

High Speed Rail (Crewe – Manchester)

Supplementary Environmental Statement 2 and Additional Provision 2 Environmental Statement

Volume 5: Appendix TR-003-00001 – Report 1 of 2

Traffic and transport

Transport Assessment Part 3 Addendum

MA01: Hough to Walley's Green

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MA01: Hough to Walley's Green



Department for Transport

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11 Hough to Walley's Green (MA01)

11.1 AP2 revised scheme construction description

Introduction

- 11.1.1 A number of changes to the original scheme reported in Section 5.2 of this report mean that Section 13.2 of the main Transport Assessment (the main TA) and Section 10.1 of the Supplementary Environmental Statement 1 and Additional Provision 1 Environmental Statement TA (SES1 and AP1 ES TA) are generally replaced by Section 11.1 in this document. Where there is no replacement the text in the main TA and the SES1 and AP1 ES TA (the AP1 revised scheme) remains valid.
- 11.1.2 The terms used in this report to differentiate between the original proposals assessed as part of the main Environmental Statement (ES) and subsequent changes are set out in the SES2 and AP2 ES Volume 5, Appendix: TR-001-00000 Transport Assessment Part 1 Addendum.
- 11.1.3 This section provides an overview of the construction traffic and transport impacts for the section of the AP2 revised scheme that will pass through the Hough to Walley's Green (MA01) community area.
- 11.1.4 Construction of the AP2 revised scheme is expected to commence in 2026 with construction activity continuing to 2039 (although activity in 2039 will be limited to testing and commissioning). Construction activities have been assessed against 2031 baseline traffic flows, irrespective of when they occur during the construction period.

Construction activities and phasing

- 11.1.5 Details of the main construction works and the time periods when each compound is operational are summarised in the indicative construction programme. For the construction programme refer to SES2 and AP2 ES Volume 2, Community Area report: Hough to Walley's Green (MA01), Section 6.
- 11.1.6 A complete description of the works associated with the AP2 revised scheme in the MA01 area is provided in SES2 and AP2 ES Volume 2, Community Area report: Hough to Walley's Green (MA01), Sections 2 and 4. The construction works will be carried out throughout MA01 for the majority of the construction period. The overall programme has been outlined on a year-by-year basis.
- 11.1.7 Table 13-1 in the SES1 and AP1 ES TA replaced Table 13-1 in the main TA and summarised the key construction activities, along with their start dates. Table 13-1 below replaces Table 13-1 in the SES1 and AP1 ES TA.

Table 13-1: AP2 revised scheme key highway construction activities in the MA01 area

Activity	Community area (CA)	Start date
Area Advance Works	MA01	2026 Q1
Middlewich Street vent shaft	MA01	2028 Q2
Cowley Way vent shaft	MA01	2028 Q2
Crewe Northern Connection – northbound works	MA01	2029 Q2
Crewe Northern Connection – southbound works	MA01	2029 Q2
Crewe tunnel south porous portal	MA01	2031 Q1

Compounds and construction sites

- 11.1.8 The AP2 revised scheme will be constructed from compounds. This will include main compounds that manage and coordinate the work from satellite compounds. Where material is required to be transferred from site haul movements to highway movements, this will be undertaken through transfer nodes.
- 11.1.9 Table 13-2 in the SES1 and AP1 ES TA replaced Table 13-2 in the main TA and summarised the expected average and peak workforce (site workers plus staff) at each construction compound in the MA01 area. Table 13-2 below replaces Table 13-2 in the SES1 and AP1 ES TA.
- 11.1.10 The location of the construction compounds and the associated construction Heavy Goods Vehicle (HGV) routes in MA01 are shown in SES2 and AP2 ES Volume 5, Traffic and transport Map Book: Map Series TR-08 – Construction Routes to the Strategic Network.

Table 13-2: AP2 revised scheme assumed workforce at construction sites in the MA01 area

Compound type	Compound name	Number of site workers (peak)	Number of staff (peak)	Total workforce (site plus staff)	
				Average	Peak
Satellite	Crewe tunnel south portal satellite compound	90	48	85	138
Satellite	Cowley Way vent shaft satellite compound	81	53	93	134
Satellite	Middlewich Street vent shaft satellite compound	80	45	86	125
Main	Crewe tunnel north main compound	410	164	310	560
Satellite	Warmingham Moss satellite compound	215	60	131	275
Satellite	Moss Lane satellite compound	195	60	131	255

- 11.1.11 Table 13-3 in the SES1 and AP1 ES TA replaced Table 13-3 in the main TA and summarised the compound set up dates and the duration of active use. Table 13-3 below replaces Table 13-3 in the SES1 and AP1 ES TA.
- 11.1.12 Table 13-3 also provides a summary of the HGV and car/Light Goods Vehicle (LGV) access trips at each compound in the peak month of activity and during the busy period. For each compound, the peak month of activity is the month within which HGV traffic is at its highest for that compound. The busy period is the period during which HGV traffic serving that compound will be greater than 50% of the HGV traffic in the peak month. The average daily

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combined two-way vehicle trips¹ for the busy period is the lower end of the range shown in Table 13-3 and the average daily combined two-way vehicle trips for the peak month is the upper end of the range shown. The estimated duration of busy period is also provided.

Table 13-3: AP2 revised scheme typical vehicle trip generation for construction site compounds in the MA01 area

Compound type	Compound name	Indicative start/set up date (years/quarter)	Estimated duration of active use (years/months)	Average daily combined two-way car/LGV trips during busy period and within peak month of activity	Average daily combined two-way HGV trips during busy period and within peak month of activity	Estimate duration of busy period (months)
Satellite	Crewe tunnel south portal satellite compound	2031 Q1	4 years	94-248	188-190	7
Satellite	Cowley Way vent shaft satellite compound	2028 Q2	5 years and 9 months	110-190	112-114	2
Satellite	Middlewich Street vent shaft satellite compound	2028 Q2	5 years and 9 months	106-128	64-86	12
Main	Crewe tunnel north main compound	2027 Q3	7 years and 6 months	374-576	222-338	33
Satellite	Warmingham Moss satellite compound	2028 Q2	7 years and 3 months	196-502	166-226	7
Satellite	Moss Lane satellite compound	2028 Q2	7 years and 6 months	196-468	154-210	11

11.1.13 The indicative construction programme in the SES2 and AP2 ES Volume 2, Community Area report: Hough to Walley's Green (MA01), Section 6 illustrates how the phasing of activities at different compounds will generally be staggered and that construction activities at individual compounds may not occur over the whole duration presented in Table 13-3.

Construction HGV routes

11.1.14 Construction vehicle movements required to construct the AP2 revised scheme will include the delivery of plant and materials, movement of surpluses and site workforce trips. Works will include utilities diversions, earthworks, and the construction of underpasses, viaducts, bridges and highways.

11.1.15 HGV have been routed, where reasonably practicable, along the strategic or primary road network, although some access locations will be via local roads. Where reasonably practicable, the use of the local road network has been limited to site set up, access for

¹ Two-way trips refer to the total number of vehicle movements in both directions (i.e. with 200 westbound (or arriving) vehicles and 100 eastbound (or departing), there would be 300 two-way trips).

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environmental surveys and ongoing servicing (including refuse collection and general deliveries).

- 11.1.16 The location of the compounds and the associated construction HGV routes are shown on the SES2 and AP2 ES Volume 5, Traffic and transport Map Book: Map Series TR-08. Table 13-4 in the SES1 and AP1 ES TA replaced Table 13-4 in the main TA and summarised the construction HGV routes to and from each compound to the main road network. Table 13-4 below replaces Table 13-4 in the SES1 and AP1 ES TA. For some compounds, Table 13-4 includes multiple construction HGV routes. This is either because the construction HGV route varies depending on the origin/destination of the trip or because the construction HGV route varies over time to account for changes to the highway network or changes in construction activity through the construction period.

Table 13-4: AP2 revised scheme construction HGV routes for construction compounds in the MA01 area

Compound name(s)	Access routes to/from compound(s) to main road network
Crewe tunnel south portal satellite compound	Casey Lane, Newcastle Road and A531 Newcastle Road
Cowley Way vent shaft satellite compound	Route to/from the south: Cowley Way, A532 Weston Road, A5020 David Whitby Way and A500 Shavington Bypass Route to/from the north: Cowley Way, A532 Weston Road and A534 Crewe Road
Middlewich Street vent shaft satellite compound	Route to/from the south: B5076 Middlewich Street, Remer Street, Sydney Road and A5020 University Way B5076 Middlewich Street, Remer Street, B5076 North Street, B5076 Bradfield Road, B5076 Flowers Lane and A530 Middlewich Road Route to/from the north: B5076 Middlewich Street, Remer Street, Sydney Road and A534 Haslington Bypass
Crewe tunnel north main compound	Route to/from the south: Warmingham Road, Groby Road, Sydney Road and A5020 University Way Parkers Road, B5076 Bradfield Road, B5076 Flowers Lane and A530 Middlewich Road Route to/from the north: Warmingham Road, Groby Road, Sydney Road and A534 Haslington Bypass
Warmingham Moss satellite compound	Route to/from the south: Site haul route, Warmingham Road, Groby Road, Sydney Road and A5020 University Way Site haul route, Warmingham Road, Groby Road, Sydney Road and A534 Haslington Bypass Site haul route, Parkers Road, B5076 Bradfield Road, B5076 Flowers Lane and A530 Middlewich Road

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Compound name(s)	Access routes to/from compound(s) to main road network
	Route to/from the north: Site haul route and A530 Nantwich Road
Moss Lane satellite compound	Site haul route and A530 Middlewich Road

- 11.1.17 Table 13-5 in the SES1 and AP1 ES TA replaced Table 13-5 in the main TA and summarised the peak daily construction traffic flows associated with the AP1 revised scheme, both in HGV and total vehicles (which includes LGV and workforce trips), on roads within the MA01 area that form part of construction HGV routes. Table 13-5 below replaces Table 13-5 in the SES1 and AP1 ES TA.
- 11.1.18 Table 13-5 indicates an increase in construction traffic, when compared to the AP1 revised scheme at locations such as parts of Newcastle Road and the A530 Nantwich Road.
- 11.1.19 Where zero 'all vehicle' and/or 'HGV' construction flows are indicated, these represent links that are no longer a main construction route when considering the AP2 revised scheme. These links may, however, be subject to occasional or infrequent use by AP2 revised scheme construction traffic.
- 11.1.20 The forecast traffic flow tables presented in this report use the following abbreviations for road direction: NB = northbound; SB = southbound; EB = eastbound; and WB = westbound.

Table 13-5: AP2 revised scheme MA01 peak daily construction traffic flow

Location	Direction	Daily peak HGV vehicles	Daily peak all vehicles
Back Lane (between Casey Lane and Newcastle Road)	NB	95	114
	SB	95	114
Newcastle Road (between Back Lane and Casey Lane realignment)	EB	95	153
	WB	95	143
Newcastle Road (between Casey Lane realignment and A531 Newcastle Road)	NB	95	241
	SB	95	239
Casey Lane (between Back Lane and route of HS2 Phase 2a)	NB	95	114
	SB	95	114
A531 Newcastle Road (between Main Road and A500 Shavington Bypass)	EB	95	216
	WB	95	238
A51 Nantwich Bypass (between A51 Newcastle Road and A534 Crewe Road)	NB	690	770
	SB	690	766
A500 Newcastle Road (between A500 Shavington Bypass and M6 junction 16)	EB	748	1,171
	WB	748	1,224
A500 Shavington Bypass (between A51 Newcastle Road and B5071 Jack Mills Way)	EB	690	776
	WB	690	771
A500 Shavington Bypass (between B5071 Jack Mills Way and A5020 David Whitby Way)	EB	690	776
	WB	690	772
	EB	748	964

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Location	Direction	Daily peak HGV vehicles	Daily peak all vehicles
A500 Shavington Bypass (between A5020 David Whitby Way and A500 Newcastle Road)	WB	748	999
A51 Nantwich Bypass (between A534 Crewe Road and A530 Middlewich Road)	NB	690	778
	SB	690	772
A5020 David Whitby Way (between A500 Shavington Bypass and B5472 Weston Road)	NB	97	276
	SB	97	236
A530 Middlewich Road (between A51 Nantwich Bypass and Colleys Lane)	NB	690	795
	SB	690	775
A5020 University Way (between A534 Crewe Green Road and A532 Weston Road)	NB	77	291
	SB	77	177
A532 Weston Road (between A5020 David Whitby Way and Western Road Service Road (southern access))	EB	54	118
	WB	54	101
A530 Middlewich Road (between Colleys Lane and Wistaston Green Road)	EB	690	798
	WB	690	786
A532 Weston Road (between Western Road Service Road (southern access) and Western Road Service Road (central southern access))	EB	54	118
	WB	54	101
A532 Weston Road (between Western Road Service Road (central southern access) and Western Road Service Road (central northern access))	NB	5	83
	SB	5	101
A532 Weston Road (between Western Road Service Road (central northern access) and Western Road Service Road (northern access))	NB	5	84
	SB	5	101
A532 Weston Road (between Western Road Service Road (northern access) and A534 Crewe Road)	NB	5	84
	SB	5	101
A534 Crewe Road (between A532 Weston Road and Gateway)	EB	5	73
	WB	5	74
A532 Macon Way (between A534 Crewe Road and Hungerford Road)	NB	10	13
	SB	10	36
A534 Crewe Road (between Gateway and Electra Way)	EB	5	73
	WB	5	74
A534 Crewe Green Road (between Electra Way and A5020 University Way)	EB	5	71
	WB	5	74
A530 Middlewich Road (between Wistaston Green Road and A532 Coppenhall Lane)	NB	690	809
	SB	690	799
A5078 Oak Street (between Cross Street and A5019 Mill Street)	EB	10	10
	WB	10	10
A5078 Oak Street (between A5078 Edleston Road and Cross Street)	EB	10	10
	WB	10	10
	EB	10	15

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Location	Direction	Daily peak HGV vehicles	Daily peak all vehicles
A5019 Vernon Way (between A5019 Mill Street and Lyon Street)	WB	10	14
A5078 Wistaston Road (between A5078 Dunwoody Way and A5078 Edleston Road)	EB	10	16
	WB	10	15
A5078 Dunwoody Way (between Flag Lane and A5078 Wistaston Road)	EB	10	16
	WB	10	15
A532 Coppenhall Lane (between A530 Middlewich Road and Sunnybank Road)	EB	10	16
	WB	10	18
A532 Manchester Bridge (between William Street and Hungerford Road)	EB	10	41
	WB	10	13
A5019 Vernon Way (between Lyon Street and A532 Earle Street)	NB	10	15
	SB	10	14
A5078 Dunwoody Way (between The Four Eagles PH access and Flag Lane)	EB	10	16
	WB	10	15
A532 Earle Street (between A5019 Vernon Way and William Street)	EB	10	12
	WB	10	11
Sydney Road (between Hungerford Road and Shakespeare Drive)	NB	94	321
	SB	94	199
A5078 Dunwoody Way (between Joseph Reddrop Way and The Four Eagles PH access)	NB	10	15
	SB	10	16
A532 Coppenhall Lane (between Sunnybank Road and Victoria Avenue)	EB	10	16
	WB	10	18
A532 Vernon Way (between A532 Earle Street and A532 West Street)	NB	10	16
	SB	10	16
A532 West Street (between Broad Street and A532 Vernon Way)	EB	10	19
	WB	10	13
A532 Coppenhall Lane (between Ford Lane and Broad Street)	EB	10	18
	WB	10	12
A532 West Street (between Ford Lane and Broad Street)	EB	10	19
	WB	10	14
A532 Coppenhall Lane (between Minshull New Road and Darlington Avenue)	EB	10	16
	WB	10	18
Sydney Road (between Shakespeare Drive and Lansdowne Road)	NB	94	321
	SB	94	199
A5078 Dunwoody Way (between A532 West Street and Joseph Reddrop Way)	EB	10	16
	WB	10	15
A532 Vernon Way (between A532 West Street and Badger Avenue)	NB	10	24
	SB	10	18
	EB	10	19

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Location	Direction	Daily peak HGV vehicles	Daily peak all vehicles
A532 West Street (between Goddard Street and Ford Lane)	WB	10	14
A532 West Street (between Darlington Avenue and Frank Webb Avenue)	EB	10	16
	WB	10	12
A532 West Street (between Underwood Lane and Goddard Street)	EB	10	19
	WB	10	19
A532 West Street (between A5078 Dunwoody Way and Underwood Lane)	EB	10	16
	WB	10	10
A532 Coppenhall Lane (between Frank Webb Avenue and A5078 Dunwoody Way)	EB	10	20
	WB	10	15
B5076 Middlewich Road (between B5076 Vernon Way and Henry Street)	EB	10	25
	WB	10	22
B5076 Middlewich Road (between Henry Street and Elm Drive)	NB	10	26
	SB	10	51
A534 Haslington Bypass (between Sydney Road and Clay Lane)	NB	21	103
	SB	21	102
B5076 Middlewich Street (between Henry Street and Elm Drive)	NB	10	26
	SB	10	51
A530 Middlewich Road (between A532 Coppenhall Lane and Pyms Lane)	NB	690	805
	SB	690	796
B5076 Middlewich Road (between Elm Drive and Stamp Avenue)	NB	43	54
	SB	43	56
Sydney Road (between Herbert Street and Maw Green Road)	NB	94	321
	SB	94	201
B5076 Middlewich Street (between Stamp Avenue and Lime Tree Avenue)	NB	43	54
	SB	43	56
A530 Middlewich Road (between Pyms Lane and Middlewich Road)	NB	690	805
	SB	690	796
B5076 Middlewich Street (between Lime Tree Avenue and Remer Street)	NB	43	54
	SB	43	56
Remer Street (between Acer Avenue and Groby Road)	EB	43	71
	WB	43	100
Remer Street (between B5076 Middlewich Street and Acer Avenue)	EB	43	74
	WB	43	102
B5076 Middlewich Street (between Broad Street and Remer Street)	EB	10	46
	WB	10	73
B5076 North Street (between Broughton Road and Broad Street)	EB	10	46
	WB	10	72
	EB	10	46

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Location	Direction	Daily peak HGV vehicles	Daily peak all vehicles
B5076 Bradfield Road (between Underwood Lane and Broughton Road)	WB	10	72
B5076 Bradfield Road (between Selworthy Drive and Mablins Lane)	EB	10	47
	WB	10	74
B5076 Bradfield Road (between Mablins Lane and Cliffe Road)	EB	10	66
	WB	10	84
B5076 Bradfield Road (between Cliffe Road and Underwood Lane)	EB	10	50
	WB	10	71
Broughton Road (between Maplins Moss Place and Parkers Road)	NB	10	10
	SB	10	11
A530 Middlewich Road (between Middlewich Road and Smithy Lane)	NB	690	805
	SB	690	796
Groby Road (between Remer Street and Stoneley Road)	NB	87	237
	SB	87	172
B5076 Bradfield Road (between Parkers Road and Selworthy Drive)	NB	10	73
	SB	10	49
B5076 Bradfield Road (between Parkers Road and B5076 Flowers Lane)	EB	87	258
	WB	87	237
Parkers Road (between B5076 Bradfield Road and Higher Croft Drive)	EB	87	219
	WB	87	174
Parkers Road (between Higher Croft Drive and Parkfield)	EB	87	220
	WB	87	174
Parkers Road (between Parkfield and Mablins Lane)	EB	87	221
	WB	87	174
B5076 Flowers Lane (between A530 Middlewich Road and B5076 Bradfield Road)	EB	87	258
	WB	87	237
Parkers Road (between Mablins Lane and Broughton Road)	EB	87	232
	WB	87	193
A534 Haslington Bypass (between Clay Lane and Crewe Road)	EB	21	141
	WB	21	302
Groby Road (between Stoneley Road and Warmingham Road)	NB	87	128
	SB	87	131
A530 Middlewich Road (between Smithy Lane and B5076 Flowers Lane)	NB	690	812
	SB	690	807
Warmingham Road (between Broughton Road and Waldron's Lane)	EB	87	507
	WB	87	465
Warmingham Road (between Waldron's Lane and Groby Road)	EB	87	465
	WB	87	355
	NB	21	142

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Location	Direction	Daily peak HGV vehicles	Daily peak all vehicles
A534 Wheelock Bypass (between Crewe Road and Mill Lane)	SB	21	290
A530 Middlewich Road (between B5076 Flowers Lane and Eardswick Lane)	NB	624	821
	SB	624	837
Warmingham Road (between Groby Road and Moss Lane)	NB	10	352
	SB	10	245
A534 Wheelock Bypass (between Mill Lane and A533 Old Mill Road)	NB	21	144
	SB	21	290
A534 Old Mill Road (between Brookhouse Road and A533 The Hill)	NB	21	149
	SB	21	290
A533 Old Mill Road (between A534 Wheelock Bypass and A533 The Hill)	NB	21	149
	SB	21	289
A534 Old Mill Road (between A533 The Hill and Congleton Road)	NB	21	143
	SB	21	292
A530 Middlewich Road (between Eardswick Lane and Brookhouse Lane)	NB	604	864
	SB	604	874
A534 Congleton Road (between Congleton Road and M6 northbound off-slip)	EB	21	214
	WB	21	326
A534 Congleton Road (between M6 northbound off-slip and M6 southbound on-slip)	EB	11	101
	WB	11	274
A530 Nantwich Road (between Brookhouse Lane and Clive Green Lane)	NB	536	1,135
	SB	536	1,040
A532 West Street (between Victoria Avenue and Minshull New Road)	EB	10	13
	WB	10	19
Warmingham Road (between Hall Lane and School Lane)	NB	10	278
	SB	10	25
Warmingham Road (between Moss Lane and Hall Lane)	NB	10	352
	SB	10	245

Traffic management, road closures and diversions

11.1.21 The approach to traffic management, road closures and diversions is reported in Section 13.2 of the main TA and Section 10.1 of the SES1 and AP1 ES TA. This section of the main TA and the SES1 and AP1 ES TA is unchanged.

Public rights of way, closures and diversions

11.1.22 The approach to PRow closures and diversions is reported in Section 13.2 of the main TA and Section 10.1 of the SES1 and AP1 ES TA. This section of the main TA and the SES1 and AP1 ES TA is unchanged.

11.2 AP2 revised scheme assessment of construction impacts

- 11.2.1 The MA01 construction assessment (for the original scheme) is reported in Section 13.3 of the main TA and Section 10.2 of the SES1 and AP1 ES TA (for the AP1 revised scheme).
- 11.2.2 The SES2 changes and AP2 amendments reported in Section 5.2 of this report mean that Section 13.3 of the main TA and Section 10.2 of the SES1 and AP1 ES TA are generally replaced by Section 11.2 in this document. Where there is no replacement the text in the main TA and the SES1 and AP1 ES TA remains valid.

Key construction transport issues

- 11.2.3 The construction assessment takes account of all of the impacts of the AP2 revised scheme in the MA01 area. The main temporary traffic and transport impacts in this area will include:
- construction and workforce vehicle movements to and from the various construction compounds;
 - road closures, realignments and diversions;
 - alternative routes for PRoW and roadside footways; and
 - possessions and blockades on the conventional rail network.
- 11.2.4 The construction assessment has also considered any impacts in this area that arise from construction of the AP2 revised scheme in the adjoining community areas.
- 11.2.5 Refinements to the construction process and programme will result in further changes to construction traffic on the local road network compared to the AP1 revised scheme.

Highway network

Highway diversions, realignments and closures

- 11.2.6 Highway diversions, realignments and closures required to accommodate construction of the original scheme are reported in Section 14.3 of the main TA and those required to accommodate construction of the AP1 revised scheme are provided in Section 10.2 of the SES1 and AP1 ES TA.
- 11.2.7 The AP2 revised scheme will introduce temporary modifications to the highway network to mitigate construction impacts at the following junctions:
- B5076 Bradfield Road/Parkers Road (AP2-001-001);
 - Warmingham Road/Hall Lane (AP2-001-002); and
 - A534 Old Mill Road/Congleton Road (AP2-001-003).

- 11.2.8 During implementation and removal of the temporary junction modifications, temporary traffic management will be required, with no change in journey lengths. On completion of the construction phase of the AP2 revised scheme, these junctions will be reverted to their existing layouts.
- 11.2.9 These may involve lane closures and partial lane closures under traffic control for the tie-in of the new alignments, intermittent lane restrictions and temporary road closures. Closures and diversions will be restricted to short-term overnight and/or weekend closures where reasonably practicable.

Highway network analysis

- 11.2.10 The impacts of construction of the AP2 revised scheme on the highway network have been assessed by undertaking strategic model runs for a number of 'with AP2 revised scheme' construction scenarios, and by comparing the flows and delays against the 2031 future baseline scenario.
- 11.2.11 Changes have been made within the strategic model to reflect construction including HS2 construction traffic and changes to the road network including road closures, traffic management and changes to junction operations. These changes are only relevant to some aspects of the assessment, namely those related to highway impacts due to the combination of highway changes and construction traffic. These aspects are changes in:
- traffic flows;
 - junction performance; and
 - bus journey times.
- 11.2.12 To ensure the assessment addresses the different combinations and interactions of advance works, utility diversions, temporary highway closures and diversions and construction HGV movements through the construction programme period, the impacts have been considered in a utilities scenario and two construction scenarios representing three distinct temporal phases. These scenarios ensure that all activities are assessed and combined impacts identified. It should be noted that, due to changes in the construction programme of the AP2 revised scheme and to ensure a robust assessment, these scenarios differ slightly from those reported in the SES1 and AP1 ES TA:
- utilities scenario, 2026 Q1 – 2027 Q2. This scenario corresponds with utility and advance works and includes shuttle working on the A532 Weston Road and Weston Service Road one-way system, shuttle working on the A530 Nantwich Road and temporary traffic management associated with implementation of the temporary junction modifications. There are negligible construction traffic movements in this scenario;
 - scenario 1, 2027 Q3 – 2031 Q1. This corresponds with the construction peak during the period when Clive Green Lane (Wimboldsley to Lostock Gralam (MA02) community area) will not be available to HS2 construction traffic and includes shuttle working on the A532 West Street/Coppenhall Lane and commencement of works on Cowley Way vent shaft

and Middlewich Street vent shaft. This scenario equates to 94% of the overall peak in construction traffic across the whole construction period; and

- scenario 2, 2031 Q2 – 2036 Q4. This corresponds with the construction peak following the realignment of Clive Green Lane (Wimboldsley to Lostock Gralam (MA02) community area) and includes works associated with Crewe tunnel south portal satellite compound. This scenario equates to the overall peak in construction traffic across the whole construction period.

11.2.13 Table 13-6 in the SES1 and AP1 ES TA replaced Table 13-6 in the main TA and summarised the advance works, utility diversions, main works and construction HGV movements included in each scenario, ensuring that the impacts of the relevant activities are assessed in-combination, as appropriate. Table 13-6 below replaces Table 13-6 in the SES1 and AP1 ES TA.

Table 13-6: AP2 revised scheme construction highway interventions by scenario in the MA01 area

Type	Intervention	Utilities scenario	Scenario 1	Scenario 2
Utilities	Shuttle working on A532 West Street/Coppenhall Lane	Not included	Included	Not included
Utilities	A532 Weston Road and Weston Service Road one-way system and shuttle working on the A530 Nantwich Road between bridge over West Coast Main Line and junction with Clive Green Lane	Included	Not included	Not included
Main works	Temporary traffic management associated with implementation of temporary junction modifications	Included	Not included	Not included
Main works	Clive Green Lane (Wimboldsley to Lostock Gralam (MA02) community area) available to construction traffic	Not included	Not included	Included
Main works	Grobby Road/Remer Street/Maw Green Road Junction Improvement Scheme	Included*	Included*	Included*
	Construction HGV traffic assessed as a percentage of peak construction HGV traffic	Negligible	94%	100%

**While it is considered likely that this improvement scheme will have been completed prior to the commencement of the construction of the AP1 revised scheme, due to the uncertainty over the timing of its delivery, the Sydney Road/Maw Green Road, Remer Street/Sydney Road/Elm Drive and Remer Street/Grobby Drive junctions have been assessed both with and without the junction improvement scheme in place.*

Strategic and local road network traffic flows

11.2.14 During the construction period a number of roads will be affected by the construction of the AP2 revised scheme. An assessment of the impact of construction related vehicle movements and temporary diversions has been undertaken and is detailed below. The flows outlined in the following sections will not necessarily occur concurrently, as impacts on different parts of the network will occur at different times.

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- 11.2.15 The A500 Crewe Area Wide Transport model has been used to model the construction scenarios across MA01. In the MA01 area, the model covers the area from Stoke-on-Trent in the south, Bunbury in the west, Kidsgrove in the east and the M6 junction 18 in the north.
- 11.2.16 The strategic traffic model used to assess the impacts of the AP2 revised scheme within the MA01 area has been updated since the SES1 and AP1 ES TA. This has led to traffic flow changes in the baseline and future baseline traffic scenarios, as set out in this report.
- 11.2.17 Table 13-7 and Table 13-8 in the SES1 and AP1 ES TA replaced Table 13-7 and Table 13-8 in the main TA and set out the traffic flows for the 2030 future baseline and the AP1 revised scheme on the roads most affected by construction of the AP1 revised scheme for the AM and PM peak hours respectively. Table 13-7 and Table 13-8 below replace Table 13-7 and Table 13-8 in the SES1 and AP1 ES TA, with the 2030 baseline replaced by 2031. In both time periods, the percentage changes in HGV flows are generally higher than the percentage changes in all traffic flows as a result of the relatively low number of HGV movements in the future baseline. Due to the simplified way in which the road network is represented in the strategic models, the use of some local roads may not be precisely reflected in the forecast traffic flows during construction of the AP2 revised scheme; however, this is not expected to change the conclusions of the assessment.
- 11.2.18 Traffic flows on all other roads are either unaffected from the future baseline or there are only small changes in traffic flows (HGV or all vehicles of less than 10%) compared to the future baseline daily flow.
- 11.2.19 It should be noted that, unless identified in the next section of this report relating to junction impacts, these changes in traffic will not result in material increases in congestion or delay.
- 11.2.20 An assessment has been undertaken of the construction traffic volumes and routes associated with HS2 Phase 2a. However, the assessment indicates that in the future baseline of 2031 there will be minimal construction traffic movements as a result of HS2 Phase 2a that overlap with the AP2 revised scheme.
- 11.2.21 Figure 13-1 to Figure 13-6 in the SES1 and AP1 ES TA replaced Figure 13-1 to Figure 13-6 in the main TA and set out traffic flow changes for each scenario for the AM and PM peak hours. Figure 13-1 to Figure 13-6 below replace Figure 13-1 to Figure 13-6 in the SES1 and AP1 ES TA. The width of the band indicates the proportional change in traffic, with red representing an increase and green a decrease compared with the 2031 future baseline scenario. It should be noted that due to the simplified way in which the road network is represented in the strategic model, the location of some modelled links may not precisely match the location of the corresponding roads shown on the mapping. However, this does not change the conclusions of the assessment.
- 11.2.22 The forecast traffic flow tables presented in this report use the following abbreviations for road direction: NB = northbound; SB = southbound; EB = eastbound; and WB = westbound.

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Table 13-7: 2031 future baseline and with the AP2 revised scheme construction traffic (vehicles) - AM peak hour (08:00–09:00)

Location	Direction	2031 baseline flows		2031 AP2 revised scheme flows - utilities scenario		Utilities scenario - % change from 2031 baseline		2031 AP2 revised scheme flows - scenario 1		Scenario 1 - % change from 2031 baseline		2031 AP2 revised scheme flows - scenario 2		Scenario 2 - % change from 2031 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
Annions Lane (between A51 London Road and B5071 Main Road)	EB	32	0	43	0	34%	0%	58	0	81%	0%	51	0	59%	0%
	WB	88	0	88	0	0%	0%	88	0	0%	0%	88	0	0%	0%
Wybunbury Lane (between Wybunbury Lane and B5071 Stock Lane)	EB	0	0	0	0	0%	0%	0	0	0%	0%	0	0	0%	0%
	WB	29	0	29	0	0%	0%	30	0	3%	0%	30	0	3%	0%
Back Lane (between Casey Lane and Newcastle Road)	NB	82	0	85	0	4%	0%	83	3	1%	0%	91	10	11%	0%
	SB	53	0	61	0	15%	0%	49	3	-8%	0%	55	9	4%	0%
Newcastle Road (between Casey Lane realignment and A531 Newcastle Road)	EB	402	16	410	16	2%	0%	400	19	0%	19%	401	25	0%	56%
	WB	428	11	438	11	2%	0%	468	14	9%	27%	493	20	15%	82%
Newcastle Road (between Back Lane and Casey Lane realignment)	EB	377	19	392	19	4%	0%	388	23	3%	21%	397	29	5%	53%
	WB	411	22	420	22	2%	0%	422	25	3%	14%	427	31	4%	41%
Main Road east (between Newcastle Road and Main Road west)	NB	167	0	173	0	4%	0%	201	0	20%	0%	191	0	14%	0%
	SB	72	0	74	0	3%	0%	78	0	8%	0%	78	0	8%	0%
A531 Newcastle Road (between Main Road and A500 Shavington Bypass)	EB	491	16	454	16	-8%	0%	423	18	-14%	13%	421	25	-14%	56%
	WB	308	12	313	13	2%	8%	315	15	2%	25%	346	22	12%	83%
A500 Shavington Bypass (between A51 Newcastle Road and B5071 Jack Mills Way)	EB	1,440	76	1,435	80	0%	5%	1,380	125	-4%	64%	1,382	123	-4%	62%
	WB	1,161	76	1,193	77	3%	1%	1,232	141	6%	86%	1,191	136	3%	79%
	NB	912	53	913	48	0%	-9%	889	113	-3%	113%	878	110	-4%	108%

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Location	Direction	2031 baseline flows		2031 AP2 revised scheme flows - utilities scenario		Utilities scenario - % change from 2031 baseline		2031 AP2 revised scheme flows - scenario 1		Scenario 1 - % change from 2031 baseline		2031 AP2 revised scheme flows - scenario 2		Scenario 2 - % change from 2031 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
A51 Nantwich Bypass (between A51 Newcastle Road and A534 Crewe Road)	SB	685	66	679	64	-1%	-3%	601	116	-12%	76%	647	113	-6%	71%
Casey Lane realignment (between Newcastle Road and Weston Lane)	NB	151	6	162	5	7%	-17%	163	6	8%	0%	157	6	4%	0%
	SB	162	12	167	11	3%	-8%	169	12	4%	0%	169	12	4%	0%
Cemetery Road (between Cemetery Road north and Main Road)	EB	26	1	28	1	8%	0%	28	1	8%	0%	30	1	15%	0%
	WB	105	1	103	1	-2%	0%	108	1	3%	0%	112	1	7%	0%
Cemetery Road (between Whites Lane and Mere Road)	EB	47	0	51	0	9%	0%	51	0	9%	0%	51	0	9%	0%
	WB	72	0	70	0	-3%	0%	77	0	7%	0%	80	0	11%	0%
Eastern Road (between Rope Hall Lane and Rope Lane)	EB	8	2	11	2	38%	0%	20	2	150%	0%	17	2	113%	0%
	WB	10	0	11	0	10%	0%	11	0	10%	0%	11	0	10%	0%
A500 Shavington Bypass (between B5071 Jack Mills Way and A5020 David Whitby Way)	EB	1,728	78	1,777	82	3%	5%	1,689	128	-2%	64%	1,673	125	-3%	60%
	WB	1,533	89	1,587	90	4%	1%	1,613	155	5%	74%	1,601	149	4%	67%
A500 Shavington Bypass (between A5020 David Whitby Way and A500 Newcastle Road)	EB	1,078	78	1,150	82	7%	5%	1,100	133	2%	71%	1,095	129	2%	65%
	WB	1,471	86	1,516	94	3%	9%	1,569	156	7%	81%	1,592	152	8%	77%
A500 Newcastle Road (between A500 Shavington Bypass and M6 junction 16)	EB	1,640	128	1,663	133	1%	4%	1,595	182	-3%	42%	1,600	180	-2%	41%
	WB	1,864	93	1,924	101	3%	9%	1,977	162	6%	74%	2,029	160	9%	72%
	NB	934	42	957	35	2%	-17%	955	100	2%	138%	948	98	1%	133%

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		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
A51 Nantwich Bypass (between A534 Crewe Road and A530 Middlewich Road)	SB	642	68	663	66	3%	-3%	732	119	14%	75%	753	116	17%	71%
A5020 David Whitby Way (between A500 Shavington Bypass and B5472 Weston Road)	NB	982	37	959	36	-2%	-3%	906	47	-8%	27%	894	45	-9%	22%
	SB	405	38	413	29	2%	-24%	371	48	-8%	26%	336	43	-17%	13%
A530 Middlewich Road (between A51 Nantwich Bypass and Colleys Lane)	NB	1,205	39	1,203	35	0%	-10%	1,196	101	-1%	159%	1,169	98	-3%	151%
	SB	750	23	744	24	-1%	4%	677	93	-10%	304%	672	89	-10%	287%
A5020 University Way (between A534 Crewe Green Road and A532 Weston Road)	NB	748	20	729	17	-3%	-15%	782	27	5%	35%	779	27	4%	35%
	SB	691	27	733	17	6%	-37%	741	36	7%	33%	742	32	7%	19%
A530 Middlewich Road (between Colleys Lane and Wistaston Green Road)	EB	1,270	40	1,249	36	-2%	-10%	1,235	101	-3%	153%	1,216	99	-4%	148%
	WB	878	25	891	25	1%	0%	771	94	-12%	276%	809	90	-8%	260%
Barthomley Road (between Radway Green Road and B5077 Butterton Lane)	NB	108	0	106	1	-2%	0%	112	1	4%	0%	112	1	4%	0%
	SB	59	0	81	0	37%	0%	58	0	-2%	0%	57	0	-3%	0%
Ernest Street (between Manor Way and Neville Street)	NB	139	2	132	2	-5%	0%	176	2	27%	0%	182	2	31%	0%
	SB	12	0	12	0	0%	0%	15	2	25%	0%	13	1	8%	0%
Chambers Street (between Catherine Street and A534 Nantwich Road)	SB	23	0	23	0	0%	0%	23	0	0%	0%	23	0	0%	0%
	EB	151	5	317	18	110%	260%	152	5	1%	0%	152	5	1%	0%

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		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
Weston Road Service Road (between Weston Road south access and Weston Road north access)	WB	17	1	17	1	0%	0%	17	1	0%	0%	17	1	0%	0%
Cotterill Street (between A534 Nantwich Road and Hope Street)	NB	4	0	4	0	0%	0%	4	0	0%	0%	4	0	0%	0%
	SB	5	0	5	0	0%	0%	5	0	0%	0%	5	0	0%	0%
Hope Street (between A5078 Edleston Road and Cotterill Street)	EB	19	0	21	0	11%	0%	23	0	21%	0%	23	0	21%	0%
	WB	33	0	33	0	0%	0%	37	0	12%	0%	33	0	0%	0%
Hope Street (between Lord Street and A5019 Mill Street)	EB	16	0	18	0	13%	0%	17	0	6%	0%	20	0	25%	0%
	WB	12	0	12	0	0%	0%	12	0	0%	0%	12	0	0%	0%
Union Street (between A5078 Edleston Road and Lord Street)	EB	168	8	164	8	-2%	0%	126	7	-25%	-13%	150	8	-11%	0%
	WB	4	0	4	0	0%	0%	10	6	150%	0%	5	1	25%	0%
Union Street (between Lord Street and A5019 Mill Street)	EB	168	8	164	8	-2%	0%	125	7	-26%	-13%	150	8	-11%	0%
	WB	6	0	6	0	0%	0%	12	6	100%	0%	7	1	17%	0%
A530 Middlewich Road (between Wistaston Green Road and A532 Coppenhall Lane)	NB	1,403	37	1,395	33	-1%	-11%	1,329	99	-5%	168%	1,430	97	2%	162%
	SB	904	32	881	31	-3%	-3%	762	99	-16%	209%	764	96	-15%	200%
Wistaston Road (between Flag Lane and Walthall Street)	EB	30	3	47	3	57%	0%	17	3	-43%	0%	18	3	-40%	0%
	WB	188	5	187	5	-1%	0%	315	8	68%	60%	189	5	1%	0%
	NB	6	0	6	0	0%	0%	6	0	0%	0%	6	0	0%	0%

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		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
Forge Street/Prince Albert Street (between Chester Street and Lyon Street)	SB	132	0	158	0	20%	0%	196	0	48%	0%	148	0	12%	0%
Coleridge Way (between Hungerford Road and Wordsworth Drive)	NB	29	2	32	2	10%	0%	40	2	38%	0%	33	2	14%	0%
	SB	103	0	94	0	-9%	0%	98	0	-5%	0%	98	0	-5%	0%
Sydney Road (between Hungerford Road and Shakespeare Drive)	NB	777	10	717	9	-8%	-10%	795	19	2%	90%	782	18	1%	80%
	SB	817	10	774	9	-5%	-10%	858	20	5%	100%	850	19	4%	90%
Shakespeare Drive (between Sydney Road and Laureston Avenue)	EB*	5	1	5	1	0%	0%	5	1	0%	0%	5	1	0%	0%
	WB	75	0	71	0	-5%	0%	70	0	-7%	0%	70	0	-7%	0%
Laureston Avenue (between Shakespeare Drive and Wordsworth Drive)	NB	75	0	71	0	-5%	0%	70	0	-7%	0%	70	0	-7%	0%
	SB*	5	1	5	1	0%	0%	5	1	0%	0%	5	1	0%	0%
Wordsworth Drive (between Kipling Way and Laureston Avenue)	EB	6	0	6	0	0%	0%	6	0	0%	0%	6	0	0%	0%
	WB	73	0	69	0	-5%	0%	68	0	-7%	0%	69	0	-5%	0%
Wordsworth Drive (between Tennyson Avenue and Kipling Way)	EB	8	0	8	0	0%	0%	8	0	0%	0%	8	0	0%	0%
	WB	71	0	66	0	-7%	0%	66	0	-7%	0%	66	0	-7%	0%
Wordsworth Drive (between Coleridge Way and Tennyson Avenue)	EB	12	0	12	0	0%	0%	12	0	0%	0%	12	0	0%	0%
	WB	72	0	68	0	-6%	0%	67	0	-7%	0%	67	0	-7%	0%
Coleridge Way (between Lansdowne Road and Wordsworth Drive)	NB	20	2	23	2	15%	0%	31	2	55%	0%	25	2	25%	0%
	SB	34	0	30	0	-12%	0%	34	0	0%	0%	34	0	0%	0%

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		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
Lansdowne Road (between Coleridge Way and Pelican Close)	EB	8	2	8	2	0%	0%	9	2	13%	0%	9	2	13%	0%
	WB	16	0	11	0	-31%	0%	16	0	0%	0%	16	0	0%	0%
Sydney Road (between Shakespeare Drive and Lansdowne Road)	NB	656	10	598	9	-9%	-10%	678	18	3%	80%	665	18	1%	80%
	SB	751	10	695	8	-7%	-20%	792	20	5%	100%	784	19	4%	90%
Lansdowne Road (between Lansdowne Road and Sydney Road)	EB	15	2	15	2	0%	0%	16	2	7%	0%	16	2	7%	0%
	WB	66	0	59	0	-11%	0%	55	0	-17%	0%	62	0	-6%	0%
A530 Middlewich Road (between A532 Coppenhall Lane and Pyms Lane)	NB	842	24	822	20	-2%	-17%	1,121	87	33%	263%	881	84	5%	250%
	SB	733	19	803	19	10%	0%	671	86	-8%	353%	686	84	-6%	342%
Elm Drive (between B5076 Middlewich Street and Coronation Street)	EB	30	0	43	0	43%	0%	52	0	73%	0%	64	0	113%	0%
	WB	19	0	11	0	-42%	0%	43	0	126%	0%	52	0	174%	0%
Elm Drive (between Coronation Street and Sycamore Avenue)	NB	30	0	43	0	43%	0%	52	0	73%	0%	64	0	113%	0%
	SB	19	0	11	0	-42%	0%	43	0	126%	0%	52	0	174%	0%
B5076 Middlewich Road (between Elm Drive and Stamp Avenue)	NB	230	3	231	4	0%	33%	257	8	12%	167%	216	5	-6%	67%
	SB	376	4	363	4	-3%	0%	386	9	3%	125%	360	6	-4%	50%
Sydney Road (between Herbert Street and Maw Green Road)	NB	634	12	566	11	-11%	-8%	668	21	5%	75%	648	20	2%	67%
	SB	769	9	706	8	-8%	-11%	810	20	5%	122%	802	19	4%	111%
Elm Drive (between Sycamore Avenue and Lime Tree Avenue)	NB	24	2	36	2	50%	0%	44	2	83%	0%	57	2	138%	0%
	SB	15	2	7	2	-53%	0%	37	2	147%	0%	46	2	207%	0%

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		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
Greenway (between Stamp Avenue and B5076 Middlewich Street)	NB	32	0	34	0	6%	0%	57	0	78%	0%	21	0	-34%	0%
	SB	15	0	15	0	0%	0%	13	0	-13%	0%	17	0	13%	0%
Stamp Avenue (between Greenway and B5076 Middlewich Street)	EB	48	1	49	1	2%	0%	46	1	-4%	0%	50	1	4%	0%
	WB	53	0	54	0	2%	0%	77	0	45%	0%	38	0	-28%	0%
B5076 Middlewich Street (between Stamp Avenue and Lime Tree Avenue)	NB	242	4	242	4	0%	0%	245	9	1%	125%	243	6	0%	50%
	SB	392	5	379	5	-3%	0%	404	9	3%	80%	375	6	-4%	20%
Lime Tree Avenue (between B5076 Middlewich Street and Sycamore Avenue)	EB	80	1	80	1	0%	0%	80	1	0%	0%	80	1	0%	0%
	WB	53	1	53	1	0%	0%	51	1	-4%	0%	53	1	0%	0%
A530 Middlewich Road (between Pymys Lane and Middlewich Road)	NB	828	22	804	19	-3%	-14%	1,166	86	41%	291%	905	83	9%	277%
	SB	788	19	796	19	1%	0%	746	86	-5%	353%	729	83	-7%	337%
Lime Tree Avenue (between Sycamore Avenue and Acer Avenue)	EB	79	0	79	0	0%	0%	79	0	0%	0%	78	0	-1%	0%
	WB	47	0	47	0	0%	0%	48	0	2%	0%	47	0	0%	0%
Clay Lane (between Newtons Lane and Maw Lane)	EB	77	0	81	0	5%	0%	82	0	6%	0%	78	0	1%	0%
	WB	133	2	129	2	-3%	0%	177	2	33%	0%	176	2	32%	0%
Lime Tree Avenue (between Prunus Road and Elm Drive)	EB	81	1	81	1	0%	0%	81	1	0%	0%	81	1	0%	0%
	WB	54	1	54	1	0%	0%	58	1	7%	0%	55	1	2%	0%
Elm Drive (between Lime Tree Avenue and Remer Street)	NB	239	4	261	4	9%	0%	258	4	8%	0%	271	4	13%	0%
	SB	339	6	239	6	-29%	0%	369	6	9%	0%	406	6	20%	0%

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		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
Maw Green Road (between Sydney Road and Maw Lane)	EB	66	5	52	5	-21%	0%	89	6	35%	20%	84	6	27%	20%
	WB	382	10	461	11	21%	10%	410	11	7%	10%	422	11	10%	10%
Lime Tree Avenue (between Acer Avenue and Prunus Road)	EB	79	0	79	0	0%	0%	79	0	0%	0%	79	0	0%	0%
	WB	50	1	50	1	0%	0%	54	1	8%	0%	51	1	2%	0%
B5076 Middlewich Street (between Lime Tree Avenue and Remer Street)	NB	169	5	169	5	0%	0%	170	9	1%	80%	170	6	1%	20%
	SB	346	5	333	5	-4%	0%	358	9	3%	80%	329	6	-5%	20%
Acer Avenue (between Remer Street and Lime Tree Avenue)	NB	3	0	3	0	0%	0%	7	0	133%	0%	4	0	33%	0%
	SB*	0	0	0	0	0%	0%	1	0	0%	0%	0	0	0%	0%
Remer Street (between B5076 Middlewich Street and Acer Avenue)	EB	973	10	1,001	9	3%	-10%	918	15	-6%	50%	1,017	12	5%	20%
	WB	499	17	521	18	4%	6%	519	22	4%	29%	499	18	0%	6%
Selworthy Drive (between B5076 Bradfield Road and Underwood Lane)	NB	113	1	127	1	12%	0%	123	0	9%	-100%	118	0	4%	-100%
	SB	54	1	71	1	31%	0%	65	2	20%	100%	85	2	57%	100%
B5076 Middlewich Street (between Broad Street and Remer Street)	EB	1,317	12	1,332	11	1%	-8%	1,266	14	-4%	17%	1,338	14	2%	17%
	WB	666	19	688	20	3%	5%	678	21	2%	11%	661	20	-1%	5%
Newtons Lane (between Clay Lane and Nesfield Drive)	EB	16	0	21	0	31%	0%	20	0	25%	0%	17	0	6%	0%
	WB	57	1	61	1	7%	0%	101	1	77%	0%	100	1	75%	0%
Underwood Lane (between Cliffe Road and Newbury Avenue)	EB	81	3	112	3	38%	0%	48	3	-41%	0%	112	3	38%	0%
	WB	194	3	203	3	5%	0%	168	4	-13%	33%	208	3	7%	0%

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		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
Newtons Lane (between Nesfield Drive and Crewe Road)	EB	76	0	83	0	9%	0%	81	0	7%	0%	77	0	1%	0%
	WB	107	1	114	1	7%	0%	126	1	18%	0%	120	2	12%	100%
Underwood Lane (between Newbury Avenue and Pear Tree Avenue)	NB	79	3	110	3	39%	0%	46	3	-42%	0%	110	3	39%	0%
	SB	188	2	197	2	5%	0%	160	4	-15%	100%	199	2	6%	0%
Stoneley Road (between B5076 Broad Street and Waldron's Lane)	NB*	6	0	1	0	-83%	0%	7	0	17%	0%	3	0	-50%	0%
	SB	218	0	224	0	3%	0%	202	0	-7%	0%	235	0	8%	0%
B5076 North Street (between Broughton Road and Broad Street)	EB	604	17	656	16	9%	-6%	639	17	6%	0%	663	18	10%	6%
	WB	702	24	703	25	0%	4%	661	27	-6%	13%	689	25	-2%	4%
Underwood Lane (between Pear Tree Avenue and B5076 Bradfield Road)	NB	79	3	110	3	39%	0%	47	3	-41%	0%	111	3	41%	0%
	SB	187	2	196	2	5%	0%	159	4	-15%	100%	198	2	6%	0%
B5076 Bradfield Road (between Underwood Lane and Broughton Road)	EB	544	16	599	15	10%	-6%	586	16	8%	0%	601	17	10%	6%
	WB	700	21	705	22	1%	5%	658	24	-6%	14%	687	22	-2%	5%
B5076 Bradfield Road (between Selworthy Drive and Mablins Lane)	EB	297	11	336	10	13%	-9%	317	12	7%	9%	338	12	14%	9%
	WB	579	19	480	19	-17%	0%	485	20	-16%	5%	473	19	-18%	0%
B5076 Bradfield Road (between Mablins Lane and Cliffe Road)	EB	520	22	474	20	-9%	-9%	585	22	13%	0%	524	22	1%	0%
	WB	665	34	660	35	-1%	3%	664	35	0%	3%	658	35	-1%	3%
B5076 Bradfield Road (between Cliffe Road and Underwood Lane)	EB	360	17	404	16	12%	-6%	437	18	21%	6%	405	18	13%	6%
	WB	855	24	871	25	2%	4%	843	25	-1%	4%	850	24	-1%	0%

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		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
Broughton Road (between Maplins Moss Place and Parkers Road)	NB	94	4	91	5	-3%	25%	96	6	2%	50%	96	6	2%	50%
	SB	152	2	150	2	-1%	0%	145	3	-5%	50%	155	3	2%	50%
Groby Road (between Remer Street and Stoneley Road)*	NB	113	4	75	2	-34%	-50%	146	11	29%	175%	162	11	43%	175%
	SB	437	3	246	2	-44%	-33%	444	13	2%	333%	507	13	16%	333%
A530 Middlewich Road (between Middlewich Road and Smithy Lane)	NB	624	21	584	18	-6%	-14%	908	84	46%	300%	666	81	7%	286%
	SB	649	18	650	18	0%	0%	580	85	-11%	372%	598	82	-8%	356%
B5076 Bradfield Road (between Parkers Road and Selworthy Drive)	NB	627	15	517	15	-18%	0%	524	15	-16%	0%	505	15	-19%	0%
	SB	359	11	390	10	9%	-9%	372	12	4%	9%	409	12	14%	9%
Stoneley Road (between Waldron's Lane and Groby Road)	EB	18	1	154	1	756%	0%	227	1	1161%	0%	129	1	617%	0%
	WB	14	1	53	1	279%	0%	91	0	550%	-100%	107	1	664%	0%
B5076 Bradfield Road (between Parkers Road and B5076 Flowers Lane)	EB	674	26	621	24	-8%	-8%	831	34	23%	31%	755	34	12%	31%
	WB	995	28	1,002	28	1%	0%	981	37	-1%	32%	1,003	37	1%	32%
Parkers Road (between B5076 Bradfield Road and Higher Croft Drive)	EB	327	15	241	14	-26%	-7%	472	23	44%	53%	358	22	9%	47%
	WB	455	12	570	12	25%	0%	543	21	19%	75%	584	21	28%	75%
Parkers Road (between Higher Croft Drive and Parkfield)	EB	459	14	293	13	-36%	-7%	611	22	33%	57%	469	21	2%	50%
	WB	305	10	338	10	11%	0%	400	19	31%	90%	412	19	35%	90%
Parkers Road (between Parkfield and Mablins Lane)	EB	509	13	341	12	-33%	-8%	661	21	30%	62%	519	21	2%	62%
	WB	295	11	328	11	11%	0%	390	20	32%	82%	402	20	36%	82%

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		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
A530 Middlewich Road (between Smithy Lane and B5076 Flowers Lane)	NB	529	20	515	17	-3%	-15%	578	83	9%	315%	569	81	8%	305%
	SB	541	22	529	21	-2%	-5%	519	88	-4%	300%	483	86	-11%	291%
Waldrons Lane (between Stoneley Road and Warmingham Road)	NB	28	1	58	1	107%	0%	105	0	275%	-100%	113	0	304%	-100%
	SB	38	1	161	1	324%	0%	233	1	513%	0%	131	1	245%	0%
Parkers Road (between Mablins Lane and Broughton Road)	EB	550	3	452	3	-18%	0%	676	12	23%	300%	597	12	9%	300%
	WB	402	4	326	3	-19%	-25%	425	12	6%	200%	411	12	2%	200%
Groby Road (between Stoneley Road and Warmingham Road)	NB	248	3	170	2	-31%	-33%	203	11	-18%	267%	207	11	-17%	267%
	SB*	595	2	207	1	-65%	-50%	505	12	-15%	500%	522	12	-12%	500%
Warmingham Road (between Broughton Road and Waldron's Lane)	EB	488	4	382	4	-22%	0%	578	13	18%	225%	483	13	-1%	225%
	WB	423	5	343	4	-19%	-20%	570	13	35%	160%	599	13	42%	160%
B5076 Flowers Lane (between A530 Middlewich Road and B5076 Bradfield Road)	EB	710	26	658	24	-7%	-8%	861	34	21%	31%	789	34	11%	31%
	WB	942	28	951	28	1%	0%	922	37	-2%	32%	947	36	1%	29%
Warmingham Road (between Waldron's Lane and Groby Road)	EB	480	3	230	3	-52%	0%	361	12	-25%	300%	361	12	-25%	300%
	WB	425	5	293	3	-31%	-40%	481	13	13%	160%	495	13	16%	160%
A530 Middlewich Road (between B5076 Flowers Lane and Eardswick Lane)	NB	950	26	948	24	0%	-8%	1,033	82	9%	215%	1,023	81	8%	212%
	SB	905	29	940	28	4%	-3%	898	90	-1%	210%	896	88	-1%	203%
A533 The Hill (between Hassall Road and Heath Road)	EB	391	2	588	2	50%	0%	370	1	-5%	-50%	370	1	-5%	-50%
	WB	287	4	691	32	141%	700%	272	4	-5%	0%	268	4	-7%	0%

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		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
Manor Road (between Dubthorn Lane and School Lane)	EB	18	0	32	1	78%	0%	41	1	128%	0%	41	1	128%	0%
	WB	101	3	215	3	113%	0%	114	3	13%	0%	111	3	10%	0%
Heath Road (between A533 The Hill and Manor Road)	EB	140	1	394	1	181%	0%	145	1	4%	0%	144	1	3%	0%
	WB	107	0	502	25	369%	0%	106	0	-1%	0%	101	0	-6%	0%
Heath Road (between Manor Road and School Lane)	EB	134	1	388	1	190%	0%	137	1	2%	0%	137	1	2%	0%
	WB	99	0	493	25	398%	0%	97	0	-2%	0%	92	0	-7%	0%
A533 The Hill (between A534 Old Mill Road and Hassall Road)	EB	456	3	614	2	35%	-33%	427	2	-6%	-33%	427	2	-6%	-33%
	WB	524	4	878	33	68%	725%	504	5	-4%	25%	499	4	-5%	0%
School Lane (between Manor Road and Heath Road)	NB	98	3	215	3	119%	0%	112	3	14%	0%	110	3	12%	0%
	SB	14	0	29	1	107%	0%	37	1	164%	0%	37	1	164%	0%
High Street (between Hightown and A534 Old Mill Road)	WB	202	2	398	7	97%	250%	220	2	9%	0%	219	2	8%	0%
Bradwall Road (between Hightown and Chapel Street)	NB	161	0	331	0	106%	0%	169	0	5%	0%	168	0	4%	0%
	SB	169	3	315	3	86%	0%	182	3	8%	0%	176	3	4%	0%
Chapel Street (between A533 Middlewich Road and Bradwall Road)	WB	6	1	50	1	733%	0%	6	1	0%	0%	6	1	0%	0%
Church Lane (between Heath Road and Reynolds Lane)	NB	255	4	644	4	153%	0%	273	4	7%	0%	270	4	6%	0%
	SB	121	1	536	27	343%	2600%	143	2	18%	100%	137	2	13%	100%

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		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
Bradwall Road (between Chapel Street and Elworth Street)	NB	156	0	281	1	80%	0%	164	0	5%	0%	164	0	5%	0%
	SB	152	4	297	4	95%	0%	166	4	9%	0%	159	4	5%	0%
Moss Lane (between B5079 Salt Line Way and Plant Lane)	NB	47	0	107	0	128%	0%	48	0	2%	0%	51	0	9%	0%
	SB	28	0	32	0	14%	0%	29	0	4%	0%	29	0	4%	0%
A530 Middlewich Road (between Eardswick Lane and Brookhouse Lane)	NB	529	12	512	9	-3%	-25%	575	66	9%	450%	566	65	7%	442%
	SB	630	20	669	20	6%	0%	688	79	9%	295%	703	78	12%	290%
B5074 Over Road/B5074 Swanlow Lane (between Cross Lane and Moor Lane)	NB	467	23	623	23	33%	0%	579	23	24%	0%	544	23	16%	0%
	SB	555	17	540	17	-3%	0%	627	30	13%	76%	500	17	-10%	0%

**Some traffic movements may not be precisely reflected due to the simplified way in which the road network is represented in the strategic traffic models, however, this is not expected to change the conclusions of the assessment.*

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Table 13-8: 2031 future baseline and with the AP2 revised scheme construction traffic (vehicles) - PM peak hour (17:00–18:00)

Location	Direction	2031 baseline flows		2031 AP2 revised scheme flows - utilities scenario		Utilities scenario - % change from 2031 baseline		2031 AP2 revised scheme flows - scenario 1		Scenario 1 - % change from 2031 baseline		2031 AP2 revised scheme flows - scenario 2		Scenario 2 - % change from 2031 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
		Annions Lane (between A51 London Road and B5071 Main Road)	EB	36	0	36	0	0%	0%	37	0	3%	0%	37	0
	WB	30	0	30	0	0%	0%	37	0	23%	0%	37	0	23%	0%
Wybunbury Lane (between Wybunbury Lane and B5071 Stock Lane)	EB	2	0	2	0	0%	0%	2	0	0%	0%	2	0	0%	0%
	WB	23	0	24	0	4%	0%	47	0	104%	0%	46	0	100%	0%
Back Lane (between Casey Lane and Newcastle Road)	NB	41	0	37	0	-10%	0%	35	3	-15%	0%	43	9	5%	0%
	SB	69	0	69	0	0%	0%	68	3	-1%	0%	78	9	13%	0%
Newcastle Road (between Casey Lane realignment and A531 Newcastle Road)	EB	433	3	442	3	2%	0%	483	7	12%	133%	508	13	17%	333%
	WB	567	3	567	3	0%	0%	620	6	9%	100%	626	13	10%	333%
Newcastle Road (between Back Lane and Casey Lane realignment)	EB	365	3	367	3	1%	0%	362	6	-1%	100%	364	12	0%	300%
	WB	522	4	532	4	2%	0%	594	7	14%	75%	605	14	16%	250%
Main Road east (between Newcastle Road and Main Road west)	NB	24	0	24	0	0%	0%	26	0	8%	0%	24	0	0%	0%
	SB	23	0	24	0	4%	0%	25	0	9%	0%	25	0	9%	0%
A531 Newcastle Road (between Main Road and A500 Shavington Bypass)	EB	239	2	236	2	-1%	0%	194	5	-19%	150%	196	11	-18%	450%
	WB	559	3	544	3	-3%	0%	543	6	-3%	100%	561	13	0%	333%
	EB	1,161	46	1,185	37	2%	-20%	1,202	104	4%	126%	1,189	101	2%	120%

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Location	Direction	2031 baseline flows		2031 AP2 revised scheme flows - utilities scenario		Utilities scenario - % change from 2031 baseline		2031 AP2 revised scheme flows - scenario 1		Scenario 1 - % change from 2031 baseline		2031 AP2 revised scheme flows - scenario 2		Scenario 2 - % change from 2031 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
A500 Shavington Bypass (between A51 Newcastle Road and B5071 Jack Mills Way)	WB	1,676	44	1,691	43	1%	-2%	1,624	111	-3%	152%	1,629	108	-3%	145%
A51 Nantwich Bypass (between A51 Newcastle Road and A534 Crewe Road)	NB	978	35	984	35	1%	0%	935	103	-4%	194%	938	100	-4%	186%
	SB	895	37	910	35	2%	-5%	916	100	2%	170%	911	98	2%	165%
Casey Lane realignment (between Newcastle Road and Weston Lane)	NB	155	0	156	0	1%	0%	162	0	5%	0%	169	0	9%	0%
	SB	149	2	167	2	12%	0%	193	2	30%	0%	192	2	29%	0%
Cemetery Road (between Cemetery Road north and Main Road)	EB	17	0	17	0	0%	0%	19	0	12%	0%	20	0	18%	0%
	WB	98	0	98	0	0%	0%	96	0	-2%	0%	96	0	-2%	0%
Cemetery Road (between Whites Lane and Mere Road)	EB	48	0	50	0	4%	0%	53	0	10%	0%	53	0	10%	0%
	WB	19	0	20	0	5%	0%	21	0	11%	0%	21	0	11%	0%
Eastern Road (between Rope Hall Lane and Rope Lane)	EB	12	0	12	0	0%	0%	23	0	92%	0%	18	0	50%	0%
	WB	51	2	51	2	0%	0%	53	2	4%	0%	46	2	-10%	0%
A500 Shavington Bypass (between B5071 Jack Mills Way and A5020 David Whitby Way)	EB	1,526	54	1,548	45	1%	-17%	1,599	112	5%	107%	1,596	109	5%	102%
	WB	1,789	50	1,812	49	1%	-2%	1,760	116	-2%	132%	1,767	113	-1%	126%
A500 Shavington Bypass (between A5020 David Whitby Way and A500 Newcastle Road)	EB	1,361	53	1,408	46	3%	-13%	1,312	117	-4%	121%	1,319	113	-3%	113%
	WB	1,187	66	1,248	66	5%	0%	1,189	137	0%	108%	1,198	133	1%	102%
	EB	1,807	55	1,854	48	3%	-13%	1,777	119	-2%	116%	1,789	117	-1%	113%

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		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
A500 Newcastle Road (between A500 Shavington Bypass and M6 junction 16)	WB	1,953	72	2,032	71	4%	-1%	1,979	142	1%	97%	1,991	140	2%	94%
A51 Nantwich Bypass (between A534 Crewe Road and A530 Middlewich Road)	NB	905	35	917	35	1%	0%	955	102	6%	191%	936	100	3%	186%
	SB	887	32	900	30	1%	-6%	957	97	8%	203%	942	94	6%	194%
A5020 David Whitby Way (between A500 Shavington Bypass and B5472 Weston Road)	NB	599	29	535	28	-11%	-3%	696	38	16%	31%	700	36	17%	24%
	SB	1,069	14	995	14	-7%	0%	1,012	25	-5%	79%	1,025	23	-4%	64%
A530 Middlewich Road (between A51 Nantwich Bypass and Colleys Lane)	NB	846	8	846	9	0%	13%	879	77	4%	863%	900	75	6%	838%
	SB	648	7	643	7	-1%	0%	580	76	-10%	986%	598	73	-8%	943%
A5020 University Way (between A534 Crewe Green Road and A532 Weston Road)	NB	900	8	868	7	-4%	-13%	943	15	5%	88%	944	14	5%	75%
	SB	914	7	907	9	-1%	29%	906	17	-1%	143%	910	16	0%	129%
A530 Middlewich Road (between Colleys Lane and Wistaston Green Road)	EB	873	12	868	13	-1%	8%	897	80	3%	567%	919	78	5%	550%
	WB	897	8	890	8	-1%	0%	810	77	-10%	863%	880	74	-2%	825%
Barthomley Road (between Radway Green Road and B5077 Butterton Lane)	NB	32	0	30	0	-6%	0%	31	0	-3%	0%	30	0	-6%	0%
	SB	103	0	120	0	17%	0%	122	0	18%	0%	120	0	17%	0%
Ernest Street (between Manor Way and Neville Street)	NB	23	0	22	0	-4%	0%	24	0	4%	0%	24	0	4%	0%
	SB	16	0	16	0	0%	0%	36	1	125%	0%	20	0	25%	0%

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		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
		Chambers Street (between Catherine Street and A534 Nantwich Road)	SB	42	0	69	0	64%	0%	166	0	295%	0%	125	0
Weston Road Service Road (between Weston Road south access and Weston Road north access)	EB	31	2	544	7	1655 %	250%	30	2	-3%	0%	30	2	-3%	0%
	WB	66	0	64	0	-3%	0%	74	0	12%	0%	74	0	12%	0%
Cotterill Street (between A534 Nantwich Road and Hope Street)	NB	3	0	3	0	0%	0%	3	0	0%	0%	3	0	0%	0%
	SB	54	0	112	1	107%	0%	220	2	307%	0%	177	1	228%	0%
Hope Street (between A5078 Edleston Road and Cotterill Street)	EB	64	0	96	1	50%	0%	198	2	209%	0%	158	1	147%	0%
	WB	36	0	37	0	3%	0%	37	0	3%	0%	37	0	3%	0%
Hope Street (between Lord Street and A5019 Mill Street)	EB	14	0	14	0	0%	0%	14	0	0%	0%	14	0	0%	0%
	WB	36	0	62	0	72%	0%	67	0	86%	0%	65	0	81%	0%
Union Street (between A5078 Edleston Road and Lord Street)	EB	15	0	8	0	-47%	0%	7	0	-53%	0%	8	0	-47%	0%
	WB	18	3	9	3	-50%	0%	18	3	0%	0%	10	3	-44%	0%
Union Street (between Lord Street and A5019 Mill Street)	EB	22	0	15	0	-32%	0%	13	0	-41%	0%	14	0	-36%	0%
	WB	20	3	11	3	-45%	0%	18	3	-10%	0%	11	2	-45%	-33%
A530 Middlewich Road (between Wistaston Green Road and A532 Copenhall Lane)	NB	789	14	761	14	-4%	0%	781	82	-1%	486%	819	79	4%	464%
	SB	1,159	7	1,142	7	-1%	0%	1,056	76	-9%	986%	1,102	73	-5%	943%
	EB	39	2	39	2	0%	0%	8	2	-79%	0%	32	2	-18%	0%

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		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
Wistaston Road (between Flag Lane and Walthall Street)	WB	243	3	250	3	3%	0%	296	3	22%	0%	256	3	5%	0%
Forge Street/Prince Albert Street (between Chester Street and Lyon Street)	NB	51	0	53	0	4%	0%	49	0	-4%	0%	48	0	-6%	0%
	SB	22	0	20	0	-9%	0%	30	0	36%	0%	23	0	5%	0%
Coleridge Way (between Hungerford Road and Wordsworth Drive)	NB	178	2	183	2	3%	0%	188	2	6%	0%	191	2	7%	0%
	SB	246	0	246	0	0%	0%	251	0	2%	0%	253	0	3%	0%
Sydney Road (between Hungerford Road and Shakespeare Drive)	NB	996	2	1,006	2	1%	0%	983	11	-1%	450%	986	11	-1%	450%
	SB	640	2	636	2	-1%	0%	556	11	-13%	450%	555	11	-13%	450%
Shakespeare Drive (between Sydney Road and Laureston Avenue)	EB*	120	0	124	0	3%	0%	129	0	8%	0%	131	0	9%	0%
	WB	216	0	216	0	0%	0%	215	0	0%	0%	215	0	0%	0%
Laureston Avenue (between Shakespeare Drive and Wordsworth Drive)	NB	216	0	216	0	0%	0%	215	0	0%	0%	215	0	0%	0%
	SB*	120	0	124	0	3%	0%	129	0	8%	0%	131	0	9%	0%
Wordsworth Drive (between Kipling Way and Laureston Avenue)	EB	121	0	125	0	3%	0%	130	0	7%	0%	132	0	9%	0%
	WB	216	0	216	0	0%	0%	215	0	0%	0%	215	0	0%	0%
Wordsworth Drive (between Tennyson Avenue and Kipling Way)	EB	123	0	126	0	2%	0%	132	0	7%	0%	134	0	9%	0%
	WB	216	0	215	0	0%	0%	215	0	0%	0%	214	0	-1%	0%
	EB	127	0	131	0	3%	0%	136	0	7%	0%	138	0	9%	0%

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		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
		Wordsworth Drive (between Coleridge Way and Tennyson Avenue)	WB	219	0	219	0	0%	0%	219	0	0%	0%	218	0
Coleridge Way (between Lansdowne Road and Wordsworth Drive)	NB	53	2	54	2	2%	0%	54	2	2%	0%	55	2	4%	0%
	SB	29	0	29	0	0%	0%	34	0	17%	0%	37	0	28%	0%
Lansdowne Road (between Coleridge Way and Pelican Close)	EB	13	2	14	2	8%	0%	14	2	8%	0%	15	2	15%	0%
	WB	18	0	19	0	6%	0%	24	0	33%	0%	26	0	44%	0%
Sydney Road (between Shakespeare Drive and Lansdowne Road)	NB	727	2	732	1	1%	-50%	719	11	-1%	450%	722	10	-1%	400%
	SB	492	2	486	2	-1%	0%	405	11	-18%	450%	402	10	-18%	400%
Lansdowne Road (between Lansdowne Road and Sydney Road)	EB	16	2	16	2	0%	0%	17	2	6%	0%	17	2	6%	0%
	WB	51	0	52	0	2%	0%	57	0	12%	0%	59	0	16%	0%
A530 Middlewich Road (between A532 Coppenhall Lane and Pym's Lane)	NB	676	9	653	9	-3%	0%	848	78	25%	767%	691	74	2%	722%
	SB	891	5	871	5	-2%	0%	903	74	1%	1380%	869	71	-2%	1320%
Elm Drive (between B5076 Middlewich Street and Coronation Street)	EB	36	10	37	10	3%	0%	47	10	31%	0%	58	10	61%	0%
	WB	9	0	10	0	11%	0%	12	0	33%	0%	12	0	33%	0%
Elm Drive (between Coronation Street and Sycamore Avenue)	NB	36	10	37	10	3%	0%	47	10	31%	0%	58	10	61%	0%
	SB	9	0	10	0	11%	0%	12	0	33%	0%	12	0	33%	0%
	NB	426	1	403	2	-5%	100%	419	6	-2%	500%	433	3	2%	200%

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		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
		B5076 Middlewich Road (between Elm Drive and Stamp Avenue)	SB	300	13	299	13	0%	0%	292	17	-3%	31%	335	15
Sydney Road (between Herbert Street and Maw Green Road)	NB	706	4	710	3	1%	-25%	699	13	-1%	225%	703	12	0%	200%
	SB	525	2	511	2	-3%	0%	441	11	-16%	450%	440	10	-16%	400%
Elm Drive (between Sycamore Avenue and Lime Tree Avenue)	NB	15	12	16	12	7%	0%	32	12	113%	0%	37	12	147%	0%
	SB	4	2	4	2	0%	0%	5	2	25%	0%	6	2	50%	0%
Greenway (between Stamp Avenue and B5076 Middlewich Street)	NB	39	0	43	0	10%	0%	40	0	3%	0%	39	0	0%	0%
	SB	8	0	7	0	-13%	0%	6	0	-25%	0%	7	0	-13%	0%
Stamp Avenue (between Greenway and B5076 Middlewich Street)	EB	21	0	20	0	-5%	0%	20	0	-5%	0%	21	0	0%	0%
	WB	43	0	47	0	9%	0%	45	0	5%	0%	44	0	2%	0%
B5076 Middlewich Street (between Stamp Avenue and Lime Tree Avenue)	NB	404	2	376	2	-7%	0%	394	6	-2%	200%	411	3	2%	50%
	SB	301	13	300	13	0%	0%	293	17	-3%	31%	335	15	11%	15%
Lime Tree Avenue (between B5076 Middlewich Street and Sycamore Avenue)	EB	56	0	62	0	11%	0%	45	0	-20%	0%	45	0	-20%	0%
	WB	34	0	34	0	0%	0%	37	0	9%	0%	37	0	9%	0%
A530 Middlewich Road (between Pyms Lane and Middlewich Road)	NB	868	9	845	8	-3%	-11%	1,013	77	17%	756%	883	74	2%	722%
	SB	695	5	674	4	-3%	-20%	682	73	-2%	1360%	672	70	-3%	1300%
	EB	53	0	59	0	11%	0%	42	0	-21%	0%	42	0	-21%	0%

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		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
		Lime Tree Avenue (between Sycamore Avenue and Acer Avenue)	WB	32	0	32	0	0%	0%	35	0	9%	0%	35	0
Clay Lane (between Newtons Lane and Maw Lane)	EB	281	1	299	1	6%	0%	351	1	25%	0%	360	1	28%	0%
	WB	40	0	40	0	0%	0%	37	0	-8%	0%	36	0	-10%	0%
Lime Tree Avenue (between Prunus Road and Elm Drive)	EB	55	0	61	0	11%	0%	45	0	-18%	0%	45	0	-18%	0%
	WB	37	0	37	0	0%	0%	41	0	11%	0%	40	0	8%	0%
Elm Drive (between Lime Tree Avenue and Remer Street)	NB	256	12	191	12	-25%	0%	201	12	-21%	0%	235	12	-8%	0%
	SB	220	3	179	3	-19%	0%	231	3	5%	0%	232	3	5%	0%
Maw Green Road (between Sydney Road and Maw Lane)	EB	401	4	548	4	37%	0%	577	5	44%	25%	617	5	54%	25%
	WB	52	2	105	2	102%	0%	64	2	23%	0%	58	2	12%	0%
Lime Tree Avenue (between Acer Avenue and Prunus Road)	EB	54	0	60	0	11%	0%	44	0	-19%	0%	44	0	-19%	0%
	WB	35	0	35	0	0%	0%	38	0	9%	0%	38	0	9%	0%
B5076 Middlewich Street (between Lime Tree Avenue and Remer Street)	NB	351	2	318	2	-9%	0%	353	6	1%	200%	370	3	5%	50%
	SB	270	13	269	13	0%	0%	259	17	-4%	31%	302	15	12%	15%
Acer Avenue (between Remer Street and Lime Tree Avenue)	NB	3	0	3	0	0%	0%	3	0	0%	0%	3	0	0%	0%
	SB	1	0	1	0	0%	0%	2	0	100%	0%	2	0	100%	0%
Remer Street (between B5076 Middlewich Street and Acer Avenue)	EB	470	5	602	6	28%	20%	522	10	11%	100%	538	7	14%	40%
	WB	742	14	784	14	6%	0%	741	18	0%	29%	735	16	-1%	14%
	NB	385	1	373	2	-3%	100%	352	1	-9%	0%	380	1	-1%	0%

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Location	Direction	2031 baseline flows		2031 AP2 revised scheme flows - utilities scenario		Utilities scenario - % change from 2031 baseline		2031 AP2 revised scheme flows - scenario 1		Scenario 1 - % change from 2031 baseline		2031 AP2 revised scheme flows - scenario 2		Scenario 2 - % change from 2031 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
Selworthy Drive (between B5076 Bradfield Road and Underwood Lane)	SB	132	0	131	1	-1%	0%	146	0	11%	0%	138	0	5%	0%
B5076 Middlewich Street (between Broad Street and Remer Street)	EB	729	7	860	7	18%	0%	762	8	5%	14%	822	8	13%	14%
	WB	1,082	4	1,090	4	1%	0%	1,074	5	-1%	25%	1,087	5	0%	25%
Newtons Lane (between Clay Lane and Nesfield Drive)	EB	243	1	263	1	8%	0%	313	1	29%	0%	322	1	33%	0%
	WB	17	0	17	0	0%	0%	14	0	-18%	0%	13	0	-24%	0%
Underwood Lane (between Cliffe Road and Newbury Avenue)	EB	183	4	183	4	0%	0%	176	4	-4%	0%	180	4	-2%	0%
	WB	100	4	103	4	3%	0%	94	4	-6%	0%	108	4	8%	0%
Newtons Lane (between Nesfield Drive and Crewe Road)	EB	245	1	279	1	14%	0%	319	1	30%	0%	332	1	36%	0%
	WB	59	0	72	0	22%	0%	59	0	0%	0%	62	0	5%	0%
Underwood Lane (between Newbury Avenue and Pear Tree Avenue)	NB	175	4	175	4	0%	0%	167	4	-5%	0%	171	4	-2%	0%
	SB	99	4	102	4	3%	0%	95	4	-4%	0%	110	4	11%	0%
Stoneley Road (between B5076 Broad Street and Waldron's Lane)	NB	20	0	7	0	-65%	0%	35	0	75%	0%	34	0	70%	0%
	SB	7	0	1	0	-86%	0%	12	0	71%	0%	7	0	0%	0%
B5076 North Street (between Broughton Road and Broad Street)	EB	631	6	725	6	15%	0%	631	7	0%	17%	654	7	4%	17%
	WB	864	6	900	6	4%	0%	821	7	-5%	17%	876	7	1%	17%
	NB	170	4	170	4	0%	0%	163	4	-4%	0%	167	4	-2%	0%

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		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
		Underwood Lane (between Pear Tree Avenue and B5076 Bradfield Road)	SB	99	4	102	4	3%	0%	95	4	-4%	0%	110	4
B5076 Bradfield Road (between Underwood Lane and Broughton Road)	EB	616	6	706	6	15%	0%	609	7	-1%	17%	635	7	3%	17%
	WB	829	5	867	5	5%	0%	760	6	-8%	20%	844	6	2%	20%
B5076 Bradfield Road (between Selworthy Drive and Mablins Lane)	EB	447	7	534	8	19%	14%	506	8	13%	14%	468	8	5%	14%
	WB	398	5	409	5	3%	0%	375	7	-6%	40%	387	7	-3%	40%
B5076 Bradfield Road (between Mablins Lane and Cliffe Road)	EB	563	13	652	13	16%	0%	656	14	17%	8%	601	14	7%	8%
	WB	643	12	660	11	3%	-8%	643	13	0%	8%	639	13	-1%	8%
B5076 Bradfield Road (between Cliffe Road and Underwood Lane)	EB	680	9	756	9	11%	0%	740	10	9%	11%	703	11	3%	22%
	WB	764	9	787	9	3%	0%	760	10	-1%	11%	770	10	1%	11%
Broughton Road (between Maplins Moss Place and Parkers Road)	NB	97	1	90	1	-7%	0%	117	2	21%	100%	92	2	-5%	100%
	SB	76	0	76	0	0%	0%	78	1	3%	0%	79	1	4%	0%
Groby Road (between Remer Street and Stoneley Road)	NB	238	1	183	1	-23%	0%	150	9	-37%	800%	182	9	-24%	800%
	SB	120	0	77	0	-36%	0%	131	9	9%	0%	151	9	26%	0%
A530 Middlewich Road (between Middlewich Road and Smithy Lane)	NB	770	9	747	8	-3%	-11%	891	77	16%	756%	790	73	3%	711%
	SB	521	4	498	4	-4%	0%	526	72	1%	1700%	522	70	0%	1650%
	NB	578	5	595	5	3%	0%	545	6	-6%	20%	547	6	-5%	20%

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		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
B5076 Bradfield Road (between Parkers Road and Selworthy Drive)	SB	449	4	553	4	23%	0%	544	4	21%	0%	459	5	2%	25%
Stoneley Road (between Waldron's Lane and Groby Road)	EB	0	0	35	0	0%	0%	33	0	0%	0%	48	0	0%	0%
	WB	48	1	108	1	125%	0%	303	1	531%	0%	121	1	152%	0%
B5076 Bradfield Road (between Parkers Road and B5076 Flowers Lane)	EB	859	9	868	10	1%	11%	962	18	12%	100%	887	18	3%	100%
	WB	721	13	704	13	-2%	0%	679	21	-6%	62%	697	21	-3%	62%
Parkers Road (between B5076 Bradfield Road and Higher Croft Drive)	EB	493	6	391	6	-21%	0%	499	14	1%	133%	502	14	2%	133%
	WB	182	8	140	8	-23%	0%	172	16	-5%	100%	180	16	-1%	100%
Parkers Road (between Higher Croft Drive and Parkfield)	EB	505	6	408	6	-19%	0%	533	14	6%	133%	536	14	6%	133%
	WB	268	8	231	8	-14%	0%	280	16	4%	100%	289	16	8%	100%
Parkers Road (between Parkfield and Mablins Lane)	EB	479	6	382	6	-20%	0%	510	15	6%	150%	512	15	7%	150%
	WB	302	8	264	8	-13%	0%	315	16	4%	100%	323	16	7%	100%
A530 Middlewich Road (between Smithy Lane and B5076 Flowers Lane)	NB	635	15	632	14	0%	-7%	659	82	4%	447%	660	79	4%	427%
	SB	395	8	381	7	-4%	-13%	437	77	11%	863%	452	73	14%	813%
Waldrons Lane (between Stoneley Road and Warmingham Road)	NB	75	1	122	1	63%	0%	346	1	361%	0%	164	1	119%	0%
	SB	14	0	40	0	186%	0%	52	0	271%	0%	61	0	336%	0%
Parkers Road (between Mablins Lane and Broughton Road)	EB	391	3	268	3	-31%	0%	416	11	6%	267%	420	11	7%	267%
	WB	315	2	247	2	-22%	0%	333	11	6%	450%	343	11	9%	450%

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		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
		Groby Road (between Stoneley Road and Warmingham Road)	NB	548	0	433	0	-21%	0%	205	9	-63%	0%	419	9
	SB	141	0	60	0	-57%	0%	120	9	-15%	0%	125	9	-11%	0%
Warmingham Road (between Broughton Road and Waldron's Lane)	EB	325	4	196	4	-40%	0%	497	12	53%	200%	544	12	67%	200%
	WB	336	2	269	2	-20%	0%	312	11	-7%	450%	342	11	2%	450%
B5076 Flowers Lane (between A530 Middlewich Road and B5076 Bradfield Road)	EB	819	9	831	9	1%	0%	916	17	12%	89%	841	18	3%	100%
	WB	755	13	741	13	-2%	0%	708	22	-6%	69%	726	22	-4%	69%
Warmingham Road (between Waldron's Lane and Groby Road)	EB	348	4	172	4	-51%	0%	742	12	113%	200%	567	13	63%	225%
	WB	298	2	163	1	-45%	-50%	262	11	-12%	450%	262	11	-12%	450%
A530 Middlewich Road (between B5076 Flowers Lane and Eardswick Lane)	NB	1,208	18	1,214	18	0%	0%	1,193	79	-1%	339%	1,194	77	-1%	328%
	SB	617	9	652	8	6%	-11%	662	70	7%	678%	670	68	9%	656%
A533 The Hill (between Hassall Road and Heath Road)	EB	253	0	391	0	55%	0%	252	0	0%	0%	250	0	-1%	0%
	WB	522	2	920	14	76%	600%	537	2	3%	0%	526	2	1%	0%
Manor Road (between Dubthorn Lane and School Lane)	EB	70	1	52	1	-26%	0%	64	1	-9%	0%	64	1	-9%	0%
	WB	47	1	118	2	151%	100%	62	1	32%	0%	63	1	34%	0%
Heath Road (between A533 The Hill and Manor Road)	EB	102	0	228	0	124%	0%	99	0	-3%	0%	99	0	-3%	0%
	WB	170	0	510	13	200%	0%	169	0	-1%	0%	170	0	0%	0%
	EB	92	0	225	0	145%	0%	90	0	-2%	0%	90	0	-2%	0%

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		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
Heath Road (between Manor Road and School Lane)	WB	165	0	505	13	206%	0%	164	0	-1%	0%	165	0	0%	0%
A533 The Hill (between A534 Old Mill Road and Hassall Road)	EB	568	2	583	1	3%	-50%	565	2	-1%	0%	563	2	-1%	0%
	WB	609	3	897	15	47%	400%	624	3	2%	0%	613	3	1%	0%
School Lane (between Manor Road and Heath Road)	NB	42	1	114	2	171%	100%	58	1	38%	0%	59	1	40%	0%
	SB	67	1	49	1	-27%	0%	61	1	-9%	0%	61	1	-9%	0%
High Street (between Hightown and A534 Old Mill Road)	WB	283	0	377	1	33%	0%	264	0	-7%	0%	275	0	-3%	0%
Bradwall Road (between Hightown and Chapel Street)	NB	412	0	538	0	31%	0%	411	0	0%	0%	414	0	0%	0%
	SB	403	4	450	4	12%	0%	400	4	-1%	0%	396	4	-2%	0%
Chapel Street (between A533 Middlewich Road and Bradwall Road)	WB	170	1	212	1	25%	0%	170	1	0%	0%	172	1	1%	0%
Church Lane (between Heath Road and Reynolds Lane)	NB	158	1	368	2	133%	100%	171	1	8%	0%	172	1	9%	0%
	SB	256	1	596	15	133%	1400%	248	1	-3%	0%	250	1	-2%	0%
Bradwall Road (between Chapel Street and Elworth Street)	NB	234	0	301	0	29%	0%	232	0	-1%	0%	233	0	0%	0%
	SB	396	5	441	5	11%	0%	393	5	-1%	0%	389	5	-2%	0%
Moss Lane (between B5079 Salt Line Way and Plant Lane)	NB	88	0	92	0	5%	0%	89	0	1%	0%	89	0	1%	0%
	SB	54	1	58	1	7%	0%	57	1	6%	0%	57	1	6%	0%
	NB	803	7	751	4	-6%	-43%	832	65	4%	829%	852	64	6%	814%

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		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
A530 Middlewich Road (between Eardswick Lane and Brookhouse Lane)	SB	477	4	509	4	7%	0%	501	64	5%	1500%	502	63	5%	1475%
B5074 Over Road/B5074 Swanlow Lane (between Cross Lane and Moor Lane)	NB	510	3	596	3	17%	0%	570	3	12%	0%	595	3	17%	0%
	SB	574	5	548	5	-5%	0%	721	5	26%	0%	530	4	-8%	-20%

**Some traffic movements may not be precisely reflected due to the simplified way in which the road network is represented in the strategic traffic models, however, this is not expected to change the conclusions of the assessment.*

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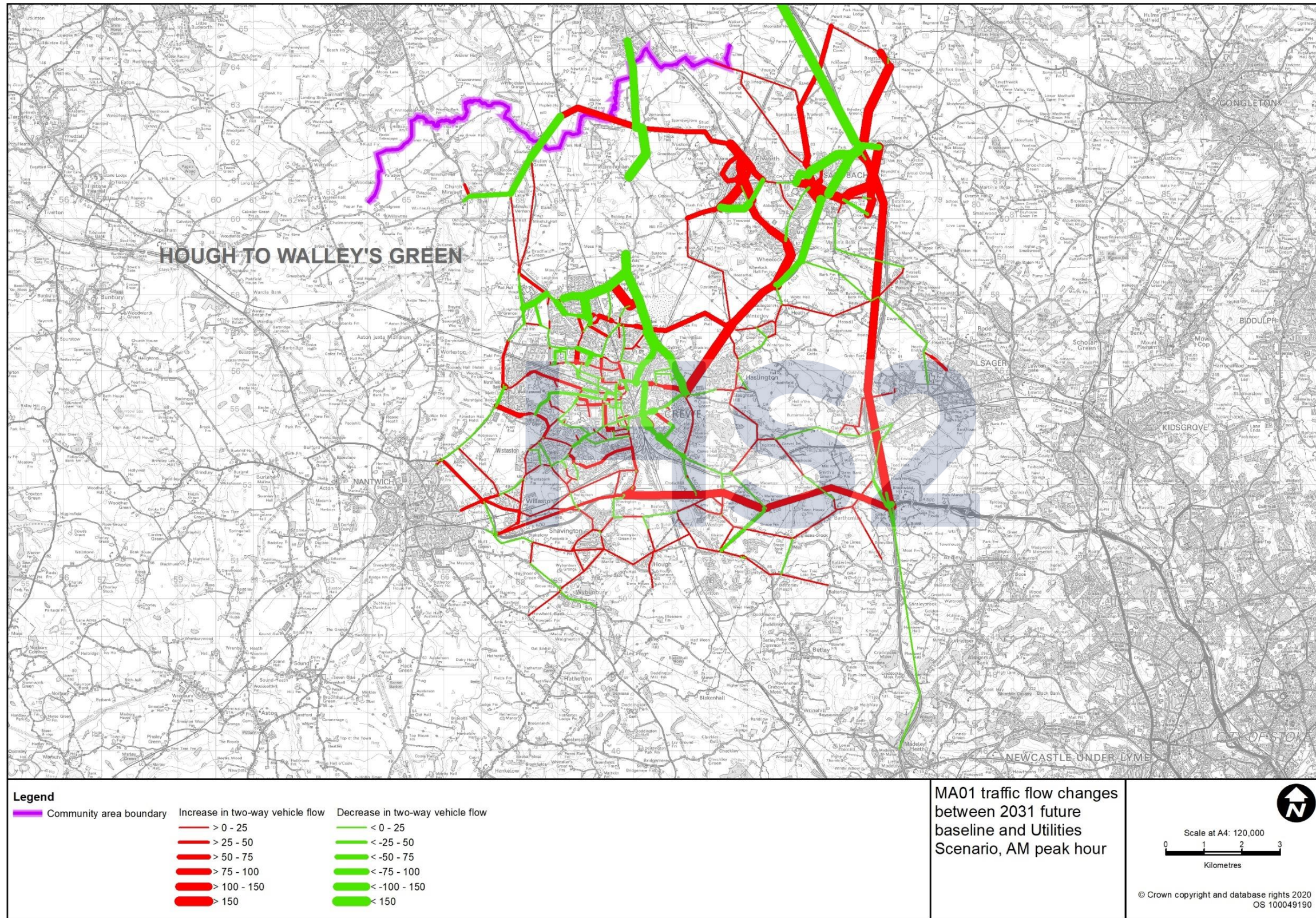
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Figure 13-1: MA01 traffic flow changes between 2031 future baseline and AP2 revised scheme utilities scenario, AM peak hour



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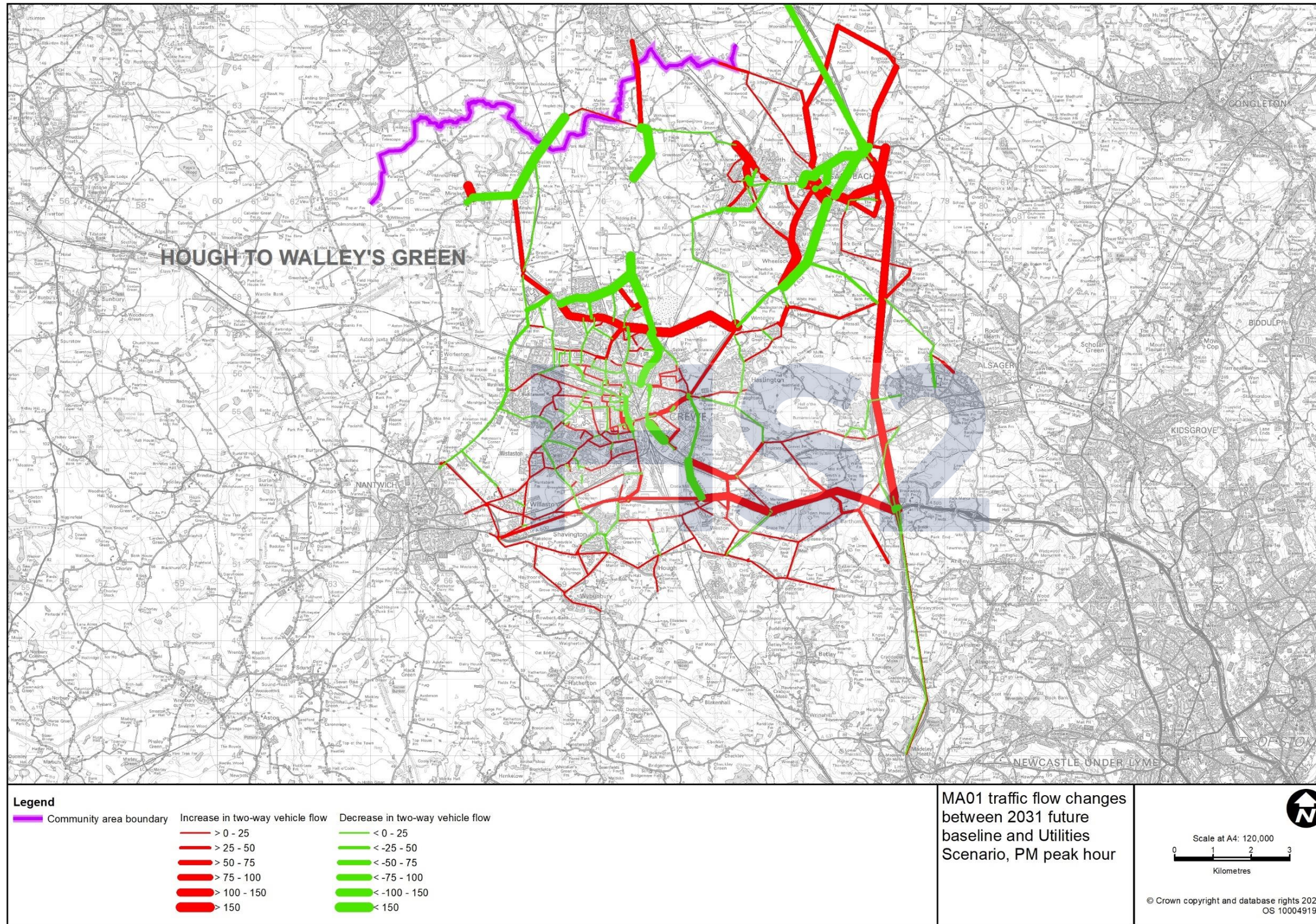
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Figure 13-2: MA01 traffic flow changes between 2031 future baseline and AP2 revised scheme utilities scenario, PM peak hour



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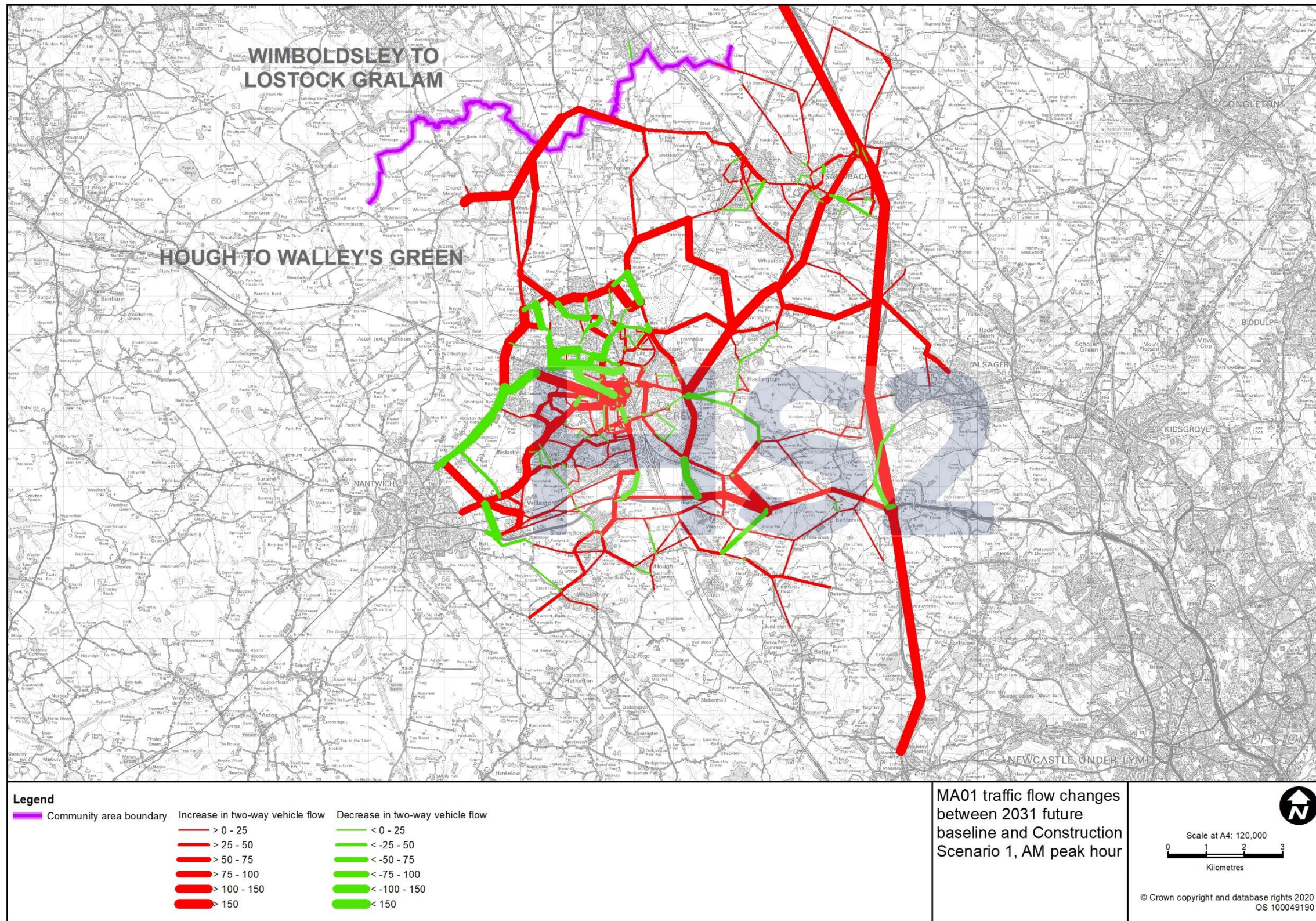
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Figure 13-3: MA01 traffic flow changes between 2031 future baseline and AP2 revised scheme scenario 1, AM peak hour



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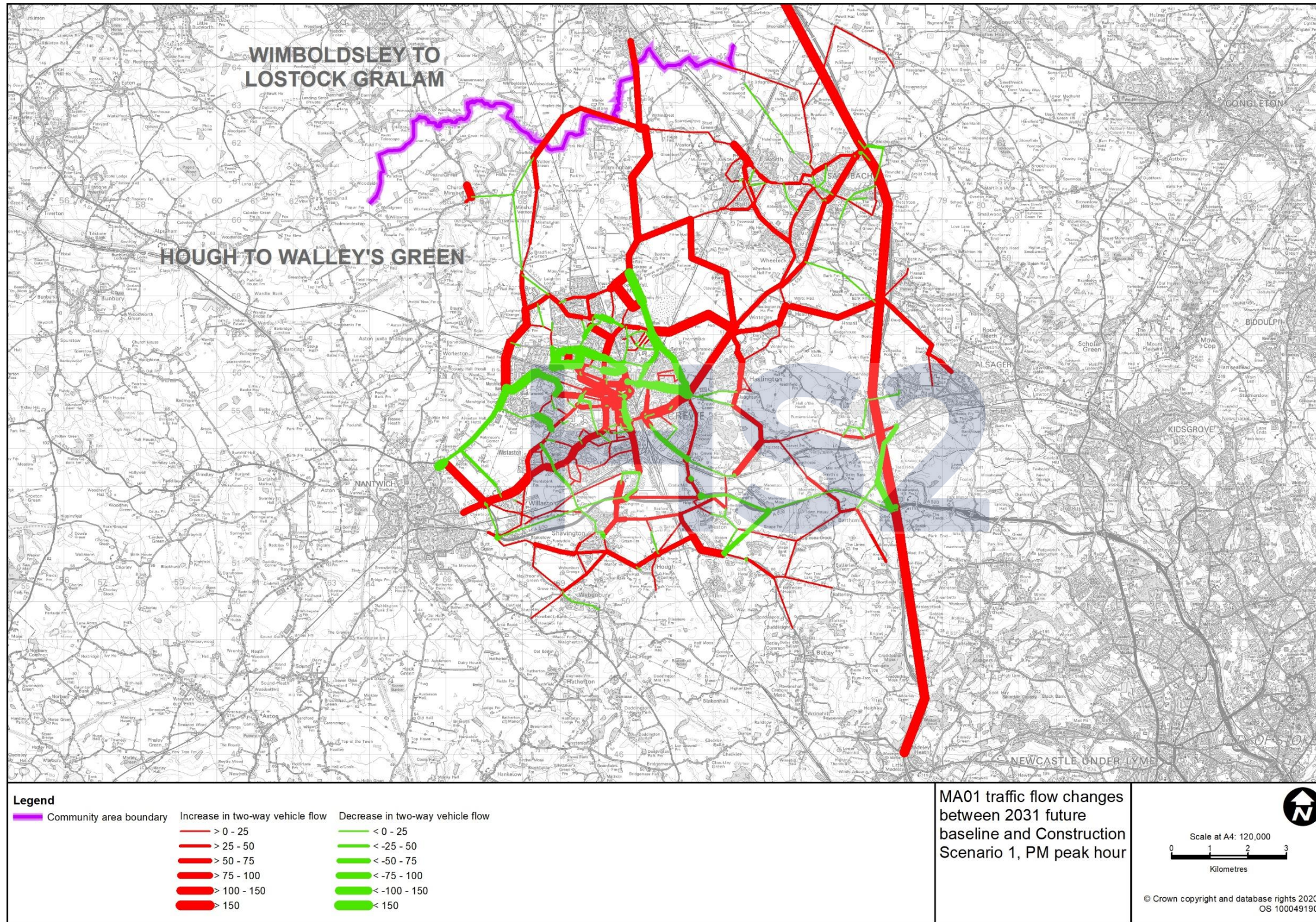
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Figure 13-4: MA01 traffic flow changes between 2031 future baseline and AP2 revised scheme scenario 1, PM peak hour



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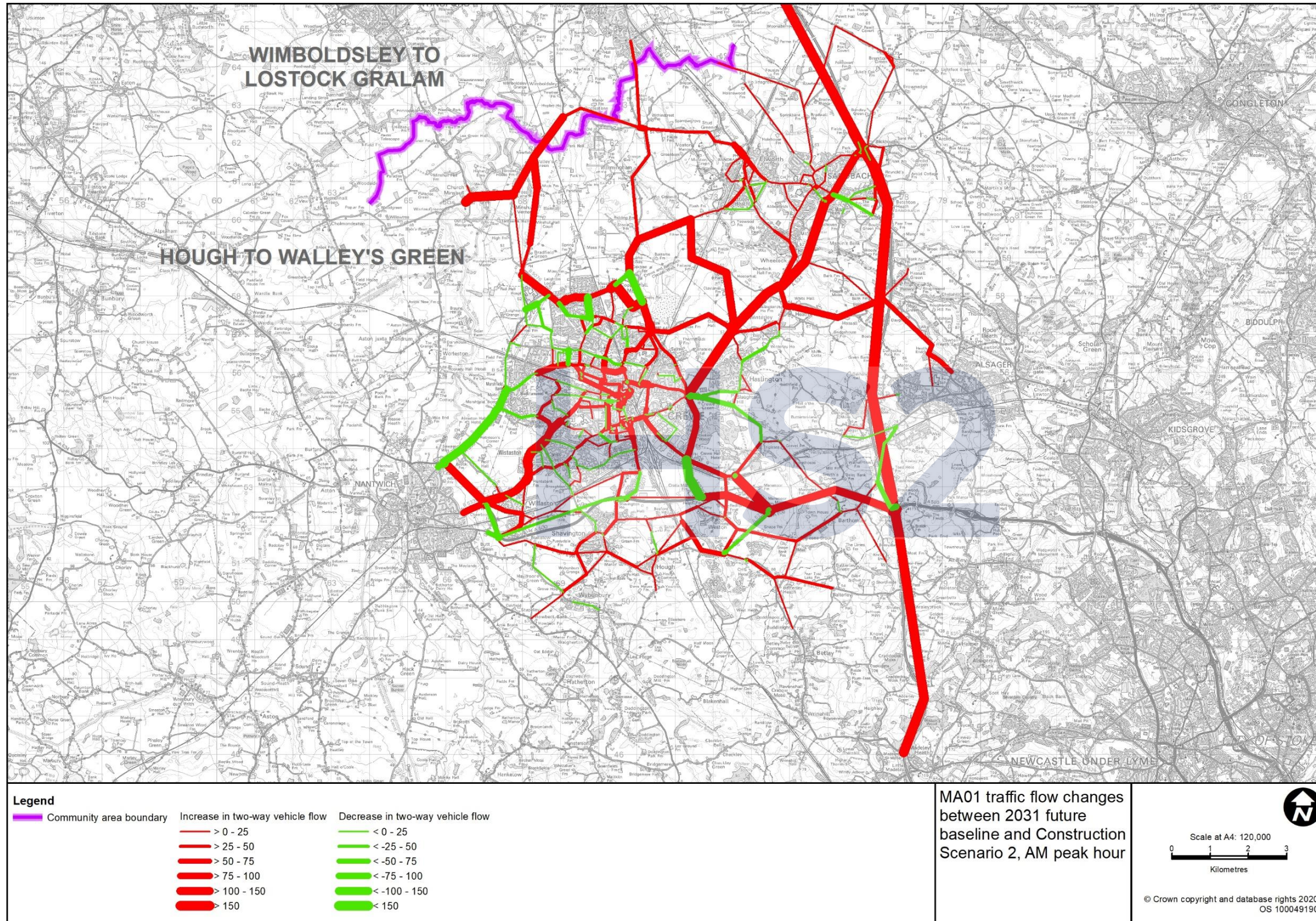
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Figure 13-5: MA01 traffic flow changes between 2031 future baseline and AP2 revised scheme scenario 2, AM peak hour



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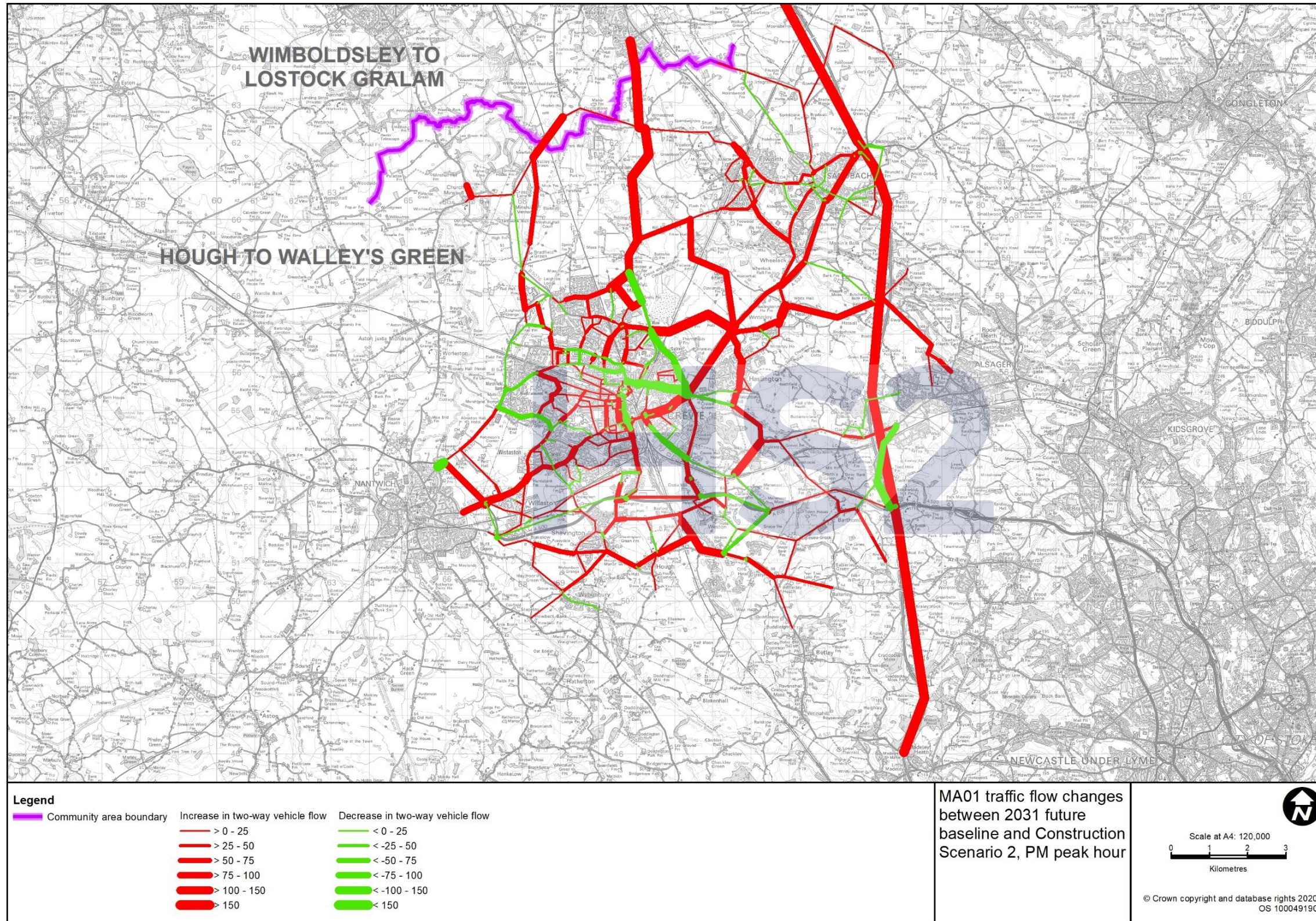
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Figure 13-6: MA01 traffic flow changes between 2031 future baseline and AP2 revised scheme scenario 2, PM peak hour



Junction performance

- 11.2.23 Junction capacity analysis was reported in Section 13.3 of the main TA which was undertaken for the 2030 weekday AM and PM peak hours and compared junction operation for the future baseline and original scheme. Updated junction capacity analysis was reported in Section 10.2 of the SES1 and AP1 ES TA.
- 11.2.24 Updated junction capacity analysis has been undertaken for the AP2 revised scheme taking account of the revised baseline traffic, changes in traffic flows associated with the SES2 changes and AP2 amendments and associated traffic reassignment. Junction capacity analysis has been undertaken for the weekday AM and PM peak hours comparing junction operation in the 2031 future baseline with the modelled scenarios for the AP2 revised scheme.
- 11.2.25 The following tables and commentary set out the performance at junctions where there is the potential for the AP2 revised scheme to have substantial impacts, including new temporary junctions and those junctions where temporary or permanent changes are proposed.
- 11.2.26 The results are presented from south to north through the MA01 area, firstly for junctions on the strategic road network, followed by junctions on other roads. The 2031 future baseline results are included for comparison. The models developed to assess the existing and future baseline have been used, except where otherwise stated. Where there are changes to infrastructure compared to the SES1 and AP1 ES TA, these are highlighted.
- 11.2.27 The results are presented in the same order as presented in the main TA and SES1 and AP1 ES TA. Junctions that were not modelled in the main TA and SES1 and AP1 ES TA are provided at the end of the junction performance section after the Forge Mill Lane/Dragons Lane/Tetton Lane/White Hall Lane junction (Table 13-47). Where no updates to junction operation are provided, junction operation is as described in Section 10.2 of the SES1 and AP1 ES TA.
- 11.2.28 It should be noted that the assessments consider the peak level of construction traffic in each location, for each scenario, and these conditions will not be present across the whole construction period.
- 11.2.29 Due to the negligible number of construction traffic movements during the utilities scenario, junction capacity analysis is only reported for the utilities scenario at those junctions forecast to experience an impact as a result of the AP2 revised scheme.
- 11.2.30 The junction performance tables presented in this report use the following abbreviations: PCU = Passenger Car Unit; VoC = Volume over Capacity; DoS = Degree of Saturation; RFC = Ratio of Flow to Capacity; and Q = Queue.

M6 junction 16/A500 Newcastle Road/B5078 Radway Green Road/A500 (Barthomley Interchange) junction

- 11.2.31 Table 13-9 in the SES1 and AP1 ES TA replaced Table 13-9 in the main TA and summarised the results of the changes in performance of the junction as a result of the AP1 revised scheme. Table 13-9 below replaces Table 13-9 in the SES1 and AP1 ES TA.

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Table 13-9: M6 junction 16/A500 Newcastle Road/B5078 Radway Green/A500 (Barthomley Interchange) junction 2031 future baseline and with the AP2 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00–09:00	2031 future baseline			AP2 revised scheme utilities scenario			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
B5078 Radway Green Road	168	107%	5	160	108%	5	137	107%	4	140	107%	4
M6 junction 16 southbound off-slip	1,328	73%	11	1,472	81%	12	1,418	78%	11	1,463	81%	12
Circulatory at M6 junction 16 southbound off-slip	1,445	58%	10	1,341	53%	9	1,393	55%	10	1,373	55%	9
A500 (east)	2,279	99%	12	2,251	98%	12	2,304	100%	12	2,301	100%	12
Circulatory at A500 (east)	744	73%	8	830	81%	9	877	86%	9	897	88%	9
M6 junction 16 northbound off-slip	769	50%	7	776	51%	7	882	57%	8	886	58%	8
Circulatory at M6 junction 16 northbound off-slip	2,409	86%	15	2,482	89%	16	2,538	91%	16	2,573	92%	16
A500 Newcastle Road	1,819	100%	14	1,849	102%	14	1,842	102%	14	1,846	102%	14
Circulatory at A500 Newcastle Road	1,179	47%	8	1,187	47%	8	1,219	49%	8	1,210	48%	8
17:00–18:00	2031 future baseline			AP2 revised scheme utilities scenario			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
B5078 Radway Green Road	180	109%	5	182	109%	5	150	109%	5	145	109%	4
M6 junction 16 southbound off-slip	1,441	69%	11	1,532	73%	11	1,627	78%	12	1,625	78%	12
Circulatory at M6 junction 16 southbound off-slip	1,777	80%	13	1,671	75%	12	1,753	79%	13	1,735	78%	12
A500 (east)	1,951	100%	12	1,936	99%	11	1,958	100%	11	1,958	100%	11
Circulatory at A500 (east)	1,153	83%	10	1,201	86%	10	1,255	90%	11	1,275	91%	11

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Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
M6 junction 16 northbound off-slip	856	56%	8	862	56%	8	937	61%	8	918	60%	8
Circulatory at M6 junction 16 northbound off-slip	2,504	90%	16	2,568	92%	16	2,552	91%	16	2,580	92%	16
A500 Newcastle Road	1,910	105%	14	1,949	107%	14	1,957	108%	14	1,965	108%	14
Circulatory at A500 Newcastle Road	1,280	51%	8	1,269	51%	8	1,295	52%	8	1,295	52%	8

11.2.32 The conclusions drawn in paragraph 10.2.32 of the SES1 and AP1 ES TA are replaced by:

“The assessment shows that in the AM and PM peak hours the junction operates over capacity in both the future baseline and with the AP2 revised scheme.

In scenario 2, the change in traffic due to construction of the AP2 revised scheme will increase the VoC on the circulatory at M6 junction 16 northbound off-slip approach from 86% in the future baseline to 92% in the AM peak hour, with a corresponding queue length from 15 PCU in the future baseline to 16 PCU.

In scenario 1 and 2, the change in traffic due to construction of the AP2 revised scheme in the PM peak hour will increase the VoC on the A500 Newcastle Road approach from 105% in the future baseline to 108%, with no change in corresponding queue length.”

M6 junction 17/A534 Congleton Road junction

11.2.33 Table 13-10 in the SES1 and AP1 ES TA replaced Table 13-10 in the main TA and summarised results of the changes in performance of the junction as a result of the AP1 revised scheme. Table 13-10 below replaces Table 13-10 in the SES1 and AP1 ES TA.

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Table 13-10: M6 junction 17/A534 Congleton Road junction 2031 future baseline and with the AP2 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00-09:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
M6 southbound off-slip (junction 17)	373	67%	4	489	87%	5	493	88%	5
A534 Congleton Road (east)	602	100%	7	602	100%	7	602	100%	7
A534 Congleton Road (east) (left slip)	273	26%	0	257	24%	0	257	24%	0
M6 northbound off-slip (junction 17) (roundabout entry)	430	35%	0	440	40%	0	432	39%	0
Capricorn Business Park Access	67	8%	0	66	10%	0	66	10%	0
A534 Old Mill Road (west)	1,471	54%	0	1,471	54%	0	1,472	54%	0
A534 Old Mill Road (motorway overbridge eastbound)	1,089	91%	9	1,098	92%	9	1,094	92%	9
A534 Old Mill Road (motorway overbridge westbound)	973	56%	0	1,089	63%	0	1,093	63%	0
17:00-18:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
M6 southbound off-slip (junction 17)	440	98%	7	439	98%	7	440	98%	7
A534 Congleton Road (east)	666	93%	8	674	94%	8	676	94%	8
A534 Congleton Road (east) (left slip)	441	40%	0	420	38%	1	420	38%	1
M6 northbound off-slip (junction 17) (roundabout entry)	720	63%	3	697	60%	2	697	60%	2
Capricorn Business Park Access	113	19%	0	112	19%	0	112	19%	0
A534 Old Mill Road (west)	1,282	60%	1	1,374	63%	1	1,375	63%	1
A534 Old Mill Road (motorway overbridge eastbound)	1,147	77%	10	1,162	79%	10	1,159	79%	10
A534 Old Mill Road (motorway overbridge westbound)	1,107	64%	0	1,113	64%	0	1,117	65%	0

11.2.34 The conclusions drawn in paragraph 11.2.73 of the SES1 and AP1 ES TA are replaced by:

“The assessment shows that in the AM peak hour the junction operates over capacity in both the future baseline and with the AP2 revised scheme. In the PM peak hour, the junction operates close to capacity in both the future baseline and with the AP2 revised scheme.

In scenario 2, the change in traffic due to construction of the AP2 revised scheme will increase the VoC on the M6 southbound off-slip (junction 17) approach from 67% in the future baseline to 88% in the AM peak hour, with a corresponding change in queue length from four PCU in the future baseline to five PCU.

A500 Shavington Bypass/A51 Newcastle Road/A51 Nantwich Bypass (Cheerbrook Roundabout) junction

11.2.35 Table 10-12 in the SES1 and AP1 ES TA replaced Table 13-11 in the main TA and summarised the results of the changes in performance of the junction as a result of the AP1 revised scheme. Table 13-11 below replaces Table 10-12 in the SES1 and AP1 ES TA.

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Table 13-11: A500 Shavington Bypass/A51 Newcastle Road/A51 Nantwich Bypass (Cheerbrook Roundabout) junction 2031 future baseline and with the AP2 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00-09:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
A51 Nantwich Bypass	776	70%	1	753	66%	1	795	70%	1
Cheerbrook Road	303	44%	1	283	82%	2	277	39%	0
A500 Shavington Bypass	1,269	67%	0	1,424	70%	0	1,375	70%	0
Newcastle Road	346	43%	0	352	48%	1	361	48%	1
A51 Newcastle Road	1,143	90%	3	1,080	92%	4	1,072	90%	3
17:00-18:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
A51 Nantwich Bypass	958	65%	1	1,058	74%	1	1,049	72%	1
Cheerbrook Road	150	20%	0	156	24%	0	158	24%	0
A500 Shavington Bypass	1,762	99%	6	1,793	101%	9	1,794	101%	9
Newcastle Road	233	47%	1	255	52%	1	252	52%	1
A51 Newcastle Road	733	63%	1	759	68%	1	740	66%	1

11.2.36 The conclusions drawn in paragraphs 10.2.36 of the SES1 and AP1 ES TA are replaced by:

“The assessment shows that in the AM peak hour the junction operates close to capacity in both the future baseline and with the AP2 revised scheme. In the PM peak hour, the junction operates close to capacity in the future baseline and over capacity with the AP2 revised scheme.

In scenario 1, the change in traffic due to construction of the AP2 revised scheme will increase the VoC on the A51 Newcastle Road approach from 90% in the future baseline to 92% in the AM peak hour, with a corresponding change in queue length from three PCU in the future baseline to four PCU. In the PM peak hour, the change in traffic due to construction of the AP2 revised scheme will increase the VoC on the A500 Shavington Bypass approach from 99% in the future baseline to 101%, with a corresponding change in queue length from six PCU in the future baseline to nine PCU.”

A500 Newcastle Road/A500 Shavington Bypass/A531 Newcastle Road/B5472 Weston Road (Meremoor Moss Roundabout) junction

11.2.37 Table 13-12 in the SES1 and AP1 ES TA replaced Table 13-12 in the main TA and summarised the results of the changes in performance of the junction as a result of the AP1 revised scheme. Table 13-12 below replaces Table 13-12 in the SES1 and AP1 ES TA.

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Table 13-12: A500 Newcastle Road/A500 Shavington Bypass/A531 Newcastle Road/B5472 Weston Road (Meremoor Moss Roundabout) junction 2031 future baseline and with the AP2 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00–09:00	2031 future baseline			AP2 revised scheme utilities scenario			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
B5472 Weston Road	416	54%	1	398	54%	1	498	66%	1	530	70%	1
A500 Newcastle Road	1,998	60%	0	2,071	62%	0	2,201	70%	0	2,250	72%	0
A531 Newcastle Road	515	74%	2	479	73%	2	450	84%	3	456	88%	3
A500 Shavington Bypass	1,188	78%	1	1,265	81%	1	1,278	86%	2	1,269	87%	2
17:00–18:00	2031 future baseline			AP2 revised scheme utilities scenario			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
B5472 Weston Road	545	73%	2	539	75%	2	557	77%	2	564	79%	2
A500 Newcastle Road	2,080	65%	0	2,160	67%	0	2,194	69%	0	2,203	69%	0
A531 Newcastle Road	246	33%	0	243	35%	0	203	30%	0	213	32%	0
A500 Shavington Bypass	1,454	91%	3	1,493	95%	4	1,483	93%	3	1,484	94%	3

11.2.38 The conclusions drawn in paragraph 10.2.38 of the SES1 and AP1 ES TA are replaced by:

“The assessment shows that in the AM peak hour the junction operates within capacity in the future baseline and close to capacity with the AP2 revised scheme. In the PM peak hour, the junction operates close to capacity in both the future baseline and with the AP2 revised scheme.

In scenario 2, the change in traffic due to construction of the AP2 revised scheme will increase the VoC on the A531 Newcastle Road approach from 74% in the future baseline to 88% in the AM peak hour, with a corresponding change in queue length from two PCU in the future baseline to three PCU.

In the utilities scenario, the change in traffic due to construction of the AP2 revised scheme in the PM peak hour will increase the VoC on the A500 Shavington Bypass approach from 91% in the future baseline to 95%, with a corresponding change in queue length from three PCU in the future baseline to four PCU.”

A51 Nantwich Bypass/A534 Crewe Road/B5338 Crewe Road/Park Road junction

11.2.39 Table 13-13 in the SES1 and AP1 ES TA replaced Table 13-13 in the main TA and summarised the results of the changes in performance of the junction as a result of the AP1 revised scheme. Table 13-13 below replaces Table 13-13 in the SES1 and AP1 ES TA.

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Table 13-13: A51 Nantwich Bypass/A534 Crewe Road/B5338 Crewe Road/Park Road junction 2031 future baseline and with the AP2 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00-09:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
A51 Nantwich Bypass (north)	735	48%	0	882	57%	0	900	59%	0
A534 Crewe Road	700	49%	0	735	54%	0	787	58%	1
Park Road	117	25%	0	184	42%	0	166	41%	0
A51 Nantwich Bypass (south)	988	82%	2	1,042	87%	2	1,027	86%	2
B5338 Crewe Road	554	91%	3	534	96%	4	537	96%	5
17:00-18:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
A51 Nantwich Bypass (north)	944	57%	0	1,091	66%	0	1,071	65%	0
A534 Crewe Road	753	62%	1	883	81%	2	874	80%	2
Park Road	140	37%	0	146	52%	1	145	51%	1
A51 Nantwich Bypass (south)	1,041	87%	2	1,081	94%	5	1,081	93%	4
B5338 Crewe Road	427	70%	1	434	79%	2	429	76%	1

11.2.40 The conclusions drawn in paragraph 10.2.40 of the SES1 and AP1 ES TA are replaced by:

“The assessment shows that in the AM and PM peak hours the junction operates close to capacity in both the future baseline and with the AP2 revised scheme.

In scenario 2, the change in traffic due to construction of the AP2 revised scheme will increase the VoC on the B5338 Crewe Road approach from 91% in the future baseline to 96% in the AM peak hour, with a corresponding change in queue length from three PCU in the future baseline to five PCU.

In scenario 1, the change in traffic due to construction of the AP2 revised scheme in the PM peak hour will increase the VoC on the Nantwich Bypass (south) approach from 87% in the future baseline to 94%, with a corresponding change in queue length from two PCU in the future baseline to five PCU.”

A500 Shavington Bypass/B5071 Jack Mills Way junction

11.2.41 Table 13-14 in the SES1 and AP1 ES TA replaced Table 13-14 in the main TA and summarised the results of the changes in performance of the junction as a result of the AP1 revised scheme. Table 13-14 below replaces Table 13-14 in the SES1 and AP1 ES TA.

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Table 13-14: A500 Shavington Bypass/B5071 Jack Mills Way junction 2031 future baseline and with the AP2 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00–09:00	2031 future baseline			AP2 revised scheme utilities scenario			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
B5071 Jack Mills Way	676	71%	1	736	77%	2	655	71%	1	641	70%	1
A500 Shavington Bypass (east)	1,661	75%	0	1,716	78%	0	1,825	82%	0	1,805	82%	0
B5071	257	37%	0	247	38%	0	237	41%	0	248	42%	1
A500 Shavington Bypass (west)	1,550	95%	3	1,550	95%	4	1,550	93%	3	1,550	96%	4
17:00–18:00	2031 future baseline			AP2 revised scheme utilities scenario			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
B5071 Jack Mills Way	836	73%	1	858	76%	1	872	85%	2	883	85%	2
A500 Shavington Bypass (east)	1,884	94%	2	1,907	97%	4	1,938	98%	4	1,942	98%	4
B5071	188	44%	1	191	48%	1	188	45%	1	188	45%	1
A500 Shavington Bypass (west)	1,241	68%	0	1,255	71%	1	1,354	73%	1	1,337	73%	1

11.2.42 The conclusions drawn in paragraph 10.2.42 of the SES1 and AP1 ES TA are replaced by:

“The assessment shows that in the AM and PM peak hours the junction operates close to capacity in both the future baseline and with the AP2 revised scheme.

The change in traffic due to construction of the AP2 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths in the AM peak hour.

In Scenarios 1 and 2, the change in traffic due to construction of the AP2 revised scheme in the PM peak hour will increase the VoC on the Jack Mills Way approach from 73% in the future baseline to 85%, with a corresponding change in queue length from one PCU in the future baseline to two PCU.”

A500 Shavington Bypass/A5020 David Whitby Way junction

11.2.43 Table 13-15 in the SES1 and AP1 ES TA replaced Table 13-15 in the main TA and summarised the results of the changes in performance of the junction as a result of the AP1 revised scheme. Table 13-15 below replaces Table 13-15 in the SES1 and AP1 ES TA.

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Table 13-15: A500 Shavington Bypass/A5020 David Whitby Way junction 2031 future baseline and with the AP2 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00–09:00	2031 future baseline			AP2 revised scheme utilities scenario			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
A5020 David Whitby Way	447	41%	0	439	43%	0	428	42%	0	385	37%	0
A500 Shavington Bypass (east)	1,594	85%	1	1,651	87%	1	1,782	93%	2	1,801	91%	1
A500 Shavington Bypass (west)	1,842	94%	2	1,897	96%	3	1,865	94%	2	1,846	93%	2
17:00–18:00	2031 future baseline			AP2 revised scheme utilities scenario			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
A5020 David Whitby Way	1,076	91%	3	1,000	90%	3	1,034	92%	4	1,046	92%	4
A500 Shavington Bypass (east)	1,294	83%	1	1,356	84%	2	1,385	88%	2	1,389	87%	2
A500 Shavington Bypass (west)	1,623	71%	0	1,634	72%	0	1,769	79%	0	1,762	79%	0

11.2.44 The conclusions drawn in paragraph 10.2.44 of the SES1 and AP1 ES TA are replaced by:

“The assessment shows that in the AM and PM peak hours the junction operates close to capacity in both the future baseline and with the AP2 revised scheme.

In scenario 1, the change in traffic due to construction of the AP2 revised scheme will increase the VoC on the A500 Shavington Bypass (east) approach from 85% in the future baseline to 93% in the AM peak hour, with a corresponding change in queue length from one PCU in the future baseline to two PCU. In the PM peak hour, the change in traffic due to construction of the AP2 revised scheme will increase the VoC on the A5000 Shavington Bypass (east) approach from 83% in the future baseline to 88%, with a corresponding change in queue length from one PCU in the future baseline to two PCU.”

A530 Middlewich Road/A51 Nantwich Bypass/B334 Middlewich Road (Alvaston Roundabout) junction

11.2.45 Table 13-16 in the SES1 and AP1 ES TA replaced Table 13-16 in the main TA and summarised the results of the changes in performance of the junction as a result of the AP1 revised scheme. Table 13-16 below replaces Table 13-16 in the SES1 and AP1 ES TA.

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Table 13-16: A530 Middlewich Road/A51 Nantwich Bypass/B5334 Middlewich Road (Alvaston Roundabout) junction 2031 future baseline and with the AP2 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00-09:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
Alvaston Business Park Approach	22	4%	0	22	4%	0	22	4%	0
A530 Middlewich Road	787	106%	7	800	108%	7	791	109%	7
A51 Nantwich Bypass (east)	995	83%	2	1,090	91%	3	1,080	90%	2
B5334 Middlewich Road	674	46%	0	700	49%	1	719	50%	1
A51 Nantwich Bypass (west)	1,212	76%	1	1,211	76%	1	1,207	75%	1
17:00-18:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
Alvaston Business Park Approach	131	17%	0	131	19%	0	131	19%	0
A530 Middlewich Road	669	106%	7	687	109%	7	701	111%	7
A51 Nantwich Bypass (east)	966	81%	1	1,101	92%	3	1,078	90%	2
B5334 Middlewich Road	662	41%	0	609	41%	0	626	42%	0
A51 Nantwich Bypass (west)	1,084	68%	1	1,100	69%	1	1,092	68%	1

11.2.46 The conclusions drawn in paragraph 10.2.46 of the SES1 and AP1 ES TA are replaced by:

“The assessment shows that in the AM and PM peak hours the junction operates over capacity in both the future baseline and with the AP2 revised scheme.

In scenario 2, the change in traffic due to construction of the AP2 revised scheme in the AM peak hour will increase the VoC on the A51 Nantwich Bypass (east) approach from 83% in the future baseline to 91%, with a corresponding change in queue length from two PCU to three PCU.

In scenario 1, the change in traffic due to construction of the AP2 revised scheme in the PM peak hour will increase the VoC on the A51 Nantwich Bypass (east) approach from 81% in the future baseline to 92%, with a corresponding change in queue length from one PCU to three PCU.”

A532 Weston Road/A5020 University Way/A5020 David Whitby Way/B5472 Weston Road/Savoy Road junction

11.2.47 Table 13-17 in the SES1 and AP1 ES TA replaced Table 13-17 in the main TA and summarised the results of the changes in performance of the junction as a result of the AP1 revised scheme. Table 13-17 below replaces Table 13-17 in the SES1 and AP1 ES TA.

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Table 13-17: A532 Weston Road/A5020 University Way/A5020 David Whitby Way/B5472 Weston Road/Savoy Road junction 2031 future baseline and with AP2 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00–09:00	2031 future baseline			AP2 revised scheme utilities scenario			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
A5020 University Way	732	37%	0	761	37%	0	793	40%	0	789	40%	0
B5472 Weston Road	1,107	92%	2	1,113	93%	2	1,153	96%	4	1,158	97%	4
A5020 David Whitby Way	1,038	96%	5	1,013	95%	5	973	100%	10	958	100%	10
Savoy Road	54	26%	0	54	26%	0	54	29%	0	54	29%	0
A532 Weston Road	323	22%	0	272	18%	0	334	23%	0	329	23%	0
17:00–18:00	2031 future baseline			AP2 revised scheme utilities scenario			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
A5020 University Way	939	99%	8	935	98%	7	942	95%	5	945	95%	5
B5472 Weston Road	607	52%	1	644	54%	1	601	50%	0	605	50%	0
A5020 David Whitby Way	647	38%	0	581	36%	0	758	45%	0	758	45%	0
Savoy Road	129	25%	0	129	24%	0	129	27%	0	129	27%	0
A532 Weston Road	1,271	102%	10	1,251	97%	6	1,202	104%	10	1,190	105%	10

11.2.48 The conclusions drawn in paragraph 10.2.48 of the SES1 and AP1 ES TA are replaced by:

“The assessment shows that in the AM peak hour the junction operates close to capacity in the future baseline and over capacity with the AP2 revised scheme. In the PM peak hour, the junction operates over capacity in both the future baseline and with the AP2 revised scheme.

In scenario 2, the change in traffic due to construction of the AP2 revised scheme will increase the VoC on the B5472 Weston Road approach from 92% in the future baseline to 97% in the AM peak hour, with a corresponding change in queue length from two PCU to four PCU. In the PM peak hour, the change in traffic due to construction of the AP2 revised scheme will increase the VoC on the A532 Weston Road approach from 102% in the future baseline to 105%, with no change in corresponding queue length.”

Valley Road/Wistaston Green Road junction

11.2.49 Table 13-18 in the SES1 and AP1 ES TA replaced Table 13-18 in the main TA and summarised the results of the changes in performance of the junction as a result of the AP1 revised scheme. Table 13-18 below replaces Table 13-18 in the SES1 and AP1 ES TA.

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Table 13-18: Valley Road/Wistaston Green Road junction 2031 future baseline and with the AP2 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00–09:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
Wistaston Green Road	392	53%	0	397	56%	0	395	58%	0
Valley Road (north)	286	32%	0	400	44%	0	336	38%	0
Valley Road (south)	744	70%	0	812	77%	0	842	80%	0
17:00–18:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
Wistaston Green Road	747	85%	1	720	82%	1	719	83%	1
Valley Road (north)	648	93%	3	694	97%	4	665	96%	4
Valley Road (south)	652	73%	0	616	66%	0	651	71%	0

11.2.50 The conclusions drawn in paragraph 10.2.50 of the SES1 and AP1 ES TA are replaced by:

“The assessment shows that in the AM peak hour the junction operates well within capacity in the future baseline and within capacity with the AP2 revised scheme. In the PM peak hour, the junction operates close to capacity in both the future baseline and with the AP2 revised scheme.

The change in traffic due to construction of the AP2 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths in the AM peak hour.

In scenario 1, the change in traffic due to construction of the AP2 revised scheme in the PM peak hour will increase the VoC on the Valley Road (north) approach from 93% in the future baseline to 97%, with a corresponding change in queue length from three PCU to four PCU.”

Wistaston Green Road/Capesthorpe Road junction

11.2.51 Table 13-19 in the SES1 and AP1 ES TA replaced Table 13-19 in the main TA and summarised the results of the changes in performance of the junction as a result of the AP1 revised scheme. Table 13-19 below replaces Table 13-19 in the SES1 and AP1 ES TA.

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Table 13-19: Wistaston Green Road/Capesthorpe Road junction 2031 future baseline and with the AP2 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00–09:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
Capesthorpe Road	291	45%	0	285	46%	0	358	51%	0
Wistaston Green Road (east)	284	22%	0	338	29%	0	332	23%	0
Wistaston Green Road (west)	966	61%	0	995	62%	0	887	56%	0
17:00–18:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
Capesthorpe Road	441	94%	4	461	95%	4	466	96%	4
Wistaston Green Road (east)	578	39%	0	503	33%	0	547	36%	0
Wistaston Green Road (west)	961	59%	0	957	58%	0	928	57%	0

11.2.52 The conclusions drawn in paragraph 10.2.52 of the SES1 and AP1 ES TA are replaced by:

“The assessment shows that in the AM peak hour the junction operates well within capacity in both the future baseline and with the AP2 revised scheme. In the PM peak hour, the junction operates close to capacity in both the future baseline and with the AP2 revised scheme.

The change in traffic due to construction of the AP2 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths in the AM peak hour.

In scenario 2, the change in traffic due to construction of the AP2 revised scheme in the PM peak hour will increase the VoC on the Capesthorpe Road approach from 94% in the future baseline to 96%, with no change in corresponding queue length.”

A534 Crewe Road/A534 Nantwich Road/A532 Weston Road/A532 Macon Way/Tommy’s Lane junction

11.2.53 Table 13-20 in the SES1 and AP1 ES TA replaced Table 13-20 in the main TA and summarised the results of the changes in performance of the junction as a result of the AP1 revised scheme. Table 13-20 below replaces Table 13-20 in the SES1 and AP1 ES TA.

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Table 13-20: A534 Crewe Road/A534 Nantwich Road/A532 Weston Road/A532 Macon Way/Tommy's Lane junction 2031 future baseline and with the AP2 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00–09:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
A532 Macon Way	566	65%	5	593	69%	5	603	70%	5
A534 Crewe Road	635	56%	6	665	59%	6	669	59%	6
A532 Weston Road	678	47%	6	699	49%	6	696	49%	6
A534 Nantwich Road	847	62%	6	849	63%	6	861	63%	6
Tommy's Lane	68	6%	0	68	6%	0	68	6%	0
17:00–18:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
A532 Macon Way	692	78%	6	769	87%	6	749	84%	6
A534 Crewe Road	613	46%	6	599	45%	6	600	45%	6
A532 Weston Road	819	41%	7	919	46%	8	919	46%	8
A534 Nantwich Road	860	62%	6	891	64%	7	882	63%	7
Tommy's Lane	76	8%	0	76	8%	0	76	8%	0

11.2.54 The conclusions drawn in paragraph 10.2.54 of the SES1 and AP1 ES TA are replaced by:

“The assessment shows that in the AM peak hour the junction operates well within capacity in both the future baseline and with the AP2 revised scheme. In the PM peak hour, the junction operates within capacity in the future baseline and close to capacity with the AP2 revised scheme.

The change in traffic due to the construction of the AP2 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths in the AM peak hour.

In scenario 1, the change in traffic due to construction of the AP2 revised scheme in the PM peak hour will increase the VoC on the A532 Macon Way approach from 78% in the future baseline to 87%, with no change in corresponding queue length.”

A534/A534 Crewe Green Road/A5020 University Way (Crewe Green Roundabout) junction

11.2.55 Table 13-21 in the SES1 and AP1 ES TA replaced Table 13-21 in the main TA and summarised the results of the changes in performance of the junction as a result of the AP1 revised scheme. Table 13-21 below replaces Table 13-21 in the SES1 and AP1 ES TA.

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Table 13-21: A534/A534 Crewe Green Road/A5020 University Way (Crewe Green Roundabout) junction 2031 future baseline and with the AP2 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00-09:00	2031 future baseline			AP2 revised scheme utilities scenario			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
Sydney Road	859	39%	0	813	37%	0	912	41%	0	904	41%	0
A534	988	47%	0	1,142	50%	1	1,114	55%	1	1,138	56%	1
B5077 Crewe Road	898	95%	6	890	99%	9	817	101%	10	807	101%	10
A5020 University Way	786	64%	1	764	64%	1	830	70%	2	826	71%	2
A534 Crewe Green Road	574	27%	0	540	26%	0	550	27%	0	561	28%	0
17:00-18:00	2031 future baseline			AP2 revised scheme utilities scenario			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
Sydney Road	457	21%	0	452	21%	0	380	17%	0	371	17%	0
A534	1,058	50%	1	1,073	50%	1	1,091	49%	0	1,095	49%	0
B5077 Crewe Road	484	42%	0	486	42%	0	475	41%	0	478	41%	0
A5020 University Way	937	33%	0	901	32%	0	989	34%	0	989	34%	0
A534 Crewe Green Road	1,002	49%	1	1,085	54%	1	1,202	61%	1	1,217	62%	1

11.2.56 The conclusions drawn in paragraph 10.2.56 of the SES1 and AP1 ES TA are replaced by:

“The assessment shows that in the AM peak the junction operates close to capacity in the future baseline and over capacity with the AP2 revised scheme. In the PM peak hour, the junction operates well within capacity in both the future baseline and with the AP2 revised scheme.

In scenario 1 and 2, the change in traffic due to construction of the AP2 revised scheme will increase the VoC on the B5077 Crewe Road approach from 95% in the future baseline to 101% in the AM peak hour, with a corresponding change in queue length from six PCU in the future baseline to 10 PCU.

In the PM peak hour, the change in traffic due to construction of the AP2 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths.”

A532 Earle Street/A532 Manchester Bridge/William Street/Grand Junction Way junction

11.2.57 Table 13-22 in the SES1 and AP1 ES TA replaced Table 13-22 in the main TA and summarised the results of the changes in performance of the junction as a result of the AP1 revised scheme. Table 13-22 below replaces Table 13-22 in the SES1 and AP1 ES TA.

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Table 13-22: A532 Earle Street/A532 Manchester Bridge/William Street/Grand Junction Way junction 2031 future baseline and with the AP2 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00–09:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
William Street	550	77%	1	604	85%	2	567	82%	1
A532 Manchester Bridge	887	42%	0	924	43%	0	936	44%	0
Grand Junction Way	24	2%	0	24	2%	0	24	2%	0
A532 Earle Street	1,141	53%	0	1,148	53%	0	1,172	54%	0
17:00–18:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
William Street	485	68%	1	477	64%	1	517	67%	1
A532 Manchester Bridge	1,279	59%	0	1,260	59%	0	1,259	59%	0
Grand Junction Way	19	2%	0	21	2%	0	19	2%	0
A532 Earle Street	931	48%	0	857	43%	0	822	41%	0

11.2.58 The conclusions drawn in paragraph 10.2.58 of the SES1 and AP1 ES TA are replaced by:

“The assessment shows that in the AM peak hour the junction operates within capacity in the future baseline and close to capacity with the AP2 revised scheme. In the PM peak hour, the junction operates well within capacity in both the future baseline and with the AP2 revised scheme.

In scenario 1, the change in traffic due to construction of the AP2 revised scheme will increase the VoC on the William Street approach from 77% in the future baseline to 85% in the AM peak hour, with a corresponding change in queue length from one PCU in the future baseline to two PCU.

In the PM peak hour, the change in traffic due to construction of the AP2 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths.”

A532 Vernon Way/A532 Earle Street/A5019 Vernon Way/Earle Street junction

11.2.59 Table 13-23 in the SES1 and AP1 ES TA replaced Table 13-23 in the main TA and summarised the results of the changes in performance of the junction as a result of the AP1 revised scheme. Table 13-23 below replaces Table 13-23 in the SES1 and AP1 ES TA.

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Table 13-23: A532 Vernon Way/A532 Earle Street/A5019 Vernon Way/Earle Street junction 2031 future baseline and with the AP2 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00-09:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
A532 Vernon Way	738	53%	0	731	57%	1	729	53%	0
A532 Earle Street	939	78%	1	960	80%	1	984	82%	1
A5019 Vernon Way	596	35%	0	649	40%	0	620	37%	0
Earle Street	457	38%	0	513	43%	0	463	39%	0
17:00-18:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
A532 Vernon Way	643	39%	0	706	43%	0	609	37%	0
A532 Earle Street	1,135	95%	2	1,152	96%	3	1,163	97%	3
A5019 Vernon Way	742	47%	0	714	47%	0	729	47%	0
Earle Street	318	27%	0	377	31%	0	310	26%	0

11.2.60 The conclusions drawn in paragraph 10.2.60 of the SES1 and AP1 ES TA are replaced by:

“The assessment shows that in the AM peak hour the junction operates within capacity in the future baseline and with the AP2 revised scheme. In the PM peak hour, the junction operates close to capacity in both the future baseline and with the AP2 revised scheme.

The change in traffic due to construction of the AP2 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths in the AM peak hour.

In scenario 2, the change in traffic due to construction of the AP2 revised scheme in the PM peak hour will increase the VoC on the A532 Earle Street approach from 95% in the future baseline to 97%, with a corresponding change in queue length from two PCU in the future baseline to three PCU.”

A532 West Street/A5078 Dunwoody Way/Bessemer Way junction

11.2.61 Table 13-24 in the SES1 and AP1 ES TA replaced Table 13-24 in the main TA and summarised the results of the changes in performance of the junction as a result of the AP1 revised scheme. Table 13-24 below replaces Table 13-24 in the SES1 and AP1 ES TA.

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Table 13-24: A532 West Street/A5078 Dunwoody Way/Bessemer Way junction 2031 future baseline and with the AP2 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00-09:00	2031 future baseline			AP2 revised scheme utilities scenario			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
A532 West Street (east)	260	86%	9	257	85%	9	189	63%	7	259	86%	9
A5078 Dunwoody Way	463	38%	8	435	35%	8	299	27%	6	517	42%	9
Bessemer Way	52	45%	2	52	45%	2	52	45%	2	52	45%	2
A532 West Street (west)	739	97%	17	752	100%	17	696	86%	16	735	95%	17
17:00-18:00	2031 future baseline			AP2 revised scheme utilities scenario			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
A532 West Street (east)	283	86%	10	284	86%	10	243	73%	8	293	89%	10
A5078 Dunwoody Way	626	54%	11	613	53%	11	620	53%	11	616	53%	11
Bessemer Way	33	29%	1	33	29%	1	33	29%	1	33	29%	1
A532 West Street (west)	678	93%	17	677	93%	17	632	83%	15	681	93%	17

11.2.62 The conclusions drawn in paragraph 10.2.62 of the SES1 and AP1 ES TA are replaced by:

“The assessment shows that in the AM peak hour the junction operates close to capacity in the future baseline and over capacity with the AP2 revised scheme. In the PM peak hour, the junction operates close to capacity in both the future baseline and with the AP2 revised scheme.

In the utilities scenario, the change in traffic due to construction of the AP2 revised scheme will increase the VoC on the A532 West Street (west) approach from 97% in the future baseline to 100% in the AM peak hour, with no change in corresponding queue length.

In scenario 2, the change in traffic due to construction of the AP2 revised scheme in the PM peak hour will increase the VoC on the A532 West Street (east) approach from 86% in the future baseline to 89%, with no change in corresponding queue length.”

Badger Avenue/Broad Street junction

11.2.63 Table 13-25 in the SES1 and AP1 ES TA replaced Table 13-25 in the main TA and summarised the results of the changes in performance of the junction as a result of the AP1 revised scheme. Table 13-25 below replaces Table 13-25 in the SES1 and AP1 ES TA.

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Table 13-25: Badger Avenue/Broad Street junction 2031 future baseline and with the AP2 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00-09:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
Broad Street (north)	628	96%	9	632	96%	9	635	98%	9
Badger Avenue (east)	282	38%	4	222	30%	3	271	36%	4
Broad Street (south)	388	54%	6	398	56%	6	425	60%	6
Badger Avenue (west)	391	92%	7	374	80%	7	387	90%	7
17:00-18:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
Broad Street (north)	568	94%	9	579	91%	9	576	97%	9
Badger Avenue (east)	439	65%	6	403	61%	5	435	65%	6
Broad Street (south)	369	53%	6	394	57%	6	378	54%	6
Badger Avenue (west)	353	63%	6	342	63%	6	374	68%	6

11.2.64 The conclusions drawn in paragraph 10.2.64 of the SES1 and AP1 ES TA are replaced by:

“The assessment shows that in the AM and PM peak hours the junction operates close to capacity in both the future baseline and with the AP2 revised scheme.

In scenario 2, the change in traffic due to construction of the AP2 revised scheme will increase the VoC on the Broad Street (north) approach from 96% in the future baseline to 98% in the AM peak hour, with no change in corresponding queue length. In the PM Peak hour, the change in traffic due to construction of the AP2 revised scheme will increase the VoC on the Broad Street (north) approach from 94% in the future baseline to 97%, with no change in corresponding queue length.”

Badger Avenue/Underwood Lane junction

11.2.65 Table 13-26 in the SES1 and AP1 ES TA replaced Table 13-26 in the main TA and summarised the results of the changes in performance of the junction as a result of the AP1 revised scheme. Table 13-26 below replaces Table 13-26 in the SES1 and AP1 ES TA.

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Table 13-26: Badger Avenue/Underwood Lane junction 2031 future baseline and with the AP2 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00–09:00	2031 future baseline			AP2 revised scheme utilities scenario			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
Underwood Lane (north)	271	47%	4	252	43%	3	191	33%	3	242	42%	3
Badger Avenue (east)	564	92%	6	560	92%	6	591	93%	6	585	96%	6
Underwood Lane (south)	496	97%	7	516	100%	7	456	87%	6	497	96%	7
Badger Avenue (west)	375	43%	4	380	43%	4	357	40%	4	396	45%	4
17:00–18:00	2031 future baseline			AP2 revised scheme utilities scenario			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
Underwood Lane (north)	353	62%	5	356	63%	5	221	43%	3	314	57%	4
Badger Avenue (east)	585	95%	6	587	95%	6	669	92%	7	610	98%	7
Underwood Lane (south)	477	99%	7	477	99%	7	461	95%	6	477	99%	7
Badger Avenue (west)	476	56%	5	471	55%	5	302	36%	3	462	54%	5

11.2.66 The conclusions drawn in paragraph 10.2.66 of the SES1 and AP1 ES TA are replaced by:

“The assessment shows that in the AM peak hour the junction operates close to capacity in the future baseline and over capacity with the AP2 revised scheme. In the PM peak hour, the junction operates close to capacity in both the future baseline and with the AP2 revised scheme.

In scenario 2, the change in traffic due to construction of the AP2 revised scheme will increase the VoC on the Badger Avenue (east) approach from 92% in the future baseline to 96% in the AM peak hour, with no change in corresponding queue length. In the PM Peak hour, the change in traffic due to construction of the AP2 revised scheme will increase the VoC on the Badger Avenue (east) approach from 95% in the future baseline to 98%, with a corresponding change in queue length from six PCU in the future baseline to seven PCU.”

Broad Street/Davenport Street/McLaren Street junction

11.2.67 Table 13-27 in the SES1 and AP1 ES TA replaced Table 13-27 in the main TA and summarised the results of the changes in performance of the junction as a result of the AP1 revised scheme. Table 13-27 below replaces Table 13-27 in the SES1 and AP1 ES TA.

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Table 13-27: Broad Street/Davenport Street/McLaren Street junction 2031 future baseline and with the AP2 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00–09:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
Broad Street (north)	381	28%	0	433	33%	0	383	29%	0
Davenport Street*	-	-	-	-	-	-	-	-	-
Broad Street (south)	718	44%	0	636	39%	0	751	46%	0
McLaren Street	600	95%	3	603	93%	2	572	96%	3
17:00–18:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
Broad Street (north)	463	34%	0	498	40%	0	453	34%	0
Davenport Street*	-	-	-	-	-	-	-	-	-
Broad Street (south)	631	39%	0	752	46%	0	705	43%	0
McLaren Street	447	69%	1	451	77%	1	466	76%	1

**Minor approach arm not represented within the strategic traffic model.*

11.2.68 The conclusions drawn in paragraph 10.2.68 of the SES1 and AP1 ES TA are replaced by:

“The assessment shows that in the AM peak hour the junction operates close to capacity in both the future baseline and with the AP2 revised scheme. In the PM peak hour, the junction operates well within capacity in the future baseline and within capacity with the AP2 revised scheme.

In scenario 1, the change in traffic due to construction of the AP2 revised scheme will decrease the VoC on the McLaren Street approach from 95% in the future baseline to 93% in the AM peak hour, with a corresponding change in queue length from three PCU in the future baseline to two PCU.

In the PM peak hour, the change in traffic due to construction of the AP2 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths.”

Sydney Road/Maw Green Road/Remer Street/Elm Drive/Groby Road network

Sydney Road/Maw Green Road junction

11.2.69 Table 13-28 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 13-28 of the main TA is replaced by Table 13-28 below.

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Table 13-28: Sydney Road/Maw Green Road junction 2031 future baseline and with the AP2 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	RFC	Q, PCU	Flow, PCU/hr	RFC	Q, PCU	Flow, PCU/hr	RFC	Q, PCU	Flow, PCU/hr	RFC	Q, PCU
08:00-09:00	2031 future baseline (existing layout)			AP2 revised scheme utilities scenario (existing layout)			AP2 revised scheme scenario 1 (existing layout)			AP2 revised scheme scenario 2 (existing layout)		
Sydney Road (north) (ahead)	1,140	-	-	1,067	-	-	1,192	-	-	1,188	-	-
Sydney Road (north) (left)	57	-	-	44	-	-	77	-	-	75	-	-
Maw Green Road (left)	42	2.03	16	50	2.08	21	53	2.64	26	43	2.66	21
Maw Green Road (right)	323	2.14	117	397	2.17	159	341	2.72	161	364	2.76	177
Sydney Road (south) (ahead and right)	889	0.02	0	819	0.02	0	943	0.04	0	917	0.03	0
17:00-18:00	2031 future baseline (existing layout)			AP2 revised scheme utilities scenario (existing layout)			AP2 revised scheme scenario 1 (existing layout)			AP2 revised scheme scenario 2 (existing layout)		
Sydney Road (north) (ahead)	1,030	-	-	793	-	-	750	-	-	745	-	-
Sydney Road (north) (left)	21	-	-	519	-	-	541	-	-	583	-	-
Maw Green Road (left)	12	0.03	0	23	0.08	0	15	0.04	0	12	0.03	0
Maw Green Road (right)	45	0.26	0	88	0.53	1	53	0.31	0	49	0.29	0
Sydney Road (south) (ahead and right)	1,051	0.06	0	1,056	0.09	0	1065	0.11	0	1,064	0.11	0

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11.2.70 The conclusions drawn in paragraph 10.2.73 of the SES1 and AP1 TA are replaced by:

“The assessment shows that in the AM peak hour the junction operates over capacity in both the future baseline and the AP2 revised scheme. In the PM peak hour, the junction operates well within capacity in both the future baseline and with the AP2 revised scheme.

In scenario 2, the change in traffic due to construction of the AP2 revised scheme will increase the RFC on the Maw Green Road (right) approach from 2.03 in the future baseline to 2.66 in the AM peak hour, with a corresponding change in queue length from 117 PCU in the future baseline to 177 PCU.

In the PM peak hour, the change in traffic due to construction of the original scheme will not result in substantial changes in capacity indicators such as RFC and queue lengths.”

Remer Street/Sydney Road/Elm Drive junction

11.2.71 Table 13-29 in the SES1 and AP1 ES TA replaced Table 13-29 in the main TA and summarised the results of the changes in performance of the junction as a result of the AP1 revised scheme. Table 13-29 below replaces Table 13-29 in the SES1 and AP1 ES TA.

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Table 13-29: Remer Street/Sydney Road/Elm Drive junction 2031 future baseline and with the AP2 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	RFC	Q, PCU	Flow, PCU/hr	RFC	Q, PCU	Flow, PCU/hr	RFC	Q, PCU	Flow, PCU/hr	RFC	Q, PCU
08:00–09:00	2031 future baseline (existing layout)			AP2 revised scheme utilities scenario (existing layout)			AP2 revised scheme scenario 1 (existing layout)			AP2 revised scheme scenario 2 (existing layout)		
Remer Street (ahead and right)	1,423	0.67	4	1,245	0.41	1	1,486	0.69	5	1,522	0.82	12
Sydney Road (ahead)	1,359	-	-	1,394	-	-	1,405	-	-	1,423	-	-
Sydney Road (left)	55	-	-	47	-	-	92	-	-	91	-	-
Elm Drive (left)	210	N/A*	116	232	N/A*	129	226	N/A*	125	242	N/A*	134
Elm Drive (right)	4	N/A*	2	47	N/A*	2	7	N/A*	4	5	N/A*	3
17:00–18:00	2031 future baseline (existing layout)			AP2 revised scheme utilities scenario (existing layout)			AP2 revised scheme scenario 1 (existing layout)			AP2 revised scheme scenario 2 (existing layout)		
Remer Street (ahead and right)	1,298	0.38	1	1,395	0.27	0	1,404	0.38	1	1,428	0.39	1
Sydney Road (ahead)	1,177	-	-	1,172	-	-	1,126	-	-	1,140	-	-
Sydney Road (left)	15	-	-	18	-	-	23	-	-	22	-	-
Elm Drive (left)	117	1.44	22	76	0.99	4	68	1.35	12	86	2.23	27
Elm Drive (right)	51	1.39	10	27	0.83	2	45	1.32	8	61	2.19	19

** This RFC is not reported due to the model reaching its upper limit. The reported queue length provides only an indication of the level of queuing likely to be experienced at this junction as in practice some drivers may choose to modify their route or the timing of their journey to avoid the congestion.*

11.2.72 The conclusions drawn in paragraph 10.2.75 of the SES1 and AP1 TA are replaced by:

“The assessment shows that in the AM and PM peak hours the junction operates over capacity in both the future baseline and with the AP2 revised scheme.

In scenario 2 the change in traffic due to construction of the AP2 revised scheme will increase the RFC on the Remer Street (ahead and right) approach from 0.67 in the future baseline to 0.82 in the AM peak hour, with a corresponding change in queue length from four PCU in the future baseline to 12 PCU. In the PM peak hour, the junction will continue to operate in excess of its theoretical capacity in both the future baseline and with the AP2 revised scheme with a change in queue length in scenario 1 on Elm Drive (left) from 22 PCU in the future baseline to 27 PCU with the AP2 revised scheme.”

Remer Street/Groby Road junction

11.2.73 Table 13-30 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 13-30 of the main TA is replaced by Table 13-30 below.

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Table 13-30: Remer Street/Groby Road junction 2031 future baseline and with the AP2 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	RFC	Q, PCU	Flow, PCU/hr	RFC	Q, PCU	Flow, PCU/hr	RFC	Q, PCU	Flow, PCU/hr	RFC	Q, PCU
08:00-09:00	2031 future baseline (existing layout)			AP2 revised scheme utilities scenario (existing layout)			AP2 revised scheme scenario 1 (existing layout)			AP2 revised scheme scenario 2 (existing layout)		
Remer Street (north) (ahead)	885	-	-	885	-	-	915	-	-	907	-	-
Remer Street (north) (left)	312	-	-	340	-	-	233	-	-	338	-	-
Groby Road (left and right)	612	N/A*	699	420	N/A*	465	633	N/A*	725	695	N/A*	864
Remer Street (south) (ahead and right)	1,197	2.00	613	1,394	2.02	639	1,405	1.96	620	1,423	2.25	773
17:00-18:00	2031 future baseline (existing layout)			AP2 revised scheme utilities scenario (existing layout)			AP2 revised scheme scenario 1 (existing layout)			AP2 revised scheme scenario 2 (existing layout)		
Remer Street (north) (ahead)	632	-	-	767	-	-	632	-	-	707	-	-
Remer Street (north) (left)	26	-	-	26	-	-	26	-	-	21	-	-
Groby Road (left and right)	798	2.01	383	775	2.11	375	798	2.01	383	841	2.16	451
Remer Street (south) (ahead and right)	941	0.25	0	985	0.26	0	941	0.25	0	935	0.24	0

** This RFC is not reported due to the model reaching its upper limit. The reported queue length provides only an indication of the level of queuing likely to be experienced at this junction as in practice some drivers may choose to modify their route or the timing of their journey to avoid the congestion.*

11.2.74 The conclusions drawn in paragraph 10.2.77 of the SES1 and AP1 TA are replaced by:

“The assessment shows that in the AM and PM peak hours the junction operates over capacity in both the future baseline and the AP2 revised scheme.

In scenario 2 the change in traffic due to construction of the AP2 revised scheme will increase the RFC on the Remer Street (south) (ahead and right) approach from 2.00 in the future baseline to 2.25 in the AM peak hour, with a corresponding change in queue length from 613 PCU in the future baseline to 773 PCU.

In the PM peak hour, the change in traffic due to construction of the AP2 revised scheme will increase the RFC on the Groby Road (left and right) approach from 2.01 in the future baseline to 2.16, with a corresponding change in queue length from 383 PCU in the future baseline to 451 PCU.”

Remer Street/Groby Road/Sydney Road/Elm Drive/Maw Green Road junction

11.2.75 The Sydney Road/Maw Green Road/Remer Street/Elm Drive/Groby Road network comprises the proposed elongated priority controlled roundabout junction layout.

11.2.76 Table 13-31 in the SES1 and AP1 ES TA replaced Table 13-31 in the main TA and summarised the results of the changes in performance of the junction as a result of the revised scheme. Table 13-31 below replaces Table 13-31 in the SES1 and AP1 ES TA.

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Table 13-31: Remer Street/Groby Road/Sydney Road/Elm Drive/Maw Green Road junction 2031 future baseline and with the AP2 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	RFC	Q, PCU	Flow, PCU/hr	RFC	Q, PCU	Flow, PCU/hr	RFC	Q, PCU	Flow, PCU/hr	RFC	Q, PCU
08:00-09:00	2031 future baseline (proposed layout)			AP2 revised scheme utilities scenario (proposed layout)			AP2 revised scheme scenario 1 (proposed layout)			AP2 revised scheme scenario 2 (proposed layout)		
Groby Road	612	0.77	3	420	0.52	1	633	0.83	4	695	0.86	5
Maw Green Road	385	0.95	10	446	0.51	7	394	1.09	24	407	1.15	33
Sydney Road	889	0.99	18	819	0.89	7	943	1.03	31	917	1.04	34
Elm Drive	215	0.36	1	236	0.4	1	234	0.38	1	247	0.40	1
Remer Street	1,197	1.50	289	1,225	1.54	313	1,147	1.44	248	1,245	1.61	375
17:00-18:00	2031 future baseline (proposed layout)			AP2 revised scheme utilities scenario (proposed layout)			AP2 revised scheme scenario 1 (proposed layout)			AP2 revised scheme scenario 2 (proposed layout)		
Groby Road	798	1.08	41	755	1.12	52	821	1.17	74	841	1.23	93
Maw Green Road	57	0.11	0	111	0.2	0	68	0.12	0	61	0.10	0
Sydney Road	1,051	0.98	19	1,057	0.98	19	1,065	0.98	19	1,064	0.98	18
Elm Drive	168	0.28	0	103	0.18	0	112	0.18	0	147	0.24	0
Remer Street	658	0.66	2	752	0.77	3	716	0.69	2	728	0.72	3

11.2.77 The conclusions drawn in paragraph 10.2.79 of the SES1 and AP1 ES TA are replaced by:

“The assessment shows that in the AM peak hour the junction operates close to capacity in the future baseline and over capacity with the AP2 revised scheme. In the PM peak hour, the junction operates over capacity in both the future baseline and with the AP2 revised scheme.

In scenario 2, the change in traffic due to construction of the AP2 revised scheme will increase the RFC on the Maw Green Road approach from 0.95 in the future baseline to 1.15 in the AM peak hour, with a corresponding change in queue length from 10 PCU in the future baseline to 33 PCU. In the PM peak hour, the change in traffic due to construction of the AP2 revised scheme will increase the RFC on the Groby Road approach from 1.08 in the future baseline to 1.23, with a corresponding change in queue length from 41 PCU in the future baseline to 93 PCU.”

B5076 Middlewich Street/B5076 North Street/Broad Street/Stoneley Road junction

11.2.78 Table 13-32 in the SES1 and AP1 ES TA replaced Table 10-32 in the main TA and summarised the results of the changes in performance of the junction as a result of the AP1 revised scheme. Table 13-32 below replaces Table 13-32 in the SES1 and AP1 ES TA.

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Table 13-32: B5076 Middlewich Street/B5076 North Street/Broad Street/Stoneley Road junction 2031 future baseline and with the AP2 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00-09:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
Stoneley Road	220	47%	1	204	42%	0	237	51%	1
Broad Street (north)*	-	-	-	-	-	-	-	-	-
B5076 Middlewich Street	696	41%	0	710	42%	0	691	41%	0
Greenway	32	3%	0	58	6%	0	22	2%	0
Broad Street	643	40%	0	544	34%	0	621	38%	0
B5076 North Street	742	93%	3	812	94%	3	762	94%	3
17:00-18:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
Stoneley Road	7	1%	0	12	2%	0	7	1%	0
Broad Street (north)*	-	-	-	-	-	-	-	-	-
B5076 Middlewich Street	1,105	65%	0	1,098	65%	0	1,111	65%	0
Greenway	40	4%	0	41	5%	0	40	4%	0
Broad Street	472	36%	0	515	39%	0	557	43%	0
B5076 North Street	647	65%	0	655	68%	0	664	70%	0

* Minor approach arm not represented within the strategic traffic model.

11.2.79 The conclusions drawn in paragraph 10.2.81 of the SES1 and AP1 ES TA are replaced by:

“The assessment shows that in the AM peak hour the junction operates close to capacity in both the future baseline and with the AP2 revised scheme. In the PM peak hour, the junction operates well within capacity in both the future baseline and with the AP2 revised scheme.

The change in traffic due to construction of the AP2 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths at this junction.”

B5076 Bradfield Road/B5076 North Street/Broughton Road junction

11.2.80 Table 13-33 in the SES1 and AP1 ES TA replaced Table 13-33 in the main TA and summarised the results of the changes in performance of the junction as a result of the AP1 revised scheme. Table 13-33 below replaces Table 13-33 in the SES1 and AP1 ES TA.

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Table 13-33: B5076 Bradfield Road/B5076 North Street/Broughton Road junction 2031 future baseline and with the AP2 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00-09:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
Broughton Road	156	18%	0	151	18%	0	161	19%	0
B5076 North Street	740	46%	0	702	44%	0	728	46%	0
B5076 Bradfield Road	570	34%	0	613	36%	0	628	37%	0
17:00-18:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
Broughton Road	78	9%	0	80	9%	0	82	10%	0
B5076 North Street	887	55%	0	845	53%	0	899	55%	0
B5076 Bradfield Road	634	38%	0	628	37%	0	654	39%	0

11.2.81 The conclusions drawn in paragraph 10.2.83 of the SES1 and AP1 ES TA are replaced by:

“The assessment shows that in the AM and PM peak hours the junction operates well within capacity in both the future baseline and with the AP2 revised scheme.

The change in traffic due to construction of the AP2 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths at this junction.”

B5076 Bradfield Road/Mablins Lane junction

11.2.82 Table 13-34 in the SES1 and AP1 ES TA replaced Table 13-34 in the main TA and summarised the results of the changes in performance of the junction as a result of the AP1 revised scheme. Table 13-34 below replaces Table 13-34 in the SES1 and AP1 ES TA.

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Table 13-34: B5076 Bradfield Road/Mablins Lane junction 2031 future baseline and with the AP2 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00–09:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
Mablins Lane	337	44%	0	300	31%	0	215	22%	0
B5076 Bradfield Road (east)	716	46%	0	716	47%	0	710	47%	0
B5076 Bradfield Road (west)	311	18%	0	327	19%	0	349	21%	0
17:00–18:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
Mablins Lane	243	27%	0	264	31%	0	265	30%	0
B5076 Bradfield Road (east)	670	47%	0	672	49%	0	668	47%	0
B5076 Bradfield Road (west)	470	28%	0	528	32%	0	492	30%	0

11.2.83 The conclusions drawn in paragraph 10.2.85 of the SES1 and AP1 ES TA are replaced by:

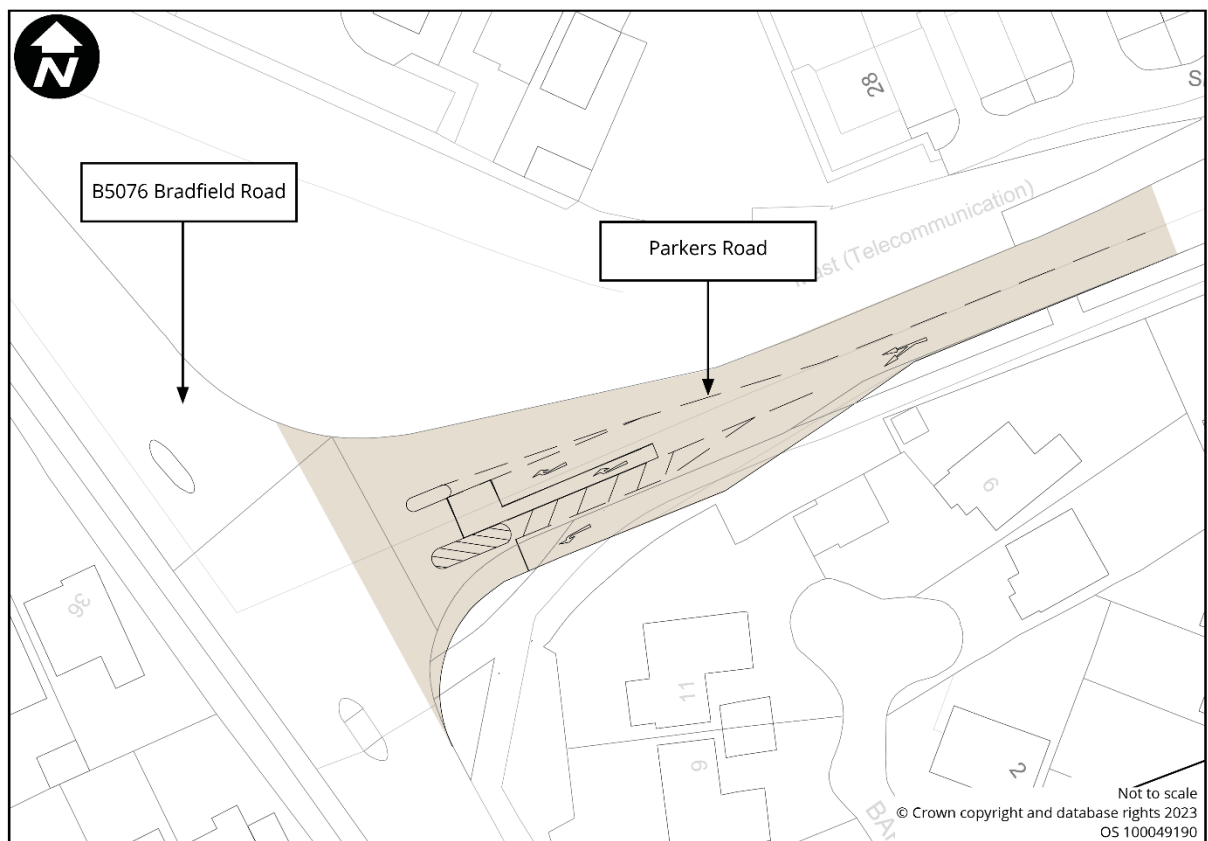
“The assessment shows that in the AM and PM peak hours the junction operates well within capacity in both the future baseline and with the AP2 revised scheme.

The change in traffic due to construction of the AP2 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths at this junction.”

B5076 Bradfield Road/Parkers Road junction

11.2.84 The B5076 Bradfield Road/Parkers Road junction will be temporarily modified as a result of the AP2 revised scheme to mitigate impacts at this location. The modifications comprise the widening of the carriageway to provide changes to the traffic signals, introducing a new turn signal for users turning left from Parkers Road to Bradfield Road. Figure 13-7 shows the junction layout introduced as part of the AP2 revised scheme.

Figure 13-7: Junction layout diagram (B5076 Bradfield Road/Parkers Road)



11.2.85 Table 13-35 summarises the results of the changes in performance of the junction as a result of the AP2 revised scheme based on the existing junction layout. Table 13-35.1 summarises the performance of the junction as a result of the AP2 revised scheme with the proposed temporary junction layout introduced.

11.2.86 The proposed layout will be constructed during the utilities scenario. During this period, temporary traffic management will be in place during construction of the proposed layout.

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- 11.2.87 Table 13-35 in the SES1 and AP1 ES TA replaced Table 13-35 in the main TA and summarised the results of the changes in performance of the junction as a result of the AP1 revised scheme. Table 13-35 and Table 13-35.1 below replace table 13-35 in the SES1 and AP1 ES TA.

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Table 13-35: B5076 Bradfield Road/Parkers Road junction 2031 future baseline and with the AP2 revised scheme (existing layout) junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00–09:00	2031 future baseline			AP2 revised scheme utilities scenario (existing layout)			AP2 revised scheme scenario 1 (existing layout)			AP2 revised scheme scenario 2 (existing layout)		
Parkers Road	427	100%	5	432	102%	5	494	99%	6	425	99%	6
B5076 Bradfield Road (south)	651	65%	6	656	65%	6	572	61%	5	650	65%	6
B5076 Bradfield Road (north)	715	93%	10	724	93%	10	816	91%	11	818	79%	10
17:00–18:00	2031 future baseline			AP2 revised scheme utilities scenario (existing layout)			AP2 revised scheme scenario 1 (existing layout)			AP2 revised scheme scenario 2 (existing layout)		
Parkers Road	274	47%	5	262	45%	5	282	47%	5	293	49%	5
B5076 Bradfield Road (south)	594	50%	5	579	48%	5	560	47%	5	568	47%	5
B5076 Bradfield Road (north)	887	72%	13	874	71%	13	977	80%	14	904	73%	13

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Table 13-35.1: B5076 Bradfield Road/Parkers Road junction 2031 future baseline and with the AP2 revised scheme (proposed layout) junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00–09:00	2031 future baseline			AP2 revised scheme utilities scenario (including temporary traffic management)			AP2 revised scheme scenario 1 (proposed layout)			AP2 revised scheme scenario 2 (proposed layout)		
Parkers Road	427	100%	5	544	96%	6	525	96%	9	564	93%	9
B5076 Bradfield Road (south)	651	65%	6	540	65%	6	548	58%	7	528	60%	7
B5076 Bradfield Road (north)	715	93%	10	659	99%	9	883	74%	14	805	75%	13
17:00–18:00	2031 future baseline			AP2 revised scheme utilities scenario (including temporary traffic management)			AP2 revised scheme scenario 1 (proposed layout)			AP2 revised scheme scenario 2 (proposed layout)		
Parkers Road	274	47%	5	231	64%	4	270	54%	5	280	56%	5
B5076 Bradfield Road (south)	594	50%	5	612	51%	6	562	50%	5	564	50%	6
B5076 Bradfield Road (north)	887	72%	13	897	75%	13	1,002	69%	13	926	63%	12

11.2.88 The conclusions drawn in paragraph 10.2.87 of the SES1 and AP1 ES TA are replaced by:

“The assessment shows that, based on the existing layout, in the AM peak hour the junction operates over capacity in both the future baseline and with the AP2 revised scheme. In the PM peak hour, the junction operates well within capacity in the future baseline and within capacity with the AP2 revised scheme.

Based on the proposed layout, the assessment shows that in the AM peak hour the junction operates over capacity in the future baseline and close to capacity with the AP2 revised scheme. In the PM peak hour, the junction operates well within capacity in the future baseline and within capacity with the AP2 revised scheme.

In scenario 2, the change in traffic due to construction of the AP2 revised scheme will decrease the VoC on the Parkers Road approach from 100% in the future baseline to 93% in the AM peak hour, with a corresponding change in queue length from five PCU in the future baseline to nine PCU.

In the PM peak hour, the change in traffic due to construction of the AP2 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths.”

B5076 Flowers Lane/B5076 Bradfield Road/Minshull New Road/Smithy Lane junction

11.2.89 Table 13-36 in the SES1 and AP1 ES TA replaced Table 13-36 in the main TA and summarised the results of the changes in performance of the junction as a result of the AP1 revised scheme. Table 13-36 below replaces Table 13-36 in the SES1 and AP1 ES TA.

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Table 13-36: B5076 Flowers Lane/B5076 Bradfield Road/Minshull New Road/Smithy Lane junction 2031 future baseline and with the AP2 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00–09:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
B5076 Flowers Lane	380	44%	0	424	53%	0	460	53%	0
B5076 Bradfield Road	1,041	99%	1	1,038	98%	1	1,060	100%	3
Minshull New Road	42	10%	0	42	10%	0	42	10%	0
Smithy Lane	375	47%	0	493	64%	1	384	50%	0
17:00–18:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
B5076 Flowers Lane	257	35%	0	283	42%	0	280	39%	0
B5076 Bradfield Road	752	69%	0	720	66%	0	738	68%	0
Minshull New Road	120	20%	0	120	19%	0	120	20%	0
Smithy Lane	594	74%	1	677	83%	1	603	74%	1

11.2.90 The conclusions drawn in paragraph 10.2.89 of the SES1 and AP1 ES TA are replaced by:

“The assessment shows that in the AM peak hour the junction operates close to capacity in the future baseline and over capacity with the AP2 revised scheme. In the PM peak hour, the junction operates well within capacity in the future baseline and within capacity with the AP2 revised scheme.

The change in traffic due to construction of the AP2 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths at this junction.”

A534/Crewe Road junction

11.2.91 Table 13-37 in the SES1 and the AP1 ES TA replaced Table 13-37 in the main TA and summarised the results of the changes in performance of the junction as a result of the AP1 revised scheme. Table 13-37 below replaces Table 13-37 in the SES1 and AP1 ES TA.

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Table 13-37: A534/Crewe Road junction 2031 future baseline and with the AP2 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00–09:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
Crewe Road (north)	470	39%	0	486	40%	0	503	42%	0
A534 Wheelock Bypass	790	66%	0	925	77%	1	932	78%	1
Crewe Road (south)	541	45%	0	597	53%	1	607	55%	1
A534 Haslington Bypass	962	80%	1	986	82%	1	987	82%	1
17:00–18:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
Crewe Road (north)	471	41%	0	504	46%	0	500	46%	0
A534 Wheelock Bypass	910	76%	1	916	76%	1	920	77%	1
Crewe Road (south)	603	50%	0	624	52%	1	625	52%	1
A534 Haslington Bypass	1,110	93%	2	1,158	97%	4	1,167	97%	4

11.2.92 The conclusions drawn in paragraph 10.2.91 of the SES1 and AP1 ES TA are replaced by:

“The assessment shows that in the AM peak hour the junction operates within capacity in both the future baseline and with the AP2 revised scheme. In the PM peak hour, the junction operates close to capacity in both the future baseline and with the AP2 revised scheme.

The change in traffic due to construction of the AP2 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths in the AM peak hour.

In scenarios 1 and 2, the change in traffic due to construction of the AP2 revised scheme in the PM peak hour will increase the VoC on the A534 Haslington Bypass approach from 93% in the future baseline to 97%, with a corresponding change in queue length from two PCU in the future baseline to four PCU.”

Warmingham Road/Waldrons Lane junction

11.2.93 Table 13-38 in the SES1 and the AP1 ES TA replaced Table 13-38 in the main TA and summarised the results of the changes in performance of the junction as a result of the AP1 revised scheme. Table 13-38 below replaces Table 13-38 in the SES1 and AP1 ES TA.

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Table 13-38: Warmingham Road/Waldrons Lane junction 2031 future baseline and with the AP2 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00–09:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
Warmingham Road (north)	435	27%	0	501	31%	0	514	31%	0
Waldrons Lane	29	4%	0	106	14%	0	114	14%	0
Warmingham Road (south)	498	30%	0	599	42%	0	504	34%	0
17:00–18:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
Warmingham Road (north)	306	19%	0	280	17%	0	280	17%	0
Waldrons Lane	77	9%	0	353	60%	0	168	23%	0
Warmingham Road (south)	335	20%	0	519	31%	0	567	34%	0

11.2.94 The conclusions drawn in paragraph 10.2.93 of the SES1 and AP1 ES TA are replaced by:

“The assessment shows that in the AM and PM peak hours the junction operates well within capacity in both the future baseline and with the AP2 revised scheme.

The change in traffic due to construction of the AP2 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths at this junction.”

Warmingham Road/Groby Road junction

11.2.95 The Warmingham Road/Groby Road junction will be modified as part of the AP1 revised scheme to mitigate construction impacts in this location. Details of the changes are presented in Section 10.2 of the SES1 and AP1 ES TA.

11.2.96 Table 13-39 and Table 13-39.1 of the SES1 and AP1 ES TA replaced Table 13-39 in the main TA and summarised the results of the changes in performance of the junction as a result of the AP1 revised scheme. Table 13-39 and Table 13-39.1 below replace Table 13-39 and Table 13-39.1 in the SES1 and AP1 ES TA.

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Table 13-39: Warmingham Road/Groby Road junction 2031 future baseline and with the AP2 revised scheme (existing layout) junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00-09:00	2031 future baseline			AP2 revised scheme utilities scenario (existing layout)			AP2 revised scheme scenario 1 (existing layout)			AP2 revised scheme scenario 2 (existing layout)		
Warmingham Road (north)	879	54%	0	899	56%	0	987	61%	0	1,016	63%	0
Groby Road	253	21%	0	266	23%	0	322	29%	1	333	30%	1
Warmingham Road (south) (ahead and right)	488	35%	0	505	37%	0	526	42%	0	523	41%	0
17:00-18:00	2031 future baseline			AP2 revised scheme utilities scenario (existing layout)			AP2 revised scheme scenario 1 (existing layout)			AP2 revised scheme scenario 2 (existing layout)		
Warmingham Road (north)	380	23%	0	406	25%	0	380	23%	0	383	23%	0
Groby Road	558	69%	2	551	80%	3	525	83%	4	522	88%	6
Warmingham Road (south) (ahead and right)	360	22%	0	385	24%	0	551	34%	0	603	37%	0

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Table 13-39.1: Warmingham Road/Groby Road junction 2031 future baseline and with the AP2 revised scheme (proposed layout) junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00–09:00	2031 future baseline			AP2 revised scheme utilities scenario (including temporary traffic management)			AP2 revised scheme scenario 1 (proposed layout)			AP2 revised scheme scenario 2 (proposed layout)		
Warmingham Road (north)	879	54%	0	510	96%	10	985	60%	6	1,010	65%	9
Groby Road	253	21%	0	174	72%	4	219	48%	4	223	35%	3
Warmingham Road (south) (ahead and right)	488	35%	0	236	77%	6	379	38%	4	379	49%	5
17:00–18:00	2031 future baseline			AP2 revised scheme utilities scenario (including temporary traffic management)			AP2 revised scheme scenario 1 (proposed layout)			AP2 revised scheme scenario 2 (proposed layout)		
Warmingham Road (north)	380	23%	0	230	73%	5	374	23%	2	373	23%	3
Groby Road	558	69%	2	441	91%	9	219	93%	6	437	98%	10
Warmingham Road (south) (ahead and right)	360	22%	0	180	65%	4	768	58%	6	590	54%	8

11.2.97 The conclusions drawn in paragraph 10.2.97 of the SES1 and AP1 ES TA are replaced by:

“The assessment shows that, based on the existing layout, in the AM peak hour the junction operates well within capacity in both the future baseline and with the AP2 revised scheme. In the PM peak hour, the junction operates well within capacity in the future baseline and close to capacity with the AP2 revised scheme.

With the proposed layout the assessment shows that in the AM peak hour the junction operates well within capacity in the future baseline and close to capacity with the AP2 revised scheme. In the PM peak hour, the junction operates well within capacity in the future baseline and close to capacity with the AP2 revised scheme.

In the utilities scenario, the change in traffic due to construction of the AP2 revised scheme will increase the maximum VoC on the Warmingham Road (north) approach from 54% in the future baseline to 96% in the AM peak hour, with a corresponding change in queue length from no queue in the future baseline to 10 PCU.

In scenario 2, the change in traffic due to construction of the AP2 revised scheme in the PM peak hour will increase the maximum VoC on the Groby Road approach from 69% in the future baseline to 98%, with a corresponding change in queue length from two PCU in the future baseline to 10 PCU.”

A530 Middlewich Road/B5076 Flowers Lane/Eardswick Lane

11.2.98 Table 13-40 in the SES1 and the AP1 ES TA replaced Table 13-40 in the main TA and summarised the results of the changes in performance of the A530 Middlewich Road/B5076 Flowers Lane/Eardswick Lane junction as a result of the AP1 revised scheme.

11.2.99 In the future baseline the A530 Middlewich Road/B5076 Flowers Lane/Eardswick Lane priority controlled (give way) staggered crossroads junction will be modified to create two new junctions:

- A530 Middlewich Road/Eardswick Lane signal controlled T-junction; and
- A530 Middlewich Road/B5076 Flowers Lane priority (give-way) controlled roundabout junction.

11.2.100 Table 13-40 and Table 13-40.1 below replace Table 13-40 in the SES1 and AP1 ES TA.

11.2.101 The conclusions drawn in paragraph 10.2.99 in the SES1 and AP1 ES TA are replaced by paragraphs 11.2.103 to 11.2.105 and paragraphs 11.2.107 and 11.2.108 below.

A530 Middlewich Road/Eardswick Lane

11.2.102 Table 13-40 below summarises the results of the changes in performance of the junction as a result of the AP2 revised scheme.

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Table 13-40: A530 Middlewich Road/Eardswick Lane junction 2031 future baseline and with the AP2 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00–09:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
A530 Middlewich Road (north)	648	48%	5	714	53%	5	710	53%	5
A530 Middlewich Road (south)	992	85%	7	1,147	99%	8	1,131	97%	8
Eardswick Lane	310	103%	6	313	104%	6	316	104%	6
17:00–18:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
A530 Middlewich Road (north)	475	32%	3	595	41%	3	601	41%	3
A530 Middlewich Road (south)	1,254	98%	7	1,315	103%	7	1,314	103%	7
Eardswick Lane	165	97%	4	168	99%	4	168	99%	4

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- 11.2.103 The assessment shows that in the AM peak hour the junction operates over capacity in both the future baseline and with the AP2 revised scheme. In the PM peak hour, the junction operates close to capacity in the future baseline and over capacity with the AP2 revised scheme.
- 11.2.104 In scenario 1, the change in traffic due to construction of the AP2 revised scheme will increase the VoC on the A530 Middlewich Road (south) approach from 85% in the future baseline to 99% in the AM peak hour, with a corresponding change in queue length from seven PCU in the future baseline to eight PCU.
- 11.2.105 In scenario 1 and 2, the change in traffic due to construction of the AP2 revised scheme in the PM peak hour will increase the VoC on the A530 Middlewich Road (south) approach from 98% in the future baseline to 103%, with no corresponding change in queue length.

A530 Middlewich Road/B5076 Flowers Lane junction

- 11.2.106 Table 13-40.1 below summarises the results of the changes in performance of the junction as a result of the AP2 revised scheme.

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Table 13-40.1: A53 Middlewich Road/B5076 Flowers Lane junction 2031 future baseline and with the AP2 revised scheme junction capacity assessment results

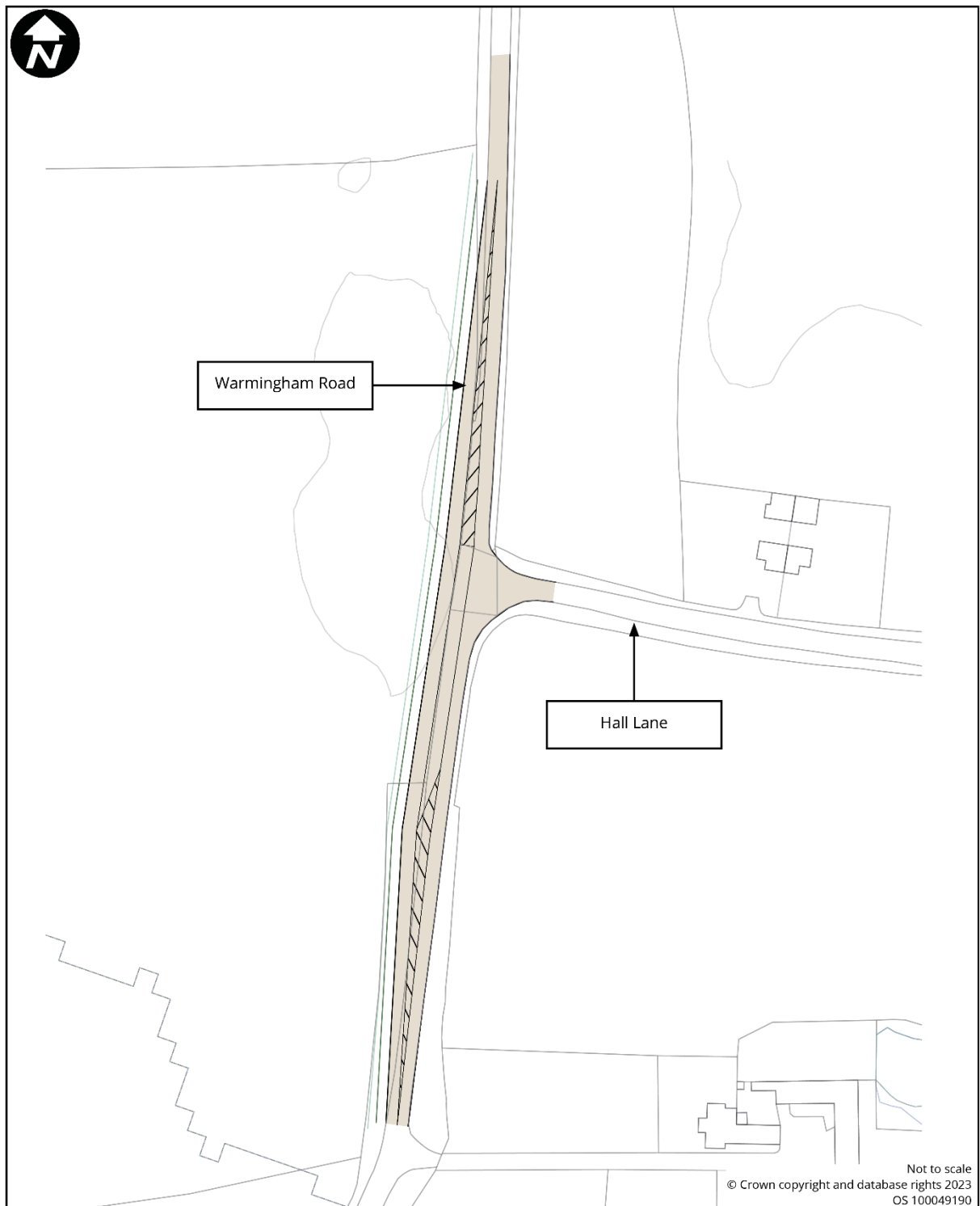
Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00–09:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
A530 Middlewich Road (north)	950	58%	0	1,016	62%	0	1,012	62%	0
B5076 Flowers Lane	478	65%	1	539	76%	1	539	74%	1
A530 Middlewich Road (south)	592	43%	0	725	55%	0	708	53%	0
17:00–18:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
A530 Middlewich Road (north)	640	39%	0	763	47%	0	769	47%	0
B5076 Flowers Lane	472	56%	0	461	59%	0	465	60%	0
A530 Middlewich Road (south)	817	61%	0	927	68%	0	924	68%	0

- 11.2.107 The assessment shows that in the AM peak hour the junction operates well within capacity in the future baseline and within capacity with the AP2 revised scheme. In the PM peak hour, the junction operates well within capacity in both the future baseline and with the AP2 revised scheme.
- 11.2.108 The change in traffic due to construction of the AP2 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths at this junction.

Warmingham Road/Hall Lane junction

- 11.2.109 The Warmingham Road/Hall Lane junction will be temporarily modified as a result of the AP2 revised scheme to mitigate impacts at this location. The modifications comprise the widening of the carriageway to enable the formation of a right-turn lane on Warmingham Road (south) approach. As this scheme is for the construction of HS2 only, the road markings and kerb layouts are proposed to revert to their existing layouts afterwards. Hedgerow locations would not be reverted. Figure 13-8 shows the junction layout introduced as part of the AP2 revised scheme.

Figure 13-8: Junction layout diagram (Warmingham Road/Hall Lane)



11.2.110 Table 13-41 summarises the results of the changes in performance of the junction as a result of the AP2 revised scheme based on the existing junction layout. Table 13-41.1 summarises the performance of the junction as a result of the AP2 revised scheme with the proposed temporary junction layout introduced.

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- 11.2.111 The proposed layout will be constructed during the utilities scenario. During this period, temporary traffic management will be in place during construction of the proposed layout.
- 11.2.112 Table 13-41 in the SES1 and AP1 ES TA replaced Table 13-41 in the main TA and summarised the results of the changes in performance of the junction as a result of the AP1 revised scheme. Table 13-41 and Table 13-41.1 below replace Table 13-41 in the SES1 and AP1 ES TA.

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Table 13-41: Warmingham Road/Hall Lane junction 2031 future baseline and with the AP2 revised scheme (existing layout) junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00–09:00	2031 future baseline			AP2 revised scheme utilities scenario (existing layout)			AP2 revised scheme scenario 1 (existing layout)			AP2 revised scheme scenario 2 (existing layout)		
Warmingham Road (north)	512	31%	0	534	33%	0	525	32%	0	548	33%	0
Hall Lane	619	45%	1	605	45%	1	739	55%	1	731	55%	1
Warmingham Road (south)	577	45%	0	603	47%	0	575	45%	0	592	47%	0
17:00–18:00	2031 future baseline			AP2 revised scheme utilities scenario (existing layout)			AP2 revised scheme scenario 1 (existing layout)			AP2 revised scheme scenario 2 (existing layout)		
Warmingham Road (north)	242	15%	0	247	16%	0	263	17%	0	260	16%	0
Hall Lane	462	31%	0	442	30%	0	478	35%	0	473	35%	0
Warmingham Road (south)	875	57%	0	931	61%	0	1,026	67%	0	1,062	69%	0

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Table 13-41.1: Warmingham Road/Hall Lane junction 2031 future baseline and with the AP2 revised scheme (proposed layout) junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00–09:00	2031 future baseline			AP2 revised scheme utilities scenario (including temporary traffic management)			AP2 revised scheme scenario 1 (proposed layout)			AP2 revised scheme scenario 2 (proposed layout)		
Warmingham Road (north)	512	31%	0	260	91%	6	524	32%	0	550	34%	0
Hall Lane	619	45%	1	332	93%	7	757	56%	1	744	56%	1
Warmingham Road (south)	577	45%	0	402	96%	8	552	34%	0	551	34%	0
17:00–18:00	2031 future baseline			AP2 revised scheme utilities scenario (including temporary traffic management)			AP2 revised scheme scenario 1 (proposed layout)			AP2 revised scheme scenario 2 (proposed layout)		
Warmingham Road (north)	242	15%	0	125	82%	3	261	16%	0	255	16%	0
Hall Lane	462	31%	0	257	91%	6	508	38%	0	496	37%	0
Warmingham Road (south)	875	57%	0	643	102%	11	976	60%	0	1,009	62%	0

11.2.113 The conclusions drawn in paragraph 10.2.101 of the SES1 and AP1 ES TA are replaced by:

“The assessment shows that, based on the existing layout, in the AM and PM peak hours the junction operates well within capacity in both the future baseline and with the AP2 revised scheme.

With the proposed layout the assessment shows that in the AM peak hour the junction operates well within capacity in the future baseline and close to capacity with the AP2 revised scheme. In the PM peak hour, the junction operates well within capacity in the future baseline and over capacity with the AP2 revised scheme.

During construction of the proposed layout in the utilities scenario when temporary traffic management will be in place, the change in traffic due to construction of the AP2 revised scheme will increase the VoC on the Warmingham Road (south) approach from 45% in the future baseline to 96% in the AM peak hour, with a corresponding change in queue length from no queue in the future baseline to eight PCU. In the PM peak hour, the change in traffic due to construction of the AP2 revised scheme will increase the VoC on the Warmingham Road (south) approach from 57% in the future baseline to 102%, with a corresponding change in queue length from no queue in the future baseline to 11 PCU.

Following construction of the proposed layout, from scenario 1 onwards, the assessment shows that in the AM and PM peak hours the junction operates well within capacity in both the future baseline and with the AP2 revised scheme. With the proposed layout in place, the change in traffic due to construction of the AP2 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths at this junction.”

A534 Wheelock Bypass/A533 Old Mill Road junction

11.2.114 Table 13-42 in the SES1 and AP1 ES TA replaced Table 13-42 in the main TA and summarised the results of the changes in performance of the junction as a result of the AP1 revised scheme. Table 13-42 below replaces Table 13-42 in the SES1 and AP1 ES TA.

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Table 13-42: A534 Wheelock Bypass/A533 Old Mill Road junction 2031 future baseline and with the AP2 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00-09:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
Brookhouse Road	69	8%	0	69	8%	0	69	8%	0
A533 Old Mill Road (east)	798	81%	1	906	93%	2	908	93%	2
A534 Wheelock Bypass	1,090	91%	1	1,111	93%	1	1,109	92%	1
A533 Old Mill Road (west)	683	57%	1	689	57%	1	689	57%	1
17:00-18:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
Brookhouse Road	198	26%	0	198	28%	0	198	28%	0
A533 Old Mill Road (east)	779	94%	3	806	97%	4	795	96%	3
A534 Wheelock Bypass	1,004	84%	1	1,058	88%	1	1,064	89%	1
A533 Old Mill Road (west)	1,014	85%	2	1,018	85%	2	1,013	84%	2

11.2.115 The conclusions drawn in paragraph 10.2.103 of the SES1 and AP1 ES TA are replaced by:

“The assessment shows that in the AM and PM peak hours the junction operates close to capacity in both the future baseline and with the AP2 revised scheme.

In scenarios 1 and 2, the change in traffic due to construction of the AP2 revised scheme will increase the VoC on the Old Mill Road (east) approach from 81% in the future baseline to 93% in the AM peak hour, with a corresponding change in queue length from one PCU in the future baseline to two PCU.

In scenario 1, the change in traffic due to construction of the AP2 revised scheme in the PM peak hour will increase the VoC on the A533 Old Mill Road (east) approach from 94% in the future baseline to 97%, with a corresponding change in queue length from three PCU in the future baseline to four PCU.”

Brookhouse Lane/Eardswick Lane/Cross Lane junction

11.2.116 Table 13-43 in the SES1 and AP1 ES TA replaced Table 13-43 in the main TA and summarised the results of the changes in performance of the junction as a result of the AP1 revised scheme. Table 13-43 below replaces Table 13-43 in the SES1 and AP1 ES TA.

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Table 13-43: Brookhouse Lane/Eardswick Lane/Cross Lane junction 2031 future baseline and with the AP2 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00-09:00	2031 future baseline			AP2 revised scheme utilities scenario			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
Brookhouse Lane	409	78%	1	379	74%	1	407	79%	1	396	77%	1
Eardswick Lane	492	30%	0	514	31%	0	517	32%	0	506	31%	0
Cross Lane	983	62%	0	912	57%	0	1,149	72%	0	1,139	72%	0
17:00-18:00	2031 future baseline			AP2 revised scheme utilities scenario			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
Brookhouse Lane	263	45%	0	226	41%	0	341	59%	0	323	56%	0
Eardswick Lane	486	30%	0	547	33%	0	476	29%	0	477	29%	0
Cross Lane	570	36%	0	429	27%	0	474	30%	0	520	33%	0

11.2.117 The conclusions drawn in paragraph 10.2.105 of the SES1 and AP1 ES TA are replaced by:

“The assessment shows that in the AM peak hour the junction operates within capacity in both the future baseline and with the AP2 revised scheme. In the PM peak hour, the junction operates well within capacity in both the future baseline and with the AP2 revised scheme.

The change in traffic due to construction of the AP2 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths at this junction.”

A533 London Road/B5079 Station Road junction

11.2.118 Table 13-44 in the SES1 and AP1 ES TA replaced Table 13-44 in the main TA and summarised the results of the changes in performance of the junction as a result of the AP1 revised scheme. Table 13-44 below replaces Table 13-44 in the SES1 and AP1 ES TA.

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Table 13-44: A533 London Road/B5079 Station Road junction 2031 future baseline and with the AP2 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00–09:00	2031 future baseline			AP2 revised scheme utilities scenario			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
A533 London Road (north)	763	67%	9	976	86%	12	806	71%	10	823	72%	10
A533 London Road (south)	471	74%	9	575	91%	11	522	82%	10	503	79%	9
B5079 Station Road	314	72%	7	395	91%	8	322	74%	7	326	75%	7
17:00–18:00	2031 future baseline			AP2 revised scheme utilities scenario			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
A533 London Road (north)	871	77%	11	951	84%	12	938	83%	11	926	82%	11
A533 London Road (south)	495	78%	9	575	90%	11	523	82%	10	526	83%	10
B5079 Station Road	355	82%	8	394	91%	8	368	85%	8	367	84%	8

11.2.119 The conclusions drawn in paragraph 10.2.107 of the SES1 and AP1 ES TA are replaced by:

“The assessment shows that in the AM peak hour the junction operates well within capacity in the future baseline and close to capacity with the AP2 revised scheme. In the PM peak hour, the junction operates within capacity in the future baseline and close to capacity with the AP2 revised scheme.

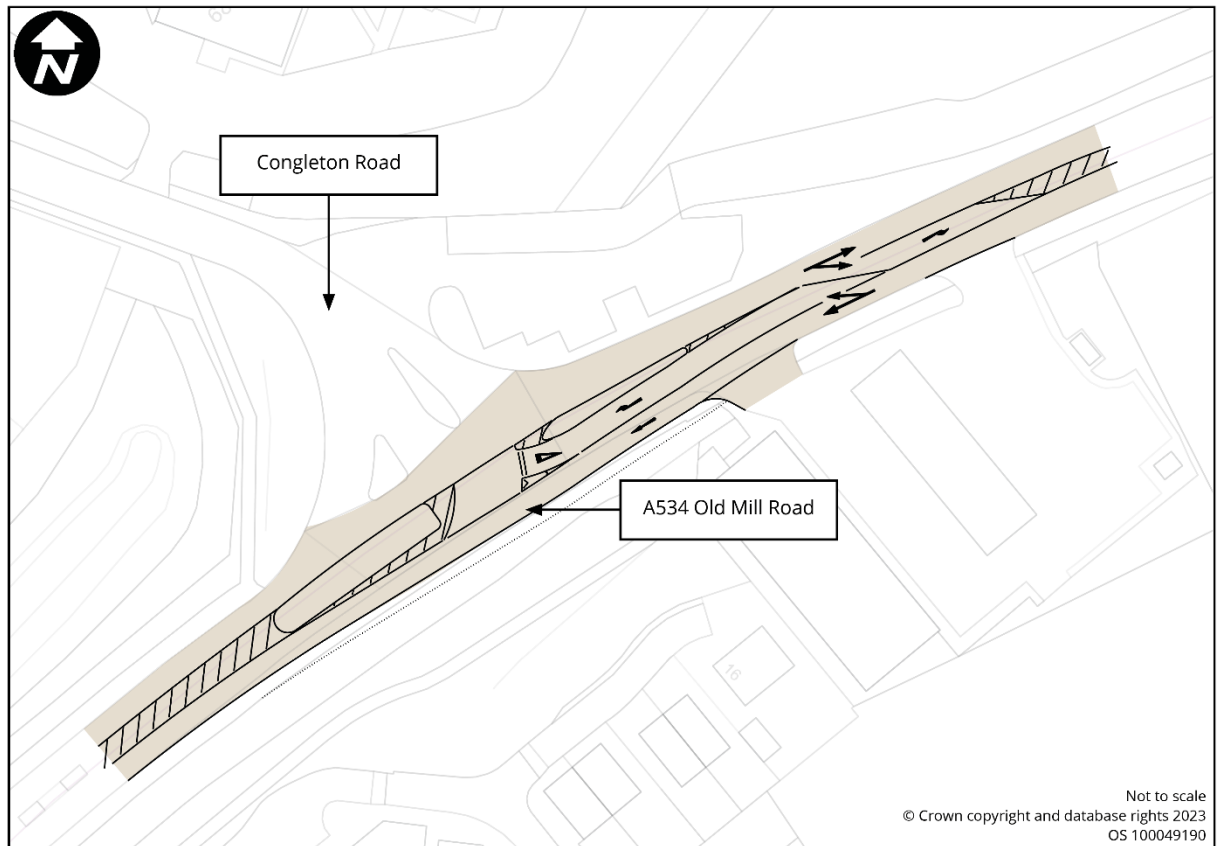
In the utilities scenario, the change in traffic due to construction of the AP2 revised scheme in the AM peak hour will increase the VoC on the B5079 Station Road approach from 72% in the future baseline to 91%, with a corresponding change in queue length from seven PCU in the future baseline to eight PCU.

In the utilities scenario, the change in traffic due to the construction of the AP2 revised scheme in the PM peak hour will increase the VoC on the A533 London Road (south) approach from 78% in the future baseline to 90%, with a corresponding change in queue length from nine PCU in the future baseline to 11 PCU.”

A534 Congleton Road/A534 Old Mill Road/Congleton Road junction

11.2.120 The A534 Congleton Road/A534 Old Mill Road/Congleton Road junction will be temporarily modified as a result of the AP2 revised scheme to mitigate impacts at this location. The modifications comprise the widening of the carriageway to enable modification of the right turn lane on the A534 Congleton Road approach. Figure 13-9 shows the junction layout introduced as part of the AP2 revised scheme.

Figure 13-9: Junction layout diagram (A534 Congleton Road/A534 Old Mill Road/Congleton Road)



- 11.2.121 Table 13-45 summarises the results of the changes in performance of the junction as a result of the AP2 revised scheme based on the existing junction layout.
- 11.2.122 Table 13-45.1 summarises the performance of the junction as a result of the AP2 revised scheme with the proposed temporary junction layout introduced.
- 11.2.123 The proposed layout will be constructed during the utilities scenario. During this period, temporary traffic management will be in place, comprising temporary signalisation to enable shuttle working during construction of the proposed layout.
- 11.2.124 Table 13-45 in the SES1 and AP1 ES TA replaced Table 13-45 in the main TA and summarised the results of the changes in performance of the junction as a result of the AP1 revised scheme. Table 13-45 and Table 13-45.1 below replace Table 13-45 in the SES1 and AP1 ES TA.

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Table 13-45: A534 Congleton Road/A534 Old Mill Road/Congleton Road junction 2031 future baseline and with the AP2 revised scheme (existing layout) junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00–09:00	2031 future baseline			AP2 revised scheme utilities scenario (existing layout)			AP2 revised scheme scenario 1 (existing layout)			AP2 revised scheme scenario 2 (existing layout)		
A534 Congleton Road	936	55%	0	1,064	63%	0	1,082	64%	0	1,073	63%	0
A534 Old Mill Road	958	56%	0	866	51%	0	845	50%	0	841	50%	0
A534 Old Mill Road (left turn slip)	110	11%	0	-	-	-	110	12%	0	110	11%	0
Congleton Road	728	96%	8	719	100%	9	720	97%	9	724	97%	9
17:00–18:00	2031 future baseline			AP2 revised scheme utilities scenario (existing layout)			AP2 revised scheme scenario 1 (existing layout)			AP2 revised scheme scenario 2 (existing layout)		
A534 Congleton Road	1,061	62%	0	1,086	64%	0	1,074	63%	0	1,074	63%	0
A534 Old Mill Road	733	43%	0	720	42%	0	752	44%	0	762	45%	0
A534 Old Mill Road (left turn slip)	48	5%	0	-	-	-	48	5%	0	48	5%	0
Congleton Road	620	70%	1	627	74%	2	655	83%	3	653	83%	3

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Table 13-45.1: A534 Congleton Road/A534 Old Mill Road/Congleton Road junction 2031 future baseline and with the AP2 revised scheme (proposed layout) junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00-09:00	2031 future baseline			AP2 revised scheme utilities scenario (including temporary traffic management)			AP2 revised scheme scenario 1 (proposed layout)			AP2 revised scheme scenario 2 (proposed layout)		
A534 Congleton Road	936	55%	0	349	98%	8	1,075	63%	0	1,071	63%	0
A534 Old Mill Road	958	56%	0	388	104%	8	843	50%	0	844	50%	0
A534 Old Mill Road (left turn slip)	110	11%	0	-	-	-	110	12%	0	110	11%	0
Congleton Road	728	96%	8	345	102%	7	726	97%	9	724	97%	9
17:00-18:00	2031 future baseline			AP2 revised scheme utilities scenario (including temporary traffic management)			AP2 revised scheme scenario 1 (proposed layout)			AP2 revised scheme scenario 2 (proposed layout)		
A534 Congleton Road	1,061	62%	0	366	102%	8	1,074	63%	0	1,075	63%	0
A534 Old Mill Road	733	43%	0	380	102%	8	762	45%	0	761	45%	0
A534 Old Mill Road (left turn slip)	48	5%	0	-	-	-	48	5%	0	48	5%	0
Congleton Road	620	70%	1	340	100%	8	656	80%	3	656	80%	3

11.2.125 The conclusions drawn in paragraph 10.2.109 of the SES1 and AP1 ES TA are replaced by:

“The assessment shows that, based on the existing layout, in the AM peak hour the junction operates close to capacity in the future baseline and over capacity with the AP2 revised scheme. In the PM peak hour, the junction operates well within capacity in the future baseline and within capacity with the AP2 revised scheme.

With the proposed layout, the assessment shows that in the AM peak hour the junction operates close to capacity in the future baseline and over capacity with the AP2 revised scheme. In the PM peak hour, the junction operates well within capacity in the future baseline and over capacity in the AP2 revised scheme.

During construction of the proposed layout in the utilities scenario when temporary traffic management will be in place, the change in traffic due to construction of the AP2 revised scheme will increase the VoC on the A534 Old Mill Road approach from 56% in the future baseline to 104% in the AM peak hour, with a corresponding change in queue length from no queue in the future baseline to eight PCU. In the PM peak hour, the change in traffic due to construction of the AP2 revised scheme will increase the VoC on the A534 Old Mill Road approach from 43% in the future baseline to 102%, with a corresponding change in queue length from no queue in the future baseline to eight PCU.

Following construction of the proposed layout, from scenario 1 onwards, the assessment shows that in the AM peak hour the junction operates close to capacity in both the future baseline and with the AP2 revised scheme. In the PM peak hour, the junction operates well within capacity in the future baseline and within capacity with the AP2 revised scheme. With the proposed layout in place, the change in traffic due to construction of the AP2 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths at this junction.”

A533 London Road/Moss Lane junction

11.2.126 Table 13-46 in the SES1 and AP1 ES TA replaced Table 13-46 in the main TA and summarised the results of the changes in performance of the junction as a result of the AP1 revised scheme. Table 13-46 below replaces Table 13-46 in the SES1 and AP1 ES TA.

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Table 13-46: A533 London Road/Moss Lane junction 2031 future baseline and with the AP2 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00–09:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
A533 London Road (north)	709	43%	0	752	46%	0	769	47%	0
A533 London Road (south)	791	47%	0	849	51%	0	834	50%	0
Moss Lane	133	34%	0	133	37%	0	136	37%	0
17:00–18:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
A533 London Road (north)	829	51%	0	898	56%	0	886	55%	0
A533 London Road (south)	861	51%	0	902	54%	0	904	54%	0
Moss Lane	201	53%	1	202	59%	1	202	58%	1

11.2.127 The conclusions drawn in paragraph 10.2.111 of the SES1 and AP1 ES TA are replaced by:

“The assessment shows that in the AM and PM peak hours the junction operates well within capacity in both the future baseline and with the AP2 revised scheme.

The change in traffic due to construction of the AP2 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths at this junction.”

Forge Mill Lane/Dragons Lane/Tetton Lane/White Hall Lane junction

11.2.128 Table 13-47 in the SES1 and AP1 ES TA replaced Table 13-47 in the main TA and summarised the results of the changes in performance of the junction as a result of the AP1 revised scheme. Table 13-47 below replaces Table 13-47 in the SES1 and AP1 ES TA.

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Table 13-47: Forge Mill Lane/Dragons Lane/Tetton Lane/White Hall Lane junction 2031 future baseline and with the AP2 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00–09:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
Tetton Lane*	-	-	-	-	-	-	-	-	-
Dragons Lane	139	9%	0	201	12%	0	180	11%	0
White Hall Lane	419	39%	0	446	43%	0	431	41%	0
Forge Mill Lane	642	43%	0	640	45%	0	669	46%	0
17:00–18:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
Tetton Lane*	-	-	-	-	-	-	-	-	-
Dragons Lane	137	8%	0	112	7%	0	114	7%	0
White Hall Lane	667	62%	0	792	72%	0	816	74%	0
Forge Mill Lane	347	23%	0	405	26%	0	394	26%	0

* Minor approach arm not represented within the strategic traffic model.

11.2.129 The conclusions drawn in paragraph 10.2.113 of the SES1 and AP1 ES TA are replaced by:

“The assessment shows that in the AM and PM peak hours the junction operates well within capacity in both the future baseline and with the AP2 revised scheme.

The change in traffic due to construction of the AP2 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths at this junction.”

A534 Nantwich Road/A5019 Mill Street/B5071 South Street junction

11.2.130 Table 13-48 below summarises the results of the changes in performance of the junction as a result of the AP2 revised scheme.

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Table 13-48: A534 Nantwich Road/A5019 Mill Street/B5071 South Street junction 2031 future baseline and with the AP2 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00–09:00	2031 future baseline			AP2 revised scheme utilities scenario			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
A5019 Mill Street	506	98%	12	499	95%	12	451	102%	11	484	97%	12
A534 Nantwich Road (east)	463	54%	8	455	55%	8	469	55%	8	469	55%	8
B5071 South Street	609	96%	14	619	96%	14	666	96%	15	633	96%	14
A534 Nantwich Road (west)	447	94%	10	444	94%	10	450	95%	10	452	96%	10
17:00–18:00	2031 future baseline			AP2 revised scheme utilities scenario			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
A5019 Mill Street	413	103%	10	334	103%	8	331	103%	8	332	103%	8
A534 Nantwich Road (east)	601	60%	10	584	55%	9	563	53%	9	555	52%	8
B5071 South Street	296	81%	7	289	80%	7	294	85%	7	296	81%	7
A534 Nantwich Road (west)	351	75%	8	386	72%	8	407	76%	9	397	74%	9

11.2.131 The assessment shows that in the AM peak hour the junction operates close to capacity in the future baseline and over capacity with the AP2 revised scheme. In the PM peak hour, the junction operates over capacity in both the future baseline and with the AP2 revised scheme.

In scenario 1, the change in traffic due to construction of the AP2 revised scheme will increase the VoC on the A5019 Mill Street approach from 98% in the future baseline to 102% in the AM peak hour, with a corresponding change in queue length from 12 PCU in the future baseline to 11 PCU.

In the PM peak hour, the change in traffic due to construction of the AP2 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths.

A532 West Street/Victoria Avenue junction

11.2.132 Table 13-49 below summarises the results of the changes in performance of the junction as a result of the AP2 revised scheme.

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Table 13-49: A532 West Street/Victoria Avenue junction 2031 future baseline and with the AP2 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00–09:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
A532 West Street (east)	968	76%	10	588	51%	6	1,004	78%	10
Victoria Avenue	303	104%	4	593	101%	7	281	104%	4
A532 West Street (west)	773	59%	5	557	42%	3	810	62%	5
17:00–18:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
A532 West Street (east)	858	77%	12	605	58%	8	886	78%	13
Victoria Avenue	313	65%	4	297	38%	3	314	76%	4
A532 West Street (west)	940	68%	6	792	62%	5	946	68%	6

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- 11.2.133 The assessment shows that in the AM peak hour the junction operates over capacity in both the future baseline and with the AP2 revised scheme. In the PM peak hour, the junction operates within capacity in both the future baseline and with the AP2 revised scheme.
- 11.2.134 In scenario 1, the change in traffic due to the construction of the AP2 revised scheme will decrease the VoC on the Victoria Avenue approach from 104% in the future baseline to 101% in the AM peak hour, with a corresponding change in queue length from four PCU in the future baseline to seven PCU.
- 11.2.135 In the PM peak hour, the change in traffic due to construction of the AP2 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths.

B5071/Crewe Road

- 11.2.136 Table 13-50 below summarises the results of the changes in performance of the junction as a result of the AP2 revised scheme.

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Table 13-50: B5071/Crewe Road junction 2031 future baseline and with the AP2 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00–09:00	2031 future baseline			AP2 revised scheme utilities scenario			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
Crewe Road (north)	230	53%	3	235	54%	4	235	54%	4	234	54%	3
B5071	179	50%	3	182	50%	3	177	49%	3	176	49%	3
Crewe Road (south)	597	44%	5	587	43%	5	634	47%	5	624	46%	5
17:00–18:00	2031 future baseline			AP2 revised scheme utilities scenario			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
Crewe Road (north)	305	53%	5	313	55%	5	334	59%	5	331	58%	5
B5071	164	86%	3	162	88%	3	226	83%	5	217	83%	5
Crewe Road (south)	411	29%	4	409	29%	4	428	30%	4	410	29%	4

- 11.2.137 The assessment shows that in the AM peak hour the junction operates well within capacity in both the future baseline and with the AP2 revised scheme. In the PM peak hour, the junction operates close to capacity in both the future baseline and with the AP2 revised scheme.
- 11.2.138 The change in traffic due to construction of the AP2 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths in the AM peak hour.
- 11.2.139 In the utilities scenario, the change in traffic due to construction of the AP2 revised scheme in the PM peak hour will increase the VoC on the B5071 approach from 86% in the future baseline to 88%, with no change in corresponding queue length.

A532 Weston Road/Weston Service Road South

- 11.2.140 Table 13-51 below summarises the results of the changes in performance of the junction as a result of the AP2 revised scheme.

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Table 13-51: A532 Weston Road/Weston Service Road South junction 2031 future baseline and with the AP2 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00–09:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
A532 Weston Road (north)	280	20%	5	291	21%	5	286	21%	5
Weston Road Service Road	41	8%	1	42	8%	1	41	8%	1
A532 Weston Road (south)	1,334	85%	14	1,369	87%	14	1,371	87%	14
JTi Access (left)	4	1%	0	4	1%	0	4	1%	0
JTi Access (ahead and right)	8	3%	0	7	3%	0	7	3%	0
17:00–18:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
A532 Weston Road (north)	997	56%	15	935	53%	14	924	52%	14
Weston Road Service Road	291	33%	5	284	32%	5	284	32%	5
A532 Weston Road (south)	332	31%	4	341	32%	4	323	30%	3
JTi Access (left)	11	1%	0	11	1%	0	11	1%	0
JTi Access (ahead and right)	6	3%	0	5	3%	0	5	3%	0

- 11.2.141 The assessment shows that in the AM peak hour the junction operates close to capacity in both the future baseline and with the AP2 revised scheme. In the PM peak hour, the junction operates well within capacity in both the future baseline and with the AP2 revised scheme.
- 11.2.142 In scenario 1 and 2, the change in traffic due to the construction of the AP2 revised scheme will increase the VoC on the A532 Weston Road (south) approach from 85% in the future baseline to 87% in the AM peak hour, with no change in corresponding queue length.
- 11.2.143 In the PM peak hour, the change in traffic due to construction of the AP2 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths.

A530 Middlewich Road/Wistaston Green Road

- 11.2.144 Table 13-52 below summarises the results of the changes in performance of the junction as a result of the AP2 revised scheme.

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Table 13-52: A530 Middlewich Road/Wistaston Green Road junction 2031 future baseline and with the AP2 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00–09:00	2031 future baseline			AP2 revised scheme utilities scenario			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
A530 Middlewich Road	952	92%	12	929	94%	12	893	83%	11	892	97%	11
Wistaston Green Road	185	107%	4	236	105%	5	178	103%	4	235	105%	5
A530 Nantwich Road	1,377	86%	8	1,343	88%	9	1,421	88%	8	1,399	100%	9
17:00–18:00	2031 future baseline			AP2 revised scheme utilities scenario			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
A530 Middlewich Road	1,189	84%	16	1,172	83%	16	1,172	83%	16	1,215	91%	16
Wistaston Green Road	174	53%	4	156	49%	3	156	49%	3	157	50%	3
A530 Nantwich Road	897	53%	5	893	53%	5	1,008	59%	6	1,027	60%	6

- 11.2.145 The assessment shows that in the AM peak hour the junction operates over capacity in both the future baseline and with the AP2 revised scheme. In the PM peak hour, the junction operates within capacity in the future baseline and close to capacity with the AP2 revised scheme.
- 11.2.146 In scenario 2, the change in traffic due to the construction of the AP2 revised scheme will increase the VoC on the A530 Nantwich Road approach from 86% in the future baseline to 100% in the AM peak hour, with a corresponding change in queue length from eight PCU in the future baseline to nine PCU. In the PM peak hour, the change in traffic due to construction of the AP2 revised scheme will increase the VoC on the A530 Middlewich Road approach from 84% in the future baseline to 91%, with no change in corresponding queue length.

A532 West Street/Minshull New Road

- 11.2.147 Table 13-53 below summarises the results of the changes in performance of the junction as a result of the AP2 revised scheme.

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Table 13-53: A532 West Street/Minshull New Road junction 2031 future baseline and with the AP2 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00–09:00	2031 future baseline			AP2 revised scheme utilities scenario			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
Minshull New Road	380	91%	3	388	93%	3	380	59%	0	370	95%	4
A532 West Street (east)	838	54%	0	806	53%	0	499	32%	0	876	57%	0
A532 West Street (west)	876	53%	0	896	54%	0	605	37%	0	923	56%	0
17:00–18:00	2031 future baseline			AP2 revised scheme utilities scenario			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
Minshull New Road	323	97%	5	320	97%	5	362	67%	1	316	99%	6
A532 West Street (east)	863	67%	0	863	67%	0	709	52%	0	892	69%	0
A532 West Street (west)	842	51%	0	836	50%	0	575	35%	0	860	52%	0

- 11.2.148 The assessment shows that in the AM and PM peak hours the junction operates close to capacity in both the future baseline and with the AP2 revised scheme.
- 11.2.149 In scenario 2, the change in traffic due to the construction of the AP2 revised scheme will increase the VoC on the Minshull New Road approach from 91% in the future baseline to 95% in the AM peak hour, with a corresponding change in queue length from three PCU in the future baseline to four PCU. In the PM peak hour, the change in traffic due to construction of the AP2 revised scheme will increase the VoC on the Minshull New Road approach from 97% in the future baseline to 99%, with a corresponding change in queue length from five PCU in the future baseline to six PCU.

B5079 Hind Heath Road/Crewe Road

- 11.2.150 Table 13-54 below summarises the results of the changes in performance of the junction as a result of the AP2 revised scheme.

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Table 13-54: B5079 Hind Heath Road/Crewe Road junction 2031 future baseline and with the AP2 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00–09:00	2031 future baseline			AP2 revised scheme utilities scenario			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
Crewe Road (north)	442	31%	0	452	32%	0	460	33%	0	450	32%	0
Crewe Road (south)	394	24%	0	399	25%	0	410	25%	0	416	25%	0
B5079 Hind Heath Road	490	70%	1	604	91%	2	507	74%	1	507	73%	1
17:00–18:00	2031 future baseline			AP2 revised scheme utilities scenario			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
Crewe Road (north)	481	34%	0	575	40%	0	493	35%	0	486	35%	0
Crewe Road (south)	517	32%	0	542	34%	0	528	33%	0	534	33%	0
B5079 Hind Heath Road	495	67%	0	506	74%	1	544	74%	1	540	74%	1

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- 11.2.151 The assessment shows that in the AM peak hour the junction operates well within capacity in the future baseline and close to capacity with the AP2 revised scheme. In the PM peak hour, the junction operates well within capacity in both the future baseline and with the AP2 revised scheme.
- 11.2.152 In the utilities scenario, the change in traffic due to the construction of the AP2 revised scheme will increase the VoC on the B5079 Hind Heath Road approach from 70% in the future baseline to 91% in the AM peak hour, with a corresponding change in queue length from one PCU in the future baseline to two PCU.
- 11.2.153 In the PM peak hour, the change in traffic due to construction of the AP2 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths.

A533 The Hill/A534 Old Mill Road/High Street

- 11.2.154 Table 13-55 below summarises the results of the changes in performance of the junction as a result of the AP2 revised scheme.

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Table 13-55: A533 The Hill/A534 Old Mill Road/High Street 2031 future baseline and with the AP2 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00–09:00	2031 future baseline			AP2 revised scheme utilities scenario			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
A533 The Hill	533	109%	9	928	93%	14	514	110%	9	509	110%	8
A533 Old Mill Road (south)	1,181	83%	13	1,153	73%	15	1,193	83%	13	1,192	83%	13
A534 Old Mill Road (north)	752	54%	11	245	89%	6	851	61%	13	858	62%	13
17:00–18:00	2031 future baseline			AP2 revised scheme utilities scenario			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
A533 The Hill	624	100%	12	932	89%	15	638	101%	12	627	101%	12
A533 Old Mill Road (south)	1,063	69%	15	1,058	70%	16	1,130	74%	15	1,131	74%	15
A534 Old Mill Road (north)	713	67%	14	253	75%	6	722	68%	14	727	69%	14

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- 11.2.155 The assessment shows that in the AM and PM peak hours the junction operates over capacity in the future baseline and with the AP2 revised scheme.
- 11.2.156 In the utilities scenario, the change in traffic due to the construction of the AP2 revised scheme will increase the VoC on the A534 Old Mill Road (north) approach from 54% in the future baseline to 89% in the AM peak hour, with a corresponding change in queue length from 11 PCU in the future baseline to six PCU. In the PM peak hour, the change in traffic due to construction of the AP2 revised scheme will decrease the VoC on the A533 The Hill approach from 100% in the future baseline to 89%, with a corresponding change in queue length from 12 PCU in the future baseline to 15 PCU.

A533 Middlewich Road/A533 Old Mill Road/Crewe Road/Hightown

- 11.2.157 Table 13-56 below summarises the results of the changes in performance of the junction as a result of the AP2 revised scheme.

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Table 13-56: A533 Middlewich Road/A533 Old Mill Road/Crewe Road/Hightown junction 2031 future baseline and with the AP2 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00–09:00	2031 future baseline			AP2 revised scheme utilities scenario			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
A533 Middlewich Road	271	23%	0	342	28%	0	277	23%	0	275	23%	0
Hightown	508	59%	0	714	89%	2	567	66%	0	551	64%	0
A533 Old Mill Road	584	49%	0	707	59%	0	568	47%	0	564	47%	0
Crewe Road	446	53%	0	414	53%	0	453	55%	0	451	54%	0
17:00–18:00	2031 future baseline			AP2 revised scheme utilities scenario			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
A533 Middlewich Road	373	31%	0	520	43%	0	370	31%	0	368	31%	0
Hightown	753	95%	3	722	96%	4	750	95%	3	754	95%	3
A533 Old Mill Road	775	65%	0	887	74%	0	784	65%	0	766	64%	0
Crewe Road	371	48%	0	350	44%	0	396	51%	0	396	51%	0

- 11.2.158 The assessment shows that in the AM peak hour the junction operates well within capacity in the future baseline and close to capacity with the AP2 revised scheme. In the PM peak hour, the junction operates close to capacity in both the future baseline and with the AP2 revised scheme.
- 11.2.159 In the utilities scenario, the change in traffic due to the construction of the AP2 revised scheme will increase the VoC on the Hightown approach from 59% in the future baseline to 89% in the AM peak hour, with a corresponding change in queue length from no queue in the future baseline to two PCU.
- 11.2.160 In the PM peak hour, the change in traffic due to construction of the AP2 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths.

A534 Nantwich Road/A5078 Edleston Road/Edward Street

- 11.2.161 Table 13-57 summarises the results of the changes in performance of the junction as a result of the AP2 revised scheme.

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Table 13-57: A534 Nantwich Road/A5078 Edleston Road/Edward Street junction 2031 future baseline and with the AP2 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00–09:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
A5078 Edleston Road	159	62%	3	170	67%	3	155	61%	3
A534 Nantwich Road (east)	532	29%	3	546	30%	3	578	32%	4
A534 Nantwich Road (west)	573	63%	6	586	64%	6	590	65%	6
17:00–18:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
A5078 Edleston Road	372	90%	6	378	91%	6	377	91%	6
A534 Nantwich Road (east)	541	33%	5	549	33%	5	526	32%	5
A534 Nantwich Road (west)	383	53%	5	401	55%	5	394	54%	5

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11.2.162 The assessment shows that in the AM peak hour the junction operates well within capacity in both the future baseline and with the AP2 revised scheme. In the PM peak hour, the junction operates close to capacity in both the future baseline and with the AP2 revised scheme.

The change in traffic due to construction of the AP2 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths at this junction.

A530 Middlewich Road/Marshfield Bank/A532 Coppenhall Lane

11.2.163 Table 13-58 summarises the results of the changes in performance of the junction as a result of the AP2 revised scheme.

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Table 13-58: A530 Middlewich Road/Marshfield Bank/A532 Coppenhall Lane junction 2031 future baseline and with the AP2 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00–09:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
A530 Middlewich Road (north)	767	64%	1	783	65%	1	798	66%	1
Marshfield Bank	131	13%	0	131	11%	0	131	14%	0
A532 Coppenhall Lane	714	59%	0	767	64%	1	661	55%	0
A530 Middlewich Road (south)	1,462	77%	1	1,465	86%	1	1,563	86%	1
17:00–18:00	2031 future baseline			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
A530 Middlewich Road (north)	975	81%	1	1,071	89%	1	1,044	87%	1
Marshfield Bank	404	42%	0	404	40%	0	404	44%	0
A532 Coppenhall Lane	574	48%	0	494	41%	0	527	44%	0
A530 Middlewich Road (south)	821	41%	0	899	46%	0	933	47%	0

- 11.2.164 The assessment shows that in the AM and PM peak hours the junction operates within capacity in the future baseline and close to capacity with the AP2 revised scheme.
- 11.2.165 In scenarios 1 and 2, the change in traffic due to construction of the AP2 revised scheme will increase the VoC on the A530 Middlewich Road (south) approach from 77% in the future baseline to 86% in the AM peak hour, with no change in corresponding queue length.
- 11.2.166 In scenario 1, the change in traffic due to construction of the AP2 revised scheme in the PM peak hour will increase the VoC on the A530 Middlewich Road (north) approach from 81% in the future baseline to 89%, with no change in corresponding queue length.

A530 Middlewich Road/Platt Avenue

- 11.2.167 Table 13-59 summarises the results of the changes in performance of the junction as a result of the AP2 revised scheme.

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Table 13-59: A533 Middlewich Road/Platt Avenue junction 2031 future baseline and with the AP2 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
08:00–09:00	2031 future baseline			AP2 revised scheme utilities scenario			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
Platt Avenue	487	96%	4	420	92%	3	487	98%	4	491	97%	4
A533 Middlewich Road (east)	475	28%	0	552	32%	0	499	29%	0	486	29%	0
A533 Middlewich Road (west)	991	58%	0	971	57%	0	992	58%	0	991	58%	0
17:00–18:00	2031 future baseline			AP2 revised scheme utilities scenario			AP2 revised scheme scenario 1			AP2 revised scheme scenario 2		
Platt Avenue	443	98%	5	356	95%	4	446	99%	5	447	99%	5
A533 Middlewich Road (east)	555	33%	0	634	37%	0	561	33%	0	558	33%	0
A533 Middlewich Road (west)	1,058	62%	0	1,045	61%	0	1,081	64%	0	1,080	64%	0

- 11.2.168 The assessment shows that in the AM and PM peak hours the junction operates close to capacity in both the future baseline and with the AP2 revised scheme.
- 11.2.169 In scenario 1, the change in traffic due to construction of the AP2 revised scheme will increase the VoC on the Platt Avenue approach from 96% in the future baseline to 98% in the AM peak hour, with no change in corresponding queue length.
- 11.2.170 In the utilities scenario, the change in traffic due to construction of the AP2 revised scheme in the PM peak hour will decrease the VoC on the Platt Avenue approach from 98% in the future baseline to 95%, with a corresponding change in queue length from five PCU in the future baseline to four PCU.

Accidents and safety

- 11.2.171 The impacts on accident and safety risks during construction are reported in Section 13.3 of the main TA and section 10.2 of the SES1 and AP1 ES TA.
- 11.2.172 The baseline analysis of accidents and safety identified one location which had experienced an accident cluster over the three-year period from July 2016 to June 2019.
- 11.2.173 In the MA01 area, there are no locations with existing safety concerns that are likely to experience substantial increases in traffic during construction and, consequently, no unacceptable impacts on accident and safety risks are expected. This represents no change to the conclusions of the analysis of accidents of safety for the original scheme reported in Section 13.3 of the main TA and Section 10.2 of the SES1 and AP1 ES TA.

Parking and loading

- 11.2.174 The impacts on parking and loading during construction are reported in Section 13.3 of the main TA and Section 10.2 of the SES1 and AP1 ES TA. This section of the main TA and the SES1 and AP1 ES TA is unchanged.

Public transport

Local bus services

- 11.2.175 The impacts on local bus services during construction are reported in Section 13.3 of the main TA and Section 10.2 in the SES1 and AP1 ES TA. This section of the main TA and the SES1 and AP1 ES TA is unchanged.

Rail network

- 11.2.176 The impacts on the rail network during construction are reported in Section 13.3 of the main TA and Section 10.2 in the SES1 and AP1 ES TA.
- 11.2.177 The AP2 revised scheme includes changes to the Minshull Vernon Footpath 8/1 Accommodation Overbridge works, reducing possession from 54 hours to 27 hours.

Public transport interchanges

- 11.2.178 The impacts on public transport interchanges during construction are reported in Section 13.3 of the main TA and Section 10.2 in the SES1 and AP1 ES TA. This section of the main TA and the SES1 and AP1 ES TA is unchanged.

Pedestrians, cyclists and equestrians

- 11.2.179 The impacts on pedestrians, cyclists and equestrians during construction are reported in Section 13.3 of the main TA and Section 10.2 in the SES1 and AP1 ES TA. This section of the main TA and the SES1 and AP1 ES TA is unchanged.

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