In Parliament – Session 2022 - 2023

HS2

High Speed Rail (Crewe – Manchester)

Supplementary Environmental Statement 1 and Additional Provision 1 Environmental Statement

Volume 5: Appendix TR-003-00002

Traffic and transport

Transport Assessment Part 3 Addendum

MA02: Wimboldsley to Lostock Gralam

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Department for Transport

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11.1 AP1 revised Scheme construction description

Introduction

11.1.1 A number of changes to the original scheme reported in Section 6.2 of this report mean that Section 14.2 of the main Transport Assessment (TA) is generally replaced by Section 11.1 in this document. Where there is no replacement, the text in the main TA remains valid.

11.1.2 The terms used in this report to differentiate between the original proposals assessed as part of the main ES and subsequent changes are set out in the SES1 and AP1 ES Volume 5 Part 1.

11.1.3 This section provides an overview of the construction traffic and transport impacts for the section of the AP1 revised scheme that will pass through the MA02 area.

11.1.4 Construction of the AP1 revised scheme is expected to commence in 2025 with construction activity continuing to 2038 (although activity in 2038 will be limited to testing and commissioning). Construction activities have been assessed against 2030 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 SES1 and AP1 ES Volume 2, Community Area report: Wimboldsley to Lostock Gralam area (MA02), Section 6.

11.1.6 A complete description of the works associated with the AP1 revised scheme in the MA02 area is provided in Volume 2, Community Area report: Wimboldsley to Lostock Gralam area (MA02), Sections 2 and 4. The construction works will be carried out throughout MA02 for the majority of the construction period. The overall programme has been outlined on a year-by-year basis. Table 14-1 in the main TA summarises the key construction activities, along with their start dates. Table 14-1 below replaces Table 14-1 of the main TA.

Table 14-1: AP1 revised scheme key highway construction activities in the MA02 area

Activity	Community area (CA)	Start date
Area advance works	MA02	2025 Q2
A556 Shurlach Road realignment	MA02	2025 Q4
Crewe North RSD	MA02	2027 Q1
Clive Green Lane overbridge and realignment	MA02	2027 Q2
A530 Nantwich Road overbridge and realignment	MA02	2027 Q2

Activity	Community area (CA)	Start date
A54 Middlewich Road realignment	MA02	2027 Q2
A559 Manchester Road realignment	MA02	2028 Q3
Birches Lane diversion	MA02	2029 Q1
Park House Farm access realignment	MA02	2029 Q2
B5082 Pennys Lane diversion	MA02	2029 Q4

Compounds and construction sites

11.1.7 The AP1 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.

11.1.8 Table 14-2 in the main TA summarises the expected average and peak workforce (site workers plus staff) at each construction compound in the MA02 area. Table 14-2 below replaces Table 14-2 of the main TA. The AP1 revised scheme removes the requirement for MA02 Borrow Pit D compared with the original scheme.

11.1.9 The location of the construction compounds and the associated construction Heavy Goods Vehicle (HGV) routes in MA02 are shown in SES1 and AP1 ES Volume 5, Traffic and transport Map Book: Map Series TR-08.

Table 14-2: AP1 revised scheme assumed workforce at construction sites in the MA02 area

Compound type	Compound name	Number of site workers (peak)	Number of staff (peak)	Total workforce (site plus staff)	
				Average	Peak
Satellite	A530 Nantwich Road satellite compound	80	53	77	125
Satellite	Crewe North RSD satellite compound 1	140	45	113	185
Satellite	Crewe North RSD satellite compound 2	221	131	190	352
Satellite	Crewe North RSD satellite compound 3	160	45	116	205
Satellite	Minshull Vernon satellite compound	50	15	43	65
Borrow pit	MA02 Borrow Pit A	50	15	51	65
Borrow pit	MA02 Borrow Pit B	80	15	52	95
Borrow pit	MA02 Borrow Pit C	80	15	51	95
Satellite	Clive Green Lane satellite compound	80	45	97	125
Satellite	Shropshire Union Canal South satellite compound	155	45	121	200
Satellite	Shropshire Union Canal North satellite compound	175	45	86	220

Compound type	Compound name	Number of site workers (peak)	Number of staff (peak)	Total workforce (site plus staff)	
				Average	Peak
Satellite	A54 Middlewich Road satellite compound	130	105	172	235
Satellite	A533 Bostock Road satellite compound	120	45	110	165
Satellite	River Dane viaduct south satellite compound	120	45	111	165
Satellite	River Dane viaduct north satellite compound	100	45	102	145
Satellite	Puddinglake Brook viaduct satellite compound	180	45	119	225
Satellite	Gad Brook viaduct South satellite compound	130	52	102	175
Satellite	Gad Brook viaduct North satellite compound	160	45	101	205
Satellite	Rudheath embankment satellite compound	47	75	117	122
Satellite	B5082 King Street Lane satellite compound	47	75	117	122
Satellite	Birches Lane satellite compound	157	45	91	202
Satellite	Lostock Gralam viaduct satellite compound	170	45	126	215
Satellite	Smoker Brook viaduct south satellite compound	140	69	145	200

11.1.10 Table 14-3 of the main TA provides details of the compound set up date and the duration of active use. Table 14-3 below replaces Table 14-3 of the main TA. The duration of active use excludes any period where there are no substantial workforce trips or movement of materials to and from the compound.

11.1.11 Table 14-3 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 combined two-way vehicle trips[1] for the busy period is the lower end of the range shown in Table 14-3 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.

[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).

Table 14-3: AP1 revised scheme typical vehicle trip generation for construction site compounds in the MA02 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	Estimated duration of busy period (months)
Satellite	A530 Nantwich Road satellite compound	2027 Q2	5 years	160–254	148–166	7
Satellite	Crewe North RSD satellite compound 1	2025 Q3	8 years	224–316	512–512	1
Satellite	Crewe North RSD satellite compound 2	2025 Q3	9 years	370–722	86–128	54
Satellite	Crewe North RSD satellite compound 3	2025 Q3	8 years	260–352	552–624	18
Satellite	Minshull Vernon satellite compound	2027 Q4	1 year and 6 months	148–148	4–4	7
Borrow pit	MA02 Borrow Pit A	2027 Q2	2 years	92–110	36–44	5
Borrow pit	MA02 Borrow Pit B	2027 Q2	1 year and 3 months	80–160	34–42	5
Borrow pit	MA02 Borrow Pit C	2027 Q2	1 year and 9 months	80–160	36–42	4
Satellite	Clive Green Lane satellite compound	2027 Q2	3 years and 9 months	146–212	88–116	7
Satellite	Shropshire Union Canal South satellite compound	2027 Q2	2 years and 3 months	114–336	68–90	6
Satellite	Shropshire Union Canal North satellite compound	2027 Q2	4 years	162–370	88–122	8
Satellite	A54 Middlewich Road satellite compound	2027 Q2	4 years and 9 months	264–396	66–106	11
Satellite	A533 Bostock Road satellite compound	2027 Q2	4 years and 6 months	206–278	388–510	16
Satellite	River Dane viaduct South satellite compound	2027 Q2	2 years and 9 months	140–278	124–160	7
Satellite	River Dane viaduct North satellite compound	2027 Q2	2 years and 9 months	136–244	92–114	7
Satellite	Puddlinglake Brook viaduct satellite compound	2027 Q2	3 years and 9 months	162–380	78–100	7

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	Estimated duration of busy period (months)
Satellite	Gad Brook viaduct south satellite compound	2027 Q2	4 years and 9 months	194–296	346–466	3
Satellite	Gad Brook viaduct north satellite compound	2025 Q2	6 years and 6 months	180–348	210–218	3
Satellite	Rudheath embankment satellite compound	2028 Q3	3 years and 6 months	204–206	310–410	4
Satellite	Pennys Lane satellite compound	2028 Q3	3 years and 6 months	178–208	328–444	3
Satellite	Birches Lane satellite compound	2025 Q2	6 years and 9 months	178–254	292–388	4
Satellite	Lostock Gralam viaduct satellite compound	2028 Q4	1 year and 6 months	132–362	74–92	8
Satellite	Smoker Brook viaduct south satellite compound	2027 Q4	4 years and 3 months	264–366	322–472	5

11.1.12 The indicative construction programme in Volume 2, Community Area report: Wimboldsley to Lostock Gralam area (MA02), 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 14-3.

Construction HGV routes

11.1.13 Construction vehicle movements required to construct the AP1 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.

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

11.1.15 The AP1 revised scheme will introduce amended construction HGV routes for the A54 Middlewich Road satellite compound, the A533 Bostock Road satellite compound and the

Birches Lane satellite compound compared to the original scheme. In addition, the construction HGV route associated with MA02 Borrow Pit D is no longer required in the AP1 revised scheme.

11.1.16 The location of the compounds and the associated construction HGV routes are shown on the SES1 and AP1 ES Volume 5, Traffic and transport Map Book: Map Series TR-08. Table 14-4 in the main TA summarises the construction HGV routes to and from each compound to the main road network. Table 14-4 below replaces Table 14-4 of the main TA. For some compounds, Table 14-4 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 14-4: AP1 revised scheme construction HGV routes for construction compounds in the MA02 area

Compound name(s)	Access routes to/from compound(s) to main road network
A530 Nantwich Road satellite compound Crewe North RSD satellite compound 1	A530 Nantwich Road
Crewe North RSD satellite compound 2	Route to/from south: Site haul route, Clive Green Lane and A530 Nantwich Road Route to/from north (to be used after opening of the Clive Green Lane realignment): Site haul route, Clive Green Lane and A54 Middlewich Road Site haul route, Clive Green Lane, Road One and A533 Davenham Bypass
Crewe North RSD satellite compound 3	Site haul route, Clive Green Lane and A530 Nantwich Road Site haul route and A530 Nantwich Road
Minshull Vernon satellite compound	A530 Nantwich Road
MA02 Borrow Pit A MA02 Borrow Pit B	Route to/from south: A530 Nantwich Road Route to/from north (to be used after opening of the Clive Green Lane realignment): A530 Nantwich Road, Clive Green Lane and A54 Middlewich Road A530 Nantwich Road, Clive Green Lane, Road One and A533 Davenham Bypass
MA02 Borrow Pit C	Site haul route and A54 Middlewich Road
Clive Green Lane satellite compound	Route to/from south: Clive Green Lane and A530 Nantwich Road Route to/from north (to be used after opening of the Clive Green Lane realignment): Clive Green Lane and A54 Middlewich Road Clive Green Lane, Road One and A533 Davenham Bypass
Shropshire Union Canal South satellite compound	Route to/from south: Site haul route, Clive Green Lane and A530 Nantwich Road

Compound name(s)	Access routes to/from compound(s) to main road network
	Route to/from north (to be used after opening of the Clive Green Lane realignment): Site haul route, Clive Green Lane and A54 Middlewich Road
Shropshire Union Canal North satellite compound	Site haul route and A54 Middlewich Road
A54 Middlewich Road satellite compound	A533 Northwich Road (to be used before opening of A54 Middlewich Road realignment) A54 Middlewich Road realignment (to be used after opening of A54 Middlewich Road realignment)
A533 Bostock Road satellite compound	A533 Northwich Road (to be used before opening of A54 Middlewich Road realignment) A54 Middlewich Road (to be used after opening of A54 Middlewich Road realignment)
River Dane viaduct South satellite compound	Site haul route and A533 Northwich Road
River Dane viaduct North satellite compound	Site haul route, Whatcroft Hall Lane and A530 King Street
Puddinglake Brook viaduct satellite compound	Whatcroft Hall Lane and A530 King Street
Gad Brook viaduct south satellite compound Gad Brook viaduct north satellite compound	A530 King Street
Rudheath embankment satellite compound	Site haul route and A530 King Street
Pennys Lane satellite compound	Route to/from the north: B5082 Pennys Lane and A556 Shurlach Road (to be used before opening of the Pennys Lane diversion) B5082 Pennys Lane diversion to A530 King Street (to be used after opening of the Pennys Lane diversion) Route to/from the south: B5082 Pennys Lane, Crowders Lane and A530 King Street (to be used before opening of the Pennys Lane diversion) B5082 Pennys Lane diversion to A530 King Street (to be used after opening of Pennys Lane diversion)
Birches Lane satellite compound	Birches Lane and A556 Shurlach Road Birches Lane and A559 Manchester Road
Lostock Gralam viaduct satellite compound	Site haul route, Birches Lane and A556 Shurlach Road
Smoker Brook viaduct south satellite compound	A556 Shurlach Road

11.1.17 Table 14-5 in the main TA summarises the peak daily construction traffic flows associated with the original scheme, both in HGV and total vehicles, on roads within the MA02 area that form part of construction HGV routes. Table 14-5 below replaces Table 14-5 of the main TA.

11.1.18 Table 14-5 indicates a reduction in construction traffic, when compared to the original scheme, on most routes in the MA02 area. Locations with the largest reduction in construction traffic include parts of the A556 Chester Road, A556 Shurlach Road, A530 King Street, A530 Newton Bank, A54 Kinderton Street, A530 Nantwich Road and the B5081 Byley Road. Some routes, such as parts of the A530 Nantwich Road and A54 Holmes Chapel Road, show an overall reduction in total construction vehicles but an increase in the number of HGV construction vehicles when compared to the original scheme.

11.1.19 Table 14-5 indicates an increase in construction traffic, when compared to the original scheme at locations including parts of the A556 Shurlach Road, Davenham Road and Birches Lane.

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 14-5: AP1 revised scheme MA02 peak daily construction traffic flow

Location	Direction	Daily peak HGV vehicles	Daily peak all vehicles
A530 Nantwich Road (between Moss Lane and Brookhouse Lane)	NB	608	1,237
	SB	608	1,262
A556 Chester Road (between A559 Manchester Road and Plumley Moor Road)	EB	570	1,656
	WB	570	1,383
A54 Middlewich Road (between Clive Lane and Birch Lane)	EB	70	310
	WB	70	352
A54 Middlewich Road realignment (between A533 Northwich Road diversion and Birch Lane)	EB	273	488
	WB	273	701
A54 Middlewich Road realignment (between Birch Lane and Coalpit Lane)	EB	265	467
	WB	265	380
A54 St Michael's Way (between A54 Chester Road and The Bull Ring)	EB	273	560
	WB	273	463
A54 Chester Road (between A530 Croxton Lane and A530 Newton Bank)	EB	273	1,005
	WB	273	776
Clive Green Lane realignment/Clive Lane (between A530 Nantwich Road and A54 Middlewich Road)	NB	16	505
	SB	16	516
A533 Northwich Road (between A54 Chester Road and Bell Lane)	NB	106	443
	SB	106	463
A54 Middlewich Road realignment (between Clive Lane and A533 Northwich Road diversion)	EB	8	52
	WB	8	82
A54 Holmes Chapel Road (between King Street and B5309 Centurion Way)	EB	273	412
	WB	273	446
A54 St Michael's Way (between The Bull Ring and A533 Leadsmithy Street)	EB	273	560
	WB	273	463
A54 Kinderton Street (between A533 Leadsmithy Street and King Street)	EB	273	561

Location	Direction	Daily peak HGV vehicles	Daily peak all vehicles
	WB	273	461
A530 Nantwich Road (between Brynlow Drive and Glastonbury Drive)	NB	10	585
	SB	10	704
A530 Nantwich Road (between Glastonbury Drive and St Ann's Road)	EB	10	586
	WB	10	703
A530 Nantwich Road (between St Ann's Road and A530 Newton Bank)	NB	10	589
A530 Nantwich Road (between A530 Nantwich Road gyratory and St Ann's Road)	WB	10	705
A533 Northwich Road (between Bell Lane and A533 Bostock Road)	NB	106	649
	SB	106	657
A530 Nantwich Road (between A530 Newton Bank and A54 St Michael's Way)	WB	273	1,083
A54 Homes Chapel Road (between King Street and B5309 Centurion Way)	EB	273	411
	WB	273	446
Clive Green Lane (between A54 Middlewich Road and Coalpit Lane)	EB	405	622
	WB	405	611
B5309 Centurion Way (between A54 Holmes Chapel Road and B5081 Byley Road)	EB	257	288
	WB	257	308
A54 Holmes Chapel Road (between B5309 Centurion Way and Brereton Lane)	EB	442	563
	WB	442	619
A530 Nantwich Road (between Brookhouse Lane and Clive Green Lane)	NB	405	1,224
	SB	405	1,192
B5081 Byley Road (between B5309 Centurion Way and Moss Lane)	NB	10	43
	SB	10	32
A530 Croxton Lane (between A54 Chester Road and B5309 King Street)	NB	10	404
	SB	10	529
A533 Northwich Road diversion (between A54 Middlewich Road realignment and A533 Northwich Road)	EB	88	463
	WB	88	656
A530 King Street (between A530 Croxton Lane and Whatcroft Hall Lane)	NB	257	795
	SB	257	863
B5309 King Street (between B5309 Centurion Way and A530 Croxton Lane)	NB	257	418
	SB	257	268
A533 Northwich Road (between Bell Lane and A533 Bostock Road)	EB	405	621
	WB	405	757
A533 Northwich Road (between A54 Chester Road and Bell Lane)	NB	273	960
A54 Chester Road (between Coal Pit Lane and A530 Croxton Lane)	EB	273	467
	WB	273	392
A530 Nantwich Road (between Clive Green Lane and Brynlow Drive)	EB	10	682
	WB	10	790

Location	Direction	Daily peak HGV vehicles	Daily peak all vehicles
A54 Chester Road (between A530 Newton Bank and A54 St Michael's Way)	EB	273	1,180
Road One (between A54 Middlewich Road and A533 Bostock Road)	NB	8	436
	SB	8	457
B5309 Centurion Way (between B5309 King Street and White Park Close)	NB	257	276
	SB	257	268
A54 Chester Road (between A530 Chester Road and A54 St Michael's Way)	EB	273	1,181
A54 St Michael's Way (between A54 Chester Road and The Bull Ring)	EB	273	559
London Road (between A533 Bostock Road and Brick Kiln Lane)	NB	10	570
	SB	10	763
A533 Davenham Bypass (between A533 Bostock Road and Brick Kiln Lane)	NB	8	111
	SB	8	104
A54 Holmes Chapel Road (between Brereton Lane and Poolford Lane)	EB	442	544
	WB	442	619
A530 King Street (between Whatcroft Hall Lane and Davenham Road)	NB	236	507
	SB	236	957
Davenham Road (between Shurlach Lane and A530 King Street)	EB	234	392
	WB	234	291
A533 Davenham Bypass (between London Road and A556 Shurlach Road)	EB	10	34
	WB	8	37
A556 Shurlach Road (between A533 London Road and A556 off-slip to A533 Davenham Bypass)	EB	8	93
	WB	10	92
A556 Shurlach Road off-slip (between A556 Shurlach Road and A533 Davenham Bypass)	SB	8	33
A533 London Road (between A556 Chester Road and A533 Kingsmead)	NB	10	25
	SB	8	27
Crowders Lane (between A530 King Street and B5082 Pennys Lane)	EB	16	48
	WB	10	31
A556 Shurlach Road (between A556 off-slip to A533 Davenham Bypass and Shurlach Lane)	EB	8	93
	WB	8	115
A530 King Street (between Crowder's Lane and B5082 Pennys Lane diversion)	NB	32	342
	SB	39	748
A556 Shurlach Road (between Shurlach Lane and Shipbrook Road)	EB	8	93
	WB	8	225
B5082 Pennys Lane diversion (between Pennys Lane and A556 Shurlach Road)	EB	10	63
	WB	16	59
A556 Shurlach Road (between Shipbrook Road and Gadbrook Road)	NB	8	91
	SB	8	214
A556 Shurlach Road (between Gadbrook Road and A530 King Street)	EB	8	110
	WB	8	238

Location	Direction	Daily peak HGV vehicles	Daily peak all vehicles
A556 Shurlach Road (between A530 King Street and B5082 Pennys Lane)	EB	414	1,023
	WB	415	1,495
A530 King Street (between A556 Shurlach Road and B5082 Middlewich Road)	NB	10	18
	SB	10	16
A556 Shurlach Road (between B5082 Pennys Lane and Birches Lane)	NB	414	1,023
	SB	414	1,463
Birches Lane/Station Road (between A556 Shurlach Road and School Lane)	NB	193	294
	SB	193	198
A556 Shurlach Road (between Birches Lane and A559 Manchester Road)	NB	414	927
	SB	414	1,631
A530 Griffiths Road (between A559 Manchester Road and B5082 Middlewich Road)	NB	10	10
	SB	10	10
A559 Manchester Road (between A530 Griffiths Road and A559 Hall Lane)	EB	10	16
	WB	10	13
Station Road (between School Lane and A559 Manchester Road)	NB	10	129
	SB	10	73
A559 Manchester Road (between A559 Hall Lane and Stubbs Lane)	EB	10	22
	WB	10	13
A559 Manchester Road (between Stubbs Lane and Fryer Road)	EB	10	173
	WB	10	13
A559 Manchester Road (between Fryer Road and A556 Shurlach Road)	EB	10	176
	WB	10	13
A556 Chester Road (between A559 Manchester Road and Linnards Lane)	EB	489	1,141
	WB	489	1,711

Traffic management, road closures and diversions

11.1.21 The approach to traffic management, road closures and diversions is reported in Section 14-2 of the main TA. This section of the main TA is unchanged.

Public Rights of Way, closures and diversions

11.1.22 The approach to PRoW closures and diversions is reported in Section 14-2 of the main TA. This section of the main TA is unchanged.

11.2 AP1 revised scheme assessment of construction impacts

11.2.1 A number of changes to the original scheme reported in Section 6.2 of this report mean that Section 14.3 of the main TA is generally replaced by Section 11.2 in this document. Where there is no replacement the text in the main TA remains valid.

Key construction transport issues

11.2.2 The construction assessment takes account of all of the impacts of the AP1 revised scheme in the MA02 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.

11.2.3 The construction assessment has also considered any impacts in this area that arise from construction of the AP1 revised scheme in the adjoining community area.

11.2.4 The AP1 revised scheme will no longer provide a connection to the West Coast Main Line (WCML) between the Pickmere to Agden and Hulseheath area (MA03) and the Risley to Bamfurlong area (MA05), which generally results in reduced construction traffic on the local road network in the MA02 area. Refinements to the construction process and programme will result in further changes to construction traffic on the local road network compared to the original scheme.

Highway network

Highway diversions, realignments and closures

11.2.5 Highway diversions, realignments and closures required to accommodate construction of the original scheme are reported in Section 14-3 of the main TA. Temporary road or lane closures and associated diversions will be required in a number of locations for the AP1 revised scheme, in addition to those reported in the main TA, including:

- A54 Chester Road/A530 Croxton Lane – temporary modification of the A54 Chester Road/A530 Croxton Lane junction to mitigate construction impacts at this location, as reported in the main TA, with no change in journey length. The temporary modifications comprise the replacement of the existing priority-controlled mini-roundabout with traffic signal control. The carriageway will be widened to provide a two-lane entry on the A54 Chester Road (north) and A54 Chester Road (south) approaches. The A530 Croxton Lane approach will become left-turn only onto the A54 Chester Road (south). As a result, traffic

travelling from the A530 Croxton Lane to the A54 Chester Road (north) will be directed to turn left and travel around the gyratory. On completion of the construction phase of the AP1 revised scheme, the junction will be reverted to its existing layout. During implementation and removal of the temporary junction modification, temporary traffic management will be required, with no change in journey length;

- M6 junction 18/A54 Middlewich Road – temporary modification of the M6 junction 18/A54 Middlewich Road junction to address concerns that have been raised by National Highways regarding potential blocking back beyond link capacity during the construction phase. The temporary modifications comprise the introduction of traffic signal control on the A54 Middlewich Road (west) approach and on the M6 junction 18 circulatory, with no change in journey length. On completion of the construction phase of the AP1 revised scheme, the junction will be reverted to its existing layout. During implementation and removal of the temporary junction modification, temporary traffic management will be required, with no change in journey length;
- A54 Middlewich Road/A54 Chester Road/B5308 Middlewich Road – temporary modification of the existing A54 Middlewich Road/A54 Chester Road/B5308 Middlewich Road junction to address concerns that have been raised by National Highways during the construction phase. The carriageway will be widened to enable the formation of a right-turn lane on the A54 Middlewich Road approach, with no change in journey length. On completion of the construction phase of the AP1 revised scheme, the junction will be reverted to its existing layout. During implementation and removal of the temporary junction modification, temporary traffic management will be required, with no change in journey length; and
- A530 Griffiths Road/A559 Manchester Road – The A530 Griffiths Road/A559 Manchester Road junction will be permanently modified as a result of the AP1 revised scheme to mitigate impacts at this location, as reported in the main TA. Further details of the permanent changes are presented in the operational assessment in Section 11.4. During implementation of the permanent junction modification, temporary traffic management will be required for one year, with no change in journey length.

11.2.6 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.

11.2.7 Permanent realignments, diversions and closures are considered under the operational assessment.

Highway network analysis

11.2.8 The impacts of construction of the AP1 revised scheme on the highway network have been assessed by undertaking strategic model runs for a number of 'with AP1 revised scheme' construction scenarios, and by comparing the flows and delays against the 2030 future baseline scenario.

11.2.9 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.

11.2.10 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 in three scenarios representing four 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 AP1 revised scheme, these scenarios differ slightly from those reported in the main TA:

- utilities scenario, peak between 2025 Q1 and 2027 Q1. This scenario corresponds with utility and advance works, site preparation and setup of compounds associated with Crewe North RSD. To enable the utility works traffic management will be required, comprising shuttle working on the A530 Nantwich Road and A54 Middlewich Road/Chester Road/St Michael's Way/Kinderton Street/Holmes Chapel Road, and the temporary closure of Coalpit Lane and Birch Lane. There are negligible construction traffic movements in this scenario;
- scenario 1, peak between 2027 Q2 and 2028 Q4. This scenario corresponds with site preparation and setup of the remaining compounds and early main construction works. The main construction activities taking place during this scenario include construction of the Crewe North RSD, extraction of material from MA02 Borrow Pits A, B and C, and the construction of several highway modifications, including the A530 Nantwich Road realignment, the Clive Green Lane realignment, the A54 Middlewich Road realignment, the A533 Nantwich Road diversion and the A556 Shurlach Road realignment. A number of viaducts will also be under construction during this scenario, including the Shropshire Union Canal Viaducts, River Dane Viaduct, Puddinglake Brook Viaduct, Trent and Mersey Canal Viaduct, Gad Brook Viaduct, Lostock Gralam Viaduct and Smoker Brook Viaduct. This scenario equates to 97% of the overall peak in construction traffic across the whole construction period;
- scenario 2, peak between 2029 Q1 and 2030 Q1. This scenario corresponds with the construction peak following the opening of the A54 Middlewich Road realignment and the A533 Northwich Road diversion. The main construction activities taking place during this scenario include the construction of the Crewe North RSD, River Dane Viaduct, Trent and Mersey Canal Viaduct, Gad Brook Viaduct, Wade Brook Viaduct, Lostock Gralam Viaduct, Smoker Brook Viaduct, Walley's Green embankment, Clive Green South and North embankments, Stanthorne South and North embankments, Dane Valley

embankment, Whatcroft South and North embankments, Rudheath embankment, Lostock Gralam South and North embankments, the A530 Nantwich Road realignment, the B5082 Pennys Lane diversion and the Middlewich box structure. This scenario equates to the overall peak in construction traffic across the whole construction period; and

- scenario 3, peak between 2030 Q2 and 2033 Q2. This scenario corresponds with the construction peak following the opening of the Clive Green Lane realignment and the opening of the B5082 Pennys Lane realignment. The Clive Green Lane realignment will enable construction traffic associated with the AP1 revised scheme to use routes between the Crewe North RSD and the A54 Middlewich Road. The majority of construction activities taking place during scenario 2 will continue into scenario 3. This scenario equates to 73% of the overall peak in construction traffic across the whole construction period.

11.2.11 Table 14-6 in the main TA summarises 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 14-6 below replaces Table 14-6 of the main TA.

Table 14-6: AP1 revised scheme construction highway interventions by scenario in the MA02 area

Type	Intervention	Utilities scenario	Scenario 1	Scenario 2	Scenario 3
Utilities	A54 Middlewich Road / Chester Road / St Michael's Way / Kinderton Street / Holmes Chapel Road shuttle working	Included	Not included	Not included	Not included
Utilities	A530 Nantwich Road shuttle working	Included	Not included	Not included	Not included
Utilities	Temporary closure of Coalpit Lane	Included	Not included	Not included	Not included
Main works	A54 Middlewich Road realignment	Not included	Not included	Included	Included
Main works	A533 Northwich Road diversion	Not included	Not included	Included	Included
Main works	Clive Green Lane available to construction traffic	Not included	Not included	Not included	Included
Main works	B5082 Pennys Lane realignment	Not included	Not included	Not included	Included

Type	Intervention	Utilities scenario	Scenario 1	Scenario 2	Scenario 3
Key construction activities	Crewe North RSD	Not included	Included	Included	Included
Key construction activities	Clive Green Lane overbridge and realignment	Not included	Not included	Not included	Included
	Construction HGV traffic assessed as a percentage of peak construction HGV traffic (Winsford and Northwich models combined)	Negligible	97%	100%	73%

Strategic and local road network traffic flows

11.2.12 During the construction period a number of roads will be affected by the construction of the AP1 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.

11.2.13 The Winsford (and Middlewich) to M6 model and the Northwich Town Centre model have been used to model the construction scenarios across the MA02 area. In the MA02 area, the Winsford (and Middlewich) to M6 model covers the area from Bostock Green in the north to Walley's Green in the south, and from Winsford in the west to Holmes Chapel in the east. The Northwich Town Centre model covers the area from Higher Wincham in the north to Wharton Green in the south, and from Sandiway in the west to the M6 in the east.

11.2.14 Table 14-7 and Table 14-8 in the main TA set out the traffic flows for the 2030 future baseline and the original scheme on the roads most affected by construction of the original scheme for the AM and PM peak hour. Table 14-7 and Table 14-8 below replace Table 14-7 and Table 14-8 of the main TA respectively. 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 AP1 revised scheme, however, this is not expected to change the conclusions of the assessment.

11.2.15 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.

11.2.16 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.

11.2.17 Figure 14-1 to Figure 14-6 of the main TA show traffic flow changes for each scenario for the AM and PM peak hours respectively. Figure 14-1 to Figure 14-6 , Figure 14-6.1 and Figure 14-6.2 below replace Figure 14-1 to Figure 14-6 of the main TA respectively. The width of the band indicates the proportional change in traffic, with red representing an increase and green a decrease compared with the 2030 future baseline scenario.

11.2.18 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 14-7: 2030 future baseline and with the AP1 revised scheme construction traffic (vehicles), AM peak hour (08:00–09:00)

Location	Direction	2030 baseline flows		AP1 revised scheme flows – utilities scenario		Utilities scenario - % change from 2030 baseline		AP1 revised scheme flows - scenario 1		Scenario 1 - % change from 2030 baseline		AP1 revised scheme flows - scenario 2		Scenario 2 - % change from 2030 baseline		AP1 revised scheme flows - scenario 3		Scenario 3 - % change from 2030 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
Clive Green Lane (between A54 Middlewich Road and Coalpit Lane)	EB	241	23	434	22	80%	-4%	149	50	-38%	117%	140	55	-42%	139%	0	0	-100%	-100%
	WB	458	18	503	18	10%	0%	501	52	9%	189%	494	58	8%	222%	0	0	-100%	-100%
A530 Nantwich Road (between Moss Lane and Brookhouse Lane)	NB	311	3	321	2	3%	-33%	311	63	0%	2000%	307	44	-1%	1367%	947	61	205%	1933%
	SB	501	20	440	18	-12%	-10%	541	79	8%	295%	560	61	12%	205%	972	64	94%	220%
A530 Nantwich Road (between Brookhouse Lane and Clive Green Lane)	NB	912	21	648	19	-29%	-10%	910	65	0%	210%	937	82	3%	290%	921	61	1%	190%
	SB	714	29	635	23	-11%	-21%	774	60	8%	107%	797	80	12%	176%	972	64	36%	121%
Swanlow Drive (between B5074 Swanlow Lane and Darnhall School Lane)	EB	23	1	23	1	0%	0%	23	1	0%	0%	23	1	0%	0%	23	1	0%	0%
	WB	76	1	80	1	5%	0%	86	1	13%	0%	84	1	11%	0%	79	1	4%	0%
B5074 Swanlow Lane (between Moors Lane and Swanlow Drive)	NB	564	23	678	23	20%	0%	677	23	20%	0%	657	23	16%	0%	631	23	12%	0%
	SB	508	13	525	14	3%	8%	590	21	16%	62%	602	21	19%	62%	491	15	-3%	15%
Bell Lane (between A54 Middlewich Road and A533 Bostock Road)	NB	92	0	0	0	-100%	0%	142	0	54%	0%	0	0	-100%	0%	0	0	-100%	0%
	SB	175	0	1	0	-99%	0%	100	0	-43%	0%	0	0	-100%	0%	0	0	-100%	0%

Location	Direction	2030 baseline flows		AP1 revised scheme flows – utilities scenario		Utilities scenario - % change from 2030 baseline		AP1 revised scheme flows - scenario 1		Scenario 1 - % change from 2030 baseline		AP1 revised scheme flows - scenario 2		Scenario 2 - % change from 2030 baseline		AP1 revised scheme flows - scenario 3		Scenario 3 - % change from 2030 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
Middlewich Eastern Bypass (between A533 Booth Lane and Cledford Lane)	NB	274	15	-	-	49%	0%	421	16	54%	7%	421	16	54%	7%	341	16	24%	7%
	SB	90	1	-	-	66%	0%	131	4	46%	300%	125	4	39%	300%	96	4	7%	300%
Darnhall School Lane (between Glebe Green Drive and B5074 Swanlow Lane)	NB	21	1	9	1	-57%	0%	2	1	-90%	0%	7	1	-67%	0%	20	1	-5%	0%
	SB	80	1	209	1	161%	0%	256	1	220%	0%	246	1	208%	0%	145	1	81%	0%
Durham Drive/Glebe Green Drive (between Darnhall School Lane and Townsfields Drive)	NB	226	2	371	2	64%	0%	431	2	91%	0%	414	2	83%	0%	295	2	31%	0%
	SB	33	2	33	2	0%	0%	33	2	0%	0%	33	2	0%	0%	33	2	0%	0%
Durham Drive/Dover Drive/Mount Pleasant Drive (between Townsfields Drive and Denbigh Drive)	NB	177	2	305	2	72%	0%	358	2	102%	0%	346	2	95%	0%	242	2	37%	0%
	SB	108	2	95	2	-12%	0%	95	2	-12%	0%	97	2	-10%	0%	94	2	-13%	0%
Mount Pleasant Drive (between Denbigh Drive and Woodford Lane West)	EB	67	0	65	0	-3%	0%	68	0	1%	0%	67	0	0%	0%	67	0	0%	0%
	WB	241	0	382	0	59%	0%	435	0	80%	0%	421	0	75%	0%	320	0	33%	0%
	EB	9	0	9	0	0%	0%	9	0	0%	0%	10	0	11%	0%	10	0	11%	0%

Location	Direction	2030 baseline flows		AP1 revised scheme flows – utilities scenario		Utilities scenario - % change from 2030 baseline		AP1 revised scheme flows - scenario 1		Scenario 1 - % change from 2030 baseline		AP1 revised scheme flows - scenario 2		Scenario 2 - % change from 2030 baseline		AP1 revised scheme flows - scenario 3		Scenario 3 - % change from 2030 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
Cledford Lane (between Jones Lane and Bradwall Road)	WB	29	0	29	0	0%	0%	50	0	72%	0%	50	0	72%	0%	44	0	52%	0%
Woodford Lane West (between Mount Pleasant Drive and A54 Oakmere Road)	NB	56	0	54	0	-4%	0%	57	0	2%	0%	56	0	0%	0%	56	0	0%	0%
	SB	273	2	415	2	52%	0%	468	2	71%	0%	454	2	66%	0%	352	2	29%	0%
Coalpit Lane (between Clive Green Lane and Birch Lane)	NB	96	0	0	0	-100%	0%	55	0	-43%	0%	0	0	-100%	0%	172	0	79%	0%
	SB	174	0	0	0	-100%	0%	143	0	-18%	0%	0	0	-100%	0%	148	0	-15%	0%
St Ann's Road (between Sutton Lane and Manor Lane)	NB	82	0	84	0	2%	0%	83	1	1%	0%	80	0	-2%	0%	82	0	0%	0%
	SB	100	0	89	0	-11%	0%	92	0	-8%	0%	94	0	-6%	0%	91	0	-9%	0%
Clive Green Lane realignment/Clive Lane (between A530 Nantwich Road and A54 Middlewich Road)	NB	443	18	489	18	10%	0%	357	17	-19%	-6%	361	17	-19%	-6%	401	19	-9%	6%
	SB	235	23	428	22	82%	-4%	334	15	42%	-35%	287	15	22%	-35%	576	23	145%	0%
St Ann's Road (between Manor Lane and King Edward Street)	NB	88	1	99	1	13%	0%	88	1	0%	0%	85	1	-3%	0%	85	0	-3%	-100%
	SB	124	0	111	0	-10%	0%	125	0	1%	0%	126	0	2%	0%	117	0	-6%	0%
	EB	818	27	842	26	3%	-4%	832	23	2%	-15%	818	23	0%	-15%	838	25	2%	-7%

Location	Direction	2030 baseline flows		AP1 revised scheme flows – utilities scenario		Utilities scenario - % change from 2030 baseline		AP1 revised scheme flows - scenario 1		Scenario 1 - % change from 2030 baseline		AP1 revised scheme flows - scenario 2		Scenario 2 - % change from 2030 baseline		AP1 revised scheme flows - scenario 3		Scenario 3 - % change from 2030 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
A54 Middlewich Road (between Clive Lane and A54 Winsford Bypass)	WB	555	20	498	20	-10%	0%	513	3	-8%	-85%	528	3	-5%	-85%	519	10	-6%	-50%
St Ann's Road (between King Edward Street and A530 Nantwich Road)	NB	154	1	166	1	8%	0%	148	1	-4%	0%	145	1	-6%	0%	144	0	-6%	-100%
	SB	185	0	166	0	-10%	0%	177	0	-4%	0%	178	0	-4%	0%	170	0	-8%	0%
A54 Kinderton Street (between A533 Leadsmithy Street and King Street)	EB	1,299	80	1,143	79	-12%	-1%	1,155	94	-11%	18%	1,145	95	-12%	19%	1,240	92	-5%	15%
	WB	557	62	553	57	-1%	-8%	555	65	0%	5%	549	70	-1%	13%	591	63	6%	2%
A54 St Michael's Way (between A533 Leadsmithy Street and The Bull Ring)	EB	1,049	63	851	63	-19%	0%	909	77	-13%	22%	916	78	-13%	24%	944	76	-10%	21%
	WB	751	55	719	54	-4%	-2%	714	64	-5%	16%	713	65	-5%	18%	764	61	2%	11%
A54 St Michael's Way (between The Bull Ring and A54 Chester Road)	EB	1,095	61	898	61	-18%	0%	947	75	-14%	23%	957	76	-13%	25%	988	74	-10%	21%
	WB	692	53	656	52	-5%	-2%	651	62	-6%	17%	653	63	-6%	19%	704	59	2%	11%
Brereton Lane (between Cledford Lane and A54 Holmes Chapel Road)	NB	16	1	16	1	0%	0%	16	1	0%	0%	16	1	0%	0%	16	1	0%	0%
	SB	7	1	7	1	0%	0%	27	0	286%	-100%	27	0	286%	-100%	21	0	200%	-100%

Location	Direction	2030 baseline flows		AP1 revised scheme flows – utilities scenario		Utilities scenario - % change from 2030 baseline		AP1 revised scheme flows - scenario 1		Scenario 1 - % change from 2030 baseline		AP1 revised scheme flows - scenario 2		Scenario 2 - % change from 2030 baseline		AP1 revised scheme flows - scenario 3		Scenario 3 - % change from 2030 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
A54 Chester Road (between A530 Newton Bank and A54 St Michael's Way)	EB	1,569	62	1,274	62	-19%	0%	1,734	75	11%	21%	1,747	76	11%	23%	1,676	74	7%	19%
A54 Middlewich Road realignment (between Clive Lane and A533 Northwich Road diversion)	NB	425	34	334	34	-21%	0%	500	41	18%	21%	0	0	-100%	-100%	0	0	-100%	-100%
	SB	446	35	436	34	-2%	-3%	556	24	25%	-31%	0	0	-100%	-100%	0	0	-100%	-100%
A54 Holmes Chapel Road (between King Street and B5309 Centurion Way)	EB	1,192	91	1,088	95	-9%	4%	1,003	110	-16%	21%	993	107	-17%	18%	1,106	109	-7%	20%
	WB	453	57	471	58	4%	2%	517	65	14%	14%	495	67	9%	18%	534	63	18%	11%
A54 Chester Road (between A530 Croxton Lane and A530 Newton Bank)	EB	1,193	61	965	61	-19%	0%	1,484	75	24%	23%	1,501	76	26%	25%	1,346	74	13%	21%
	WB	957	53	891	52	-7%	-2%	1,027	62	7%	17%	1,040	63	9%	19%	1,014	59	6%	11%
King Street (between New King Street and Hadrian Way)	NB	255	1	234	1	-8%	0%	311	1	22%	0%	294	1	15%	0%	277	1	9%	0%
	SB	147	1	159	1	8%	0%	64	1	-56%	0%	66	1	-55%	0%	75	1	-49%	0%
A54 Chester Road (between A530 Croxton Lane and	EB	776	61	527	61	-32%	0%	861	78	11%	28%	866	79	12%	30%	662	75	-15%	23%
	WB	793	43	683	42	-14%	-2%	801	52	1%	21%	800	53	1%	23%	796	49	0%	14%

Location	Direction	2030 baseline flows		AP1 revised scheme flows – utilities scenario		Utilities scenario - % change from 2030 baseline		AP1 revised scheme flows - scenario 1		Scenario 1 - % change from 2030 baseline		AP1 revised scheme flows - scenario 2		Scenario 2 - % change from 2030 baseline		AP1 revised scheme flows - scenario 3		Scenario 3 - % change from 2030 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
A533 Northwich Road)																			
Coalpit Lane (between Birch Lane and A54 Chester Road)	NB	24	0	30	0	25%	0%	24	0	0%	0%	25	0	4%	0%	25	0	4%	0%
	SB	36	0	6	0	-83%	0%	90	0	150%	0%	6	0	-83%	0%	7	0	-81%	0%
B5309 Centurion Way (between B5081 Byley Road and A54 Holmes Chapel Road)	EB	667	41	729	41	9%	0%	545	58	-18%	41%	549	49	-18%	20%	561	43	-16%	5%
	WB	629	74	648	65	3%	-12%	622	71	-1%	-4%	622	61	-1%	-18%	632	67	0%	-9%
A54 Middlewich Road (between Clive Lane and Birch Lane)	EB	424	34	334	34	-21%	0%	500	41	18%	21%	0	0	-100%	-100%	0	0	-100%	-100%
	WB	446	35	436	34	-2%	-3%	556	24	25%	-31%	0	0	-100%	-100%	0	0	-100%	-100%
A54 Holmes Chapel Road (between B5309 Centurion Way and Brereton Lane)	EB	1,053	99	1,049	113	0%	14%	1,014	134	-4%	35%	1,025	130	-3%	31%	1,024	111	-3%	12%
	WB	990	99	998	99	1%	0%	1,098	104	11%	5%	1,091	104	10%	5%	1,102	91	11%	-8%
B5309 Centurion Way (between White Park Close and B5081 Byley Road)	EB	487	13	548	13	13%	0%	172	28	-65%	115 %	171	19	-65%	46%	195	13	-60%	0%
	WB	453	59	478	50	6%	-15%	464	65	2%	10%	466	56	3%	-5%	462	54	2%	-8%
A54 Middlewich Road realignment (between A533 Northwich Road	EB	424	34	334	34	-21%	0%	500	41	18%	21%	892	79	110%	132%	809	75	91%	121%
	WB	446	35	436	34	-2%	-3%	556	24	25%	-31%	932	53	109%	51%	939	49	111%	40%

Location	Direction	2030 baseline flows		AP1 revised scheme flows – utilities scenario		Utilities scenario - % change from 2030 baseline		AP1 revised scheme flows - scenario 1		Scenario 1 - % change from 2030 baseline		AP1 revised scheme flows - scenario 2		Scenario 2 - % change from 2030 baseline		AP1 revised scheme flows - scenario 3		Scenario 3 - % change from 2030 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
diversion and Birch Lane)																			
A54 Holmes Chapel Road (between Brereton Lane and Poolford Lane)	EB	987	97	983	111	0%	14%	944	133	-4%	37%	956	129	-3%	33%	959	109	-3%	12%
	WB	1,039	99	1,047	99	1%	0%	1,153	104	11%	5%	1,150	104	11%	5%	1,161	91	12%	-8%
B5309 Centurion Way (between B5309 King Street and White Park Close)	NB	416	49	442	40	6%	-18%	401	55	-4%	12%	409	46	-2%	-6%	404	45	-3%	-8%
	SB	406	13	466	13	15%	0%	62	28	-85%	115%	67	18	-83%	38%	91	12	-78%	-8%
B5308 Middlewich Road (A54 Chester Road and A50 Knutsford Road)	EB	381	8	-	-	-	-	357	23	-6%	188%	360	24	-6%	200%	357	24	-6%	200%
	WB	279	2	-	-	-	-	270	2	-3%	0%	280	2	0%	0%	281	2	1%	0%
A50 Knutsford Road (between A535 Macclesfield Road and B5308 Middlewich Road)	NB	645	5	-	-	-	-	660	7	2%	40%	664	7	3%	40%	673	7	4%	40%
	SB	705	12	-	-	-	-	673	27	-5%	125%	683	28	-3%	133%	679	28	-4%	133%
B5081 Byley Road (between B5309 Centurion Way and Moss Lane)	NB	278	18	267	18	-4%	0%	258	10	-7%	-44%	257	10	-8%	-44%	271	17	-3%	-6%
	SB	282	31	278	31	-1%	0%	495	36	76%	16%	491	36	74%	16%	476	36	69%	16%

Location	Direction	2030 baseline flows		AP1 revised scheme flows – utilities scenario		Utilities scenario - % change from 2030 baseline		AP1 revised scheme flows - scenario 1		Scenario 1 - % change from 2030 baseline		AP1 revised scheme flows - scenario 2		Scenario 2 - % change from 2030 baseline		AP1 revised scheme flows - scenario 3		Scenario 3 - % change from 2030 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
B5309 King Street (between B5309 Centurion Way and A530 Croxton Lane)	NB	545	45	555	36	2%	-20%	643	52	18%	16%	634	43	16%	-4%	596	41	9%	-9%
	SB	452	20	530	20	17%	0%	76	33	-83%	65%	82	24	-82%	20%	101	18	-78%	-10%
A533 Bostock Road (between A533 Northwich Road diversion and London Road)	NB	513	8	232	8	-55%	0%	390	9	-24%	13%	397	8	-23%	0%	417	8	-19%	0%
	SB	421	27	167	27	-60%	0%	630	18	50%	-33%	575	18	37%	-33%	590	25	40%	-7%
London Road (between A533 Bostock Road and Brick Kiln Lane)	NB	237	0	86	0	-64%	0%	187	1	-21%	0%	207	1	-13%	0%	218	1	-8%	0%
	SB	447	1	350	1	-22%	0%	826	2	85%	100%	760	2	70%	100%	761	2	70%	100%
B5081 Byley Road (between Moss Lane and B5082 Holmes Chapel Road)	NB	271	2	-	-	-	-	281	1	4%	-50%	278	1	3%	-50%	277	1	2%	-50%
	SB	197	3	-	-	-	-	213	3	8%	0%	212	3	8%	0%	207	2	5%	-33%
A530 King Street (between Whatcroft Hall Lane and Davenham Road)	NB	1,009	17	1,002	17	-1%	0%	1,024	40	1%	135%	1,030	31	2%	82%	982	18	-3%	6%
	SB	706	15	702	15	-1%	0%	940	38	33%	153%	901	30	28%	100%	884	19	25%	27%
Davenham Road (between Shurlach	EB	243	0	237	0	-2%	0%	150	23	-38%	0%	176	15	-28%	0%	132	5	-46%	0%
	WB	328	0	349	0	6%	0%	483	23	47%	0%	497	15	52%	0%	371	5	13%	0%

Location	Direction	2030 baseline flows		AP1 revised scheme flows – utilities scenario		Utilities scenario - % change from 2030 baseline		AP1 revised scheme flows - scenario 1		Scenario 1 - % change from 2030 baseline		AP1 revised scheme flows - scenario 2		Scenario 2 - % change from 2030 baseline		AP1 revised scheme flows - scenario 3		Scenario 3 - % change from 2030 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
Lane and A530 King Street)																			
A556 Shurlach Road off-slip (between A556 Shurlach Road and A533 Davenham Bypass)	SB	344	17	338	17	-2%	0%	435	17	26%	0%	411	17	19%	0%	385	18	12%	6%
A530 King Street (between Davenham Road and Gadbrook Distribution Centre)	NB	806	17	800	17	-1%	0%	796	19	-1%	12%	808	19	0%	12%	763	16	-5%	-6%
	SB	660	15	688	15	4%	0%	1,154	19	75%	27%	1,122	17	70%	13%	859	17	30%	13%
A530 King Street (between B5082 Pennys Lane diversion and A556 Shurlach Road)	NB	805	16	799	16	-1%	0%	807	30	0%	88%	827	40	3%	150%	1,252	36	56%	125%
	SB	686	17	714	17	4%	0%	1,193	32	74%	88%	1,170	40	71%	135%	1,421	31	107%	82%
B5082 Pennys Lane diversion (between Pennys Lane and A556 Shurlach Road)	EB	321	2	294	2	-8%	0%	223	3	-31%	50%	209	3	-35%	50%	529	4	65%	100%
	WB	300	6	273	6	-9%	0%	218	8	-27%	33%	199	7	-34%	17%	514	11	71%	83%
Birches Lane diversion (between A556 Shurlach Road	NB	2	0	3	0	50%	0%	7	0	250%	0%	37	0	1750%	0%	7	0	250%	0%
	SB	164	3	165	3	1%	0%	188	3	15%	0%	165	3	1%	0%	157	3	-4%	0%

Location	Direction	2030 baseline flows		AP1 revised scheme flows – utilities scenario		Utilities scenario - % change from 2030 baseline		AP1 revised scheme flows - scenario 1		Scenario 1 - % change from 2030 baseline		AP1 revised scheme flows - scenario 2		Scenario 2 - % change from 2030 baseline		AP1 revised scheme flows - scenario 3		Scenario 3 - % change from 2030 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
and B5082 Holmes Chapel Road)																			
Gadbrook Road (between East Avenue and A556 Shurlach Road)	NB	154	0	202	1	31%	0%	172	0	12%	0%	173	0	12%	0%	154	0	0%	0%
	SB	272	3	274	3	1%	0%	276	2	1%	-33%	275	2	1%	-33%	277	3	2%	0%
East Avenue (between Gadbrook Road and Grange Road)	NB	33	0	47	0	42%	0%	46	0	39%	0%	46	0	39%	0%	34	0	3%	0%
	SB	48	3	49	3	2%	0%	43	3	-10%	0%	41	3	-15%	0%	48	3	0%	0%
A556 Shurlach Road (between A530 King Street and B5082 Pennys Lane)	EB	1,793	35	1,769	35	-1%	0%	1,704	68	-5%	94%	1,727	75	-4%	114%	1,493	45	-17%	29%
	WB	1,474	44	1,556	44	6%	0%	1,783	79	21%	80%	1,792	85	22%	93%	1,572	52	7%	18%
East Avenue (between Grange Road and South Drive)	NB	35	0	49	0	40%	0%	48	0	37%	0%	48	0	37%	0%	36	0	3%	0%
	SB	43	3	44	3	2%	0%	37	3	-14%	0%	35	3	-19%	0%	44	3	2%	0%
West Avenue (between Gadbrook Road and Grange Road)	NB	34	0	30	0	-12%	0%	45	1	32%	0%	46	1	35%	0%	33	0	-3%	0%
	SB	7	0	8	0	14%	0%	8	0	14%	0%	7	0	0%	0%	7	0	0%	0%
Grange Road (between West	EB	7	0	7	0	0%	0%	8	0	14%	0%	8	0	14%	0%	6	0	-14%	0%
	WB	0	0	0	0	0%	0%	0	0	0%	0%	0	0	0%	0%	0	0	0%	0%

Location	Direction	2030 baseline flows		AP1 revised scheme flows – utilities scenario		Utilities scenario - % change from 2030 baseline		AP1 revised scheme flows - scenario 1		Scenario 1 - % change from 2030 baseline		AP1 revised scheme flows - scenario 2		Scenario 2 - % change from 2030 baseline		AP1 revised scheme flows - scenario 3		Scenario 3 - % change from 2030 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
Avenue and East Avenue)																			
East Avenue (between South Drive and Central Road)	NB	25	0	26	0	4%	0%	27	0	8%	0%	27	0	8%	0%	26	0	4%	0%
	SB	72	3	61	3	-15%	0%	54	3	-25%	0%	52	3	-28%	0%	73	3	1%	0%
Central Road (between West Avenue and East Avenue)	NB	1	0	1	0	0%	0%	1	0	0%	0%	1	0	0%	0%	1	0	0%	0%
	SB	25	0	26	0	4%	0%	27	0	8%	0%	25	0	0%	0%	25	0	0%	0%
A556 Shurlach Road (between B5082 Pennys Lane and Birches Lane)	NB	1,462	33	1,467	33	0%	0%	1,476	67	1%	103%	1,514	74	4%	124%	1,493	45	2%	36%
	SB	1,181	38	1,289	38	9%	0%	1,675	71	42%	87%	1,745	78	48%	105%	1,572	52	33%	37%
East Avenue (between Central Road and North Drive)	NB	25	0	26	0	4%	0%	27	0	8%	0%	27	0	8%	0%	26	0	4%	0%
	SB	48	3	36	3	-25%	0%	28	3	-42%	0%	28	3	-42%	0%	49	3	2%	0%
Greenway Drive (between Agecroft Road and Belmont Road)	EB	11	0	11	0	0%	0%	11	0	0%	0%	12	0	9%	0%	12	0	9%	0%
	WB	13	3	13	3	0%	0%	13	3	0%	0%	13	3	0%	0%	13	3	0%	0%
North Drive (between West Avenue and East Avenue)	EB	40	0	45	0	13%	0%	57	1	43%	0%	57	1	43%	0%	42	0	5%	0%
	WB	0	0	0	0	0%	0%	0	0	0%	0%	0	0	0%	0%	0	0	0%	0%

Location	Direction	2030 baseline flows		AP1 revised scheme flows – utilities scenario		Utilities scenario - % change from 2030 baseline		AP1 revised scheme flows - scenario 1		Scenario 1 - % change from 2030 baseline		AP1 revised scheme flows - scenario 2		Scenario 2 - % change from 2030 baseline		AP1 revised scheme flows - scenario 3		Scenario 3 - % change from 2030 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
A50 Holmes Chapel Road (between Booth Bed Lane and B5081 Middlewich Road)	NB	164	1	-	-	-	-	194	1	18%	0%	195	1	19%	0%	197	1	20%	0%
	SB	116	2	-	-	-	-	118	3	2%	50%	114	2	-2%	0%	114	2	-2%	0%
Birches Lane/Station Road (between A556 Shurlach Road and School Lane)	NB	234	4	234	4	0%	0%	249	14	6%	250%	282	23	21%	475%	251	8	7%	100%
	SB	0	0	0	0	0%	0%	11	10	0%	0%	20	19	0%	0%	5	5	0%	0%
A556 Shurlach Road (between Birches Lane and A559 Manchester Road)	NB	1,228	29	1,233	29	0%	0%	1,239	63	1%	117%	1,253	70	2%	141%	1,248	41	2%	41%
	SB	1,344	40	1,451	40	8%	0%	1,895	74	41%	85%	1,979	81	47%	103%	0	0	-100%	-100%
A559 Manchester Road (between A530 Griffiths Road and A559 Hall Lane)	EB	603	14	600	14	0%	0%	630	15	4%	7%	629	15	4%	7%	612	17	1%	21%
	WB	842	16	739	16	-12%	0%	733	16	-13%	0%	706	16	-16%	0%	768	15	-9%	-6%
Station Road (between School Lane and A559 Manchester Road)	NB	168	4	170	4	1%	0%	163	4	-3%	0%	166	4	-1%	0%	165	4	-2%	0%
	SB	0	0	0	0	0%	0%	14	1	0%	0%	36	1	0%	0%	11	1	0%	0%
School Lane (between Station Road and Stubbs Lane)	NB	66	0	64	0	-3%	0%	64	0	-3%	0%	65	0	-2%	0%	78	0	18%	0%
	EB	450	11	439	11	-2%	0%	470	12	4%	9%	467	12	4%	9%	469	13	4%	18%

Location	Direction	2030 baseline flows		AP1 revised scheme flows – utilities scenario		Utilities scenario - % change from 2030 baseline		AP1 revised scheme flows - scenario 1		Scenario 1 - % change from 2030 baseline		AP1 revised scheme flows - scenario 2		Scenario 2 - % change from 2030 baseline		AP1 revised scheme flows - scenario 3		Scenario 3 - % change from 2030 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
A559 Manchester Road (between A559 Hall Lane and Stubbs Lane)	WB	576	13	549	13	-5%	0%	550	13	-5%	0%	536	14	-7%	8%	550	13	-5%	0%

Table 14-8: 2030 future baseline and with the AP1 revised scheme construction traffic (vehicles), PM peak hour (17:00–18:00)

Location	Direction	2030 baseline flows		AP1 revised scheme flows – utilities scenario		Utilities scenario - % change from 2030 baseline		AP1 revised scheme flows - scenario 1		Scenario 1 - % change from 2030 baseline		AP1 revised scheme flows - scenario 2		Scenario 2 - % change from 2030 baseline		AP1 revised scheme flows - scenario 3		Scenario 3 - % change from 2030 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
Clive Green Lane (between A54 Middlewich Road and Coalpit Lane)	EB	392	3	571	3	46%	0%	274	37	-30%	1133%	306	42	-22%	1300%	0	0	-100%	-100%
	WB	428	18	391	17	-9%	-6%	299	52	-30%	189%	379	57	-11%	217%	0	0	-100%	-100%
A530 Nantwich Road (between Moss Lane and Brookhouse Lane)	NB	486	4	451	3	-7%	-25%	516	64	6%	1500%	545	45	12%	1025%	1,183	59	143%	1375%
	SB	375	4	345	4	-8%	0%	380	65	1%	1525%	385	45	3%	1025%	838	48	123%	1100%
	NB	1,038	19	754	19	-27%	0%	1,104	63	6%	232%	1,160	79	12%	316%	1,183	59	14%	211%

Location	Direction	2030 baseline flows		AP1 revised scheme flows – utilities scenario		Utilities scenario - % change from 2030 baseline		AP1 revised scheme flows - scenario 1		Scenario 1 - % change from 2030 baseline		AP1 revised scheme flows - scenario 2		Scenario 2 - % change from 2030 baseline		AP1 revised scheme flows - scenario 3		Scenario 3 - % change from 2030 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
A530 Nantwich Road (between Brookhouse Lane and Clive Green Lane)	SB	712	6	569	6	-20%	0%	732	50	3%	733%	759	66	7%	1000%	793	48	11%	700%
Swanlow Drive (between B5074 Swanlow Lane and Darnhall School Lane)	EB	18	1	18	1	0%	0%	19	1	6%	0%	18	1	0%	0%	18	1	0%	0%
	WB	35	1	44	1	26%	0%	36	1	3%	0%	38	1	9%	0%	39	1	11%	0%
B5074 Swanlow Lane (between Moors Lane and Swanlow Drive)	NB	576	5	637	3	11%	-40%	607	4	5%	-20%	609	3	6%	-40%	635	3	10%	-40%
	SB	533	4	589	4	11%	0%	686	5	29%	25%	672	5	26%	25%	596	4	12%	0%
Bell Lane (between A54 Middlewich Road and A533 Bostock Road)	NB	208	0	101	0	-51%	0%	146	1	-30%	0%	0	0	-100%	0%	0	0	-100%	0%
	SB	162	0	2	0	-99%	0%	215	0	33%	0%	0	0	-100%	0%	0	0	-100%	0%
Middlewich Eastern Bypass (between A533 Booth Lane and Cledford Lane)	NB	28	0	29	0	4%	0%	74	0	164%	0%	77	0	175%	0%	71	0	154%	0%
	SB	561	14	568	14	1%	0%	610	14	9%	0%	641	14	14%	0%	609	21	9%	50%
Darnhall School Lane (between Glebe Green Drive and B5074 Swanlow Lane)	NB	2	1	2	1	0%	0%	1	1	-50%	0%	1	1	-50%	0%	1	1	-50%	0%
	SB	166	1	235	1	42%	0%	249	1	50%	0%	249	1	50%	0%	243	1	46%	0%

Location	Direction	2030 baseline flows		AP1 revised scheme flows – utilities scenario		Utilities scenario - % change from 2030 baseline		AP1 revised scheme flows - scenario 1		Scenario 1 - % change from 2030 baseline		AP1 revised scheme flows - scenario 2		Scenario 2 - % change from 2030 baseline		AP1 revised scheme flows - scenario 3		Scenario 3 - % change from 2030 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
Durham Drive/Glebe Green Drive (between Darnhall School Lane and Townsfields Drive)	NB	165	2	243	2	47%	0%	250	2	52%	0%	250	2	52%	0%	246	2	49%	0%
	SB	42	2	42	2	0%	0%	43	2	2%	0%	42	2	0%	0%	42	2	0%	0%
Durham Drive/Dover Drive/Mount Pleasant Drive (between Townsfields Drive and Denbigh Drive)	NB	162	2	231	2	43%	0%	248	2	53%	0%	244	2	51%	0%	240	2	48%	0%
	SB	111	2	129	2	16%	0%	101	2	-9%	0%	99	2	-11%	0%	122	2	10%	0%
Mount Pleasant Drive (between Denbigh Drive and Woodford Lane West)	EB	131	0	149	0	14%	0%	122	0	-7%	0%	119	0	-9%	0%	142	0	8%	0%
	WB	129	0	199	0	54%	0%	219	0	70%	0%	213	0	65%	0%	208	0	61%	0%
Cledford Lane (between Jones Lane and Bradwall Road)	EB	192	0	205	0	7%	0%	222	0	16%	0%	229	0	19%	0%	238	0	24%	0%
	WB	19	0	19	0	0%	0%	18	0	-5%	0%	18	0	-5%	0%	18	0	-5%	0%
Woodford Lane West (between Mount Pleasant Drive and A54 Oakmere Road)	NB	137	0	155	0	13%	0%	128	0	-7%	0%	125	0	-9%	0%	148	0	8%	0%
	SB	140	2	209	2	49%	0%	230	2	64%	0%	224	2	60%	0%	218	2	56%	0%
Coalpit Lane (between Clive Green Lane and Birch Lane)	NB	167	0	0	0	-100%	0%	77	0	-54%	0%	0	0	-100%	0%	183	0	10%	0%
	SB	173	0	0	0	-100%	0%	234	0	35%	0%	0	0	-100%	0%	342	0	98%	0%

Location	Direction	2030 baseline flows		AP1 revised scheme flows – utilities scenario		Utilities scenario - % change from 2030 baseline		AP1 revised scheme flows - scenario 1		Scenario 1 - % change from 2030 baseline		AP1 revised scheme flows - scenario 2		Scenario 2 - % change from 2030 baseline		AP1 revised scheme flows - scenario 3		Scenario 3 - % change from 2030 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
St Ann's Road (between Sutton Lane and Manor Lane)	NB	174	0	173	0	-1%	0%	114	0	-34%	0%	117	0	-33%	0%	142	0	-18%	0%
	SB	116	0	100	0	-14%	0%	154	0	33%	0%	149	0	28%	0%	104	0	-10%	0%
Clive Green Lane realignment/Clive Lane (between A530 Nantwich Road and A54 Middlewich Road)	NB	428	18	391	17	-9%	-6%	491	17	15%	-6%	526	17	23%	-6%	467	19	9%	6%
	SB	390	3	569	3	46%	0%	134	1	-66%	-67%	172	1	-56%	-67%	396	5	2%	67%
St Ann's Road (between Manor Lane and King Edward Street)	NB	194	0	195	0	1%	0%	135	0	-30%	0%	137	0	-29%	0%	162	0	-16%	0%
	SB	147	1	114	1	-22%	0%	187	1	27%	0%	182	1	24%	0%	124	1	-16%	0%
A54 Middlewich Road (between Clive Lane and A54 Winsford Bypass)	EB	549	3	568	4	3%	33%	577	2	5%	-33%	559	3	2%	0%	534	4	-3%	33%
	WB	904	2	853	2	-6%	0%	936	2	4%	0%	962	3	6%	50%	909	3	1%	50%
St Ann's Road (between King Edward Street and A530 Nantwich Road)	NB	196	0	215	0	10%	0%	134	0	-32%	0%	136	0	-31%	0%	173	0	-12%	0%
	SB	169	1	143	1	-15%	0%	207	1	22%	0%	198	1	17%	0%	156	1	-8%	0%
A54 Kinderton Street (between A533 Leadsmithy Street and King Street)	EB	818	24	763	24	-7%	0%	958	49	17%	104%	947	50	16%	108%	1,012	40	24%	67%
	WB	715	19	715	19	0%	0%	686	45	-4%	137%	685	46	-4%	142%	698	35	-2%	84%

Location	Direction	2030 baseline flows		AP1 revised scheme flows – utilities scenario		Utilities scenario - % change from 2030 baseline		AP1 revised scheme flows - scenario 1		Scenario 1 - % change from 2030 baseline		AP1 revised scheme flows - scenario 2		Scenario 2 - % change from 2030 baseline		AP1 revised scheme flows - scenario 3		Scenario 3 - % change from 2030 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
A54 St Michael's Way (between A533 Leadsmithy Street and The Bull Ring)	EB	890	26	802	25	-10%	-4%	995	51	12%	96%	975	52	10%	100%	1,044	42	17%	62%
	WB	926	18	892	18	-4%	0%	893	45	-4%	150%	893	45	-4%	150%	908	35	-2%	94%
A54 St Michael's Way (between The Bull Ring and A54 Chester Road)	EB	924	24	837	23	-9%	-4%	1,030	49	11%	104%	1,011	50	9%	108%	1,082	40	17%	67%
	WB	792	16	755	16	-5%	0%	766	43	-3%	169%	766	44	-3%	175%	782	33	-1%	106%
Brereton Lane (between Cledford Lane and A54 Holmes Chapel Road)	NB	156	0	169	0	8%	0%	187	0	20%	0%	194	0	24%	0%	202	0	29%	0%
	SB	11	0	10	0	-9%	0%	10	0	-9%	0%	9	0	-18%	0%	9	0	-18%	0%
A54 Chester Road (between A530 Newton Bank and A54 St Michael's Way)	EB	1,274	24	1,121	23	-12%	-4%	1,568	49	23%	104%	1,546	50	21%	108%	1,428	40	12%	67%
A54 Middlewich Road realignment (between Clive Lane and A533 Northwich Road diversion)	NB	394	18	281	18	-29%	0%	616	25	56%	39%	0	0	-100%	-100%	0	0	-100%	-100%
	SB	526	7	509	7	-3%	0%	668	15	27%	114%	0	0	-100%	-100%	0	0	-100%	-100%
A54 Holmes Chapel Road (between King	EB	786	28	742	28	-6%	0%	781	54	-1%	93%	798	55	2%	96%	860	45	9%	61%
	WB	754	26	778	26	-3%	0%	702	52	-7%	100%	710	53	-6%	104%	708	42	-6%	62%

Location	Direction	2030 baseline flows		AP1 revised scheme flows – utilities scenario		Utilities scenario - % change from 2030 baseline		AP1 revised scheme flows - scenario 1		Scenario 1 - % change from 2030 baseline		AP1 revised scheme flows - scenario 2		Scenario 2 - % change from 2030 baseline		AP1 revised scheme flows - scenario 3		Scenario 3 - % change from 2030 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
Street and B5309 Centurion Way)																			
A54 Chester Road (between A530 Croxton Lane and A530 Newton Bank)	EB	1,049	24	901	23	-14%	-4%	1,249	48	19%	100%	1,242	50	18%	108%	1,077	40	3%	67%
	WB	1,024	17	943	17	-8%	0%	1,083	43	6%	153%	1,074	44	5%	159%	1,048	33	2%	94%
King Street (between New King Street and Hadrian Way)	NB	454	1	462	1	2%	0%	563	1	24%	0%	543	1	20%	0%	533	1	17%	0%
	SB	53	1	50	1	-6%	0%	49	1	-8%	0%	48	1	-9%	0%	48	1	-9%	0%
A54 Chester Road (between A530 Croxton Lane and A533 Northwich Road)	EB	769	21	622	20	-19%	-5%	938	47	22%	124%	905	48	18%	129%	794	37	3%	76%
	WB	707	17	679	17	-4%	0%	650	43	-8%	153%	641	44	-9%	159%	664	33	-6%	94%
Coalpit Lane (between Birch Lane and A54 Chester Road)	NB	20	0	20	0	0%	0%	21	0	5%	0%	21	0	5%	0%	42	0	110 %	0%
	SB	4	0	5	0	25%	0%	4	0	0%	0%	4	0	0%	0%	4	0	0%	0%
B5309 Centurion Way (between B5081 Byley Road and A54 Holmes Chapel Road)	EB	507	15	532	14	5%	-7%	467	39	-8%	160%	460	29	-9%	93%	461	29	-9%	93%
	WB	769	32	748	32	-3%	0%	944	51	23%	59%	947	41	23%	28%	913	39	19%	22%
A54 Middlewich Road (between Clive Lane and Birch Lane)	EB	394	18	281	18	-29%	0%	615	25	56%	39%	0	0	-100%	-100%	0	0	-100%	-100%
	WB	526	7	510	7	-3%	0%	668	15	27%	114%	0	0	-100%	-100%	0	0	-100%	-100%

Location	Direction	2030 baseline flows		AP1 revised scheme flows – utilities scenario		Utilities scenario - % change from 2030 baseline		AP1 revised scheme flows - scenario 1		Scenario 1 - % change from 2030 baseline		AP1 revised scheme flows - scenario 2		Scenario 2 - % change from 2030 baseline		AP1 revised scheme flows - scenario 3		Scenario 3 - % change from 2030 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
A54 Holmes Chapel Road (between B5309 Centurion Way and Brereton Lane)	EB	787	36	779	36	-1%	0%	710	78	-10%	117%	670	77	-15%	114%	740	53	-6%	47%
	WB	770	50	781	50	1%	0%	897	87	16%	74%	904	86	17%	72%	865	68	12%	36%
B5309 Centurion Way (between White Park Close and B5081 Byley Road)	EB	297	12	313	11	5%	-8%	359	36	21%	200%	310	26	4%	117%	313	26	5%	117%
	WB	580	24	592	24	2%	0%	580	43	0%	79%	570	33	-2%	38%	574	31	-1%	29%
A54 Middlewich Road realignment (between A533 Northwich Road diversion and Birch Lane)	EB	394	18	281	18	-29%	0%	615	25	56%	39%	977	48	148 %	167%	942	37	139%	106%
	WB	526	7	510	7	-3%	0%	668	15	27%	114%	872	44	66%	529%	988	33	88%	371%
A54 Holmes Chapel Road (between Brereton Lane and Poolford Lane)	EB	675	31	679	30	1%	-3%	608	70	-10%	126%	573	69	-15%	123%	638	46	-5%	48%
	WB	659	52	672	53	2%	2%	812	89	23%	71%	811	88	23%	69%	761	70	15%	35%
B5309 Centurion Way (between B5309 King Street and White Park Close)	NB	401	24	401	24	0%	0%	361	43	-10%	79%	369	33	-8%	38%	383	31	-4%	29%
	SB	323	9	326	8	1%	-11%	336	33	4%	267%	307	24	-5%	167%	324	24	0%	167%
B5308 Middlewich Road (A54 Chester	EB	545	5	-	-	-	-	522	4	-4%	-20%	494	4	-9%	-20%	506	4	-7%	-20%
	WB	287	1	-	-	-	-	285	1	-1%	0%	285	1	-1%	0%	285	1	-1%	0%

Location	Direction	2030 baseline flows		AP1 revised scheme flows – utilities scenario		Utilities scenario - % change from 2030 baseline		AP1 revised scheme flows - scenario 1		Scenario 1 - % change from 2030 baseline		AP1 revised scheme flows - scenario 2		Scenario 2 - % change from 2030 baseline		AP1 revised scheme flows - scenario 3		Scenario 3 - % change from 2030 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
Road and A50 Knutsford Road)																			
A50 Knutsford Road (between A535 Macclesfield Road and B5308 Middlewich Road)	NB	515	3	-	-	-	-	528	4	3%	33%	533	4	3%	33%	523	4	2%	33%
	SB	1,047	8	-	-	-	-	1,036	8	-1%	0%	1,017	8	-3%	0%	1,029	8	-2%	0%
B5081 Byley Road (between B5309 Centurion Way and Moss Lane)	NB	330	9	294	9	-11%	0%	511	8	55%	-11%	492	9	49%	0%	461	9	40%	0%
	SB	352	3	358	3	2%	0%	286	4	-19%	33%	285	4	-19%	33%	283	4	-20%	33%
B5309 King Street (between B5309 Centurion Way and A530 Croxton Lane)	NB	784	31	793	31	1%	0%	847	51	8%	65%	839	41	7%	32%	848	39	8%	26%
	SB	365	7	364	6	0%	0%	359	32	-2%	357%	335	22	-8%	214%	359	22	-2%	214%
A533 Bostock Road (between A533 Northwich Road diversion and London Road)	NB	394	10	271	10	-31%	0%	526	10	34%	0%	498	9	26%	-10%	597	9	52%	-10%
	SB	577	2	437	2	-24%	0%	467	3	-19%	50%	520	3	-10%	50%	599	3	4%	50%
London Road (between A533 Bostock Road and Brick Kiln Lane)	NB	354	0	232	0	-34%	0%	489	1	38%	0%	461	1	30%	0%	560	1	58%	0%
	SB	309	1	191	1	-38%	0%	255	2	-17%	100%	277	2	-10%	100%	358	2	16%	100%

Location	Direction	2030 baseline flows		AP1 revised scheme flows – utilities scenario		Utilities scenario - % change from 2030 baseline		AP1 revised scheme flows - scenario 1		Scenario 1 - % change from 2030 baseline		AP1 revised scheme flows - scenario 2		Scenario 2 - % change from 2030 baseline		AP1 revised scheme flows - scenario 3		Scenario 3 - % change from 2030 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
B5081 Byley Road (between Moss Lane and B5082 Holmes Chapel Road)	NB	121	1	-	-	-	-	135	1	12%	0%	210	1	74%	0%	194	1	60%	0%
	SB	548	4	-	-	-	-	543	4	-1%	0%	545	4	-1%	0%	562	4	3%	0%
A530 King Street (between Whatcroft Hall Lane and Davenham Road)	NB	835	9	821	9	-2%	0%	942	32	13%	256%	890	23	7%	156%	791	14	-5%	56%
	SB	1,044	8	1,030	8	-1%	0%	941	31	-10%	288%	956	22	-8%	175%	976	14	-7%	75%
Davenham Road (between Shurlach Lane and A530 King Street)	EB	234	0	242	0	3%	0%	218	23	-7%	0%	244	15	4%	0%	285	5	22%	0%
	WB	116	0	115	0	-1%	0%	105	23	-9%	0%	99	15	-15%	0%	101	5	-13%	0%
A556 Shurlach Road off-slip (between A556 Shurlach Road and A533 Davenham Bypass)	SB	844	9	840	9	0%	0%	922	9	9%	0%	915	9	8%	0%	907	10	7%	11%
A530 King Street (between Davenham Road and Gadbrook Distribution Centre)	NB	765	9	757	9	-1%	0%	772	11	1%	22%	762	10	0%	11%	728	12	-5%	33%
	SB	815	8	806	8	-1%	0%	815	12	0%	50%	830	10	2%	25%	749	12	-8%	50%
A530 King Street (between B5082 Pennys Lane diversion	NB	770	9	763	9	-1%	0%	790	23	3%	156%	789	32	2%	256%	1,028	23	34%	156%
	SB	809	8	800	8	-1%	0%	822	24	2%	200%	846	31	5%	288%	1,270	23	57%	188%

Location	Direction	2030 baseline flows		AP1 revised scheme flows – utilities scenario		Utilities scenario - % change from 2030 baseline		AP1 revised scheme flows - scenario 1		Scenario 1 - % change from 2030 baseline		AP1 revised scheme flows - scenario 2		Scenario 2 - % change from 2030 baseline		AP1 revised scheme flows - scenario 3		Scenario 3 - % change from 2030 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
and A556 Shurlach Road)																			
B5082 Pennys Lane diversion (between Pennys Lane and A556 Shurlach Road)	EB	243	1	225	1	-7%	0%	251	2	3%	100%	265	2	9%	100%	400	2	65%	100%
	WB	232	2	214	2	-8%	0%	216	3	-7%	50%	217	2	-6%	0%	136	3	-41%	50%
Birches Lane diversion (between A556 Shurlach Road and B5082 Holmes Chapel Road)	NB	167	0	179	0	7%	0%	221	0	32%	0%	194	0	16%	0%	254	0	52%	0%
	SB	202	1	206	1	2%	0%	202	1	0%	0%	217	2	7%	100%	176	1	-13%	0%
Gadbrook Road (between East Avenue and A556 Shurlach Road)	NB	293	0	347	1	18%	0%	297	0	1%	0%	298	0	2%	0%	295	1	1%	0%
	SB	156	0	157	0	1%	0%	368	1	136%	0%	369	1	137%	0%	368	1	136%	0%
East Avenue (between Gadbrook Road and Grange Road)	NB	147	1	153	1	4%	0%	92	0	-37%	-100%	91	0	-38%	-100%	88	0	-40%	-100%
	SB	8	3	8	3	0%	0%	43	3	438%	0%	44	3	450%	0%	42	3	425%	0%
A556 Shurlach Road (between A530 King Street and B5082 Pennys Lane)	EB	1,583	22	1,568	22	-1%	0%	1,617	54	2%	145%	1,564	60	-1%	173%	1,374	35	-13%	59%
	WB	1,773	15	1,840	15	4%	0%	1,898	51	7%	240%	1,873	56	6%	273%	1,665	28	-6%	87%
	NB	148	1	154	1	4%	0%	94	0	-36%	-100%	92	0	-38%	-100%	89	0	-40%	-100%

Location	Direction	2030 baseline flows		AP1 revised scheme flows – utilities scenario		Utilities scenario - % change from 2030 baseline		AP1 revised scheme flows - scenario 1		Scenario 1 - % change from 2030 baseline		AP1 revised scheme flows - scenario 2		Scenario 2 - % change from 2030 baseline		AP1 revised scheme flows - scenario 3		Scenario 3 - % change from 2030 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
East Avenue (between Grange Road and South Drive)	SB	10	3	10	3	0%	0%	44	3	340%	0%	45	3	350%	0%	43	3	330%	0%
West Avenue (between Gadbrook Road and Grange Road)	NB	35	1	22	0	-37%	-100%	36	1	3%	0%	35	1	0%	0%	35	1	0%	0%
	SB	11	0	10	0	-9%	0%	10	0	-9%	0%	10	0	-9%	0%	10	0	-9%	0%
Grange Road (between West Avenue and East Avenue)	EB	1	0	1	0	0%	0%	1	0	0%	0%	1	0	0%	0%	2	0	100%	0%
	WB	1	0	1	0	0%	0%	1	0	0%	0%	1	0	0%	0%	1	0	0%	0%
East Avenue (between South Drive and Central Road)	NB	176	1	182	1	3%	0%	96	0	-45%	-100%	95	0	-46%	-100%	92	0	-48%	-100%
	SB	34	3	34	3	0%	0%	43	3	26%	0%	44	3	29%	0%	43	3	26%	0%
Central Road (between West Avenue and East Avenue)	NB	1	0	1	0	0%	0%	1	0	0%	0%	1	0	0%	0%	1	0	0%	0%
	SB	1	0	1	0	0%	0%	8	0	700%	0%	8	0	700%	0%	8	0	700%	0%
A556 Shurlach Road (between B5082 Pennys Lane and Birches Lane)	NB	1,340	21	1,340	21	0%	0%	1,382	53	3%	152%	1,323	59	-1%	181%	1,374	35	3%	67%
	SB	1,547	14	1,632	14	5%	0%	1,584	48	2%	243%	1,515	54	-2%	286%	1,665	28	8%	100%
	NB	175	1	181	1	3%	0%	95	0	-46%	-100%	94	0	-46%	-100%	91	0	-48%	-100%

Location	Direction	2030 baseline flows		AP1 revised scheme flows – utilities scenario		Utilities scenario - % change from 2030 baseline		AP1 revised scheme flows - scenario 1		Scenario 1 - % change from 2030 baseline		AP1 revised scheme flows - scenario 2		Scenario 2 - % change from 2030 baseline		AP1 revised scheme flows - scenario 3		Scenario 3 - % change from 2030 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
East Avenue (between Central Road and North Drive)	SB	33	3	32	3	-3%	0%	35	3	6%	0%	35	3	6%	0%	35	3	6%	0%
Greenway Drive (between Agecroft Road and Belmont Road)	EB	5	0	5	0	0%	0%	8	0	60%	0%	8	0	60%	0%	8	0	60%	0%
	WB	9	3	9	3	0%	0%	9	3	0%	0%	9	3	0%	0%	9	3	0%	0%
North Drive (between West Avenue and East Avenue)	EB	3	0	3	0	0%	0%	3	0	0%	0%	3	0	0%	0%	3	0	0%	0%
	WB	75	1	101	1	35%	0%	95	1	27%	0%	98	1	31%	0%	98	1	31%	0%
A50 Holmes Chapel Road (between Booth Bed Lane and B5081 Middlewich Road)	NB	147	1	-	-	-	-	152	1	3%	0%	149	1	1%	0%	152	1	3%	0%
	SB	235	1	-	-	-	-	237	1	1%	0%	242	1	3%	0%	241	1	3%	0%
Birches Lane/Station Road (between A556 Shurlach Road and School Lane)	NB	262	1	262	1	0%	0%	292	11	11%	1000%	228	20	-13%	1900%	284	6	8%	500%
	SB	0	0	0	0	0%	0%	11	10	0%	0%	20	19	0%	0%	5	5	0%	0%
A556 Shurlach Road (between Birches Lane and A559 Manchester Road)	NB	1,077	20	1,079	20	0%	0%	1,102	52	2%	160%	1,117	58	4%	190%	1,096	33	2%	65%
	SB	1,582	15	1,659	15	5%	0%	1,549	49	-2%	227%	1,490	56	-6%	273%	0	0	-100%	-100%
	EB	742	4	746	4	1%	0%	746	5	1%	25%	747	5	1%	25%	742	5	0%	25%

Location	Direction	2030 baseline flows		AP1 revised scheme flows – utilities scenario		Utilities scenario - % change from 2030 baseline		AP1 revised scheme flows - scenario 1		Scenario 1 - % change from 2030 baseline		AP1 revised scheme flows - scenario 2		Scenario 2 - % change from 2030 baseline		AP1 revised scheme flows - scenario 3		Scenario 3 - % change from 2030 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
A559 Manchester Road (between A530 Griffiths Road and A559 Hall Lane)	WB	844	7	787	7	-7%	0%	822	7	-3%	0%	839	7	-1%	0%	826	7	-2%	0%
Station Road (between School Lane and A559 Manchester Road)	NB	193	1	196	1	2%	0%	199	2	3%	100%	203	2	5%	100%	193	2	0%	100%
	SB	4	0	4	0	0%	0%	1	1	-75%	0%	1	1	-75%	0%	1	1	-75%	0%
School Lane (between Station Road and Stubbs Lane)	NB	74	0	69	0	-7%	0%	132	0	78%	0%	132	0	78%	0%	126	0	70%	0%
A559 Manchester Road (between A559 Hall Lane and Stubbs Lane)	EB	549	3	562	3	2%	0%	561	4	2%	33%	555	4	1%	33%	558	4	2%	33%
	WB	497	5	485	5	-2%	0%	473	6	-5%	20%	474	6	-5%	20%	462	6	-7%	20%

Figure 14-1: MA02 traffic flow changes between 2030 future baseline and AP1 revised scheme Utilities Scenario, AM peak hour

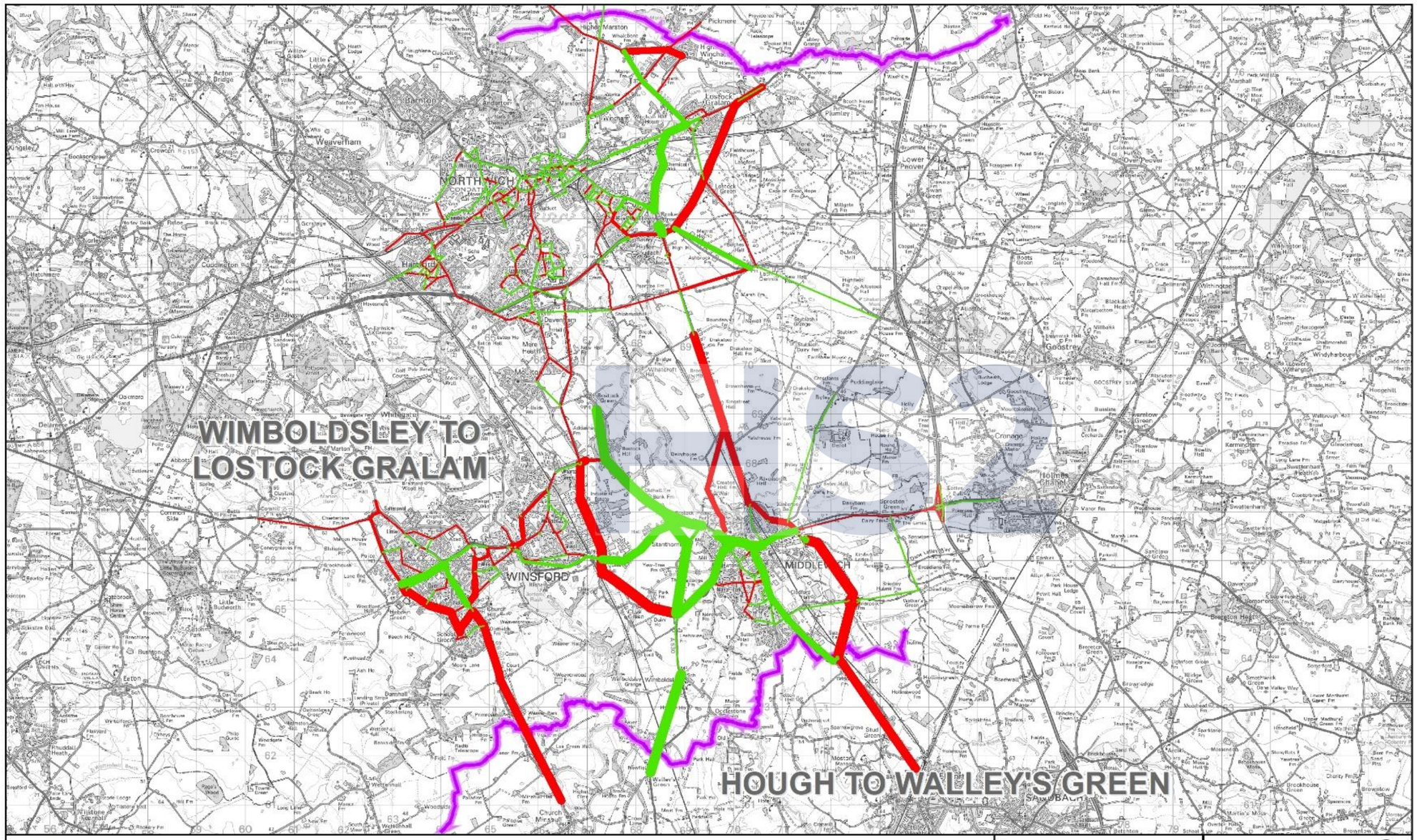


Figure 14-2: MA02 traffic flow changes between 2030 future baseline and AP1 revised scheme Utilities Scenario, PM peak hour

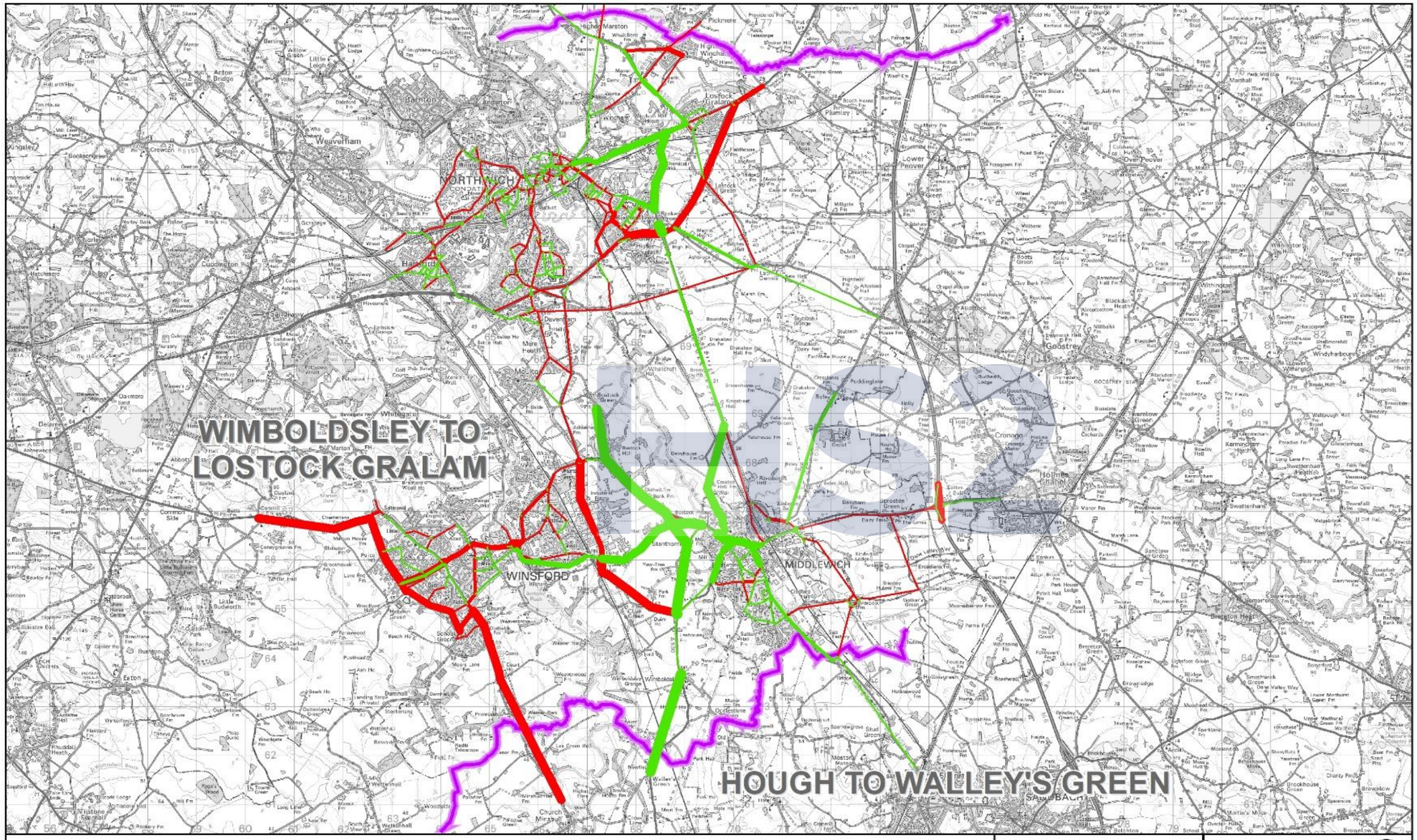


Figure 14-3: MA02 traffic flow changes between 2030 future baseline and AP1 revised scheme Scenario 1, AM peak hour

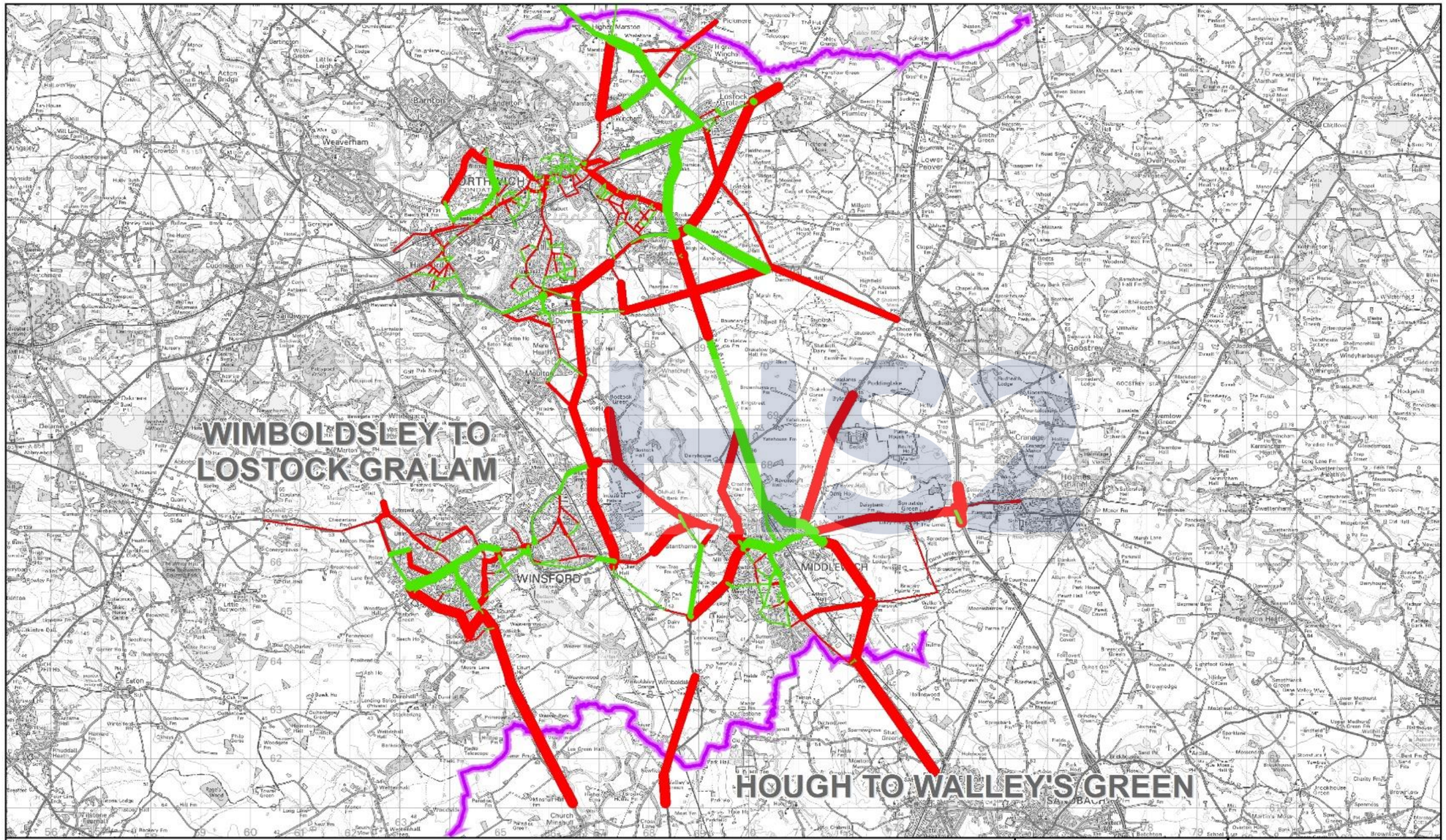


Figure 14-4: MA02 traffic flow changes between 2030 future baseline and AP1 revised scheme Scenario 1, PM peak hour

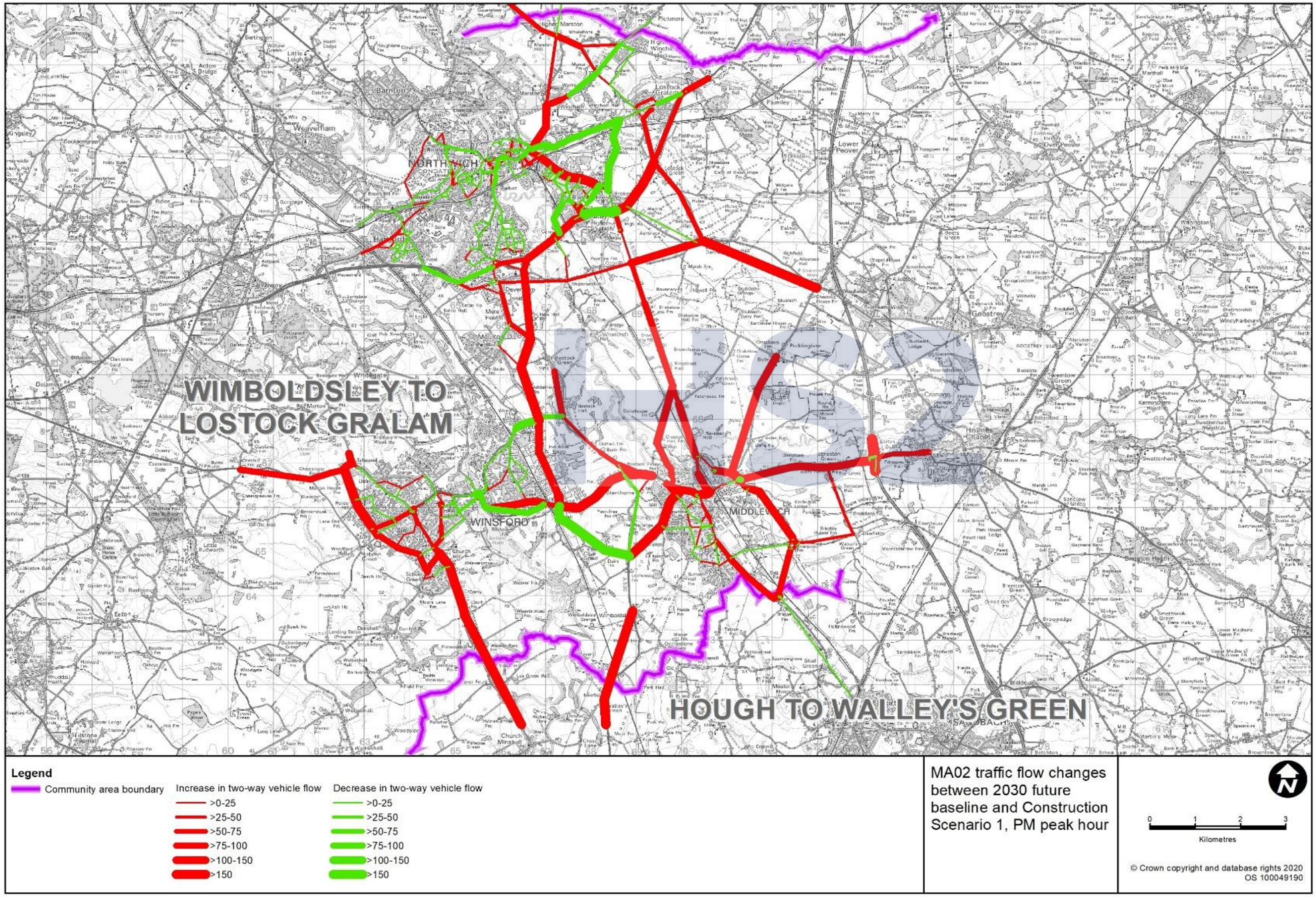


Figure 14-5: MA02 traffic flow changes between 2030 future baseline and AP1 revised scheme Scenario 2, AM peak hour

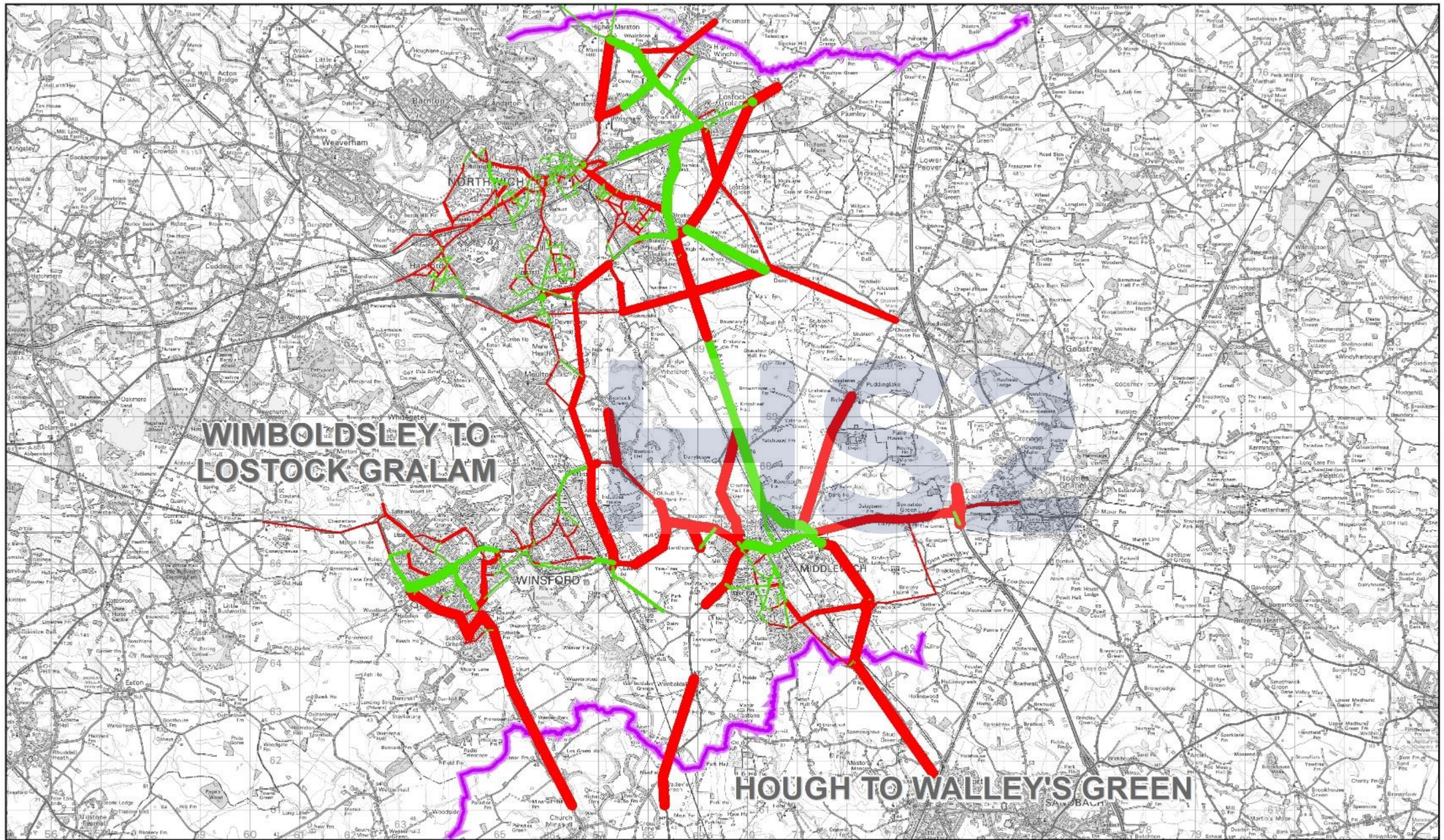


Figure 14-6: MA02 traffic flow changes between 2030 future baseline and AP1 revised scheme Scenario 2, PM peak hour

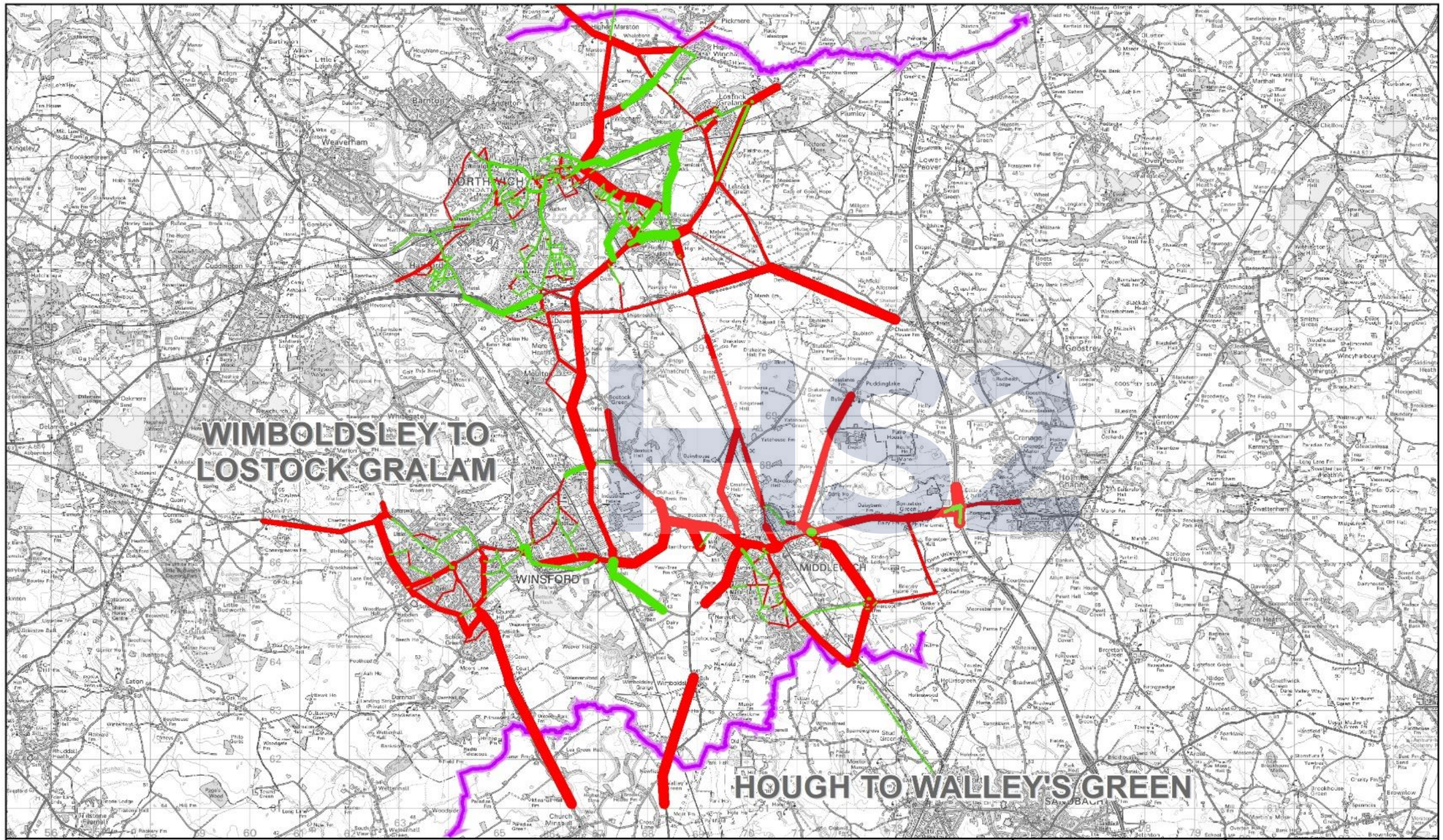


Figure 14-6.1: MA02 traffic flow changes between 2030 future baseline and AP1 revised scheme Scenario 3, AM peak hour

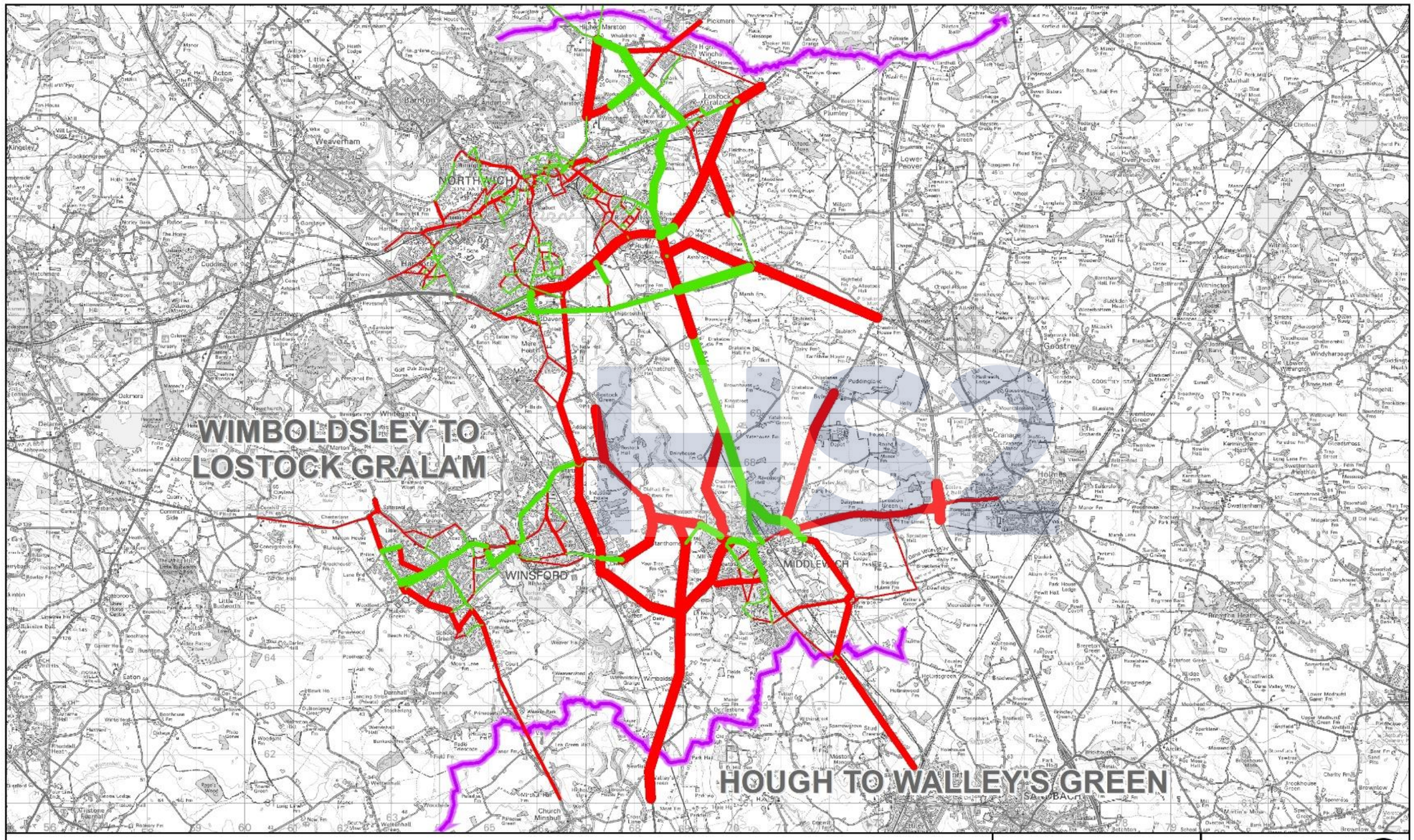
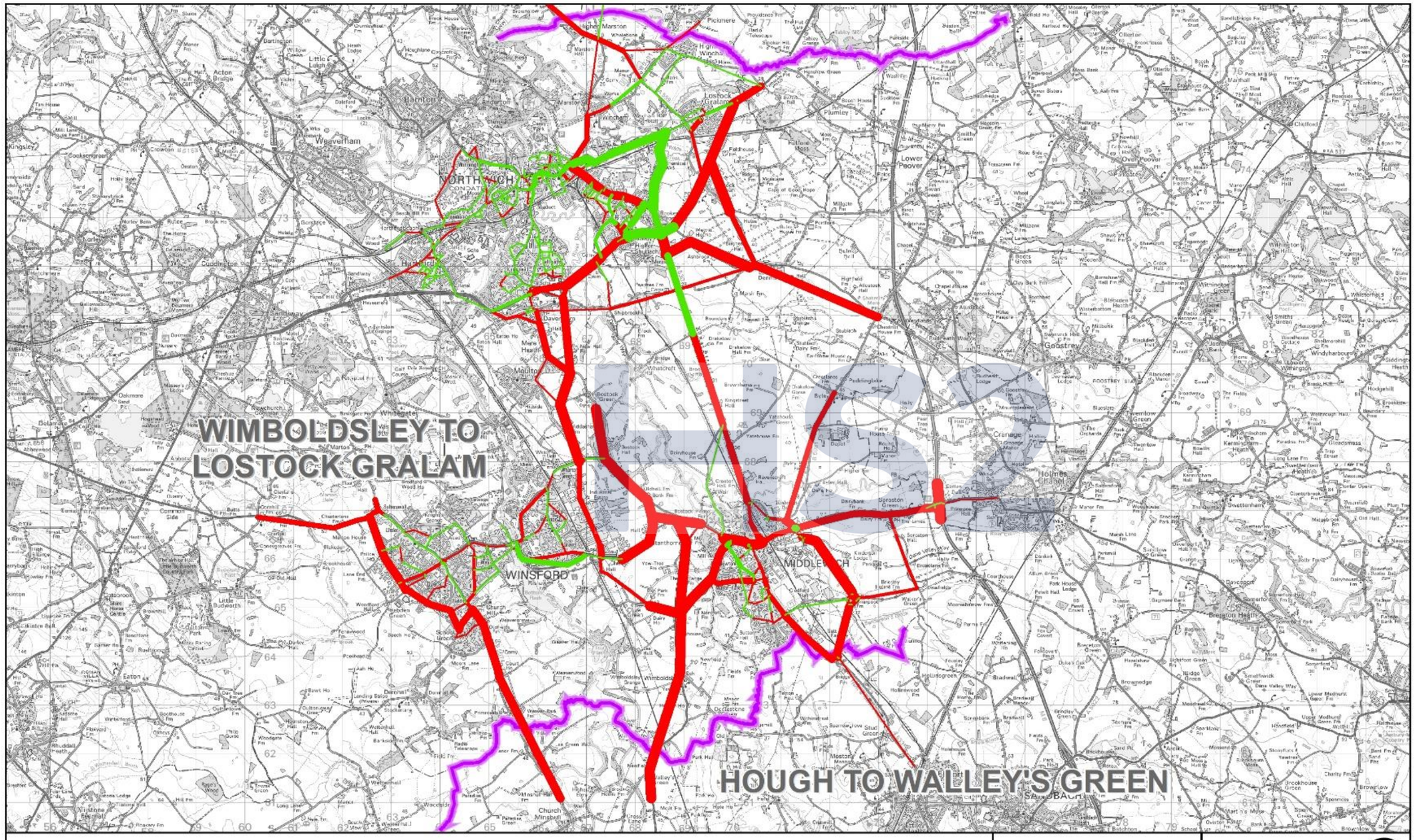


Figure 14-6.2: MA02 traffic flow changes between 2030 future baseline and AP1 revised scheme Scenario 3, PM peak hour



Junction performance

11.2.19 Junction capacity analysis is reported in Section 14-3 of the main TA. Updated junction capacity analysis has been undertaken for the AM and PM peak hours comparing junction operation in the 2030 future baseline scenario with the modelled scenarios for the AP1 revised scheme.

11.2.20 The following tables and commentary set out the performance at junctions where there is the potential for the AP1 revised scheme to have substantial impacts, including new temporary junctions and those junctions where temporary or permanent changes are proposed.

11.2.21 The results are presented from south to north through the MA02 area, firstly for junctions on the strategic road network, followed by junctions on other roads. The 2030 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 main TA, these are highlighted.

11.2.22 The results are presented in the same order as presented in the main TA. Junctions that were not modelled in the main TA are provided at the end of the junction performance section from the A533 Town Bridge/A533 Dane Street/Weaver Way junction (Table 14-60.1) onwards.

11.2.23 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.

11.2.24 Due to the negligible number of construction traffic movements during the utilities scenario, junction capacity analysis is reported for the utilities scenario at only those junctions forecast to experience an impact as a result of the AP1 revised scheme.

11.2.25 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 18/A54 Middlewich Road

11.2.26 The M6 junction 18/A54 Middlewich Road junction will be modified as a result of the AP1 revised scheme to address concerns that have been raised by National Highways regarding potential blocking back beyond link capacity during the construction phase. The temporary modifications comprise the introduction of traffic signal control on the A54 Middlewich Road (west) approach and on the M6 junction 18 circulatory. This mitigation scheme is temporary and will be in place during construction of the AP1 revised scheme only.

11.2.27 Table 14-9 summarises the results of the changes in performance of the junction as a result of the AP1 revised scheme based on the existing junction layout. Table 14-9.1 summarises

the performance of the junction as a result of the AP1 revised scheme with the proposed temporary junction layout introduced.

11.2.28 Table 14-9 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-9 of the main TA is replaced by Table 14-9 and Table 14-9.1 below.

Table 14-9: M6 junction 18/A54 Middlewich Road junction 2030 future baseline and with the AP1 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	**2030 future baseline (existing layout)**			**AP1 revised scheme scenario 1 (existing layout)**			**AP1 revised scheme scenario 2 (existing layout)**			**AP1 revised scheme scenario 3 (existing layout)**		
M6 junction 18 southbound off-slip	268	14%	0	524	33%	0	516	32%	0	433	23%	0
A54 Middlewich Road (east)	427	20%	0	447	26%	0	446	26%	0	455	23%	0
M6 junction 18 northbound off-slip	911	41%	0	953	78%	4	956	78%	4	978	48%	1
A54 Middlewich Road (west)	1,089	45%	0	1,120	53%	0	1,124	53%	0	1,103	47%	0
17:00–18:00	**2030 future baseline (existing layout)**			**AP1 revised scheme scenario 1 (existing layout)**			**AP1 revised scheme scenario 2 (existing layout)**			**AP1 revised scheme scenario 3 (existing layout)**		
M6 junction 18 southbound off-slip	381	18%	0	542	26%	0	554	26%	0	451	22%	0
A54 Middlewich Road (east)	336	17%	0	410	22%	0	403	21%	0	374	20%	0
M6 junction 18 northbound off-slip	374	17%	0	417	21%	0	413	21%	0	416	20%	0
A54 Middlewich Road (west)	716	30%	0	734	31%	0	666	28%	0	703	29%	0

Table 14-9.1: M6 junction 18/A54 Middlewich Road junction 2030 future baseline and with the AP1 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	**2030 future baseline (existing layout)**			**AP1 revised scheme scenario 1 (proposed layout)**			**AP1 revised scheme scenario 2 (proposed layout)**			**AP1 revised scheme scenario 3 (proposed layout)**		
M6 junction 18 southbound off-slip	268	14%	0	584	35%	1	569	33%	0	432	23%	0
A54 Middlewich Road (east)	427	20%	0	440	25%	0	437	24%	0	444	22%	0
M6 junction 18 northbound off-slip	911	41%	0	862	68%	4	871	63%	4	955	46%	1
A54 Middlewich Road (west)	1,089	45%	0	1,111	47%	7	1,119	45%	6	1,100	44%	6
17:00–18:00	**2030 future baseline (existing layout)**			**AP1 revised scheme scenario 1 (proposed layout)**			**AP1 revised scheme scenario 2 (proposed layout)**			**AP1 revised scheme scenario 3 (proposed layout)**		
M6 junction 18 southbound off-slip	381	18%	0	542	27%	0	552	27%	0	452	22%	0
A54 Middlewich Road (east)	336	17%	0	403	21%	0	394	21%	0	364	19%	0
M6 junction 18 northbound off-slip	374	17%	0	417	21%	0	413	21%	0	416	20%	0
A54 Middlewich Road (west)	716	30%	0	721	29%	4	669	26%	4	702	27%	4

11.2.29 The conclusions drawn in paragraph 14.3.24 of the main 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 the future baseline and within capacity with the AP1 revised scheme. In the PM peak hour, the junction operates well within capacity in both the future baseline and with the AP1 revised scheme. However, in order to address concerns raised by National Highways regarding potential blocking back beyond capacity during the construction phase, the junction will be modified as part of the AP1 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 within capacity with the AP1 revised scheme. In the PM peak hour, the junction operates well within capacity in both the future baseline and with the AP1 revised scheme.

The change in traffic due to construction of the AP1 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths at this junction with the proposed layout."

A530 Nantwich Road/Chapel Lane

11.2.30 Table 14-10 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-10 of the main TA is replaced by Table 14-10 below.

Table 14-10: A530 Nantwich Road/Chapel Lane junction 2030 future baseline and with the AP1 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	**2030 future baseline**			**AP1 revised scheme scenarios 1 and 2**			**AP1 revised scheme scenario 3**		
A530 Nantwich Road (north)	713	43%	0	865	53%	0	875	53%	0
Chapel Lane	431	41%	1	505	70%	2	462	61%	2
A530 Nantwich Road (south)	835	58%	0	876	64%	0	869	63%	0
17:00–18:00	**2030 future baseline**			**AP1 revised scheme scenarios 1 and 2**			**AP1 revised scheme scenario 3**		
A530 Nantwich Road (north)	644	39%	0	747	46%	0	735	45%	0
Chapel Lane	331	45%	2	352	68%	4	321	57%	3
A530 Nantwich Road (south)	900	57%	0	962	64%	0	1,014	67%	0

11.2.31 The conclusions drawn in paragraph 14.3.26 of the main 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 AP1 revised scheme.

The change in traffic due to construction of the AP1 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths at this junction."

A533 Booth Lane/Cledford Lane/Cross Lane

11.2.32 Table 14-11 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-11 of the main TA is replaced by Table 14-11 below.

Table 14-11: A533 Booth Lane/Cledford Lane/Cross Lane junction 2030 future baseline and with the AP1 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	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
A533 Booth Lane (north)	229	15%	1	244	16%	1	266	18%	1	234	16%	1
Cledford Lane	80	24%	1	87	25%	1	87	25%	1	81	24%	1
A533 Booth Lane (south)	398	26%	1	436	29%	2	427	28%	2	421	28%	2
Cross Lane	226	80%	3	233	82%	3	234	83%	3	227	80%	3
17:00–18:00	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
A533 Booth Lane (north)	262	17%	1	308	20%	1	291	19%	1	305	20%	1
Cledford Lane	273	92%	4	270	86%	4	270	85%	4	273	93%	4
A533 Booth Lane (south)	724	48%	3	754	50%	3	774	52%	3	752	50%	3
Cross Lane	142	51%	2	141	50%	2	141	50%	2	142	51%	2

11.2.33 The conclusions drawn in paragraphs 14.3.29 to 14.2.31 of the main 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 AP1 revised scheme. In the PM peak hour, the junction operates close to capacity in both the future baseline and with the AP1 revised scheme.

The change in traffic due to construction of the AP1 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths at this junction."

Local network change in the Clive Green area

11.2.34 There are a number of permanent changes to the local road network in the Clive Green area as part of the original scheme. Details of the permanent changes are presented in Section 14.5 of the main TA. Where new or modified junctions are proposed during the construction phase, the performance of the existing layout is presented for scenarios before the junction layout change, where relevant, and the performance of the proposed layout is presented for scenarios following completion of the new junction layout.

Clive Green Lane realignment/Crewe North RSD access

11.2.35 Table 14-12 of the main TA summarises the performance of the junction as a result of the original scheme. Table 14-12 of the main TA is replaced by Table 14-12 below.

Table 14-12: Clive Green Lane realignment/Crewe North RSD access 2030 with the AP1 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
08:00–09:00	**AP1 revised scheme scenario 1 (proposed layout)**			**AP1 revised scheme scenario 2 (proposed layout)**			**AP1 revised scheme scenario 3 (proposed layout)**		
Clive Green Lane realignment (west) (ahead and left)	353	-	-	305	-	-	607	-	-
Crewe North RSD access (left)	99	0.15	0	107	0.16	0	88	0.15	0
Crewe North RSD access (right)	0	0.00	0	0	0.00	0	5	0.02	0
Clive Green Lane realignment (east) (ahead and right)	575	0.48	1	574	0.46	1	588	0.48	2
17:00–18:00	**AP1 revised scheme scenario 1 (proposed layout)**			**AP1 revised scheme scenario 2 (proposed layout)**			**AP1 revised scheme scenario 3 (proposed layout)**		
Clive Green Lane realignment (west) (ahead and left)	136	-	-	175	-	-	403	-	-
Crewe North RSD access (left)	190	0.36	1	190	0.35	1	270	0.48	1
Crewe North RSD access (right)	231	0.52	1	190	0.46	1	83	0.26	0
Clive Green Lane realignment (east) (ahead and right)	372	0.19	0	456	0.23	1	488	0.21	1

11.2.36 The conclusions drawn in paragraph 14.3.34 of the main 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 AP1 revised Scheme."

A530 Nantwich Road/Clive Green Lane

11.2.37 Table 14-13 of the main TA summarises the results of the changes in performance of the existing junction as a result of the original scheme. Table 14-13 of the main TA is replaced by Table 14-13 below.

Table 14-13: A530 Nantwich Road/Clive Green Lane (existing layout) junction 2030 future baseline and with the AP1 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
08:00–09:00	**2030 future baseline**			**AP1 revised scheme scenario 1 (existing layout)**			**AP1 revised scheme scenario 2 (existing layout)**		
A530 Nantwich Road (north) (ahead and right)	726	0.83	8	1,036	1.03	3	1,034	1.04	3
Clive Green Lane (left)	69	1.10	7	25	1.19	16	25	1.19	16
Clive Green Lane (right)	230	1.11	18	181	1.05	53	179	1.04	49
A530 Nantwich Road (south) (ahead and left)	1,100	-	-	1,074	-	-	1,089	-	-
17:00–18:00	**2030 future baseline**			**AP1 revised scheme scenario 1 (existing layout)**			**AP1 revised scheme scenario 2 (existing layout)**		
A530 Nantwich Road (north) (ahead and right)	581	0.39	1	551	1.72	30	566	1.87	44
Clive Green Lane (left)	176	1.42	32	115	1.74	79	139	1.90	104
Clive Green Lane (right)	388	1.41	70	306	0.24	1	335	0.32	1
A530 Nantwich Road (south) (ahead and left)	1,029	-	-	1,429	-	-	1,432	-	-

11.2.38 The conclusions drawn in paragraphs 14.3.37 to 14.3.41 of the main 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 AP1 revised scheme.

In scenario 2, the change in traffic due to construction of the AP1 revised scheme will increase the RFC on the A530 Nantwich Road (north) (ahead and right) approach from 0.83 in the future baseline to 1.04 in the AM peak hour, with a corresponding change in queue length from eight PCU in the future baseline to three PCU. In the PM peak hour, the change in traffic due to construction of the AP1 revised scheme will increase the RFC on the A530 Nantwich Road (north) (ahead and right) approach from 0.39 in the future baseline to 1.87, with a corresponding change in queue length from one PCU in the future baseline to 44 PCU.

HS2 Ltd will seek to achieve earlier delivery of the proposed permanent junction layout or work with the Local Highway Authority to identify potential opportunities to mitigate this constraint.

The permanent realignment of Clive Green Lane and the associated changes to the A530 Nantwich Road/Clive Green Lane junction are expected to open during scenario 2 but would not be fully operational until scenario 3. The HS2 Track Access approach is a minor arm that is not included within the Junctions 9 model."

11.2.39 Table 14-14 of the main TA summarises the results of the performance of the junction as a result of the original scheme after the opening of the permanent junction layout. Table 14-14 of the main TA is replaced by Table 14-14 below.

Table 14-14: A530 Nantwich Road/Clive Green Lane realignment/Coalpit Lane (proposed layout) 2030 with the AP1 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	RFC	Q, PCU
08:00–09:00	**AP1 revised scheme scenario 3 (proposed layout)**		
A530 Nantwich Road (north)	960	0.65	2
A530 Nantwich Road (south)	1,022	0.59	1
Clive Green Lane	504	0.38	1
HS2 Track Access*	-	-	-
Coalpit Lane	172	0.17	0
17:00–18:00	**AP1 revised scheme scenario 3 (proposed layout)**		
A530 Nantwich Road (north)	485	0.32	1
A530 Nantwich Road (south)	1,382	0.74	3
Clive Green Lane	672	0.57	1
HS2 Track Access *	-	-	-
Coalpit Lane	184	0.20	0

** Minor approach arm not represented within the Junctions 9 model*

11.2.40 The conclusions drawn in paragraphs 14.3.43 of the main TA are replaced by:

"The assessment shows that in the AM and PM peak hours this junction operates well within capacity with the AP1 revised scheme (proposed layout)."

B5074 Swanlow Lane/Townfields Road/Townfields Drive

11.2.41 Table 14-15 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-15 of the main TA is replaced by Table 14-15 below.

Table 14-15: B5074 Swanlow Lane/Townfields Road/Townfields Drive junction 2030 future baseline and with the AP1 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	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
Townfields Road	266	38%	6	294	43%	7	304	44%	7	262	37%	6
B5074 Swanlow Lane (south)	620	96%	11	527	96%	10	524	96%	10	618	96%	11
Townfields Drive	139	24%	3	149	26%	3	146	26%	3	128	22%	3
B5074 Swanlow Lane (north)	356	42%	7	418	49%	8	421	49%	9	345	40%	7
17:00–18:00	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
Townfields Road	344	43%	7	439	55%	9	431	54%	9	363	45%	7
B5074 Swanlow Lane (south)	481	95%	9	426	96%	9	426	96%	9	456	97%	9
Townfields Drive	105	21%	2	87	20%	2	94	20%	2	118	25%	2
B5074 Swanlow Lane (north)	373	50%	8	436	63%	9	434	62%	9	404	56%	9

11.2.42 The conclusions drawn in paragraphs 14.3.45 and 14.3.46 of the main 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 AP1 revised scheme.

The change in traffic due to construction of the AP1 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths in the AM peak hour.

In scenario 3, the change in traffic due to construction of the AP1 revised scheme in the PM peak hour will increase the VoC on the B5074 Swanlow Lane (south) approach from 95% in the future baseline to 97%, with no change in corresponding queue length."

A530 Nantwich Road/Brynlow Drive

11.2.43 Table 14-16 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-16 of the main TA is replaced by Table 14-16 below.

Table 14-16: A530 Nantwich Road/Brynlow Drive junction 2030 future baseline and with the AP1 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	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
A530 Nantwich Road (north)	432	22%	0	686	35%	0	687	35%	0	656	34%	0
Brynlow Drive	316	56%	1	329	88%	4	323	87%	4	342	91%	4
A530 Nantwich Road (south)	667	64%	0	546	56%	0	563	58%	0	714	87%	0
17:00–18:00	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
A530 Nantwich Road (north)	408	21%	0	490	25%	0	496	26%	0	380	20%	0
Brynlow Drive	145	23%	0	172	32%	0	183	34%	0	155	26%	0
A530 Nantwich Road (south)	721	79%	0	856	84%	0	829	82%	0	922	98%	1

11.2.44 The conclusions drawn in paragraphs 14.3.48 to 14.3.50 of the main 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 AP1 revised scheme. In the PM peak hour, the junction operates within capacity in the future baseline and close to capacity with the AP1 revised scheme.

In scenario 3, the change in traffic due to construction of the AP1 revised scheme will increase the VoC on the Brynlow Drive approach from 56% 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 four PCU. In the PM peak hour, the change in traffic due to construction of the AP1 revised scheme will increase the VoC on the A530 Nantwich Road (south) approach from 79% in the future baseline to 98%, with a corresponding change in queue length from no queue in the future baseline to one PCU."

Clive Lane/Clive Green Lane

11.2.45 Table 14-17 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-17 of the main TA is replaced by Table 14-17 below.

Table 14-17: Clive Lane/Clive Green Lane junction 2030 future baseline and with the AP1 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	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
Clive Lane	265	14%	0	353	18%	0	306	16%	0	608	31%	0
Clive Green Lane	469	24%	0	381	20%	0	385	20%	0	427	22%	0
Clive Back Lane*	-	-	-	-	-	-	-	-	-	-	-	-
17:00–18:00	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
Clive Lane	394	20%	0	136	7%	0	175	9%	0	403	21%	0
Clive Green Lane	448	23%	0	508	26%	0	544	28%	0	488	25%	0
Clive Back Lane*	-	-	-	-	-	-	-	-	-	-	-	-

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

11.2.46 The conclusions drawn in paragraph 14.3.52 of the main 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 AP1 revised scheme

The change in traffic due to construction of the AP1 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths at this junction."

Clive Lane/Rilshaw Lane

11.2.47 Table 14-18 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-18 of the main TA is replaced by Table 14-18 below.

Table 14-18: Clive Lane/Rilshaw Lane junction 2030 future baseline and with the AP1 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	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
Clive Lane (north)	287	32%	0	435	41%	0	397	39%	0	646	52%	0
Rilshaw Lane*	-	-	-	-	-	-	-	-	-	-	-	-
Clive Lane (south)	469	25%	0	381	20%	0	385	20%	0	427	22%	0
17:00–18:00	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
Clive Lane (north)	427	44%	0	218	35%	0	217	36%	0	433	45%	0
Rilshaw Lane*	-	-	-	-	-	-	-	-	-	-	-	-
Clive Lane (south)	452	24%	0	512	27%	0	548	100%	0	492	26%	0

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

11.2.48 The conclusions drawn in paragraphs 14.3.54 to 14.3.56 of the main 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 AP1 revised scheme. In the PM peak hour, the junction operates well within capacity in the future baseline and over capacity with the AP1 revised scheme.

The change in traffic due to construction of the AP1 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 AP1 revised scheme in the PM peak hour will increase the VoC on the Clive Lane (south) approach from 24% in the future baseline to 100%, with no change in corresponding queue length."

A54 Middlewich Road/Clive Lane/Road One

11.2.49 Table 14-19 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-19 of the main TA is replaced by Table 14-19 below.

Table 14-19: A54 Middlewich Road/Clive Lane/Road One junction 2030 future baseline and with the AP1 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	Flow, PCU/hr	VoC	Q, PCU
08:00–09:00	**2030 future baseline**			**AP1 revised scheme utilities scenario**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
Road One	284	42%	4	399	60%	6	489	69%	7	455	64%	7	485	69%	7
A54 Middlewich Road (east)	516	67%	5	505	67%	5	482	69%	5	517	74%	5	537	67%	5
Clive Lane	522	91%	8	542	100%	8	491	85%	7	496	85%	7	498	87%	7
A54 Middlewich Road (west)	858	91%	10	880	95%	11	866	96%	10	852	94%	10	875	97%	10
17:00–18:00	**2030 future baseline**			**AP1 revised scheme utilities scenario**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
Road One	575	96%	10	613	102%	10	531	89%	9	563	95%	9	594	98%	10
A54 Middlewich Road (east)	525	44%	5	503	41%	5	677	55%	6	637	51%	6	555	46%	5
Clive Lane	474	102%	8	480	103%	8	484	103%	8	485	104%	8	472	103%	8
A54 Middlewich Road (west)	554	77%	8	574	85%	8	582	72%	8	564	70%	8	540	74%	8

11.2.50 The conclusions drawn in paragraphs 14.3.58 to 14.3.61 of the main 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 AP1 revised scheme. In the PM peak hour, the junction operates over capacity in both the future baseline and with the AP1 revised scheme.

In the utilities scenario, the change in traffic due to construction of the AP1 revised scheme in the AM peak hour will increase the VoC on the Clive Lane approach from 91% in the future baseline to 100%, with no change in corresponding queue length. In the PM peak hour, the change in traffic due to construction of the AP1 revised scheme will increase the VoC on the Road One approach from 96% in the future baseline to 102%, with no change in corresponding queue length."

A530 Nantwich Road/St Ann's Road

11.2.51 Table 14-20 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-20 of the main TA is replaced by Table 14-20 below.

Table 14-20: A530 Nantwich Road/St Ann's Road junction 2030 future baseline and with the AP1 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	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
A530 Nantwich Road (east)	611	32%	0	873	46%	0	877	46%	0	795	41%	0
St Ann's Road	172	77%	1	163	100%	5	160	100%	5	159	99%	4
A530 Nantwich Road (west)	626	46%	0	556	48%	0	565	48%	0	621	59%	0
17:00–18:00	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
A530 Nantwich Road (east)	660	35%	0	782	41%	0	782	41%	0	604	32%	0
St Ann's Road	211	99%	5	150	92%	3	153	91%	3	190	94%	3
A530 Nantwich Road (west)	559	36%	0	741	46%	0	712	45%	0	701	43%	0

11.2.52 The conclusions drawn in paragraphs 14.3.63 to 14.3.65 of the main TA are replaced by:

"The assessment shows that in the AM peak hour the junction operates within capacity in the future baseline and over capacity with the AP1 revised scheme. In the PM peak hour, the junction operates close to capacity in both the future baseline and with the AP1 revised scheme.

In scenario 1 and 2, the change in traffic due to construction of the AP1 revised scheme will increase the VoC on the St Ann's Road approach from 77% in the future baseline to 100% in the AM peak hour, with a corresponding change in queue length from one PCU in the future baseline to five PCU.

In the PM peak hour, the change in traffic due to construction of the AP1 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths."

A54 Kinderton Street/A54 St Michael's Way/A533 Leadsmithy Street

11.2.53 Table 14-21 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-21 of the main TA is replaced by Table 14-21 below.

Table 14-21: A54 Kinderton Street/A54 St Michael's Way/A533 Leadsmithy Street junction 2030 future baseline and with the AP1 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	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
A54 Kinderton Street	638	90%	13	637	89%	13	638	89%	13	672	94%	14
A533 Leadsmithy Street	784	85%	19	745	81%	18	752	82%	19	752	82%	19
A54 St Michael's Way	1,135	73%	14	1,006	64%	13	1,014	65%	13	1,043	67%	13
17:00–18:00	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
A54 Kinderton Street	741	104%	15	742	104%	15	742	104%	15	742	104%	15
A533 Leadsmithy Street	619	78%	16	648	81%	17	653	82%	17	648	81%	17
A54 St Michael's Way	925	55%	11	1,055	63%	12	1,038	61%	12	1,097	65%	13

11.2.54 The conclusions drawn in paragraphs 14.3.67 to 14.3.69 of the main TA are replaced by:

"The assessment shows that in the AM peak hour the junction operates close to capacity in the future baseline and with the AP1 revised scheme. In the PM peak hour, the junction operates over capacity in both the future baseline and with the AP1 revised scheme.

In scenario 3, the change in traffic due to construction of the AP1 revised scheme will increase the VoC on the A54 Kinderton Street approach from 90% in the future baseline to 94% in the AM peak hour, with a corresponding change in queue length from 13 PCU in the future baseline to 14 PCU.

In the PM peak hour the change in traffic due to construction of the AP1 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths."

A54 St Michael's Way/Wheelock Street

11.2.55 Table 14-22 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-22 of the main TA is replaced by Table 14-22 below.

Table 14-22: A54 St Michael's Way/Wheelock Street junction 2030 future baseline and with the AP1 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	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
A54 St Michael's Way (north)	762	39%	0	730	100%	0	734	100%	0	781	40%	0
Wheelock Street	60	21%	0	60	55%	0	60	55%	0	60	22%	0
A54 St Michael's Way (south)*	-	-	-	-	-	-	-	-	-	-	-	-
17:00–18:00	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
A54 St Michael's Way (north)	815	42%	0	819	42%	0	819	42%	0	823	42%	0
Wheelock Street	76	29%	0	76	30%	0	76	30%	0	76	30%	0
A54 St Michael's Way (south)*	-	-	-	-	-	-	-	-	-	-	-	-

** A54 St Michael's Way is one-way southbound and therefore no results are reported for the A54 St Michael's Way (south) approach*

11.2.56 The conclusions drawn in paragraphs 14.3.71 to 14.3.73 of the main TA are replaced by:

"The assessment shows that in the AM peak hour the junction operates well within capacity in the future baseline and over capacity with the AP1 revised scheme. In the PM peak hour, the junction operates well within capacity in both the future baseline and with the AP1 revised scheme.

In scenario 1 and 2, the change in traffic due to construction of the AP1 revised scheme will increase the VoC on the A54 St Michael's Way (north) approach from 39% in the future baseline to 100% in the AM peak hour, with no change in corresponding queue length. This is due to queuing traffic blocking back from the nearby A54 St Michael's Way/Wheelock Street junction.

In the PM peak hour, the change in traffic due to construction of the AP1 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths."

A54 Chester Road/A530 Newton Bank

11.2.57 Table 14-23 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-23 of the main TA is replaced by Table 14-23 below.

Table 14-23: A54 Chester Road/A530 Newton Bank junction 2030 future baseline and with the AP1 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	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
A54 Chester Road (west)	1,278	66%	0	1,506	77%	0	1,511	77%	0	1,357	70%	0
A530 Newton Bank	1,410	61%	5	1,291	60%	6	1,291	60%	6	1,340	60%	5
17:00–18:00	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
A54 Chester Road (west)	1,082	55%	0	1,215	62%	0	1,223	63%	0	1,091	56%	0
A530 Newton Bank	1,281	82%	0	1,376	93%	1	1,357	92%	1	1,405	58%	1

11.2.58 The conclusions drawn in paragraphs 14.3.75 to 14.3.77 of the main 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 AP1 revised scheme. In the PM peak hour, the junction operates within capacity in the future baseline and close to capacity with the AP1 revised scheme.

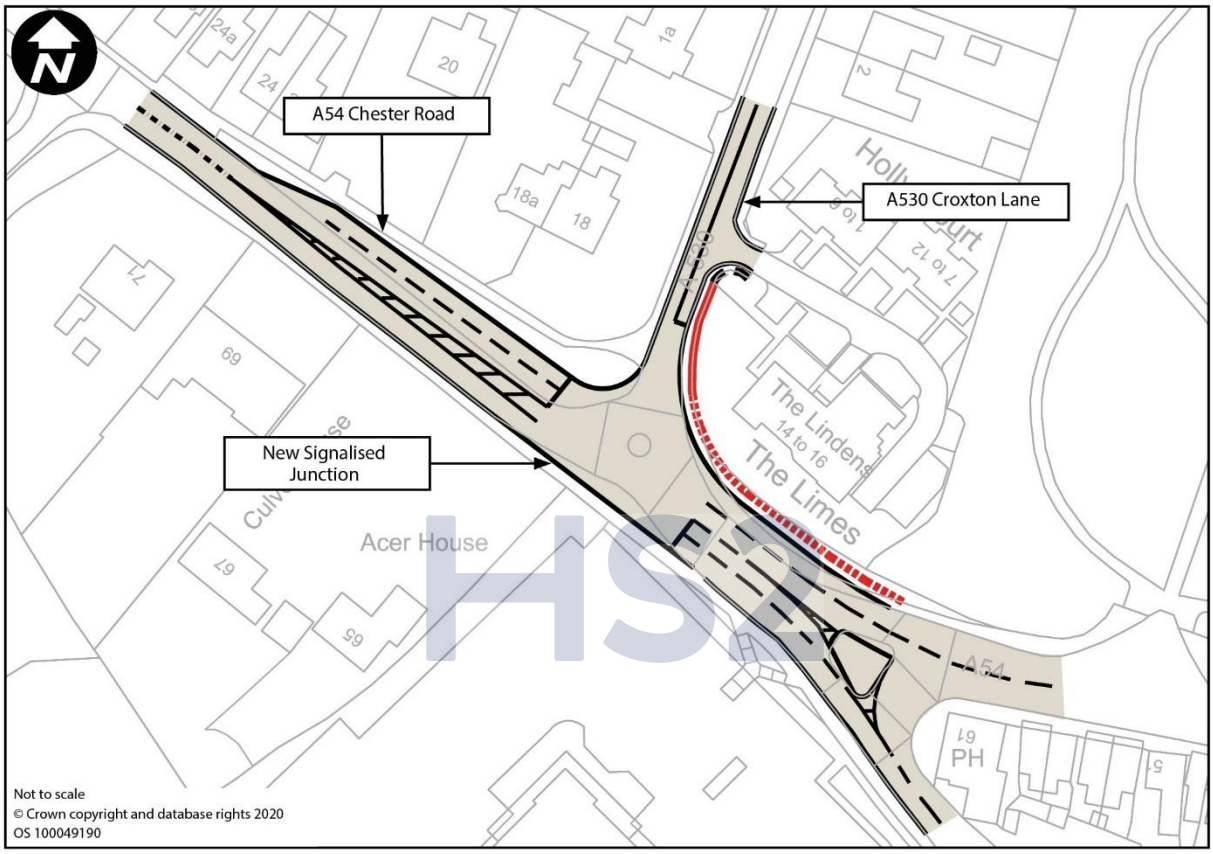
The change in traffic due to construction of the AP1 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths in the AM peak hour.

In scenario 1, the change in traffic due to construction of the AP1 revised scheme in the PM peak hour will increase the VoC on the A530 Newton Bank approach from 82% in the future baseline to 93%, with a corresponding change in queue length from no queue in the future baseline to one PCU."

A54 Chester Road/A530 Croxton Lane

11.2.59 The A54 Chester Road/A530 Croxton Lane junction will be modified as a result of the AP1 revised scheme to mitigate impacts identified at this location during the construction phase, as reported in the main TA. The temporary modifications comprise the replacement of the existing priority-controlled mini-roundabout with traffic signal control. The carriageway will be widened to provide a two-lane entry on the A54 Chester Road (north) and A54 Chester Road (south) approaches. The A530 Croxton Lane approach will become left-turn only onto the A54 Chester Road (south). As a result, traffic travelling from the A530 Croxton Lane to the A54 Chester Road (north) will be directed to turn left and travel around the gyratory. This mitigation scheme is temporary and will be in place during construction of the AP1 revised scheme only. Figure 14-6.3 shows the junction layout introduced as part of the AP1 revised scheme.

Figure 14-6.3: Junction layout diagram (A54 Chester Road/A530 Croxton Lane)



11.2.60 Table 14-24 summarises the results of the changes in performance of the junction as a result of the AP1 revised scheme based on the existing junction layout. Table 14-24.1 summarises the performance of the junction as a result of the AP1 revised scheme with the proposed temporary junction layout introduced.

11.2.61 Table 14-24 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-24 of the main TA is replaced by Table 14-24 and Table 14-24.1 below.

Table 14-24: A54 Chester Road/A530 Croxton Lane junction 2030 future baseline and with the AP1 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	**2030 future baseline (existing layout)**			**AP1 revised scheme scenario 1 (existing layout)**			**AP1 revised scheme scenario 2 (existing layout)**			**AP1 revised scheme scenario 3 (existing layout)**		
A54 Chester Road (north)	913	94%	1	1,006	103%	4	1,003	103%	4	812	83%	0
A530 Croxton Lane	463	62%	0	623	86%	1	642	88%	2	647	82%	1
A54 Chester Road (south)	1,031	100%	2	1,030	100%	2	1,034	101%	2	1,007	98%	1
17:00–18:00	**2030 future baseline (existing layout)**			**AP1 revised scheme scenario 1 (existing layout)**			**AP1 revised scheme scenario 2 (existing layout)**			**AP1 revised scheme scenario 3 (existing layout)**		
A54 Chester Road (north)	801	85%	0	952	103%	5	953	103%	5	845	90%	1
A530 Croxton Lane	364	45%	0	397	53%	0	391	52%	0	332	42%	0
A54 Chester Road (south)	1,049	101%	2	1,035	101%	2	1,038	101%	2	1,051	101%	2

Table 14-24.1: A54 Chester Road/A530 Croxton Lane junction 2030 future baseline and with the AP1 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	**2030 future baseline (existing layout)**			**AP1 revised scheme scenario 1 (proposed layout)**			**AP1 revised scheme scenario 2 (proposed layout)**			**AP1 revised scheme scenario 3 (proposed layout)**		
A54 Chester Road (north)	913	94%	1	1,018	108%	14	1,020	109%	14	813	87%	14
A530 Croxton Lane	463	62%	0	621	87%	10	641	89%	10	647	90%	10
A54 Chester Road (south)	1,031	100%	2	1,109	86%	11	1,124	87%	11	1,094	84%	11
17:00–18:00	**2030 future baseline (existing layout)**			**AP1 revised scheme scenario 1 (proposed layout)**			**AP1 revised scheme scenario 2 (proposed layout)**			**AP1 revised scheme scenario 3 (proposed layout)**		
A54 Chester Road (north)	801	85%	0	970	103%	14	969	103%	14	845	90%	14
A530 Croxton Lane	364	45%	0	395	55%	10	391	55%	10	331	46%	10
A54 Chester Road (south)	1,049	101%	2	1,136	88%	11	1,129	87%	11	1,090	84%	11

11.2.62 The conclusions drawn in paragraph 14.3.79 and 14.3.80 of the main TA are replaced by:

"The assessment shows that, based on the existing layout, in the AM and PM peak hours the junction operates over capacity in both the future baseline and with the AP1 revised scheme.

With the proposed layout, the assessment shows that in the AM and PM peak hours the junction operates over capacity in both the future baseline and with the AP1 revised scheme.

The assessment shows that, with the AP1 revised scheme, the A54 Chester Road (north) approach operates over capacity in the AM and PM peak hours based on both the existing layout and with the proposed temporary layout. However, with the existing layout the A54 Chester Road (south) approach operates over capacity in the AM and PM peaks hours, and close to capacity with the proposed layout.

With the proposed layout in scenario 2, the change in traffic due to construction of the AP1 revised scheme will increase the VoC on the A54 Chester Road (north) approach from 94% in the future baseline to 109% in the AM peak hour, with a corresponding change in queue length from one PCU in the future baseline to 14 PCU.

With the proposed layout in scenario 1 and 2, the change in traffic due to construction of the AP1 revised scheme in the PM peak hour will increase the VoC on the A54 Chester Road (north) approach from 85% in the future baseline to 103%, with a corresponding change in queue length from no queue in the future baseline to 14 PCU."

A54 Holmes Chapel Road/B5309 Centurion Way/Pochin Way

11.2.63 Table 14-25 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-25 of the main TA is replaced by Table 14-25 below.

Table 14-25: A54 Holmes Chapel Road/B5309 Centurion Way/Pochin Way junction 2030 future baseline and with the AP1 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	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
B5309 Centurion Way	723	101%	9	618	80%	2	613	79%	2	619	86%	3
A54 Holmes Chapel Road (east)	1,120	92%	4	1,227	84%	2	1,222	84%	2	1,221	90%	3
Pochin Way	622	46%	0	704	55%	1	703	54%	1	669	53%	1
A54 Holmes Chapel Road (west)	1,236	65%	1	1,102	61%	1	1,089	60%	1	1,190	65%	1
17:00–18:00	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
B5309 Centurion Way	527	51%	1	512	46%	0	495	44%	0	498	46%	0
A54 Holmes Chapel Road (east)	835	58%	1	998	66%	1	1,004	68%	1	948	63%	1
Pochin Way	882	63%	1	891	68%	1	874	68%	1	859	63%	1
A54 Holmes Chapel Road (west)	896	52%	1	919	61%	1	935	60%	1	984	60%	1

11.2.64 The conclusions drawn in paragraphs 14.3.82 to 14.3.85 of the main TA are replaced by:

"The assessment shows that in the AM peak hour the junction operates over capacity in the future baseline and close to capacity with the AP1 revised scheme. In the PM peak hour, the junction operates well within capacity in both the future baseline and with the AP1 revised scheme.

The change in traffic due to construction of the AP1 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths at this junction."

Local network change in the Stanthorne area

11.2.65 There are a number of temporary and permanent changes to the local road network in the Stanthorne area as part of the original scheme. Details of the permanent changes are presented in Section 14.5 of the main TA. Where new or modified junctions are proposed during the construction phase, the performance of the existing layout is presented for scenarios before the junction layout change, where relevant, and the performance of the proposed layout is presented for scenarios following completion of the new junction layout.

A54 Middlewich Road realignment/A533 Northwich Road diversion

11.2.66 Table 14-26 of the main TA summarises the performance of the junction as a result of the original scheme. Table 14-26 of the main TA is replaced by Table 14-26 below.

Table 14-26: A54 Middlewich Road realignment/A533 Northwich Road diversion 2030 with the AP1 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	RFC	Q, PCU	Flow, PCU/hr	RFC	Q, PCU
08:00–09:00	**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
A533 Northwich Road diversion	623	0.54	1	632	0.52	1
A54 Middlewich realignment (east)	929	0.45	1	945	0.46	1
A54 Middlewich Road realignment (south)	526	0.44	1	387	0.32	1
17:00–18:00	**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
A533 Northwich Road diversion	541	0.48	1	605	0.50	1
A54 Middlewich realignment (east)	1028	0.51	1	1097	0.54	1
A54 Middlewich Road realignment (south)	594	0.51	1	424	0.39	1

11.2.67 The conclusions drawn in paragraph 14.3.88 of the main TA remain unchanged.

A54 Middlewich Road realignment/Birch Lane diversion/Bell Lane realignment

11.2.68 Table 14-27 of the main TA summarises the performance of the junction as a result of the original scheme. Table 14-27 of the main TA is replaced by Table 14-27 below.

Table 14-27: A54 Middlewich Road realignment/Birch Lane diversion/Bell Lane realignment junction 2030 with the AP1 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	RFC	Q, PCU	Flow, PCU/hr	RFC	Q, PCU
08:00–09:00	**AP1 revised scheme scenario 2 (proposed layout)**			**AP1 revised scheme scenario 3 (proposed layout)**		
Birch Lane diversion (ahead, left and right)	287	1.24	36	304	1.28	42
A54 Middlewich Road (east) (ahead, left and right)	769	0.00	0	788	0.00	0
Bell Lane realignment (ahead, left and right)	140	0.83	4	140	0.67	2
A54 Middlewich Road (west) (ahead, left and right)	929	0.10	0	814	0.23	0
17:00–18:00	**AP1 revised scheme scenario 2 (proposed layout)**			**AP1 revised scheme scenario 3 (proposed layout)**		
Birch Lane diversion (ahead, left and right)	283	0.99	11	277	1.07	18
A54 Middlewich Road (east) (ahead, left and right)	638	0.00	0	666	0.00	0
Bell Lane realignment (ahead, left and right)	249	1.25	32	249	1.13	22
A54 Middlewich Road (west) (ahead, left and right)	923	0.15	0	908	0.34	1

11.2.69 The conclusions drawn in paragraph 14.3.90 of the main TA are replaced by:

"The assessment shows that in the AM and PM peak hours the junction operates over capacity with the AP1 revised Scheme."

A54 Chester Road/A54 Middlewich Road/A533 Northwich Road

11.2.70 Table 14-28 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-28 of the main TA is replaced by Table 14-28 below.

Table 14-28: A54 Chester Road/A54 Middlewich Road/A533 Northwich Road junction 2030 future baseline and with the AP1 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	RFC	Q, PCU	Flow, PCU/hr	RFC	Q, PCU
08:00–09:00	**2030 future baseline**			**AP1 revised scheme scenario 1**		
A54 Middlewich Road (ahead and left)	490	-	-	615	-	-

Approach	Flow, PCU/hr	RFC	Q, PCU	Flow, PCU/hr	RFC	Q, PCU
A533 Northwich Road (left)	400	0.80	4	407	1.62	103
A533 Northwich Road (right)	1	0.01	0	163	1.59	42
A54 Chester Road (ahead and right)	824	1.05	38	819	1.06	40
17:00–18:00	**2030 future baseline**			**AP1 revised scheme scenario 1**		
A54 Middlewich Road (ahead and left)	391	-	-	819	-	-
A533 Northwich Road (left)	365	0.70	2	337	0.44	3
A533 Northwich Road (right)	2	0.01	0	5	0.05	0
A54 Chester Road (ahead and right)	770	0.82	6	782	0.90	12

11.2.71 The conclusions drawn in paragraphs 14.3.83 to 14.3.84 of the main 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 AP1 revised scheme. In the PM peak hour, the junction operates within capacity in the future baseline and close to capacity with the AP1 revised scheme.

In scenario 1, the change in traffic due to construction of the AP1 revised scheme will increase the RFC on the A533 Northwich Road (left) approach from 0.80 in the future baseline to 1.62 in the AM peak hour, with a corresponding change in queue length from four PCU in the future baseline to 103 PCU. In the PM peak hour, the change in traffic due to construction of the AP1 revised scheme will increase the RFC on the A54 Chester Road (ahead and right) approach from 0.82 in the future baseline to 0.90, with a corresponding change in queue length from six PCU in the future baseline to 12 PCU."

A54 Chester Road/A530 St Michael's Way

11.2.72 Table 14-29 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-29 of the main TA is replaced by Table 14-29 below.

Table 14-29: A54 Chester Road/A530 St Michael's Way junction 2030 future baseline and with the AP1 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	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
A54 Chester Road	491	25%	0	727	37%	0	718	37%	0	616	32%	0
A530 St Michael's Way	822	91%	1	787	100%	6	792	100%	6	840	99%	5
17:00–18:00	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
A54 Chester Road	323	17%	0	424	22%	0	430	22%	0	282	14%	0
A530 St Michael's Way	891	90%	1	895	95%	2	896	95%	2	900	89%	1

11.2.73 The conclusions drawn in paragraphs 14.3.95 to 14.3.97 of the main 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 AP1 revised scheme. In the PM peak hour, the junction operates close to capacity in both the future baseline and with the AP1 revised scheme.

In scenario 1 and 2, the change in traffic due to construction of the AP1 revised scheme will increase the VoC on the A54 St Michael's Way approach from 91% in the future baseline to 100% in the AM peak hour, with a corresponding change in queue length from one PCU in the future baseline to six PCU. In the PM peak hour, the change in traffic due to construction of the AP1 revised scheme will increase the VoC on the A54 St Michael's Way approach from 90% in the future baseline to 95%, with a corresponding change in queue length from one PCU in the future baseline to two PCU."

A5018 Wharton Road/A5018 Wharton Park Road/B5355 Wharton Road/Collingtree Avenue

11.2.74 Table 14-30 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-30 of the main TA is replaced by Table 14-30 below.

Table 14-30: A5018 Wharton Road/A5018 Wharton Park Road/B5355 Wharton Road/Collingtree Avenue junction 2030 future baseline and with AP1 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	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
A5018 Wharton Road	696	67%	0	629	61%	0	653	63%	0	610	59%	0
B5355 Wharton Road	295	27%	0	294	26%	0	284	25%	0	321	28%	0
A5018 Wharton Park Road	889	65%	0	920	68%	0	924	68%	0	901	67%	0
Collingtree Avenue	161	22%	0	162	23%	0	162	23%	0	161	23%	0
17:00–18:00	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
A5018 Wharton Road	1,130	110%	4	1,136	110%	4	1,124	109%	4	1,119	109%	4
B5355 Wharton Road	201	21%	0	202	22%	0	212	23%	0	209	22%	0
A5018 Wharton Park Road	637	45%	0	597	43%	0	631	45%	0	658	47%	0
Collingtree Avenue	72	7%	0	72	7%	0	72	7%	0	72	7%	0

11.2.75 The conclusions drawn in paragraphs 14.3.99 to 14.3.101 of the main 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 AP1 revised scheme. In the PM peak hour, the junction operates over capacity in both the future baseline and with the AP1 revised scheme.

The change in traffic due to construction of the AP1 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths at this junction."

A533 Bostock Road/A5018 Bostock Road/A533 Davenham Road/Road One

11.2.76 Table 14-31 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-31 of the main TA is replaced by Table 14-31 below.

Table 14-31: A533 Bostock Road/A5018 Bostock Road/A533 Davenham Road/Road One junction 2030 future baseline and with the AP1 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	Flow, PCU/hr	VoC	Q, PCU
08:00–09:00	**2030 future baseline**			**AP1 revised scheme utilities scenario**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 3**		
A533 Bostock Road	354	20%	0	427	24%	0	489	27%	0	460	26%	0	425	24%	0
Road One	343	17%	0	422	21%	0	336	16%	0	348	17%	0	309	15%	0
A5018 Bostock Road	1,161	102%	4	1,160	103%	4	1,181	103%	4	1,175	103%	4	1,190	103%	4
A533 Davenham Bypass	774	101%	7	762	101%	7	777	102%	7	779	102%	7	784	102%	7
17:00–18:00	**2030 future baseline**			**AP1 revised scheme utilities scenario**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
A533 Bostock Road	214	11%	0	244	13%	0	243	13%	0	225	12%	0	244	13%	0
Road One	810	42%	0	849	43%	0	991	51%	0	933	48%	0	856	44%	0
A5018 Bostock Road	801	74%	0	830	78%	0	724	71%	0	770	75%	1	819	77%	0
A533 Davenham Bypass	833	90%	2	873	95%	3	805	82%	1	821	85%	1	833	90%	2

11.2.77 The conclusions drawn in paragraphs 14.3.103 and 14.3.104 of the main 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 AP1 revised scheme. In the PM peak hour, the junction operates close to capacity in both the future baseline and with the AP1 revised scheme.

The change in traffic due to construction of the AP1 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths at this junction in the AM peak.

In the utilities scenario, the change in traffic due to construction of the AP1 revised scheme in the PM peak hour will increase the VoC on the A533 Davenham Bypass approach from 90% in the future baseline to 95%, with a change in corresponding queue length from two to three PCU."

A530 King Street/A530 Croxton Lane/B5309 King Street

11.2.78 Table 14-32 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-32 of the main TA is replaced by Table 14-32 below.

Table 14-32: A530 King Street/A530 Croxton Lane/B5309 King Street junction 2030 future baseline and with the AP1 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	Flow, PCU/ hr	VoC	Q, PCU
08:00–09:00	**2030 future baseline**			**AP1 revised scheme utilities scenario**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
A530 King Street	790	82%	0	881	88%	1	645	116%	4	633	113%	4	663	111%	4
B5309 King Street	638	48%	0	636	48%	0	742	56%	0	722	55%	0	682	52%	0
A530 Croxton Lane	236	33%	0	290	43%	0	220	33%	0	224	33%	0	217	31%	0
17:00–18:00	**2030 future baseline**			**AP1 revised scheme utilities scenario**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
A530 King Street	713	101%	3	715	103%	3	750	109%	3	728	107%	3	716	104%	2
B5309 King Street	894	67%	0	903	68%	0	957	72%	0	952	72%	0	959	72%	0
A530 Croxton Lane	348	69%	2	275	52%	1	406	103%	6	400	103%	5	379	105%	5

11.2.79 The conclusions drawn in paragraphs 14.3.106 and 14.3.107 of the main TA are replaced by:

"The assessment shows that in the AM peak hour the junction operates within capacity in the future baseline and over capacity with the AP1 revised scheme. In the PM peak hour, the junction operates over capacity in both the future baseline and with the AP1 revised scheme.

In scenario 1, the change in traffic due to construction of the AP1 revised scheme will increase the VoC on the A530 King Street approach from 82% in the future baseline to 116% in the AM peak hour, with a corresponding change in queue length from no queue in the future baseline to four PCU.

In scenario 3, the change in traffic due to construction of the AP1 revised scheme will increase the VoC on the A530 Croxton Lane approach from 69% in the future baseline to 105% in the PM peak hour, with a corresponding change in queue length from two PCU in the future baseline to five PCU."

A533 Davenham Bypass/Brick Kiln Lane

11.2.80 Table 14-33 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-33 of the main TA is replaced by Table 14-33 below.

Table 14-33: A533 Davenham Bypass/Brick Kiln Lane junction 2030 future baseline and with the AP1 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	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
A533 Davenham Bypass (north)	972	43%	0	1,102	49%	0	1,063	47%	0	1,032	46%	0
A533 Davenham Bypass (south)	1,234	62%	0	1,220	61%	0	1,227	62%	0	1,243	63%	0
Brick Kiln Lane	67	61%	1	86	88%	2	80	79%	2	78	77%	2
17:00–18:00	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
A533 Davenham Bypass (north)	1,170	51%	0	1,269	56%	0	1,264	56%	0	1,263	56%	0
A533 Davenham Bypass (south)	1,174	59%	0	1,294	65%	0	1,276	64%	0	1,315	66%	0
Brick Kiln Lane	48	50%	1	46	63%	1	46	61%	1	46	65%	1

11.2.81 The conclusions drawn in paragraphs 14.3.109 and 14.3.110 of the main 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 AP1 revised scheme. In the PM peak hour, the junction operates well within capacity in both the future baseline and with the AP1 revised scheme.

In scenario 1, the change in traffic due to construction of the AP1 revised scheme will increase the VoC on the Brick Kiln Lane approach from 61% in the future baseline to 88% 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 AP1 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths."

London Road/Jack Lane

11.2.82 Table 14-34 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-34 of the main TA is replaced by Table 14-34 below.

Table 14-34: London Road/Jack Lane junction 2030 future baseline and with the AP1 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	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
London Road (north)	271	20%	0	285	20%	0	279	20%	0	277	20%	0
London Road (south)	441	22%	0	420	21%	0	431	22%	0	453	23%	0
Jack Lane	379	66%	0	387	67%	0	388	67%	0	385	67%	0
17:00–18:00	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
London Road (north)	333	34%	0	338	34%	0	337	35%	0	341	36%	0
London Road (south)	417	22%	0	463	24%	0	458	24%	0	494	26%	0
Jack Lane	120	19%	0	122	20%	0	122	20%	0	122	20%	0

11.2.83 The conclusions drawn in paragraph 14.3.112 to 14.3.114 of the main 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 with the AP1 revised scheme.

The change in traffic due to construction of AP1 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths at this junction."

London Road/Church Street

11.2.84 Table 14-35 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-35 of the main TA is replaced by Table 14-35 below.

Table 14-35: London Road/Church Street junction 2030 future baseline and with the AP1 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	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
London Road (north)	567	32%	0	504	28%	0	524	29%	0	483	27%	0
Church Street	66	21%	0	95	30%	0	96	31%	0	52	16%	0
London Road (south)	791	61%	0	788	59%	0	796	60%	0	807	60%	0
17:00–18:00	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
London Road (north)	296	15%	0	287	15%	0	291	15%	0	288	15%	0
Church Street	442	107%	4	487	118%	4	479	116%	4	464	113%	5
London Road (south)	296	16%	0	317	16%	0	315	16%	0	351	18%	0

11.2.85 The conclusions drawn in paragraphs 14.3.116 to 14.3.118 of the main 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 AP1 revised scheme. In the PM peak hour, the junction operates over capacity in both the future baseline and with the AP1 revised scheme.

The change in traffic due to construction of the AP1 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 the construction of the AP1 revised scheme in the PM peak hour will increase the VoC on the Church Street approach from 107% in the future baseline to 118%, with no change in corresponding queue length."

Shurlach Lane/Davenham Road/Shipbrook Road/Manor Lane

11.2.86 Table 14-36 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-36 of the main TA is replaced by Table 14-36 below.

Table 14-36: Shurlach Lane/Davenham Road/Shipbrook Road/Manor Lane junction 2030 future baseline and with the AP1 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	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
Shurlach Lane	107	15%	0	98	13%	0	99	14%	0	101	14%	0
Davenham Road	330	54%	0	519	67%	0	520	68%	0	380	47%	0
Manor Lane*	-	-	-	-	-	-	-	-	-	-	-	-
Shipbrook Road	580	33%	0	532	30%	0	560	31%	0	522	29%	0
17:00–18:00	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
Shurlach Lane	666	105%	2	675	108%	2	672	107%	2	676	107%	2
Davenham Road	116	13%	0	138	11%	0	120	11%	0	108	12%	0
Manor Lane*	-	-	-	-	-	-	-	-	-	-	-	-
Shipbrook Road	31	2%	0	24	1%	0	24	1%	0	24	1%	0

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

11.2.87 The conclusions drawn in paragraphs 14.3.120 to 14.3.122 of the main 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 AP1 revised scheme. In the PM peak hour, the junction operates over capacity in both the future baseline and with the AP1 revised scheme.

The change in traffic due to construction of the AP1 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 AP1 revised scheme in the PM peak hour will increase the VoC on the Shurlach Lane approach from 105% in the future baseline to 108%, with no corresponding change in queue length."

A556 Shurlach Road/A533 Davenham Bypass junction

11.2.88 Table 14-37 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-37 of the main TA is replaced by Table 14-37 below.

Table 14-37: A556 Shurlach Road/A533 Davenham Bypass junction 2030 future baseline and with the AP1 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	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
A556 Shurlach Road (off-slip)	371	42%	0	462	53%	0	438	50%	0	413	47%	0
A533 Davenham Bypass (south)	774	70%	0	769	70%	0	770	70%	0	772	70%	0
A533 Davenham Bypass (west)	604	50%	0	606	50%	0	605	50%	0	607	51%	0
17:00–18:00	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
A556 Shurlach Road (off-slip)	860	92%	2	938	100%	6	931	99%	5	925	99%	5
A533 Davenham Bypass (south)	839	78%	0	893	82%	0	886	81%	0	890	82%	0
A533 Davenham Bypass (west)	506	42%	0	492	41%	0	498	42%	0	501	42%	0

11.2.89 The conclusions drawn in paragraphs 14.3.124 to 14.3.126 of the main 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 AP1 revised scheme. In the PM peak hour, the junction operates close to capacity in the future baseline and over capacity with the AP1 revised scheme.

The change in traffic due to construction of the AP1 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 AP1 revised scheme in the PM peak hour will increase the VoC on the A556 Shurlach Road (off-slip) approach from 92% in the future baseline to 100%, with a corresponding change in queue length from two PCU in the future baseline to six PCU."

A556 Shurlach Road/A556 Chester Road/A533 London Road/London Road

11.2.90 Table 14-38 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-38 of the main TA is replaced by Table 14-38 below.

Table 14-38: A556 Shurlach Road/A556 Chester Road/A533 London Road/London Road junction 2030 future baseline and with the AP1 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	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
A533 London Road	611	89%	3	637	93%	4	631	92%	4	631	92%	4
A556 Shurlach Road	508	29%	0	476	26%	0	483	27%	0	548	29%	0
London Road (south)	976	56%	1	1,000	55%	0	1,009	56%	0	978	57%	1
A556 Chester Road	1,788	101%	11	1,803	102%	11	1,799	102%	11	1,788	102%	11
17:00–18:00	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
A533 London Road	677	59%	1	683	60%	1	690	60%	1	680	61%	1
A556 Shurlach Road	1,777	103%	11	1,815	105%	11	1,794	104%	11	1,815	104%	11
London Road (south)	554	96%	6	581	101%	9	583	101%	9	580	101%	9
A556 Chester Road	1,120	64%	1	1,086	65%	1	1,075	64%	1	1,122	67%	1

11.2.91 The conclusions drawn in paragraphs 14.3.128 to 14.3.130 of the main 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 AP1 revised scheme.

In scenario 1 the change in traffic due to construction of the AP1 revised scheme will increase the VoC on the A533 London Road approach from 89% 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 four PCU.

In scenarios 1, 2 and 3 the change in traffic due to the construction of the AP1 revised scheme in the PM peak hour will increase the VoC on the London Road (south) approach from 96% in the future baseline to 101%, with a corresponding change in queue length from six PCU in the future baseline to nine PCU."

A530 King Street/Davenham Road/Crowders Lane

11.2.92 Table 14-39 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-39 of the main TA is replaced by Table 14-39 below.

Table 14-39: A530 King Street/Davenham Road/Crowders Lane junction 2030 future baseline and with the AP1 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	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
A530 King Street (north)	686	35%	0	1,185	69%	0	1,152	71%	0	886	59%	0
Crowders Lane	105	34%	0	206	91%	3	209	89%	3	66	27%	0
A530 King Street (south)	1,040	54%	0	1,087	59%	0	1,081	58%	0	1,015	54%	0
Davenham Road	244	82%	2	184	90%	3	198	91%	3	140	62%	1
17:00–18:00	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
A530 King Street (north)	829	42%	0	835	43%	0	846	43%	0	768	39%	0
Crowders Lane	109	31%	0	99	29%	0	102	29%	0	106	29%	0
A530 King Street (south)	851	49%	0	990	70%	0	926	62%	0	813	53%	0
Davenham Road	235	103%	6	248	119%	6	264	117%	6	292	112%	6

11.2.93 The conclusions drawn in paragraphs 14.3.132 to 14.3.135 of the main 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 AP1 revised scheme. In the PM peak hour, the junction operates over capacity in both the future baseline and with the AP1 revised scheme.

In scenario 1, the change in traffic due to construction of the AP1 revised scheme will increase the VoC on the Crowders Lane approach from 34% in the future baseline to 91% in the AM peak hour, with a corresponding change in queue length from no queue in the future baseline to three PCU. In the PM peak hour, the change in traffic due to construction of the AP1 revised scheme will increase the VoC on the Davenham Road approach from 103% in the future baseline to 119%, with no change in corresponding queue length."

A533 Kingsmead/A533 London Road/London Road

11.2.94 Table 14-40 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-40 of the main TA is replaced by Table 14-40 below.

Table 14-40: A533 Kingsmead/A533 London Road/London Road junction 2030 future baseline and with the AP1 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	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
London Road	521	60%	11	523	60%	11	519	59%	11	520	59%	11
A533 Davenham Bypass (Kingsmead)	973	64%	18	953	63%	18	957	63%	18	958	63%	18
A533 London Road	1,093	80%	17	1,090	79%	17	1,092	79%	17	1,090	79%	17
A533 Kingsmead	1,244	83%	24	1,259	84%	24	1,255	84%	24	1,260	84%	24
17:00–18:00	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
London Road	352	30%	6	338	28%	6	338	28%	6	344	29%	6
A533 Davenham Bypass (Kingsmead)	1,081	99%	22	1,106	101%	23	1,100	100%	23	1,107	101%	23
A533 London Road	1,115	78%	18	1,124	78%	18	1,124	78%	18	1,130	79%	18
A533 Kingsmead	960	68%	18	941	67%	18	942	67%	18	951	67%	18

11.2.95 The conclusions drawn in paragraphs 14.3.137 and 14.3.138 of the main 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 AP1 revised scheme. In the PM peak hour, the junction operates close to capacity in the future baseline and over capacity with the AP1 revised scheme.

The change in traffic due to construction of the AP1 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 3, the change in traffic due to construction of the AP1 revised scheme in the PM peak hour will increase the VoC on the A533 Davenham Bypass (Kingsmead) approach from 99% in the future baseline to 101%, with a corresponding change in queue length from 22 PCU in the future baseline to 23 PCU."

A556 Shurlach Road/Shurlach Lane

11.2.96 Table 14-41 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-41 of the main TA is replaced by Table 14-41 below.

Table 14-41: A556 Shurlach Road/Shurlach Lane junction 2030 future baseline and with the AP1 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	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
A556 Shurlach Road (east)	1,024	26%	0	956	25%	0	948	24%	0	1,090	28%	0
Shurlach Lane	68	16%	0	139	33%	0	141	33%	0	44	11%	0
A556 Shurlach Road (west)	2,263	57%	0	2,373	59%	0	2,341	59%	0	2,385	60%	0
17:00–18:00	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
A556 Shurlach Road (east)	2,594	65%	0	2,721	68%	0	2,690	67%	0	2,706	68%	0
Shurlach Lane	80	112%	3	71	124%	3	74	121%	3	71	119%	3
A556 Shurlach Road (west)	1,297	32%	0	1,321	33%	0	1,287	32%	0	1,354	34%	0

11.2.97 The conclusions drawn in paragraphs 14.3.140 to 14.3.142 of the main 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 AP1 revised scheme. In the PM peak hour, the junction operates over capacity in both the future baseline and with the AP1 revised scheme.

The change in traffic due to construction of the AP1 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 AP1 revised scheme in the PM peak hour will increase the VoC on the Shurlach Lane approach from 112% in the future baseline to 124%, with no change in corresponding queue length."

A530 King Street/Gadbrook Distribution Centre

11.2.98 Table 14-42 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-42 of the main TA is replaced by Table 14-42 below.

Table 14-42: A530 King Street/Gadbrook Distribution Centre junction 2030 future baseline and with the AP1 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	**2030 future baseline (existing layout)**			**AP1 revised scheme scenario 1 (existing layout)**			**AP1 revised scheme scenario 2 (existing layout)**			**AP1 revised scheme scenario 3 (proposed layout)**		
A530 King Street (north)	990	0.29	0	1520	0.45	1	1508	0.45	1	1489	0.56	1
B5082 Pennys Lane diversion	-	-	-	-	-	-	-	-	-	525	0.50	1
A530 King Street (south)	1,209	0.47	1	1203	0.47	1	1213	0.48	1	795	0.47	1
Gadbrook Distribution Centre	142	0.09	0	146	0.09	1	146	0.10	0	142	0.11	0
17:00–18:00	**2030 future baseline (existing layout)**			**AP1 revised scheme scenario 1 (existing layout)**			**AP1 revised scheme scenario 2 (existing layout)**			**AP1 revised scheme scenario 3 (proposed layout)**		
A530 King Street (north)	934	0.28	0	944	0.28	0	977	0.29	0	1467	0.56	1
B5082 Pennys Lane diversion	-	-	-	-	-	-	-	-	-	157	0.16	0
A530 King Street (south)	832	0.32	1	1017	0.40	1	1013	0.40	1	754	0.41	1
Gadbrook Distribution Centre	188	0.10	0	143	0.08	0	143	0.08	0	188	0.13	0

11.2.99 The conclusions drawn in paragraphs 14.3.144 and 14.3.145 of the main TA remain unchanged.

A556 Shurlach Road /A530 King Street

11.2.100 Table 14-43 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-43 of the main TA is replaced by Table 14-43 below.

Table 14-43: A556 Shurlach Road/A530 King Street junction 2030 future baseline and with the AP1 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	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
A530 King Street (north)	782	96%	6	718	102%	9	714	102%	9	731	101%	9
A556 Shurlach Road (east)	1,547	77%	1	1,904	101%	10	1,921	101%	10	1,653	100%	11
A530 King Street (south)	834	85%	2	856	82%	2	889	86%	2	1,311	100%	10
A556 Shurlach Road (west)	1,596	94%	3	1,671	100%	9	1,641	101%	9	1,690	100%	9
17:00–18:00	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
A530 King Street (north)	889	100%	9	811	90%	4	818	90%	4	802	88%	3
A556 Shurlach Road (east)	1,801	101%	10	1,976	102%	10	1,957	103%	10	1,710	101%	10
A530 King Street (south)	785	106%	9	824	109%	9	835	108%	9	1,063	112%	9
A556 Shurlach Road (west)	1,436	96%	5	1,294	97%	5	1,271	95%	5	1,314	93%	4

11.2.101 The conclusions drawn in paragraphs 14.3.147 and 14.3.148 of the main 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 AP1 revised scheme. In the PM peak hour, the junction operates over capacity in both the future baseline and with the AP1 revised scheme.

In scenarios 1 and 2 the change in traffic due to construction of the AP1 revised scheme will increase the VoC on the A556 Shurlach Road (east) approach from 77% in the future baseline to 101% in the AM peak hour, with a corresponding change in queue length from one PCU in the future baseline to 10 PCU.

In the PM peak hour, the change in traffic due to construction of the AP1 revised scheme will increase the VoC on the A530 King Street (south) approach from 106% in the future baseline to 112%, with no change in corresponding queue length."

Gadbrook Road/East Avenue junction

11.2.102 Table 14-44 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-44 of the main TA is replaced by Table 14-44 below.

Table 14-44: Gadbrook Road/East Avenue junction 2030 future baseline and with the AP1 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	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
East Avenue	52	9%	0	47	8%	0	45	8%	0	52	9%	0
Gadbrook Road (south)	156	11%	0	174	14%	0	175	14%	0	156	11%	0
Gadbrook Road (north)	238	12%	0	245	12%	0	246	12%	0	242	12%	0
17:00–18:00	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
East Avenue	11	3%	0	46	9%	0	47	9%	0	46	9%	0
Gadbrook Road (south)	295	23%	0	299	24%	0	300	24%	0	297	24%	0
Gadbrook Road (north)	229	12%	0	351	18%	0	350	18%	0	348	17%	0

11.2.103 The conclusions drawn in paragraphs 14.3.150 to 14.3.152 of the main 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 AP1 revised scheme.

The change in traffic due to construction of the AP1 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths at this junction."

A533 London Road/A533 Kingsmead

11.2.104 Table 14-45 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-45 of the main TA is replaced by Table 14-45 below.

Table 14-45: A533 London Road/A533 Kingsmead junction 2030 future baseline and with the AP1 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	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
A533 London Road	924	60%	11	951	61%	11	942	61%	11	945	61%	11
London Road	277	58%	4	279	59%	4	279	59%	4	278	59%	4
A533 Kingsmead	983	90%	9	977	88%	9	979	88%	9	978	88%	9
17:00–18:00	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
A533 London Road	1,200	64%	13	1,150	61%	12	1,155	62%	13	1,165	62%	13
London Road	135	46%	2	135	46%	2	136	46%	2	143	49%	3
A533 Kingsmead	873	63%	6	881	63%	6	882	63%	6	876	63%	6

11.2.105 The conclusions drawn in paragraphs 14.3.154 to 14.3.156 of the main 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 AP1 revised scheme. In the PM peak hour, the junction operates well within capacity in both the future baseline and with the AP1 revised scheme.

The change in traffic due to construction of the AP1 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths at this junction."

A530 Griffiths Road/A530 King Street/B5082 Middlewich Road

11.2.106 Table 14-46 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-46 of the main TA is replaced by Table 14-46 below.

Table 14-46: A530 Griffiths Road/A530 King Street/B5082 Middlewich Road junction 2030 future baseline and with the AP1 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	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
A530 Griffiths Road	430	38%	4	289	41%	4	282	40%	4	374	33%	4
Pennys Lane*	-	-	-	-	-	-	-	-	-	-	-	-
A530 King Street	523	53%	7	463	64%	8	466	65%	9	492	50%	7
B5082 Middlewich Road	448	92%	11	533	56%	10	535	56%	10	421	94%	10
17:00–18:00	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
A530 Griffiths Road	487	45%	5	400	41%	4	412	42%	4	391	37%	4
Pennys Lane*	-	-	-	-	-	-	-	-	-	-	-	-
A530 King Street	660	67%	9	717	73%	10	715	73%	10	662	67%	9
B5082 Middlewich Road	432	94%	10	406	98%	10	414	98%	10	387	98%	9

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

11.2.107 The conclusions drawn in paragraphs 14.3.158 and 14.3.159 of the main 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 AP1 revised scheme.

In scenario 3 the change in traffic due to the construction of the AP1 revised scheme will increase the VoC on the B5082 Middlewich Road approach from 92% in the future baseline to 94% in the AM peak hour, with a corresponding change in queue length from 11 PCU in the future baseline to 10 PCU.

In scenarios 1, 2 and 3 the change in traffic due to construction of the AP1 revised scheme in the PM peak hour will increase the VoC on the B5082 Middlewich Road approach from 94% in the future baseline to 98%, with no change in corresponding queue length."

A559 Watling Street/Apple Market Street

11.2.108 Table 14-47 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-47 of the main TA is replaced by Table 14-47 below.

Table 14-47: A559 Watling Street/Apple Market Street junction 2030 future baseline and with the AP1 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	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
Apple Market Street	119	92%	3	119	98%	4	119	98%	4	119	97%	4
A559 Watling Street (east)*	-	-	-	-	-	-	-	-	-	-	-	-
A559 Watling Street (west)	2,295	38%	0	2,344	39%	0	2,344	39%	0	2,340	39%	0
17:00–18:00	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
Apple Market Street	187	100%	5	179	100%	5	178	100%	5	182	100%	5
A559 Watling Street (east)*	-	-	-	-	-	-	-	-	-	-	-	-
A559 Watling Street (west)	1,926	47%	0	1,966	48%	0	1,971	48%	0	1,949	48%	0

** A559 Watling Street is one-way eastbound and therefore no results are reported for A559 Watling Street (east) approach*

11.2.109 The conclusions drawn in paragraphs 14.3.161 and 14.3.162 of the main 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 AP1 revised scheme. In the PM peak hour, the junction operates over capacity in both the future baseline and with the AP1 revised scheme.

In scenarios 1 and 2, the change in traffic due to construction of the AP1 revised scheme will increase the VoC on the Apple Market Street approach from 92% in the future baseline to 98% 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 AP1 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths."

Local network change in the Lostock Green area

11.2.110 There are a number of temporary and permanent changes to the local road network in the Lostock Green area as part of the original scheme. Details of the permanent changes are presented Section 14.5 of the main TA. Where new or modified junctions are proposed during the construction phase, the performance of the existing layout is presented for scenarios before the junction layout change, where relevant, and the performance of the proposed layout is presented for scenarios following completion of the new junction layout.

A556 Shurlach Road (northbound) realignment/Birches Lane realignment

11.2.111 Table 14-48 of the main TA summarises the performance of the junction as a result of the original scheme. Table 14-48 of the main TA is replaced by Table 14-48 below.

Table 14-48: A556 Shurlach Road (northbound) realignment/Birches Lane realignment 2030 with the AP1 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	RFC	Q, PCU
08:00 - 09:00	**AP1 revised scheme scenario 3 (proposed layout)**		
A556 Shurlach Road realignment (north)*	-	-	-
A556 Shurlach Road realignment (south) (ahead)	1,707	0.00	0
A556 Shurlach Road realignment (south) (left)	251	0.00	0
Birches Lane realignment (left)	6	0.02	0
17:00-18:00	**AP1 revised scheme scenario 3 (proposed layout)**		
A556 Shurlach Road realignment (north)*	-	-	-
A556 Shurlach Road realignment (south) (ahead)	1,325	0.00	0
A556 Shurlach Road realignment (south) (left)	292	0.00	0
Birches Lane realignment (left)	4	0.00	0

** A556 Shurlach Road will be one-way northbound and therefore no results are reported for the A556 Shurlach Road realignment (north) approach*

11.2.112 The conclusions drawn in paragraph 14.3.165 of the main TA remain unchanged.

A556 Shurlach Road (southbound) realignment/Birches Lane diversion

11.2.113 Table 14-49 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-49 of the main TA is replaced by Table 14-49 below.

Table 14-49: A556 Shurlach Road (southbound) realignment/Birches Lane diversion junction 2030 with the AP1 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	RFC	Q, PCU
08:00–09:00	**AP1 revised scheme scenario 3 (proposed layout)**		
A556 Shurlach Road realignment (north) (ahead)	2,063	0.00	0
A556 Shurlach Road realignment (north) (left)	173	0.00	0
Birches Lane diversion (left)	51	0.15	0
A556 Shurlach Road realignment (south)*	-	-	-
17:00–18:00	**AP1 revised scheme scenario 3 (proposed layout)**		
A556 Shurlach Road realignment (north) (ahead)	1,676	0.00	0
A556 Shurlach Road realignment (north) (left)	190	0.00	0
Birches Lane diversion (left)	298	0.72	3
A556 Shurlach Road realignment (south)*	-	-	-

** A556 Shurlach Road will be one-way southbound and therefore no results are reported for the A556 Shurlach Road realignment (south) approach*

11.2.114 The conclusions drawn in paragraph 14.3.167 of the main TA are replaced by:

"The assessment shows that in the AM and PM peak hours the junction operates well within capacity with the AP1 Revised Scheme."

B5082 Station Road/B5062 Middlewich Road/Manchester Road/Victoria Road

11.2.115 Table 14-50 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-50 of the main TA is replaced by Table 14-50 below.

Table 14-50: B5082 Station Road/B5062 Middlewich Road/Manchester Road/Victoria Road junction 2030 future baseline and with the AP1 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	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
Manchester Road	176	24%	2	216	29%	3	216	29%	3	178	24%	2
B5082 Middlewich Road	862	92%	10	875	93%	10	877	94%	10	890	95%	10
Victoria Road	470	61%	6	469	63%	6	474	64%	6	466	61%	6
B5082 Station Road	195	21%	2	231	25%	3	224	24%	3	200	22%	2
17:00–18:00	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
Manchester Road	303	38%	4	285	35%	4	280	35%	4	293	36%	4
B5082 Middlewich Road	841	90%	10	877	94%	10	881	94%	10	856	92%	10
Victoria Road	308	51%	4	327	52%	4	326	52%	4	322	52%	4
B5082 Station Road	385	41%	4	488	53%	6	501	54%	6	479	52%	5

11.2.116 The conclusions drawn in paragraphs 14.3.169 to 14.3.171 of the main 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 AP1 revised scheme.

In scenario 3, the change in traffic due to construction of the AP1 revised scheme will increase the VoC on the B5082 Middlewich Road approach from 92% in the future baseline to 95% in the AM peak hour, with no change in corresponding queue length.

In scenarios 1 and 2, the change in traffic due to construction of the AP1 revised scheme in the PM peak hour will increase the VoC on the B5082 Middlewich Road approach from 90% in the future baseline to 94%, with no change in corresponding queue length."

A559 Chester Way/B5082 Station Road/B5075 New Warrington Road

11.2.117 Table 14-51 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-51 of the main TA is replaced by Table 14-51 below.

Table 14-51: A559 Chester Way/B5082 Station Road/B5075 New Warrington Road junction 2030 future baseline and with the AP1 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	Flow, PCU/ hr	VoC	Q, PCU
08:00–09:00	**2030 future baseline**			**AP1 revised scheme utilities scenario**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
B5075 New Warrington Road	537	38%	0	536	38%	0	603	45%	0	589	44%	0	568	42%	0
A559 Chester Way (east)	399	40%	4	404	41%	4	391	40%	4	372	38%	4	382	39%	4
B5082 Station Road	866	97%	4	863	97%	4	855	97%	4	868	97%	4	864	97%	4
A559 Chester Way (west)	807	35%	7	804	35%	7	813	36%	8	818	36%	8	815	36%	8
Leicester Street	165	13%	2	165	13%	2	165	13%	2	165	13%	2	165	13%	2
17:00–18:00	**2030 future baseline**			**AP1 revised scheme utilities scenario**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
B5075 New Warrington Road	878	74%	1	870	73%	1	906	77%	1	928	78%	1	896	76%	1
A559 Chester Way (east)	870	88%	9	876	89%	9	864	87%	9	865	87%	9	845	85%	9
B5082 Station Road	509	101%	7	500	101 %	7	507	100%	7	505	100%	7	515	101%	7
A559 Chester Way (west)	913	40%	8	917	40%	8	905	40%	8	913	40%	8	902	39%	8
Leicester Street	416	32%	5	422	32%	5	421	32%	5	422	32%	5	420	32%	5

11.2.118 The conclusions drawn in paragraphs 14.3.173 to 14.3.175 of the main 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 AP1 revised scheme. In the PM peak hour, the junction operates over capacity in both the future baseline and with the AP1 revised scheme.

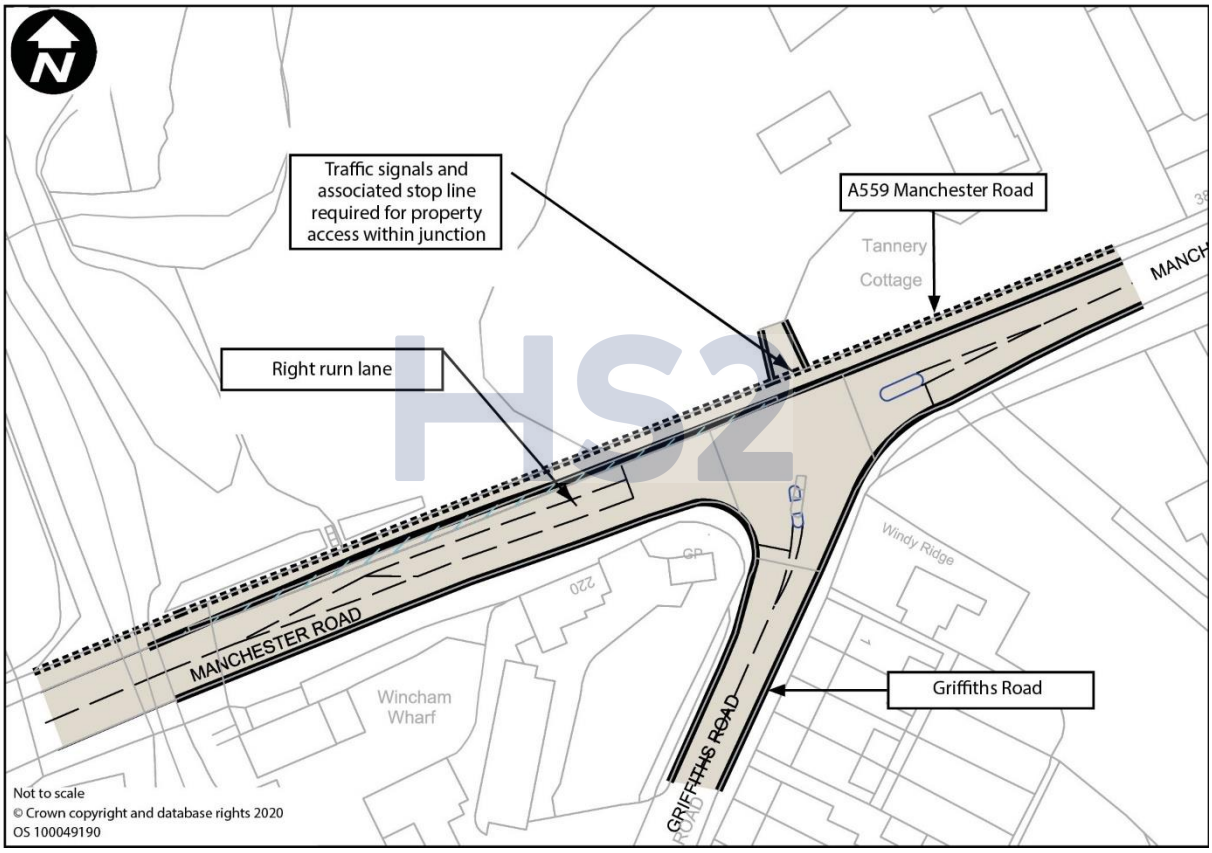
The change in traffic due to construction of the AP1 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths at this junction."

A530 Griffiths Road/A559 Manchester Road

11.2.119 The A530 Griffiths Road/A559 Manchester Road junction will be permanently modified as a result of the AP1 revised scheme to mitigate impacts at this location as reported in the main TA. The modifications comprise the introduction of traffic signal control and associated geometric changes at the junction. Further details of the permanent changes are presented in the operational assessment in Section 11.4.

11.2.120 Figure 14-6.4 shows the junction layout introduced as part of the AP1 revised scheme.

Figure 14-6.4: Junction layout diagram (A530 Griffiths Road/A559 Manchester Road)



11.2.121 Table 14-52 summarises the results of the changes in performance of the junction as a result of the AP1 revised scheme based on the existing junction layout. Table 14-52.1 summarises the performance of the junction as a result of the AP1 revised scheme with the proposed temporary junction layout introduced.

11.2.122 Table 14-52 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-52 of the main TA is replaced by Table 14-52 and Table 14-52.1 below.

Table 14-52: A530 Griffiths Road/A559 Manchester Road junction 2030 future baseline and with the AP1 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	**2030 future baseline (existing layout)**			**AP1 revised scheme scenario 1 (existing layout)**			**AP1 revised scheme scenario 2 (existing layout)**			**AP1 revised scheme scenario 3 (existing layout)**		
A599 Manchester Road (east)	870	46%	0	813	43%	0	796	42%	0	858	46%	0
A530 Griffiths Road	242	68%	1	264	78%	1	264	78%	1	259	77%	1
A599 Manchester Road (west)	605	48%	0	612	45%	0	608	44%	0	628	48%	0
17:00–18:00	**2030 future baseline (existing layout)**			**AP1 revised scheme scenario 1 (existing layout)**			**AP1 revised scheme scenario 2 (existing layout)**			**AP1 revised scheme scenario 3 (existing layout)**		
A599 Manchester Road (east)	856	45%	0	862	46%	0	888	47%	0	880	46%	0
A530 Griffiths Road	314	90%	2	339	100%	6	337	101%	6	315	92%	2
A599 Manchester Road (west)	811	71%	0	760	63%	0	764	65%	0	767	62%	0

Table 14-52.1: A530 Griffiths Road/A559 Manchester Road junction 2030 future baseline and with the AP1 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	**2030 future baseline (existing layout)**			**AP1 revised scheme scenario 1 (proposed layout)**			**AP1 revised scheme scenario 2 (proposed layout)**			**AP1 revised scheme scenario 3 (proposed layout)**		
A599 Manchester Road (east)	870	46%	0	760	72%	11	733	69%	11	794	76%	12
A530 Griffiths Road	242	68%	1	198	70%	5	196	69%	5	179	63%	5
A599 Manchester Road (west)	605	48%	0	573	35%	5	574	35%	5	632	39%	6
17:00–18:00	**2030 future baseline (existing layout)**			**AP1 revised scheme scenario 1 (proposed layout)**			**AP1 revised scheme scenario 2 (proposed layout)**			**AP1 revised scheme scenario 3 (proposed layout)**		
A599 Manchester Road (east)	856	45%	0	834	79%	12	851	81%	13	839	79%	12
A530 Griffiths Road	314	90%	2	264	93%	7	271	95%	8	247	86%	7
A599 Manchester Road (west)	811	71%	0	747	46%	7	736	46%	7	744	46%	7

11.2.123 The conclusions drawn in paragraphs 14.3.177 to 14.3.179 of the main 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 the future baseline and within capacity with the AP1 revised scheme. In the PM peak hour, the junction operates close to capacity in the future baseline and over capacity with the AP1 revised scheme.

With the proposed layout the assessment shows that in the AM peak hour the junction operates well within capacity in both the future baseline and with the AP1 revised scheme. In the PM peak hour, the junction operates close to capacity in both the future baseline and with the AP1 revised scheme.

The change in traffic due to construction of the AP1 revised scheme will not result in substantial changes in capacity indicators such as RFC and queue lengths in the AM peak hour.

In scenario 2, the change in traffic due to construction of the AP1 revised scheme in the PM peak hour will increase the VoC on the A530 Griffiths Road approach from 90% in the future baseline to 95%, with a corresponding change in queue length from two PCU in the future baseline to eight PCU."

A559 Manchester Road/A559 Hall Lane/Station Road

11.2.124 Table 14-53 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-53 of the main TA is replaced by Table 14-53 below.

Table 14-53: A559 Manchester Road/A559 Hall Lane/Station Road junction 2030 future baseline and with the AP1 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	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
A559 Hall Lane	361	67%	7	292	54%	6	301	55%	6	325	60%	6
A559 Manchester Road (east)	598	73%	10	572	70%	10	559	69%	10	571	70%	10
Station Road	176	89%	4	170	87%	4	174	89%	4	172	88%	4
A559 Manchester Road (west)	627	80%	11	655	85%	11	654	85%	11	639	82%	11
17:00–18:00	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
A559 Hall Lane	405	76%	8	400	75%	8	414	78%	8	416	78%	8
A559 Manchester Road (east)	506	65%	9	482	60%	8	482	59%	8	471	59%	8
Station Road	195	99%	5	201	103%	5	205	106%	5	197	101%	5
A559 Manchester Road (west)	750	104%	13	756	105%	13	757	106%	13	751	105%	13

11.2.125 The conclusions drawn in paragraphs 14.3.181 to 14.3.184 of the main 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 AP1 revised scheme. In the PM peak hour, the junction operates over capacity in both the future baseline and with the AP1 revised scheme.

The change in traffic due to construction of the AP1 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 AP1 revised scheme in the PM peak hour will increase the VoC on the Station Road approach from 99% in the future baseline to 106%, with no change in corresponding queue length."

A559 Manchester Road/Stubbs Lane

11.2.126 Table 14-54 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-54 of the main TA is replaced by Table 14-54 below.

Table 14-54: A559 Manchester Road/Stubbs Lane junction 2030 future baseline and with the AP1 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	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
A559 Manchester Road (east)	460	23%	0	441	22%	0	423	22%	0	433	22%	0
Stubbs Lane	279	64%	0	279	64%	0	279	63%	0	279	63%	0
A559 Manchester Road (west)	468	51%	0	489	51%	0	486	51%	0	491	50%	0
17:00–18:00	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
A559 Manchester Road (east)	333	17%	0	327	17%	0	325	17%	0	331	17%	0
Stubbs Lane	427	103%	5	423	104%	5	427	104%	5	417	104%	5
A559 Manchester Road (west)	555	45%	0	568	46%	0	562	45%	0	565	45%	0

11.2.127 The conclusions drawn in paragraphs 14.3.186 and 14.3.187 of the main 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 AP1 revised scheme. In the PM peak hour, the junction operates over capacity in both the future baseline and with the AP1 revised scheme.

The change in traffic due to construction of the AP1 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths at this junction."

B5075 Ollershaw Lane/B5075 New Warrington Road/Chapel Street

11.2.128 Table 14-55 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-55 of the main TA is replaced by Table 14-55 below.

Table 14-55: B5075 Ollershaw Lane/B5075 New Warrington Road/Chapel Street junction 2030 future baseline and with the AP1 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	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
B5075 Ollershaw Lane	383	19%	0	571	30%	0	558	29%	0	547	29%	0
Chapel Street	215	44%	0	211	45%	0	212	45%	0	205	44%	0
B5075 New Warrington Road	738	91%	1	694	96%	2	698	95%	1	708	96%	2
17:00–18:00	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
B5075 Ollershaw Lane	337	17%	0	372	19%	0	408	20%	0	363	18%	0
Chapel Street	554	99%	4	546	100%	5	533	100%	5	546	99%	4
B5075 New Warrington Road	679	58%	0	764	74%	0	784	78%	0	726	67%	0

11.2.129 The conclusions drawn in paragraphs 14.3.189 and 14.3.190 of the main 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 AP1 revised scheme. In the PM peak hour, the junction operates close to capacity in the future baseline and over capacity with the AP1 revised scheme.

In scenarios 1 and 3, the change in traffic due to construction of the AP1 revised scheme will increase the VoC on the B5075 New Warrington Road approach from 91% in the future baseline to 96% 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 AP1 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths."

A556 Chester Road/A556 Shurlach Road/A559 Manchester Road

11.2.130 Table 14-56 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-56 of the main TA is replaced by Table 14-56 below.

Table 14-56: A556 Chester Road/A556 Shurlach Road/A559 Manchester Road junction 2030 future baseline and with the AP1 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	Flow, PCU/ hr	VoC	Q, PCU
08:00 - 09:00	**2030 future baseline**			**AP1 revised scheme utilities scenario**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
A559 (northbound) to A556 (southbound) slip road	203	68%	1	228	83%	2	111	80%	2	91	76%	2	149	87%	3
A556 Chester Road	1,675	42%	0	1,759	44%	0	2,352	59%	0	2,467	62%	0	2,190	55%	0
A556 (southbound) to A559 Manchester Road (westbound)	505	31%	9	506	31%	9	524	32%	9	508	31%	9	538	33%	10
A556 Shurlach Road	1,278	72%	21	1,283	72%	22	1,336	75%	22	1,359	76%	23	1,315	74%	22
A559 Manchester Road (eastbound)	476	94%	12	488	97%	13	482	96%	13	484	96%	13	468	93%	12
17:00-18:00	**2030 future baseline**			**AP1 revised scheme utilities scenario**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
A559 (northbound) to A556 (southbound) slip road	195	77%	2	194	83%	2	182	75%	2	160	65%	1	183	79%	2
A556 Chester Road	1,845	46%	0	1,918	48%	0	1,883	47%	0	1,881	47%	0	1,926	48%	0
A556 (southbound) to A559 Manchester Road (westbound)	430	21%	4	426	21%	4	475	23%	4	493	24%	4	497	24%	4
A556 Shurlach Road	1,109	102%	14	1,111	102%	14	1,176	108%	14	1,198	111%	14	1,145	106%	14
A559 Manchester Road (eastbound)	671	91%	6	683	92%	6	675	91%	6	692	93%	7	666	90%	6

11.2.131 The conclusions drawn in paragraphs 14.3.193 to 14.3.194 of the main 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 AP1 revised scheme. In the PM peak hour, the junction operates over capacity in both the future baseline and with the AP1 revised scheme.

In scenario 3, the change in traffic due to construction of the AP1 revised scheme will increase the VoC on the A559 (northbound) to A556 (southbound) slip road approach from 68% in the future baseline to 87% in the AM peak hour, with a corresponding change in queue length from one PCU in the future baseline to three PCU.

In scenario 2, the change in traffic due to construction of the AP1 revised scheme in the PM peak hour will increase the VoC on the A556 Shurlach Road approach from 102% in the future baseline to 111%, with no change in corresponding queue length."

A559 Marston Lane/A559 Hall Lane/B5391 Church Street/Wincham Lane

11.2.132 Table 14-57 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-57 of the main TA is replaced by Table 14-57 below.

Table 14-57: A559 Marston Lane/A559 Hall Lane/B5391 Church Street/Wincham Lane junction 2030 future baseline and with the AP1 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	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
B5391 Church Street	234	76%	4	265	86%	4	267	87%	4	260	85%	4
A559 Hall Lane	555	61%	5	543	55%	5	534	54%	5	529	54%	5
Wincham Lane	179	60%	3	173	58%	3	170	57%	3	183	61%	3
A559 Marston Lane	381	53%	4	181	19%	2	195	20%	2	183	19%	2
17:00–18:00	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
B5391 Church Street	171	56%	3	139	46%	2	121	40%	2	163	53%	2
A559 Hall Lane	413	59%	5	398	56%	5	297	56%	5	405	58%	5
Wincham Lane	562	97%	7	572	100%	7	575	100%	7	572	99%	7
A559 Marston Lane	209	34%	3	206	31%	2	210	32%	3	211	32%	3

11.2.133 The conclusions drawn in paragraphs 14.3.196 to 14.3.198 of the main 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 AP1 revised scheme. In the PM peak hour, the junction operates close to capacity in the future baseline and over capacity with the AP1 revised scheme.

In scenario 2, the change in traffic due to construction of the AP1 revised scheme will increase the VoC on the B5391 Church Street approach from 76% in the future baseline to 87% 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 AP1 revised scheme will increase the VoC on the Wincham Lane approach from 97% in the future baseline to 100%, with no change in corresponding queue length."

A556 Chester Road/B5569 Plumley Moor Road

11.2.134 Table 14-58 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-58 of the main TA is replaced by Table 14-58 below.

Table 14-58: A556 Chester Road/B5569 Plumley Moor Road junction 2030 future baseline and with the AP1 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	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
A556 Chester Road (north)	1,360	57%	16	1,408	59%	17	1,396	59%	17	1,367	57%	16
B5569 Plumley Moor Road (east)	130	49%	2	123	47%	2	114	43%	2	123	47%	2
A556 Chester Road (south)	1,846	92%	17	1,923	95%	18	1,931	96%	18	1,887	94%	17
B5569 Plumley Moor Road (west)	196	101%	3	199	102%	3	199	102%	3	198	102%	3
17:00–18:00	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
A556 Chester Road (north)	1,528	84%	23	1,517	83%	23	1,561	86%	23	1,535	84%	23
B5569 Plumley Moor Road (east)	46	10%	2	126	28%	3	140	31%	4	98	22%	3
A556 Chester Road (south)	1,299	84%	15	1,512	98%	16	1,554	101%	16	1,504	98%	16
B5569 Plumley Moor Road (west)	252	101%	4	244	98%	4	201	81%	4	249	100%	4

11.2.135 The conclusions drawn in paragraphs 14.3.200 to 14.3.202 of the main 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 AP1 revised scheme.

In scenario 2, the change in traffic due to construction of the AP1 revised scheme will increase the VoC on the A556 Chester Road (south) approach from 92% in the future baseline to 96% in the AM peak hour, with a corresponding change in queue length from 17 PCU in the future baseline to 18 PCU.

In scenarios 2, the change in traffic due to construction of the AP1 revised scheme in the PM peak hour will increase the VoC on the A556 Chester Road (south) approach from 84% in the future baseline to 101%, with a corresponding change in queue length from 15 PCU in the future baseline to 16 PCU."

B5391 Church Street/B5391 Pickmere Lane/Linnards Lane/Earles Lane

11.2.136 Table 14-59 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-59 of the main TA is replaced by Table 14-59 below.

Table 14-59: B5391 Church Street/B5391 Pickmere Lane/Linnards Lane/Earles Lane junction 2030 future baseline and with the AP1 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	Flow, PCU/hr	VoC	Q, PCU
08:00–09:00	**2030 future baseline**			**AP1 revised scheme utilities scenario**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
B5391 Pickmere Lane	394	20%	0	398	20%	0	474	24%	0	494	25%	0	467	24%	0
Linnards Lane	107	28%	0	107	30%	0	89	26%	0	90	27%	0	90	2%	0
B5391 Church Street	210	11%	0	217	11%	0	218	11%	0	216	11%	0	206	10%	0
Earles Lane	375	61%	0	461	75%	0	368	60%	0	383	63%	0	401	65%	0
B5391 Church Street (north) (internal)	399	37%	0	402	38%	0	464	44%	0	484	47%	0	459	43%	0
B5391 Church Street (south) (internal)	582	75%	0	674	90%	1	582	80%	0	595	84%	1	603	85%	1
17:00–18:00	**2030 future baseline**			**AP1 revised scheme utilities scenario**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
B5391 Pickmere Lane	376	19%	0	384	20%	0	379	19%	0	383	20%	0	394	20%	0
Linnards Lane	116	25%	0	120	26%	0	115	24%	0	131	27%	0	129	27%	0
B5391 Church Street	461	23%	0	478	24%	0	443	22%	0	450	23%	0	468	23%	0
Earles Lane	163	32%	0	206	40%	0	155	30%	0	151	29%	0	138	27%	0
B5391 Church Street (north) (internal)	398	50%	0	401	50%	0	416	56%	0	436	62%	0	435	57%	0
B5391 Church Street (south) (internal)	621	50%	0	680	60%	0	595	45%	0	597	44%	0	602	48%	0

11.2.137 The conclusions drawn in paragraphs 14.3.205 and 14.3.206 of the main 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 AP1 revised scheme. In the PM peak hour, the junction operates well within capacity in both the future baseline and with the AP1 revised scheme.

In the utilities scenario, the change in traffic due to construction of the AP1 revised scheme will increase the VoC on the B5391 Church Street (south) (internal) approach from 75% in the future baseline to 90% in the AM peak hour, with a corresponding change in queue length from no queue in the future baseline to one PCU.

In the PM peak hour, the change in traffic due to construction of the AP1 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths."

A559 Marston Lane/B5075 Ollershaw Lane/Dark Lane

11.2.138 Table 14-60 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-60 of the main TA is replaced by Table 14-60 below.

Table 14-60: A559 Marston Lane/B5075 Ollershaw Lane/Dark Lane junction 2030 future baseline and with the AP1 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	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
Dark Lane	0	0%	0	0	0%	0	0	0%	0	0	0%	0
A559 Marston Lane (east)	325	17%	0	360	19%	0	376	20%	0	362	19%	0
B5075 Ollershaw Lane	310	75%	1	289	67%	0	291	68%	0	296	71%	1
A559 Marston Lane (west)	983	85%	0	942	101%	2	961	101%	2	957	101%	2
17:00–18:00	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
Dark Lane	0	0%	0	0	0%	0	0	0%	0	0	0%	0
A559 Marston Lane (east)	490	25%	0	579	30%	0	625	32%	0	569	29%	0
B5075 Ollershaw Lane	479	103%	5	474	104%	5	475	104%	6	475	104%	5
A559 Marston Lane (west)	608	70%	0	613	74%	0	608	76%	0	608	74%	0

11.2.139 The conclusions drawn in paragraph 14.3.208 to 14.3.210 of the main 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 AP1 revised scheme. In the PM peak hour, the junction operates over capacity in both the future baseline and with the AP1 revised scheme.

In scenario 1, 2 and 3, the change in traffic due to construction of the AP1 revised scheme will increase the VoC on the A559 Marston Lane (west) approach from 85% in the future baseline to 101% in the AM peak hour, with a corresponding change in queue length from no queue in the future baseline to two PCU.

In the PM peak hour, the change in traffic due to construction of the AP1 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths."

A533 Town Bridge/A533 Dane Street/Weaver Way

11.2.140 Table 14-60.1 summarises the results of the changes to the performance of the junction as a result of the AP1 revised scheme.

Table 14-60.1: A533 Town Bridge/A533 Dane Street/Weaver Way junction 2030 future baseline and with the AP1 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	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
A559 Watling Street*	-	-	-	-	-	-	-	-	-	-	-	-
A533 Dane Street	610	70%	10	617	70%	10	617	70%	10	613	70%	10
Watling Street**	-	-	-	-	-	-	-	-	-	-	-	-
A533 Town Bridge	1,705	98%	21	1,758	101%	21	1,753	100%	21	1,751	100%	21
Weaver Way*	-	-	-	-	-	-	-	-	-	-	-	-
17:00–18:00	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
A559 Watling Street*	-	-	-	-	-	-	-	-	-	-	-	-
A533 Dane Street	583	54%	10	620	58%	11	627	58%	11	603	56%	10
Watling Street**	-	-	-	-	-	-	-	-	-	-	-	-
A533 Town Bridge	1,338	94%	21	1,341	95%	21	1,339	95%	21	1,341	95%	21
Weaver Way*	-	-	-	-	-	-	-	-	-	-	-	-

** One-way exit arm from the junction and therefore not reported in the results*

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

11.2.141 The assessment shows in the AM peak hour the junction operates close to capacity in the future baseline and over capacity with the AP1 revised scheme. In the PM peak hour, the junction operates close to capacity in both the future baseline and with the AP1 revised scheme.

11.2.142 In scenario 1 the change in traffic due to construction of the AP1 revised scheme will increase the VoC on the A533 Town Bridge approach from 98% in the future baseline to 101% 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 AP1 revised scheme will not result in substantial changes in capacity indicators such as VoC and queue lengths.

A54 Holmes Chapel Road/Brereton Lane

11.2.143 Table 14-60.2 summarises the results of the changes to the performance of the junction as a result of the AP1 revised scheme.

Table 14-60.2: A54 Holmes Chapel Road/Brereton Lane junction 2030 future baseline and with the AP1 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	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
A54 Holmes Chapel Road (east)	1,171	88%	0	1,283	97%	0	1,282	97%	0	1,281	96%	0
Brereton Lane	17	43%	1	17	52%	1	17	53%	1	17	52%	1
A54 Holmes Chapel Road (west)	1,098	83%	0	1,095	82%	0	1,102	83%	0	1,084	82%	0
17:00–18:00	**2030 future baseline**			**AP1 revised scheme scenario 1**			**AP1 revised scheme scenario 2**			**AP1 revised scheme scenario 3**		
A54 Holmes Chapel Road (east)	727	55%	0	919	69%	0	918	69%	0	849	64%	0
Brereton Lane	157	68%	1	188	107%	5	195	108%	5	203	105%	6
A54 Holmes Chapel Road (west)	647	49%	0	578	44%	0	538	40%	0	582	44%	0

11.2.144 The assessment shows that in the AM peak hour the junction operates close to capacity in both the future baseline and with the AP1 revised scheme. In the PM peak hour, the junction operates well within capacity in the future baseline and over capacity with the AP1 revised scheme.

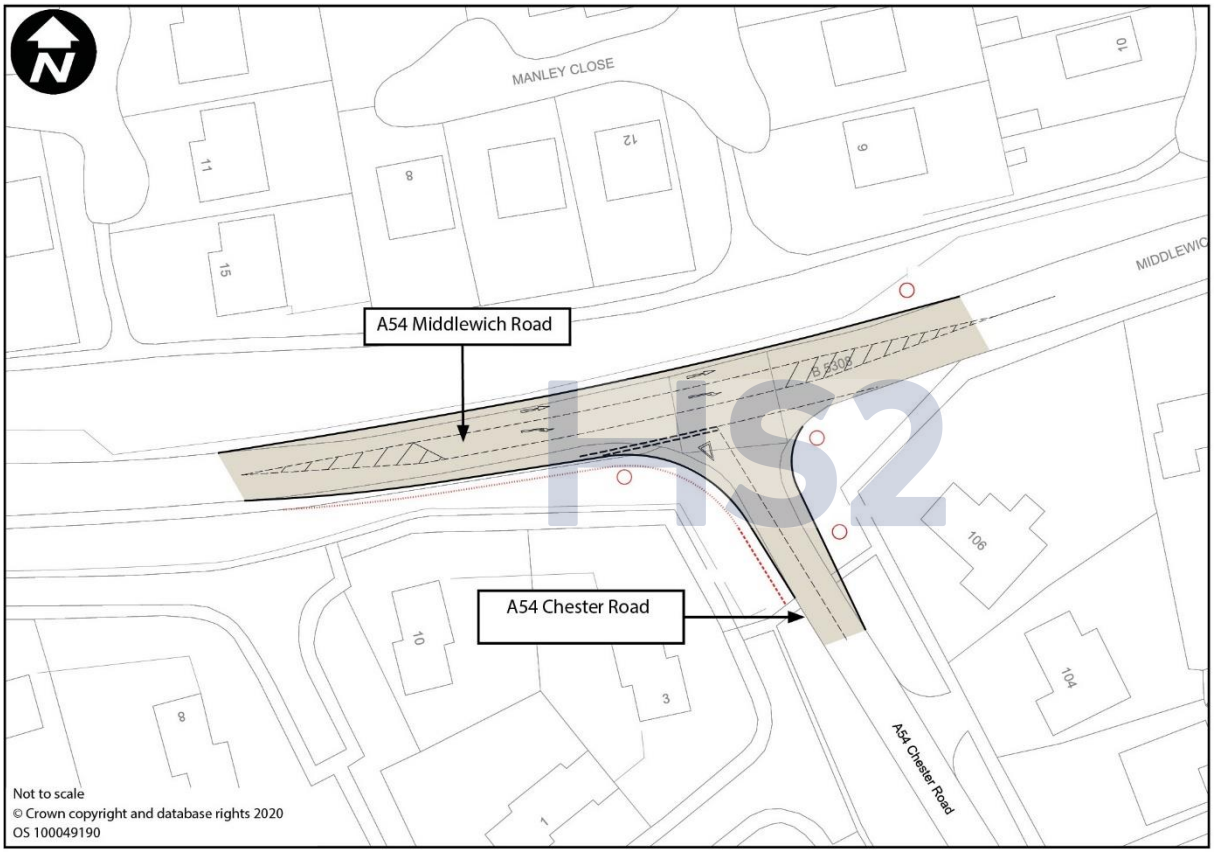
11.2.145 In scenarios 1 and 2 the change in traffic due to construction of the AP1 revised scheme will increase the VoC on the A54 Holmes Chapel Road (east) approach from 88% in the future baseline to 97% in the AM peak hour, with no change in corresponding queue length.

11.2.146 In scenario 2 the change in traffic due to construction of the AP1 revised scheme in the PM peak hour will increase the VoC on the Brereton Lane approach from 68% in the future baseline to 108%, with a corresponding change in queue length from one PCU in the future baseline to five PCU.

A54 Middlewich Road/A54 Chester Road/B5308 Middlewich Road

11.2.147 The A54 Middlewich Road/A54 Chester Road/B5308 Middlewich Road junction will be modified as a result of the AP1 revised scheme address concerns that have been raised by National Highways during the construction phase. The carriageway will be widened to enable the formation of a right-turn lane on the A54 Middlewich Road approach. On completion of the construction phase of the AP1 revised scheme, the junction will revert back to its existing layout. Figure 14-6.5 shows the junction layout introduced as part of the AP1 revised scheme.

Figure 14-6.5: Junction layout diagram (A54 Middlewich Road/A54 Chester Road/B5308 Middlewich Road)



11.2.148 Table 14-60.3 summarises the results of the changes in performance of the junction as a result of the AP1 revised scheme based on the existing junction layout. Table 14-60.4 summarises the performance of the junction as a result of the AP1 revised scheme with the proposed temporary junction layout introduced.

Table 14-60.3: A54 Middlewich Road/A54 Chester Road/B5308 Middlewich Road junction 2030 future baseline and with the AP1 revised scheme (existing layout) 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	**2030 future baseline (existing layout)**			**AP1 revised scheme scenario 1 (existing layout)**			**AP1 revised scheme scenario 2 (existing layout)**			**AP1 revised scheme scenario 3 (existing layout)**		
B5308 Middlewich Road	363	-	-	384	-	-	381	-	-	388	-	-
A54 Chester Road	32	0.06	0	24	0.05	0	24	0.05	0	24	0.05	0
A54 Middlewich Road	512	0.55	2	530	0.55	2	542	0.56	2	540	0.56	2
17:00–18:00	**2030 future baseline (existing layout)**			**AP1 revised scheme scenario 1 (existing layout)**			**AP1 revised scheme scenario 2 (existing layout)**			**AP1 revised scheme scenario 3 (existing layout)**		
B5308 Middlewich Road	264	-	-	343	-	-	337	-	-	303	-	-
A54 Chester Road	36	0.07	0	26	0.05	0	26	0.05	0	26	0.05	0
A54 Middlewich Road	203	0.21	0	218	0.24	0	203	0.22	0	191	0.2	0

Table 14-60.4: A54 Middlewich Road/A54 Chester Road/B5308 Middlewich Road junction 2030 future baseline and with the AP1 revised scheme (proposed layout) 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	**2030 future baseline (existing layout)**			**AP1 revised scheme scenario 1 (proposed layout)**			**AP1 revised scheme scenario 2 (proposed layout)**			**AP1 revised scheme scenario 3 (proposed layout)**		
B5308 Middlewich Road	363	-	-	384	-	-	381	-	-	388	-	-
A54 Chester Road	32	0.06	0	24	0.05	0	24	0.05	0	24	0.05	0.1
A54 Middlewich Road	512	0.51	1	530	0.5	1	542	0.51	1	540	0.51	1.1
17:00–18:00	**2030 future baseline (existing layout)**			**AP1 revised scheme scenario 1 (proposed layout)**			**AP1 revised scheme scenario 2 (proposed layout)**			**AP1 revised scheme scenario 3 (proposed layout)**		
B5308 Middlewich Road	264	-	-	343	-	-	337	-	-	303	-	-
A54 Chester Road	36	0.07	0	26	0.05	0	26	0.05	0	26	0.05	0
A54 Middlewich Road	203	0.19	0	218	0.22	0	203	0.2	0	191	0.2	0

11.2.149 The assessment shows that, based on the existing layout, the junction operates well within capacity in the AM and PM peak hours in both the future baseline and with the AP1 revised scheme. However, in order to address concerns raised by National Highways during the construction phase, the junction will be modified as part of the AP1 revised scheme.

11.2.150 With the proposed layout the assessment shows that the junction operates well within capacity in the AM and PM peak hours in both the future baseline and with the AP1 revised scheme.

Accidents and safety

11.2.151 The impacts on accidents and safety during construction are reported in Section 14-3 of the main TA.

11.2.152 The baseline analysis of accidents and safety identified no locations which had experienced an accident cluster over the three-year period from July 2016 to June 2019.

11.2.153 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 14-3 of the main TA.

Parking and loading

11.2.154 The impacts on parking and loading during construction are reported in Section 14-3 of the main TA. This section of the main TA is unchanged.

Public transport

Local bus services

11.2.155 The impacts on local bus services during construction are reported in Section 14-3 of the main TA. This section of the main TA is unchanged.

Rail network

11.2.156 The impacts on the rail network during construction are reported in Section 14-3 of the main TA. This section of the main TA is unchanged.

11.2.157 Section 14-3 of the main TA summarises the impacts on the rail network during construction as a result of the original scheme. The conclusions drawn in paragraphs 14.4.34 – 14.4.36 of the main TA are replaced by:

"There are interfaces with the existing rail network in this area, in particular on the operation of the WCML, the Sandbach to Northwich Line and the Mid-Cheshire Line and its passengers and rail freight services.

The construction of the original scheme is expected to require a number of rail possessions and blockades over a period of up to four years in this area. Overall, there will be 23 possessions comprising nine possessions of up to 27 hours, 13 possessions up to 54 hours and one possession up to 72 hours. The possessions will be required to enable the construction of scheme elements including the following: A530 Nantwich Road overbridge, Crewe North RSD, Trent and Mersey Canal viaduct, Lostock Gralam viaduct and utility works.

Disruption to rail users will be reduced by limiting possessions, where reasonably practicable, to existing maintenance periods. Possessions will affect users of the WCML, the Sandbach to Northwich Line and the Mid-Cheshire Line and will be managed through a combination of measures, which could include rail service diversions or replacement bus services, which will reduce the disruption to the travelling public. The WCML will be affected by possessions in the Wimboldsley to Lostock Gralam area and the Hough to Walley's Green area (MA01). The combined effects of these possessions are reported in Volume 3, Route-wide effects, Section 14. As the possessions on the Sandbach to Northwich Line and the Mid-Cheshire Line will be short term in nature, the effect on delay to rail passengers and freight services will not be significant."

Public transport interchanges

11.2.158 The impacts on public transport interchanges during construction are reported in Section 14-3 of the main TA. This section of the main TA is unchanged.

Pedestrians, cyclists and equestrians

11.2.159 The impact on pedestrians, cyclists and equestrians during construction are reported in Section 14-3 of the main TA. This section of the main TA is unchanged.

Waterways and canals

11.2.160 The impacts waterways and canals during construction is reported in Section 14-3 of the main TA. This section of the main TA is unchanged.

11.3 AP1 revised scheme operation description

11.3.1 The MA02 operation description for the original scheme is reported in Section 14.4 of the main TA. This section of the main TA is unchanged.

11.4 AP1 revised scheme assessment of operation impacts

11.4.1 The changes to the original scheme reported in Section 6.2 of this report mean that Section 14.5 of the main TA is replaced by Section 11.4 in this document. Where there is no replacement, the text in the main TA remains valid.

11.4.2 This section provides an overview of the impacts resulting from the operation of the AP1 revised scheme. HS2 Phase Two services are expected to commence in 2038.

11.4.3 In the main TA, future baseline traffic volumes were calculated for 2030, 2038 and 2046. However, the 2046 future baseline in the main TA has been updated to 2051 in order to give the assessment greater resilience to long term growth in travel demand. Consequently, the operational assessment of the AP1 revised scheme has been undertaken for 2038 and 2051.

Key operation transport issues

11.4.4 The key operation transport issues are reported in Section 14.5 of the main TA. This section of the main TA is unchanged.

Highway network

Highway diversions, realignments and closures

11.4.5 Table 14-62 in the main TA summarises the permanent road diversions, realignments and extensions and any new or altered junctions required to accommodate the original scheme. Table 14-62a summarises the changes in the highway diversions to those in Table 14-62 in the main TA, identifying new or different permanent changes required to support the AP1 revised scheme. Those not listed in Table 14-62a remain unchanged to those identified in Table 14-62 of the main TA.

Table 14-62a: MA02 AP1 revised scheme permanent highway diversion/closure/amendment

Highway name/junction	Description	Change/alteration
A530 Griffiths Road/A559	Modification of the A530 Griffiths Road/A559 Manchester Road junction (AP1-002-162) to mitigate impacts at this location as reported in the main TA. The modifications	No change in journey length.

Highway name/junction	Description	Change/alteration
Manchester Road	comprise the introduction of traffic signal control and widening of the carriageway to enable the formation of a right-turn lane on the A559 Manchester Road (west) approach	

Network traffic flows

11.4.6 The highway changes set out above together with changes in traffic flows arising from the operation of the AP1 revised scheme will result in changes to travel patterns in the area.

Strategic and local road network traffic flows

11.4.7 The impacts of the AP1 revised scheme on the highway network have been assessed by undertaking strategic model runs for the 2038 and 2051 'with AP1 revised scheme' scenarios, and by comparing the flows and delays against the corresponding future baseline scenarios.

11.4.8 Changes have been made within the strategic models for both the original scheme and the AP1 revised scheme to reflect the proposed changes to the road network, including road closures, realigned roads and changes to junction operations.

11.4.9 Table 14-63 and Table 14-64 of the main TA set out the traffic flows on highway links affected by operation of the original scheme for the weekday AM peak hour (08:00–09:00) for 2038 and 2046 respectively. Table 14-65 and Table 14-66 of the main TA cover the weekday PM peak hour (17:00–18:00) for 2038 and 2046 respectively. Table 14-63, Table 14-64, Table 14-65 and Table 14-66 below replace Table 14-63, Table 14-64, Table 14-65, and Table 14-66 of the main TA respectively and include the change from a 2046 to a 2051 final assessment year. 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 operation of the AP1 revised scheme, however, this is not expected to change the conclusions of the assessment. Traffic flows on all other links are either unaffected from the future baseline or result in only small changes.

11.4.10 Figure 14-7 to Figure 14-10 of the main TA show traffic flow changes for the AM and PM peak hours respectively for both 2038 and 2046. Figure 14-7 to Figure 14-10 below replace Figure 14-7 to Figure 14-10 of the main TA respectively. The width of the band indicates the proportional change in traffic, with red representing an increase and green a decrease compared with the 2038 and 2051 future baseline scenario. Flow changes are the combination of changes associated with the SES1 changes and AP1 amendments, revised baseline traffic and associated traffic reassignment.

11.4.11 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 14-63: MA02 AP1 revised scheme impacted links, 2038 AM peak

Location	Direction	2038 future baseline flows		2038 AP1 revised scheme flows		AP1 revised scheme actual flow change from 2038 baseline		AP1 revised scheme % change from 2038 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
Darnhall School Lane (between Glebe Green Drive and B5074 Swanlow Lane)	NB	3	1	4	1	1	0	33%	0%
	SB	176	1	177	1	1	0	1%	0%
Durham Drive/Glebe Green Drive (between Darnhall School Lane and Townsfields Drive)	NB	308	2	312	2	4	0	1%	0%
	SB	35	2	35	2	0	0	0%	0%
Durham Drive/Dover Drive/Mount Pleasant Drive (between Townsfields Drive and Denbigh Drive)	EB	57	2	58	2	1	0	2%	0%
	WB	321	2	334	2	13	0	4%	0%
Brynlow Drive (between Long Lane and A530 Nantwich Road)	EB	120	10	177	9	57	-1	48%	-10%
	WB	294	8	297	9	3	1	1%	13%
St Annes Avenue (between Sutton Lane and A533 Booth Lane)	EB	113	3	143	2	30	-1	27%	-33%
	WB	225	2	236	3	11	1	5%	50%
Coalpit Lane (between Clive Green Lane and Birch Lane)	NB	183	0	182	0	-1	0	-1%	0%
	SB	93	0	131	0	38	0	41%	0%
Clive Green Lane realignment/Clive Lane (between A530 Nantwich Road and A54 Middlewich Road)	NB	450	18	470	18	20	0	4%	0%
	SB	199	23	400	24	201	1	101%	4%
Station Road (between B5355 Crook Lane and Rilshaw Lane)	EB	79	6	82	6	3	0	4%	0%
	WB	65	3	57	2	-8	-1	-12%	-33%
Dingle Lane/Weaver Street (between The Drumber and A54 Winsford Bypass)	NB	172	0	164	0	-8	0	-5%	0%
	SB	183	0	150	0	-33	0	-18%	0%
B5355 Station Road (between A54 Middlewich Road and B5355 Crook Lane)	EB	265	19	240	19	-25	0	-9%	0%
	WB	35	2	53	2	18	0	51%	0%
	NB	55	0	105	0	50	0	91%	0%

Location	Direction	2038 future baseline flows		2038 AP1 revised scheme flows		AP1 revised scheme actual flow change from 2038 baseline		AP1 revised scheme % change from 2038 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
B5355 Crook Lane (between B5355 Station Road and Birch Avenue)	SB	130	13	124	13	-6	0	-5%	0%
B5355 Crook Lane (between B5355 Station Road and Bradbury Road)	NB	55	0	104	0	49	0	89%	0%
	SB	119	13	113	13	-6	0	-5%	0%
B5355 Crook Lane (between Bradbury Road and B5355 Wharton Road)	NB	125	4	162	4	37	0	30%	0%
	SB	86	4	83	4	-3	0	-3%	0%
Coalpit Lane (between Birch Lane and A54 Chester Road)	NB	27	0	26	0	-1	0	-4%	0%
	SB	64	0	7	0	-57	0	-89%	0%
A54 Middlewich Road realignment (between Clive Lane and A533 Northwich Road diversion)	NB	469	35	382	35	-87	0	-19%	0%
	SB	456	35	533	35	77	0	17%	0%
Road One (between A533 Bostock Road and A54 Middlewich Road)	NB	332	18	317	19	-15	1	-5%	6%
	SB	294	23	360	23	66	0	22%	0%
A54 Middlewich Road realignment (between A533 Northwich Road diversion and Birch Lane)	EB	468	35	825	62	357	27	76%	77%
	WB	456	35	1,020	43	564	8	124%	23%
B5355 Wharton Road (between Nat Lane and Bradbury Road)	NB	122	4	163	4	41	0	34%	0%
	SB	147	0	150	0	3	0	2%	0%
A533 Northwich Road diversion (between A54 Middlewich Road realignment and A533 Northwich Road)	NB	513	9	507	8	-6	-1	-1%	-11%
	SB	430	28	461	28	31	0	7%	0%
B5355 Wharton Road (between A5018 Wharton Park Road and Bradbury Road)	NB	190	8	236	8	46	0	24%	0%
	SB	127	7	118	7	-9	0	-7%	0%
A533 Bostock Road (between A5018 Bostock Road and London Road)	EB	131	27	137	27	6	0	5%	0%
	WB	482	10	508	9	26	-1	5%	-10%

Location	Direction	2038 future baseline flows		2038 AP1 revised scheme flows		AP1 revised scheme actual flow change from 2038 baseline		AP1 revised scheme % change from 2038 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
London Road (between A533 Bostock Road and Brick Kiln Lane)	NB	221	0	242	0	21	0	10%	0%
	SB	493	1	573	1	80	0	16%	0%
A533 Davenham Bypass (between London Road and A556 Shurlach Road)	NB	793	0	794	0	1	0	0%	0%
	SB	751	14	786	7	35	-7	5%	-50%
London Road (between Hartford Road and Church Street)	EB	537	4	429	4	-108	0	-20%	0%
	WB	673	23	681	23	8	0	1%	0%
Church Street/Shipbrook Road (between London Road and Shurlach Lane)	EB	593	0	486	0	-107	0	-18%	0%
	WB	49	0	43	0	-6	0	-12%	0%
London Road (between Green Lane and A556 Chester Road)	NB	962	21	970	22	8	1	1%	5%
	SB	482	6	374	6	-108	0	-22%	0%
Davenham Road (between Shurlach Lane and A530 King Street)	EB	251	0	138	0	-113	0	-45%	0%
	WB	347	0	281	0	-66	0	-19%	0%
B5082 Holmes Chapel Road (between B5081 Byley Lane and Birches Lane)	EB	680	4	705	5	25	1	4%	25%
	WB	405	7	479	10	74	3	18%	43%
Crowders Lane (between B5082 Pennys Lane and A530 King Street)	EB	217	0	17	0	-200	0	-92%	0%
	WB	123	0	64	0	-59	0	-48%	0%
A530 King Street (between Crowder's Lane and B5082 Pennys Lane diversion)	NB	0	0	776	14	776	14	0%	0%
	SB	0	0	561	25	561	25	0%	0%
Shurlach Lane (beween Shipbook Road and A556 Shurlach Road)	NB	101	0	41	0	-60	0	-59%	0%
	SB	216	1	208	1	-8	0	-4%	0%
Shipbrook Road (between Gadbrook Road and A556 Shurlach Road)	NB	205	3	214	3	9	0	4%	0%
	SB	68	0	67	0	-1	0	-1%	0%

Location	Direction	2038 future baseline flows		2038 AP1 revised scheme flows		AP1 revised scheme actual flow change from 2038 baseline		AP1 revised scheme % change from 2038 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
A530 King Street (between B5082 Pennys Lane diversion and A556 Shurlach Road)	NB	811	17	1,186	23	375	6	46%	35%
	SB	738	21	1,117	29	379	8	51%	38%
B5082 Pennys Lane diversion (between Pennys Lane and A556 Shurlach Road)	EB	299	2	531	3	232	1	78%	50%
	WB	279	7	414	10	135	3	48%	43%
A556 southbound on-slip (between Gadbrook Road and A556 Shurlach Road)	WB	48	0	92	0	44	0	92%	0%
Birches Lane diversion (between A556 Shurlach Road and B5082 Holmes Chapel Road)	NB	3	0	0	0	-3	0	-100%	0%
	SB	164	3	157	3	-7	0	-4%	0%
East Avenue (between Gadbrook Road and Grange Road)	NB	34	0	35	0	1	0	3%	0%
	SB	41	3	48	3	7	0	17%	0%
A556 Shurlach Road (between A530 King Street and B5082 Pennys Lane)	EB	1,828	36	1,537	33	-291	-3	-16%	-8%
	WB	1,537	45	1,305	38	-232	-7	-15%	-16%
East Avenue (between Grange Road and South Drive)	NB	36	0	37	0	1	0	3%	0%
	SB	37	3	45	3	8	0	22%	0%
A530 Griffiths Road (between A559 Manchester Road and B5082 Middlewich Road)	NB	281	6	237	6	-44	0	-16%	0%
	SB	400	3	346	3	-54	0	-14%	0%
Birches Lane/Station Road (between A556 Shurlach Road and School Lane)	NB	237	4	251	4	14	0	6%	0%
	SB	0	0	0	0	0	0	0%	0%
Station Road (between School Lane and A559 Manchester Road)	NB	168	4	169	4	1	0	1%	0%
	SB	0	0	0	0	0	0	0%	0%
School Lane (between Station Road and Stubbs Lane)	NB	69	0	82	0	13	0	19%	0%
	EB	378	10	422	10	44	0	12%	0%

Location	Direction	2038 future baseline flows		2038 AP1 revised scheme flows		AP1 revised scheme actual flow change from 2038 baseline		AP1 revised scheme % change from 2038 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
Earles Lane (between A559 Marston Lane and B5391 Pickmere Lane)	WB	195	8	224	8	29	0	15%	0%

Table 14-64: MA02 AP1 revised scheme impacted links, 2051 AM peak

Location	Direction	2051 future baseline flows		2051 AP1 revised scheme flows		AP1 revised scheme actual flow change from 2051 baseline		AP1 revised scheme % change from 2051 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
Darnhall School Lane (between Glebe Green Drive and B5074 Swanlow Lane)	NB	2	1	3	1	1	0	50%	0%
	SB	294	1	281	1	-13	0	-4%	0%
Durham Drive/Dover Drive/Mount Pleasant Drive (between Townsfields Drive and Denbigh Drive)	NB	426	2	415	2	-11	0	-3%	0%
	SB	107	2	108	2	1	0	1%	0%
Townfields Drive (between B5074 Swanlow Lane and Durham Drive)	EB	155	0	156	0	1	0	1%	0%
	WB	13	0	14	0	1	0	8%	0%
Woodford Lane West (between Mount Pleasant Drive and A54 Oakmere Road)	NB	61	0	61	0	0	0	0%	0%
	SB	550	2	541	2	-9	0	-2%	0%
Elm Road (between Long Lane South and A533 Booth Lane)	EB	61	5	60	5	-1	0	-2%	0%
	WB	11	1	11	1	0	0	0%	0%
Beeston Drive (between Denbigh Drive and Handley Hill)	NB	92	12	97	12	5	0	5%	0%
	SB	44	2	44	2	0	0	0%	0%
Brynlow Drive (between Long Lane and A530 Nantwich Road)	EB	124	10	202	10	78	0	63%	0%
	WB	297	8	315	9	18	1	6%	13%
Hayhurst Avenue (between Eaton Drive and Long Lane)	EB	153	10	229	10	76	0	50%	0%

Location	Direction	2051 future baseline flows		2051 AP1 revised scheme flows		AP1 revised scheme actual flow change from 2051 baseline		AP1 revised scheme % change from 2051 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
	WB	279	8	294	9	15	1	5%	13%
Hayhurst Avenue (between Long Lane and Sutton Lane)	EB	147	8	215	8	68	0	46%	0%
	WB	231	7	253	8	22	1	10%	14%
St Annes Avenue (between Sutton Lane and A533 Booth Lane)	EB	118	3	159	3	41	0	35%	0%
	WB	221	2	244	3	23	1	10%	50%
Beeston Drive (between Handley Hill and B5074 Swanlow Lane)	EB	93	12	98	12	5	0	5%	0%
	WB	44	2	44	2	0	0	0%	0%
Coalpit Lane (between Clive Green Lane and Birch Lane)	NB	191	0	229	0	38	0	20%	0%
	SB	67	0	159	0	92	0	137%	0%
Sutton Lane (between St Ann's Road and A533 Lewin Street)	NB	179	6	204	6	25	0	14%	0%
	SB	63	5	68	5	5	0	8%	0%
Clive Green Lane realignment/Clive Lane (between A530 Nantwich Road and A54 Middlewich Road)	NB	418	18	464	19	46	1	11%	6%
	SB	196	18	424	24	228	6	116%	33%
Station Road (between B5355 Crook Lane and Rilshaw Lane)	EB	86	6	112	6	26	0	30%	0%
	WB	53	6	49	2	-4	-4	-8%	-67%
Station Road (between Kingsway and B5355 Crook Lane)	EB	506	9	506	9	0	0	0%	0%
	WB	131	6	121	2	-10	-4	-8%	-67%
Dingle Lane/Weaver Street (between The Drumber and A54 Winsford Bypass)	NB	256	0	234	0	-22	0	-9%	0%
	SB	194	4	199	4	5	0	3%	0%
Station Road (between Rilshaw Lane and B5355 Crook Lane)	EB	232	2	263	6	31	4	13%	200%
	WB	42	2	43	2	1	0	2%	0%
Dingle Lane (between A54 High Street and The Drumber)	NB	412	1	412	1	0	0	0%	0%

Location	Direction	2051 future baseline flows		2051 AP1 revised scheme flows		AP1 revised scheme actual flow change from 2051 baseline		AP1 revised scheme % change from 2051 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
	SB	442	3	453	2	11	-1	2%	-33%
B5355 Crook Lane (between B5355 Station Road and Birch Avenue)	NB	69	0	106	0	37	0	54%	0%
	SB	131	13	120	13	-11	0	-8%	0%
B5355 Crook Lane (between B5355 Station Road and Bradbury Road)	NB	69	0	105	0	36	0	52%	0%
	SB	119	13	108	13	-11	0	-9%	0%
Nixon Drive (between Basford Way and Saxon Crossway)	EB	128	2	133	2	5	0	4%	0%
	WB	84	2	121	2	37	0	44%	0%
Nixon Drive (between Abbotts Way and Basford Way)	EB	95	2	100	2	5	0	5%	0%
	WB	68	2	105	2	37	0	54%	0%
Birch Lane (between Coalpit Lane and A54 Middlewich Road)	NB	193	0	202	0	9	0	5%	0%
	SB	62	0	140	0	78	0	126%	0%
Nixon Drive (between B5074 Delamere Street and Abbotts Way)	EB	39	2	43	2	4	0	10%	0%
	WB	75	2	111	2	36	0	48%	0%
Nixon Drive (between Saxon Crossway and Grange Lane)	EB	78	2	105	2	27	0	35%	0%
	WB	52	2	87	2	35	0	67%	0%
B5355 Crook Lane (between Bradbury Road and B5355 Wharton Road)	NB	149	4	184	4	35	0	23%	0%
	SB	86	4	81	4	-5	0	-6%	0%
Coalpit Lane (between Birch Lane and A54 Chester Road)	NB	28	0	56	0	28	0	100%	0%
	SB	7	0	21	0	14	0	200%	0%
A54 Middlewich Road realignment (between Clive Lane and A533 Northwich Road diversion)	NB	483	36	396	35	-87	-1	-18%	-3%
	SB	471	18	516	18	45	0	10%	0%
	EB	483	36	902	61	419	25	87%	69%

Location	Direction	2051 future baseline flows		2051 AP1 revised scheme flows		AP1 revised scheme actual flow change from 2051 baseline		AP1 revised scheme % change from 2051 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
A54 Middlewich Road realignment (between A533 Northwich Road diversion and Birch Lane)	WB	471	18	1,005	27	534	9	113%	50%
B5355 Wharton Road (between Nat Lane and Bradbury Road)	NB	144	4	183	4	39	0	27%	0%
	SB	163	0	162	0	-1	0	-1%	0%
B5309 Centurion Way (between B5309 King Street and White Park Close)	NB	435	24	431	32	-4	8	-1%	33%
	SB	277	6	271	6	-6	0	-2%	0%
A533 Northwich Road diversion (between A54 Middlewich Road realignment and A533 Northwich Road)	NB	492	9	512	8	20	-1	4%	-11%
	SB	430	19	529	26	99	7	23%	37%
B5355 Wharton Road (between A5018 Wharton Park Road and Bradbury Road)	NB	219	8	263	8	44	0	20%	0%
	SB	140	7	138	7	-2	0	-1%	0%
B5309 King Street (between B5309 Centurion Way and A530 Croxton Lane)	NB	643	20	652	28	9	8	1%	40%
	SB	321	12	297	12	-24	0	-7%	0%
A533 Bostock Road (between A533 Northwich Road diversion and London Road)	NB	488	9	507	8	19	-1	4%	-11%
	SB	430	19	529	26	99	7	23%	37%
A533 Bostock Road (between A5018 Bostock Road and London Road)	EB	155	18	141	26	-14	8	-9%	44%
	WB	587	10	626	10	39	0	7%	0%
London Road (between A533 Bostock Road and Brick Kiln Lane)	NB	236	0	227	0	-9	0	-4%	0%
	SB	612	1	736	1	124	0	20%	0%
B5081 Byley Road (between B5309 Centurion Way and Moss Lane)	NB	262	10	278	17	16	7	6%	70%
	SB	324	10	318	10	-6	0	-2%	0%
A530 King Street (between A530 Croxton Lane and Whatcroft Hall Lane)	NB	885	20	872	28	-13	8	-1%	40%
	SB	775	14	752	14	-23	0	-3%	0%

Location	Direction	2051 future baseline flows		2051 AP1 revised scheme flows		AP1 revised scheme actual flow change from 2051 baseline		AP1 revised scheme % change from 2051 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
London Road (between Hartford Road and Church Street)	EB	541	4	495	4	-46	0	-9%	0%
	WB	723	20	736	21	13	1	2%	5%
Church Street/Shipbrook Road (between London Road and Shurlach Lane)	EB	613	0	579	0	-34	0	-6%	0%
	WB	47	0	47	0	0	0	0%	0%
A50 London Road (between B5082 Northwich Road and Booth Bed Lane)	NB	154	1	152	1	-2	0	-1%	0%
	SB	90	2	90	2	0	0	0%	0%
London Road (between Green Lane and A556 Chester Road)	NB	1,064	19	1,076	19	12	0	1%	0%
	SB	474	6	425	6	-49	0	-10%	0%
Davenham Road (between Shurlach Lane and A530 King Street)	EB	262	0	233	0	-29	0	-11%	0%
	WB	392	0	343	0	-49	0	-13%	0%
B5082 Holmes Chapel Road (between B5081 Byley Lane and Birches Lane)	EB	750	4	769	5	19	1	3%	25%
	WB	426	7	465	10	39	3	9%	43%
Crowders Lane (between B5082 Pennys Lane and A530 King Street)	EB	314	0	56	0	-258	0	-82%	0%
	WB	167	0	126	0	-41	0	-25%	0%
A530 King Street (between Crowder's Lane and B5082 Pennys Lane diversion)	NB	0	0	801	14	801	14	0%	0%
	SB	0	0	583	25	583	25	0%	0%
Shurlach Lane (beween Shipbook Road and A556 Shurlach Road)	NB	151	0	94	0	-57	0	-38%	0%
	SB	248	1	239	1	-9	0	-4%	0%
London Road (between Dunham Road and Old Hall Road)	NB	170	4	173	4	3	0	2%	0%
	SB	242	15	241	13	-1	-2	0%	-13%
Old Hall Road (between Clifton Drive and Fairfield Road)	EB	127	2	127	2	0	0	0%	0%
	WB	7	2	7	2	0	0	0%	0%

Location	Direction	2051 future baseline flows		2051 AP1 revised scheme flows		AP1 revised scheme actual flow change from 2051 baseline		AP1 revised scheme % change from 2051 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
Old Hall Road (between Granville Road and Clifton Drive)	EB	130	5	129	5	-1	0	-1%	0%
	WB	10	5	10	5	0	0	0%	0%
Old Hall Road (between London Road and Granville Road)	EB	145	5	145	5	0	0	0%	0%
	WB	25	5	25	5	0	0	0%	0%
London Road (between Old Hall Road and Lime Avenue)	NB	182	4	185	4	3	0	2%	0%
	SB	375	15	374	14	-1	-1	0%	-7%
Shipbrook Road (between Gadbrook Road and A556 Shurlach Road)	NB	224	3	222	3	-2	0	-1%	0%
	SB	74	0	76	0	2	0	3%	0%
A530 King Street (between B5082 Pennys Lane diversion and A556 Shurlach Road)	NB	834	18	1,131	24	297	6	36%	33%
	SB	859	28	1,150	30	291	2	34%	7%
B5082 Pennys Lane diversion (between Pennys Lane and A556 Shurlach Road)	EB	249	2	545	3	296	1	119%	50%
	WB	230	7	338	10	108	3	47%	43%
Kingsley Drive (between Old Hall Road and Langley Road)	NB	89	0	90	0	1	0	1%	0%
	SB	16	0	16	0	0	0	0%	0%
Birches Lane diversion (between A556 Shurlach Road and B5082 Holmes Chapel Road)	NB	29	0	0	0	-29	0	-100%	0%
	SB	187	2	168	2	-19	0	-10%	0%
East Avenue (between Gadbrook Road and Grange Road)	NB	38	0	38	0	0	0	0%	0%
	SB	42	3	65	3	23	0	55%	0%
A556 Shurlach Road (between A530 King Street and B5082 Pennys Lane)	EB	1,853	38	1,582	34	-271	-4	-15%	-11%
	WB	1,696	46	1,460	40	-236	-6	-14%	-13%
East Avenue (between Grange Road and South Drive)	NB	41	0	40	0	-1	0	-2%	0%
	SB	39	3	60	3	21	0	54%	0%

Location	Direction	2051 future baseline flows		2051 AP1 revised scheme flows		AP1 revised scheme actual flow change from 2051 baseline		AP1 revised scheme % change from 2051 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
East Avenue (between South Drive and Central Road)	NB	31	0	31	0	0	0	0%	0%
	SB	72	3	92	3	20	0	28%	0%
Central Road (between West Avenue and East Avenue)	NB	2	0	1	0	-1	0	-50%	0%
	SB	28	0	42	0	14	0	50%	0%
North Drive (between West Avenue and East Avenue)	EB	11	1	44	1	33	0	300%	0%
	WB	0	0	0	0	0	0	0%	0%
East Avenue (between North Drive and B5082 Middlewich Road)	NB	140	1	166	1	26	0	19%	0%
	SB	55	3	53	3	-2	0	-4%	0%
Central Road (between West Avenue and Shipbrook Road	EB	51	0	66	0	15	0	29%	0%
	WB	21	0	32	0	11	0	52%	0%
West Avenue (between North Drive and B5082 Middlewich Road)	NB	72	0	24	0	-48	0	-67%	0%
	SB	25	0	24	0	-1	0	-4%	0%
Shipbrook Road (between Central Road and B5082 Middlewich Road)	NB	66	1	76	1	10	0	15%	0%
	SB	113	0	126	1	13	1	12%	0%
A530 Griffiths Road (between A559 Manchester Road and B5082 Middlewich Road)	NB	303	6	261	6	-42	0	-14%	0%
	SB	398	3	377	3	-21	0	-5%	0%
Brockhurst Street (between Percy Street and A559 Chester Way)	EB	77	0	77	0	0	0	0%	0%
	WB	79	1	79	1	0	0	0%	0%
Percy Street (between Whalley Road and A559 Chester Way)	NB	73	0	74	0	1	0	1%	0%
	SB	63	0	63	0	0	0	0%	0%
Applemarket Street (between Weaver Way and A559 Watling Street)	NB	156	1	146	1	-10	0	-6%	0%
	SB	115	2	113	1	-2	-1	-2%	-50%

Location	Direction	2051 future baseline flows		2051 AP1 revised scheme flows		AP1 revised scheme actual flow change from 2051 baseline		AP1 revised scheme % change from 2051 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
A50 Holmes Chapel Road (between Booth Bed Lane and B5081 Middlewich Road)	NB	246	1	240	1	-6	0	-2%	0%
	SB	130	2	130	3	0	1	0%	50%
Birches Lane/Station Road (between A556 Shurlach Road and School Lane)	NB	235	4	252	4	17	0	7%	0%
	SB	0	0	1	0	1	0	0%	0%
Station Road (between School Lane and A559 Manchester Road)	NB	167	4	167	4	0	0	0%	0%
	SB	0	0	1	0	1	0	0%	0%
School Lane (between Station Road and Stubbs Lane)	NB	68	0	85	0	17	0	25%	0%

Table 14-65: MA02 AP1 revised scheme impacted links, 2038 PM peak

Location	Direction	2038 future baseline flows		2038 AP1 revised scheme flows		AP1 revised scheme actual flow change from 2038 baseline		AP1 revised scheme % change from 2038 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
Denbigh Drive (between Mount Pleasant Drive and Swanlow Lane)	EB	25	2	25	2	0	0	0%	0%
	WB	63	2	75	2	12	0	19%	0%
Beeston Drive (between Denbigh Drive and Handley Hill)	NB	41	2	42	2	1	0	2%	0%
	SB	132	10	159	10	27	0	20%	0%
Beeston Drive (between Handley Hill and B5074 Swanlow Lane)	EB	41	2	42	2	1	0	2%	0%
	WB	134	10	160	10	26	0	19%	0%
Coalpit Lane (between Clive Green Lane and Birch Lane)	NB	174	0	244	0	70	0	40%	0%
	SB	158	0	195	0	37	0	23%	0%
Clive Green Lane realignment/Clive Lane (between A530 Nantwich Road and A54 Middlewich Road)	NB	466	19	519	19	53	0	11%	0%
	SB	363	3	473	3	110	0	30%	0%
Station Road (between Kingsway and B5355 Crook Lane)	EB	269	10	267	10	-2	0	-1%	0%
	WB	98	9	150	9	52	0	53%	0%
Station Road (between A54 Winsford Bypass and Kingsway)	EB	289	10	286	10	-3	0	-1%	0%
	WB	99	9	151	9	52	0	53%	0%
Dene Drive (between A54 High Street and The Drumber)	NB	282	5	299	4	17	-1	6%	-20%
	SB	258	1	244	1	-14	0	-5%	0%
Birch Lane (between Coalpit Lane and A54 Middlewich Road)	NB	172	0	233	0	61	0	35%	0%
	SB	158	0	195	0	37	0	23%	0%
Coalpit Lane (between Birch Lane and A54 Chester Road)	NB	22	0	31	0	9	0	41%	0%
	SB	4	0	4	0	0	0	0%	0%

Location	Direction	2038 future baseline flows		2038 AP1 revised scheme flows		AP1 revised scheme actual flow change from 2038 baseline		AP1 revised scheme % change from 2038 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
A54 Middlewich Road realignment (between Clive Lane and A533 Northwich Road diversion)	NB	408	18	325	18	-83	0	-20%	0%
	SB	555	8	651	8	96	0	17%	0%
A54 Middlewich Road realignment (between A533 Northwich Road diversion and Birch Lane)	EB	408	18	892	21	484	3	119%	17%
	WB	555	8	917	17	362	9	65%	113%
A533 Northwich Road diversion (between A54 Middlewich Road realignment and A533 Northwich Road)	NB	384	10	385	10	1	0	0%	0%
	SB	655	3	689	3	34	0	5%	0%
A533 Bostock Road (between A5018 Bostock Road and London Road)	EB	277	3	320	3	43	0	16%	0%
	WB	41	11	41	11	0	0	0%	0%
Booth Bed Lane (between Main Road and A50 London Road)	NB	230	0	227	0	-3	0	-1%	0%
	SB	47	0	47	0	0	0	0%	0%
Davenham Road (between Shurlach Lane and A530 King Street)	EB	254	0	277	0	23	0	9%	0%
	WB	133	0	150	0	17	0	13%	0%
B5082 Holmes Chapel Road (between B5081 Byley Lane and Birches Lane)	EB	575	2	610	2	35	0	6%	0%
	WB	534	2	508	2	-26	0	-5%	0%
Crowders Lane (between B5082 Pennys Lane and A530 King Street)	EB	66	0	32	0	-34	0	-52%	0%
	WB	143	0	162	0	19	0	13%	0%
A530 King Street (between B5082 Pennys Lane diversion and A556 Shurlach Road)	NB	753	9	963	10	210	1	28%	11%
	SB	776	8	1,055	9	279	1	36%	13%
B5082 Pennys Lane diversion (between Pennys Lane and A556 Shurlach Road)	EB	236	1	335	1	99	0	42%	0%
	WB	225	2	254	2	29	0	13%	0%
	NB	167	0	92	0	-75	0	-45%	0%

Location	Direction	2038 future baseline flows		2038 AP1 revised scheme flows		AP1 revised scheme actual flow change from 2038 baseline		AP1 revised scheme % change from 2038 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
Birches Lane diversion (between A556 Shurlach Road and B5082 Holmes Chapel Road)	SB	272	1	243	1	-29	0	-11%	0%
A556 Shurlach Road (between A530 King Street and B5082 Pennys Lane)	EB	1,614	22	1,349	21	-265	-1	-16%	-5%
	WB	1,798	16	1,543	14	-255	-2	-14%	-13%
Shipbrook Road (between Porter Drive and Gadbrook Road)	EB	19	0	29	0	10	0	53%	0%
	WB	117	0	141	0	24	0	21%	0%
A530 King Street (between B5082 Middlewich Road and A556 Shurlach Road)	NB	637	8	629	9	-8	1	-1%	13%
	SB	772	8	755	8	-17	0	-2%	0%
North Drive (between West Avenue and East Avenue)	EB	3	0	3	0	0	0	0%	0%
	WB	93	1	106	1	13	0	14%	0%
East Avenue (between North Drive and B5082 Middlewich Road)	NB	180	1	140	1	-40	0	-22%	0%
	SB	152	4	152	4	0	0	0%	0%
West Avenue (between North Drive and B5082 Middlewich Road)	NB	117	1	133	1	16	0	14%	0%
	SB	31	0	30	0	-1	0	-3%	0%
A530 Griffiths Road (between A559 Manchester Road and B5082 Middlewich Road)	NB	311	5	252	5	-59	0	-19%	0%
	SB	458	5	421	5	-37	0	-8%	0%
Birches Lane/Station Road (between A556 Shurlach Road and School Lane)	NB	277	2	257	1	-20	-1	-7%	-50%
	SB	0	0	0	0	0	0	0%	0%
School Lane (between Station Road and Stubbs Lane)	NB	84	0	64	0	-20	0	-24%	0%
Fryer Road/Townshend Road (between A559 Hall Lane and A559 Manchester Road)	NB	372	1	400	1	28	0	8%	0%
	SB	119	1	116	1	-3	0	-3%	0%
A569 Hall Lane (between Townshend Road and Green Lane)	EB	334	3	304	3	-30	0	-9%	0%

Location	Direction	2038 future baseline flows		2038 AP1 revised scheme flows		AP1 revised scheme actual flow change from 2038 baseline		AP1 revised scheme % change from 2038 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
	WB	446	3	444	3	-2	0	0%	0%
A559 Manchester Road (between Fryer Road and A556 Shurlach Road)	EB	653	2	674	2	21	0	3%	0%
	WB	631	4	653	4	22	0	3%	0%
A569 Marston Lane (between B5391 Church Street and Earles Lane)	NB	277	0	281	0	4	0	1%	0%
	SB	169	8	153	8	-16	0	-9%	0%
Linnards Lane (between Green Lane and B5391 Church Street)	EB	282	5	284	5	2	0	1%	0%
	WB	129	3	168	3	39	0	30%	0%

Table 14-66: MA02 AP1 revised scheme impacted links, 2051 PM peak

Location	Direction	2051 future baseline flows		2051 AP1 revised scheme flows		AP1 revised scheme actual flow change from 2051 baseline		AP1 revised scheme % change from 2051 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
A530 Nantwich Road (between Clive Green Lane and Brynlow Drive)	EB	805	3	809	2	4	-1	0%	-33%
	WB	761	5	582	4	-179	-1	-24%	-20%
Long Lane South (between Sutton Lane and Elm Road)	EB	46	0	54	0	8	0	17%	0%
	WB	22	0	22	0	0	0	0%	0%
Sutton Lane (between Long Lane South and Hayhurst Avenue)	NB	45	0	54	0	9	0	20%	0%
	SB	42	0	45	0	3	0	7%	0%
Sutton Lane (between Rutland Drive and St Annes Avenue)	NB	49	0	59	0	10	0	20%	0%
	SB	75	0	79	0	4	0	5%	0%
Beeston Drive (between Denbigh Drive and Handley Hill)	NB	44	2	45	2	1	0	2%	0%
	SB	104	10	117	10	13	0	13%	0%
Brynlow Drive (between Long Lane and A530 Nantwich Road)	EB	247	3	353	3	106	0	43%	0%
	WB	301	6	275	6	-26	0	-9%	0%
Hayhurst Avenue (between Long Lane and Sutton Lane)	EB	162	2	242	2	80	0	49%	0%
	WB	309	4	286	4	-23	0	-7%	0%
Sutton Lane (between St Annes Avenue and St Ann's Road)	NB	179	1	271	1	92	0	51%	0%
	SB	144	3	143	3	-1	0	-1%	0%
Beeston Drive (between Handley Hill and B5074 Swanlow Lane)	EB	44	2	45	2	1	0	2%	0%
	WB	105	10	118	10	13	0	12%	0%
Coalpit Lane (between Clive Green Lane and Birch Lane)	NB	243	0	381	0	138	0	57%	0%
	SB	105	0	196	0	91	0	87%	0%
Sutton Lane (between St Ann's Road and A533 Lewin Street)	NB	103	1	137	0	34	-1	33%	-100%

Location	Direction	2051 future baseline flows		2051 AP1 revised scheme flows		AP1 revised scheme actual flow change from 2051 baseline		AP1 revised scheme % change from 2051 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
	SB	66	3	63	3	-3	0	-5%	0%
St Ann's Road (between Sutton Lane and Manor Lane)	NB	124	0	170	0	46	0	37%	0%
	SB	125	0	115	0	-10	0	-8%	0%
Clive Green Lane realignment/Clive Lane (between A530 Nantwich Road and A54 Middlewich Road)	NB	509	19	520	19	11	0	2%	0%
	SB	373	3	553	3	180	0	48%	0%
St Ann's Road (between Manor Lane and King Edward Street)	NB	137	0	191	0	54	0	39%	0%
	SB	150	1	130	1	-20	0	-13%	0%
A530 Nantwich Road (between Brynlow Drive and Glastonbury Drive)	NB	612	0	537	0	-75	0	-12%	0%
	SB	541	0	415	0	-126	0	-23%	0%
A530 Nantwich Road (between Glastonbury Drive and St Ann's Road)	EB	662	0	574	0	-88	0	-13%	0%
	WB	637	0	500	0	-137	0	-22%	0%
A54 St Michael's Way (between A54 Chester Road and The Bull Ring)	EB	1,020	24	886	23	-134	-1	-13%	-4%
	WB	794	17	803	17	9	0	1%	0%
A54 Chester Road (between A530 Newton Bank and A54 St Michael's Way)	EB	1,458	24	1,209	23	-249	-1	-17%	-4%
A54 Chester Road (between A530 Croxton Lane and A530 Newton Bank)	EB	1,191	24	929	23	-262	-1	-22%	-4%
	WB	1,010	17	1,025	18	15	1	1%	6%
Birch Lane (between Coalpit Lane and A54 Middlewich Road)	NB	239	0	302	0	63	0	26%	0%
	SB	104	0	196	0	92	0	88%	0%
Nixon Drive (between Saxon Crossway and Grange Lane)	EB	144	2	157	2	13	0	9%	0%
	WB	64	2	85	2	21	0	33%	0%
Coalpit Lane (between Birch Lane and A54 Chester Road)	NB	26	0	102	0	76	0	292%	0%

Location	Direction	2051 future baseline flows		2051 AP1 revised scheme flows		AP1 revised scheme actual flow change from 2051 baseline		AP1 revised scheme % change from 2051 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
	SB	5	0	5	0	0	0	0%	0%
A54 Middlewich Road realignment (between Clive Lane and A533 Northwich Road diversion)	NB	410	18	296	18	-114	0	-28%	0%
	SB	693	8	824	8	131	0	19%	0%
A54 Middlewich Road realignment (between Birch Lane and Coalpit Lane)	EB	890	21	647	20	-243	-1	-27%	-5%
	WB	701	17	749	17	48	0	7%	0%
A54 Middlewich Road realignment (between A533 Northwich Road diversion and Birch Lane)	EB	409	18	849	21	440	3	108%	17%
	WB	693	8	1,051	17	358	9	52%	113%
B5355 Wharton Road (between Nat Lane and Bradbury Road)	NB	173	0	189	0	16	0	9%	0%
	SB	106	0	110	0	4	0	4%	0%
A533 Northwich Road diversion (between A54 Middlewich Road realignment and A533 Northwich Road)	NB	412	10	458	10	46	0	11%	0%
	SB	751	3	785	3	34	0	5%	0%
B5355 Wharton Road (between A5018 Wharton Park Road and Bradbury Road)	NB	181	6	202	6	21	0	12%	0%
	SB	198	4	203	4	5	0	3%	0%
A533 Bostock Road (between A533 Northwich Road diversion and London Road)	EB	760	3	794	3	34	0	4%	0%
	WB	409	10	455	10	46	0	11%	0%
A533 Bostock Road (between A5018 Bostock Road and London Road)	EB	260	3	242	3	-18	0	-7%	0%
	WB	45	11	45	11	0	0	0%	0%
A530 Croxton Lane (between A54 Chester Road and B5309 King Street)	NB	389	0	376	0	-13	0	-3%	0%
	SB	496	0	418	0	-78	0	-16%	0%
London Road (between A533 Bostock Road and Brick Kiln Lane)	NB	367	0	411	0	44	0	12%	0%
	SB	502	1	552	1	50	0	10%	0%
	NB	1,224	8	1,238	11	14	3	1%	38%

Location	Direction	2051 future baseline flows		2051 AP1 revised scheme flows		AP1 revised scheme actual flow change from 2051 baseline		AP1 revised scheme % change from 2051 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
A533 Davenham Bypass (between Jack Lane and London Road)	SB	1,243	8	1,250	8	7	0	1%	0%
B5082 Holmes Chapel Road (between B5081 Byley Lane and Birches Lane)	EB	717	2	745	3	28	1	4%	50%
	WB	599	2	556	2	-43	0	-7%	0%
Crowders Lane (between B5082 Pennys Lane and A530 King Street)	EB	118	0	30	0	-88	0	-75%	0%
	WB	206	0	220	0	14	0	7%	0%
A530 King Street (between B5082 Pennys Lane diversion and A556 Shurlach Road)	NB	780	13	974	12	194	-1	25%	-8%
	SB	797	8	1,049	9	252	1	32%	13%
B5082 Pennys Lane diversion (between Pennys Lane and A556 Shurlach Road)	EB	225	1	336	1	141	0	63%	0%
	WB	213	2	215	2	2	0	1%	0%
Birches Lane diversion (between A556 Shurlach Road and B5082 Holmes Chapel Road)	NB	180	0	122	0	-58	0	-32%	0%
	SB	374	1	349	2	-25	1	-7%	100%
East Avenue (between Gadbrook Road and Grange Road)	NB	143	1	167	1	24	0	17%	0%
	SB	9	3	9	3	0	0	0%	0%
A556 Shurlach Road (between A530 King Street and B5082 Pennys Lane)	EB	1,637	22	1,358	21	-279	-1	-17%	-5%
	WB	1,841	16	1,579	13	-262	-3	-14%	-19%
East Avenue (between Grange Road and South Drive)	NB	144	1	168	1	24	0	17%	0%
	SB	10	3	11	3	1	0	10%	0%
Porter Drive (between Shipbrook Road and Marlowe Road)	NB	125	0	136	0	11	0	9%	0%
	SB	38	0	45	0	7	0	18%	0%
East Avenue (between South Drive and Central Road)	NB	176	1	201	1	25	0	14%	0%
	SB	37	3	38	3	1	0	3%	0%

Location	Direction	2051 future baseline flows		2051 AP1 revised scheme flows		AP1 revised scheme actual flow change from 2051 baseline		AP1 revised scheme % change from 2051 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
West Avenue (between Grange Road and South Drive)	NB	38	0	6	0	-32	0	-84%	0%
	SB	10	0	10	0	0	0	0%	0%
West Avenue (between South Drive and Central Road)	NB	38	0	6	0	-32	0	-84%	0%
	SB	10	0	10	0	0	0	0%	0%
A530 King Street (between B5082 Middlewich Road and A556 Shurlach Road)	NB	641	8	628	8	-13	0	-2%	0%
	SB	785	8	776	8	-9	0	-1%	0%
East Avenue (between Central Road and North Drive)	NB	175	1	200	1	25	0	14%	0%
	SB	36	3	36	3	0	0	0%	0%
West Avenue (between Central Road and North Drive)	NB	72	1	39	1	-33	0	-46%	0%
	SB	35	0	34	0	-1	0	-3%	0%
North Drive (between West Avenue and East Avenue)	EB	3	0	3	0	0	0	0%	0%
	WB	59	1	88	1	29	0	49%	0%
Whitton Street (between Station Road and A559 Chester Way)	EB	91	5	102	5	11	0	12%	0%
Whitton Street (between Old Warrington Road and Station Road)	EB	91	5	101	5	10	0	11%	0%
	WB	83	0	84	0	1	0	1%	0%
Birches Lane/Station Road (between A556 Shurlach Road and School Lane)	NB	311	1	267	1	-44	0	-14%	0%
	SB	0	0	0	0	0	0	0%	0%
Station Road (between School Lane and A559 Manchester Road)	NB	204	1	203	1	-1	0	0%	0%
	SB	1	0	1	0	0	0	0%	0%
School Lane (between Station Road and Stubbs Lane)	NB	108	0	64	0	-44	0	-41%	0%
A569 Hall Lane (between Townshend Road and Green Lane)	EB	313	3	298	3	-15	0	-5%	0%
	WB	506	3	486	3	-20	0	-4%	0%

Location	Direction	2051 future baseline flows		2051 AP1 revised scheme flows		AP1 revised scheme actual flow change from 2051 baseline		AP1 revised scheme % change from 2051 baseline	
		All vehicles	HGV	All vehicles	HGV	All vehicles	HGV	All vehicles	HGV
A559 Manchester Road (between Fryer Road and A556 Shurlach Road)	EB	622	2	653	2	31	0	5%	0%
	WB	654	4	666	4	12	0	2%	0%
A559 Hall Lane (between Green Lane and B5391 Church Street)	EB	265	3	252	3	-13	0	-5%	0%
	WB	486	3	466	3	-20	0	-4%	0%
B5391 Church Street (between Earles Lane and A559 Marston Lane)	NB	471	3	473	3	2	0	0%	0%
	SB	199	3	199	3	0	0	0%	0%
Linnards Lane (between Green Lane and B5391 Church Street)	EB	372	5	371	5	-1	0	0%	0%
	WB	275	3	311	3	36	0	13%	0%

Figure 14-7: MA02 AP1 revised scheme traffic flow changes – 2038 AM peak

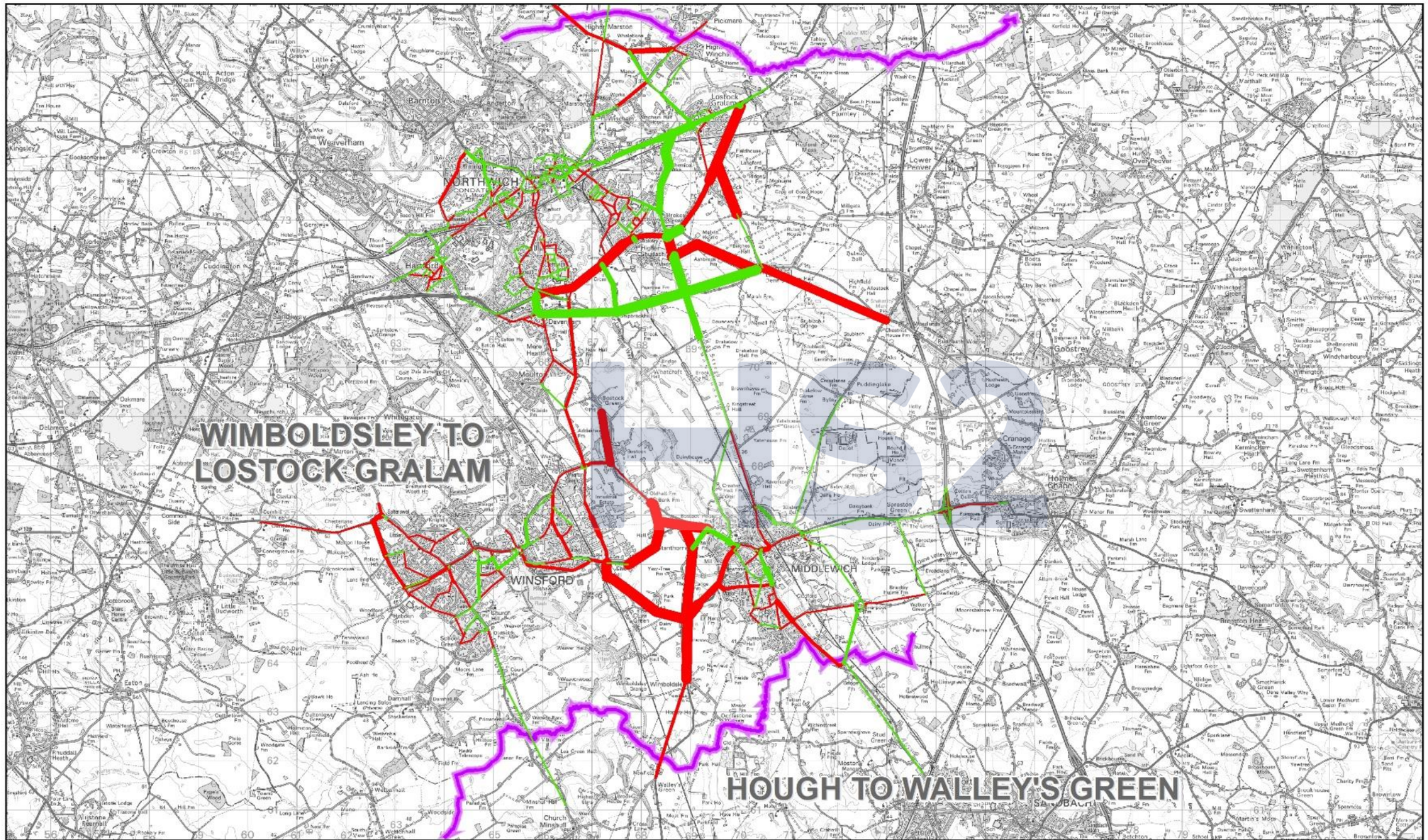


Figure 14-8: MA02 AP1 revised scheme traffic flow changes – 2051 AM peak

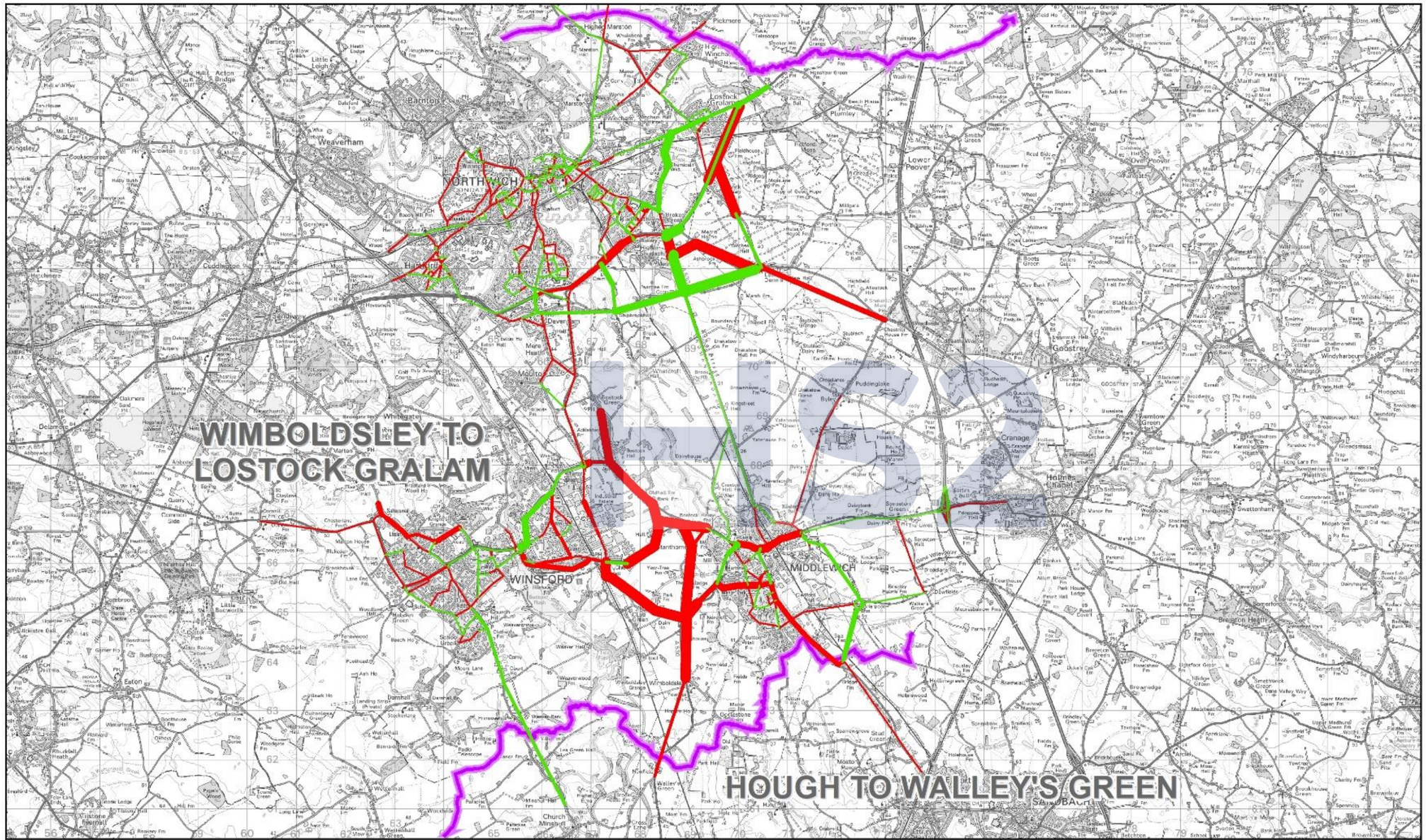


Figure 14-9 : MA02 AP1 revised scheme traffic flow changes – 2038 PM peak

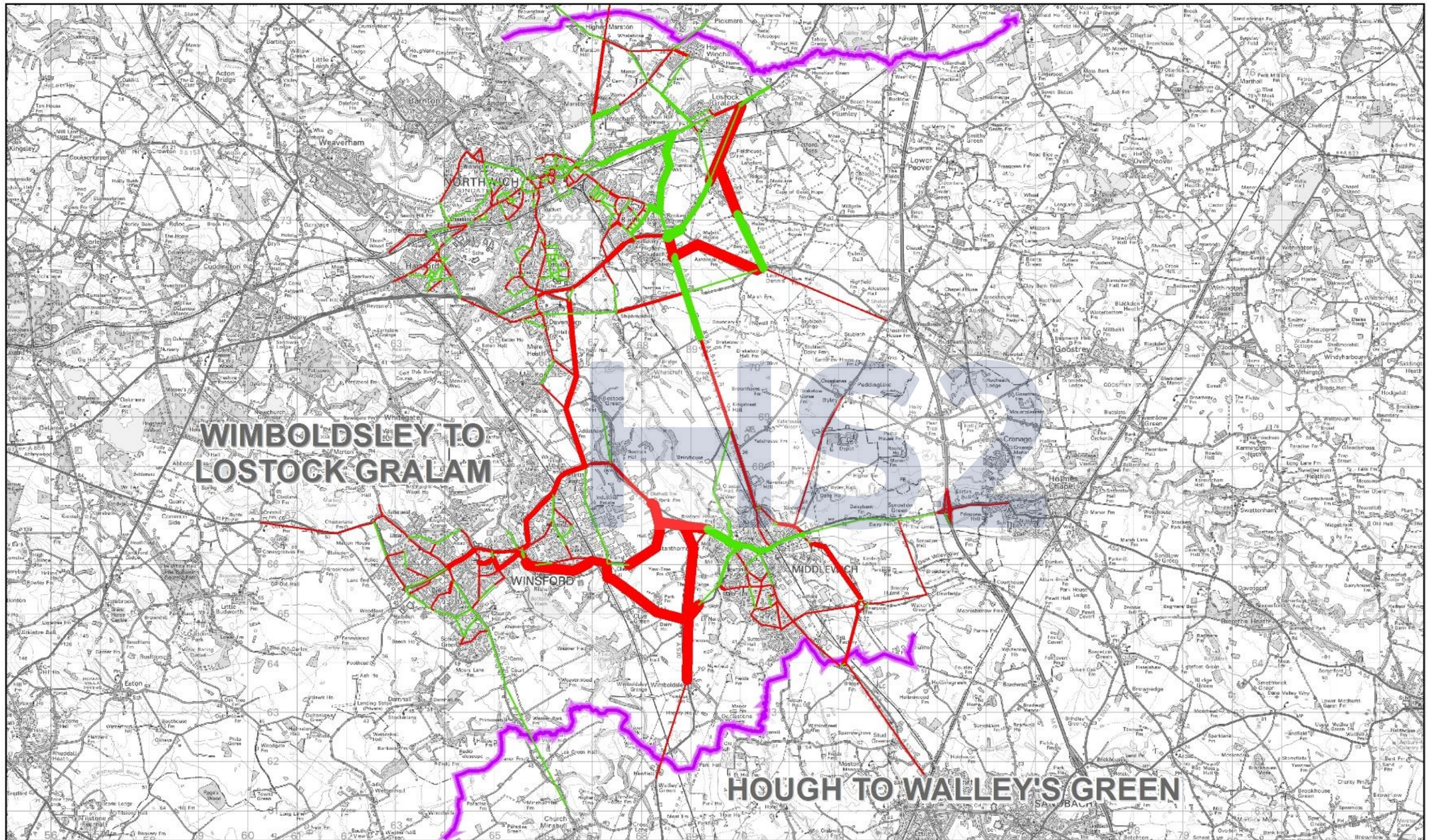
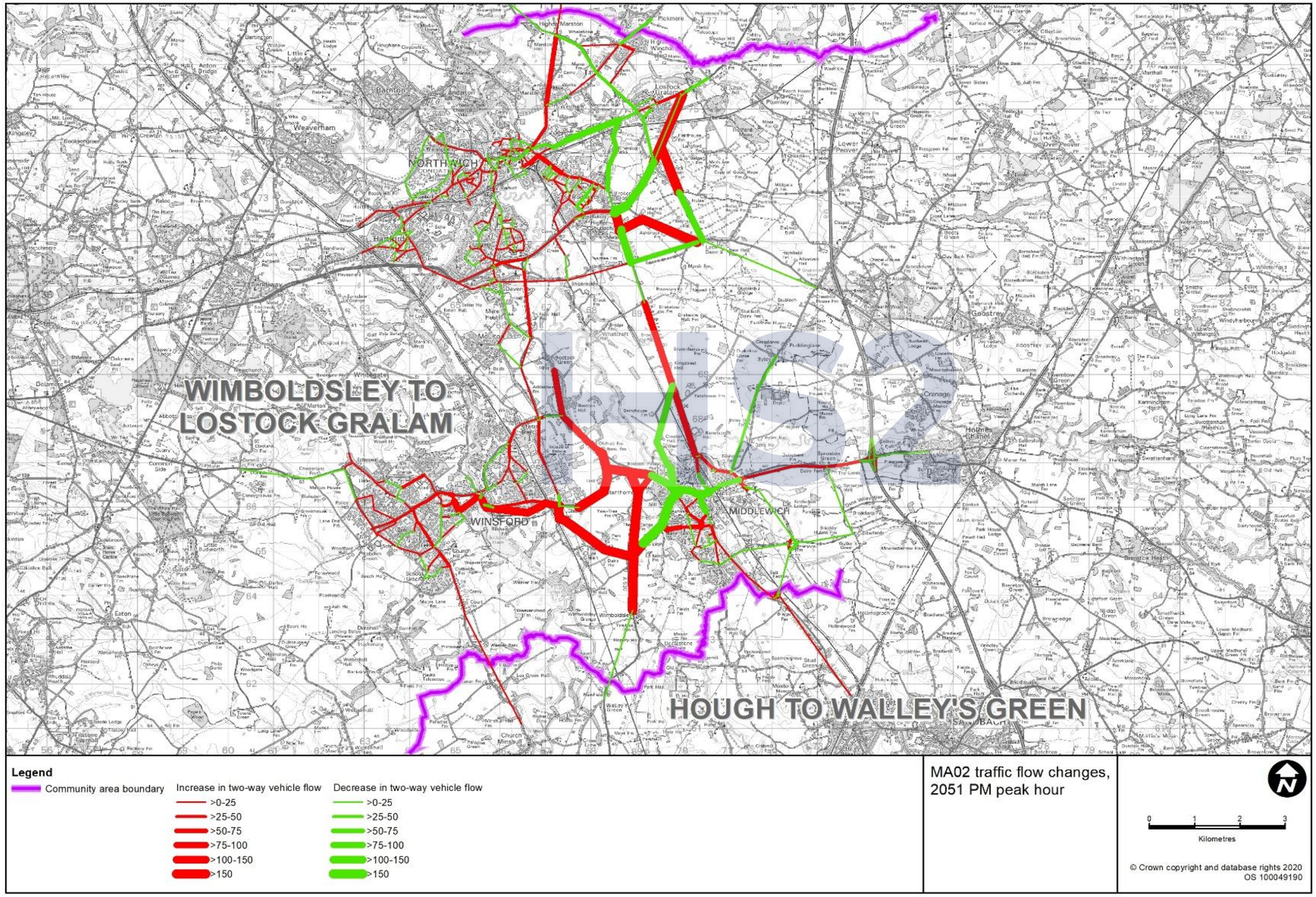


Figure 14-10: MA02 AP1 revised scheme traffic flow changes – 2051 PM peak



Junction performance

11.4.12 Junction capacity analysis is reported in Section 14.5 of the main TA, which was undertaken for the weekday AM and PM peak hours comparing junction operation in the 2038 and 2046 future baseline with 2038 and 2046 with the original scheme.

11.4.13 Updated junction capacity analysis has been undertaken for the AP1 revised scheme taking account of the changes in traffic flows associated with the SES1 changes and AP1 amendments, revised baseline traffic and associated traffic reassignment. Junction capacity analysis has been undertaken for the weekday AM and PM peak hours comparing junction operation in the 2038 and 2051 future baseline with 2038 and 2051 with the AP1 revised scheme.

11.4.14 The results are presented from south to north through the MA02 area, firstly for junctions on the strategic road network, followed by junctions on other roads. The 2038 and 2051 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 main TA, these are highlighted.

11.4.15 The results are presented in the same order as presented in the main TA. Junctions that were not modelled in the main TA are provided at the end of the junction performance section from the A54 New High Street/A54 Winsford Bypass/A5018 Wharton Road/New Road/Weaver Street junction (Table 14-88.1) onwards.

11.4.16 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 18/A54 Middlewich Road

11.4.17 Table 14-67 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-67 of the main TA is replaced by Table 14-67 below.

Table 14-67: M6 junction 18/A54 Middlewich Road junction 2038 and 2051 future baseline and AP1 revised scheme junction capacity assessment

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	**2038 future baseline (existing layout)**			**2038 with the AP1 revised scheme**			**2051 future baseline (existing layout)**			**2051 with the AP1 revised scheme**		
M6 junction 18 southbound off-slip	291	15%	0	295	15%	0	436	24%	0	411	22%	0
A54 Middlewich Road (east)	460	22%	0	460	22%	0	472	23%	0	475	23%	0
M6 junction 18 northbound off-slip	953	44%	1	952	44%	1	1,011	49%	1	1,027	49%	1
A54 Middlewich Road (west)	1,135	47%	0	1,116	46%	0	1,129	48%	0	1,119	48%	0
17:00–18:00	**2038 future baseline (existing layout)**			**2038 with the AP1 revised scheme**			**2051 future baseline (existing layout)**			**2051 with the AP1 revised scheme**		
M6 junction 18 southbound off-slip	424	20%	0	429	20%	0	490	22%	0	473	22%	0
A54 Middlewich Road (east)	389	20%	0	397	20%	0	425	21%	0	431	22%	0
M6 junction 18 northbound off-slip	410	19%	0	410	19%	0	442	22%	0	423	21%	0
A54 Middlewich Road (west)	612	25%	0	624	26%	0	485	20%	0	512	21%	0

11.4.18 The conclusions drawn in paragraph 14.5.18 of the main TA are replaced by:

"The assessment shows that for this junction, the change in traffic due to operation in 2038 and 2051 of the AP1 revised scheme will not result in substantial changes in VoC and queue lengths in the AM or PM peak hours. 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 AP1 revised scheme. The traffic flow will have a negligible impact on the operation of the junction."

Local network change in the Clive Green area

11.4.19 There are a number of changes to the local road network in the Clive Green area as part of the original scheme. Details of the changes are presented in Section 14.5 of the main TA.

Clive Green Lane realignment/Crewe North RSD access

11.4.20 Table 14-68 of the main TA summarises performance of the junction as a result of the original scheme. Table 14-68 of the main TA is replaced by Table 14-68 below.

Table 14-68: Clive Green Lane realignment/Crewe North RSD access junction 2038 and 2051 AP1 revised scheme junction capacity assessment

Approach	Flow, PCU/hr	RFC	Q, PCU	Flow, PCU/hr	RFC	Q, PCU
08:00–09:00	**2038 with the AP1 revised scheme (proposed layout)**			**2051 with the AP1 revised scheme (proposed layout)**		
Clive Green Lane realignment (west) (ahead and left)	433	-	-	458	-	-
Crewe North RSD access (left)	36	0.07	0	37	0.07	0
Crewe North RSD access (right)	68	0.18	0	67	0.18	0
Clive Green Lane realignment (east) (ahead and right)	527	0.26	1	504	0.22	1
17:00–18:00	**2038 with the AP1 revised scheme (proposed layout)**			**2051 with the AP1 revised scheme (proposed layout)**		
Clive Green Lane realignment (west) (ahead and left)	478	-	-	559	-	-
Crewe North RSD access (left)	103	0.20	0	97	0.20	0
Crewe North RSD access (right)	114	0.31	1	104	0.31	0
Clive Green Lane realignment (east) (ahead and right)	457	0.08	0	469	0.09	0

11.4.21 The conclusions drawn in paragraph 14.5.21 of the main TA are replaced by:

"The assessment shows that the junction operates well within capacity in both 2038 and 2051 with the AP1 revised scheme."

A530 Nantwich Road/Clive Green Lane realignment/Coalpit Lane

11.4.22 Table 14-69 of the main TA summarises the performance of the junction as a result of the original scheme. Table 14-69 of the main TA is replaced by Table 14-69 below.

Table 14-69: A530 Nantwich Road/Clive Green Lane realignment/Coalpit Lane junction 2038 and 2051 future baseline and AP1 revised scheme junction capacity assessment

Approach	Flow, PCU/hr	RFC	Q, PCU	Flow, PCU/hr	RFC	Q, PCU
08:00–09:00	**2038 with the AP1 revised scheme (proposed layout)**			**2051 with the AP1 revised scheme (proposed layout)**		
A530 Nantwich Road (north)	780	0.49	1	854	0.55	1
A530 Nantwich Road (south)	1,030	0.65	2	1,034	0.66	2
Clive Green Lane realignment	335	0.26	0	362	0.29	0
HS2 track access*	-	-	-	-	-	-
Coalpit Lane	131	0.12	0	160	0.15	0
17:00–18:00	**2038 with the AP1 revised scheme (proposed layout)**			**2051 with the AP1 revised scheme (proposed layout)**		
A530 Nantwich Road (north)	531	0.34	1	590	0.38	1
A530 Nantwich Road (south)	1149	0.68	2	1266	0.74	3
Clive Green Lane realignment	515	0.40	1	592	0.49	1
HS2 track access*	-	-	-	-	-	-
Coalpit Lane	195	0.19	0	196	0.20	0

** Minor approach arm not represented within the Junctions 9 model*

11.4.23 The conclusions drawn in paragraph 14.5.24 of the main TA are replaced by:

"The assessment shows that the junction operates well within capacity in 2038 and 2051 with the AP1 revised scheme."

A54 Middlewich Road/Clive Lane/Road One

11.4.24 Table 14-70 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-70 of the main TA is replaced by Table 14-70 below.

Table 14-70: A54 Middlewich Road/Clive Lane/Road One junction 2038 and 2051 future baseline and AP1 revised scheme junction capacity assessment

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	**2038 future baseline**			**2038 with the AP1 revised scheme**			**2051 future baseline**			**2051 with the AP1 revised scheme**		
Road One	296	44%	4	350	52%	5	308	45%	5	371	55%	6
A54 Middlewich Road (east)	528	72%	5	604	75%	6	524	77%	5	569	73%	6
Clive Lane	529	94%	8	532	97%	8	527	92%	8	535	98%	8
A54 Middlewich Road (west)	877	96%	10	872	100%	10	894	101%	11	914	103%	11
17:00–18:00	**2038 future baseline**			**2038 with the AP1 revised scheme**			**2051 future baseline**			**2051 with the AP1 revised scheme**		
Road One	580	98%	10	571	99%	9	595	102%	10	584	101%	10
A54 Middlewich Road (east)	553	46%	5	642	53%	6	691	57%	7	813	66%	8
Clive Lane	476	103%	8	480	104%	8	477	103%	8	481	104%	8
A54 Middlewich Road (west)	564	76%	8	580	100%	8	610	88%	9	626	92%	9

11.4.25 The conclusions drawn paragraphs 14.5.27 and 14.5.28 of the main TA are replaced by:

"The change in traffic due to operation of the AP1 revised scheme will increase the maximum VoC from 96% in the 2038 future baseline to 100% with the AP1 revised scheme in 2038 on the A54 Middlewich Road (west) approach in the AM peak hour, with no change in corresponding queue length. In the PM peak hour, the change in traffic due to the operation of the AP1 revised scheme in 2038 will increase the VoC from 76% in the 2038 future baseline to 100% with the AP1 revised scheme in 2038 on the A54 Middlewich Road (west) approach. There will be no change in queue lengths. The assessment shows that in the AM peak hour this junction operates close to capacity in the future baseline and over capacity with the AP1 revised scheme. In the PM peak hour, this junction operates over capacity in both the future baseline and with the AP1 revised scheme. The traffic flow will have an adverse impact on the operation of the junction, which is, however, predicted to operate over its capacity in the PM peak hour of the future baseline.

The change in traffic due to the operation of the AP1 revised scheme will increase the VoC from 92% in the 2051 future baseline to 98% with the AP1 revised scheme on the Clive Lane approach in the AM peak hour, with no change in corresponding queue length. The change in traffic due to operation of the AP1 revised scheme will not substantially increase the maximum VoC between the 2051 future baseline and the AP1 revised scheme in the PM peak hour. However, in the PM peak hour, the change in traffic due to operation of the AP1 revised scheme will increase the VoC from 88% in the 2051 future baseline to 92% with the AP1 revised scheme in 2051 on the A54 Middlewich Road (west) approach, with no change in corresponding queue length. The assessment shows that in the AM and PM peak hours the junction operates over capacity in both the future baseline and with the AP1 revised scheme. The traffic flow will have an adverse impact on the operation of the junction, which is, however, predicted to operate over its capacity in the future baseline."

A530 Nantwich Road/St Ann's Road

11.4.26 Table 14-71 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-71 of the main TA is replaced by Table 14-71 below.

Table 14-71: A530 Nantwich Road/St Ann's Road junction 2038 and 2051 future baseline and AP1 revised scheme junction capacity assessment

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	**2038 future baseline**			**2038 with the AP1 revised scheme**			**2051 future baseline**			**2051 with the AP1 revised scheme**		
A530 Nantwich Road (north)	700	37%	0	692	36%	0	827	43%	0	764	40%	0
St Ann's Road	174	82%	2	176	87%	2	151	93%	3	165	91%	3
A530 Nantwich Road (south)	583	46%	0	636	49%	0	628	52%	0	614	51%	0
17:00–18:00	**2038 future baseline**			**2038 with the AP1 revised scheme**			**2051 future baseline**			**2051 with the AP1 revised scheme**		
A530 Nantwich Road (north)	715	38%	0	648	34%	0	771	40%	0	615	32%	0
St Ann's Road	181	97%	4	195	96%	4	162	98%	4	212	100%	5
A530 Nantwich Road (south)	615	40%	0	619	39%	0	664	43%	0	576	37%	0

11.4.27 The conclusions drawn paragraphs 14.5.30 and 14.5.31 of the main TA are replaced by:

"The change in traffic due to operation of the AP1 revised scheme will increase the maximum VoC from 82% in the 2038 future baseline to 87% with the AP1 revised scheme in 2038 on the St Ann's Road approach in the AM peak hour, with no change in corresponding queue length. The assessment shows that for this junction, the change in traffic due to operation in 2038 of the AP1 revised scheme will not result in substantial changes in VoC and queue lengths in the PM peak hour. The assessment shows that in the AM peak hour the junction operates within capacity in the future baseline and close to capacity with the AP1 revised scheme. In the PM peak hour, the junction operates close to capacity in both the future baseline and with the AP1 revised scheme. The traffic flow will have an adverse impact on the operation of the junction in the AM peak hour and a negligible impact on the operation of the junction in the PM peak hour.

The change in traffic due to operation of the AP1 revised scheme will decrease the maximum VoC from 93% in the 2051 future baseline to 91% with the AP1 revised scheme in 2051 on the St Ann's Road approach in the AM peak hour, with no change in corresponding queue length. In the PM peak hour the maximum VoC will increase from 98% in the 2051 future baseline to 100% with the AP1 revised scheme in 2051 on the St Ann's Road approach, with a corresponding change in queue length from four PCU in the future baseline to five PCU. The assessment shows that in the AM peak hour the junction operates close to capacity in both the future baseline and with the AP1 revised scheme. In the PM peak hour, the junction operates close to capacity in the future baseline and over capacity with the AP1 revised scheme. The traffic flow will have a beneficial impact on the operation of the junction in the AM peak hour and an adverse impact on the operation of the junction in the PM peak hour."

A54 Kinderton Street/A54 St Michael's Way/A533 Leadsmithy Street

11.4.28 Table 14-72 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-72 of the main TA is replaced by Table 14-72 below.

Table 14-72: A54 Kinderton Street/A54 St Michael's Way/A533 Leadsmithy Street junction 2038 and 2051 future baseline and AP1 revised scheme junction capacity assessment

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	**2038 future baseline**			**2038 with the AP1 revised scheme**			**2051 future baseline**			**2051 with the AP1 revised scheme**		
A54 Kinderton Street	647	91%	13	656	92%	14	609	86%	13	636	89%	13
A533 Leadsmithy Street	775	85%	19	783	85%	19	811	88%	20	810	88%	20
A54 St Michael's Way	1,119	72%	14	1,116	71%	14	1,048	67%	13	1,115	71%	14
17:00–18:00	**2038 future baseline**			**2038 with the AP1 revised scheme**			**2051 future baseline**			**2051 with the AP1 revised scheme**		
A54 Kinderton Street	742	104%	15	742	104%	15	742	104%	15	743	104%	15
A533 Leadsmithy Street	651	82%	17	642	80%	17	728	91%	19	691	86%	18
A54 St Michael's Way	988	58%	11	924	55%	11	1,024	61%	12	885	52%	10

11.4.29 The conclusions drawn paragraphs 14.5.33 and 14.5.34 of the main TA are replaced by:

"The assessment shows that for this junction, the change in traffic due to operation in 2038 of the AP1 revised scheme will not result in substantial changes in VoC and queue lengths in the AM or PM peak hours. The assessment shows that in the AM peak hour the junction operates close to capacity in both the future baseline and with the AP1 revised scheme. In the PM peak hour, this junction operates over capacity in both the future baseline and with the AP1 revised scheme. The traffic flow will have a negligible impact on the operation of the junction, which is, however, predicted to operate over its capacity in the future baseline.

The change in traffic due to operation of the AP1 revised scheme will not increase the maximum VoC between the 2051 future baseline and the AP1 revised scheme in the AM or PM peak hours. However, in the AM peak hour, the change in traffic due to operation of the AP1 revised scheme will increase the VoC from 86% in the 2051 future baseline to 89% with the AP1 revised scheme in 2051 on the A54 Kinderton Street approach in the AM peak hour. There will be no change in queue lengths. The change in traffic due to operation of the AP1 revised scheme will not decrease the maximum VoC between 2051 future baseline and the AP1 revised scheme in the AM or PM peak hours. However, in the PM peak hour, the change in traffic due to operation of the AP1 revised scheme will decrease the VoC from 91% in the 2051 future baseline to 86% with the AP1 revised scheme in 2051 on the A533 Leadsmithy Street approach in the PM peak hour. Queue length will decrease from 19 PCU in the future baseline to 18 PCU with the AP1 revised scheme. The assessment shows that in the AM peak hour the junction operates close to capacity in both the future baseline and with the AP1 revised scheme. In the PM peak hour, the junction operates over capacity in both the future baseline and with the AP1 revised scheme. The traffic flow will have an adverse impact on the operation of the junction in the AM peak hour and a beneficial impact on the operation of the junction in the PM peak hour which is, however, predicted to operate over its capacity in the future baseline."

A54 St Michael's Way/Wheelock Street

11.4.30 Table 14-73 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-73 of the main TA is replaced by Table 14-73 below.

Table 14-73: A54 St Michael's Way/Wheelock Street junction 2038 and 2051 future baseline and AP1 revised scheme junction capacity assessment

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	**2038 future baseline**			**2038 with the AP1 revised scheme**			**2051 future baseline**			**2051 with the AP1 revised scheme**		
A54 St Michael's Way (north)	757	39%	0	774	40%	0	732	38%	0	758	39%	0
Wheelock Street	61	22%	0	70	26%	0	64	22%	0	72	26%	0
A54 St Michael's Way (south)*	-	-	-	-	-	-	-	-	-	-	-	-
17:00–18:00	**2038 future baseline**			**2038 with the AP1 revised scheme**			**2051 future baseline**			**2051 with the AP1 revised scheme**		
A54 St Michael's Way (north)	818	42%	0	818	42%	0	818	42%	0	827	42%	0
Wheelock Street	80	31%	0	80	31%	0	86	33%	0	86	34%	0
A54 St Michael's Way (south)*	-	-	-	-	-	-	-	-	-	-	-	-

** A54 St Michael's Way is one-way southbound and therefore no results are reported for the A54 St Michael's Way (south) approach*

11.4.31 The conclusions drawn paragraph 14.5.36 of the main TA are replaced by:

"The assessment shows that for this junction, the change in traffic due to operation in 2038 and 2051 of the AP1 revised scheme will not result in substantial changes in VoC and queue lengths in the AM or PM peak hours. 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 AP1 revised scheme. The traffic flow will have a negligible impact on the operation of the junction."

A54 Chester Road/A530 St Michael's Way/A530 Nantwich Road

11.4.32 Table 14-74 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-74 of the main TA is replaced by Table 14-74 below.

Table 14-74: A54 Chester Road/A530 St Michael's Way/A530 Nantwich Road junction 2038 and 2051 future baseline and AP1 revised scheme junction capacity assessment

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	**2038 future baseline**			**2038 with the AP1 revised scheme**			**2051 future baseline**			**2051 with the AP1 revised scheme**		
A54 Chester Road	571	29%	0	538	28%	0	657	34%	0	579	30%	0
A54 St Michael's Way	818	94%	2	844	95%	3	796	97%	3	830	96%	3
17:00–18:00	**2038 future baseline**			**2038 with the AP1 revised scheme**			**2051 future baseline**			**2051 with the AP1 revised scheme**		
A54 Chester Road	361	19%	0	303	16%	0	410	21%	0	294	15%	0
A54 St Michael's Way	898	92%	1	898	90%	1	903	95%	2	912	91%	1

11.4.33 The conclusions drawn in paragraphs 14.5.38 and 14.5.39 of the main TA are replaced by:

"The assessment shows that for this junction, the change in traffic due to operation in 2038 of the AP1 revised scheme will not result in substantial changes in VoC and queue lengths in the AM peak hour. In the PM peak hour the maximum VoC will decrease from 92% in the 2038 future baseline to 90% with the AP1 revised scheme in 2038 on the A54 St Michael's Way approach, with no change in corresponding queue length. The assessment shows that in the AM peak hour the junction operates close to capacity in both the future baseline and with the AP1 revised scheme. In the PM peak hour, the junction operates close to capacity in both the future baseline and with the AP1 revised scheme. The traffic flow will have a negligible impact on the operation of the junction in the AM peak hour and a beneficial impact on the operation of the junction in the PM peak hour.

The assessment shows that for this junction, the change in traffic due to operation in 2051 of the AP1 revised scheme will not result in substantial changes in VoC and queue lengths in the AM peak hour. In the PM peak hour the maximum VoC will decrease from 95% in the 2051 future baseline to 91% with the AP1 revised scheme in 2051 on the A54 St Michael's Way approach, with a corresponding change in queue length from two PCU in the future baseline to one PCU. The assessment shows that in the AM peak hour the junction operates close to capacity in both the future baseline and with the AP1 revised scheme. In the PM peak hour, the junction operates close to capacity in both the future baseline and with the AP1 revised scheme. The traffic flow will have a beneficial impact on the operation of the junction in both the AM and PM peak hour."

Local network change in the Stanthorne area

11.4.34 There are a number of changes to the local road network in the Stanthorne area as part of the original scheme. Details of the changes are presented in Section 14.5 of the main TA.

A54 Middlewich Road realignment/A533 Northwich Road diversion

11.4.35 Table 14-75 of the main TA summarises the performance of the junction as a result of the original scheme. Table 14-75 of the main TA is replaced by Table 14-75 below.

Table 14-75: A54 Middlewich Road realignment/A533 Northwich Road diversion 2038 and 2051 AP1 revised scheme junction capacity assessment

Approach	Flow, PCU/hr	RFC	Q, PCU	Flow, PCU/hr	RFC	Q, PCU
08:00–09:00	**2038 with the AP1 revised scheme (proposed layout)**			**2051 with the AP1 revised scheme (proposed layout)**		
A533 Northwich Road diversion	499	0.42	1	566	0.48	1
A54 Middlewich Road realignment (east)	1081	0.52	1	1046	0.50	1
A54 Middlewich Road realignment (south)	427	0.37	1	442	0.39	1
17:00–18:00	**2038 with the AP1 revised scheme (proposed layout)**			**2051 with the AP1 revised scheme (proposed layout)**		
A533 Northwich Road diversion	695	0.56	1	791	0.63	2

Approach	Flow, PCU/hr	RFC	Q, PCU	Flow, PCU/hr	RFC	Q, PCU
A54 Middlewich Road realignment (east)	940	0.47	1	1076	0.56	1
A54 Middlewich Road realignment (south)	363	0.30	0	325	0.28	0

11.4.36 The conclusions drawn in paragraph 14.5.42 of the main TA are replaced by:

"The assessment shows that the junction operates well within capacity in 2038 and 2051 with the AP1 revised scheme."

A54 Chester Road/A54 Middlewich Road/A533 Northwich Road

11.4.37 Table 14-76 of the main TA summarises the performance of the junction as a result of the original scheme. Table 14-76 of the main TA is replaced by Table 14-76 below.

Table 14-76: A54 Chester Road/A54 Middlewich Road/A533 Northwich Road junction 2038 and 2051 future baseline and AP1 revised scheme junction capacity assessment

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	**2038 future baseline**			**2038 with the AP1 revised scheme**			**2051 future baseline**			**2051 with the AP1 revised scheme**		
A54 Middlewich Road (ahead and left)	538	-	-	787	-	-	556	-	-	849	-	-
A533 Northwich Road (left)	413	0.85	5	5	0.01	0	428	0.89	6	5	0.01	0
A533 Northwich Road (right)	1	0.02	0	5	0.03	0	1	0.03	0	5	0.03	0
A54 Chester Road (ahead and right)	796	1.03	33	903	0.03	0	816	1.00	27	847	0.03	0
17:00–18:00	**2038 future baseline**			**2038 with the AP1 revised scheme**			**2051 future baseline**			**2051 with the AP1 revised scheme**		
A54 Middlewich Road (ahead and left)	404	-	-	731	-	-	408	-	-	680	-	-
A533 Northwich Road (left)	420	0.81	4	5	0.01	0	482	0.93	9	5	0.01	0
A533 Northwich Road (right)	2	0.02	0	5	0.02	0	1	0.07	0	5	0.02	0
A54 Chester Road (ahead and right)	747	0.77	5	711	0.02	0	759	0.67	3	778	0.02	0

11.4.38 The conclusions drawn in paragraphs 14.5.44 to 14.5.45 of the main TA are replaced by:

"The change in traffic due to operation of the AP1 revised scheme will decrease the maximum RFC from 1.03 in the 2038 future baseline to 0.03 with the AP1 revised scheme in 2038 on the A54 Chester Road (ahead and right) approach in the AM peak hour, with a corresponding change in queue length from 33 PCU in the future baseline to no queue. In the PM peak hour, the maximum RFC will decrease from 0.81 in the 2038 future baseline to 0.01 with the AP1 revised scheme in 2038 on the A533 Northwich Road (left) approach, with a corresponding change in queue length from four PCU in the future baseline to no queue. The assessment shows that in the AM peak hour the junction operates over capacity in the future baseline and well within capacity with the AP1 revised scheme. In the PM peak hour, the junction operates within capacity in the future baseline and well within capacity with the AP1 revised scheme. The traffic flow will have a beneficial impact on the operation of the junction which is predicted to operate over its capacity in the future baseline.

The change in traffic due to operation of the AP1 revised scheme will decrease the maximum RFC from 1.00 in the 2051 future baseline to 0.03 with the AP1 revised scheme in 2051 on the A54 Chester Road (ahead and right) approach in the AM peak hour, with a corresponding change in queue length from 27 PCU in the future baseline to no queue. In the PM peak hour, the maximum RFC will decrease from 0.93 in the 2051 future baseline to 0.01 with the AP1 revised scheme in 2051 on the A533 Northwich Road (left) approach, with a corresponding change in queue length from nine PCU in the future baseline to no queue. The assessment shows that in the AM peak hour the junction operates over capacity in the future baseline and well within capacity with the AP1 revised scheme. In the PM peak hour, the junction operates close to capacity in the future baseline and well within capacity with the AP1 revised scheme. The traffic flow will have a beneficial impact on the operation of the junction which is, however, predicted to operate over its capacity in the future baseline."

A54 Middlewich Road realignment/Birch Lane diversion/Bell Lane realignment

11.4.39 Table 14-77 of the main TA summarises the performance of the junction as a result of the original scheme. Table 14-77 of the main TA is replaced by Table 14-77 below.

Table 14-77: A54 Middlewich Road realignment/Birch Lane diversion/Bell Lane realignment junction 2038 and 2051 with the AP1 revised scheme junction capacity assessment

Approach	Flow, PCU/hr	RFC	Q, PCU	Flow, PCU/hr	RFC	Q, PCU
08:00–09:00	**2038 with the AP1 revised scheme (proposed layout)**			**2051 with the AP1 revised scheme (proposed layout)**		
Birch Lane diversion (ahead, left and right)	184	0.42	1	203	0.44	1
A54 Middlewich Road (east) (ahead, left and right)	898	0.00	0	843	0.00	0
Bell Lane realignment (ahead, left and right)	5	0.01	0	5	0.01	0
A54 Middlewich Road (west) (ahead, left and right)	913	0.26	0	990	0.28	0
17:00–18:00	**2038 with the AP1 revised scheme (proposed layout)**			**2051 with the AP1 revised scheme (proposed layout)**		
Birch Lane diversion (ahead, left and right)	234	0.47	1	303	0.64	2
A54 Middlewich Road (east) (ahead, left and right)	706	0.00	0	773	0.00	0
Bell Lane realignment (ahead, left and right)	5	0.01	0	5	0.01	0
A54 Middlewich Road (west) (ahead, left and right)	927	0.36	1	882	0.38	1

11.4.40 The conclusions drawn in paragraph 14.5.47 of the main TA are replaced by:

"The assessment shows that the junction operates well within capacity in 2038 and 2051 with the AP1 revised scheme."

A533 Bostock Road/Road One/A5018 Bostock Road/A533 Davenham Road

11.4.41 Table 14-78 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-78 of the main TA is replaced by Table 14-78 below.

Table 14-78: A533 Bostock Road/A5018 Bostock Road/A533 Davenham Road/Road One junction 2038 and 2051 future baseline and AP1 revised scheme junction capacity assessment

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	**2038 future baseline**			**2038 with the AP1 revised scheme**			**2051 future baseline**			**2051 with the AP1 revised scheme**		
A533 Bostock Road	391	22%	0	418	23%	0	469	26%	0	532	30%	0
Road One	353	18%	0	311	16%	0	347	18%	0	302	15%	0
A5018 Bostock Road	1,169	102%	4	1,195	104%	4	1,193	104%	4	1,213	106%	4
A533 Davenham Bypass	779	101%	7	762	101%	7	775	101%	7	750	103%	7
17:00–18:00	**2038 future baseline**			**2038 with the AP1 revised scheme**			**2051 future baseline**			**2051 with the AP1 revised scheme**		
A533 Bostock Road	223	12%	0	212	11%	0	252	13%	0	275	15%	0
Road One	844	43%	0	845	43%	0	909	46%	0	923	46%	0
A5018 Bostock Road	822	76%	0	877	81%	1	901	85%	1	931	88%	1
A533 Davenham Bypass	829	91%	2	815	93%	2	823	91%	2	779	87%	2

11.4.42 The conclusions drawn in paragraphs 14.5.49 and 14.5.50 of the main TA are replaced by:

"The change in traffic due to operation of the AP1 revised scheme will increase the maximum VoC from 102% in the 2038 future baseline to 104% with the AP1 revised scheme in 2038 on the A5018 Bostock Road approach in the AM peak hour, with no change in corresponding queue length. In the PM peak hour, the maximum VoC will increase from 91% in the 2038 future baseline to 93% with the AP1 revised scheme in 2038 on the A533 Davenham Bypass approach, with no change in corresponding queue length. The assessment shows that in the AM peak hour the junction operates over capacity in both the future baseline and with the AP1 revised scheme. In the PM peak hour, the junction operates close to capacity in both the future baseline and with the AP1 revised scheme. The traffic flow will have an adverse impact on the operation of the junction which is, however, predicted to operate over its capacity in the future baseline in the AM peak hour.

The change in traffic due to operation of the AP1 revised scheme will increase the maximum VoC from 104% in the 2051 future baseline to 106% with the AP1 revised scheme in 2051 on the A5018 Bostock Road approach in the AM peak hour, with no change in corresponding queue length. In the PM peak hour, the change in traffic due to operation of the AP1 revised scheme will increase the VoC from 85% in the 2051 future baseline to 88% with the AP1 revised scheme in 2051 on the A5018 Bostock Road approach with no change in queue length. The assessment shows that in the AM peak hour the junction operates over capacity in both the future baseline and with the AP1 revised scheme. In the PM peak hour, the junction operates close to capacity in both the future baseline and with the AP1 revised scheme. The traffic flow will have an adverse impact on the operation of the junction which is, however, predicted to operate over capacity in the future baseline in the AM peak hour."

A556 Chester Road/Hartford Road/Hill Top Grange

11.4.43 Table 14-79 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-79 of the main TA is replaced by Table 14-79 below.

Table 14-79: A556 Chester Road/Hartford Road/Hill Top Grange junction 2038 and 2051 future baseline and AP1 revised scheme junction capacity assessment

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	**2038 future baseline**			**2038 with the AP1 revised scheme**			**2051 future baseline**			**2051 with the AP1 revised scheme**		
Hill Top Grange*	-	-	-	-	-	-	-	-	-	-	-	-
A556 Chester Road (east)	1,029	48%	14	1,023	48%	14	1,041	49%	14	1,030	48%	14
Hartford Road	239	32%	5	239	32%	5	254	35%	6	255	35%	6
A556 Chester Road (west)	1,976	92%	25	1,965	92%	25	2,057	96%	26	2,052	96%	26
17:00–18:00	**2038 future baseline**			**2038 with the AP1 revised scheme**			**2051 future baseline**			**2051 with the AP1 revised scheme**		
Hill Top Grange*	-	-	-	-	-	-	-	-	-	-	-	-
A556 Chester Road (east)	1,795	83%	25	1,788	82%	25	1,857	85%	25	1,852	85%	25
Hartford Road	283	42%	6	290	43%	7	290	43%	7	292	43%	7
A556 Chester Road (west)	1,229	57%	16	1,228	57%	16	1,362	63%	18	1,376	63%	18

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

11.4.44 The conclusions drawn in paragraphs 14.5.52 and 14.5.53 of the main TA are replaced by:

"The assessment shows that for this junction, the change in traffic due to operation in 2038 of the AP1 revised scheme will not result in substantial changes in VoC and queue lengths in the AM or PM peak hours. The assessment shows that in the AM peak hour the junction operates close to capacity in both the future baseline and with the AP1 revised scheme. In the PM peak hour, the junction operates within capacity in both the future baseline and with the AP1 revised scheme. The traffic flow will have a negligible impact on the operation of the junction.

The assessment shows that for this junction, the change in traffic due to operation in 2051 of the AP1 revised scheme will not result in substantial changes in VoC and queue lengths in the AM or PM peak hours. The assessment shows that in the AM peak hour the junction operates close to capacity in both the future baseline and with the AP1 revised scheme. In the PM peak hour, the junction operates close to capacity in both the future baseline and with the AP1 revised scheme. The traffic flow will have a negligible impact on the operation of the junction."

A530 King Street/Davenham Road/Crowders Lane

11.4.45 Table 14-80 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-80 of the main TA is replaced by Table 14-80 below.

Table 14-80: A530 King Street/Davenham Road/Crowders Lane junction 2038 and 2051 future baseline and AP1 revised scheme junction capacity assessment

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	**2038 future baseline**			**2038 with the AP1 revised scheme**			**2051 future baseline**			**2051 with the AP1 revised scheme**		
A530 King Street (north)	743	38%	0	600	30%	0	874	45%	0	623	31%	0
Crowders Lane	125	42%	0	65	19%	0	169	59%	1	127	39%	0
A530 King Street (south)	1,046	55%	0	1,007	53%	0	1,080	57%	0	1,043	55%	0
Davenham Road	253	88%	3	139	51%	1	264	100%	7	234	89%	3
17:00–18:00	**2038 future baseline**			**2038 with the AP1 revised scheme**			**2051 future baseline**			**2051 with the AP1 revised scheme**		
A530 King Street (north)	797	40%	0	746	37%	0	822	42%	0	713	36%	0
Crowders Lane	144	40%	0	163	43%	0	207	57%	1	221	58%	1
A530 King Street (south)	784	42%	0	719	37%	0	772	39%	0	759	39%	0
Davenham Road	255	100%	6	278	101%	6	289	104%	7	297	105%	7

11.4.46 The conclusions drawn in paragraphs 14.5.55 and 14.5.56 of the main TA are replaced by:

"The change in traffic due to operation of the AP1 revised scheme will decrease the maximum VoC from 88% in the 2038 future baseline to 51% with the AP1 revised scheme in 2038 on the Davenham Road approach in the AM peak hour, with a corresponding change in queue length from three PCU in the future baseline to one PCU. The assessment shows that for this junction, the change in traffic due to operation in 2038 of the AP1 revised scheme will not result in substantial changes in VoC and queue lengths in the PM peak hour. The assessment shows that in the AM peak hour the junction operates close to capacity in the future baseline and well within capacity with the AP1 revised scheme. In the PM peak hour, the junction operates over capacity in both the future baseline and with the AP1 revised scheme. The traffic flow will have a beneficial impact on the operation of the junction in the AM peak hour and a negligible impact on the operation of the junction in the PM peak hour which is, however, predicted to operate over its capacity in the future baseline in the PM peak hour.

The change in traffic due to operation of the AP1 revised scheme will decrease the maximum VoC from 100% in the 2051 future baseline to 89% with the AP1 revised scheme in 2051 on the Davenham Road approach in the AM peak hour, with a corresponding change in queue length from seven PCU in the future baseline to three PCU. The assessment shows that for this junction, the change in traffic due to operation in 2051 of the AP1 revised scheme will not result in substantial changes in VoC and queue lengths in the PM peak hour. The assessment shows that in the AM peak hour the junction operates over capacity in the future baseline and close to capacity with the AP1 revised scheme. In the PM peak hour, the junction operates over capacity in both the future baseline and with the AP1 revised scheme. The traffic flow will have a beneficial impact on the operation of the junction in the AM peak hour and a negligible impact on the operation of the junction in the PM peak hour which is, however, predicted to operate over its capacity in the future baseline."

A556 Shurlach Road/Shurlach Lane

11.4.47 Table 14-81 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-81 of the main TA is replaced by Table 14-81 below.

Table 14-81: A556 Shurlach Road/Shurlach Lane junction 2038 and 2051 future baseline and AP1 revised scheme junction capacity assessment

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	**2038 future baseline**			**2038 with the AP1 revised scheme**			**2051 future baseline**			**2051 with the AP1 revised scheme**		
A556 Shurlach Road (east)	1,025	26%	0	1,104	28%	0	1,041	27%	0	1,105	29%	0
Shurlach Lane	102	24%	0	41	10%	0	152	36%	0	94	23%	0
A556 Shurlach Road (west)	2,336	-	-	2,442	-	-	2,452	-	-	2,502	-	-
17:00–18:00	**2038 future baseline**			**2038 with the AP1 revised scheme**			**2051 future baseline**			**2051 with the AP1 revised scheme**		
A556 Shurlach Road (east)	2,653	66%	0	2,645	66%	0	2,694	67%	0	2,681	67%	0
Shurlach Lane	77	119%	3	79	120%	3	80	131%	3	83	134%	3
A556 Shurlach Road (west)	1,300	-	-	1,335	-	-	1,282	-	-	1,314	-	-

11.4.48 The conclusions drawn in paragraphs 14.5.58 and 14.5.59 of the main TA are replaced by:

"The assessment shows that for this junction, the change in traffic due to operation in 2038 of the AP1 revised scheme will not result in substantial changes in VoC and queue lengths in the AM or PM peak hours. The assessment shows that in the AM peak hour the junction operates well within capacity in both the future baseline and with the AP1 revised scheme. In the PM peak hour, the junction operates over capacity in both the future baseline and with the AP1 revised scheme. The traffic flow will have an adverse impact on the operation of the junction which is, however, predicted to operate over its capacity in the future baseline in the PM peak hour.

The assessment shows that for this junction, the change in traffic due to the operation in 2051 of the AP1 revised Scheme will not result in substantial changes in VoC and queue lengths in the AM peak hour. In the PM peak hour the maximum VoC will increase from 131% in the 2051 future baseline to 134% with the AP1 revised Scheme in 2051 on the Shurlach Lane approach, with no change in corresponding queue length. The assessment shows that in the AM peak hour the junction operates well within capacity in both the future baseline and with the AP1 revised scheme. In the PM peak hour, the junction operates over capacity in both the future baseline and with the AP1 revised scheme. The traffic flow will have a negligible impact on the operation of the junction in the AM peak hour and an adverse impact on the operation of the junction in the PM peak hour which is, however, predicted to operate over its capacity in the future baseline in the PM peak hour."

A530 King Street/Gadbrook Distribution Centre/B5082 Pennys Lane diversion

11.4.49 The existing A530 King Street/Gadbrook Distribution Centre junction will be modified to accommodate the B5082 Pennys Lane diversion as a result of the original scheme. The B5082 Pennys Lane diversion will form a new fourth-arm of the roundabout. Details of the changes are presented in Section 14.5 of the main TA

11.4.50 Table 14-82 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-82 of the main TA is replaced by Table 14-82 below.

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Table 14-82: A530 King Street/Gadbrook Distribution Centre/B5082 Pennys Lane diversion junction 2038 and 2051 future baseline and AP1 revised scheme junction capacity assessment

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	**2038 future baseline (existing layout)**			**2038 with the AP1 revised scheme (proposed layout)**			**2051 future baseline (existing layout)**			**2051 with the AP1 revised scheme (proposed layout)**		
A530 King Street (north)	1049	0.31	1	1468	0.55	1	1185	0.35	1	1516	0.57	1
B5082 Pennys Lane diversion	-	-	-	431	0.41	1	-	-	-	356	0.34	1
A530 King Street (south)	1214	0.47	1	1265	0.74	3	1237	0.48	1	1300	0.74	3
Gadbrook Distribution Centre	142	0.09	0	142	0.12	0	142	0.09	0	142	0.12	0
17:00–18:00	**2038 future baseline (existing layout)**			**2038 with the AP1 revised scheme (proposed layout)**			**2051 future baseline (existing layout)**			**2051 with the AP1 revised scheme (proposed layout)**		
A530 King Street (north)	902	0.27	0	1179	0.45	1	925	0.28	0	1168	0.44	1
B5082 Pennys Lane diversion	-	-	-	258	0.23	0	-	-	-	219	0.20	0
A530 King Street (south)	815	0.32	1	780	0.43	1	850	0.33	1	843	0.46	1
Gadbrook Distribution Centre	188	0.10	0	188	0.13	0	188	0.10	0	188	0.13	0

11.4.51 The conclusions drawn in paragraph 14.5.61 and 14.5.62 of the main TA are replaced by:

"The assessment shows that for this junction, the change in traffic due to operation in 2038 and 2051 of the AP1 revised scheme will not result in substantial changes in RFC and queue lengths in the AM or PM peak hours. 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 AP1 revised scheme. The traffic flow will have a negligible impact on the operation of the junction."

A530 Griffiths Road/A530 King Street/B5082 Middlewich Road/Pennys Lane

11.4.52 Table 14-83 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-83 of the main TA is replaced by Table 14-83 below.

Table 14-83: A530 Griffiths Road/A530 King Street/B5082 Middlewich Road/Pennys Lane junction 2038 and 2051 future baseline and AP1 revised scheme junction capacity assessment

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	**2038 future baseline**			**2038 with the AP1 revised scheme**			**2051 future baseline**			**2051 with the AP1 revised scheme**		
A530 Griffiths Road	406	37%	4	352	32%	3	404	37%	4	384	34%	4
Pennys Lane*	-	-	-	-	-	-	-	-	-	-	-	-
A530 King Street	522	52%	7	519	52%	7	505	51%	7	515	52%	7
B5082 Middlewich Road	456	93%	11	420	98%	10	480	94%	11	442	100%	10
17:00–18:00	**2038 future baseline**			**2038 with the AP1 revised scheme**			**2051 future baseline**			**2051 with the AP1 revised scheme**		
A530 Griffiths Road	467	46%	5	430	40%	4	485	49%	5	458	44%	4
Pennys Lane*	-	-	-	-	-	-	-	-	-	-	-	-
A530 King Street	651	66%	9	643	65%	9	654	65%	9	642	64%	9
B5082 Middlewich Road	448	94%	11	393	99%	9	440	97%	10	434	99%	10

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

11.4.53 The conclusions drawn in paragraphs 14.5.64 and 14.5.65 of the main TA are replaced by:

"The change in traffic due to operation of the AP1 revised scheme will increase the maximum VoC from 93% in the 2038 future baseline to 98% with the AP1 revised scheme in 2038 on the B5082 Middlewich Road approach in the AM peak hour, with a corresponding change in queue length from 11 PCU in the future baseline to 10 PCU. In the PM peak hour the maximum VoC will increase from 94% in the 2038 future baseline to 99% with the AP1 revised scheme in 2038 on the B5082 Middlewich Road approach, with a corresponding change in queue length from 11 PCU in the future baseline to nine PCU. The assessment shows that in the AM peak hour the junction operates close to capacity in both the future baseline and with the AP1 revised scheme. In the PM peak hour, the junction operates close to capacity in both the future baseline and with the AP1 revised scheme. The traffic flow will have an adverse impact on the operation of the junction.

The change in traffic due to operation of the AP1 revised scheme will increase the maximum VoC from 94% in the 2051 future baseline to 100% with the AP1 revised scheme in 2051 on the B5082 Middlewich Road approach in the AM peak hour, with a corresponding change in queue length from 11 PCU in the future baseline to 10 PCU. In the PM peak hour the maximum VoC will increase from 97% in the 2051 future baseline to 99% with the AP1 revised scheme in 2051 on the B5082 Middlewich Road approach, with no change in corresponding queue length. The assessment shows that in the AM peak hour the junction operates close to capacity in the future baseline and over capacity with the AP1 revised Scheme. In the PM peak hour, the junction operates close to capacity in both the future baseline and with the AP1 revised Scheme. The traffic flow will have an adverse impact on the operation of the junction."

Local network change in the Lostock Green area

11.4.54 There are a number of changes to the local road network in the Lostock Green area as part of the original scheme. Details of the changes are presented in Section 14.5 of the main TA.

A556 Shurlach Road (northbound) realignment/Birches Lane realignment

11.4.55 Table 14-84 of the main TA summarises the performance of the junction as a result of the original scheme. Table 14-84 of the main TA is replaced by Table 14-84 below.

Table 14-84: A556 Shurlach Road (northbound) realignment/Birches Lane realignment 2038 and 2051 with the AP1 revised scheme junction capacity assessment

Approach	Flow, PCU/hr	RFC	Q, PCU	Flow, PCU/hr	RFC	Q, PCU
08:00–09:00	**2038 with the AP1 revised scheme (proposed layout)**			**2051 with the AP1 revised scheme (proposed layout)**		
A556 Shurlach Road realignment (north)*	-	-	-	-	-	-
A556 Shurlach Road realignment (south) (ahead)	1,731	-	-	1776	-	-

Approach	Flow, PCU/hr	RFC	Q, PCU	Flow, PCU/hr	RFC	Q, PCU
08:00–09:00	**2038 with the AP1 revised scheme (proposed layout)**			**2051 with the AP1 revised scheme (proposed layout)**		
A556 Shurlach Road realignment (south) (left)	245	-	-	246	-	-
Birches Lane realignment (left)	6	0.02	0	7	0.02	0
17:00–18:00	**2038 with the AP1 revised scheme (proposed layout)**			**2051 with the AP1 revised scheme (proposed layout)**		
A556 Shurlach Road realignment (north)*	-	-	-	-	-	-
A556 Shurlach Road realignment (south) (ahead)	1306	-	-	1305	-	-
A556 Shurlach Road realignment (south) (left)	258	-	-	268	-	-
Birches Lane realignment (left)	4	0.00	0	4	0.00	0

** A556 Shurlach Road will be one-way northbound and therefore no results are reported for the A556 Shurlach Road realignment (north) approach*

11.4.56 The conclusions drawn in paragraph 14.5.68 of the main TA are replaced by:

"The assessment shows that the junction operates well within capacity in both 2038 and 2051 with the AP1 revised scheme."

A556 Shurlach Road (southbound) realignment/Birches Lane diversion

11.4.57 Table 14-85 of the main TA summarises the performance of the junction as a result of the original scheme. Table 14-85 of the main TA is replaced by Table 13-85 below.

Table 14-85: A556 Shurlach Road (southbound) realignment/Birches Lane diversion junction 2038 and 2051 with the AP1 revised scheme junction capacity assessment results

Approach	Flow, PCU/hr	RFC	Q, PCU	Flow, PCU/hr	RFC	Q, PCU
08:00–09:00	**2038 with the AP1 revised scheme (proposed layout)**			**2051 with the AP1 revised scheme (proposed layout)**		
A556 Shurlach Road realignment (north) (ahead)	1,742	0.00	0	1,900	0.00	0
A556 Shurlach Road realignment (north) (left)	172	0.00	0	182	0.00	0
Birches Lane diversion (left)	44	0.11	0	44	0.12	0
A556 Shurlach Road realignment (south)*	-	-	-	-	-	-
17:00–18:00	**2038 with the AP1 revised scheme (proposed layout)**			**2051 with the AP1 revised scheme (proposed layout)**		
A556 Shurlach Road realignment (north) (ahead)	1455	0.00	0	1459	0.00	0
A556 Shurlach Road realignment (north) (left)	259	0.00	0	367	0.00	0

Approach	Flow, PCU/hr	RFC	Q, PCU	Flow, PCU/hr	RFC	Q, PCU
17:00–18:00	**2038 with the AP1 revised scheme (proposed layout)**			**2051 with the AP1 revised scheme (proposed layout)**		
Birches Lane diversion (left)	135	0.30	0	165	0.37	1
A556 Shurlach Road realignment (south)*	-	-	-	-	-	-

** A556 Shurlach Road will be one-way southbound and therefore no results are reported for the A556 Shurlach Road realignment (south) approach*

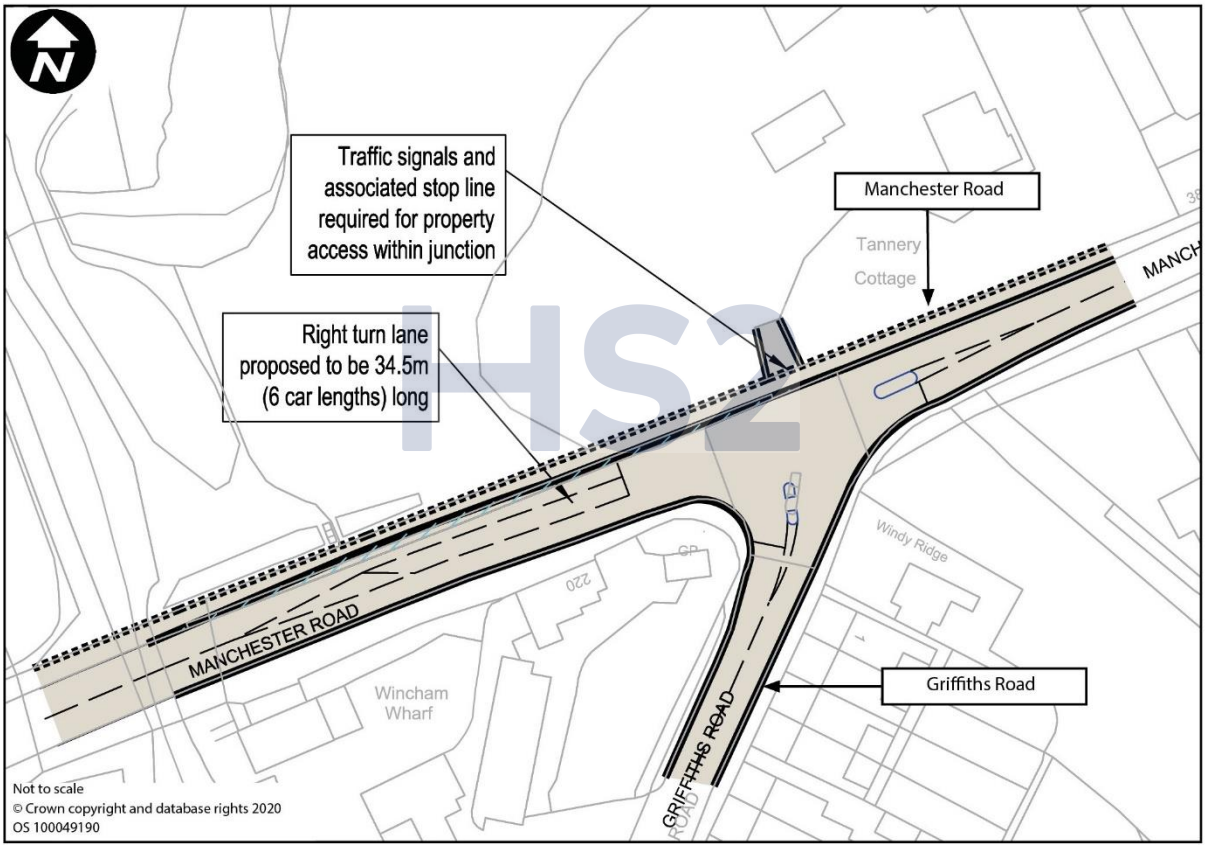
11.4.58 The conclusions drawn in paragraph 14.5.70 and 14.5.71 of the main TA are replaced by:

"The assessment shows that the junction operates well within capacity in both 2038 and 2051 with the AP1 revised scheme."

A530 Griffiths Road/A559 Manchester Road

11.4.59 The A530 Griffiths Road/A559 Manchester Road junction will be permanently modified as a result of the AP1 revised scheme to mitigate impacts at this location as reported in the main TA. The modifications comprise the introduction of traffic signal control and widening of the carriageway to enable the formation of a right-turn lane on the A559 Manchester Road (west) approach. Figure 14-15.1 shows the junction layout introduced as part of the AP1 revised scheme.

Figure 14-15.1: Junction layout diagram (A530 Griffiths Road/A559 Manchester Road



11.4.60 Table 14-25 summarises the results of the changes in performance of the junction as a result of the AP revised scheme based on the existing junction layout. Table 14-25 summarises the performance of the junction as a result of the AP1 revised scheme with the proposed permanent junction layout introduced.

11.4.61 Table 14-86 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-86 of the main TA is replaced by Table 14-86 and Table 14-86.1 below.

Table 14-86: A530 Griffiths Road/A559 Manchester Road junction 2038 and 2051 future baseline and AP1 revised scheme (existing layout) junction capacity assessment

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	**2038 future baseline (existing layout)**			**2038 with the AP1 revised scheme (existing layout)**			**2051 future baseline (existing layout)**			**2051 with the AP1 revised scheme (existing layout)**		
A599 Manchester Road (east)	837	44%	0	822	44%	0	794	42%	0	791	42%	0
A530 Griffiths Road	260	76%	1	260	77%	1	281	85%	2	272	83%	1
A599 Manchester Road (west)	656	55%	0	654	54%	0	700	60%	0	695	59%	0
17:00–18:00	**2038 future baseline (existing layout)**			**2038 with the AP1 revised scheme (existing layout)**			**2051 future baseline (existing layout)**			**2051 with the AP1 revised scheme (existing layout)**		
A599 Manchester Road (east)	822	43%	0	852	45%	0	806	42%	0	845	44%	0
A530 Griffiths Road	334	97%	4	329	96%	4	364	91%	2	347	90%	2
A599 Manchester Road (west)	864	79%	0	853	77%	0	963	84%	0	947	83%	0

Table 14-86.1: A530 Griffiths Road/A559 Manchester Road junction 2038 and 2051 future baseline and AP1 revised scheme (proposed layout) junction capacity assessment

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	**2038 future baseline (existing layout)**			**2038 with the AP1 revised scheme (proposed layout)**			**2051 future baseline (existing layout)**			**2051 with the AP1 revised scheme (proposed layout)**		
A599 Manchester Road (east)	837	44%	0	749	71%	11	794	42%	0	749	71%	11
A530 Griffiths Road	260	76%	1	187	66%	5	281	85%	2	210	74%	6
A599 Manchester Road (west)	656	55%	0	634	39%	6	700	60%	0	711	43%	6
17:00–18:00	**2038 future baseline (existing layout)**			**2038 with the AP1 revised scheme (proposed layout)**			**2051 future baseline (existing layout)**			**2051 with the AP1 revised scheme (proposed layout)**		
A599 Manchester Road (east)	822	43%	0	797	85%	14	806	42%	0	791	84%	13
A530 Griffiths Road	334	97%	4	271	70%	7	364	91%	2	322	83%	8
A599 Manchester Road (west)	864	79%	0	852	55%	9	963	84%	0	922	60%	10

11.4.62 The conclusions drawn in paragraphs 14.5.73 and 14.5.74 of the main TA are replaced by:

"The assessment shows that in 2038, based on the existing layout, in the AM peak hour the junction operates within capacity in the future baseline and well within capacity with the AP1 revised scheme. In the PM peak hour, the junction operates close to capacity in both the future baseline and with the AP1 revised scheme.

The assessment shows that in 2051, based on the existing layout, in the AM peak hour the junction operates close to capacity in the future baseline and well within capacity with the AP1 revised scheme. In the PM peak hour, the junction operates close to capacity in the future baseline and within capacity with the AP1 revised scheme.

With the proposed layout, the change in traffic due to operation in 2038 of the AP1 revised scheme will not result in substantial changes in VoC and queue lengths in the AM peak hour. In the PM peak hour, the maximum VoC will decrease from 97% in the 2038 future baseline to 70% with the AP1 revised scheme in 2038 on the A530 Griffiths Road approach, with a corresponding change in queue length from four PCU in the future baseline to seven PCU.

The change in traffic due to operation in 2051 of the AP1 revised scheme will not result in substantial changes in VoC and queue lengths in the AM peak hour. In the PM peak hour, the maximum VoC will decrease from 91% in the 2051 future baseline to 83% with the AP1 revised scheme in 2051 on the A530 Griffiths Road approach, with a corresponding change in queue length from two PCU in the future baseline to eight PCU."

A559 Manchester Road/A559 Hall Lane/Station Road

11.4.63 Table 14-87 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-87 of the main TA is replaced by Table 14-87 below.

Table 14-87: A559 Manchester Road/A559 Hall Lane/Station Road junction 2038 and 2051 future baseline and AP1 revised scheme junction capacity assessment

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	**2038 future baseline**			**2038 with the AP1 revised scheme**			**2051 future baseline**			**2051 with the AP1 revised scheme**		
A559 Hall Lane	314	59%	6	283	53%	5	286	53%	5	286	53%	5
A559 Manchester Road (east)	615	75%	11	559	68%	10	601	73%	11	555	68%	10
Station Road	175	89%	4	175	88%	4	174	88%	4	174	88%	4
A559 Manchester Road (west)	664	87%	12	624	80%	11	703	100%	12	694	97%	12
17:00–18:00	**2038 future baseline**			**2038 with the AP1 revised scheme**			**2051 future baseline**			**2051 with the AP1 revised scheme**		
A559 Hall Lane	369	69%	7	360	67%	7	379	71%	7	373	70%	7
A559 Manchester Road (east)	506	64%	9	488	60%	9	476	61%	8	465	58%	8
Station Road	196	99%	5	196	99%	5	207	104%	5	205	104%	5
A559 Manchester Road (west)	763	106%	13	757	105%	13	808	113%	12	794	111%	13

11.4.64 The conclusions drawn in paragraphs 14.5.76 and 14.5.77 of the main TA are replaced by:

"The change in traffic due to operation of the AP1 revised scheme will not substantially decrease the maximum VoC between the 2038 future baseline and the AP1 revised scheme in the AM peak hour. However, in the AM peak hour, the change in traffic due to operation of the AP1 revised scheme will decrease the VoC from 87% in the 2038 future baseline to 80% with the AP1 revised scheme in 2038 on the A559 Manchester Road (west) approach in the AM peak hour. The queue length will decrease from 12 PCU in the future baseline to 11 PCU with the AP1 revised scheme. The assessment shows that for this junction, the change in traffic due to operation in 2038 of the AP1 revised scheme will not result in substantial changes in VoC and queue lengths in the PM peak hour. The assessment shows that in the AM peak hour the junction operates close to capacity in both the future baseline and with the AP1 revised scheme. In the PM peak hour, the junction operates over capacity in both the future baseline and with the AP1 revised scheme. The traffic flow will have a beneficial impact on the operation of the junction in the AM peak hour and a negligible impact on the operation of the junction in the PM peak hour which is, however, predicted to operate over its capacity in the future baseline in the PM peak hour.

The change in traffic due to operation of the AP1 revised scheme will decrease the maximum VoC from 100% in the 2051 future baseline to 97% with the AP1 revised scheme in 2051 on the A559 Manchester Road (west) approach in the AM peak hour, with no change in corresponding queue length. In the PM peak hour, the maximum VoC will decrease from 113% in the 2051 future baseline to 111% with the AP1 revised Scheme in 2051 on the A559 Manchester Road (west) approach, with a corresponding change in queue length from 12 PCU in the future baseline to 13 PCU. The assessment shows that in the AM peak hour the junction operates over capacity in the future baseline and close to capacity with the AP1 revised scheme. In the PM peak hour, the junction operates over capacity in both the future baseline and with the AP1 revised scheme. The traffic flow will have a beneficial impact on the operation of the junction which is, however, predicted to operate over its capacity in the future baseline."

A556 Chester Road/A556 Shurlach Road/A559 Manchester Road

11.4.65 Table 14-88 of the main TA summarises the results of the changes in performance of the junction as a result of the original scheme. Table 14-88 of the main TA is replaced by Table 14-88 below.

Table 14-88: A556 Chester Road/A556 Shurlach Road/A559 Manchester Road junction 2038 and 2051 future baseline and AP1 revised scheme junction capacity assessment

Approach	Flow, PCU/hr	VoC	Queue, PCU	Flow, PCU/hr	VoC	Queue, PCU	Flow, PCU/hr	VoC	Queue, PCU	Flow, PCU/hr	VoC	Queue, PCU
08:00–09:00	**2038 future baseline**			**2038 with the AP1 revised scheme**			**2051 future baseline**			**2051 with the AP1 revised scheme**		
A559 (northbound) to A556 (southbound) slip road	201	74%	2	208	75%	2	198	90%	3	201	87%	3
A556 Chester Road	1,774	44%	0	1,749	44%	0	1,977	49%	0	1,926	48%	0
A556 (southbound) to A559 Manchester Road (westbound)	521	32%	9	468	28%	8	520	32%	9	474	29%	9
A556 Shurlach Road	1,335	75%	22	1,338	75%	22	1,419	79%	24	1,383	77%	23
A559 Manchester Road (eastbound)	488	97%	13	496	98%	13	509	101%	13	514	102%	13
17:00–18:00	**2038 future baseline**			**2038 with the AP1 revised scheme**			**2051 future baseline**			**2051with the AP1 revised scheme**		
A559 (northbound) to A556 (southbound) slip road	187	87%	3	192	87%	3	129	81%	2	136	82%	2
A556 Chester Road	1,991	50%	0	1,974	49%	0	2,250	56%	0	2,218	55%	0
A556 (southbound) to A559 Manchester Road (westbound)	467	23%	4	444	22%	4	524	25%	5	520	25%	5
A556 Shurlach Road	1,128	104%	14	1,124	104%	14	1,130	104%	14	1,123	104%	14
A559 Manchester Road (eastbound)	658	89%	6	680	92%	6	627	85%	6	659	89%	6

11.4.66 The conclusions drawn in paragraphs 14.5.79 and 14.5.80 of the main TA are replaced by:

"The model shows that for this junction, the change in traffic due to operation in 2038 of the AP1 revised scheme will not result in substantial changes in VoC and queue lengths in the AM peak hour. However, in the PM peak hour, the change in traffic due to operation of the AP1 revised scheme will increase the VoC from 89% in the 2038 future baseline to 92% with the AP1 Revised Scheme in 2038 on the A559 Manchester Road (eastbound) approach in the PM peak hour. There will be no change in queue lengths. The assessment shows that in the AM peak hour the junction operates close to capacity in both the future baseline and with the AP1 revised scheme. In the PM peak hour, the junction operates over capacity in both the future baseline and with the AP1 revised scheme. The traffic flow will have a negligible impact on the operation of the junction in the AM peak hour and an adverse impact on the operation of the junction in the PM peak hour.

The change in traffic due to operation of the AP1 revised scheme will not substantially increase the maximum VoC between the 2051 future baseline and the AP1 revised scheme in the AM or PM peak hours. However, in the AM peak hour, the change in traffic due to operation of the AP1 revised scheme will decrease the VoC from 90% in the 2051 future baseline to 87% with the AP1 revised scheme in 2051 on the A559 (northbound) to A556 (southbound) slip road approach in the AM peak hour. There will be no change in queue lengths. In the PM peak hour, the change in traffic due to operation of the AP1 revised scheme will increase the VoC from 85% in the 2051 future baseline to 89% with the AP1 revised scheme in 2051 on the A559 Manchester Road (eastbound) approach in the PM peak hour. There will be no change in queue lengths. The assessment shows that in the AM and PM peak hours the junction operates over capacity in both the future baseline and with the AP1 revised Scheme. The traffic flow will have a beneficial impact on the operation of the junction in the AM peak hour and an adverse impact on the operation of the junction in the PM peak hour."

A54 New High Street/A54 Winsford Bypass/A5018 Wharton Road/New Road/Weaver Street

11.4.67 Table 14-88.1 summarises the performance of the junction as a result of the AP1 revised scheme in both 2038 and 2051.

Table 14-88.1: A54 New High Street/A54 Winsford Bypass/A5018 Wharton Road/New Road/Weaver Street junction 2038 and 2051 future baseline and AP1 revised scheme junction capacity assessment

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	**2038 future baseline**			**2038 with the AP1 revised scheme**			**2051 future baseline**			**2051 with the AP1 revised scheme**		
A5018 Wharton Road	1,024	60%	0	1,006	60%	0	1,152	69%	1	1,097	68%	1
Market Place*	-		-	-		-	-		-	-		-
A54 Winsford-Bypass	840	47%	0	851	47%	0	857	50%	0	871	50%	0
Weaver Street	184	13%	0	150	11%	0	200	14%	0	205	15%	0
A54 New High Street	1,704	74%	0	1,722	74%	0	1,778	79%	0	1,779	79%	0
New Road	235	41%	0	249	43%	0	223	41%	0	236	44%	0
17:00–18:00	**2038 future baseline**			**2038 with the AP1 revised scheme**			**2051 future baseline**			**2051 with the AP1 revised scheme**		
A5018 Wharton Road	1,062	57%	0	1,073	57%	0	1,091	61%	0	1,083	60%	0
Market Place*	-		-	-		-	-		-	-		-
A54 Winsford-Bypass	1,228	74%	1	1,316	80%	1	1,396	88%	2	1,487	92%	3
Weaver Street	178	13%	0	195	15%	0	236	18%	0	246	19%	0
A54 New High Street	1,467	65%	0	1,475	66%	0	1,506	68%	0	1,516	69%	0
New Road	250	38%	0	235	36%	0	330	53%	1	318	51%	1

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

11.4.68 The assessment shows that for this junction, the change in traffic due to operation in 2038 of the AP1 revised scheme will not result in substantial changes in VoC and queue lengths in the AM or PM peak hours. The assessment shows that in the AM peak hour the junction operates well within capacity in both the future baseline and with the AP1 revised scheme. In the PM peak hour, the junction operates well within capacity in the future baseline and within capacity with the AP1 revised scheme. The traffic flow will have a negligible impact on the operation of the junction.

11.4.69 The assessment shows that for this junction, the change in traffic due to operation in 2051 of the AP1 revised scheme will not result in substantial changes in VoC and queue lengths in the AM peak hour. In the PM peak hour, the maximum VoC will increase from 88% in the 2051 future baseline to 92% on the A54 Winsford-Bypass approach, with a corresponding change in queue length from two PCU in the future baseline to three PCU. The assessment shows that in the AM peak hour the junction operates within capacity in both the future baseline and the AP1 revised scheme. In the PM peak hour, the junction operates close to capacity in both the future baseline and with the AP1 revised scheme. The traffic flow will have a negligible impact on the operation of the junction in the AM peak hour and an adverse impact in the operation of the junction in the PM peak hour.

Dene Drive/The Drumber

11.4.70 Table 14-88.2 summarises the performance of the junction as a result of the AP1 revised scheme in both 2038 and 2051.

Table 14-88.2: Dene Drive/The Drumber junction 2038 and 2051 future baseline and AP1 revised scheme junction capacity assessment

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	**2038 future baseline**			**2038 with the AP1 revised scheme**			**2051 future baseline**			**2051 with the AP1 revised scheme**		
Dene Drive (north)	117	26%	2	116	26%	2	127	28%	3	118	26%	2
The Drumber	275	25%	5	271	24%	5	305	27%	5	294	26%	5
Dene Drive (south)	625	72%	9	589	67%	9	612	72%	9	615	72%	9
17:00–18:00	**2038 future baseline**			**2038 with the AP1 revised scheme**			**2051 future baseline**			**2051 with the AP1 revised scheme**		
Dene Drive (north)	260	44%	4	246	42%	4	294	50%	5	308	52%	5
The Drumber	492	69%	9	542	76%	10	611	85%	11	636	89%	12
Dene Drive (south)	299	29%	3	304	30%	3	259	29%	3	243	28%	3

11.4.71 The assessment shows that for this junction, the change in traffic due to operation in 2038 of the AP1 revised scheme will not result in substantial change in the VoC and queue lengths in the AM or PM peak hours. 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 AP1 revised scheme. The traffic flow will have a negligible impact on the operation of the junction. 3.

11.4.72 The assessment shows that for this junction, the change in traffic due to operation in 2051 of the AP1 revised scheme will not result in substantial changes in VoC and queue lengths in the AM peak hour. In the PM peak hour, the maximum VoC will increase from 85% in the 2051 future baseline to 89% with the AP1 revised scheme on The Drumber approach with a corresponding change in queue length from 11 PCU in the future baseline to 12 PCU. The assessment shows that in the AM peak hour the junction operates well within capacity in both the future baseline and with the AP1 revised scheme. In the PM peak hour, the junction operates close to capacity in both the future baseline and with the AP1 revised scheme. The traffic flow will have a negligible impact on the operation of the junction in the AM peak hour and an adverse impact on the operation of the junction in the PM peak hour.

A54 Middlewich Road/A54 Winsford-Bypass/B5355 Station Road

11.4.73 Table 14-88.3 summarises the performance of the junction as a result of the AP1 revised scheme in both 2038 and 2051.

Table 14-88.3: A54 Middlewich Road/A54 Winsford-Bypass/B5355 Station Road junction 2038 and 2051 future baseline and AP1 revised scheme junction capacity assessment

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	**2038 future baseline**			**2038 with the AP1 revised scheme**			**2051 future baseline**			**2051 with the AP1 revised scheme**		
A54 Middlewich Road	595	41%	0	631	43%	0	581	40%	0	598	42%	0
A54 Winsford-Bypass	642	42%	0	665	44%	0	685	45%	0	729	48%	0
B5355 Station Road	370	34%	0	345	32%	0	390	37%	0	391	38%	0
17:00–18:00	**2038 future baseline**			**2038 with the AP1 revised scheme**			**2051 future baseline**			**2051 with the AP1 revised scheme**		
A54 Middlewich Road	958	74%	0	1,065	84%	1	1,114	91%	2	1,218	101%	7
A54 Winsford-Bypass	478	34%	0	523	38%	0	558	41%	0	562	41%	0
B5355 Station Road	426	36%	0	423	37%	0	478	42%	0	513	45%	0

11.4.74 The assessment shows that for this junction, the change in traffic due to operation in 2038 of the AP1 revised scheme will not result in substantial changes in VoC and queue length in the AM or PM peak hours. The assessment shows that in the AM peak hour the junction operates well within capacity in both the future baseline and with the AP1 revised scheme. In the PM peak hour, the junction operates well within capacity in the future baseline and within capacity with the AP1 revised scheme. The traffic flow will have a negligible impact on the operation of the junction.

11.4.75 The assessment shows that for this junction, the change in traffic due to operation in 2051 of the AP1 revised scheme will not result in substantial changes in VoC and queue length in the AM peak hour. In the PM peak hour, the maximum VoC will increase from 91% in the 2051 future baseline to 101% with the AP1 revised scheme on the A54 Middlewich Road approach with a corresponding change in queue length from two PCU in the future baseline to seven PCU. The assessment shows that in the AM peak hour the junction operates well within capacity in both the future baseline and with the AP1 revised scheme. In the PM peak hour, the junction operates close to capacity in the future baseline and over capacity with the AP1 revised scheme. The traffic flow will have a negligible impact on the operation on the junction in the AM peak hour and an adverse impact on the operation of the junction in the PM peak hour.

A559 Manchester Road/Fryer Road

11.4.76 Table 14-88.4 summarises the performance of the junction as a result of the AP1 revised scheme in both 2038 and 2051.

Table 14-88.4: A559 Manchester Road/Fryer Road junction 2038 and 2051 future baseline and AP1 revised scheme junction capacity assessment

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	**2038 future baseline**			**2038 with the AP1 revised scheme**			**2051 future baseline**			**2051 with the AP1 revised scheme**		
A559 Manchester Road (east)	588	44%	0	545	44%	0	587	47%	0	532	43%	0
A559 Manchester Road (west)	368	19%	0	366	19%	0	376	19%	0	389	20%	0
Fryer Road	180	33%	0	189	35%	0	198	36%	0	190	35%	0
17:00–18:00	**2038 future baseline**			**2038 with the AP1 revised scheme**			**2051 future baseline**			**2051 with the AP1 revised scheme**		
A559 Manchester Road (east)	639	76%	0	662	84%	1	662	80%	0	674	88%	1
A559 Manchester Road (west)	626	32%	0	635	32%	0	596	31%	0	604	31%	0
Fryer Road	121	26%	0	117	25%	0	136	28%	0	129	27%	0

11.4.77 The assessment shows that for this junction, the change in traffic due to operation in 2038 of the AP1 revised scheme will not result in substantial changes in VoC and queue lengths in the AM or PM peak hours. The assessment shows that in the AM peak hour the junction operates well within capacity in both the future baseline and with the AP1 revised scheme. In the PM peak hour, the junction operates within capacity in both the future baseline and with the AP1 revised scheme. The traffic flow will have a negligible impact on the operation of the junction.

11.4.78 The assessment shows that for this junction, the change in traffic due to operation in 2051 of the AP1 revised scheme will not result in substantial changes in VoC and queue lengths in the AM hour. In the PM peak hour the maximum VoC will increase from 80% in the 2051 future baseline to 88% with the AP1 revised scheme on the A559 Manchester Road (east) approach with a corresponding change in queue length from no queue in the future baseline to one PCU. The assessment shows that in the AM peak hour the junction operates well within capacity in both the future baseline and with the AP1 revised scheme. In the PM peak hour, the junction operates within capacity in the future baseline and close to capacity with the AP1 revised scheme. The traffic flow will have a negligible impact on the operation of the junction.

A559 Chester Way/A559 Station Road/B5075 New Warrington Road/B5082 Station Road/Leicester Street

11.4.79 Table 14-88.5 summarises the performance of the junction as a result of the AP1 revised scheme in both 2038 and 2051.

Table 14-88.5: A559 Chester Way/A559 Station Road/B5075 New Warrington Road/B5082 Station Road/Leicester Street junction 2038 and 2051 future baseline and AP1 revised scheme junction capacity assessment

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	**2038 future baseline**			**2038 with the AP1 revised scheme**			**2051 future baseline**			**2051 with the AP1 revised scheme**		
B5075 New Warrington Road	547	40%	0	526	39%	0	581	44%	0	581	45%	0
A559 Chester Way (east)	411	42%	4	389	39%	4	404	41%	4	391	39%	4
B5082 Station Road	852	97%	5	866	97%	5	839	97%	5	845	97%	5
A559 Station Road*	-	-	-	-	-	-	-	-	-	-	-	-
A559 Chester Way (west)	836	37%	8	834	36%	8	881	39%	8	882	39%	8
Leicester Street	182	14%	2	182	14%	2	216	16%	2	219	17%	2
17:00–18:00	**2038 future baseline**			**2038 with the AP1 revised scheme**			**2051 future baseline**			**2051 with the AP1 revised scheme**		
B5075 New Warrington Road	941	81%	2	961	85%	2	1,063	96%	5	1,091	99%	8
A559 Chester Way (east)	933	94%	10	914	92%	10	1,010	102%	10	993	100%	10
B5082 Station Road	465	101%	7	459	101%	7	371	101%	7	363	101%	7
A559 Station Road*	-	-	-	-	-	-	-	-	-	-	-	-
A559 Chester Way (west)	943	41%	9	931	41%	9	934	41%	9	916	40%	8
Leicester Street	452	34%	5	460	35%	5	525	40%	6	518	39%	6

** A559 Station Road is a one-way exit from the junction and is therefore not reported in the results*

11.4.80 The assessment shows that for this junction, the change in traffic due to operation in 2038 of the AP1 revised scheme will not result in substantial changes in VoC and queue lengths in the AM peak hour. The change in traffic due to operation of the AP1 revised scheme will not decrease the maximum VoC between the 2038 future baseline and the AP1 revised scheme in the PM peak hour. However, in the PM peak hour, the change in traffic due to operation of the AP1 revised scheme will decrease the VoC from 94% in the 2038 future baseline to 92% with the AP1 revised scheme in 2038 on the A559 Chester Way (east) approach in the PM peak hour. There will be no change in queue lengths. The assessment shows that in the AM peak hour the junction operates close to capacity in both the future baseline and with the AP1 revised scheme. In the PM peak hour, the junction operates over capacity in both future baseline and with the AP1 revised scheme. The traffic flow will have a negligible impact on the operation of the junction in the AM peak hour and a beneficial impact on the operation of the junction in the PM peak hour.

11.4.81 The assessment shows that for this junction, the change in traffic due to operation in 2051 of the AP1 revised scheme will not result in substantial changes in VoC and queue lengths in the AM peak hour. The change in traffic due to operation of the AP1 revised scheme will not increase the maximum VoC between the 2051 future baseline and the AP1 revised scheme in the PM peak hour. However, in the PM peak hour, the change in traffic due to operation of the AP1 revised scheme will increase the VoC from 96% in the 2051 future baseline to 99% with the AP1 revised scheme in 2051 on the B5075 New Warrington Road approach in the PM peak hour. The queue length will increase from five in the future baseline to nine in the AP1 revised scheme. The assessment shows that in the AM peak hour the junction operates close to capacity in both the future baseline and with the AP1 revised scheme. In the PM peak hour, the junction operates over capacity in both the future baseline and with the AP1 revised scheme. The traffic flow will have a negligible impact on the operation of the junction in the AM peak hour and an adverse impact on the operation of the junction in the PM peak hour.

Accidents and safety

11.4.82 The impacts on accidents and safety during operation are reported in Section 14.3 of the main TA.

11.4.83 The baseline analysis of accidents and safety identified no locations which had experienced an accident cluster over the three-year period from July 2016 to June 2019.

11.4.84 Whilst there are locations in the MA02 area where there are substantial forecast increases in traffic flows due to the operation of the AP1 revised scheme, these will not affect locations with known safety concerns 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 14.3 of the main TA.

11.4.85 New highway links and junctions will be constructed to current standards and/or in keeping with the existing infrastructure. The AP1 revised scheme is unlikely to create any new safety concerns.

Parking and loading

11.4.86 The impacts on parking and loading during operation are reported in Section 14.3 of the main TA. This section of the main TA is unchanged.

Public transport

Local bus services

11.4.87 The impacts on local bus services during operation are reported in Section 14.3 of the main TA. This section of the main TA is unchanged.

Rail network

11.4.88 The impacts on the rail network during operation are reported in Section 14.3 of the main TA. This section of the main TA is unchanged.

Public transport interchanges

11.4.89 The impacts on public transport interchanges during operation are reported in Section 14.3 of the main TA. This section of the main TA is unchanged.

Pedestrians, cyclists and equestrians

11.4.90 Table 14-89 and Table 14-90 in the main TA summarise the locations where PRoW and roads used by pedestrians, cyclists and equestrians are permanently diverted, realigned or reinstated. Table 14-89a and Table 14-90a summarise the amendments associated with the AP1 revised scheme and are in addition to or replace the associated changes noted in Table 14-89 and Table 14-90 in the main TA. Those not listed in Table 14-89a and Table 14-90a remain unchanged to those identified in Table 14-89 and Table 14-90 of the main TA.

Table 14-89a: MA02 AP1 revised scheme permanent changes to PRoW for non-motorised users

PRoW name	Change in length	Comments
Footpath Wimboldsley 1/1	Closure of Footpath Wimboldsley 1/1 between the A530 Nantwich Road and the Stanthorpe Park Mews Access realignment. Footpath Wimboldsley 1/1 will be diverted along the Lea Hall / Stanthorne Park Mews Accommodation access road to Crewe North RSD access road to provide pedestrian access to Crewe North RSD. The diverted section will only affect pedestrians accessing Crewe North RSD. Other users of Footpath Wimboldsley 1/1 travelling between the A530 Nantwich Road and the Shropshire Union Canal (Middlewich Branch) towpath will be diverted along the Shropshire Union Canal (Middlewich Branch) towpath (Footpath Wimboldsley 9/3 and Footpath Winsford 3/4), Clive Green Lane and A530 Nantwich Road, increasing journey length by 960m.	None
Shropshire Union Canal (Middlewich Branch), National	A new ramped connection will be created between Clive Green Lane and the Shropshire Union Canal (Middlewich Branch), National Cycle Route 5 and Footpath Winsford 3/1, decreasing journey length for cyclists between	None

PRoW name	Change in length	Comments
Cycle Route 5 and Footpath Winsford 3/1	Middlewich and Clive Green Lane by up to 474m. Removal of the existing stepped access will increase journey length for pedestrians by up to 609m.	
New PRoW at Lostock Green	A new PRoW will be created between Birches Lane on the western side of the A556 Shurlach Road realignment and Restricted Byway Lostock Gralam 1/1 on the eastern side of the A556 Shurlach Road realignment. The new PRoW will provide a shared use cycle path between Birches Lane (west) and Restricted Byway Lostock Gralam 1/1. Further details are provided in Table 13-35.	None

Table 14-90a: MA02 AP1 revised scheme permanent changes to roads for non-motorised users

Road name	Change in length	Comments
B5082 Pennys Lane	A section of the B5082 Pennys Lane will be diverted 420m south of its current alignment, connecting with A530 King Street. Journey length will increase by up to 908m.	Viaduct
Cookes Lane	Closure of the north-eastern section of Cookes Lane where it is crossed by A556 Shurlach Road realignment. The existing access for non-motorised users between Cookes Lane and the A556 Shurlach Road will be closed, and a new access for non-motorised users will be provided at the southern extent of Cookes Lane, increasing journey lengths by up to 35m.	None
A556 Shurlach Road	Realignment of a section of the A556 Shurlach Road, up to 90m to the north-west of its current alignment for 2.3km, changing journey length by less than 10m. A shared use cycle path will be provided to the west of the A556 Shurlach Road realignment, between the A530 King Street and Birches Lane (west).	None
Birches Lane	Diversion of a section of Birches Lane, connecting with Restricted Byway Lostock Gralam 1/1, before turning west as a new PRoW, passing beneath the Wade Brook overbridge and the Wade Brook Viaduct before turning south to re-join Birches Lane to the west of the route of the AP1 revised scheme and the realigned A556 Shurlach Road. This will increase journey length for pedestrians by up to 927m and decrease journey lengths for cyclists by up to 2.6km, who were not previously permitted to use the PRoW in the original scheme.	New overbridge

Waterways and canals

11.4.91 The impacts on waterways and canals during operation are reported in Section 14.3 of the main TA. This section of the main TA is unchanged.

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