

M5 Junction 10 Improvements Scheme

Transport Assessment Appendix P - SRN Impact Results TR010063 - APP 9.59

Rule 8 (k)

Planning Act 2008

Infrastructure Planning (Examination Procedure) Rules 2010

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Transport Assessment Appendix P – SRN Impact Results

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2027 - Performance Attributes			AM									PM								
			Scenario P			Scenario S			Scenario R			Scenario P			Scenario S			Scenario R		
Location	Section	Dir	Actual Flow (Veh)	V/C (%)	Total Average queue length (m)	Actual Flow (Veh)	V/C (%)	Total Average queue length (m)	Actual Flow (Veh)	V/C (%)	Total Average queue length (m)	Actual Flow (Veh)	V/C (%)	Total Average queue length (m)	Actual Flow (Veh)	V/C (%)	Total Average queue length (m)	Actual Flow (Veh)	V/C (%)	Total Average queue length (m)
M5 J9	A438 Ashchurch Rd Mainline (West of J9)	EB	686	20	0	690	20	0	658	19	0	755	21	0	699	19	0	688	19	0
		WB	843	47	18	753	42	16	749	42	16	877	61	41	746	52	26	759	53	26
	A438 Ashchurch Rd Slip (West of J9)	EB	686	103	81	690	102	60	658	102	65	755	49	17	699	57	21	688	59	21
		WB	843	24	0	753	21	0	749	21	0	877	24	0	746	20	0	759	20	0
	A46 Mainline (East of J9)	EB	1,167	40	22	1,196	40	22	1,193	40	22	1,077	34	20	1,104	35	21	1,125	35	22
		WB	1,041	31	0	1,008	30	0	1,019	31	0	1,879	51	0	1,873	51	0	1,884	51	0
	A46 Slip (East of J9)	EB	1,167	35	0	1,196	35	0	1,193	35	0	1,077	31	0	1,104	31	0	1,125	32	0
		WB	1,041	52	27	1,008	55	29	1,019	53	28	1,879	73	43	1,873	65	36	1,884	64	33
	Motorway Slip Rd (North of J9)	NB slip	287	13	0	291	13	0	290	13	0	494	22	1	498	22	1	497	22	1
		SB slip	604	64	29	569	67	72	545	68	80	324	52	12	308	55	11	291	59	11
	Motorway Slip Rd (South of J9)	NB slip	1,334	59	32	1,277	47	22	1,300	48	23	1,378	68	41	1,295	53	29	1,346	53	29
		SB slip	1,212	79	2	1,146	77	2	1,124	76	2	1,825	101	43	1,775	98	0	1,774	98	0
	Motorway Passing through	NB	2,487	50	0	2,424	49	0	2,419	49	0	3,302	65	0	3,272	64	0	3,268	64	0
		SB	3,172	82	0	3,188	81	0	3,199	81	0	2,685	74	0	2,650	73	0	2,646	73	0
	Circulatory (Refer Location tab)	C1	1,250	87	310	1,292	83	310	1,278	80	310	1,334	80	233	1,310	76	194	1,334	74	195
		C2	603	41	14	567	36	12	529	35	12	517	39	14	462	41	14	447	42	14
		C3	433	37	12	430	47	15	424	46	14	572	37	12	560	45	15	556	46	16
		C4	924	66	209	955	65	187	975	65	194	1,072	54	45	1,109	45	23	1,143	45	21
Motorway	M5 J9 - M5 J10	NB	3,821	75	0	3,701	73	0	3,719	73	0	4,680	88	0	4,567	86	0	4,614	87	0
		SB	4,384	84	0	4,335	84	0	4,324	83	0	4,496	81	0	4,425	79	0	4,420	79	0
	M5 J10 - M5 J11	NB	3,474	72	0	4,149	79	0	4,142	79	0	4,015	85	0	4,699	86	0	4,689	86	0
		SB	3,461	69	0	4,165	82	0	4,099	81	0	3,989	73	0	4,624	84	0	4,634	84	0
M5 J11	A40 Mainline (W of J11)	EB	1,950	56	0	2,125	60	0	2,149	61	0	1,870	50	0	2,141	57	0	2,152	58	0
		WB	2,034	37	0	2,171	39	0	2,123	39	0	2,193	38	0	2,276	39	0	2,329	40	0
	A40 Slip (W of J11)	EB	565	86	17	794	94	27	751	97	36	610	67	6	857	76	8	859	75	7
		WB	421	17	0	612	23	0	544	21	0	631	22	0	842	27	0	840	27	0
	A40 Mainline (E of J11)	EB	2,824	49	0	2,652	46	0	2,770	47	0	2,462	41	0	2,304	39	0	2,318	39	0
		WB	2,822	76	0	2,588	70	0	2,607	70	0	3,036	79	0	2,736	72	0	2,817	74	0
	A40 Slip (E of J11)	EB	1,439	78	0	1,321	72	0	1,372	74	0	1,201	64	0	1,019	56	0	1,025	57	0
		WB	1,208	70	3	1,029	70	4	1,027	66	3	1,474	96	26	1,302	98	42	1,328	100	59
	Motorway Slip Rd (North of J11)	NB slip	813	31	1	1,120	41	1	1,073	40	1	956	35	1	1,256	46	1	1,233	45	1
		SB slip	682	106	191	1,022	102	122	923	104	182	960	86	13	1,252	84	9	1,249	85	9
	Motorway Slip Rd (South of J11)	NB slip	1,206	76	20	926	91	22	1,022	91	23	873	83	18	609	97	15	616	98	15
		SB slip	945	33	1	697	27	1	694	27	1	1,130	37	1	902	32	1	953	34	1
	Motorway Passing through	NB	2,661	56	0	3,028	65	0	3,068	65	0	3,059	63	0	3,442	72	0	3,456	72	0
		SB	2,779	60	0	3,144	65	0	3,177	66	0	3,029	61	0	3,372	65	0	3,385	66	0
	Circulatory (Refer Location tab)	C1	1,201	34	0	923	26	0	1,016	29	0	872	24	0	609	17	0	616	17	0
		C2	404	13	0	604	19	0	530	17	0	631	19	0	842	24	0	840	24	0
		C3	663	72	17	935	64	17	861	63	17	976	70	17	1,242	68	17	1,214	67	16
		C4	1,448	39	0	1,249	34	0	1,339	36	0	1,218	32	0	1,009	27	0	991	26	0
Motorway	M5 J11 - M5 J11A	NB	3,867	74	0	3,955	75	0	4,090	77	0	3,931	74	0	4,052	75	0	4,072	76	0
		SB	3,726	72	0	3,841	74	0	3,872	74	0	4,159	74	0	4,274	76	0	4,338	77	0
	M5 J11A - M5 J12	NB	4,370	80	0	4,399	81	0	4,465	82	0	4,164	75	0	4,179	75	0	4,188	75	0
		SB	4,083	76	0	4,114	76	0	4,128	76	0	4,558	80	0	4,589	81	0	4,630	81	0
A40	Elm Court - M5 J11	EB	1,950	56	0	2,125	60	0	2,149	61	0	1,870	50	0	2,141	57	0	2,152	58	0
		WB	2,034	37	0	2,171	39	0	2,123	39	0	2,193	38	0	2,276	39	0	2,329	40	0
Elmbridge Court Rbt	A40 North	NB	1,398	58	0	1,480	61	0	1,455	60	0	1,775	71	0	1,789	72	0	1,806	73	0
		SB	1,559	63	46	1,610	65	47	1,622	65	48	1,468	57	41	1,566	61	44	1,567	61	44
	B4063 North Cheltenham Rd	NB	769	51	15	663	45	12	659	45	12	789	49	11	695	44	10	694	44	10
		SB	670	48	0	646	46	0	649	47	0	760	50	0	764	50	0	760	50	0
	A40 East	EB	1,950	38	0	2,125	41	0	2,149	41	0	1,870	34	0	2,141	39	0	2,152	39	0
		WB	2,034	42	30	2,171	45	33	2,123	44	32	2,193	43	31	2,276	45	33	2,329	46	34
	A417 South	Through Rbt	805	63	17	899	70	19	873	68	18	890	70	19	932	73	20	949	74	20
		NB	1,573	71	42	1,579	71	42	1,581	72	42	1,825	79	48	1,831	79	48	1,835	79	48
	B4063 West	SB	1,702	71	21	1,739	70	22	1,730	70	22	1,860	71	20	1,890	72	21	1,911	73	21
		EB	705	59	19	732	61	20	728	61	19	582	52	20	581	51	20	585	51	20
	Circulatory (Refer Location tab)	WB	706	53	0	733	54	0	739	55	0	654	52	0	679	54	0	680	54	0
		C1	2,597	37	0	2,742	39	0	2,762	39	0	2,410	33	0	2,654	36	0	2,661	36	0
		C2	1,403	88	49	1,356	85	47	1,362	86	47	1,349	84	45	1,333	83	45	1,325	82	44
		C3	929	39	24	889	38	24	882	38	23	792	34	18	788	33	18	794	34	18
		C4	1,603	47	25	1,556	45	25	1,556	46	25	1,851	51	27	1,850	51	27	1,856	52	27

2042 - Performance Attributes			AM									PM								
			Scenario P			Scenario S			Scenario R			Scenario P			Scenario S			Scenario R		
Location	Section	Dir	Actual Flow (Veh)	V/C (%)	Total Average queue length (m)	Actual Flow (Veh)	V/C (%)	Total Average queue length (m)	Actual Flow (Veh)	V/C (%)	Total Average queue length (m)	Actual Flow (Veh)	V/C (%)	Total Average queue length (m)	Actual Flow (Veh)	V/C (%)	Total Average queue length (m)	Actual Flow (Veh)	V/C (%)	Total Average queue length (m)
M5 J9	A438 Ashchurch Rd Mainline (West of J9)	EB	731	21	0	746	21	0	690	20	0	792	22	0	715	19	0	673	18	0
		WB	857	48	18	798	45	17	850	48	19	906	63	49	784	55	37	781	55	31
	A438 Ashchurch Rd Slip (West of J9)	EB	731	102	78	746	101	50	690	102	68	792	51	18	715	59	21	673	100	25
		WB	857	24	0	798	22	0	850	24	0	906	24	0	784	21	0	781	21	0
	A46 Mainline (East of J9)	EB	1,209	40	21	1,210	40	21	1,216	40	24	1,146	35	22	1,165	35	23	1,174	36	26
		WB	1,200	34	0	1,176	34	0	1,251	36	0	1,846	50	0	1,838	50	0	1,963	54	0
	A46 Slip (East of J9)	EB	1,209	35	0	1,210	35	0	1,216	35	0	1,146	31	0	1,165	32	0	1,174	32	0
		WB	1,200	57	31	1,176	58	32	1,251	55	29	1,846	71	42	1,838	64	35	1,986	65	33
	Motorway Slip Rd (North of J9)	NB slip	393	19	0	391	19	0	396	19	0	492	26	1	505	26	1	505	26	1
		SB slip	662	70	82	638	72	106	649	72	153	376	60	14	354	63	13	359	64	16
	Motorway Slip Rd (South of J9)	NB slip	1,363	59	32	1,244	50	25	1,330	51	26	1,412	69	41	1,351	53	28	1,383	54	29
		SB slip	1,327	86	3	1,258	84	4	1,266	84	3	1,806	100	7	1,737	96	0	1,849	102	110
	Motorway Passing through	NB	3,046	61	0	3,025	61	0	2,981	60	0	3,861	75	0	3,799	74	0	3,791	74	0
		SB	3,567	93	0	3,612	93	0	3,534	91	0	3,316	89	0	3,250	86	0	3,211	86	0
	Circulatory (Refer Location tab)	C1	1,315	89	310	1,295	85	310	1,230	81	310	1,394	82	262	1,353	76	234	1,347	76	310
		C2	668	46	16	614	41	14	538	41	14	547	42	15	475	42	15	439	44	15
		C3	541	46	15	531	49	16	523	51	17	587	38	12	576	48	17	576	48	17
		C4	1,047	69	194	977	68	117	1,003	69	201	1,093	54	45	1,143	45	23	1,178	68	28
Motorway	M5 J9 - M5 J10	NB	4,409	86	0	4,269	83	0	4,311	83	0	5,272	98	0	5,150	96	0	5,175	96	0
		SB	4,895	93	0	4,871	93	0	4,801	92	0	5,119	91	0	4,986	89	0	5,024	89	0
	M5 J10 - M5 J11	NB	4,067	83	0	4,762	89	0	5,028	93	0	4,600	97	0	5,230	95	0	5,497	99	0
		SB	3,948	78	0	4,611	89	0	4,797	92	0	4,597	83	0	5,171	93	0	5,457	98	0
M5 J11	A40 Mainline (W of J11)	EB	2,007	57	0	2,216	62	0	2,413	67	0	1,898	51	0	2,180	58	0	2,354	63	0
		WB	2,089	38	0	2,240	41	0	2,258	41	0	2,324	40	0	2,404	41	0	2,693	46	0
	A40 Slip (W of J11)	EB	577	90	21	812	95	29	772	102	110	643	69	7	862	74	7	938	77	8
		WB	418	17	0	617	23	0	529	21	0	641	23	0	826	27	0	866	30	1
	A40 Mainline (E of J11)	EB	2,869	49	0	2,711	47	0	3,006	52	0	2,466	41	0	2,315	39	0	2,417	40	0
		WB	2,857	77	0	2,630	71	0	2,769	74	0	3,178	83	0	2,871	75	0	3,155	82	0
	A40 Slip (E of J11)	EB	1,438	78	0	1,306	72	0	1,364	77	1	1,210	65	0	998	56	0	1,001	57	0
		WB	1,184	69	3	1,006	68	4	1,039	65	3	1,494	97	32	1,293	96	31	1,327	102	123
	Motorway Slip Rd (North of J11)	NB slip	815	34	1	1,113	45	1	1,048	47	2	966	39	1	1,213	49	2	1,231	52	2
		SB slip	654	108	221	991	102	120	853	107	233	964	87	15	1,199	82	8	1,237	85	10
	Motorway Slip Rd (South of J11)	NB slip	1,239	79	21	951	93	23	1,099	98	26	884	84	18	619	98	16	632	101	25
		SB slip	929	36	1	703	30	1	748	34	1	1,168	42	1	936	38	1	1,012	42	2
	Motorway Passing through	NB	3,252	67	0	3,649	77	0	3,980	82	0	3,635	74	0	4,017	82	0	4,266	87	0
		SB	3,294	70	0	3,620	74	0	3,944	80	0	3,633	72	0	3,972	76	0	4,220	81	0
	Circulatory (Refer Location tab)	C1	1,229	35	0	943	27	0	1,076	30	0	885	25	0	620	17	0	630	18	0
		C2	395	13	0	608	19	0	513	17	0	638	19	0	822	24	0	867	25	0
		C3	647	71	17	911	63	17	800	60	15	965	70	17	1,179	65	16	1,160	64	16
		C4	1,468	40	0	1,245	34	0	1,370	37	0	1,208	32	0	971	26	0	923	25	0
Motorway	M5 J11 - M5 J11A	NB	4,492	85	0	4,599	86	0	5,079	94	0	4,519	83	0	4,636	85	0	4,898	89	0
		SB	4,225	80	0	4,323	82	0	4,695	88	0	4,800	84	0	4,908	86	0	5,231	91	0
	M5 J11A - M5 J12	NB	5,007	92	0	5,033	92	0	5,285	96	0	4,781	85	0	4,791	85	0	4,974	88	0
		SB	4,575	84	0	4,599	84	0	4,802	88	0	5,284	92	0	5,304	93	0	5,461	95	0
A40	Elm Court - M5 J11	EB	2,007	57	0	2,216	62	0	2,413	67	0	1,898	51	0	2,180	58	0	2,354	63	0
		WB	2,089	38	0	2,240	41	0	2,258	41	0	2,324	40	0	2,404	41	0	2,693	46	0
Elmbridge Court Rbt	A40 North	NB	1,575	64	0	1,625	66	0	1,606	65	0	1,981	78	0	1,985	78	0	2,044	80	1
		SB	1,661	66	49	1,727	69	51	1,853	73	56	1,610	62	45	1,711	66	48	1,788	69	51
	B4063 North Cheltenham Rd	NB	768	51	15	662	45	12	691	47	14	782	48	11	687	44	9	744	46	11
		SB	663	47	0	651	46	0	663	49	0	758	50	0	764	50	0	767	51	0
	A40 East	EB	2,007	39	0	2,216	42	0	2,413	46	0	1,898	35	0	2,180	39	0	2,354	42	0
		WB	2,089	43	31	2,240	46	34	2,258	47	34	2,324	46	34	2,404	47	35	2,693	53	40
	A417 South	Through Rbt	879	69	19	963	75	21	925	72	20	951	74	20	990	77	21	1,099	85	24
		NB	1,641	74	44	1,642	74	44	1,675	75	44	1,921	81	50	1,925	81	50	1,986	84	52
	B4063 West	SB	1,706	69	20	1,765	73	21	1,818	75	24	2,003	77	23	2,022	74	23	2,150	80	27
		EB	686	59	19	712	61	20	694	60	19	585	53	21	586	68	28	611	60	25
	Circulatory (Refer Location tab)	WB	706	53	0	717	54	0	744	57	0	666	53	0	678	54	0	691	55	0
		C1	2,683	38	0	2,874	40	0	3,022	42	0	2,535	34	0	2,789	38	0	2,957	40	0
		C2	1,412	89	49	1,388	87	48	1,381	87	48	1,439	89	49	1,425	88	48	1,433	89	49
		C3	916	39	23	901	38	23	896	38	23	809	34	18	816	34	18	877	37	20
		C4	1,675	49	26	1,650	48	26	1,700	49	26	1,945	53	28	1,958	53	29	2,065	56	30

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