



Wylfa Newydd Project

6.3.12 ES Volume C - Road traffic-related effects (project-wide) App C2-2 - Journey Time Calculations

PINS Reference Number: EN010007

Application Reference Number: 6.3.12

June 2018

Revision 1.0

Regulation Number: 5(2)(a)

Planning Act 2008

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

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Appendix C2.02 - Journey Times

Purpose

To assess journey times for the traffic and transport study area to inform the DCO Environmental Statement for Traffic and Transport.

Journey Time calculations are based on the 48 sections that comprise the study area as explained/ shown in the Traffic and Transport DCO Volume B Chapter. The assessments are based on outputs from the Strategic Traffic Model. Please refer to the table of peak hours shown below, for each assessed year.

CRA-V

Project Title		Project Code		Client	
Wylfa Newydd Project		60PO8077		Horizon Nuclear Power Limited	
Originator	Mark Fleming	Date	12/12/2017	Revision	7
Checker	Harriet Memery	Date	18/12/2017	Status	FINAL
Reviewer	Hayden Taylor	Date	18/12/2017		

Notes

Spreadsheet Methodology - Journey Times

- Note that all times within both peak periods use the delay from the peak hour assessed.
- The methodology for deriving journey times is outlined in the Traffic and Transport DCO Volume B Chapter. Rev 4 - Journey times for Britannia Bridge (section 2) updated based on journey times from the VISSIM model.
- A 'Sensitive Link' column is included in this appendix. A tick indicates that the section is sensitive and the 10% criteria was applied for this assessment, whereas a cross indicates that the link is not sensitive and therefore the 30% criteria was applied.
- The journey time results for the A5025 Off-line Sections (Sections 10, 13, 16 and 19) are calculated based on a comparison of the existing A5025 against the new bypass section.

Peak hours for the journey time assessment		
Scenario	AM Peak	PM Peak
2016 Baseline	08:00-09:00	17:00-18:00
2020 Ref. Case	08:00-09:00	17:00-18:00
2020 WNP (Without Bypasses)	08:00-09:00	17:00-18:00
2020 WNP (with Bypasses)	08:00-09:00	17:00-18:00
2023 Ref. Case	08:00-09:00	17:00-18:00
2023 WNP	08:00-09:00	17:00-18:00
2033 Ref. Case	08:00-09:00	17:00-18:00
2033 WNP	08:00-09:00	17:00-18:00

- Journey Time Results are calculated by combining the travel time derived from Link Length and Speed Assumptions and the Junction Delay along each section. For Section 2 Britannia Bridge only Journey Time Results use VISSIM model outputs for 2020 and 2023. Along other sections of the A55 junction delay is not included because junctions are grade separated.
- Junction delay tab - greyed out cells represent scenarios that were not assessed at the junction.

Section	Location	Direction	Sensitive Link	Section Length (m)	2016 Baseline (mm:ss)		2020 Reference Case (mm:ss)		2020 Wylfa Newydd Project (mm:ss) - without		Change in journey time (mm:ss)		2020 Wylfa Newydd Project (mm:ss) - with		Change in journey time (mm:ss)	
					AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
1	A55 J12 to Britannia Bridge	Eastbound	X	8,422	04:49	04:49	04:49	04:49	04:49	04:49	00:00	00:00	04:49	04:49	00:00	00:00
		Westbound	X	8,422	04:49	04:49	04:49	04:49	04:49	04:49	00:00	00:00	04:49	04:49	00:00	00:00
2	Britannia Bridge Only	Eastbound	X	1,500	02:56	01:24	05:27*	02:06*	05:39*	02:07*	00:12	00:01	05:39*	02:07*	00:12	00:01
		Westbound	X	1,500	01:17	02:23	03:12*	05:27*	03:12*	05:51*	00:00	00:24	03:12*	05:51*	00:00	00:24
3	Britannia Bridge to A55 J6	Eastbound	X	9,877	06:15	06:15	06:15	06:15	06:15	06:15	00:00	00:00	06:15	06:15	00:00	00:00
		Westbound	X	9,877	06:08	06:08	06:08	06:08	06:08	06:08	00:00	00:00	06:08	06:08	00:00	00:00
4	A55 J6 to A55 J4	Eastbound	X	13,975	07:51	07:51	07:51	07:51	07:51	07:51	00:00	00:00	07:51	07:51	00:00	00:00
		Westbound	X	13,975	07:51	07:51	07:51	07:51	07:51	07:51	00:00	00:00	07:51	07:51	00:00	00:00
5	A55 J4 to A55 J3	Eastbound	X	2,410	01:22	01:22	01:22	01:22	01:22	01:22	00:00	00:00	01:22	01:22	00:00	00:00
		Westbound	X	2,410	01:22	01:22	01:22	01:22	01:22	01:22	00:00	00:00	01:22	01:22	00:00	00:00
6	A55 J3 to A55 J2	Eastbound	X	5,182	02:58	02:58	02:58	02:58	02:58	02:58	00:00	00:00	02:58	02:58	00:00	00:00
		Westbound	X	5,182	02:58	02:58	02:58	02:58	02:58	02:58	00:00	00:00	02:58	02:58	00:00	00:00
7	A55 J2 to A55 J1	Eastbound	X	1,547	01:26	01:26	01:26	01:26	01:26	01:26	00:00	00:00	01:26	01:26	00:00	00:00
		Westbound	X	1,547	01:37	01:37	01:37	01:37	01:37	01:37	00:00	00:00	01:37	01:37	00:00	00:00
8	A5 (Parc Cybi) to Valley Crossroads	Eastbound	U	5,326	05:13	05:15	05:14	05:17	05:28	05:40	00:14	00:22	05:28	05:40	00:14	00:22
		Westbound	U	5,326	05:05	05:07	05:05	05:07	05:11	05:16	00:05	00:08	05:11	05:16	00:05	00:08
9	A5025 Section 1a On-line	Northbound	X	1,641	01:33	01:33	01:33	01:33	01:41	01:42	00:08	00:09	01:41	01:42	00:08	00:09
		Southbound	X	1,641	02:00	02:16	02:01	02:37	02:37	03:34	00:36	00:57	02:37	03:34	00:36	00:57
10	A5025 Section 1b Off-line	Northbound	X	1,071	-	-	-	-	-	-	-	-	01:27	01:27	-	-
		Southbound	X	1,071	-	-	-	-	-	-	-	-	01:27	01:27	-	-
11	A5025 Section 2 On-line	Northbound	X	2,632	02:15	02:15	02:15	02:15	02:15	02:15	00:00	00:00	02:15	02:15	00:00	00:00
		Southbound	X	2,632	02:15	02:15	02:15	02:15	02:15	02:15	00:00	00:00	02:15	02:15	00:00	00:00
12	A5025 Section 3a On-line	Northbound	U	2,078	02:12	02:12	02:12	02:12	02:12	02:12	00:00	00:00	02:12	02:12	00:00	00:00
		Southbound	U	2,078	02:12	02:12	02:12	02:12	02:12	02:12	00:00	00:00	02:12	02:12	00:00	00:00
13	A5025 Section 3b Off-line	Northbound	X	1,990	-	-	-	-	-	-	-	-	01:38	01:38	-	-
		Southbound	X	1,990	-	-	-	-	-	-	-	-	01:38	01:38	-	-
14	A5025 Section 4 On-line	Northbound	X	2,870	02:31	02:31	02:31	02:31	02:31	02:31	00:00	00:00	02:31	02:31	00:00	00:00
		Southbound	X	2,870	02:31	02:31	02:31	02:31	02:31	02:31	00:00	00:00	02:31	02:31	00:00	00:00
15	A5025 Section 5a On-line	Northbound	X	1,370	01:32	01:32	01:32	01:32	01:32	01:32	00:00	00:00	01:32	01:32	00:00	00:00
		Southbound	X	1,370	01:28	01:28	01:28	01:28	01:28	01:28	00:00	00:00	01:28	01:28	00:00	00:00
16	A5025 Section 5b Off-line	Northbound	X	1,062	-	-	-	-	-	-	-	-	01:00	01:00	-	-
		Southbound	X	1,062	-	-	-	-	-	-	-	-	00:56	00:56	-	-
17	A5025 Section 6 On-line	Northbound	X	3,386	02:59	02:59	02:59	02:59	02:59	02:59	00:00	00:00	02:59	02:59	00:00	00:00
		Southbound	X	3,386	02:59	02:59	02:59	02:59	02:59	02:59	00:00	00:00	02:59	02:59	00:00	00:00
18	A5025 Section 7a On-line	Northbound	X	1,142	00:56	00:56	00:56	00:56	00:56	00:56	00:00	00:00	00:56	00:56	00:00	00:00
		Southbound	X	1,142	00:56	00:56	00:56	00:56	00:56	00:56	00:00	00:00	00:56	00:56	00:00	00:00
19	A5025 Section 7b Off-line	Northbound	X	1,032	-	-	-	-	-	-	-	-	00:51	00:51	-	-
		Southbound	X	1,032	-	-	-	-	-	-	-	-	00:51	00:51	-	-
20	A5025 Section 8 On-line	Northbound	X	2,202	01:49	01:49	01:49	01:49	01:53	01:52	00:03	00:02	01:53	01:52	00:03	00:02
		Southbound	X	2,202	01:49	01:49	01:49	01:49	01:49	01:49	00:00	00:00	01:49	01:49	00:00	00:00
21	A5025 Tregele	Northbound	X	857	00:51	00:51	00:51	00:51	00:51	00:51	00:00	00:00	00:51	00:51	00:00	00:00
		Southbound	X	857	00:51	00:51	00:51	00:51	00:54	00:54	00:02	00:03	00:54	00:54	00:02	00:03
22	A5025 Tregele to Amlwch	Eastbound	X	10,549	10:28	10:28	10:28	10:28	10:28	10:28	00:00	00:00	10:28	10:28	00:00	00:00
		Westbound	X	10,549	10:36	10:32	10:39	10:32	10:58	10:37	00:19	00:04	10:58	10:37	00:19	00:04
23	A5025 Amlwch to Benllech	Northbound	U	13,584	15:14	15:14	15:14	15:14	15:14	15:14	00:00	00:00	15:14	15:14	00:00	00:00
		Southbound	U	13,584	15:19	15:20	15:19	15:20	15:24	15:25	00:05	00:05	15:24	15:25	00:05	00:05
24	A5025 Benllech to A55 J8	Northbound	U	12,980	13:08	13:14	13:08	13:16	13:20	13:36	00:12	00:20	13:20	13:36	00:12	00:20
		Southbound	U	12,980	13:10	13:13	13:10	13:16	13:25	13:38	00:14	00:21	13:25	13:38	00:14	00:21

Section	Location	Direction	Sensitive Link	Section Length (m)	2016 Baseline (mm:ss)		2020 Reference Case (mm:ss)		2020 Wylfa Newydd Project (mm:ss) - without		Change in journey time (mm:ss)		2020 Wylfa Newydd Project (mm:ss) - with		Change in journey time (mm:ss)	
					AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
25	A5 Rhostrehwfa to A5 Menai Bridge	Eastbound	U	13,595	12:55	12:49	12:55	12:49	13:06	12:54	00:11	00:05	13:06	12:54	00:11	00:05
		Westbound	U	13,595	12:53	12:54	12:53	12:55	13:03	13:05	00:09	00:10	13:03	13:05	00:09	00:10
26	Menai Bridge to A545 Beaumaris Road	Eastbound	X	1,700	02:06	02:06	02:06	02:06	02:06	02:06	00:00	00:00	02:06	02:06	00:00	00:00
		Westbound	X	1,700	02:06	02:06	02:06	02:06	02:06	02:06	00:00	00:00	02:06	02:06	00:00	00:00
27	Menai Bridge Only	Northbound	X	562	00:41	00:41	00:41	00:41	00:41	00:41	00:00	00:00	00:41	00:41	00:00	00:00
		Southbound	X	562	00:45	00:44	00:45	00:44	00:49	00:46	00:03	00:02	00:49	00:46	00:03	00:02
28	A55 J9 to A5 Holyhead Road	Eastbound	X	1,601	01:31	01:35	01:31	01:36	01:37	01:47	00:05	00:11	01:37	01:47	00:05	00:11
		Westbound	X	1,601	01:35	01:34	01:36	01:35	01:46	01:44	00:10	00:09	01:46	01:44	00:10	00:09
29	A55 J9 to A487 Y Felinheli Bypass	Northbound	X	1,318	01:13	01:12	01:14	01:13	01:24	01:22	00:09	00:09	01:24	01:22	00:09	00:09
		Southbound	X	1,318	01:05	01:05	01:05	01:05	01:05	01:05	00:00	00:00	01:05	01:05	00:00	00:00
30	A4080 Ffordd Brynsiencyn to A5 Holyhead Road	Northbound	X	967	01:00	01:00	01:00	01:00	01:00	01:00	00:00	00:00	01:00	01:00	00:00	00:00
		Southbound	X	967	01:00	01:00	01:00	01:00	01:00	01:00	00:00	00:00	01:00	01:00	00:00	00:00
31	B5420 Llangejni to A5 Ffordd Caergybi	Eastbound	X	11,360	10:41	10:38	10:42	10:38	10:52	10:43	00:09	00:05	10:52	10:43	00:09	00:05
		Westbound	X	11,360	10:33	10:39	10:33	10:40	10:33	10:47	00:00	00:07	10:33	10:47	00:00	00:07
32	A55 J6 to A5114 Llangejni	Northbound	U	2,095	02:37	03:22	02:44	04:25	03:17	07:11	00:33	02:46	03:17	07:11	00:33	02:46
		Southbound	U	2,095	02:13	02:13	02:13	02:13	02:15	02:16	00:02	00:02	02:15	02:16	00:02	00:02
33	B5109 to Pentraeth	Eastbound	U	7,233	06:15	06:15	06:15	06:15	06:15	06:15	00:00	00:00	06:15	06:15	00:00	00:00
		Westbound	U	7,233	06:15	06:15	06:15	06:15	06:15	06:15	00:00	00:00	06:15	06:15	00:00	00:00
34	B5110 Llangejni to A5025 Marian-glas	Northbound	X	10,743	09:46	09:46	09:46	09:46	09:46	09:46	00:00	00:00	09:46	09:46	00:00	00:00
		Southbound	X	10,743	09:46	09:46	09:46	09:46	09:46	09:46	00:00	00:00	09:46	09:46	00:00	00:00
35	B5111 Llangejni to Llannerch-y-medd	Northbound	U	10,895	10:53	10:54	10:53	10:54	10:57	10:57	00:03	00:03	10:57	10:57	00:03	00:03
		Southbound	U	10,895	10:50	10:50	10:50	10:50	10:50	10:50	00:00	00:00	10:50	10:50	00:00	00:00
36	Llannerch-y-medd to Benllech	Northbound	U	10,590	10:11	10:16	10:12	10:16	10:28	10:37	00:16	00:20	10:28	10:37	00:16	00:20
		Southbound	U	10,590	09:56	09:56	09:56	09:56	09:56	09:56	00:00	00:00	09:56	09:56	00:00	00:00
37	B5111 Llannerch-y-medd to Amlwch	Northbound	U	9,065	08:30	08:30	08:30	08:30	08:30	08:30	00:00	00:00	08:30	08:30	00:00	00:00
		Southbound	U	9,065	08:37	08:36	08:38	08:36	08:45	08:42	00:07	00:06	08:45	08:42	00:07	00:06
38	B5111 Rhos-y-bol to Cemaes	Northbound	U	9,890	08:50	08:50	08:50	08:50	08:50	08:50	00:00	00:00	08:50	08:50	00:00	00:00
		Southbound	U	9,890	08:50	08:50	08:50	08:50	08:50	08:50	00:00	00:00	08:50	08:50	00:00	00:00
39	Rhos-y-bol to A5025 Burwen	Northbound	X	6,127	06:54	06:54	06:54	06:54	06:54	06:54	00:00	00:00	06:54	06:54	00:00	00:00
		Southbound	X	6,127	06:54	06:54	06:54	06:54	06:54	06:54	00:00	00:00	06:54	06:54	00:00	00:00
40	B5112 Llannerch-y-medd to A55 J5	Northbound	X	10,319	09:05	09:00	09:05	09:00	09:32	09:22	00:26	00:21	09:32	09:22	00:26	00:21
		Southbound	X	10,319	08:54	08:55	08:54	08:55	09:10	09:11	00:15	00:16	09:10	09:11	00:15	00:16
41	A5025 Llanfaethlu to B5112	Eastbound	U	10,250	08:29	08:29	08:29	08:29	08:29	08:29	00:00	00:00	08:29	08:29	00:00	00:00
		Westbound	U	10,250	08:29	08:29	08:29	08:29	08:29	08:29	00:00	00:00	08:29	08:29	00:00	00:00
42	B5109 Llanyghenedl to B5112	Eastbound	U	6,730	06:01	06:01	06:01	06:01	06:01	06:01	00:00	00:00	06:01	06:01	00:00	00:00
		Westbound	U	6,730	06:01	06:01	06:01	06:01	06:01	06:01	00:00	00:00	06:01	06:01	00:00	00:00
43	A55 J4 to Bodedern	Northbound	U	2,253	02:17	02:17	02:17	02:17	02:17	02:17	00:00	00:00	02:17	02:17	00:00	00:00
		Southbound	U	2,253	02:20	02:20	02:20	02:20	02:21	02:21	00:01	00:01	02:21	02:21	00:01	00:01
44	Llanfechell to A5025 Nanner Road	Eastbound	U	2,060	01:42	01:42	01:42	01:42	01:42	01:42	00:00	00:00	01:42	01:42	00:00	00:00
		Westbound	U	2,060	01:42	01:42	01:42	01:42	01:42	01:42	00:00	00:00	01:42	01:42	00:00	00:00
45	Ffordd-y-Felin to Tregele via Cromlech Terrace	Eastbound	X	1,080	01:20	01:20	01:20	01:20	01:20	01:20	00:00	00:00	01:20	01:20	00:00	00:00
		Westbound	X	1,080	01:20	01:20	01:20	01:20	01:20	01:20	00:00	00:00	01:20	01:20	00:00	00:00
46	A55 J4 to A55 J3 (via A5)	Eastbound	U	2,352	02:22	02:22	02:22	02:22	02:24	02:25	00:02	00:02	02:24	02:25	00:02	00:02
		Westbound	U	2,352	02:23	02:23	02:23	02:24	02:27	02:28	00:04	00:04	02:27	02:28	00:04	00:04
47	A5 at Dalar Hir	Eastbound	X	768	00:38	00:38	01:09	00:42	01:09	00:42	00:00	00:00	01:09	00:42	00:00	00:00
		Westbound	X	2,352	00:41	00:41	01:13	00:45	01:16	00:49	00:03	00:03	01:16	00:49	00:03	00:03
48	Park and Ride entrance	Northbound	X	100	-	-	-	-	00:07	00:07	-	-	00:07	00:07	-	-
		Southbound	X	100	-	-	-	-	00:07	00:07	-	-	00:07	00:07	-	-

Note: Year marked as 'significant' based on whether the AM and/or PM peak hour of that year triggers significance criteria.

*The worst-case assessment for 2020 is based upon the 2023 journey time assessment using VISSIM.

This approach was adopted because 2023 represents the peak of construction traffic and therefore has the greatest potential for an effect on A55 Britannia Bridge.

It should also be noted that some small reductions in journey times for A55 Britannia Bridge have been assumed as zero.

These small reductions arise because of the sensitivity of the modelling to small changes in traffic flows and the rate at which they are introduced to the road network.

In practice the difference is so small (minus one second) that road users would not perceive the journey time saving.

Section	Location	Direction	2023 Reference Case (mm:ss)		2023 Wylfa Newydd Project		Change in journey time (mm:ss)		2033 Reference Case (mm:ss)		2033 Wylfa Newydd Project		Change in journey time (mm:ss)		Significant?				
			AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	(without bypasses)	2020 (with bypasses)	2020 (with bypasses)	2023	2033
1	A55 J12 to Britannia Bridge	Eastbound	04:49	04:49	04:49	04:49	00:00	00:00	04:49	04:49	04:49	04:49	00:00	00:00	00:00	X	X	X	X
		Westbound	04:49	04:49	04:49	04:49	00:00	00:00	04:49	04:49	04:49	04:49	00:00	00:00	00:00	X	X	X	X
2	Britannia Bridge Only	Eastbound	05:27	02:06	05:39	02:07	00:12	00:01	02:56	01:24	02:56	01:24	00:00	00:00	00:00	X	X	X	X
		Westbound	03:12	05:27	03:12	05:51	00:00	00:24	01:17	02:23	01:17	02:23	00:00	00:00	00:00	X	X	X	X
3	Britannia Bridge to A55 J6	Eastbound	06:15	06:15	06:15	06:15	00:00	00:00	06:15	06:15	06:15	06:15	00:00	00:00	00:00	X	X	X	X
		Westbound	06:08	06:08	06:08	06:08	00:00	00:00	06:08	06:08	06:08	06:08	00:00	00:00	00:00	X	X	X	X
4	A55 J6 to A55 J4	Eastbound	07:51	07:51	07:51	07:51	00:00	00:00	07:51	07:51	07:51	07:51	00:00	00:00	00:00	X	X	X	X
		Westbound	07:51	07:51	07:51	07:51	00:00	00:00	07:51	07:51	07:51	07:51	00:00	00:00	00:00	X	X	X	X
5	A55 J4 to A55 J3	Eastbound	01:22	01:22	01:22	01:22	00:00	00:00	01:22	01:22	01:22	01:22	00:00	00:00	00:00	X	X	X	X
		Westbound	01:22	01:22	01:22	01:22	00:00	00:00	01:22	01:22	01:22	01:22	00:00	00:00	00:00	X	X	X	X
6	A55 J3 to A55 J2	Eastbound	02:58	02:58	02:58	02:58	00:00	00:00	02:58	02:58	02:58	02:58	00:00	00:00	00:00	X	X	X	X
		Westbound	02:58	02:58	02:58	02:58	00:00	00:00	02:58	02:58	02:58	02:58	00:00	00:00	00:00	X	X	X	X
7	A55 J2 to A55 J1	Eastbound	01:26	01:26	01:26	01:26	00:00	00:00	01:26	01:26	01:26	01:26	00:00	00:00	00:00	X	X	X	X
		Westbound	01:37	01:37	01:37	01:37	00:00	00:00	01:37	01:37	01:37	01:37	00:00	00:00	00:00	X	X	X	X
8	A5 (Parc Cybi) to Valley Crossroads	Eastbound	05:14	05:18	05:28	05:36	00:14	00:17	05:24	05:42	05:39	06:05	00:15	00:23	00:15	X	X	X	X
		Westbound	05:05	05:08	05:11	05:16	00:05	00:08	05:06	05:17	05:13	05:34	00:06	00:17	00:06	X	X	X	X
9	A5025 Section 1a On-line	Northbound	01:33	01:33	01:42	01:44	00:08	00:11	01:36	01:33	01:47	01:45	00:11	00:11	00:11	X	X	X	X
		Southbound	02:01	02:41	02:11	02:51	00:10	00:09	02:07	02:46	02:18	02:56	00:10	00:10	00:10	U(A)	U(A)	X	X
10	A5025 Section 1b Off-line	Northbound	-	-	01:27	01:27	-	-	-	-	01:27	01:27	-	-	-	X	X	X	X
		Southbound	-	-	01:27	01:27	-	-	-	-	01:27	01:27	-	-	-	X	U(B)	U(B)	U(B)
11	A5025 Section 2 On-line	Northbound	02:15	02:15	02:15	02:15	00:00	00:00	02:15	02:15	02:15	02:15	00:00	00:00	00:00	X	X	X	X
		Southbound	02:15	02:15	02:15	02:15	00:00	00:00	02:15	02:15	02:15	02:15	00:00	00:00	00:00	X	X	X	X
12	A5025 Section 3a On-line	Northbound	02:12	02:12	02:12	02:12	00:00	00:00	02:12	02:12	02:12	02:12	00:00	00:00	00:00	X	X	X	X
		Southbound	02:12	02:12	02:12	02:12	00:00	00:00	02:12	02:12	02:12	02:12	00:00	00:00	00:00	X	X	X	X
13	A5025 Section 3b Off-line	Northbound	-	-	01:38	01:38	-	-	-	-	01:38	01:38	-	-	-	X	X	X	X
		Southbound	-	-	01:38	01:38	-	-	-	-	01:38	01:38	-	-	-	X	X	X	X
14	A5025 Section 4 On-line	Northbound	02:31	02:31	02:31	02:31	00:00	00:00	02:31	02:31	02:31	02:31	00:00	00:00	00:00	X	X	X	X
		Southbound	02:31	02:31	02:31	02:31	00:00	00:00	02:31	02:31	02:31	02:31	00:00	00:00	00:00	X	X	X	X
15	A5025 Section 5a On-line	Northbound	01:32	01:32	01:36	01:37	00:03	00:05	01:32	01:32	01:32	01:32	00:00	00:00	00:00	X	X	X	X
		Southbound	01:28	01:28	01:28	01:28	00:00	00:00	01:28	01:28	01:28	01:28	00:00	00:00	00:00	X	X	X	X
16	A5025 Section 5b Off-line	Northbound	-	-	01:00	01:00	-	-	-	-	01:00	01:00	-	-	-	X	U(B)	U(B)	U(B)
		Southbound	-	-	00:56	00:56	-	-	-	-	00:56	00:56	-	-	-	X	U(B)	U(B)	U(B)
17	A5025 Section 6 On-line	Northbound	02:59	02:59	02:59	02:59	00:00	00:00	02:59	02:59	02:59	02:59	00:00	00:00	00:00	X	X	X	X
		Southbound	02:59	02:59	02:59	02:59	00:00	00:00	02:59	02:59	02:59	02:59	00:00	00:00	00:00	X	X	X	X
18	A5025 Section 7a On-line	Northbound	00:56	00:56	00:56	00:56	00:00	00:00	00:56	00:56	00:56	00:56	00:00	00:00	00:00	X	X	X	X
		Southbound	00:56	00:56	00:56	00:56	00:00	00:00	00:56	00:56	00:56	00:56	00:00	00:00	00:00	X	X	X	X
19	A5025 Section 7b Off-line	Northbound	-	-	00:51	00:51	-	-	-	-	00:51	00:51	-	-	-	X	X	X	X
		Southbound	-	-	00:51	00:51	-	-	-	-	00:51	00:51	-	-	-	X	X	X	X
20	A5025 Section 8 On-line	Northbound	01:49	01:49	01:56	01:52	00:06	00:02	01:49	01:49	01:53	01:52	00:03	00:02	00:02	X	X	X	X
		Southbound	01:49	01:49	01:49	01:49	00:00	00:00	01:49	01:49	01:49	01:49	00:00	00:00	00:00	X	X	X	X
21	A5025 Tregele	Northbound	00:51	00:51	00:51	00:51	00:00	00:00	00:51	00:51	00:51	00:51	00:00	00:00	00:00	X	X	X	X
		Southbound	00:51	00:51	00:54	00:55	00:02	00:03	00:51	00:51	00:54	00:54	00:03	00:02	00:02	X	X	X	X
22	A5025 Tregele to Amlwch	Eastbound	10:28	10:28	10:28	10:28	00:00	00:00	10:28	10:28	10:28	10:28	00:00	00:00	00:00	X	X	X	X
		Westbound	10:38	10:32	11:12	10:37	00:34	00:04	10:35	10:32	10:43	10:44	00:08	00:11	00:11	X	X	X	X
23	A5025 Amlwch to Benllech	Northbound	15:14	15:14	15:14	15:14	00:00	00:00	15:14	15:14	15:14	15:14	00:00	00:00	00:00	X	X	X	X
		Southbound	15:19	15:20	15:24	15:25	00:05	00:05	15:19	15:20	15:24	15:25	00:05	00:05	00:05	X	X	X	X
24	A5025 Benllech to A55 J8	Northbound	13:08	13:16	13:20	13:38	00:12	00:21	13:08	13:20	13:21	13:44	00:12	00:24	00:24	X	X	X	X
		Southbound	13:11	13:17	13:27	13:41	00:15	00:23	13:23	13:23	13:50	13:51	00:27	00:27	00:27	X	X	X	X

Section	Location	Direction	2023 Reference Case (mm:ss)		2023 Wylfa Newydd Project		Change in journey time (mm:ss)		2033 Reference Case (mm:ss)		2033 Wylfa Newydd Project		Change in journey time (mm:ss)		Significant?			
			AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	(without bypasses)	2020 (with bypasses)
25	A5 Rhostrehwfa to A5 Menai Bridge	Eastbound	12:56	12:50	13:07	12:55	00:11	00:05	12:56	13:09	13:09	13:36	00:12	00:26	X	X	X	X
		Westbound	12:54	12:55	13:03	13:06	00:09	00:11	12:56	12:57	13:08	13:08	00:12	00:11	X	X	X	X
26	Menai Bridge to A545 Beaumaris Road	Eastbound	02:06	02:06	02:06	02:06	00:00	00:00	02:06	02:06	02:06	02:06	00:00	00:00	X	X	X	X
		Westbound	02:06	02:06	02:06	02:06	00:00	00:00	02:06	02:06	02:06	02:06	00:00	00:00	X	X	X	X
27	Menai Bridge Only	Northbound	00:41	00:41	00:41	00:41	00:00	00:00	00:41	00:41	00:41	00:41	00:00	00:00	X	X	X	X
		Southbound	00:45	00:44	00:49	00:46	00:03	00:02	00:46	00:44	00:50	00:46	00:04	00:02	X	X	X	X
28	A55 J9 to A5 Holyhead Road	Eastbound	01:31	01:37	01:37	01:48	00:05	00:11	01:32	01:38	01:38	01:49	00:06	00:10	X	X	X	X
		Westbound	01:36	01:35	01:47	01:45	00:10	00:09	01:38	01:36	01:51	01:47	00:13	00:10	X	X	X	X
29	A55 J9 to A487 Y Felinheli Bypass	Northbound	01:15	01:14	01:26	01:24	00:10	00:10	01:30	01:19	01:55	01:30	00:25	00:10	X	X	X	X
		Southbound	01:05	01:05	01:05	01:05	00:00	00:00	01:11	01:05	01:17	01:05	00:05	00:00	X	X	X	X
30	A4080 Ffordd Brynsiencyn to A5 Holyhead Road	Northbound	01:00	01:00	01:00	01:00	00:00	00:00	01:00	01:00	01:00	01:00	00:00	00:00	X	X	X	X
		Southbound	01:00	01:00	01:00	01:00	00:00	00:00	01:00	01:00	01:00	01:00	00:00	00:00	X	X	X	X
31	B5420 Llangefni to A5 Ffordd Caergybi	Eastbound	10:43	10:38	10:53	10:44	00:09	00:05	10:46	10:44	10:58	10:55	00:12	00:10	X	X	X	X
		Westbound	10:33	10:41	10:33	10:48	00:00	00:07	10:33	10:42	10:33	10:51	00:00	00:08	X	X	X	X
32	A55 J6 to A5114 Llangefni	Northbound	02:49	05:02	03:23	07:48	00:33	02:46	04:03	16:40	04:42	20:37	00:38	03:57	U(A)	U(A)	U(A)	X
		Southbound	02:13	02:13	02:16	02:16	00:02	00:03	02:13	02:14	02:16	02:17	00:03	00:03	X	X	X	X
33	B5109 to Pentraeth	Eastbound	06:15	06:15	06:15	06:15	00:00	00:00	06:15	06:15	06:15	06:15	00:00	00:00	X	X	X	X
		Westbound	06:15	06:15	06:15	06:15	00:00	00:00	06:15	06:15	06:15	06:15	00:00	00:00	X	X	X	X
34	B5110 Llangefni to A5025 Marian-glas	Northbound	09:46	09:46	09:46	09:46	00:00	00:00	09:46	09:46	09:46	09:46	00:00	00:00	X	X	X	X
		Southbound	09:46	09:46	09:46	09:46	00:00	00:00	09:46	09:46	09:46	09:46	00:00	00:00	X	X	X	X
35	B5111 Llangefni to Llannerch-y-medd	Northbound	10:53	10:54	10:57	10:58	00:03	00:03	10:54	10:54	10:58	10:58	00:04	00:03	X	X	X	X
		Southbound	10:50	10:50	10:50	10:50	00:00	00:00	10:50	10:50	10:50	10:50	00:00	00:00	X	X	X	X
36	Llannerch-y-medd to Benllech	Northbound	10:12	10:18	10:28	10:41	00:16	00:22	10:15	10:33	10:34	11:10	00:19	00:37	X	X	X	X
		Southbound	09:56	09:56	09:56	09:56	00:00	00:00	09:56	09:56	09:56	09:56	00:00	00:00	X	X	X	X
37	B5111 Llannerch-y-medd to Amlwch	Northbound	08:30	08:30	08:30	08:30	00:00	00:00	08:30	08:30	08:30	08:30	00:00	00:00	X	X	X	X
		Southbound	08:38	08:36	08:45	08:42	00:07	00:06	08:43	08:37	08:56	08:43	00:13	00:06	X	X	X	X
38	B5111 Rhos-y-bol to Cemaes	Northbound	08:50	08:50	08:50	08:50	00:00	00:00	08:50	08:50	08:50	08:50	00:00	00:00	X	X	X	X
		Southbound	08:50	08:50	08:50	08:50	00:00	00:00	08:50	08:50	08:50	08:50	00:00	00:00	X	X	X	X
39	Rhos-y-bol to A5025 Burwen	Northbound	06:54	06:54	06:54	06:54	00:00	00:00	06:54	06:54	06:54	06:54	00:00	00:00	X	X	X	X
		Southbound	06:54	06:54	06:54	06:54	00:00	00:00	06:54	06:54	06:54	06:54	00:00	00:00	X	X	X	X
40	B5112 Llannerch-y-medd to A55 J5	Northbound	09:06	09:00	09:32	09:22	00:26	00:21	09:07	09:17	09:35	09:40	00:27	00:22	X	X	X	X
		Southbound	08:54	08:55	09:10	09:11	00:15	00:16	09:04	08:56	09:20	09:13	00:15	00:16	X	X	X	X
41	A5025 Llanfaethlu to B5112	Eastbound	08:29	08:29	08:29	08:29	00:00	00:00	08:29	08:29	08:29	08:29	00:00	00:00	X	X	X	X
		Westbound	08:29	08:29	08:29	08:29	00:00	00:00	08:29	08:29	08:29	08:29	00:00	00:00	X	X	X	X
42	B5109 Llanyghenedl to B5112	Eastbound	06:01	06:01	06:01	06:01	00:00	00:00	06:01	06:01	06:01	06:01	00:00	00:00	X	X	X	X
		Westbound	06:01	06:01	06:01	06:01	00:00	00:00	06:01	06:01	06:01	06:01	00:00	00:00	X	X	X	X
43	A55 J4 to Bodedern	Northbound	02:17	02:17	02:17	02:17	00:00	00:00	02:17	02:17	02:17	02:17	00:00	00:00	X	X	X	X
		Southbound	02:20	02:20	02:21	02:21	00:01	00:01	02:20	02:20	02:21	02:21	00:01	00:01	X	X	X	X
44	Llanfechell to A5025 Nanner Road	Eastbound	01:42	01:42	01:42	01:42	00:00	00:00	01:42	01:42	01:42	01:42	00:00	00:00	X	X	X	X
		Westbound	01:42	01:42	01:42	01:42	00:00	00:00	01:42	01:42	01:42	01:42	00:00	00:00	X	X	X	X
45	Ffordd-y-Felin to Tregele via Cromlech Terrace	Eastbound	01:20	01:20	01:20	01:20	00:00	00:00	01:20	01:20	01:20	01:20	00:00	00:00	X	X	X	X
		Westbound	01:20	01:20	01:20	01:20	00:00	00:00	01:20	01:20	01:20	01:20	00:00	00:00	X	X	X	X
46	A55 J4 to A55 J3 (via A5)	Eastbound	02:22	02:22	02:24	02:25	00:02	00:02	02:22	02:22	02:24	02:25	00:02	00:02	X	X	X	X
		Westbound	02:23	02:24	02:27	02:28	00:04	00:04	02:23	02:23	02:28	02:29	00:04	00:05	X	X	X	X
47	A5 at Dalar Hir	Eastbound	00:42	00:42	00:47	01:14	00:04	00:31	00:38	00:38	00:38	00:38	00:00	00:00	X	X	U(A)	X
		Westbound	00:45	00:45	00:53	01:21	00:07	00:35	00:41	00:41	00:44	00:44	00:03	00:03	X	X	U(A)	X
48	Park and Ride entrance	Northbound	-	-	00:07	00:07	-	-	-	-	00:07	00:07	-	-	-	-	-	-
		Southbound	-	-	00:07	00:07	-	-	-	-	00:07	00:07	-	-	-	-	-	-

App C2.02 Link Lengths and Speed Assumptions

Section	Location	Direction	Links within the section	Link Length (m)	Speed Limit (mph)	Project traffic speed (mph)	Justification
1	A55 J12 to Britannia Bridge	Eastbound	A55_J9_J10_EB	829	70	65	65mph used to account for carriageway geometry and the general composition of traffic flow.
			A55_J11_J12_EB	2771	70	65	
			A55_J9_THR_JCT_EB	270	70	65	
			A55_J10_THR_JCT_EB	717	70	65	
			A55_J10_J11_EB	3160	70	65	
			A55_J11_THR_JCT_EB	675	70	65	
		Westbound	A55_J9_J10_WB	829	70	65	65mph used to account for carriageway geometry and the general composition of traffic flow.
			A55_J11_J12_WB	2771	70	65	
			A55_J9_THR_JCT_WB	270	70	65	
			A55_J10_THR_JCT_WB	717	70	65	
			A55_J10_J11_WB	3160	70	65	
			A55_J11_THR_JCT_WB	675	70	65	
2	Britannia Bridge Only	Eastbound	A55_J8A_J9_EB	1500	50	45	VISSIM model outputs used for this section
		Westbound	A55_J8A_J9_WB	1500	50	45	
3	Britannia Bridge to A55 J6	Eastbound	A55_J7_J8_EB	4384	70	65	65mph used to account for carriageway geometry and the general composition of traffic flow.
			A55_J6_J7_EB	3853	70	65	
			A55_J6_THR_JCT_EB	767	70	65	
			A55_J7_THR_JCT_EB	687	70	65	
			A55_J8_J8A_EB	185	50	45	45mph average speed assumed to allow for merging prior to Junction 8A.
			A55_J8_THR_JCT_EB	462	50	45	45mph speed assumed for HGVs
			A55_J8A_THR_JCT_EB	190	50	45	45mph speed assumed to allow for merging at Junction 8A.
		Westbound	A55_J7_J8_WB	4384	70	65	65mph used to account for carriageway geometry and the general composition of traffic flow.
			A55_J6_J7_WB	3853	70	65	
			A55_J6_THR_JCT_WB	767	70	65	
			A55_J7_THR_JCT_WB	687	70	65	45mph assumed to allow for traffic accelerating up the hill at the speed limit change.
			A55_J8_J8A_WB	185	50	45	
			A55_J8_THR_JCT_WB	462	70	65	
			A55_J8A_THR_JCT_WB	190	50	65	65mph used to account for carriageway geometry and the general composition of traffic flow.
4	A55 J6 to A55 J4	Eastbound	A55_J5_J6_EB	8660	70	65	65mph used to account for carriageway geometry and the general composition of traffic flow.
			A55_J4_THR_JCT_EB	649	70	65	
			A55_J5_THR_JCT_EB	646	70	65	65mph used to account for carriageway geometry and the general composition of traffic flow.
			A55_J4_J5_EB	3739	70	65	
		Westbound	A55_J5_J6_WB	8660	70	65	65mph used to account for carriageway geometry and the general composition of traffic flow.
			A55_J4_THR_JCT_WB	649	70	65	
			A55_J5_THR_JCT_WB	646	70	65	
			A55_J4_J5_WB	3739	70	65	
5	A55 J4 to A55 J3	Eastbound	A55_J3_THR_JCT_EB	608	70	65	65mph used to account for carriageway geometry and the general composition of traffic flow.
			A55_J3_J4_EB	1802	70	65	65mph used to account for carriageway geometry and the general composition of traffic flow.
		Westbound	A55_J3_THR_JCT_WB	608	70	65	
			A55_J3_J4_WB	1802	70	65	
						65	65mph used to account for carriageway geometry and the general composition of traffic flow.
6	A55 J3 to A55 J2	Eastbound	A55_J2_J3_EB	5182	70	65	Although HGVs can travel at 60mph on dual carriageways, the assessment has assumed that on average HGVs would travel at 55mph along these links, which allows for the changes in gradient along this section.
		Westbound	A55_J2_J3_WB	5182	70	65	Although HGVs can travel at 60mph on dual carriageways, the assessment has assumed that on average HGVs would travel at 55mph along these links, which allows for the changes in gradient along this section.

Section	Location	Direction	Links within the section	Link Length (m)	Speed Limit (mph)	Project traffic speed (mph)	Justification
7	A55 J2 to A55 J1	Eastbound	A55_J1_J2_EB	469	50	45	Speed limit is 50mph. Assumed on average that HGVs would not reach 50mph speed limit due to the section being so short. Therefore, 45mph speed assumed.
			A55_J0_J1_EB	378	30	30	Speed limit is 30mph.
			A55_J2_THR_JCT_EB	700	50	45	45mph speed assumed for HGVs
		Westbound	A55_J1_J2_WB	469	30	30	Speed limit is 30mph.
			A55_J0_J1_WB	378	30	30	Speed limit is 30mph.
			A55_J2_THR_JCT_WB	700	50	45	45mph speed assumed for HGVs
8	A5 (Parc Cybi) to Valley Crossroads	Eastbound	A55_J2_OVER_BRIDGE_NB	132	30	30	Speed limit is 30mph.
			A5_11_EB	505	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs after the speed limit change.
			A5153_20_EB	164	30	30	Speed limit is 30mph.
			A5_10_EB	1528	60	45	Speed of 45mph assumed on average for HGVs
			A5153_10_NB	441	30	30	Speed limit is 30mph.
			A5_13_EB	680	30	30	Speed limit is 30mph.
			A5_12_EB	1875	60	45	Speed of 45mph assumed on average for HGVs
		Westbound	A55_J2_OVER_BRIDGE_SB	132	30	30	Speed limit is 30mph.
			A5_11_WB	505	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs after the speed limit change.
			A5153_20_WB	164	30	30	Speed limit is 30mph.
			A5_10_WB	1528	60	45	Speed of 45mph assumed on average for HGVs
			A5153_10_SB	441	30	30	Speed limit is 30mph.
			A5_13_WB	680	30	30	Speed limit is 30mph.
			A5_12_WB	1875	60	45	Speed of 45mph assumed on average for HGVs
9	A5025 Section 1a On-line	Northbound	A5025_11_NB	602	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs after the 30mph speed limit.
			A5_20_EB	707	60	45	HGVs assumed to be decelerating as they approach the roundabouts at A55 J3, therefore 45mph assumed.
			A5025_10_NB	154	30	30	Speed limit is 30mph.
			A55_J3_OVER_BRIDGE_NB	179	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs from the roundabouts at A55 J3
		Southbound	A5025_11_SB	602	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs after the 30mph speed limit.
			A5_20_WB	707	60	45	HGVs assumed to be accelerating off the roundabouts at A55 J3, therefore 45mph assumed.
			A5025_10_SB	154	30	30	Speed limit is 30mph.
			A55_J3_OVER_BRIDGE_SB	179	60	45	Speed limit is 60mph, but HGVs assumed to be accelerating off the roundabouts, therefore 45mph assumed.
10	A5025 Section 1b Off-line	Northbound	A5025_BY1_10_WB	368	30	30	Speed limit is 30mph.
			A5025_BY1_12_EB	271	30	30	Speed limit is 30mph.
			A5025_BY1_13_NB	800	60	45	Speed limit is 60mph, but HGVs assumed to be accelerating off the roundabout, therefore 45mph assumed.
		Southbound	A5025_BY1_10_EB	368	30	30	Speed limit is 30mph.
			A5025_BY1_12_WB	271	30	30	Speed limit is 30mph.
			A5025_BY1_13_SB	800	60	45	Speed limit is 60mph, but HGVs assumed to be accelerating off the roundabout, therefore 45mph assumed.
11	A5025 Section 2 On-line	Northbound	A5025_20_NB	343	40	40	Speed limit is 40mph.
			A5025_13_NB	365	40	40	Speed limit is 40mph.
			A5025_12_NB	1619	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			A5025_21_NB	306	60	45	Speed of HGV reduced to 45mph due to bends in the road.
		Southbound	A5025_20_SB	343	40	40	Speed limit is 40mph.
			A5025_13_SB	365	40	40	Speed limit is 40mph.
			A5025_12_SB	1619	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			A5025_21_SB	306	60	45	Speed of HGV reduced to 45mph due to bends in the road.
12	A5025 Section 3a On-line	Northbound	A5025_51_NB	179	50	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs after the 30mph speed limit and negotiating bends on this section.
			A5025_22_NB	719	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			A5025_23_NB	217	30	30	Speed limit is 30mph.
			A5025_30_NB	52.00	30	30	Speed limit is 30mph.
			A5025_40_NB	389	30	30	Speed limit is 30mph.
			A5025_60_NB	32	50	40	Speed of HGV reduced to 45mph due to bends in the road.
			A5025_50_NB	490	30	30	Speed limit is 30mph.
		Southbound	A5025_51_SB	179	50	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs after the 30mph speed limit and negotiating bends on this section.
			A5025_22_SB	719	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			A5025_23_SB	217	30	30	Speed limit is 30mph.
			A5025_30_SB	52.00	30	30	Speed limit is 30mph.
			A5025_40_SB	389	30	30	Speed limit is 30mph.
			A5025_60_SB	32	50	40	Speed of HGV reduced to 45mph due to bends in the road.
			A5025_50_SB	490	30	30	Speed limit is 30mph.

Section	Location	Direction	Links within the section	Link Length (m)	Speed Limit (mph)	Project traffic speed (mph)	Justification
13	A5025 Section 3b Off-line	Northbound	A5025_BY2_20_NB	1990	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs after the speed limit change.
		Southbound	A5025_BY2_20_SB	1990	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs after the speed limit change.
14	A5025 Section 4 On-line	Northbound	A5025_70_NB	596	50	35	Speed limit is 50mph. Speed of HGV reduced to 35mph due to bends in the road.
			A5025_71_NB	2274	60	45	Speed of HGV reduced to 45mph due to bends in the road.
		Southbound	A5025_70_SB	596	50	35	Speed limit is 50mph. Speed of HGV reduced to 35mph due to bends in the road.
			A5025_71_SB	2274	60	45	Speed of HGV reduced to 45mph due to bends in the road.
15	A5025 Section 5a On-line	Northbound	A5025_72_NB	191	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			A5025_80_NB	218	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			A5025_81_NB	346	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			A5025_90_NB	487	40	25	Speed limit is 40mph. Speed of HGV reduced to 25mph due to bends in the road.
			A5025_82_NB	127	40	40	Speed limit is 40mph.
		Southbound	A5025_72_SB	191	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			A5025_80_SB	218	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			A5025_81_SB	346	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			A5025_90_SB	487	40	25	Speed limit is 40mph. Speed of HGV reduced to 25mph due to bends in the road.
			A5025_82_SB	127	40	25	Speed limit is 40mph. Speed of HGV reduced to 25mph due to bends in the road.
16	A5025 Section 5b Off-line	Northbound	A5025_BY3_30_NB	155	60	45	Speed of 45mph reflects the top speed that HGVs and PSVs can carry through the bends.
			A5025_BY3_31_NB	277	60	45	Speed of 45mph reflects the top speed that HGVs and PSVs can carry through the bends.
			A5025_BY3_32_NB	77	60	45	Speed of 45mph reflects the top speed that HGVs and PSVs can carry through the bends.
			A5025_BY3_33_NB	426	40	40	Speed limit is 40mph.
			A5025_82_NB	127	40	25	Speed limit is 40mph. Speed of HGV reduced to 25mph due to bends in the road.
		Southbound	A5025_BY3_30_SB	155	60	45	Speed of 45mph reflects the top speed that HGVs and PSVs can carry through the bends.
			A5025_BY3_31_SB	277	60	45	Speed of 45mph reflects the top speed that HGVs and PSVs can carry through the bends.
			A5025_BY3_32_SB	77	60	45	Speed of 45mph reflects the top speed that HGVs and PSVs can carry through the bends.
			A5025_BY3_33_SB	426	40	40	Speed limit is 40mph.
			A5025_82_SB	127	40	25	Speed limit is 40mph. Speed of HGV reduced to 25mph due to bends in the road.
17	A5025 Section 6 On-line	Northbound	A5025_110_NB	817	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			A5025_91_NB	360	40	30	Speed limit is 30mph.
			A5025_100_NB	406	40	40	Speed limit is 40mph.
			A5025_101_NB	1803	60	45	Speed of HGV reduced to 45mph due to bends in the road.
		Southbound	A5025_110_SB	817	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			A5025_91_SB	360	40	30	Speed limit is 30mph.
			A5025_100_SB	406	40	40	Speed limit is 40mph.
			A5025_101_SB	1803	60	45	Speed of HGV reduced to 45mph due to bends in the road.
18	A5025 Section 7a On-line	Northbound	A5025_111_NB	176	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			A5025_120_NB	407	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			A5025_130_NB	559	60	45	Speed of HGV reduced to 45mph due to bends in the road.
		Southbound	A5025_111_SB	176	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			A5025_120_SB	407	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			A5025_130_SB	559	60	45	Speed of HGV reduced to 45mph due to bends in the road.
19	A5025 Section 7b Off-line	Northbound	A5025_BY4_40_NB	471	60	45	Speed of 45mph reflects the top speed that HGVs and PSVs can carry through the bends.
			A5025_BY4_41_NB	562	60	45	Speed of 45mph reflects the top speed that HGVs and PSVs can carry through the bends.
		Southbound	A5025_BY4_40_SB	471	60	45	Speed of 45mph reflects the top speed that HGVs and PSVs can carry through the bends.
			A5025_BY4_41_SB	562	60	45	Speed of 45mph reflects the top speed that HGVs and PSVs can carry through the bends.
20	A5025 Section 8 On-line	Northbound	A5025_131_NB	609	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			A5025_140_NB	596	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			A5025_150_NB	997	60	45	Speed of HGV reduced to 45mph due to bends in the road.
		Southbound	A5025_131_SB	609	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			A5025_140_SB	596	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			A5025_150_SB	997	60	45	Speed of HGV reduced to 45mph due to bends in the road.
21	A5025 Tregele	Northbound		318	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs after negotiating bends on this section.
			A5025_151_NB				
			A5025_152_NB	219	40	40	Speed limit is 40mph.
		Southbound	A5025_160_NB	320	40	40	Speed limit is 40mph.
			A5025_151_SB	318	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs after negotiating bends on this section.
			A5025_152_SB	219	40	40	Speed limit is 40mph.
			A5025_160_SB	320	40	40	Speed limit is 40mph.

Section	Location	Direction	Links within the section	Link Length (m)	Speed Limit (mph)	Project traffic speed (mph)	Justification
22	A5025 Tregele to Amlwch	Eastbound	A5025_171_EB	940	30	30	Speed limit is 30mph.
			A5025_181_EB	4499	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			A5025_190_EB	1170	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			A5025_192_EB	676	40	40	Speed limit is 40mph.
			A5025_191_EB	1087	30	30	Speed limit is 30mph.
			A5025_180_EB	394	30	30	Speed limit is 30mph.
			A5025_170_EB	270	40	40	Speed limit is 40mph.
			A5025_193_EB	880	30	30	Speed limit is 30mph.
			A5025_200_SB	545	30	30	Speed limit is 30mph.
		Westbound	A5025_201_SB	89	30	30	Speed limit is 30mph.
			A5025_171_WB	940	30	30	Speed limit is 30mph.
			A5025_181_WB	4499	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			A5025_190_WB	1170	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			A5025_192_WB	676	40	40	Speed limit is 40mph.
			A5025_191_WB	1087	30	30	Speed limit is 30mph.
			A5025_180_WB	394	30	30	Speed limit is 30mph.
			A5025_170_WB	270	40	40	Speed limit is 40mph.
			A5025_193_WB	880	30	30	Speed limit is 30mph.
23	A5025 Amlwch to Benllech	Northbound	A5025_200_NB	545	30	30	Speed limit is 30mph.
			A5025_201_NB	89	30	30	Speed limit is 30mph.
			A5025_251_NB	740	30	30	Speed limit is 30mph.
			A5025_241_NB	357	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs after negotiating bends on this section.
			A5025_231_NB	1187	40	25	Speed limit is 40mph. Speed of HGV reduced to 25mph due to bends in the road.
			A5025_222_NB	331	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			A5025_220_NB	3034	40	30	Speed limit is 30mph.
			A5025_212_NB	102	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs after negotiating bends on this section.
			A5025_210_NB	52	30	30	Speed limit is 30mph.
			A5025_211_NB	1073	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			A5025_221_NB	3277	40	30	Speed limit is 30mph.
			A5025_230_NB	1504	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			A5025_240_NB	385	40	25	Speed limit is 40mph. Speed of HGV reduced to 25mph due to bends in the road.
		Southbound	A5025_250_NB	1542	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs after negotiating bends on this section.
			A5025_251_SB	740	30	30	Speed limit is 30mph.
			A5025_241_SB	357	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs after negotiating bends on this section.
			A5025_231_SB	1187	40	25	Speed limit is 40mph. Speed of HGV reduced to 25mph due to bends in the road.
			A5025_222_SB	331	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			A5025_220_SB	3034	40	30	Speed limit is 30mph.
			A5025_212_SB	102	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs after negotiating bends on this section.
			A5025_210_SB	52	30	30	Speed limit is 30mph.
			A5025_211_SB	1073	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			A5025_221_SB	3277	40	30	Speed limit is 30mph.
			A5025_230_SB	1504	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			A5025_240_SB	385	40	25	Speed limit is 40mph. Speed of HGV reduced to 25mph due to bends in the road.
			A5025_250_SB	1542	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs after negotiating bends on this section.

Section	Location	Direction	Links within the section	Link Length (m)	Speed Limit (mph)	Project traffic speed (mph)	Justification
24	A5025 Benllech to A55 J8	Northbound	A5025_264_NB	1233	30	30	Speed limit is 30mph.
			A5025_263_NB	638	40	25	Speed limit is 40mph. Speed of HGV reduced to 25mph due to bends in the road.
			A5025_261_NB	397	40	40	Speed limit is 40mph.
			A5025_271_NB	2757	50	40	Speed limit is 50mph. Speed of HGV reduced to 40mph due to bends in the road.
			A5025_260_NB	1089	30	30	Speed limit is 30mph.
			A5025_280_NB	877	50	45	Speed of HGV reduced to 45mph due to bends in the road.
			A5025_262_NB	1655	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			A5025_281_NB	211	30	30	Speed limit is 30mph.
			A5025_273_NB	1671	50	40	Speed limit is 50mph. Speed of HGV reduced to 40mph due to bends in the road.
				1944	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs after negotiating bends on this section.
			A5025_272_NB				
			A5025_270_NB	444	30	30	Speed limit is 30mph.
			A55_J8_OVER_BRIDGE_NB	64	30	30	Speed limit is 30mph.
		Southbound	A5025_264_SB	1233	30	30	Speed limit is 30mph.
			A5025_263_SB	638	40	25	Speed limit is 40mph. Speed of HGV reduced to 25mph due to bends in the road.
			A5025_261_SB	397	40	40	Speed limit is 40mph.
			A5025_271_SB	2757	50	40	Speed limit is 50mph. Speed of HGV reduced to 40mph due to bends in the road.
			A5025_260_SB	1089	30	30	Speed limit is 30mph.
			A5025_280_SB	877	50	45	Speed of HGV reduced to 45mph due to bends in the road.
			A5025_262_SB	1655	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			A5025_281_SB	211	30	30	Speed limit is 30mph.
			A5025_273_SB	1671	50	40	Speed limit is 50mph. Speed of HGV reduced to 40mph due to bends in the road.
				1944	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs after negotiating bends on this section.
			A5025_272_SB				
			A5025_270_SB	444	30	30	Speed limit is 30mph.
			A55_J8_OVER_BRIDGE_SB	64	30	30	Speed limit is 30mph.
25	A5 Rhostrohwyfa to A5 Menai Bridge	Eastbound	A55_J8A_UNDER_BRIDGE_NB	132	40	40	Speed limit is 40mph.
			A5_72_EB	712	40	40	Speed limit is 40mph.
			A5_70_EB	2929	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs from the roundabout south of A55 J7, therefore 45mph assumed.
			A5_61_EB	1343	30	30	Speed limit is 30mph.
			A5_40_EB	1714	60	45	Speed of 45mph reflects the deceleration of HGVs and PSVs towards the roundabouts at A55 J6, therefore 45mph assumed.
			A55_J6_OVER_BRIDGE_NB	165	60	45	Speed limit is 60mph, but HGVs assumed to be accelerating off the roundabouts, therefore 45mph assumed.
			A5_60_EB	318	40	40	Speed limit is 40mph.
			A5_71_EB	1223	30	30	Speed limit is 30mph.
			A5_62_EB	202	60	45	Speed of 45mph reflects the deceleration of HGVs and PSVs towards the roundabout south of A55 J7, therefore 45mph assumed.
			A5_100_NB	415	30	30	Speed limit is 30mph.
			A5_80_EB	1482	60	45	Speed of 45mph for HGVs and PSVs due to gradient changes along the section.
				1731	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs after the speed limit changes. Therefore, not all vehicles expected to achieve 50mph on this section. As a result, 45mph assumed.
			A5_50_EB				
			A5_51_EB	1228	40	40	Speed limit is 40mph.
		Westbound	A55_J8A_UNDER_BRIDGE_SB	132	40	40	Speed limit is 40mph.
			A5_72_WB	712	40	40	Speed limit is 40mph.
			A5_70_WB	2929	60	45	Speed of 45mph reflects the deceleration of HGVs and PSVs towards the roundabout south of A55 J7, therefore 45mph assumed.
			A5_61_WB	1343	30	30	Speed limit is 30mph.
			A5_40_WB	1714	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs from the roundabouts at A55 J6, therefore 45mph assumed.
			A55_J6_OVER_BRIDGE_SB	165	60	45	Speed limit is 60mph, but HGVs assumed to be accelerating off the roundabouts, therefore 45mph assumed.
			A5_60_WB	318	40	40	Speed limit is 40mph.
			A5_71_WB	1223	30	30	Speed limit is 30mph.
			A5_62_WB	202	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs from the roundabout south of A55 J7, therefore 45mph assumed.
			A5_100_SB	415	30	30	Speed limit is 30mph.
			A5_80_WB	1482	60	45	Speed of 45mph for HGVs and PSVs due to gradient changes along the section.
				1731	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs after the speed limit changes. Therefore, not all vehicles expected to achieve 50mph on this section. As a result, 45mph assumed.
			A5_50_WB				

App C2.02 Link Lengths and Speed Assumptions

Section	Location	Direction	Links within the section	Link Length (m)	Speed Limit (mph)	Project traffic speed (mph)	Justification
26	Menai Bridge to A545 Beaumaris Road	Eastbound	A545_10_EB	1700	30	30	Speed limit is 30mph.
		Westbound	A545_10_WB	1700	30	30	Speed limit is 30mph.
27	Menai Bridge Only	Northbound	A5_110_NB	562	30	30	Speed limit is 30mph.
		Southbound	A5_110_SB	562	30	30	Speed limit is 30mph.
28	A55 J9 to A5 Holyhead Road	Eastbound	A55_J9_UNDER_BRIDGE_NB	241	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs off the roundabout and at A55 J9.
			A5_120_EB	986	40	40	Speed limit is 40mph.
			A487_20_NB	374	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs off the roundabout and at A5/ Menai Bridge.
		Westbound	A55_J9_UNDER_BRIDGE_SB	241	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs off the roundabout and at A55 J9.
			A5_120_WB	986	40	40	Speed limit is 40mph.
			A487_20_SB	374	60	45	Speed of 45mph reflects the deceleration of HGVs and PSVs off the roundabout and at A5/ Menai Bridge.
29	A55 J9 to A487 Y Felinheli Bypass	Northbound	A487_10_NB	318	60	45	Speed of 45mph reflects the deceleration of HGVs and PSVs towards the roundabout and at A55 J9.
			A487_30_NB	1000	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs off the A487/ B4547 roundabout.
		Southbound	A487_10_SB	318	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs towards the roundabout and at A55 J9.
			A487_30_SB	1000	60	45	Speed of 45mph reflects the deceleration of HGVs and PSVs off the A487/ B4547 roundabout.
30	A4080 Ffordd Brynsiencyn to A5 Holyhead Road	Northbound	A4080_20_NB	643	40	40	Speed limit is 40mph.
			A4080_21_NB	324	30	30	Speed limit is 30mph.
		Southbound	A4080_20_SB	643	40	40	Speed limit is 40mph.
			A4080_21_SB	324	30	30	Speed limit is 30mph.
31	B5420 Llangefni to A5 Ffordd Caergybi	Eastbound	B5420_14_EB	670	30	30	Speed limit is 30mph.
			B5420_10_EB	670	30	30	Speed limit is 30mph.
			B5420_12_EB	8583	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			B5420_13_EB	1104	30	30	Speed limit is 30mph.
			B5420_11_EB	334	30	30	Speed limit is 30mph.
		Westbound	B5420_14_WB	670	30	30	Speed limit is 30mph.
			B5420_10_WB	670	30	30	Speed limit is 30mph.
			B5420_12_WB	8583	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			B5420_13_WB	1104	30	30	Speed limit is 30mph.
			B5420_11_WB	334	30	30	Speed limit is 30mph.
32	A55 J6 to A5114 Llangefni	Northbound	A5114_10_NB	968	30	30	Speed limit is 30mph.
			A5114_12_NB	715	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs between speed limit changes.
			A5114_11_NB	412	40	40	Speed limit is 40mph.
		Southbound	A5114_10_SB	968	30	30	Speed limit is 30mph.
			A5114_12_SB	715	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs between speed limit changes.
			A5114_11_SB	412	40	40	Speed limit is 40mph.
33	B5109 to Pentraeth	Eastbound	B5109_20_EB	658	30	30	Speed limit is 30mph.
			B5109_21_EB	6575	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs after negotiating bends on this section.
		Westbound	B5109_20_WB	658	30	30	Speed limit is 30mph.
			B5109_21_WB	6575	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs after negotiating bends on this section.
34	B5110 Llangefni to A5025 Marian-glas	Northbound	B5110_10_NB	417	30	30	Speed limit is 30mph.
			B5110_12_NB	6219	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs after negotiating bends on this section.
			B5110_16_NB	87	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs after negotiating bends on this section.
			B5110_15_NB	722	30	30	Speed limit is 30mph.
			B5110_14_NB	1640	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs after negotiating bends on this section.
			B5110_13_NB	724	30	30	Speed limit is 30mph.
			B5110_11_NB	933	40	40	Speed limit is 40mph.
			B5110_10_SB	417	30	30	Speed limit is 30mph.
			B5110_12_SB	6219	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs after negotiating bends on this section.

Section	Location	Direction	Links within the section	Link Length (m)	Speed Limit (mph)	Project traffic speed (mph)	Justification
		Southbound	B5110_16_SB	87	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs after negotiating bends on this section.
			B5110_15_SB	722	30	30	Speed limit is 30mph.
			B5110_14_SB	1640	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs after negotiating bends on this section.
			B5110_13_SB	724	30	30	Speed limit is 30mph.
			B5110_11_SB	933	40	40	Speed limit is 40mph.
35	B5111 Llangefni to Llannerch-y-medd	Northbound	B5111_10_NB	502	30	30	Speed limit is 30mph.
			B5111_15_NB	743	30	30	Speed limit is 30mph.
			B5111_13_NB	1558	30	30	Speed limit is 30mph.
			B5111_12_NB	880	40	25	Speed limit is 40mph. Speed of HGV reduced to 25mph due to bends in the road.
			B5111_11_NB	183	30	30	Speed limit is 30mph.
			B5111_14_NB	7030	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			B5111_10_SB	502	30	30	Speed limit is 30mph.
		Southbound	B5111_15_SB	743	30	30	Speed limit is 30mph.
			B5111_13_SB	1558	30	30	Speed limit is 30mph.
			B5111_12_SB	880	40	25	Speed limit is 40mph. Speed of HGV reduced to 25mph due to bends in the road.
			B5111_11_SB	183	30	30	Speed limit is 30mph.
			B5111_14_SB	7030	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			B5108_10_EB	2800	30	30	Speed limit is 30mph.
36	Llannerch-y-medd to Benllech	Northbound	LOCAL_130_EB	7790	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			B5108_10_WB	2800	30	30	Speed limit is 30mph.
		Southbound	LOCAL_130_WB	7790	60	45	Speed of HGV reduced to 45mph due to bends in the road.
37	B5111 Llannerch-y-medd to Amlwch	Northbound	B5111_20_NB	784	30	30	Speed limit is 30mph.
			B5111_32_NB	192	30	30	Speed limit is 30mph.
			B5111_30_NB	801	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs after negotiating bends on this section.
			B5111_31_NB	1378	30	30	Speed limit is 30mph.
			B5111_33_NB	3696	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs after negotiating bends on this section.
			B5111_21_NB	2106	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			B5111_35_NB	64	30	30	Speed limit is 30mph.
			B5111_34_NB	43	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs after negotiating bends on this section.
		Southbound	B5111_20_SB	784	30	30	Speed limit is 30mph.
			B5111_32_SB	192	30	30	Speed limit is 30mph.
			B5111_30_SB	801	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs after negotiating bends on this section.
			B5111_31_SB	1378	30	30	Speed limit is 30mph.
			B5111_33_SB	3696	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs after negotiating bends on this section.
			B5111_21_SB	2106	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			B5111_35_SB	64	30	30	Speed limit is 30mph.
			B5111_34_SB	43	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs after negotiating bends on this section.
38	B5111 Rhos-y-bol to Cemaes	Northbound	LOCAL_90_NB	761	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			LOCAL_20_NB	1445	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			LOCAL_80_WB	4460	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			LOCAL_70_WB	1650	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			LOCAL_81_WB	464	30	30	Speed limit is 30mph.
			LOCAL_120_NB	1110	30	30	Speed limit is 30mph.
		Southbound	LOCAL_90_SB	761	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			LOCAL_20_SB	1445	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			LOCAL_80_EB	4460	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			LOCAL_70_EB	1650	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			LOCAL_81_EB	464	30	30	Speed limit is 30mph.
			LOCAL_120_SB	1110	30	30	Speed limit is 30mph.
39	Rhos-y-bol to A5025 Burwen	Northbound	LOCAL_21_NB	577	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			LOCAL_26_NB	2652	50	35	Speed limit is 50mph. Speed of HGV reduced to 35mph due to bends in the road.
			LOCAL_25_NB	1726	30	30	Speed limit is 30mph.
			LOCAL_24_NB	404	30	30	Speed limit is 30mph.
		Southbound	LOCAL_22_NB	768	30	30	Speed limit is 30mph.
			LOCAL_24_SB	404	30	30	Speed limit is 30mph.
			LOCAL_22_SB	768	30	30	Speed limit is 30mph.

Section	Location	Direction	Links within the section	Link Length (m)	Speed Limit (mph)	Project traffic speed (mph)	Justification
40	B5112 Llannerch-y-medd to A55 J5	Northbound	B5112_11_NB	9163	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			B5112_10_NB	536	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			B5112_12_NB	250	30	30	Speed limit is 30mph.
			A4080_10_NB	235	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs from the roundabout at A55 J5.
			A55_J5_OVER_BRIDGE_NB	135	60	45	Speed limit is 60mph, but HGVs assumed to be accelerating off the roundabouts, therefore 45mph assumed.
		Southbound	B5112_11_SB	9163	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			B5112_10_SB	536	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			B5112_12_SB	250	30	30	Speed limit is 30mph.
			A4080_10_SB	235	60	45	Speed of 45mph reflects the deceleration of HGVs and PSVs towards the roundabout at A55 J5.
			A55_J5_OVER_BRIDGE_SB	135	60	45	Speed limit is 60mph, but HGVs assumed to be accelerating off the roundabouts, therefore 45mph assumed.
41	A5025 Llanfaethlu to B5112	Eastbound	LOCAL_60_EB	10250	60	45	Speed of HGV reduced to 45mph due to bends in the road.
		Westbound	LOCAL_60_WB	10250	60	45	Speed of HGV reduced to 45mph due to bends in the road.
42	B5109 Llanynghenedl to B5112	Eastbound	B5109_10_EB	1736	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			B5109_11_EB	533	30	30	Speed limit is 30mph.
			B5109_30_EB	533	30	30	Speed limit is 30mph.
			B5109_31_EB	3929	60	45	Speed of HGV reduced to 45mph due to bends in the road.
			B5109_10_WB	1736	60	45	Speed of HGV reduced to 45mph due to bends in the road.
		Westbound	B5109_11_WB	533	30	30	Speed limit is 30mph.
			B5109_30_WB	533	30	30	Speed limit is 30mph.
			B5109_31_WB	3929	60	45	Speed of HGV reduced to 45mph due to bends in the road.
43	A55 J4 to Bodedern	Northbound	LOCAL_50_NB	1060	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs after the speed limit changes. Therefore, not all vehicles expected to achieve 50mph on this section. As a result, 45mph assumed.
			LOCAL_51_NB	1040	30	30	Speed limit is 30mph.
			LOCAL_10_NB	153	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs from the roundabout at A55 J4.
		Southbound	LOCAL_50_SB	1060	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs after the speed limit changes. Therefore, not all vehicles expected to achieve 50mph on this section. As a result, 45mph assumed.
			LOCAL_51_SB	1040	30	30	Speed limit is 30mph.
			LOCAL_10_SB	153	60	45	Speed of 45mph reflects the deceleration of HGVs and PSVs towards the roundabout at A55 J4.
44	Llanfechell to A5025 Nanner Road	Eastbound	LOCAL_100_EB	2060	60	45	Speed of HGV reduced to 45mph due to bends in the road.
		Westbound	LOCAL_100_WB	2060	60	45	Speed of HGV reduced to 45mph due to bends in the road.
45	Ffordd-y-Felin to Tregelge via Cromlech Terrace	Eastbound	LOCAL_110_EB	1080	30	30	Speed limit is 30mph.
		Westbound	LOCAL_110_WB	1080	30	30	Speed limit is 30mph.
46	A55 J4 to A55 J3 (via A5)	Eastbound	A5_140_EB	1080	60	45	Speed of 45mph reflects the deceleration of HGVs and PSVs towards the roundabout at A55 J4.
			A5_160_EB	374	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs from the roundabout at A55 J3.
			A5_150_EB	898	30	30	Speed limit is 30mph.
		Westbound	A5_140_WB	1080	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs from the roundabout at A55 J4.
			A5_160_WB	374	60	45	Speed of 45mph reflects the deceleration of HGVs and PSVs towards the roundabout at A55 J3.
			A5_150_WB	898	30	30	Speed limit is 30mph.
47	A5 at Dalar Hir	Eastbound	A5_130_EB	596	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs from the roundabout at A55 J4.
			A5_30_EB	172	60	45	Speed of 45mph reflects the slow acceleration of HGVs and PSVs from the roundabout at A55 J4.
		Westbound	A5_130_WB	596	60	45	Speed of 45mph reflects the deceleration of HGVs and PSVs towards the roundabout at A55 J4.
			A5_30_WB	172	60	45	Speed of 45mph reflects the deceleration of HGVs and PSVs towards the roundabout at A55 J4.
48	Park and Ride entrance	Northbound	P&R_MAIN_ACCESS_10_IN	100	30	30	Speed limit is 30mph.
		Southbound	P&R_MAIN_ACCESS_10_OUT	100	30	30	Speed limit is 30mph.

Note: Where HGV and PSV influences the speed adopted for the assessment, this is in recognition that these vehicle types would constrain the speed of other vehicles because of the link characteristics (e.g. single carriageway).

Junction	Link	Junction Delay by scenario (seconds)																				
		2016 Baseline AM	2016 Baseline PM	2016 Baseline Weekend	2020 Reference Case AM	2020 Reference Case PM	2020 Reference Case Weekend	2023 Reference Case AM	2023 Reference Case PM	2023 Reference Case Weekend	2033 Reference Case AM	2033 Reference Case PM	2033 Reference Case Weekend	2020 Wylfa Newydd AM	2020 Wylfa Newydd PM	2020 Wylfa Newydd Weekend	2023 Wylfa Newydd AM	2023 Wylfa Newydd PM	2023 Wylfa Newydd Weekend	2033 Wylfa Newydd AM	2033 Wylfa Newydd PM	2033 Wylfa Newydd Weekend
A55 Junction 2 (Section 8)	A5153_10_SB	4	5	5	4	6	6	4	6	6	5	15	6	4	6	6	4	6	6	5	15	6
	A55_J2_OVER_BRIDGE_NB	3	4	4	3	4	4	3	4	4	4	8	5	3	4	4	4	5	4	4	8	5
	A55_J2_OVER_BRIDGE_SB	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	A5153_20_NB	3	5	4	4	5	5	4	5	5	4	129	5	4	5	5	4	6	5	4	129	5
A5/B4545 Signalised Crossroads, Valley (Section 9)	A5_13_EB	11	12	13	11	13	12	11	14	12	20	34	20	11	13	12	11	13	12	11	15	13
	A5_20_WB	11	12	11	11	15	11	11	16	11	21	34	18	10	10	9	10	10	9	10	10	9
	B4545_10_NB	37	52	48	38	42	50	39	43	45	32	72	36	27	43	40	27	43	41	27	43	42
	A5025_10_SB	24	39	56	25	57	64	25	61	69	21	47	38	0	0	0	0	0	0	0	0	0
A55 Junction 3 (Section 9)	A5_160_WB	4	5	4	4	5	4	4	5	4	5	5	4	4	5	4	4	5	4	5	5	4
	A55_J3_OVER_BRIDGE_NB	3	4	3	3	4	3	3	4	3	3	4	3	3	4	3	3	4	3	3	4	3
	A5_20_EB	5	4	4	5	4	4	5	4	4	8	5	4	5	5	4	6	7	4	8	8	5
A55 Junction 4 (Section 43)	A5_30_WB	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	A55_J4_OVER_BRIDGE_NB	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	LOCAL_10_SB	3	3	2	3	3	2	3	3	2	3	3	3	1	1	1	1	1	1	1	1	1
	A55_J4_OVER_BRIDGE_SB	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	A5_140_EB	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
A5/B5112/A4080 Priority Crossroads (Section 40)	B5112_10_SB	15	16	0	16	16	14	16	16	14	25	18	14	16	16	14	16	16	14	16	16	14
	A4080_10_NB	23	18	0	24	18	0	24	18	0	26	34	0	24	18	0	24	18	0	24	18	0
A5025/ Existing Site Access Road Priority Junction (Section 21)	A5025_170_WB	8	5	5	11	5	5	10	5	5	8	5	5	20	5	5	34	5	6	8	12	5
B5111/B5112 Priority Roundabout, Llannerch-y-medd (Section 37)	B5111_20_SB	7	6	6	7	6	6	8	6	6	13	7	6	7	6	6	8	6	6	13	7	6
	B5111_15_NB	3	4	3	3	4	3	3	4	3	4	4	3	3	4	3	3	4	3	4	4	3
	B5112_12_NB	3	3	3	3	3	3	3	3	3	3	4	3	3	3	3	3	3	3	3	4	3
A55 Junction 6 (Section 25)	A5114_12_SB	2	3	2	3	3	2	3	3	3	3	3	3	3	3	2	3	3	3	3	3	3
	A55_J6_OVER_BRIDGE_NB	4	5	3	5	5	4	5	5	4	5	5	4	5	5	4	5	5	4	5	6	4
	A5_40_SB	4	3	3	5	3	3	5	3	3	6	4	3	5	3	3	5	3	3	6	3	3
	A55_J6_OVER_BRIDGE_SB	4	5	5	4	5	5	4	5	5	6	6	5	4	5	5	4	5	5	6	5	5
	A5_50_WB	5	5	4	5	5	4	5	6	4	6	6	4	5	6	4	5	6	4	6	6	4
A5025/B5420 Priority Roundabout, Menai (Section 24)	A5025_273_SB		4			4			4			4			4			4			4	
	B5420_13_WB		6			7			7			9			7			7			9	
	A5025_280_NB		7			8			9			12			8			9			12	
	B5420_12_EB		5			5			5			6			5			5			6	

Junction	Link	Junction Delay by scenario (seconds)																				
		2016 Baseline AM	2016 Baseline PM	2016 Baseline Weekend	2020 Reference Case AM	2020 Reference Case PM	2020 Reference Case Weekend	2023 Reference Case AM	2023 Reference Case PM	2023 Reference Case Weekend	2033 Reference Case AM	2033 Reference Case PM	2033 Reference Case Weekend	2020 Wylfa Newydd AM	2020 Wylfa Newydd PM	2020 Wylfa Newydd Weekend	2023 Wylfa Newydd AM	2023 Wylfa Newydd PM	2023 Wylfa Newydd Weekend	2033 Wylfa Newydd AM	2033 Wylfa Newydd PM	2033 Wylfa Newydd Weekend
A5025/ B5109 Staggered Priority Crossroads, Pentraeth (Section 33)	A5025_251_SB	5	6	5	5	6	5	5	6	5	5	6	5	5	6	5	5	6	6	5	6	5
	A5025_260_NB	5	5	6	5	5	6	5	5	6	5	5	6	5	5	6	5	5	5	5	5	6
	B5108_10_EB	16	20	21	16	21	21	16	23	23	19	37	23	16	21	21	16	23	23	19	37	23
A55 Junction 8 (Section 24)	A5025_281_SB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	A55_J8_OVER_BRIDGE_NB	7	7	7	7	7	7	7	7	7	7	8	7	7	7	7	7	7	7	7	8	7
	A55_J8_OVER_BRIDGE_SB	14	14	14	15	17	15	16	18	16	27	23	19	15	18	15	16	20	16	27	23	19
A55 Junction 9 (Section 28)	A487_20_SB	3	3	2	4	3	2	4	3	2	4	3	2	4	3	2	4	3	2	5	3	2
	A55_J9_UNDER_BRIDGE_NB	2	4	3	3	5	3	3	5	3	3	5	3	3	5	3	3	5	3	3	4	3
	A55_J9_UNDER_BRIDGE_SB	4	3	2	5	3	2	5	4	2	6	4	2	5	4	2	5	4	2	6	4	2
	A487_10_NB	8	7	4	9	8	4	10	9	4	18	14	4	9	9	4	11	10	4	18	11	4
A5025/ Proposed Access Road Priority Junction (Section 20)	A5025_151_SB													2	3	2	3	4	2	3	3	3
	A5025_150_NB													4	3	3	7	3	3	4	3	3
A5025/ MEEG Access Priority Junction (Section 15)	A5025_90_NB																					
A5/ Proposed Park & Ride Exit Signalised junction (Section 47)	P&R_EXIT_10				6	0	0	0	0	0				0	8	11	0	6	9			
	A5_130_WB				32	5	5	5	5	5				5	23	16	5	32	20			
	A5_30_EB				32	5	5	5	5	5				5	23	16	5	32	19			
London Road/ Proposed Park & Ride Entrance Priority Roundabout (Section 48)	LOCAL_10_SB													2	2	2	2	2	2	2	2	2
	P&R_MAIN_ACCESS_10_NB													1	1	1	1	1	1	0	0	0
	A5_30_WB													3	3	3	3	3	3	3	3	3
	A55_J4_OVER_BRIDGE_NB													3	3	3	3	3	3	3	3	3
	A55_J4_OFF-SLIP_EB													3	3	3	3	3	3	3	3	3
	P&R_MAIN_ACCESS_10_SB													1	1	1	1	1	1	1	1	1
A5 Mona Road/ Pentraeth Road Priority Roundabout, Menai (Section 25)	B5420_13_EB	8			9			10			12	5		9			10			12	5	
	A5_100_NB	3			3			3			3	15		3			3			3	15	
	A5_80_EB	3			3			3			3	5		3			3			3	5	
A5/ A487 Priority Roundabout, Menai (Section 28)	A5_120_WB	2	3	2	2	3	2	2	3	2	2	3	2	2	3	2	2	3	2	2	3	2
	A487_20_NB	3	5	3	3	6	3	3	6	3	3	8	3	3	6	3	3	6	3	3	6	3
	A5_110_SB	4	2	2	4	2	2	4	2	2	5	2	2	4	2	2	4	2	2	4	2	2
A487/ B4547 Priority Roundabout, South of A55 Junction 9 (Section 29)	A487_10_SB										6									6		
	A487_30_NB										7									7		
A5114/ Bridge Street Priority Junction, Llangefni (Section 32)	A5114_10_NB	27	72	22	34	134	25	39	172	28	113	869	40	34	166	25	34	166	25	39	238	28