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HS2

High Speed Rail (Crewe – Manchester) Environmental Statement

Volume 5: Appendix TR-002-00002

Traffic and transport

MA02: Wimboldsley to Lostock Gralam

Transport Assessment Part 2

M278

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Department for Transport

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Transport Assessment: Overall structure

Transport Assessment Part 1 – Introduction

Introduction (TR-001-00000)

Section 1 Introduction
Section 2 Policy and guidance
Section 3 Methodology
Section 4 Mitigation measures

Transport Assessment Part 2 – Existing and future baseline conditions

MA01 (TR-002-00001)

Section 5 Existing and future baseline conditions
Section 6 Existing and future baseline conditions for Hough to Walley's Green (MA01)

MA02 (TR-002-00002)

Section 7 Existing and future baseline for Wimboldsley to Lostock Gralam (MA02)

MA03 (TR-002-00003)

Section 8 Existing and future baseline for Pickmere to Agden and Hulseheath (MA03)

MA04 (TR-002-00004)

Section 9 Existing and future baseline for Broomedge to Glazebrook (MA04)

MA05 (TR-002-00005)

Section 10 Existing and future baseline for Risley to Bamfurlong (MA05)

MA06, MA07 and MA08 (TR-002-00006, Report 1 of 3)

Section 11 Existing and future baseline for Hulseheath to Manchester Piccadilly Station (MA06, MA07 and MA08)

Section 11.1 Study area
Section 11.2 Local land uses
Section 11.3 Baseline surveys
Section 11.4 Highway network

MA06, MA07 and MA08 (TR-002-00006, Report 2 of 3)

Section 11 Existing and future baseline for Hulseheath to Manchester Piccadilly Station (MA06, MA07 and MA08)

Section 11.4 Highway network (continued)

MA06, MA07 and MA08 (TR-002-00006, Report 3 of 3)

Section 11 Existing and future baseline for Hulseheath to Manchester Piccadilly Station (MA06, MA07 and MA08)

Section 11.4 Highway network (continued)
Section 11.5 Public transport
Section 11.6 Pedestrians, cyclists and equestrians
Section 11.7 Waterways and canals
Section 11.8 Air transport

Transport Assessment Part 3 – Proposed Scheme assessment

MA01 (TR-003-00001)

Section 12 Introduction

Section 13 Hough to Walley's Green (MA01)

MA02 (TR-003-00002)

Section 14 Wimboldsley to Lostock Gralam (MA02)

MA03 (TR-003-00003)

Section 15 Pickmere to Agden and Hulseheath (MA03)

MA04 (TR-003-00004)

Section 16 Broomedge to Glazebrook (MA04)

MA05 (TR-003-00005)

Section 17 Risley to Bamfurlong (MA05)

MA06, MA07 and MA08 (TR-003-00006, Report 1 of 4)

Section 18 Hulseheath to Manchester Piccadilly Station (MA06, MA07 and MA08)

Section 18.1 Description of the Proposed Scheme
Section 18.2 Proposed Scheme construction description
Section 18.3 Proposed Scheme assessment of construction impacts

MA06, MA07 and MA08 (TR-003-00006, Report 2 of 4)

Section 18 Hulseheath to Manchester Piccadilly Station (MA06, MA07 and MA08)

Section 18.3 Proposed Scheme assessment of construction impacts (continued)

MA06, MA07 and MA08 (TR-003-00006, Report 3 of 4)

Section 18 Hulseheath to Manchester Piccadilly Station (MA06, MA07 and MA08)

Section 18.3 Proposed Scheme assessment of construction impacts (continued)
Section 18.4 Proposed Scheme operation description
Section 18.5 Proposed Scheme assessment of operation impacts

MA06, MA07 and MA08 (TR-003-00006, Report 4 of 4)

Section 18 Hulseheath to Manchester Piccadilly Station (MA06, MA07 and MA08)

Section 18.5 Proposed Scheme assessment of operation impacts (continued)

Transport Assessment Part 4 – Route-wide and off-route assessment and Annexes

Route-wide and off-route assessment and Annex A (TR-005-00000, Report 1 of 2)

Section 19 Introduction

Section 20 Route-wide assessment

Section 21 Off-route assessment

Annex A Framework travel plan

Annexes B to G (TR-005-00000, Report 2 of 2)

Annex B Model performance report - Greater Manchester Public Transport Model (GMPTM)
Annex C Model performance report - Greater Manchester SATURN Model (GMSM)
Annex D Model performance report - M6 Junction 19 Model
Annex E Model performance report - Winsford and Middlewich Model
Annex F Model performance report - A500 Crewe Model
Annex G Model performance report - Northwich Traffic Model

Contents

Tables

7 Existing and future baseline for Wimboldsley to Lostock Gralam (MA02)

7.1 Study area

7.1.1 The study area for traffic and transport includes the settlements of Wimboldsley, Middlewich, Stanthorne, Winsford, Bostock Green, Byley, Moulton, Davenham, Lach Dennis, Rudheath, Northwich, Lostock Gralam, Plumley, Higher Wincham and Higher Marston. Local rail services are accessible via Winsford Station, Greenbank Station, Northwich Station, Lostock Gralam Station and Plumley Station.

7.1.2 One strategic road is potentially impacted by the Proposed Scheme in the Wimboldsley to Lostock Gralam (MA02) area, which is the M6 (including junction 18).

7.1.3 Local roads in the MA02 area potentially affected by the Proposed Scheme include the A530 Nantwich Road/Newton Bank/Croxton Lane/King Street/Griffiths Road, A54 Middlewich Road/Chester Road/St Michael's Way/Kinderton Street/Holmes Chapel Road/Middlewich Road (between M6 junction 18 and Clive Lane), A533 Northwich Road/Bostock Road/Davenham Bypass/London Road (between A54 Middlewich Road and A556 Shurlach Road), A556 Chester Road/Shurlach Road, A559 Manchester Road, B5309 Centurion Way/King Street/Griffiths Road, B5081 Byley Road and B5082 Penny's Lane.

7.1.4 There are a number of passenger and freight railways that run through the Wimboldsley to Lostock Gralam (MA02) area:

- West Coast Main Line (WCML);
- Sandbach to Northwich Line; and
- Mid-Cheshire Line.

7.1.5 There is one planned major change to the transport network that has been taken into account in the future baseline. This is the Middlewich Eastern Bypass, which is promoted by Cheshire East Council (CEC) and is intended to provide a bypass to reduce congestion in Middlewich, whilst providing capacity for future housing and employment growth. At the time of the assessment, the scheme was programmed to commence in 2022 and to be completed in 2024.

7.1.6 The Winsford (and Middlewich) to M6 model and the Northwich Town Centre model have been used to model the majority of the traffic-related impacts across the MA02 area during construction and operation of the Proposed Scheme. 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.

7.1.7 For ease of reference, the existing and future baseline conditions are considered together, for each transport topic.

7.2 Local land uses

7.2.1 The MA02 area is a mix of rural and urban areas, with agriculture being the main land use. The larger settlements of Middlewich and Winsford are located in the south of the MA02 area, while Northwich is located in the north of the MA02 area. The villages of Wimboldsley, Lostock Green and Lostock Gralam are interspersed throughout the MA02 area.

7.2.2 The following sources have been analysed in order to determine the impact of future land uses upon future traffic and transport conditions:

- Local Plan documents (Adopted Cheshire East Local Plan Strategy 2010-2030 (2017)[1]; Saved policies of the adopted Congleton Borough Local Plan First Review (2005)[2]; Saved policies of the adopted Borough of Crewe and Nantwich Replacement Local Plan (2005)[3]; Saved policies of the adopted Macclesfield Borough Local Plan (2004)[4]; Adopted Cheshire West and Chester Local Plan (Part One) Strategic Policies (2015)[5]; Saved policies of the adopted Vale Royal Borough Local Plan (2006)[6]; Cheshire West and Chester Local Transport Strategy 2017-2030 (2017)[7]; and Cheshire East Local Transport Plan Strategy 2019-2024 (2019)[8]);
- local planning authority planning portals (to obtain details of recently consented, committed development that is not included in the sources above). This allows the

[1] Cheshire East Council (2017), *Adopted Cheshire East Local Plan Strategy 2010 – 2030*. Available online at: https://www.cheshireeast.gov.uk/pdf/planning/local-plan/local-plan-strategy-web-version-1.pdf.

[2] Cheshire East Council (2005), *Saved policies of the adopted Congleton Borough Local Plan First Review (2005)*. Available online at: https://www.cheshireeast.gov.uk/planning/spatial-planning/saved_and_other_policies/congleton_local_plan/congleton_local_plan.aspx.

[3] Cheshire East Council (2005), *Borough of Crewe and Nantwich Replacement Local Plan*. Available online at: https://www.cheshireeast.gov.uk/planning/spatial-planning/saved_and_other_policies/crewe_and_nantwich_local_plan/crewe_and_nantwich_local_plan.aspx.

[4] Cheshire East Council (2004), *Macclesfield Borough Local Plan 2004 – 2011*. Available online at: https://www.cheshireeast.gov.uk/planning/spatial-planning/saved_and_other_policies/macclesfield_local_plan/macclesfield_local_plan.aspx.

[5] Cheshire West and Chester Council (2015), *Adopted Cheshire West and Chester Local Plan (Part One) Strategic Policies*. Available online at: http://consult.cheshirewestandchester.gov.uk/portal/cwc_ldf/adopted_cwac_lp/lp_1_adopted?tab=files.

[6] Cheshire West and Chester Council (2006), *Saved policies of the adopted Vale Royal Borough Local Plan (2006)*. Available online at: http://consult.cheshirewestandchester.gov.uk/events/24925/2535161_accessible.pdf.

[7] Cheshire West and Chester Council (2017), *Cheshire West and Chester Local Transport Strategy 2017-2030*, Available online at: https://www.cheshirewestandchester.gov.uk/residents/transport-and-roads/public-transport/transport-strategy/transport-strategy.aspx.

[8] Cheshire East Council (2019), *Cheshire East Local Transport Plan Strategy 2019-2024*. Available online at: https://moderngov.cheshireeast.gov.uk/ecminutes/documents/s72327/Local%20Transport%20Plan%20-%20app%201.pdf.

impact of these committed developments to be considered at a very local level (i.e. at roads and junctions in proximity to the committed sites); and

- the Northwich Town Centre model and the Winsford (and Middlewich) to M6 model, both developed by Chester West and Cheshire Council (CWCC) and include agreed committed developments in the MA02 area.

7.2.3 The committed developments identified through this review have been taken into account in the development of the future baseline.

7.3 Baseline surveys

7.3.1 Surveys were undertaken to understand the use of highways and public rights of way (PRoW) within the study area. The survey types and locations are shown in Background Information and Data (BID): Transport Assessment policy and data (BID TR-004-00001)[9].

Traffic surveys

7.3.2 Traffic surveys, comprising junction turning counts (JTC), manual classified counts (MCC), queue length surveys (QLS) and automatic traffic counts (ATC), were undertaken in June 2017 with additional surveys undertaken in November 2017, February 2018, July 2018 and November 2019. These data have been supplemented by existing traffic data from other sources, including from Highways England, CWCC and CEC. Where possible, ATC data were gathered for a two-week period. In total 72 traffic surveys have been undertaken in the MA02 area.

Non-motorised user surveys

7.3.3 Non-motorised user surveys were undertaken on various routes used by pedestrians, cyclists and equestrians in August and September 2017 to establish their nature and usage. The surveys included PRoW and roads that are crossed by the route of the Proposed Scheme and any additional PRoW and roads that may be affected by the Proposed Scheme. The majority of the PRoW surveys were undertaken during the weekend, at times when recreational use is expected to be highest, but where routes are likely to be used for non-leisure uses such as commuting, surveys were undertaken on a weekday.

7.3.4 The baseline survey report Transport Assessment policy and data (see BID TR-004-00001) provides a summary of non-motorised user survey data within the MA02 area. For ease of reference the data have been presented for each parish within the area, from south to north.

[9] High Speed Two Ltd (2022), High Speed Rail (Crewe – Manchester), *Background Information and Data*. Available online at: https://www.gov.uk/government/collections/hs2-phase-2b-crewe-manchester-environmental-statement.

7.3.5 The surveys indicated that the majority of PRoW crossed by the route of the Proposed Scheme are used by pedestrians and cyclists for recreational purposes. In the MA02 area, National Routes 5 and 573 (part of the National Cycle Network) are crossed by the route of the Proposed Scheme. The latter was used by 27 cyclists during the survey day.

7.3.6 Compared to the existing baseline, no changes are assumed to non-motorised user provision in the future baseline.

Accident data

7.3.7 Accident[10] data have been sourced from official Department of Transport (DfT) STATS19 statistics[11]. Data for the three year period from July 2016 to June 2019 have been assessed.

7.4 Highway network

Strategic and primary 'A' road network

7.4.1 One motorway and four primary 'A' roads run through the study area: the M6, the A530, the A54, the A533 and the A556.

7.4.2 The M6 extends on a north to south alignment to the east of the Community A. The M6 junction 18 is a grade-separated junction in the south-east of the CA and serves the settlements of Middlewich and Holmes Chapel. The M6 operates as a 'smart motorway' between junctions 16 and junction 19, incorporating four lanes in each direction ('all-lanes running') and variable speed limits. The M6 is managed by Highways England. The route of the Proposed Scheme does not intersect the M6 in the MA02 area.

7.4.3 The A530 Nantwich Road/Newton Bank/Croxton Lane/King Street/Griffiths Road is a single carriageway. The road is managed by CWCC and CEC within the respective authorities. It extends on a north to south alignment through the centre of the CA and connects the settlements of Wimboldsley and Middlewich in the south and Rudheath and Lostock Gralam in the north. The speed limit on the road is 60mph, with reduced speeds in built up areas along its length. The route of the Proposed Scheme intersects with the road approximately 500m south of its junction with Chapel Lane near Occlestone Green and again approximately 600m south of its junction with the A556 Shurlach Road near Rudheath.

7.4.4 The A54 Middlewich Road/Chester Road/St Michael's Way/Kinderton Street/Holmes Chapel Road/Middlewich Road is managed by CEC and extends on an east to west alignment across the south of the CA. It connects the settlements of Holmes Chapel and Middlewich in the

10 The term accident in this report refers to injury related collisions reported to/recorded by the police. This data, known as STATS19, relate only to personal injury accidents on public roads that are reported to the police, and subsequently recorded, using the STATS19 accident reporting form.

11 Department for Transport (2021), *STATS19 Road Safety Data July 2016 - June 2019*. Available online at: https://www.gov.uk/government/collections/road-accidents-and-safety-statistics.

east with Winsford in the west. The A54 Middlewich Road/Chester Road/St Michael's Way/Kinderton Street/Holmes Chapel Road/Middlewich Road is predominantly a single carriageway road with a 50mph speed limit with reduced speeds in built up areas. The route of the Proposed Scheme intersects the road approximately 300m west of its junction with Birch Lane near Stanthorne.

7.4.5 The A533 Northwich Road/Bostock Road/Davenham Bypass/London Road is managed by CEC and extends on a north to south alignment. It connects the settlements of Stanthorne and Middlewich in the south of the CA with Davenham and Northwich in the north. The A533 Northwich Road/Bostock Road/Davenham Bypass/London Road is a single carriageway road and has a 60mph speed limit with reduced speeds in built up areas. The route of the Proposed Scheme intersects with the road approximately 200m west of its junction with Bell Lane near Stanthorne.

7.4.6 The A556 Shurlach Road/Chester Road is managed by CEC and extends on a north-east to south-west alignment. It connects the settlements of Davenham and Hartford in the south with Lostock Gralam and Plumley in the north. The A556 Shurlach Road is a dual carriageway and extends between the A559 Manchester Road and the A533 London Road. Traffic is subject to the national speed limit. To the west of the A533 London Road, the A556 extends to the south of Hartford and Sandiway and is known as the A556 Chester Road and A556 Chester Road Bypass. This section is a dual carriageway and traffic is subject to the national speed limit. To the north-east of Lostock Gralam, the A556 is also known as the A556 Chester Road and is a four-lane single carriageway. Traffic is subject to a 60mph speed limit. The route of the Proposed Scheme intersects the existing alignment of the A556 at three locations within the MA02 area: approximately 500m north-east of its junction with the B5082 Penny's Lane; approximately 350m north of its junction with Birches Lane; and at its junction with the A559 Manchester Road.

Local road network

7.4.7 The key local roads in the MA02 area, including roads likely to be affected by the Proposed Scheme, are:

- A559 Manchester Road, which follows a south to north alignment and connects the A556 Chester Road and A556 Shurlach Road at Lostock Gralam in the east with the A556 Chester Road at Hartford in the west. The A559 Manchester Road is a single carriageway road for the majority of its length with a 30mph speed limit. The route of the Proposed Scheme intersects the road at its junction with the A556 Shurlach Road/Chester Road;
- B5081 Byley Road, which follows a north to south alignment and connects the settlements of Lower Peover and Smithy Green in the north with Middlewich in the south. The B5081 Byley Road is a single carriageway road with an 50mph speed limit and reduced speeds in built up areas. The road does not cross the route of the Proposed Scheme;
- B5309 Centurion Way/King Street/Griffiths Road, which follows a south to north alignment and connects the A54 Holmes Chapel Road in the south with the A530 King

Street in the north. The B5309 Centurion Way/King Street/Griffiths Road is a single carriageway road with a 60mph speed limit. The road does not cross the route of the Proposed Scheme; and

- B5082 Penny's Lane, which follows a north-west to south-east alignment and connects the settlements of Northwich and Rudheath in the north with Allostock in the south. The B5082 Penny's Lane is a single carriageway road with a 50mph/60mph speed limit and reduced speeds in built up areas. The road is crossed by the route of the Proposed Scheme approximately 150m south of its junction with the A556 Shurlach Road.

7.4.8 There are a number of other roads which are crossed by the route of or may be affected by the Proposed Scheme, or which are used as construction routes and are therefore potentially affected by the Proposed Scheme:

- Clive Green Lane, between Coalpit Lane and Clive Back Lane;
- Coalpit Lane, between Clive Green Lane and Wallange Paddocks Farm;
- Clive Lane, between Clive Back Lane and the A54 Middlewich Road;
- Road One, between the A54 Middlewich Road and the A533 Bostock Road;
- London Road (short section at the southern extent);
- Whatcroft Hall Lane, between the A530 King Street and Manor Lane;
- Davenham Road, between the A530 King Street and Shurlach Lane;
- Crowder's Lane, between the A530 King Street and the B5082 Penny's Lane;
- Cookes Lane between Penny's Lane and its northern extent;
- Birches Lane and Station Road (Lostock Gralam), between the A556 Shurlach Road and the A559 Manchester Road;
- Birches Lane, between the A556 Shurlach Road and Greenside Drive;
- Station Road, between Birches Lane and the A559 Manchester Road;
- Ascol Drive; and
- Linnards Lane, between the A559 Manchester Road and Green Lane.

Growth in traffic

7.4.9 In considering the future baseline, traffic will vary across the MA02 area. The use of strategic transport models[12], TEMPro and local traffic models, with further adjustment for known developments, means that forecast traffic growth is not uniform on all links and at junctions. Notwithstanding this, it is possible to produce an overall average growth factor for links within MA02 calculated using the total link flows for each future year. These illustrative overall growth factors are summarised in Table 7-1.

[12] The Winsford (and Middlewich) to M6 model and Northwich Town Centre model (both Cheshire West and Cheshire).

Table 7-1: MA02 traffic growth summary

Period years	AM peak hour	PM peak hour
2018-2030	16%	15%
2018-2038	24%	23%
2018-2046	33%	34%

Baseline traffic flows

7.4.10 The 2018 baseline traffic flows derived from the Northwich Town Centre model and the Winsford (and Middlewich) to M6 model for strategic, primary 'A' roads and local roads for the MA02 area are summarised in Table 7-2 for the weekday AM (08:00-09:00) and weekday PM (17:00–18:00) peak hours and in Table 7-3 for Annual Average Daily Traffic (AADT). Due to the simplified way in which the road network is represented in the strategic transport models, the use of some local roads may not be precisely reflected in the baseline traffic flows, however, this is not expected to change the conclusions of the assessment.

Table 7-2: MA02 strategic and local road network 2018 AM and PM peak hour baseline flows (vehicles)

Location	Direction*	2018 baseline AM peak hour (08:00–09:00) - All vehicles	2018 baseline AM peak hour (08:00–09:00) - HGV	2018 baseline PM peak hour (17:00–18:00) - All vehicles	2018 baseline PM peak hour (17:00–18:00) - HGV
B5074 Swanlow Lane (between New Lane and Moors Lane)	NB	403	20	518	5
	SB	350	13	396	4
A530 Nantwich Road (between Brookhouse Lane and Clive Green Lane)	NB	916	34	951	21
	SB	686	27	728	6
Swanlow Drive (between B5074 Swanlow Lane and Darnhall School Lane)	EB	22	1	18	1
	WB	37	1	33	1
Darnhall School Lane (between Swanlow Drive and Glebe Green Drive)	NB	79	1	36	1
	SB	36	1	46	1
B5074 Swanlow Lane (between Moors Lane and Swanlow Drive)	NB	469	20	537	5
	SB	359	13	463	4
Middlewich Eastern Bypass (between A533 Booth Lane and Cledford Lane)**	NB	-	-	-	-
	SB	-	-	-	-
Darnhall School Lane (between Glebe Green Drive and B5074 Swanlow Lane)	NB	29	1	5	1
	SB	23	1	71	1
Durham Drive/Glebe Green Drive (between Darnhall School Lane and Townsfields Drive)	NB	86	2	82	2
	SB	36	2	37	2

Location	Direction*	2018 baseline AM peak hour (08:00–09:00) - All vehicles	2018 baseline AM peak hour (08:00–09:00) - HGV	2018 baseline PM peak hour (17:00–18:00) - All vehicles	2018 baseline PM peak hour (17:00–18:00) - HGV
Durham Drive/Dover Drive/Mount Pleasant Drive (between Townsfields Drive and Denbigh Drive)	NB	88	2	94	2
	SB	106	2	66	2
Clive Green Lane/Clive Lane (between A530 Nantwich Road and A54 Middlewich Road)	EB	237	20	265	4
	WB	453	29	399	19
Townfields Drive (between B5074 Swanlow Lane and Durham Drive)	EB	82	0	53	0
	WB	13	0	38	0
Cledford Lane (between Jones Lane and Bradwall Road)	EB	0	0	0	0
	WB	0	0	0	0
Mount Pleasant Drive (between Denbigh Drive and Woodford Lane West)	EB	56	0	70	0
	WB	133	0	58	0
Woodford Lane West (between Mount Pleasant Drive and A54 Oakmere Road)	NB	50	0	76	0
	SB	165	2	70	2
Elm Road (between Long Lane South and A533 Booth Lane)	EB	47	4	12	1
	WB	11	1	30	1
A530 Nantwich Road (between Clive Green Lane and Brynlow Drive)	NB	578	8	604	3
	SB	563	9	521	5
Beeston Drive (between Denbigh Drive and Handley Hill)	NB	90	15	42	2
	SB	55	2	118	10
Brynlow Drive (between Long Lane and A530 Nantwich Road)	EB	96	8	101	3
	WB	225	9	128	5
Hayhurst Avenue (between Long Lane and Sutton Lane)	EB	94	7	78	2
	WB	157	7	133	3
St Annes Avenue (between Sutton Lane and A533 Booth Lane)	EB	103	2	213	1
	WB	175	14	247	1
Beeston Drive (between Handley Hill and B5074 Swanlow Lane)	EB	91	15	43	2
	WB	55	2	119	10
Sutton Lane (between St Ann's Road and A533 Lewin Street)	NB	120	5	68	1
	SB	81	5	75	2
St Ann's Road (between Sutton Lane and Manor Lane)	NB	109	12	157	0
	SB	95	0	212	0
	NB	551	0	557	0

Location	Direction*	2018 baseline AM peak hour (08:00–09:00) - All vehicles	2018 baseline AM peak hour (08:00–09:00) - HGV	2018 baseline PM peak hour (17:00–18:00) - All vehicles	2018 baseline PM peak hour (17:00–18:00) - HGV
A530 Nantwich Road (between Brynlow Drive and A530 Newton Bank)	SB	407	0	447	0
Middlewich Eastern Bypass (between Cledford Lane and A54 Holmes Chapel Road)**	NB	-	-	-	-
	SB	-	-	-	-
St Ann's Road (between Manor Lane and King Edward Street)	NB	118	12	183	0
	SB	124	0	260	1
Station Road (between B5355 Crook Lane and Rilshaw Lane)	EB	80	6	153	10
	WB	111	2	79	10
Dingle Lane/Weaver Street (between The Drumber and A54 Winsford Bypass)	NB	5	0	360	0
	SB	26	0	60	0
A54 Middlewich Road (between Clive Lane and A54 Winsford Bypass)	EB	674	29	473	4
	WB	575	35	847	2
Dene Drive (between A54 High Street and The Drumber)	NB	146	3	199	5
	SB	134	4	217	1
St Ann's Road (between King Edward Street and A530 Nantwich Road)	NB	176	12	180	0
	SB	179	0	268	1
B5355 Station Road (between A54 Middlewich Road and B5355 Crook Lane)	EB	140	4	75	3
	WB	37	2	193	2
Dingle Lane (between A54 High Street and The Drumber)	NB	414	5	445	1
	SB	526	3	80	11
A54 St Michael's Way (between A533 Leadsmithy Street and The Bull Ring)	EB	932	53	761	31
	WB	712	46	786	18
A54 Kinderton Street (between A533 Leadsmithy Street and King Street)	EB	1,110	82	803	25
	WB	571	51	443	27
A54 St Michael's Way (between The Bull Ring and A54 Chester Road)	EB	979	51	786	29
	WB	661	44	681	16
A54 St Michael's Way (between A54 Chester Road and The Bull Ring)	EB	983	51	778	29
A54 Chester Road (between A54 St Michael's Way and A530 Newton Bank)	EB	1,459	52	1,305	29
	EB	1,115	51	1,111	29

Location	Direction*	2018 baseline AM peak hour (08:00–09:00) - All vehicles	2018 baseline AM peak hour (08:00–09:00) - HGV	2018 baseline PM peak hour (17:00–18:00) - All vehicles	2018 baseline PM peak hour (17:00–18:00) - HGV
A54 Chester Road (between A530 Newton Bank and A530 Croxton Lane)	WB	965	55	1,004	17
A54 Chester Road (between A530 Croxton Lane and A533 Northwich Road)	EB	768	51	704	26
	WB	759	47	721	17
Nixon Drive (between Abbotts Way and Basford Way)	EB	87	2	80	2
	WB	64	2	123	2
A54 Holmes Chapel Road (between King Street and B5309 Centurion Way)	EB	923	82	684	25
	WB	518	50	378	28
Nixon Drive (between B5074 Delamere Street and Abbotts Way)	EB	37	2	109	2
	WB	72	2	27	2
King Street (between New King Street and Hadrian Way)	NB	220	1	268	1
	SB	102	1	52	1
B5309 Centurion Way (between B5081 Byley Road and A54 Holmes Chapel Road)	EB	512	50	386	26
	WB	606	54	573	30
Road One (between A533 Bostock Road and A54 Middlewich Road)	NB	258	16	450	20
	SB	281	23	247	3
A54 Holmes Chapel Road (between B5309 Centurion Way and Brereton Lane)	EB	814	106	797	58
	WB	599	94	446	50
B5309 Centurion Way (between White Park Close and B5081 Byley Road)	EB	353	21	236	23
	WB	410	51	579	21
B5355 Wharton Road (between Nat Lane and Bradbury Road)	NB	143	4	177	5
	SB	186	0	148	2
A54 Holmes Chapel Road (between Brereton Lane and Poolford Lane)	EB	836	104	726	58
	WB	591	94	580	50
B5309 Centurion Way (between White Park Close and B5309 King Street)	NB	370	43	312	21
	SB	256	21	285	20
B5309 Centurion Way (between B5309 King Street and King Street Industrial Estate)	NB	304	40	462	30
	SB	322	28	257	20
B5355 Wharton Road (between A5018 Wharton Park Road and Bradbury Road)	NB	213	8	191	10
	SB	161	7	227	5
	EB	333	17	366	7

Location	Direction*	2018 baseline AM peak hour (08:00–09:00) - All vehicles	2018 baseline AM peak hour (08:00–09:00) - HGV	2018 baseline PM peak hour (17:00–18:00) - All vehicles	2018 baseline PM peak hour (17:00–18:00) - HGV
A533 Northwich Road/Bostock Road (between London Road and Bell Lane)	WB	339	13	322	10
B5309 King Street (between B5309 Centurion Way and Yatehouse Lane)	NB	473	39	617	29
	SB	291	27	333	19
A533 Bostock Road (between A5018 Bostock Road and London Road)	EB	127	17	146	7
	WB	231	14	54	11
B5309 King Street (between Yatehouse Lane and A530 Croxton Lane)	NB	506	39	681	29
	SB	311	27	316	18
London Road (between A533 Bostock Road and Brick Kiln Lane)	NB	300	0	279	0
	SB	401	1	223	1
A533 Davenham Bypass (between A533 Bostock Road and Jack Lane)	NB	903	58	978	32
	SB	1,055	25	905	11
B5081 Byley Road (between Moss Lane and B5082 Holmes Chapel Road)	NB	273	0	204	0
	SB	127	1	522	1
B5081 Byley Road (between B5309 Centurion Way and Moss Lane)	NB	261	7	159	3
	SB	207	6	295	6
A533 Davenham Bypass (between Jack Lane and London Road)	NB	844	53	857	27
	SB	925	22	811	8
A530 King Street (between A530 Croxton Lane and Whatcroft Hall Lane)	NB	760	29	932	30
	SB	577	40	872	9
A533 Davenham Bypass (between London Road and A556 Shurlach Road)	NB	1,046	0	507	0
	SB	674	17	1,009	11
A530 King Street (between Whatcroft Hall Lane and Davenham Road)	NB	767	29	932	30
	SB	576	40	869	9
London Road (between Hartford Road and Church Street)	EB	375	8	320	5
	WB	386	52	607	31
Church Street/Shipbrook Road (between London Road and Shurlach Lane)	EB	80	0	43	1
	WB	13	0	246	0
A50 London Road (between B5082 Northwich Road and Booth Bed Lane)	NB	242	5	74	1
	SB	51	3	169	2

Location	Direction*	2018 baseline AM peak hour (08:00–09:00) - All vehicles	2018 baseline AM peak hour (08:00–09:00) - HGV	2018 baseline PM peak hour (17:00–18:00) - All vehicles	2018 baseline PM peak hour (17:00–18:00) - HGV
Booth Bed Lane (between Main Road and A50 London Road)	NB	13	0	35	0
	SB	32	1	70	0
London Road (between Green Lane and A556 Chester Road)	NB	650	56	531	36
	SB	251	12	867	18
Davenham Road (between Shurlach Lane and A530 King Street)	EB	80	0	46	0
	WB	286	0	256	0
A556 Shurlach Road off-slip (between A556 Shurlach Road and A533 Davenham Bypass)	SB	248	12	808	10
B5082 Holmes Chapel Road (between B5081 Byley Lane and Birches Lane)	EB	472	4	306	2
	WB	377	32	460	23
A533 London Road (between A556 Chester Road and A533 Kingsmead)	NB	804	18	1,063	16
	SB	1,479	18	962	7
A556 Shurlach Road (between A533 London Road and A556 off-slip to A533 Davenham Bypass)	EB	2,009	88	1,162	46
	WB	1,008	65	1,229	32
Crowders Lane (between B5082 Penny's Lane and A530 King Street)	EB	47	0	27	0
	WB	143	0	199	0
A556 Shurlach Road (between A556 off-slip to A533 Davenham Bypass and Shurlach Lane)	EB	2,009	88	1,162	46
	WB	1,256	77	2,037	43
A530 King Street (between Davenham Road and Gadbrook Distribution Centre)	NB	641	29	795	30
	SB	559	40	770	9
London Road (between Dunham Road and Old Hall Road)	NB	90	4	214	5
	SB	133	4	322	4
B5082 Penny's Lane (between A556 Shurlach Road and Crowders Lane)	EB	310	2	193	2
	WB	234	32	188	23
Old Hall Road (between Clifton Drive and Fairfield Road)	EB	98	2	233	5
	WB	78	2	41	4
Old Hall Road (between Granville Road and Clifton Drive)	EB	101	5	236	8
	WB	81	5	44	7
Old Hall Road (between London Road and Granville Road)	EB	111	5	236	8
	WB	90	5	44	7
London Road (between Old Hall Road and Lime Avenue)	NB	168	4	155	6
	SB	233	4	454	6

Location	Direction*	2018 baseline AM peak hour (08:00–09:00) - All vehicles	2018 baseline AM peak hour (08:00–09:00) - HGV	2018 baseline PM peak hour (17:00–18:00) - All vehicles	2018 baseline PM peak hour (17:00–18:00) - HGV
Shipbrook Road (between Gadbrook Road and A556 Shurlach Road)	NB	55	2	75	1
	SB	5	0	18	0
Kingsley Drive (between Old Hall Road and Langley Road)	NB	1	0	8	0
	SB	9	0	2	0
A556 Shurlach Road (between Shipbrook Road and Gadbrook Road)	EB	1,958	86	1,105	45
	WB	964	77	2,051	45
A530 King Street (between Gadbrook Distribution Centre Access and A556 Shurlach Road)	NB	645	28	773	30
	SB	544	40	757	9
A556 Shurlach Road (between Gadbrook Road and A530 King Street)	EB	1,423	85	1,263	44
	WB	1,629	76	1,724	48
Gadbrook Road (between East Avenue and A556 Shurlach Road)	NB	149	1	362	3
	SB	273	4	221	0
East Avenue (between Gadbrook Road and Grange Road)	NB	33	0	114	1
	SB	39	3	6	3
A556 Shurlach Road (between A530 King Street and Birches Lane)	EB	1,656	113	1,328	62
	WB	1,386	121	1,751	68
East Avenue (between Grange Road and South Drive)	NB	34	0	116	1
	SB	38	3	7	3
West Avenue (between Gadbrook Road and Grange Road)	NB	42	1	57	1
	SB	7	0	10	0
Grange Road (between West Avenue and East Avenue)	EB	2	0	2	0
	WB	0	0	1	0
East Avenue (between South Drive and Central Road)	NB	20	0	165	1
	SB	62	3	35	3
Central Road (between West Avenue and East Avenue)	NB	1	0	1	0
	SB	20	0	1	0
A530 King Street (between B5082 Middlewich Road and A556 Shurlach Road)	NB	425	23	703	29
	SB	794	20	660	9
Greenway Drive (between Agecroft Road and Belmont Road)	EB	15	2	5	0
	WB	14	3	7	3
A530 Griffiths Road (between A559 Manchester Road and B5082 Middlewich Road)	NB	125	10	379	20
	SB	547	5	320	8
	EB	81	0	120	0

Location	Direction*	2018 baseline AM peak hour (08:00–09:00) - All vehicles	2018 baseline AM peak hour (08:00–09:00) - HGV	2018 baseline PM peak hour (17:00–18:00) - All vehicles	2018 baseline PM peak hour (17:00–18:00) - HGV
Brockhurst Street (between Percy Street and A5509 Chester Way)	WB	70	1	142	0
Percy Street (between Whalley Road and A559 Chester Way)	NB	75	0	235	0
	SB	55	0	101	0
Applemarket Street (between Weaver Way and A559 Watling Street)	NB	163	1	134	1
	SB	104	2	221	0
A50 Holmes Chapel Road (between Booth Bed Lane and B5081 Middlewich Road)	NB	254	5	109	1
	SB	83	4	240	3
Birches Lane/Station Road (between A556 Shurlach Road and School Lane)	NB	165	6	197	7
	SB	14	1	17	3
A556 Shurlach Road (between Birches Lane and A559 Manchester Road)	NB	1,208	78	818	41
	SB	1,266	91	1,580	47
A559 Manchester Road (between A530 Griffiths Road and A559 Hall Lane)	EB	629	28	621	4
	WB	838	28	778	14
Station Road (between School Lane and A559 Manchester Road)	NB	162	2	173	0
	SB	96	1	45	1
School Lane (between Station Road and Stubbs Lane)	EB	67	0	159	0
A559 Manchester Road (between A559 Hall Lane and Stubbs Lane)	EB	385	19	372	3
	WB	379	20	450	5
A559 Manchester Road (between Stubbs Lane and Fryer Road)	EB	405	20	507	3
	WB	330	20	255	5
A559 Manchester Road (between Fryer Road and A556 Shurlach Road)	EB	507	20	525	3
	WB	383	19	345	4
Fryer Road/Townshend Road (between A559 Hall Lane and A559 Manchester Road)	NB	152	1	232	1
	SB	200	2	159	2
A569 Hall Lane (between Townshend Road and Green Lane)	EB	441	6	264	4
	WB	286	40	453	15
A556 Chester Road (between A559 Manchester Road and Linnards Lane)	EB	1,409	96	1,115	43
	WB	1,321	107	1,715	51
A559 Hall Lane (between Green Lane and B5391 Church Street)	EB	381	6	236	4
	WB	302	40	428	15

Location	Direction*	2018 baseline AM peak hour (08:00–09:00) - All vehicles	2018 baseline AM peak hour (08:00–09:00) - HGV	2018 baseline PM peak hour (17:00–18:00) - All vehicles	2018 baseline PM peak hour (17:00–18:00) - HGV
A556 Chester Road (between Linnards Lane and Plumley Moor Road)	EB	1,573	93	1,063	50
	WB	1,270	108	1,415	42
A569 Marston Lane (between B5391 Church Street and Earles Lane)	NB	150	29	224	2
	SB	370	7	168	9
B5391 Church Street (between Earles Lane and A559 Marston Lane)	NB	116	9	198	4
	SB	195	8	139	4
Linnards Lane (between Green Lane and B5391 Church Street)	EB	135	5	199	5
	WB	112	11	107	3

** NB = northbound; SB = southbound; EB = eastbound; and WB = westbound*

*** Middlewich Eastern Bypass is expected to open in 2024 and therefore is not included in the baseline strategic model and is not reported.*

Table 7-3: MA02 strategic and local road network 2018 AADT baseline flows (vehicles)

Location	Direction	Annual Average Daily Traffic (AADT) - all vehicles	Annual Average Daily Traffic (AADT) - HGV
B5074 Swanlow Lane (between New Lane and Moors Lane)	NB	5,013	133
	SB	4,060	92
A530 Nantwich Road (between Brookhouse Lane and Clive Green Lane)	NB	10,163	300
	SB	7,701	180
Swanlow Drive (between B5074 Swanlow Lane and Darnhall School Lane)	EB	215	11
	WB	382	11
Darnhall School Lane (between Swanlow Drive and Glebe Green Drive)	NB	626	11
	SB	447	11
B5074 Swanlow Lane (between Moors Lane and Swanlow Drive)	NB	5,476	133
	SB	4,471	92
Middlewich Eastern Bypass (between A533 Booth Lane and Cledford Lane)**	NB	-	-
	SB	-	-
Darnhall School Lane (between Glebe Green Drive and B5074 Swanlow Lane)	NB	183	11
	SB	511	11
Durham Drive/Glebe Green Drive (between Darnhall School Lane and Townsfields Drive)	NB	912	22
	SB	396	22
Durham Drive/Dover Drive/Mount Pleasant Drive (between Townsfields Drive and Denbigh Drive)	NB	992	22
	SB	937	22
Clive Green Lane/Clive Lane (between A530 Nantwich Road and A54 Middlewich Road)	EB	2,732	130
	WB	4,645	260

Location	Direction	Annual Average Daily Traffic (AADT) - all vehicles	Annual Average Daily Traffic (AADT) - HGV
Townfields Drive (between B5074 Swanlow Lane and Durham Drive)	EB	739	0
	WB	278	0
Cledford Lane (between Jones Lane and Bradwall Road)	EB	0	0
	WB	0	0
Mount Pleasant Drive (between Denbigh Drive and Woodford Lane West)	EB	683	0
	WB	1,045	0
Woodford Lane West (between Mount Pleasant Drive and A54 Oakmere Road)	NB	687	0
	SB	1,278	22
Elm Road (between Long Lane South and A533 Booth Lane)	EB	324	30
	WB	219	11
A530 Nantwich Road (between Clive Green Lane and Brynlow Drive)	NB	6,433	62
	SB	5,903	72
Beeston Drive (between Denbigh Drive and Handley Hill)	NB	723	92
	SB	941	63
Brynlow Drive (between Long Lane and A530 Nantwich Road)	EB	1,068	62
	WB	1,925	72
Hayhurst Avenue (between Long Lane and Sutton Lane)	EB	934	48
	WB	1,579	56
St Annes Avenue (between Sutton Lane and A533 Booth Lane)	EB	1,718	18
	WB	2,300	80
Beeston Drive (between Handley Hill and B5074 Swanlow Lane)	EB	729	92
	WB	948	63
Sutton Lane (between St Ann's Road and A533 Lewin Street)	NB	1,021	32
	SB	853	41
St Ann's Road (between Sutton Lane and Manor Lane)	NB	1,448	65
	SB	1,668	1
A530 Nantwich Road (between Brynlow Drive and A530 Newton Bank)	NB	6,033	0
	SB	4,645	0
Middlewich Eastern Bypass (between Cledford Lane and A54 Holmes Chapel Road)**	NB	-	-
	SB	-	-
St Ann's Road (between Manor Lane and King Edward Street)	NB	1,637	68
	SB	2,085	6
Station Road (between B5355 Crook Lane and Rilshaw Lane)	EB	1,265	85
	WB	1,031	63
Dingle Lane/Weaver Street (between The Drumber and A54 Winsford Bypass)	NB	1,979	0
	SB	468	0
A54 Middlewich Road (between Clive Lane and A54 Winsford Bypass)	EB	6,249	178
	WB	7,735	200

Location	Direction	Annual Average Daily Traffic (AADT) - all vehicles	Annual Average Daily Traffic (AADT) - HGV
Dene Drive (between A54 High Street and The Drumber)	NB	1,878	44
	SB	1,909	26
St Ann's Road (between King Edward Street and A530 Nantwich Road)	NB	1,942	68
	SB	2,433	6
B5355 Station Road (between A54 Middlewich Road and B5355 Crook Lane)	EB	1,174	35
	WB	1,246	23
Dingle Lane (between A54 High Street and The Drumber)	NB	4,677	32
	SB	3,309	73
A54 St Michael's Way (between A533 Leadsmithy Street and The Bull Ring)	EB	9,219	459
	WB	8,154	353
A54 Kinderton Street (between A533 Leadsmithy Street and King Street)	EB	10,422	584
	WB	5,526	425
A54 St Michael's Way (between The Bull Ring and A54 Chester Road)	EB	9,614	438
	WB	7,304	332
A54 St Michael's Way (between A54 Chester Road and The Bull Ring)	EB	9,589	438
A54 Chester Road (between A54 St Michael's Way and A530 Newton Bank)	EB	15,051	441
A54 Chester Road (between A530 Newton Bank and A530 Croxton Lane)	EB	12,124	438
	WB	10,722	395
A54 Chester Road (between A530 Croxton Lane and A533 Northwich Road)	EB	8,017	422
	WB	8,056	348
Nixon Drive (between Abbotts Way and Basford Way)	EB	905	22
	WB	1,018	22
A54 Holmes Chapel Road (between King Street and B5309 Centurion Way)	EB	8,759	586
	WB	4,880	429
Nixon Drive (between B5074 Delamere Street and Abbotts Way)	EB	796	22
	WB	537	22
King Street (between New King Street and Hadrian Way)	NB	2,653	11
	SB	836	11
B5309 Centurion Way (between B5081 Byley Road and A54 Holmes Chapel Road)	EB	4,892	417
	WB	6,419	455
Road One (between A533 Bostock Road and A54 Middlewich Road)	NB	3,855	193
	SB	2,873	139
A54 Holmes Chapel Road (between B5309 Centurion Way and Brereton Lane)	EB	8,773	891
	WB	5,695	788
B5309 Centurion Way (between White Park Close and B5081 Byley Road)	EB	3,212	240
	WB	5,381	396

Location	Direction	Annual Average Daily Traffic (AADT) - all vehicles	Annual Average Daily Traffic (AADT) - HGV
B5355 Wharton Road (between Nat Lane and Bradbury Road)	NB	1,744	48
	SB	1,822	8
A54 Holmes Chapel Road (between Brereton Lane and Poolford Lane)	EB	8,510	883
	WB	6,376	789
B5309 Centurion Way (between White Park Close and B5309 King Street)	NB	3,714	349
	SB	2,945	226
B5309 Centurion Way (between B5309 King Street and King Street Industrial Estate)	NB	4,172	384
	SB	3,154	259
B5355 Wharton Road (between A5018 Wharton Park Road and Bradbury Road)	NB	2,203	93
	SB	2,109	69
A533 Northwich Road/Bostock Road (between London Road and Bell Lane)	EB	3,805	133
	WB	3,599	123
B5309 King Street (between B5309 Centurion Way and Yatehouse Lane)	NB	5,934	373
	SB	3,396	249
A533 Bostock Road (between A5018 Bostock Road and London Road)	EB	1,484	132
	WB	1,556	135
B5309 King Street (between Yatehouse Lane and A530 Croxton Lane)	NB	6,458	373
	SB	3,417	248
London Road (between A533 Bostock Road and Brick Kiln Lane)	NB	3,153	0
	SB	3,401	11
A533 Davenham Bypass (between A533 Bostock Road and Jack Lane)	NB	11,418	542
	SB	11,898	221
B5081 Byley Road (between Moss Lane and B5082 Holmes Chapel Road)	NB	3,284	5
	SB	4,451	17
B5081 Byley Road (between B5309 Centurion Way and Moss Lane)	NB	2,286	55
	SB	2,730	67
A533 Davenham Bypass (between Jack Lane and London Road)	NB	10,322	490
	SB	10,539	184
A530 King Street (between A530 Croxton Lane and Whatcroft Hall Lane)	NB	10,266	353
	SB	8,790	298
A533 Davenham Bypass (between London Road and A556 Shurlach Road)	NB	9,438	0
	SB	10,205	169
A530 King Street (between Whatcroft Hall Lane and Davenham Road)	NB	10,311	353
	SB	8,761	298
London Road (between Hartford Road and Church Street)	EB	4,216	78
	WB	6,025	501
Church Street/Shipbrook Road (between London Road and Shurlach Lane)	EB	749	9
	WB	1,566	1

Location	Direction	Annual Average Daily Traffic (AADT) - all vehicles	Annual Average Daily Traffic (AADT) - HGV
A50 London Road (between B5082 Northwich Road and Booth Bed Lane)	NB	2,179	39
	SB	1,512	39
Booth Bed Lane (between Main Road and A50 London Road)	NB	329	4
	SB	705	9
London Road (between Green Lane and A556 Chester Road)	NB	7,171	558
	SB	6,771	181
Davenham Road (between Shurlach Lane and A530 King Street)	EB	766	0
	WB	3,291	0
A556 Shurlach Road off-slip (between A556 Shurlach Road and A533 Davenham Bypass)	SB	6,396	134
B5082 Holmes Chapel Road (between B5081 Byley Lane and Birches Lane)	EB	4,725	39
	WB	5,085	334
A533 London Road (between A556 Chester Road and A533 Kingsmead)	NB	11,326	210
	SB	14,829	149
A556 Shurlach Road (between A533 London Road and A556 off-slip to A533 Davenham Bypass)	EB	19,263	814
	WB	13,578	592
Crowders Lane (between B5082 Penny's Lane and A530 King Street)	EB	451	0
	WB	2,075	1
A556 Shurlach Road (between A556 off-slip to A533 Davenham Bypass and Shurlach Lane)	EB	19,263	814
	WB	19,975	725
A530 King Street (between Davenham Road and Gadbrook Distribution Centre)	NB	8,713	353
	SB	8,063	298
London Road (between Dunham Road and Old Hall Road)	NB	1,844	57
	SB	2,754	48
B5082 Penny's Lane (between A556 Shurlach Road and Crowders Lane)	EB	3,053	21
	WB	2,561	334
Old Hall Road (between Clifton Drive and Fairfield Road)	EB	2,010	47
	WB	721	37
Old Hall Road (between Granville Road and Clifton Drive)	EB	2,045	82
	WB	756	73
Old Hall Road (between London Road and Granville Road)	EB	2,107	82
	WB	808	73
London Road (between Old Hall Road and Lime Avenue)	NB	1,961	62
	SB	4,168	63
Shipbrook Road (between Gadbrook Road and A556 Shurlach Road)	NB	793	16
	SB	141	0
Kingsley Drive (between Old Hall Road and Langley Road)	NB	53	0
	SB	65	0

Location	Direction	Annual Average Daily Traffic (AADT) - all vehicles	Annual Average Daily Traffic (AADT) - HGV
A556 Shurlach Road (between Shipbrook Road and Gadbrook Road)	EB	18,611	797
	WB	18,276	739
A530 King Street (between Gadbrook Distribution Centre Access and A556 Shurlach Road)	NB	8,603	351
	SB	7,891	301
A556 Shurlach Road (between Gadbrook Road and A530 King Street)	EB	16,305	781
	WB	20,353	756
Gadbrook Road (between East Avenue and A556 Shurlach Road)	NB	3,102	22
	SB	2,996	28
East Avenue (between Gadbrook Road and Grange Road)	NB	891	6
	SB	272	37
A556 Shurlach Road (between A530 King Street and Birches Lane)	EB	18,119	1,060
	WB	19,035	1,151
East Avenue (between Grange Road and South Drive)	NB	908	6
	SB	277	37
West Avenue (between Gadbrook Road and Grange Road)	NB	599	12
	SB	105	0
Grange Road (between West Avenue and East Avenue)	EB	19	0
	WB	8	0
East Avenue (between South Drive and Central Road)	NB	1,120	5
	SB	588	40
Central Road (between West Avenue and East Avenue)	NB	13	0
	SB	128	1
A530 King Street (between B5082 Middlewich Road and A556 Shurlach Road)	NB	6,844	318
	SB	8,830	178
Greenway Drive (between Agecroft Road and Belmont Road)	EB	118	11
	WB	129	36
A530 Griffiths Road (between A559 Manchester Road and B5082 Middlewich Road)	NB	3,054	180
	SB	5,268	79
Brockhurst Street (between Percy Street and A5509 Chester Way)	EB	1,219	2
	WB	1,287	8
Percy Street (between Whalley Road and A559 Chester Way)	NB	1,883	0
	SB	945	0
Applemarket Street (between Weaver Way and A559 Watling Street)	NB	1,801	12
	SB	1,973	13
A50 Holmes Chapel Road (between Booth Bed Lane and B5081 Middlewich Road)	NB	2,507	43
	SB	2,216	48
Birches Lane/Station Road (between A556 Shurlach Road and School Lane)	NB	2,487	91
	SB	215	23

Location	Direction	Annual Average Daily Traffic (AADT) - all vehicles	Annual Average Daily Traffic (AADT) - HGV
A556 Shurlach Road (between Birches Lane and A559 Manchester Road)	NB	12,308	723
	SB	17,270	836
A559 Manchester Road (between A530 Griffiths Road and A559 Hall Lane)	EB	7,584	196
	WB	9,813	256
Station Road (between School Lane and A559 Manchester Road)	NB	2,306	17
	SB	971	12
School Lane (between Station Road and Stubbs Lane)	EB	1,371	0
A559 Manchester Road (between A559 Hall Lane and Stubbs Lane)	EB	4,592	137
	WB	5,033	156
A559 Manchester Road (between Stubbs Lane and Fryer Road)	EB	5,536	141
	WB	3,554	155
A559 Manchester Road (between Fryer Road and A556 Shurlach Road)	EB	6,262	137
	WB	4,423	143
Fryer Road/Townshend Road (between A559 Hall Lane and A559 Manchester Road)	NB	2,327	12
	SB	2,184	20
A569 Hall Lane (between Townshend Road and Green Lane)	EB	4,284	62
	WB	4,487	332
A556 Chester Road (between A559 Manchester Road and Linnards Lane)	EB	15,325	847
	WB	18,422	960
A559 Hall Lane (between Green Lane and B5391 Church Street)	EB	3,747	62
	WB	4,431	333
A556 Chester Road (between Linnards Lane and Plumley Moor Road)	EB	18,158	981
	WB	18,484	1,031
A569 Marston Lane (between B5391 Church Street and Earles Lane)	NB	2,273	185
	SB	3,273	102
B5391 Church Street (between Earles Lane and A559 Marston Lane)	NB	1,905	77
	SB	2,033	73
Linnards Lane (between Green Lane and B5391 Church Street)	EB	2,027	59
	WB	1,328	85

*** Middlewich Eastern Bypass is expected to open in 2024 and therefore is not included in the baseline strategic model and is not reported.*

7.4.11 Table 7-4, Table 7-5 and Table 7-6 summarise the 2030, 2038 and 2046 future baseline traffic flows for the AM (08:00–09:00), PM (17:00–18:00) and AADT respectively. Flows are presented for strategic and local roads where it is considered that there is the potential for a substantial impact either during construction or through the operation of the Proposed Scheme. Due to the simplified way in which the road network is represented in the strategic transport models, the use of some local roads may not be precisely reflected in the future

baseline traffic flows, however, this is not expected to change the conclusions of the assessment.

Table 7-4: MA02 strategic and local road network future baseline flows AM peak hour 08:00–09:00

Location	Direction	AM peak hour 2030 all vehicles	AM peak hour 2030 HGV	AM peak hour 2038 all vehicles	AM peak hour 2038 HGV	AM peak hour 2046 all vehicles	AM peak hour 2046 HGV
B5074 Swanlow Lane (between New Lane and Moors Lane)	NB	447	21	506	22	583	18
	SB	420	14	469	14	537	15
A530 Nantwich Road (between Brookhouse Lane and Clive Green Lane)	NB	968	27	935	26	1,042	27
	SB	781	28	823	29	831	30
Swanlow Drive (between B5074 Swanlow Lane and Darnhall School Lane)	EB	25	1	26	1	28	1
	WB	56	1	76	1	106	1
Darnhall School Lane (between Swanlow Drive and Glebe Green Drive)	NB	99	1	119	1	151	1
	SB	34	1	32	1	31	1
B5074 Swanlow Lane (between Moors Lane and Swanlow Drive)	NB	541	21	618	22	718	18
	SB	438	14	493	14	568	15
Middlewich Eastern Bypass (between A533 Booth Lane and Cledford Lane)	NB	167	15	315	22	442	23
	SB	145	1	74	1	46	1
Darnhall School Lane (between Glebe Green Drive and B5074 Swanlow Lane)	NB	4	1	4	1	4	1
	SB	50	1	131	1	150	1
Durham Drive/Glebe Green Drive (between Darnhall School Lane and Townsfields Drive)	NB	158	2	260	2	312	2
	SB	34	2	32	2	31	2
Durham Drive/Dover Drive/Mount Pleasant Drive (between Townsfields Drive and Denbigh Drive)	NB	113	2	192	2	131	2
	SB	114	2	115	2	134	2
Clive Green Lane/Clive Lane (between A530 Nantwich Road and A54 Middlewich Road)	EB	223	20	211	21	203	22
	WB	473	21	450	19	523	20
Townfields Drive (between B5074 Swanlow Lane and Durham Drive)	EB	139	0	165	0	295	0
	WB	14	0	15	0	12	0
	EB	6	0	5	0	11	0

Location	Direction	AM peak hour 2030 all vehicles	AM peak hour 2030 HGV	AM peak hour 2038 all vehicles	AM peak hour 2038 HGV	AM peak hour 2046 all vehicles	AM peak hour 2046 HGV
Cledford Lane (between Jones Lane and Bradwall Road)	WB	2	0	12	0	19	0
Mount Pleasant Drive (between Denbigh Drive and Woodford Lane West)	EB	60	0	66	0	82	0
	WB	168	0	251	0	161	0
Woodford Lane West (between Mount Pleasant Drive and A54 Oakmere Road)	NB	55	0	59	0	72	0
	SB	201	2	286	2	174	2
Elm Road (between Long Lane South and A533 Booth Lane)	EB	49	5	54	5	74	5
	WB	11	1	11	1	11	1
A530 Nantwich Road (between Clive Green Lane and Brynlow Drive)	NB	638	9	663	10	737	10
	SB	701	9	791	9	850	9
Beeston Drive (between Denbigh Drive and Handley Hill)	NB	91	16	91	17	141	17
	SB	36	2	26	2	16	2
Brynlow Drive (between Long Lane and A530 Nantwich Road)	EB	92	9	97	10	85	10
	WB	248	9	273	9	332	9
Hayhurst Avenue (between Long Lane and Sutton Lane)	EB	98	8	103	9	93	9
	WB	186	8	187	8	94	8
St Annes Avenue (between Sutton Lane and A533 Booth Lane)	EB	101	3	103	3	107	3
	WB	192	2	181	2	67	2
Beeston Drive (between Handley Hill and B5074 Swanlow Lane)	EB	92	16	92	17	142	17
	WB	36	2	26	2	16	2
Sutton Lane (between St Ann's Road and A533 Lewin Street)	NB	139	5	134	5	179	6
	SB	74	6	68	6	64	6
St Ann's Road (between Sutton Lane and Manor Lane)	NB	87	0	66	0	49	0
	SB	109	0	113	0	116	0
A530 Nantwich Road (between Brynlow Drive and A530 Newton Bank)	NB	599	0	619	0	709	0
	SB	506	0	572	0	575	0
Middlewich Eastern Bypass (between Cledford Lane and A54 Holmes Chapel Road)	NB	429	15	692	22	909	23
	SB	195	1	140	1	125	1
	NB	87	1	63	1	53	1

Location	Direction	AM peak hour 2030 all vehicles	AM peak hour 2030 HGV	AM peak hour 2038 all vehicles	AM peak hour 2038 HGV	AM peak hour 2046 all vehicles	AM peak hour 2046 HGV
St Ann's Road (between Manor Lane and King Edward Street)	SB	130	0	134	0	145	0
Station Road (between B5355 Crook Lane and Rilshaw Lane)	EB	91	6	135	6	266	3
	WB	48	2	56	2	431	4
Dingle Lane/Weaver Street (between The Drumber and A54 Winsford Bypass)	NB	137	0	296	0	472	0
	SB	135	0	241	1	293	5
A54 Middlewich Road (between Clive Lane and A54 Winsford Bypass)	EB	759	19	776	6	738	5
	WB	604	27	658	25	632	4
Dene Drive (between A54 High Street and The Drumber)	NB	130	3	116	3	97	3
	SB	109	4	112	4	130	4
St Ann's Road (between King Edward Street and A530 Nantwich Road)	NB	147	1	129	1	117	1
	SB	187	0	190	0	193	0
B5355 Station Road (between A54 Middlewich Road and B5355 Crook Lane)	EB	218	4	258	4	442	4
	WB	36	2	43	5	352	8
Dingle Lane (between A54 High Street and The Drumber)	NB	413	5	412	5	411	1
	SB	435	3	311	3	172	3
A54 St Michael's Way (between A533 Leadsmithy Street and The Bull Ring)	EB	962	45	998	35	975	36
	WB	738	56	748	52	713	31
A54 Kinderton Street (between A533 Leadsmithy Street and King Street)	EB	1,223	78	1,227	68	1,165	70
	WB	570	54	593	56	581	36
A54 St Michael's Way (between The Bull Ring and A54 Chester Road)	EB	1,013	43	1,049	33	1,028	34
	WB	682	54	689	50	652	29
A54 St Michael's Way (between A54 Chester Road and The Bull Ring)	EB	1,017	43	1,054	33	1,034	34
A54 Chester Road (between A54 St Michael's Way and A530 Newton Bank)	EB	1,592	44	1,663	33	1,663	34
	EB	1,223	43	1,346	33	1,350	34

Location	Direction	AM peak hour 2030 all vehicles	AM peak hour 2030 HGV	AM peak hour 2038 all vehicles	AM peak hour 2038 HGV	AM peak hour 2046 all vehicles	AM peak hour 2046 HGV
A54 Chester Road (between A530 Newton Bank and A530 Croxton Lane)	WB	965	54	969	48	987	28
A54 Chester Road (between A530 Croxton Lane and A533 Northwich Road)	EB	784	43	863	33	869	34
	WB	786	44	756	39	736	19
Nixon Drive (between Abbotts Way and Basford Way)	EB	82	2	78	2	91	2
	WB	57	2	50	2	46	2
A54 Holmes Chapel Road (between King Street and B5309 Centurion Way)	EB	964	78	932	68	813	70
	WB	620	55	692	57	665	36
Nixon Drive (between B5074 Delamere Street and Abbotts Way)	EB	32	2	29	2	42	2
	WB	59	2	52	2	50	2
King Street (between New King Street and Hadrian Way)	NB	379	1	460	1	508	1
	SB	82	1	78	1	78	1
B5309 Centurion Way (between B5081 Byley Road and A54 Holmes Chapel Road)	EB	607	55	563	51	551	48
	WB	646	73	654	82	723	85
Road One (between A533 Bostock Road and A54 Middlewich Road)	NB	216	17	137	15	125	15
	SB	323	23	376	24	610	25
A54 Holmes Chapel Road (between B5309 Centurion Way and Brereton Lane)	EB	864	96	933	80	951	80
	WB	648	94	701	98	813	78
B5309 Centurion Way (between White Park Close and B5081 Byley Road)	EB	415	23	207	17	194	15
	WB	427	70	418	79	378	81
B5355 Wharton Road (between Nat Lane and Bradbury Road)	NB	138	4	146	7	134	7
	SB	173	0	187	0	200	3
A54 Holmes Chapel Road (between Brereton Lane and Poolford Lane)	EB	819	94	865	78	860	78
	WB	694	94	794	98	949	78
B5309 Centurion Way (between White Park Close and B5309 King Street)	NB	372	60	362	69	362	71
	SB	308	23	101	17	129	15
	NB	296	58	292	67	285	69

Location	Direction	AM peak hour 2030 all vehicles	AM peak hour 2030 HGV	AM peak hour 2038 all vehicles	AM peak hour 2038 HGV	AM peak hour 2046 all vehicles	AM peak hour 2046 HGV
B5309 Centurion Way (between B5309 King Street and King Street Industrial Estate)	SB	373	30	170	24	193	22
B5355 Wharton Road (between A5018 Wharton Park Road and Bradbury Road)	NB	202	8	216	11	198	11
	SB	139	8	143	8	146	11
A533 Northwich Road/Bostock Road (between London Road and Bell Lane)	EB	318	19	381	19	338	21
	WB	325	7	288	1	323	1
B5309 King Street (between B5309 Centurion Way and Yatehouse Lane)	NB	624	57	703	65	723	68
	SB	321	29	113	23	113	21
A533 Bostock Road (between A5018 Bostock Road and London Road)	EB	130	18	141	19	113	20
	WB	294	8	393	2	601	2
B5309 King Street (between Yatehouse Lane and A530 Croxton Lane)	NB	656	57	733	65	753	68
	SB	337	29	126	23	123	21
London Road (between A533 Bostock Road and Brick Kiln Lane)	NB	266	0	228	0	188	0
	SB	425	1	574	1	695	1
A533 Davenham Bypass (between A533 Bostock Road and Jack Lane)	NB	1,333	67	1,373	67	1,425	63
	SB	1,044	23	1,067	23	1,119	23
B5081 Byley Road (between Moss Lane and B5082 Holmes Chapel Road)	NB	234	1	236	1	260	1
	SB	221	4	208	4	221	4
B5081 Byley Road (between B5309 Centurion Way and Moss Lane)	NB	292	8	311	8	422	9
	SB	245	7	410	8	427	7
A533 Davenham Bypass (between Jack Lane and London Road)	NB	1,237	63	1,276	63	1,325	59
	SB	961	21	992	21	1,056	21
A530 King Street (between A530 Croxton Lane and Whatcroft Hall Lane)	NB	831	19	754	20	742	23
	SB	704	38	719	40	715	40
A533 Davenham Bypass (between London Road and A556 Shurlach Road)	NB	1,065	0	1,101	0	1,183	0
	SB	744	17	764	17	797	18

Location	Direction	AM peak hour 2030 all vehicles	AM peak hour 2030 HGV	AM peak hour 2038 all vehicles	AM peak hour 2038 HGV	AM peak hour 2046 all vehicles	AM peak hour 2046 HGV
A530 King Street (between Whatcroft Hall Lane and Davenham Road)	NB	838	19	761	20	750	23
	SB	702	38	717	40	713	40
London Road (between Hartford Road and Church Street)	EB	768	6	759	6	766	6
	WB	593	53	589	51	556	46
Church Street/Shipbrook Road (between London Road and Shurlach Lane)	EB	621	0	678	0	711	0
	WB	13	0	13	0	12	0
A50 London Road (between B5082 Northwich Road and Booth Bed Lane)	NB	107	1	121	1	200	1
	SB	65	1	70	1	76	2
Booth Bed Lane (between Main Road and A50 London Road)	NB	47	1	64	1	66	1
	SB	35	1	34	1	27	0
London Road (between Green Lane and A556 Chester Road)	NB	802	59	807	58	834	53
	SB	601	10	584	11	577	10
Davenham Road (between Shurlach Lane and A530 King Street)	EB	235	0	273	0	294	0
	WB	474	0	477	0	485	0
A556 Shurlach Road off-slip (between A556 Shurlach Road and A533 Davenham Bypass)	SB	253	11	247	11	255	12
B5082 Holmes Chapel Road (between B5081 Byley Lane and Birches Lane)	EB	600	4	602	4	655	3
	WB	477	30	575	31	594	30
A533 London Road (between A556 Chester Road and A533 Kingsmead)	NB	837	21	841	19	819	13
	SB	1,636	18	1,671	19	1,712	18
A556 Shurlach Road (between A533 London Road and A556 off-slip to A533 Davenham Bypass)	EB	2,346	91	2,401	94	2,478	95
	WB	893	67	909	65	914	66
Crowders Lane (between B5082 Penny's Lane and A530 King Street)	EB	163	0	220	0	279	0
	WB	253	0	242	0	219	0
A556 Shurlach Road (between A556 off-slip to A533 Davenham Bypass and Shurlach Lane)	EB	2,346	91	2,401	94	2,478	95
	WB	1,146	78	1,155	77	1,170	77

Location	Direction	AM peak hour 2030 all vehicles	AM peak hour 2030 HGV	AM peak hour 2038 all vehicles	AM peak hour 2038 HGV	AM peak hour 2046 all vehicles	AM peak hour 2046 HGV
A530 King Street (between Davenham Road and Gadbrook Distribution Centre)	NB	630	19	544	21	502	24
	SB	643	39	680	40	715	40
London Road (between Dunham Road and Old Hall Road)	NB	103	4	108	4	151	4
	SB	184	4	191	4	202	4
B5082 Penny's Lane (between A556 Shurlach Road and Crowders Lane)	EB	270	2	224	1	196	1
	WB	218	30	173	30	152	30
Old Hall Road (between Clifton Drive and Fairfield Road)	EB	109	2	115	2	122	2
	WB	83	2	87	2	92	2
Old Hall Road (between Granville Road and Clifton Drive)	EB	112	5	118	5	125	5
	WB	86	5	90	5	95	5
Old Hall Road (between London Road and Granville Road)	EB	126	5	133	5	142	5
	WB	101	5	107	5	102	5
London Road (between Old Hall Road and Lime Avenue)	NB	193	4	203	4	241	4
	SB	298	4	312	4	331	4
Shipbrook Road (between Gadbrook Road and A556 Shurlach Road)	NB	157	8	166	9	193	11
	SB	48	0	55	0	53	0
Kingsley Drive (between Old Hall Road and Langley Road)	NB	2	0	2	0	2	0
	SB	14	0	15	0	16	0
A556 Shurlach Road (between Shipbrook Road and Gadbrook Road)	EB	2,238	83	2,289	85	2,338	84
	WB	972	78	970	77	981	77
A530 King Street (between Gadbrook Distribution Centre Access and A556 Shurlach Road)	NB	636	18	550	20	509	23
	SB	626	39	663	40	696	41
A556 Shurlach Road (between Gadbrook Road and A530 King Street)	EB	1,673	82	1,715	84	1,741	83
	WB	1,662	78	1,685	77	1,698	78
Gadbrook Road (between East Avenue and A556 Shurlach Road)	NB	162	1	165	1	152	1
	SB	286	4	287	5	288	4
East Avenue (between Gadbrook Road and Grange Road)	NB	33	0	33	0	38	0
	SB	45	3	71	4	72	3

Location	Direction	AM peak hour 2030 all vehicles	AM peak hour 2030 HGV	AM peak hour 2038 all vehicles	AM peak hour 2038 HGV	AM peak hour 2046 all vehicles	AM peak hour 2046 HGV
A556 Shurlach Road (between A530 King Street and Birches Lane)	EB	1,822	100	1,836	102	1,847	103
	WB	1,518	122	1,682	122	1,789	123
East Avenue (between Grange Road and South Drive)	NB	35	0	36	0	40	0
	SB	44	3	68	4	71	3
West Avenue (between Gadbrook Road and Grange Road)	NB	37	1	38	1	35	1
	SB	8	0	13	0	18	0
Grange Road (between West Avenue and East Avenue)	EB	3	0	5	0	3	0
	WB	0	0	0	0	0	0
East Avenue (between South Drive and Central Road)	NB	19	0	20	0	25	0
	SB	68	3	94	4	99	3
Central Road (between West Avenue and East Avenue)	NB	1	0	1	0	1	0
	SB	20	0	37	1	20	0
A530 King Street (between B5082 Middlewich Road and A556 Shurlach Road)	NB	462	21	465	21	448	21
	SB	763	19	728	19	715	20
Greenway Drive (between Agecroft Road and Belmont Road)	EB	13	2	10	1	10	2
	WB	14	3	14	3	15	3
A530 Griffiths Road (between A559 Manchester Road and B5082 Middlewich Road)	NB	172	10	188	10	196	10
	SB	515	5	497	5	508	5
Brockhurst Street (between Percy Street and A5509 Chester Way)	EB	87	0	91	0	131	0
	WB	74	1	77	1	82	1
Percy Street (between Whalley Road and A559 Chester Way)	NB	57	0	60	0	64	0
	SB	56	0	58	0	22	0
Applemarket Street (between Weaver Way and A559 Watling Street)	NB	162	1	168	1	122	1
	SB	113	2	110	2	102	2
A50 Holmes Chapel Road (between Booth Bed Lane and B5081 Middlewich Road)	NB	154	1	185	2	266	2
	SB	100	2	104	2	103	2
Birches Lane/Station Road (between A556 Shurlach Road and School Lane)	NB	182	7	192	7	200	8
	SB	16	1	17	1	18	1

Location	Direction	AM peak hour 2030 all vehicles	AM peak hour 2030 HGV	AM peak hour 2038 all vehicles	AM peak hour 2038 HGV	AM peak hour 2046 all vehicles	AM peak hour 2046 HGV
A556 Shurlach Road (between Birches Lane and A559 Manchester Road)	NB	1,325	76	1,372	78	1,441	78
	SB	1,467	95	1,512	94	1,603	96
A559 Manchester Road (between A530 Griffiths Road and A559 Hall Lane)	EB	509	24	543	23	592	23
	WB	866	28	854	28	870	27
Station Road (between School Lane and A559 Manchester Road)	NB	179	2	189	2	197	2
	SB	106	1	112	1	117	2
School Lane (between Station Road and Stubbs Lane)	EB	117	0	120	0	107	0
A559 Manchester Road (between A559 Hall Lane and Stubbs Lane)	EB	271	16	268	14	275	14
	WB	606	20	619	20	599	21
A559 Manchester Road (between Stubbs Lane and Fryer Road)	EB	216	17	214	15	238	15
	WB	422	20	430	20	434	20
A559 Manchester Road (between Fryer Road and A556 Shurlach Road)	EB	321	16	329	14	336	14
	WB	504	19	514	19	525	19
Fryer Road/Townshend Road (between A559 Hall Lane and A559 Manchester Road)	NB	128	1	134	1	137	1
	SB	152	1	164	1	143	1
A569 Hall Lane (between Townshend Road and Green Lane)	EB	207	6	186	6	190	6
	WB	325	29	373	30	398	32
A556 Chester Road (between A559 Manchester Road and Linnards Lane)	EB	1,431	91	1,472	92	1,572	92
	WB	1,730	112	1,770	112	1,899	114
A559 Hall Lane (between Green Lane and B5391 Church Street)	EB	152	6	128	6	130	6
	WB	465	30	506	32	533	34
A556 Chester Road (between Linnards Lane and Plumley Moor Road)	EB	1,592	80	1,571	96	1,570	97
	WB	1,307	89	1,309	91	1,329	77
A569 Marston Lane (between B5391 Church Street and Earles Lane)	NB	139	24	151	27	165	29
	SB	261	7	118	7	126	8
B5391 Church Street (between Earles Lane and A559 Marston Lane)	NB	150	13	183	13	204	12
	SB	227	5	225	5	224	6

Location	Direction	AM peak hour 2030 all vehicles	AM peak hour 2030 HGV	AM peak hour 2038 all vehicles	AM peak hour 2038 HGV	AM peak hour 2046 all vehicles	AM peak hour 2046 HGV
Linnards Lane (between Green Lane and B5391 Church Street)	EB	472	11	454	11	518	11
	WB	129	7	138	10	151	10

Table 7-5: MA02 strategic and local road network future baseline flows PM peak hour 17:00–18:00

Location	Direction	PM peak hour 2030 all vehicles	PM peak hour 2030 HGV	PM peak hour 2038 all vehicles	PM peak hour 2038 HGV	PM peak hour 2046 all vehicles	PM peak hour 2046 HGV
B5074 Swanlow Lane (between New Lane and Moors Lane)	NB	536	2	573	2	580	2
	SB	384	4	397	4	464	4
A530 Nantwich Road (between Brookhouse Lane and Clive Green Lane)	NB	937	23	948	24	1,028	25
	SB	770	6	801	8	915	12
Swanlow Drive (between B5074 Swanlow Lane and Darnhall School Lane)	EB	18	1	18	1	19	1
	WB	29	1	29	1	29	1
Darnhall School Lane (between Swanlow Drive and Glebe Green Drive)	NB	30	1	29	1	28	1
	SB	45	1	44	1	45	1
B5074 Swanlow Lane (between Moors Lane and Swanlow Drive)	NB	566	2	612	2	629	2
	SB	474	4	497	4	577	4
Middlewich Eastern Bypass (between A533 Booth Lane and Cledford Lane)	NB	52	0	45	0	47	0
	SB	422	10	758	12	1,278	16
Darnhall School Lane (between Glebe Green Drive and B5074 Swanlow Lane)	NB	5	1	5	1	5	1
	SB	103	1	150	1	180	1
Durham Drive/Glebe Green Drive (between Darnhall School Lane and Townsfields Drive)	NB	108	2	154	2	184	2
	SB	36	2	36	2	36	2
Durham Drive/Dover Drive/Mount Pleasant Drive (between Townsfields Drive and Denbigh Drive)	NB	114	2	152	2	182	2
	SB	84	2	94	2	92	2
	EB	281	4	273	4	251	3

Location	Direction	PM peak hour 2030 all vehicles	PM peak hour 2030 HGV	PM peak hour 2038 all vehicles	PM peak hour 2038 HGV	PM peak hour 2046 all vehicles	PM peak hour 2046 HGV
Clive Green Lane/Clive Lane (between A530 Nantwich Road and A54 Middlewich Road)	WB	344	20	313	21	329	22
Townfields Drive (between B5074 Swanlow Lane and Durham Drive)	EB	78	0	90	0	86	0
	WB	36	0	29	0	28	0
Cledford Lane (between Jones Lane and Bradwall Road)	EB	128	0	254	0	266	0
	WB	4	0	9	0	9	0
Mount Pleasant Drive (between Denbigh Drive and Woodford Lane West)	EB	95	0	110	0	115	0
	WB	59	0	94	0	126	0
Woodford Lane West (between Mount Pleasant Drive and A54 Oakmere Road)	NB	102	0	120	0	126	0
	SB	69	2	104	2	134	2
Elm Road (between Long Lane South and A533 Booth Lane)	EB	13	1	13	1	13	1
	WB	24	1	25	1	68	1
A530 Nantwich Road (between Clive Green Lane and Brynlow Drive)	NB	683	3	731	3	826	3
	SB	585	5	630	6	798	11
Beeston Drive (between Denbigh Drive and Handley Hill)	NB	50	2	54	2	49	2
	SB	107	10	98	10	91	10
Brynlow Drive (between Long Lane and A530 Nantwich Road)	EB	124	3	142	3	147	3
	WB	188	5	230	6	389	11
Hayhurst Avenue (between Long Lane and Sutton Lane)	EB	92	2	115	2	59	2
	WB	194	3	232	4	396	9
St Annes Avenue (between Sutton Lane and A533 Booth Lane)	EB	268	1	275	2	225	8
	WB	295	1	330	1	467	1
Beeston Drive (between Handley Hill and B5074 Swanlow Lane)	EB	50	2	54	2	49	2
	WB	108	10	99	10	92	10
Sutton Lane (between St Ann's Road and A533 Lewin Street)	NB	68	1	68	1	85	1
	SB	61	2	60	4	66	8
	NB	142	0	127	0	106	0

Location	Direction	PM peak hour 2030 all vehicles	PM peak hour 2030 HGV	PM peak hour 2038 all vehicles	PM peak hour 2038 HGV	PM peak hour 2046 all vehicles	PM peak hour 2046 HGV
St Ann's Road (between Sutton Lane and Manor Lane)	SB	247	0	236	0	258	7
A530 Nantwich Road (between Brynlow Drive and A530 Newton Bank)	NB	618	0	670	0	788	0
	SB	456	0	481	0	518	0
Middlewich Eastern Bypass (between Cledford Lane and A54 Holmes Chapel Road)	NB	71	0	85	0	78	0
	SB	804	10	1,117	12	1,519	16
St Ann's Road (between Manor Lane and King Edward Street)	NB	168	0	147	0	119	0
	SB	292	1	273	1	290	8
Station Road (between B5355 Crook Lane and Rilshaw Lane)	EB	494	11	554	9	513	7
	WB	12	10	12	10	12	10
Dingle Lane/Weaver Street (between The Drumber and A54 Winsford Bypass)	NB	506	8	567	8	619	8
	SB	177	0	257	0	335	0
A54 Middlewich Road (between Clive Lane and A54 Winsford Bypass)	EB	552	4	576	4	565	4
	WB	798	2	769	2	768	2
Dene Drive (between A54 High Street and The Drumber)	NB	201	5	220	5	247	5
	SB	228	1	249	1	316	1
St Ann's Road (between King Edward Street and A530 Nantwich Road)	NB	157	0	142	0	121	0
	SB	301	1	283	1	306	8
B5355 Station Road (between A54 Middlewich Road and B5355 Crook Lane)	EB	398	3	491	3	468	2
	WB	129	2	126	2	121	2
Dingle Lane (between A54 High Street and The Drumber)	NB	408	1	408	1	411	1
	SB	12	3	13	3	13	3
A54 St Michael's Way (between A533 Leadsmithy Street and The Bull Ring)	EB	810	31	915	32	1,018	26
	WB	926	19	932	20	925	20
A54 Kinderton Street (between A533 Leadsmithy Street and King Street)	EB	949	32	1,054	32	1,184	32
	WB	542	29	548	30	549	33

Location	Direction	PM peak hour 2030 all vehicles	PM peak hour 2030 HGV	PM peak hour 2038 all vehicles	PM peak hour 2038 HGV	PM peak hour 2046 all vehicles	PM peak hour 2046 HGV
A54 St Michael's Way (between The Bull Ring and A54 Chester Road)	EB	827	29	932	30	1,037	24
	WB	808	18	815	18	814	18
A54 St Michael's Way (between A54 Chester Road and The Bull Ring)	EB	818	29	923	30	1,027	24
A54 Chester Road (between A54 St Michael's Way and A530 Newton Bank)	EB	1,277	29	1,354	30	1,492	31
A54 Chester Road (between A530 Newton Bank and A530 Croxton Lane)	EB	1,053	29	1,131	30	1,190	31
	WB	1,024	18	1,024	19	1,024	19
A54 Chester Road (between A530 Croxton Lane and A533 Northwich Road)	EB	775	26	859	27	909	28
	WB	681	18	669	18	664	19
Nixon Drive (between Abbotts Way and Basford Way)	EB	75	2	73	2	67	2
	WB	105	2	91	2	78	2
A54 Holmes Chapel Road (between King Street and B5309 Centurion Way)	EB	848	32	874	32	907	32
	WB	666	30	699	31	728	35
Nixon Drive (between B5074 Delamere Street and Abbotts Way)	EB	101	2	99	2	92	2
	WB	25	2	20	2	18	2
King Street (between New King Street and Hadrian Way)	NB	407	1	494	1	588	1
	SB	52	1	53	1	36	1
B5309 Centurion Way (between B5081 Byley Road and A54 Holmes Chapel Road)	EB	585	15	477	14	309	13
	WB	648	35	892	36	1,072	22
Road One (between A533 Bostock Road and A54 Middlewich Road)	NB	446	22	462	22	445	21
	SB	213	3	210	3	186	3
A54 Holmes Chapel Road (between B5309 Centurion Way and Brereton Lane)	EB	872	40	654	38	313	28
	WB	755	53	859	52	959	38
B5309 Centurion Way (between White Park	EB	332	12	276	10	200	11
	WB	553	26	567	27	614	12

Location	Direction	PM peak hour 2030 all vehicles	PM peak hour 2030 HGV	PM peak hour 2038 all vehicles	PM peak hour 2038 HGV	PM peak hour 2046 all vehicles	PM peak hour 2046 HGV
Close and B5081 Byley Road)							
B5355 Wharton Road (between Nat Lane and Bradbury Road)	NB	167	6	136	6	125	6
	SB	124	2	92	2	84	2
A54 Holmes Chapel Road (between Brereton Lane and Poolford Lane)	EB	804	37	573	28	252	15
	WB	699	55	806	55	973	42
B5309 Centurion Way (between White Park Close and B5309 King Street)	NB	263	26	271	27	300	13
	SB	355	9	288	7	183	8
B5309 Centurion Way (between B5309 King Street and King Street Industrial Estate)	NB	404	36	415	37	447	23
	SB	317	8	262	7	156	7
B5355 Wharton Road (between A5018 Wharton Park Road and Bradbury Road)	NB	168	10	128	10	108	10
	SB	203	6	173	6	159	5
A533 Northwich Road/Bostock Road (between London Road and Bell Lane)	EB	366	6	417	6	475	6
	WB	282	10	249	11	239	11
B5309 King Street (between B5309 Centurion Way and Yatehouse Lane)	NB	698	34	795	36	928	22
	SB	395	7	339	6	220	6
A533 Bostock Road (between A5018 Bostock Road and London Road)	EB	213	6	248	6	292	6
	WB	59	11	58	12	38	12
B5309 King Street (between Yatehouse Lane and A530 Croxton Lane)	NB	742	34	824	36	938	22
	SB	390	7	341	5	221	5
London Road (between A533 Bostock Road and Brick Kiln Lane)	NB	231	0	197	0	224	0
	SB	155	1	170	1	202	1
A533 Davenham Bypass (between A533 Bostock Road and Jack Lane)	NB	1,231	31	1,282	30	1,292	31
	SB	1,152	11	1,175	14	1,211	11
B5081 Byley Road (between Moss Lane	NB	204	0	241	2	243	4
	SB	486	2	521	3	556	3

Location	Direction	PM peak hour 2030 all vehicles	PM peak hour 2030 HGV	PM peak hour 2038 all vehicles	PM peak hour 2038 HGV	PM peak hour 2046 all vehicles	PM peak hour 2046 HGV
and B5082 Holmes Chapel Road)							
B5081 Byley Road (between B5309 Centurion Way and Moss Lane)	NB	195	3	427	3	581	5
	SB	345	6	308	7	255	7
A533 Davenham Bypass (between Jack Lane and London Road)	NB	1,085	27	1,128	26	1,130	27
	SB	1,057	8	1,094	11	1,136	8
A530 King Street (between A530 Croxton Lane and Whatcroft Hall Lane)	NB	892	25	845	27	857	27
	SB	1,061	7	1,057	7	1,043	6
A533 Davenham Bypass (between London Road and A556 Shurlach Road)	NB	723	0	741	0	751	0
	SB	1,180	10	1,210	13	1,242	10
A530 King Street (between Whatcroft Hall Lane and Davenham Road)	NB	892	25	848	27	859	27
	SB	1,058	7	1,056	7	1,042	6
London Road (between Hartford Road and Church Street)	EB	340	4	337	5	343	5
	WB	722	29	736	28	728	28
Church Street/Shipbrook Road (between London Road and Shurlach Lane)	EB	32	1	34	1	37	1
	WB	401	0	409	0	418	0
A50 London Road (between B5082 Northwich Road and Booth Bed Lane)	NB	66	1	64	1	62	1
	SB	188	2	216	2	315	2
Booth Bed Lane (between Main Road and A50 London Road)	NB	72	0	109	0	197	0
	SB	49	1	47	1	48	0
London Road (between Green Lane and A556 Chester Road)	NB	646	35	658	34	647	34
	SB	881	17	901	17	922	17
Davenham Road (between Shurlach Lane and A530 King Street)	EB	212	0	231	0	237	0
	WB	104	0	105	0	138	0
A556 Shurlach Road off-slip (between A556 Shurlach Road and A533 Davenham Bypass)	SB	875	10	873	10	911	10

Location	Direction	PM peak hour 2030 all vehicles	PM peak hour 2030 HGV	PM peak hour 2038 all vehicles	PM peak hour 2038 HGV	PM peak hour 2046 all vehicles	PM peak hour 2046 HGV
B5082 Holmes Chapel Road (between B5081 Byley Lane and Birches Lane)	EB	514	4	569	4	624	6
	WB	503	21	538	22	600	20
A533 London Road (between A556 Chester Road and A533 Kingsmead)	NB	1,157	16	1,186	15	1,223	14
	SB	1,136	7	1,177	7	1,239	7
A556 Shurlach Road (between A533 London Road and A556 off-slip to A533 Davenham Bypass)	EB	1,355	45	1,367	45	1,374	45
	WB	1,298	24	1,300	24	1,290	23
Crowders Lane (between B5082 Penny's Lane and A530 King Street)	EB	47	0	27	0	26	0
	WB	131	0	157	0	175	0
A556 Shurlach Road (between A556 off-slip to A533 Davenham Bypass and Shurlach Lane)	EB	1,355	45	1,367	45	1,374	45
	WB	2,172	34	2,173	34	2,201	33
A530 King Street (between Davenham Road and Gadbrook Distribution Centre)	NB	797	25	786	26	801	27
	SB	792	7	766	7	764	6
London Road (between Dunham Road and Old Hall Road)	NB	241	5	238	5	247	6
	SB	400	4	412	7	433	4
B5082 Penny's Lane (between A556 Shurlach Road and Crowders Lane)	EB	209	2	213	1	214	1
	WB	212	21	201	22	200	19
Old Hall Road (between Clifton Drive and Fairfield Road)	EB	236	5	244	5	253	6
	WB	42	4	52	4	54	4
Old Hall Road (between Granville Road and Clifton Drive)	EB	239	8	247	8	256	9
	WB	45	7	55	7	57	7
Old Hall Road (between London Road and Granville Road)	EB	239	8	247	8	256	9
	WB	45	7	55	7	57	7
London Road (between Old Hall Road and Lime Avenue)	NB	187	6	182	6	189	7
	SB	540	6	547	9	573	7

Location	Direction	PM peak hour 2030 all vehicles	PM peak hour 2030 HGV	PM peak hour 2038 all vehicles	PM peak hour 2038 HGV	PM peak hour 2046 all vehicles	PM peak hour 2046 HGV
Shipbrook Road (between Gadbrook Road and A556 Shurlach Road)	NB	210	1	208	1	225	1
	SB	109	0	120	0	156	0
Kingsley Drive (between Old Hall Road and Langley Road)	NB	12	0	12	0	13	0
	SB	8	0	8	0	9	0
A556 Shurlach Road (between Shipbrook Road and Gadbrook Road)	EB	1,253	44	1,279	45	1,305	45
	WB	2,077	36	2,079	37	2,095	35
A530 King Street (between Gadbrook Distribution Centre Access and A556 Shurlach Road)	NB	776	25	764	26	777	27
	SB	780	7	753	7	750	6
A556 Shurlach Road (between Gadbrook Road and A530 King Street)	EB	1,401	42	1,415	42	1,416	41
	WB	1,780	40	1,791	40	1,827	39
Gadbrook Road (between East Avenue and A556 Shurlach Road)	NB	382	3	388	3	387	3
	SB	222	0	221	0	222	0
East Avenue (between Gadbrook Road and Grange Road)	NB	149	1	141	1	131	1
	SB	7	3	50	3	55	3
A556 Shurlach Road (between A530 King Street and Birches Lane)	EB	1,451	56	1,467	56	1,463	53
	WB	1,684	58	1,720	59	1,742	55
East Avenue (between Grange Road and South Drive)	NB	150	1	142	1	132	1
	SB	8	3	13	3	29	3
West Avenue (between Gadbrook Road and Grange Road)	NB	6	1	58	1	58	1
	SB	9	0	11	0	12	0
Grange Road (between West Avenue and East Avenue)	EB	1	0	40	0	29	0
	WB	1	0	2	0	2	0
East Avenue (between South Drive and Central Road)	NB	195	1	184	1	162	1
	SB	35	3	36	3	38	3
	NB	1	0	1	0	1	0

Location	Direction	PM peak hour 2030 all vehicles	PM peak hour 2030 HGV	PM peak hour 2038 all vehicles	PM peak hour 2038 HGV	PM peak hour 2046 all vehicles	PM peak hour 2046 HGV
Central Road (between West Avenue and East Avenue)	SB	1	0	1	0	2	0
A530 King Street (between B5082 Middlewich Road and A556 Shurlach Road)	NB	661	27	650	26	612	26
	SB	871	9	858	9	869	9
Greenway Drive (between Agecroft Road and Belmont Road)	EB	5	0	5	0	6	0
	WB	8	3	10	3	14	3
A530 Griffiths Road (between A559 Manchester Road and B5082 Middlewich Road)	NB	362	19	361	19	352	19
	SB	518	8	504	8	546	8
Brockhurst Street (between Percy Street and A5509 Chester Way)	EB	96	0	86	0	70	0
	WB	65	0	54	0	45	0
Percy Street (between Whalley Road and A559 Chester Way)	NB	164	0	141	0	130	0
	SB	89	0	97	0	85	0
Applemarket Street (between Weaver Way and A559 Watling Street)	NB	134	1	109	1	81	1
	SB	203	0	198	0	189	0
A50 Holmes Chapel Road (between Booth Bed Lane and B5081 Middlewich Road)	NB	139	1	136	1	138	1
	SB	237	2	228	3	243	3
Birches Lane/Station Road (between A556 Shurlach Road and School Lane)	NB	218	8	231	8	242	8
	SB	19	3	20	3	21	3
A556 Shurlach Road (between Birches Lane and A559 Manchester Road)	NB	948	39	979	38	985	37
	SB	1,576	39	1,673	40	1,707	40
A559 Manchester Road (between A530 Griffiths Road and A559 Hall Lane)	EB	710	3	717	3	729	3
	WB	813	14	808	14	857	14
Station Road (between School Lane and A559 Manchester Road)	NB	192	1	203	1	212	1
	SB	50	1	52	1	55	1

Location	Direction	PM peak hour 2030 all vehicles	PM peak hour 2030 HGV	PM peak hour 2038 all vehicles	PM peak hour 2038 HGV	PM peak hour 2046 all vehicles	PM peak hour 2046 HGV
School Lane (between Station Road and Stubbs Lane)	EB	126	0	114	0	109	0
A559 Manchester Road (between A559 Hall Lane and Stubbs Lane)	EB	486	2	485	2	489	2
	WB	454	5	473	5	512	5
A559 Manchester Road (between Stubbs Lane and Fryer Road)	EB	585	2	573	2	571	2
	WB	270	5	285	5	347	5
A559 Manchester Road (between Fryer Road and A556 Shurlach Road)	EB	588	2	598	1	600	1
	WB	479	4	511	4	601	4
Fryer Road/Townshend Road (between A559 Hall Lane and A559 Manchester Road)	NB	277	1	280	1	311	1
	SB	71	2	79	1	86	1
A569 Hall Lane (between Townshend Road and Green Lane)	EB	176	4	154	3	154	3
	WB	441	11	439	12	454	10
A556 Chester Road (between A559 Manchester Road and Linnards Lane)	EB	1,244	41	1,264	40	1,261	39
	WB	1,782	43	1,896	45	2,012	45
A559 Hall Lane (between Green Lane and B5391 Church Street)	EB	181	4	147	3	135	3
	WB	415	11	415	12	429	10
A556 Chester Road (between Linnards Lane and Plumley Moor Road)	EB	973	45	970	46	1,050	48
	WB	1,502	45	1,499	46	1,466	46
A569 Marston Lane (between B5391 Church Street and Earles Lane)	NB	197	1	210	1	251	1
	SB	143	9	124	9	124	9
B5391 Church Street (between Earles Lane and A559 Marston Lane)	NB	374	3	375	5	380	5
	SB	93	6	112	6	145	9
Linnards Lane (between Green Lane and B5391 Church Street)	EB	231	5	288	6	310	6
	WB	121	9	157	9	185	8

Table 7-6: MA02 strategic and local road network future baseline flows AADT

Location	Direction	AM peak hour 2030 all vehicles	AM peak hour 2030 HGV	AM peak hour 2038 all vehicles
B5074 Swanlow Lane (between New Lane and Moors Lane)	NB	5,349	5,874	6,333
	SB	4,377	4,713	5,449
A530 Nantwich Road (between Brookhouse Lane and Clive Green Lane)	NB	10,370	10,255	11,271
	SB	8,444	8,844	9,506
Swanlow Drive (between B5074 Swanlow Lane and Darnhall School Lane)	EB	234	244	256
	WB	464	573	736
Darnhall School Lane (between Swanlow Drive and Glebe Green Drive)	NB	702	809	979
	SB	433	414	412
B5074 Swanlow Lane (between Moors Lane and Swanlow Drive)	NB	6,032	6,698	7,337
	SB	4,962	5,389	6,236
Middlewich Eastern Bypass (between A533 Booth Lane and Cledford Lane)	NB	1,195	1,967	2,670
	SB	3,082	4,519	7,190
Darnhall School Lane (between Glebe Green Drive and B5074 Swanlow Lane)	NB	45	46	52
	SB	831	1,525	1,800
Durham Drive/Glebe Green Drive (between Darnhall School Lane and Townsfields Drive)	NB	1,450	2,257	2,700
	SB	382	371	365
Durham Drive/Dover Drive/Mount Pleasant Drive (between Townsfields Drive and Denbigh Drive)	NB	1,234	1,875	1,704
	SB	1,079	1,141	1,231
Clive Green Lane/Clive Lane (between A530 Nantwich Road and A54 Middlewich Road)	EB	2,741	2,634	2,469
	WB	4,447	4,159	4,638
Townfields Drive (between B5074 Swanlow Lane and Durham Drive)	EB	1,183	1,387	2,080
	WB	271	235	218
Cledford Lane (between Jones Lane and Bradwall Road)	EB	729	1,408	1,501
	WB	30	117	155
Mount Pleasant Drive (between Denbigh Drive and Woodford Lane West)	EB	839	962	1,076
	WB	1,236	1,883	1,560
Woodford Lane West (between Mount Pleasant Drive and A54 Oakmere Road)	NB	854	974	1,076
	SB	1,471	2,123	1,677
Elm Road (between Long Lane South and A533 Booth Lane)	EB	335	362	477
	WB	190	196	425
A530 Nantwich Road (between Clive Green Lane and Brynlow Drive)	NB	7,193	7,585	8,508
	SB	7,003	7,738	8,973
Beeston Drive (between Denbigh Drive and Handley Hill)	NB	765	790	1,037
	SB	779	676	584
Brynlow Drive (between Long Lane and A530 Nantwich Road)	EB	1,174	1,303	1,262
	WB	2,373	2,738	3,921

Location	Direction	AM peak hour 2030 all vehicles	AM peak hour 2030 HGV	AM peak hour 2038 all vehicles
Hayhurst Avenue (between Long Lane and Sutton Lane)	EB	1,035	1,189	824
	WB	2,069	2,285	2,660
St Annes Avenue (between Sutton Lane and A533 Booth Lane)	EB	2,004	2,054	1,803
	WB	2,653	2,776	2,902
Beeston Drive (between Handley Hill and B5074 Swanlow Lane)	EB	771	795	1,044
	WB	784	681	590
Sutton Lane (between St Ann's Road and A533 Lewin Street)	NB	1,130	1,103	1,436
	SB	733	698	703
St Ann's Road (between Sutton Lane and Manor Lane)	NB	1,248	1,052	843
	SB	1,934	1,897	2,034
A530 Nantwich Road (between Brynlow Drive and A530 Newton Bank)	NB	6,625	7,015	8,150
	SB	5,237	5,731	5,953
Middlewich Eastern Bypass (between Cledford Lane and A54 Holmes Chapel Road)	NB	2,730	4,239	5,388
	SB	5,429	6,828	8,927
St Ann's Road (between Manor Lane and King Edward Street)	NB	1,384	1,147	935
	SB	2,291	2,209	2,370
Station Road (between B5355 Crook Lane and Rilshaw Lane)	EB	3,175	3,742	4,239
	WB	325	375	2,418
Dingle Lane/Weaver Street (between The Drumber and A54 Winsford Bypass)	NB	3,492	4,696	5,938
	SB	1,701	2,711	3,419
A54 Middlewich Road (between Clive Lane and A54 Winsford Bypass)	EB	7,146	7,363	7,098
	WB	7,633	7,771	7,618
Dene Drive (between A54 High Street and The Drumber)	NB	1,803	1,824	1,871
	SB	1,835	1,964	2,427
St Ann's Road (between King Edward Street and A530 Nantwich Road)	NB	1,656	1,477	1,295
	SB	2,652	2,571	2,713
B5355 Station Road (between A54 Middlewich Road and B5355 Crook Lane)	EB	3,349	4,074	4,955
	WB	897	920	2,579
Dingle Lane (between A54 High Street and The Drumber)	NB	4,471	4,462	4,472
	SB	2,441	1,771	1,008
A54 St Michael's Way (between A533 Leadsmithy Street and The Bull Ring)	EB	9,649	10,419	10,849
	WB	9,059	9,142	8,917
A54 Kinderton Street (between A533 Leadsmithy Street and King Street)	EB	11,834	12,421	12,791
	WB	6,051	6,216	6,154
A54 St Michael's Way (between The Bull Ring and A54 Chester Road)	EB	10,022	10,792	11,242
	WB	8,113	8,188	7,982
A54 St Michael's Way (between A54 Chester Road and The Bull Ring)	EB	9,997	10,769	11,221

Location	Direction	AM peak hour 2030 all vehicles	AM peak hour 2030 HGV	AM peak hour 2038 all vehicles
A54 Chester Road (between A54 St Michael's Way and A530 Newton Bank)	EB	15,624	16,428	17,182
A54 Chester Road (between A530 Newton Bank and A530 Croxton Lane)	EB	12,394	13,488	13,832
	WB	10,829	10,851	10,953
A54 Chester Road (between A530 Croxton Lane and A533 Northwich Road)	EB	8,490	9,376	9,679
	WB	7,990	7,759	7,626
Nixon Drive (between Abbotts Way and Basford Way)	EB	854	821	860
	WB	877	768	671
A54 Holmes Chapel Road (between King Street and B5309 Centurion Way)	EB	9,869	9,836	9,359
	WB	7,002	7,574	7,584
Nixon Drive (between B5074 Delamere Street and Abbotts Way)	EB	725	692	727
	WB	458	396	367
King Street (between New King Street and Hadrian Way)	NB	4,282	5,197	5,970
	SB	733	711	618
B5309 Centurion Way (between B5081 Byley Road and A54 Holmes Chapel Road)	EB	6,489	5,663	4,690
	WB	7,048	8,414	9,771
Road One (between A533 Bostock Road and A54 Middlewich Road)	NB	3,598	3,253	3,098
	SB	2,922	3,196	4,338
A54 Holmes Chapel Road (between B5309 Centurion Way and Brereton Lane)	EB	9,451	8,646	6,892
	WB	7,633	8,492	9,648
B5309 Centurion Way (between White Park Close and B5081 Byley Road)	EB	4,067	2,628	2,144
	WB	5,332	5,362	5,396
B5355 Wharton Road (between Nat Lane and Bradbury Road)	NB	1,660	1,536	1,409
	SB	1,620	1,523	1,550
A54 Holmes Chapel Road (between Brereton Lane and Poolford Lane)	EB	8,835	7,830	6,064
	WB	7,583	8,711	10,468
B5309 Centurion Way (between White Park Close and B5309 King Street)	NB	3,460	3,450	3,606
	SB	3,608	2,114	1,697
B5309 Centurion Way (between B5309 King Street and King Street Industrial Estate)	NB	3,810	3,849	3,983
	SB	3,757	2,347	1,897
B5355 Wharton Road (between A5018 Wharton Park Road and Bradbury Road)	NB	2,016	1,875	1,668
	SB	1,862	1,718	1,661
A533 Northwich Road/Bostock Road (between London Road and Bell Lane)	EB	3,727	4,345	4,421
	WB	3,303	2,925	3,060
B5309 King Street (between B5309 Centurion Way and Yatehouse Lane)	NB	7,201	8,154	8,982
	SB	3,897	2,456	1,813
A533 Bostock Road (between A5018 Bostock Road and London Road)	EB	1,866	2,119	2,202
	WB	1,922	2,462	3,489

Location	Direction	AM peak hour 2030 all vehicles	AM peak hour 2030 HGV	AM peak hour 2038 all vehicles
B5309 King Street (between Yatehouse Lane and A530 Croxton Lane)	NB	7,613	8,480	9,205
	SB	3,960	2,541	1,868
London Road (between A533 Bostock Road and Brick Kiln Lane)	NB	2,707	2,316	2,239
	SB	3,158	4,057	4,893
A533 Davenham Bypass (between A533 Bostock Road and Jack Lane)	NB	13,958	14,454	14,797
	SB	11,955	12,207	12,686
B5081 Byley Road (between Moss Lane and B5082 Holmes Chapel Road)	NB	3,018	3,282	3,460
	SB	4,860	5,010	5,343
B5081 Byley Road (between B5309 Centurion Way and Moss Lane)	NB	2,654	4,018	5,460
	SB	3,212	3,913	3,717
A533 Davenham Bypass (between Jack Lane and London Road)	NB	12,646	13,090	13,369
	SB	10,983	11,356	11,933
A530 King Street (between A530 Croxton Lane and Whatcroft Hall Lane)	NB	9,376	8,704	8,705
	SB	9,602	9,665	9,567
A533 Davenham Bypass (between London Road and A556 Shurlach Road)	NB	9,739	10,034	10,539
	SB	10,466	10,738	11,094
A530 King Street (between Whatcroft Hall Lane and Davenham Road)	NB	9,417	8,758	8,762
	SB	9,573	9,646	9,546
London Road (between Hartford Road and Church Street)	EB	6,036	5,974	6,046
	WB	7,159	7,209	6,987
Church Street/Shipbrook Road (between London Road and Shurlach Lane)	EB	3,569	3,886	4,085
	WB	2,245	2,291	2,339
A50 London Road (between B5082 Northwich Road and Booth Bed Lane)	NB	1,193	1,274	1,804
	SB	1,740	1,969	2,688
Booth Bed Lane (between Main Road and A50 London Road)	NB	824	1,187	1,807
	SB	580	557	514
London Road (between Green Lane and A556 Chester Road)	NB	7,890	7,980	8,071
	SB	8,065	8,081	8,157
Davenham Road (between Shurlach Lane and A530 King Street)	EB	2,435	2,747	2,897
	WB	3,150	3,176	3,394
A556 Shurlach Road off-slip (between A556 Shurlach Road and A533 Davenham Bypass)	SB	6,127	6,086	6,338
B5082 Holmes Chapel Road (between B5081 Byley Lane and Birches Lane)	EB	6,068	6,376	6,968
	WB	5,331	6,060	6,501
A533 London Road (between A556 Chester Road and A533 Kingsmead)	NB	10,850	11,030	11,113
	SB	15,100	15,515	16,074
	EB	20,168	20,534	20,990

Location	Direction	AM peak hour 2030 all vehicles	AM peak hour 2030 HGV	AM peak hour 2038 all vehicles
A556 Shurlach Road (between A533 London Road and A556 off-slip to A533 Davenham Bypass)	WB	11,923	12,018	11,997
Crowders Lane (between B5082 Penny's Lane and A530 King Street)	EB	1,143	1,348	1,666
	WB	2,092	2,174	2,145
A556 Shurlach Road (between A556 off-slip to A533 Davenham Bypass and Shurlach Lane)	EB	20,168	20,534	20,991
	WB	18,050	18,103	18,335
A530 King Street (between Davenham Road and Gadbrook Distribution Centre)	NB	7,771	7,237	7,089
	SB	7,811	7,872	8,047
London Road (between Dunham Road and Old Hall Road)	NB	1,876	1,879	2,167
	SB	3,176	3,280	3,452
B5082 Penny's Lane (between A556 Shurlach Road and Crowders Lane)	EB	2,610	2,381	2,231
	WB	2,342	2,035	1,916
Old Hall Road (between Clifton Drive and Fairfield Road)	EB	1,878	1,950	2,043
	WB	685	759	798
Old Hall Road (between Granville Road and Clifton Drive)	EB	1,909	1,982	2,074
	WB	716	790	828
Old Hall Road (between London Road and Granville Road)	EB	1,984	2,065	2,163
	WB	800	883	867
London Road (between Old Hall Road and Lime Avenue)	NB	2,072	2,095	2,341
	SB	4,556	4,676	4,921
Shipbrook Road (between Gadbrook Road and A556 Shurlach Road)	NB	1,999	2,038	2,274
	SB	853	952	1,137
Kingsley Drive (between Old Hall Road and Langley Road)	NB	74	78	83
	SB	121	127	134
A556 Shurlach Road (between Shipbrook Road and Gadbrook Road)	EB	19,022	19,446	19,852
	WB	16,584	16,581	16,730
A530 King Street (between Gadbrook Distribution Centre Access and A556 Shurlach Road)	NB	7,689	7,151	6,997
	SB	7,651	7,705	7,870
A556 Shurlach Road (between Gadbrook Road and A530 King Street)	EB	16,741	17,047	17,198
	WB	18,743	18,924	19,194
Gadbrook Road (between East Avenue and A556 Shurlach Road)	NB	2,959	3,010	2,929
	SB	2,766	2,766	2,777
East Avenue (between Gadbrook Road and Grange Road)	NB	986	947	916
	SB	280	661	687
A556 Shurlach Road (between A530 King Street and Birches Lane)	EB	17,828	17,992	18,026
	WB	17,432	18,524	19,230
	NB	1,002	967	939

Location	Direction	AM peak hour 2030 all vehicles	AM peak hour 2030 HGV	AM peak hour 2038 all vehicles
East Avenue (between Grange Road and South Drive)	SB	279	440	545
West Avenue (between Gadbrook Road and Grange Road)	NB	233	523	506
	SB	95	126	162
Grange Road (between West Avenue and East Avenue)	EB	24	249	175
	WB	7	9	10
East Avenue (between South Drive and Central Road)	NB	1,162	1,111	1,015
	SB	564	711	746
Central Road (between West Avenue and East Avenue)	NB	12	12	13
	SB	114	210	117
A530 King Street (between B5082 Middlewich Road and A556 Shurlach Road)	NB	6,110	6,067	5,767
	SB	8,891	8,635	8,620
Greenway Drive (between Agecroft Road and Belmont Road)	EB	96	83	84
	WB	119	135	156
A530 Griffiths Road (between A559 Manchester Road and B5082 Middlewich Road)	NB	2,909	2,991	2,983
	SB	5,623	5,451	5,736
Brockhurst Street (between Percy Street and A5509 Chester Way)	EB	993	962	1,097
	WB	759	716	693
Percy Street (between Whalley Road and A559 Chester Way)	NB	1,206	1,096	1,054
	SB	789	841	582
Applemarket Street (between Weaver Way and A559 Watling Street)	NB	1,609	1,508	1,104
	SB	1,718	1,676	1,580
A50 Holmes Chapel Road (between Booth Bed Lane and B5081 Middlewich Road)	NB	2,016	2,217	2,788
	SB	2,319	2,282	2,380
Birches Lane/Station Road (between A556 Shurlach Road and School Lane)	NB	2,785	2,950	3,094
	SB	241	255	267
A556 Shurlach Road (between Birches Lane and A559 Manchester Road)	NB	12,384	12,802	13,216
	SB	16,563	17,334	18,018
A559 Manchester Road (between A530 Griffiths Road and A559 Hall Lane)	EB	6,635	6,859	7,194
	WB	9,141	9,052	9,401
Station Road (between School Lane and A559 Manchester Road)	NB	2,582	2,735	2,868
	SB	1,088	1,152	1,208
School Lane (between Station Road and Stubbs Lane)	EB	1,328	1,273	1,176
A559 Manchester Road (between A559 Hall Lane and Stubbs Lane)	EB	4,117	4,096	4,154
	WB	5,779	5,950	6,048
A559 Manchester Road (between Stubbs Lane and Fryer Road)	EB	4,352	4,280	4,401
	WB	3,772	3,896	4,251

Location	Direction	AM peak hour 2030 all vehicles	AM peak hour 2030 HGV	AM peak hour 2038 all vehicles
A559 Manchester Road (between Fryer Road and A556 Shurlach Road)	EB	4,949	5,044	5,088
	WB	5,349	5,584	6,126
Fryer Road/Townshend Road (between A559 Hall Lane and A559 Manchester Road)	NB	2,199	2,249	2,435
	SB	1,219	1,324	1,247
A569 Hall Lane (between Townshend Road and Green Lane)	EB	2,087	1,853	1,873
	WB	4,167	4,417	4,638
A556 Chester Road (between A559 Manchester Road and Linnards Lane)	EB	14,567	14,901	15,429
	WB	19,123	19,962	21,293
A559 Hall Lane (between Green Lane and B5391 Church Street)	EB	1,810	1,498	1,445
	WB	4,793	5,015	5,238
A556 Chester Road (between Linnards Lane and Plumley Moor Road)	EB	17,669	17,510	18,046
	WB	19,330	19,329	19,234
A569 Marston Lane (between B5391 Church Street and Earles Lane)	NB	1,825	1,962	2,263
	SB	2,203	1,317	1,361
B5391 Church Street (between Earles Lane and A559 Marston Lane)	NB	2,848	3,035	3,175
	SB	1,745	1,838	2,012
Linnards Lane (between Green Lane and B5391 Church Street)	EB	3,832	4,041	4,512
	WB	1,363	1,604	1,825

Junction operation

7.4.12 The operation of the key junctions that are likely to be directly affected by the Proposed Scheme or are on the main access routes from the strategic road network (SRN) through the study area to the construction sites, or are otherwise affected by the construction or operation of the scheme, have been assessed using the existing and future baseline traffic flows.

7.4.13 SATURN software has been used to calculate the existing capacity of the majority of priority-controlled junctions, roundabouts and signal-controlled junctions within the study area. Where junctions are not included in the strategic models, Junctions 9 software has been used to calculate the existing capacity of priority-controlled junctions and roundabouts within the study area and LinSig software has been used to calculate the existing capacity of signal-controlled junctions.

7.4.14 The results for the MA02 area are presented from south to north, firstly for junctions on the strategic road network, followed by junctions on other roads.

7.4.15 Where a junction will be affected by construction of the Proposed Scheme, future baseline results are included for 2030. Where a junction will be affected by the operation of the Proposed Scheme, which is primarily due to changes in traffic as a result of infrastructure changes or changes in demand associated with the Proposed Scheme, results are included for 2038 and 2046. Junctions affected by both construction and operation include results for all three assessment years.

M6 junction 18/A54 Middlewich Road/A54 Holmes Chapel Road

7.4.16 This junction is a four-arm priority controlled (give way) roundabout with no controlled pedestrian crossing facilities. The operation of the junction has been assessed for the 2018 existing baseline AM and PM peak hours using SATURN software and is shown in Table 7-7.

Table 7-7: 2018 baseline performance at M6 junction 18/A54 Middlewich Road/A54 Holmes Chapel Road junction

Approach	Flow, PCU*/hr	VoC**	Q***, PCU
	2018 AM peak hour (08:00–09:00) baseline results		
M6 junction 18 southbound off-slip	712	38%	0
A54 Middlewich Road	347	22%	0
M6 junction 18 northbound off-slip	645	27%	0
A54 Holmes Chapel Road	960	40%	0
	2018 PM peak hour (17:00–18:00) baseline results		
M6 junction 18 southbound off-slip	215	10%	0

Approach	Flow, PCU*/hr	VoC**	Q***, PCU
A54 Middlewich Road	355	17%	0
M6 junction 18 northbound off-slip	417	18%	0
A54 Holmes Chapel Road	800	33%	0

**PCU = Passenger Car Unit*

***VoC = Volume over Capacity*

***Q = Queue

7.4.17 The assessment shows that this junction operates well within capacity in the 2018 baseline.

7.4.18 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-8. As the junction is affected by both construction and operation of the Proposed Scheme, future baseline results are presented for 2030, 2038 and 2046.

Table 7-8: Future baseline performance at M6 junction 18/A54 Middlewich Road/A54 Holmes Chapel Road junction

Approach	Flow, PCU/ hr	VoC	Q, PCU	Flow, PCU/ hr	VoC	Q, PCU	Flow, PCU/ hr	VoC	Q, PCU
	2030 AM peak hour (08:00–09:00)			**2038 AM peak hour (08:00–09:00)**			**2046 AM peak hour (08:00–09:00)**		
M6 junction 18 southbound off-slip	875	46%	0	780	40%	0	697	36%	0
A54 Middlewich Road	383	24%	0	436	26%	0	525	30%	0
M6 junction 18 northbound off-slip	699	30%	0	768	34%	0	798	36%	0
A54 Holmes Chapel Road	928	39%	0	962	41%	0	964	41%	0
	2030 PM peak hour (17:00–18:00)			**2038 PM peak hour (17:00–18:00)**			**2046 PM peak hour (17:00–18:00)**		
M6 junction 18 southbound off-slip	310	15%	0	397	18%	0	533	23%	0
A54 Middlewich Road	403	20%	0	454	23%	0	538	26%	0
M6 junction 18 northbound off-slip	448	21%	0	464	22%	0	490	25%	0
A54 Holmes Chapel Road	852	35%	0	610	25%	0	290	12%	0

7.4.19 The assessment shows that this junction operates well within capacity in the 2030, 2038 and 2046 future baselines.

A530 Nantwich Road/Chapel Lane

7.4.20 This junction is a three-arm priority controlled (give way) T-junction with no controlled pedestrian crossing facilities. The operation of the junction has been assessed for the 2018 existing baseline AM and PM peak hours using SATURN software and is shown in Table 7-9.

Table 7-9: 2018 baseline performance at A530 Nantwich Road/Chapel Lane junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2018 AM peak hour (08:00–09:00) baseline results		
A530 Nantwich Road (north)	726	44%	0
Chapel Lane	268	28%	1
A530 Nantwich Road (south)	994	66%	0
	2018 PM peak hour (17:00–18:00) baseline results		
A530 Nantwich Road (north)	583	36%	0
Chapel Lane	218	21%	0
A530 Nantwich Road (south)	824	51%	0

7.4.21 The assessment shows that this junction operates well within capacity in the 2018 baseline.

7.4.22 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-10. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 7-10: Future baseline performance at A530 Nantwich Road/Chapel Lane junction

Approach	Flow, PCU/hr	RFC	Q, PCU
	2030 AM peak hour (08:00–09:00)		
A530 Nantwich Road (north)	745	45%	0
Chapel Lane	407	41%	1
A530 Nantwich Road (south)	876	61%	0
	2030 PM peak hour (17:00–18:00)		
A530 Nantwich Road (north)	545	33%	0
Chapel Lane	463	73%	3
A530 Nantwich Road (south)	616	38%	0

7.4.23 The assessment shows that this junction operates well within capacity in the 2030 future baseline.

A533 Booth Lane/Cledford Lane/Cross Lane

7.4.24 This junction is a four-arm signal controlled crossroad with signal controlled pedestrian crossing facilities. The operation of the junction has been assessed for the 2018 existing baseline AM and PM peak hours using SATURN software and is shown in Table 7-11.

Table 7-11: 2018 baseline performance at A533 Booth Lane/Cledford Lane/Cross Lane junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2018 AM peak hour (08:00–09:00) baseline results		
A533 Booth Lane (north)	254	13%	0
Cledford Lane	58	7%	0
A533 Booth Lane (south)	530	29%	0
Cross Lane	85	24%	0

Approach	Flow, PCU/hr	VoC	Q, PCU
	2018 PM peak hour (17:00–18:00) baseline results		
A533 Booth Lane (north)	369	19%	0
Cledford Lane	216	44%	2
A533 Booth Lane (south)	562	35%	0
Cross Lane	57	20%	0

7.4.25 The assessment shows that this junction operates well within capacity in the 2018 baseline.

7.4.26 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-12. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 7-12: Future baseline performance at A533 Booth Lane/Cledford Lane/Cross Lane junction

Approach	Flow, PCU/hr	RFC	Q, PCU
	2030 AM peak hour (08:00–09:00)		
A533 Booth Lane (north)	193	10%	0
Cledford Lane	95	11%	0
A533 Booth Lane (south)	495	28%	0
Cross Lane	336	85%	2
	2030 PM peak hour (17:00–18:00)		
A533 Booth Lane (north)	188	10%	0
Cledford Lane	364	88%	6
A533 Booth Lane (south)	633	38%	0
Cross Lane	175	51%	0

7.4.27 The assessment shows that this junction operates close to capacity in the 2030 future baseline with a maximum VoC of 85% on the Cross Lane approach in the AM peak hour with an associated queue length of two PCU. In the PM peak hour, the maximum VoC of 88% is on the Cledford Lane approach with a queue length of six PCU.

A530 Nantwich Road/Clive Green Lane

7.4.28 This junction is a three-arm priority controlled (give way) T-junction with no pedestrian crossing facilities. The operation of the junction has been assessed for the 2017 existing baseline AM and PM peak hours using Junctions 9 software and is shown in Table 7-13.

Table 7-13: 2017 baseline performance at A530 Nantwich Road/Clive Green Lane junction

Approach	Flow, PCU/hr	RFC	Q, PCU
	2017 AM peak hour (08:00–09:00) baseline results		
A530 Nantwich Road (north) (ahead and right)	616	0.41	2
Clive Green Lane (left)	39	0.96	3
Clive Green Lane (right)	269	0.94	8
A530 Nantwich Road (south) (ahead and left)	1,029	-	-

Approach	Flow, PCU/hr	RFC	Q, PCU
	2017 PM peak hour (17:00–18:00) baseline results		
A530 Nantwich Road (north) (ahead and right)	500	0.24	1
Clive Green Lane (left)	98	0.99	6
Clive Green Lane (right)	299	0.99	12
A530 Nantwich Road (south) (ahead and left)	1,043	-	-

7.4.29 The assessment shows that this junction operates close to capacity in the AM peak hour with a maximum RFC of 0.96 on the Clive Green Lane (left) approach with an associated queue length of three PCU. In the PM peak hour, the maximum RFC of 0.99 is on both the Clive Green Lane (left) and Clive Green Lane (right) approaches with a queue length of six PCU and 12 PCU respectively.

7.4.30 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-14. As the junction is affected by both construction and operation of the Proposed Scheme, future baseline results are presented for 2030, 2038 and 2046.

Table 7-14: Future baseline performance at A530 Nantwich Road/Clive Green Lane junction

Approach	Flow, PCU/hr	RFC	Q, PCU	Flow, PCU/hr	RFC	Q, PCU	Flow, PCU/hr	RFC	Q, PCU
	2030 AM peak hour (08:00–09:00)			**2038 AM peak hour (08:00–09:00)**			**2046 AM peak hour (08:00–09:00)**		
A530 Nantwich Road (north) (ahead and right)	756	0.56	3	1,059	0.00	0	1,184	0	0
Clive Green Lane (left)	40	1.09	4	46	1.15	4	54	1.53	12
Clive Green Lane (right)	249	1.08	18	231	1.15	18	216	1.60	43
A530 Nantwich Road (south) (ahead and left)	1,088	-	-	856	0.74	3	907	1.00	33
	2030 PM peak hour (17:00–18:00)			**2038 PM peak hour (17:00–18:00)**			**2046 PM peak hour (17:00–18:00)**		
A530 Nantwich Road (north) (ahead and right)	559	0.27	1	1,045	0.00	0	1,139	0	0
Clive Green Lane (left)	123	1.09	10	126	1.12	11	131	1.33	20
Clive Green Lane (right)	295	1.09	21	283	1.11	22	252	1.31	37
A530 Nantwich Road (south) (ahead and left)	1,036	-	-	532	0.26	1	750	0.40	2

7.4.31 The assessment shows that this junction operates over capacity in the 2030 future baseline with a maximum RFC of 1.09 on the Clive Green Lane (left) approach in the AM peak hour with an associated queue length of four PCU. In the PM peak hour, the maximum RFC of 1.09

is on both the Clive Green Lane (left) and Clive Green Lane (right) approaches with a queue length of 10 PCU and 21 PCU respectively.

7.4.32 The assessment shows that this junction operates over capacity in the 2038 future baseline with a maximum RFC of 1.15 on the Clive Green Lane (right) approach in the AM peak hour with an associated queue length of 18 PCU. In the PM peak hour, the maximum RFC of 1.12 is on the Clive Green Lane (left) approach with a queue length of 11 PCU.

7.4.33 The assessment shows that this junction operates over capacity in the 2046 future baseline with a maximum RFC of 1.60 on the Clive Green Lane (right) approach in the AM peak hour with an associated queue length of 43 PCU. In the PM peak hour, the maximum RFC of 1.33 is on the Clive Green Lane (left) approach with a queue length of 20 PCU.

Clive Green Lane/Coalpit Lane

7.4.34 This junction is a three-arm priority controlled (give way) T-junction with no controlled pedestrian crossing facilities. The operation of the junction has been assessed for the 2017 existing baseline AM and PM peak hours using Junctions 9 software and as is shown in Table 7-15.

Table 7-15: 2017 baseline performance at Clive Green Lane/Coalpit Lane junction

Approach	Flow, PCU/hr	RFC	Q, PCU
	2017 AM peak hour (08:00–09:00) baseline results		
Clive Green Lane (west) (ahead and left)	534	-	-
Coalpit Lane (left)	60	0.11	0
Coalpit Lane (right)	55	0.15	0
Clive Green Lane (east) (ahead and right)	248	0.16	0
	2017 AM peak hour (17:00–18:00) baseline results		
Clive Green Lane (west) (ahead and left)	650	-	-
Coalpit Lane (left)	66	0.13	1
Coalpit Lane (right)	67	0.19	0
Clive Green Lane (east) (ahead and right)	221	0.14	2

7.4.35 The assessment shows that this junction operates well within capacity in the 2017 existing baseline.

7.4.36 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-16. As the junction is affected by both construction and operation of the Proposed Scheme, future baseline results are presented for 2030, 2038 and 2046.

Table 7-16: Future baseline performance at Clive Green Lane/Coalpit Lane junction

Approach	Flow, PCU/hr	RFC	Q, PCU	Flow, PCU/hr	RFC	Q, PCU	Flow, PCU/hr	RFC	Q, PCU
	2030 AM peak hour (08:00–09:00)			**2038 AM peak hour (08:00–09:00)**			**2046 AM peak hour (08:00–09:00)**		
Clive Green Lane (west) (ahead and left)	569	-	-	564	-	-	620	-	-
Coalpit Lane (left)	122	0.22	0	138	0.25	0	142	0.26	0
Coalpit Lane (right)	24	0.08	0	20	0.07	0	20	0.07	0
Clive Green Lane (east) (ahead and right)	305	0.45	1	325	0.51	1	336	0.55	1
	2030 PM peak hour (17:00–18:00)			**2038 PM peak hour (17:00–18:00)**			**2046 PM peak hour (17:00–18:00)**		
Clive Green Lane (west) (ahead and left)	569	-	-	543	-	-	561	-	-
Coalpit Lane (left)	213	0.39	1	245	0.44	1	265	0.48	1
Coalpit Lane (right)	16	0.06	0	12	0.04	0	10	0.04	0
Clive Green Lane (east) (ahead and right)	344	0.57	2	369	0.63	2	385	0.69	2

7.4.37 The assessment shows that this junction operates well within capacity in 2030, 2038 and 2046 future baseline.

B5074 Swanlow Lane/Townfields Road/Townfields Drive

7.4.38 This junction is a four-arm signal controlled junction with controlled pedestrian crossing facilities. The operation of the junction has been assessed for the 2018 existing baseline AM and PM peak hours using SATURN software and is shown in Table 7-17.

Table 7-17: 2018 baseline performance at B5074 Swanlow Lane/Townfields Road/Townfields Drive junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2018 AM peak hour (08:00–09:00) baseline results		
Townfields Road	198	28%	5
B5074 Swanlow Lane (south)	647	89%	11
Townfields Drive	83	14%	2
B5074 Swanlow Lane (north)	266	31%	5
	2018 PM peak hour (17:00–18:00) baseline results		
Townfields Road	326	41%	7
B5074 Swanlow Lane (south)	535	95%	10
Townfields Drive	53	9%	1
B5074 Swanlow Lane (north)	336	44%	7

7.4.39 The assessment shows that this junction operates close to capacity in the 2018 baseline with a maximum VoC of 89% on the B5074 Swanlow Lane (south) approach in the AM peak hour

with an associated queue length of 11 PCU. In the PM peak hour, the maximum VoC of 95% is on the B5074 Swanlow Lane (south) approach with a queue length of 10 PCU.

7.4.40 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-18. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 7-18: Future baseline performance at B5074 Swanlow Lane/Townfields Road/Townfields Drive junction

Approach	Flow, PCU/hr	RFC	Q, PCU
	2030 AM peak hour (08:00–09:00)		
Townfields Road	247	35%	6
B5074 Swanlow Lane (south)	651	96%	11
Townfields Drive	140	23%	3
B5074 Swanlow Lane (north)	333	39%	7
	2030 PM peak hour (17:00–18:00)		
Townfields Road	350	43%	7
B5074 Swanlow Lane (south)	526	94%	10
Townfields Drive	78	14%	2
B5074 Swanlow Lane (north)	332	44%	7

7.4.41 The assessment shows that this junction operates close to capacity in the 2030 future baseline with a maximum VoC of 96% on the B5074 Swanlow Lane (south) approach in the AM peak hour with an associated queue length of 11 PCU. In the PM peak hour, the maximum VoC of 94% is on the B5074 Swanlow Lane (south) approach with a queue length of 10 PCU.

A530 Nantwich Road/Brynlow Drive

7.4.42 This junction is a three-arm priority controlled (give way) T-junction with no controlled pedestrian crossing facilities. The operation of the junction has been assessed for the 2018 existing baseline AM and PM peak hours using SATURN software and is shown in Table 7-19.

Table 7-19: 2018 baseline performance at A530 Nantwich Road/Brynlow Drive junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2018 AM peak hour (08:00–09:00) baseline results		
A530 Nantwich Road (north)	410	21%	0
Brynlow Drive	237	37%	0
A530 Nantwich Road (south)	592	49%	0
	2018 PM peak hour (17:00–18:00) baseline results		
A530 Nantwich Road (north)	448	23%	0
Brynlow Drive	135	22%	0
A530 Nantwich Road (south)	610	48%	0

7.4.43 The assessment shows that this junction operates well within capacity in the 2018 baseline.

7.4.44 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-20. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 7-20: Future baseline performance at A530 Nantwich Road/Brynlow Drive junction

Approach	Flow, PCU/hr	RFC	Q, PCU
	2030 AM peak hour (08:00–09:00)		
A530 Nantwich Road (north)	510	26%	0
Brynlow Drive	261	48%	1
A530 Nantwich Road (south)	654	55%	0
	2030 PM peak hour (17:00–18:00)		
A530 Nantwich Road (north)	457	24%	0
Brynlow Drive	194	33%	0
A530 Nantwich Road (south)	689	55%	0

7.4.45 The assessment shows that this junction operates well within capacity in the 2030 future baseline.

Clive Lane/Clive Green Lane

7.4.46 This junction is a three-arm priority controlled (give way) T-junction with no controlled pedestrian crossing facilities. Clive Back Lane approach is a minor arm that is not included within the strategic traffic model. The operation of the junction has been assessed for the 2018 existing baseline AM and PM peak hours using SATURN software and is shown in Table 7-21.

Table 7-21: 2018 baseline performance at Clive Lane/Clive Green Lane junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2018 AM peak hour (08:00–09:00) baseline results		
Clive Lane	262	14%	0
Clive Green Lane	484	25%	0
Clive Back Lane	-	-	-
	2018 PM peak hour (17:00–18:00) baseline results		
Clive Lane	269	14%	0
Clive Green Lane	425	22%	0
Clive Back Lane	-	-	-

7.4.47 The assessment shows that this junction operates well within capacity in the 2018 baseline.

7.4.48 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-22. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 7-22: Future baseline performance at Clive Lane/Clive Green Lane junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2030 AM peak hour (08:00–09:00)		
Clive Lane	246	13%	0
Clive Green Lane	492	25%	0
Clive Back Lane	-	-	-
	2030 PM peak hour (17:00–18:00)		
Clive Lane	285	15%	0
Clive Green Lane	369	19%	0
Clive Back Lane	-	-	-

7.4.49 The assessment shows that this junction operates well within capacity in the 2030 future baseline.

Clive Lane/Rilshaw Lane

7.4.50 This junction is a three-arm priority controlled (give-way) T-junction with no controlled pedestrian crossing facilities. Rilshaw Lane approach is a minor arm that is not included within the strategic traffic model. The operation of the junction has been assessed for the 2018 existing baseline AM and PM peak hours using SATURN software and is shown in Table 7-23.

Table 7-23: 2018 baseline performance at Clive Lane/Rilshaw Lane junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2018 AM peak hour (08:00–09:00) baseline results		
Clive Lane (north)	257	15%	0
Rilshaw Lane	-	-	-
Clive Lane (south)	484	25%	0
	2018 PM peak hour (17:00–18:00) baseline results		
Clive Lane (north)	302	22%	0
Rilshaw Lane	-	-	-
Clive Lane (south)	432	22%	0

7.4.51 The assessment shows that this junction operates well within capacity in the 2018 baseline.

7.4.52 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-24. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 7-24: Future baseline performance at Clive Lane/Rilshaw Lane junction

Approach	Flow, PCU/hr	RFC	Q, PCU
	2030 AM peak hour (08:00–09:00)		
Clive Lane (north)	256	21%	0

Approach	Flow, PCU/hr	RFC	Q, PCU
Rilshaw Lane	-	-	-
Clive Lane (south)	492	25%	0
	2030 PM peak hour (17:00–18:00)		
Clive Lane (north)	333	28%	0
Rilshaw Lane	-	-	-
Clive Lane (south)	376	19%	0

7.4.53 The assessment shows that this junction operates well within capacity in the 2030 future baseline.

A54 Middlewich Road/Clive Lane/Road One

7.4.54 This junction is a four-arm signal controlled crossroads with no controlled pedestrian crossing facilities. The operation of the junction has been assessed for the 2018 existing baseline AM and PM peak hours using SATURN software and is shown in Table 7-25.

Table 7-25: 2018 baseline performance at A54 Middlewich Road/Clive Lane/Road One junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2018 AM peak hour (08:00–09:00) baseline results		
Road One	223	34%	3
A54 Middlewich Road (east)	498	53%	5
Clive Lane	496	94%	8
A54 Middlewich Road (west)	715	100%	9
	2018 PM peak hour (17:00–18:00) baseline results		
Road One	499	86%	8
A54 Middlewich Road (east)	411	33%	4
Clive Lane	466	101%	8
A54 Middlewich Road (west)	479	61%	7

7.4.55 The assessment shows that this junction operates over capacity in the 2018 baseline with a maximum VoC of 100% on the A54 Middlewich Road (west) approach in the AM peak hour with an associated queue length of nine PCU. In the PM peak hour, the maximum VoC of 101% is on the Clive Lane approach with a queue length of eight PCU.

7.4.56 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-26. As the junction is affected by both construction and operation of the Proposed Scheme, future baseline results are presented for 2030, 2038 and 2046.

Table 7-26: Future baseline performance at A54 Middlewich Road/Clive Lane/Road One junction

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
	2030 AM peak hour (08:00–09:00)			**2038 AM peak hour (08:00–09:00)**			**2046 AM peak hour (08:00–09:00)**		
Road One	253	38%	4	284	43%	4	318	48%	5
A54 Middlewich Road (east)	545	60%	5	553	63%	5	474	49%	4
Clive Lane	497	94%	8	506	98%	8	507	98%	8
A54 Middlewich Road (west)	789	93%	10	788	96%	10	750	100%	10
	2030 PM peak hour (17:00–18:00)			**2038 PM peak hour (17:00–18:00)**			**2046 PM peak hour (17:00–18:00)**		
Road One	546	91%	9	582	97%	10	587	97%	10
A54 Middlewich Road (east)	411	34%	4	432	36%	4	443	36%	4
Clive Lane	477	103%	8	486	104%	8	486	104%	8
A54 Middlewich Road (west)	558	71%	8	582	74%	8	571	71%	8

7.4.57 In the 2030 future baseline, the assessment shows that this junction operates close to capacity in the AM peak hour with a maximum VoC of 94% on the Clive Lane approach with associated queue lengths of 10 PCU. In the PM peak hour, this junction operates over capacity in the 2030 future baseline with a maximum VoC of 103% on the Clive Lane approach with an associated queue length of eight PCU.

7.4.58 In the 2038 future baseline, the assessment shows that this junction operates close to capacity in the AM peak hour with a maximum VoC of 98% on the Clive Lane approach with an associated queue length of eight PCU. In the PM peak hour, this junction operates over capacity in the 2038 future baseline with a maximum VoC of 104% on the Clive Lane approach and an associated queue length of eight PCU.

7.4.59 In the 2046 future baseline, this junction operates over capacity in the AM peak hour with a maximum VoC of 100% on the A54 Middlewich Road (west) approach in the AM peak hour with an associated queue length of 10 PCU. In the PM peak hour, this junction operates over capacity in the 2046 future baseline with a maximum VoC of 104% is on the Clive Lane approach with a queue length of eight PCU.

A530 Nantwich Road/St Ann's Road

7.4.60 This junction is a three-arm priority controlled (give way) T-junction with no controlled pedestrian crossing facilities). The operation of the junction has been assessed for the 2018 existing baseline AM and PM peak hours using SATURN software and is shown in Table 7-27.

Table 7-27: 2018 baseline performance at A530 Nantwich Road/St Ann's Road junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2018 AM peak hour (08:00–09:00) baseline results		
A530 Nantwich Road (north)	590	31%	0
St Ann's Road	207	95%	4
A530 Nantwich Road (south)	627	45%	0
	2018 PM peak hour (17:00–18:00) baseline results		
A530 Nantwich Road (north)	800	42%	0
St Ann's Road	194	100%	5
A530 Nantwich Road (south)	602	39%	0

7.4.61 The assessment shows that this junction operates close to capacity in the 2018 baseline with a maximum VoC of 95% on the St Ann's Road approach in the AM peak hour with an associated queue length of four PCU. In the PM peak hour, this junction operates over capacity in the 2018 baseline with a maximum VoC of 100% on the St Ann's Road approach in the AM peak hour with an associated queue length of five PCU.

7.4.62 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-28. As the junction is affected by both construction and operation of the Proposed Scheme, future baseline results are presented for 2030, 2038 and 2046.

Table 7-28: Future baseline performance at A530 Nantwich Road/St Ann's Road junction

Approach	Flow, PCU/hr	RFC	Q, PCU	Flow, PCU/hr	RFC	Q, PCU	Flow, PCU/hr	RFC	Q, PCU
	2030 AM peak hour (08:00–09:00)			**2038 AM peak hour (08:00–09:00)**			**2046 AM peak hour (08:00–09:00)**		
A530 Nantwich Road (north)	697	37%	0	785	41%	0	798	42%	0
St Ann's Road	160	83%	2	141	88%	2	126	92%	3
A530 Nantwich Road (south)	686	51%	0	707	54%	0	796	59%	0
	2030 PM peak hour (17:00–18:00)			**2038 PM peak hour (17:00–18:00)**			**2046 PM peak hour (17:00–18:00)**		
A530 Nantwich Road (north)	844	45%	0	848	45%	0	905	48%	0
St Ann's Road	171	97%	4	156	98%	4	133	101%	4
A530 Nantwich Road (south)	665	42%	0	715	46%	0	836	55%	0

7.4.63 In the 2030 future baseline, the assessment shows that this junction operates within capacity in the AM peak hour with a maximum VoC of 83% on the St Ann's Road approach with an associated queue length of two PCU. In the PM peak hour, the assessment shows that this junction operates close to capacity in the 2030 future baseline with a maximum VoC of 97% on the St Ann's Road approach with an associated queue length of four PCU.

7.4.64 In the 2038 future baseline, the assessment shows that this junction operates close to capacity with a maximum VoC of 88% on the St Ann's Road approach in the AM peak hour with an associated queue length of two PCU. In the PM peak hour, the maximum VoC of 98% is on the St Ann's Road approach with a queue length of four PCU.

7.4.65 In the 2046 future baseline, the assessment shows that this junction operates close to capacity in the AM peak hour with a maximum VoC of 92% on the St Ann's Road approach with an associated queue length of three PCU. In the PM peak hour, this junction operates over capacity in the 2046 future baseline with a maximum VoC of 101% on the St Ann's Road approach with an associated queue length of four PCU.

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

7.4.66 This junction is a three-arm signal controlled T-junction with signal controlled pedestrian crossing facilities. The operation of the junction has been assessed for the 2018 existing baseline AM and PM peak hours using SATURN software and is shown in Table 7-29.

Table 7-29: 2018 baseline performance at A54 Kinderton Street/A54 St Michael's Way/A533 Leadsmithy Street junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2018 AM peak hour (08:00–09:00) baseline results		
A54 Kinderton Street	633	90%	13
A533 Leadsmithy Street	777	97%	20
A54 St Michael's Way	1,004	59%	11
	2018 PM peak hour (17:00–18:00) baseline results		
A54 Kinderton Street	726	104%	15
A533 Leadsmithy Street	661	83%	17
A54 St Michael's Way	802	47%	9

7.4.67 The assessment shows that this junction operates close to capacity in the 2018 baseline with a maximum VoC of 97% on the A533 Leadsmithy Street approach in the AM peak hour with an associated queue length of 20 PCU. In the PM peak hour, this junction operates over capacity in the 2018 baseline with a maximum VoC of 104% on the A54 Kinderton Street approach and an associated queue length of 15 PCU.

7.4.68 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-30. As the junction is affected by both construction and operation of the Proposed Scheme, future baseline results are presented for 2030, 2038 and 2046.

Table 7-30: Future baseline performance at A54 Kinderton Street/A54 St Michael's Way/A533 Leadsmithy Street junction

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
	2030 AM peak hour (08:00–09:00)			**2038 AM peak hour (08:00–09:00)**			**2046 AM peak hour (08:00–09:00)**		
A54 Kinderton Street	644	91%	13	664	94%	14	660	94%	14
A533 Leadsmithy Street	812	89%	20	816	89%	20	806	88%	20
A54 St Michael's Way	1,025	66%	13	1,047	67%	13	1,025	66%	13
	2030 PM peak hour (17:00–18:00)			**2038 PM peak hour (17:00–18:00)**			**2046 PM peak hour (17:00–18:00)**		
A54 Kinderton Street	740	104%	15	740	104%	15	739	104%	15
A533 Leadsmithy Street	627	79%	16	652	82%	17	696	87%	18
A54 St Michael's Way	851	50%	10	958	57%	11	1,053	62%	12

7.4.69 The assessment shows that this junction operates close to capacity in the 2030 future baseline with a maximum VoC of 91% on the A54 Kinderton Street approach in the AM peak hour with an associated queue length of 13 PCU. In the PM peak hour, the assessment shows that this junction operates over capacity in the year future baseline with a maximum VoC of 104% on the A54 Kinderton Street approach with a queue length of 15 PCU.

7.4.70 The assessment shows that this junction operates close to capacity in the 2038 future baseline with a maximum VoC of 94% on the A54 Kinderton Street approach in the AM peak hour with an associated queue length of 14 PCU. In the PM peak hour, this junction operates over capacity in the 2038 future baseline with a maximum VoC of 104% on the A54 Kinderton Street approach with an associated queue length of 15 PCU.

7.4.71 The assessment shows that this junction operates close to capacity in the 2046 future baseline with a maximum VoC of 94% on the A54 Kinderton Street approach in the AM peak hour with an associated queue length of 14 PCU. In the PM peak hour, this junction operates over capacity in the 2046 future baseline with a maximum VoC of 104% on the A54 Kinderton Street approach with an associated queue length of 15 PCU.

A54 St Michael's Way/Wheelock Street

7.4.72 This junction is a three-arm priority controlled (give way) T-junction with controlled pedestrian crossing facilities. The A54 St Michael's Way is one-way southbound and therefore no results are reported for the A54 St Michael's Way (south) approach. The operation of the junction has been assessed for the 2018 existing baseline AM and PM peak hours using SATURN software and is shown in Table 7-31.

Table 7-31: 2018 baseline performance at A54 St Michael's Way/Wheelock Street junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2018 AM peak hour (08:00–09:00) baseline results		
A54 St Michael's Way (north)	717	37%	0
Wheelock Street	40	14%	0
A54 St Michael's Way (south)	-	-	-
	2018 PM peak hour (17:00–18:00) baseline results		
A54 St Michael's Way (north)	671	34%	0
Wheelock Street	88	28%	0
A54 St Michael's Way (south)	-	-	-

7.4.73 The assessment shows that this junction operates well within capacity in the 2018 baseline.

7.4.74 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-32. As the junction is affected by both construction and operation of the Proposed Scheme, future baseline results are presented for 2030, 2038 and 2046.

Table 7-32: Future baseline performance at A54 St Michael's Way/Wheelock Street junction

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
	2030 AM peak hour (08:00–09:00)			**2038 AM peak hour (08:00–09:00)**			**2046 AM peak hour (08:00–09:00)**		
A54 St Michael's Way (north)	743	38%	0	740	38%	0	673	35%	0
Wheelock Street	41	14%	0	41	14%	0	42	13%	0
A54 St Michael's Way (south)	-	-	-	-	-	-	-	-	-
	2030 PM peak hour (17:00–18:00)			**2038 PM peak hour (17:00–18:00)**			**2046 PM peak hour (17:00–18:00)**		
A54 St Michael's Way (north)	797	41%	0	804	41%	0	803	41%	0
Wheelock Street	94	35%	0	95	36%	0	98	37%	0
A54 St Michael's Way (south)	-	-	-	-	-	-	-	-	-

7.4.75 The assessment shows that this junction operates well within capacity in the 2030, 2038 and 2046 future baseline.

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

7.4.76 This junction is a three-arm priority controlled (give way) T-junction with controlled pedestrian crossing facilities. The A54 St Michael's Way and A54 Chester Road is one-way southbound therefore no results are reported for the A54 Chester Road (south) and A54 St Michael's Way (south) approach. The operation of the junction has been assessed for the

2018 existing baseline AM and PM peak hours using SATURN software and is shown in Table 7-33.

Table 7-33: 2018 baseline performance at A54 Chester Road/A530 St Michael's Way/A530 Nantwich Road junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2018 AM peak hour (08:00–09:00) baseline results		
A54 Chester Road	476	24%	0
A54 St Michael's Way	758	83%	1
	2018 PM peak hour (17:00–18:00) baseline results		
A54 Chester Road	509	26%	0
A54 St Michael's Way	760	84%	1

7.4.77 The assessment shows that this junction operates within capacity in the 2018 baseline with a maximum VoC of 83% on the A54 St Michael's Way approach in the AM peak hour with an associated queue length of one PCU. In the PM peak hour, the maximum RFC of 84% is on the A54 St Michael's Way approach with a queue length of one PCU.

7.4.78 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-34. As the junction is affected by both construction and operation of the Proposed Scheme, future baseline results are presented for 2030, 2038 and 2046.

Table 7-34: Future baseline performance at A54 Chester Road/A530 St Michael's Way/A530 Nantwich Road junction

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
	2030 AM peak hour (08:00–09:00)			**2038 AM peak hour (08:00–09:00)**			**2046 AM peak hour (08:00–09:00)**		
A54 Chester Road	571	29%	0	622	32%	0	627	32%	0
A54 St Michael's Way	784	90%	2	781	93%	2	715	85%	1
	2030 PM peak hour (17:00–18:00)			**2038 PM peak hour (17:00–18:00)**			**2046 PM peak hour (17:00–18:00)**		
A54 Chester Road	440	23%	0	411	21%	0	454	23%	0
A54 St Michael's Way	891	95%	2	899	95%	2	900	97%	3

7.4.79 In the 2030 future baseline, the assessment shows that this junction operates close to capacity in the AM peak hour with a maximum VoC of 90% on the A54 St Michael's Way approach with an associated queue length of two PCU. In the PM peak hour, the maximum VoC of 95% is on the A54 St Michael's Way approach with a queue length of two PCU.

7.4.80 In the 2038 future baseline, the assessment shows that this junction operates close to capacity in the AM peak hour with a maximum VoC of 93% on the A54 St Michael's Way approach in the AM peak hour with an associated queue length of two PCU. In the PM peak

hour, the maximum VoC of 95% is on the A54 St Michael's Way approach with a queue length of two PCU.

7.4.81 In the 2046 future baseline, the assessment shows that this junction operates close to capacity in the AM peak hour with a maximum VoC of 85% on the A54 St Michael's Way approach in the AM peak hour with an associated queue length of one PCU. In the PM peak hour, the maximum VoC of 97% is on the A54 St Michael's Way approach with a queue length of three PCU.

A54 Chester Road/A530 Newton Bank

7.4.82 This junction is a three-arm priority controlled T-junction with signal controlled pedestrian crossing facilities. The A54 Chester Road (east) is a one-way exit arm from the junction and is therefore not included in the results. This junction represents the north-western corner of the gyratory junction. The operation of the junction has been assessed for the 2018 existing baseline AM and PM peak hours using SATURN software and is shown in Table 7-35.

Table 7-35: 2018 baseline performance at A54 Chester Road/A530 Newton Bank junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2018 AM peak hour (08:00–09:00) baseline results		
A54 Chester Road (west)	1,187	61%	0
A530 Newton Bank	1,400	94%	2
	2018 PM peak hour (17:00–18:00) baseline results		
A54 Chester Road (west)	1,151	59%	0
A530 Newton Bank	1,223	51%	0

7.4.83 In the AM peak hour, the assessment shows that this junction operates close to capacity in the 2018 baseline with a maximum VoC of 94% on the A530 Newton Bank approach with an associated queue length of two PCU. In the PM peak hour, the assessment shows that this junction operates well within capacity in the 2018 baseline.

7.4.84 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-36. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 7-36: Future baseline performance at A54 Chester Road/A530 Newton Bank junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2030 AM peak hour (08:00–09:00)		
A54 Chester Road (west)	1,286	66%	0
A530 Newton Bank	1,412	99%	5
	2030 PM peak hour (17:00–18:00)		
A54 Chester Road (west)	1,092	56%	0
A530 Newton Bank	1,284	82%	0

7.4.85 In the AM peak hour, the assessment shows that this junction operates close to capacity in the 2030 future baseline with a maximum VoC of 99% on the A530 Newton Bank approach with an associated queue length of five PCU. In the PM peak hour, the assessment shows that this junction operates within capacity in the 2030 future baseline with a maximum VoC of 82% on the A530 Newton Bank approach with no queue.

A54 Chester Road/A530 Croxton Lane

7.4.86 This junction is a three-arm priority controlled (give way) roundabout with no controlled pedestrian crossing facilities. The operation of the junction has been assessed for the 2018 existing baseline AM and PM peak hours using SATURN software and is shown in Table 7-37.

Table 7-37: 2018 baseline performance at A54 Chester Road/A530 Croxton Lane junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2018 AM peak hour (08:00–09:00) baseline results		
A54 Chester Road (north)	838	87%	0
A530 Croxton Lane	443	57%	0
A54 Chester Road (south)	1,041	101%	2
	2018 PM peak hour (17:00–18:00) baseline results		
A54 Chester Road (north)	739	78%	0
A530 Croxton Lane	509	62%	0
A54 Chester Road (south)	1,029	100%	2

7.4.87 This junction operates over capacity in the 2018 baseline with a maximum VoC of 101% on the A54 Chester Road (south) approach in the AM peak hour with an associated queue length of two PCU. In the PM peak hour, the maximum VoC of 100% is on the A54 Chester Road (south) approach and an associated queue length of two PCU.

7.4.88 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-38. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 7-38: Future baseline performance at A54 Chester Road/A530 Croxton Lane junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2030 AM peak hour (08:00–09:00)		
A54 Chester Road (north)	844	87%	0
A530 Croxton Lane	540	69%	1
A54 Chester Road (south)	1,038	101%	2
	2030 PM peak hour (17:00–18:00)		
A54 Chester Road (north)	810	87%	1
A530 Croxton Lane	366	46%	0
A54 Chester Road (south)	1,050	101%	2

7.4.89 This junction operates over capacity in the 2030 future baseline with a maximum VoC of 101% on the A54 Chester Road (south) approach in the AM peak hour with an associated queue length of two PCU. In the PM peak hour, the maximum VoC of 101% is on the A54 Chester Road (south) approach with a queue length of two PCU.

A54 Holmes Chapel Road/B5309 Centurion Way/Pochin Way

7.4.90 This junction is a four-arm priority controlled (give way) roundabout with no controlled pedestrian crossing facilities. The operation of the junction has been assessed for the 2018 existing baseline AM and PM peak hours using SATURN software and is shown in Table 7-39.

Table 7-39: 2018 baseline performance at A54 Holmes Chapel Road/B5309 Centurion Way/Pochin Way junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2018 AM peak hour (08:00–09:00) baseline results		
B5309 Centurion Way	579	47%	0
A54 Holmes Chapel Road (east)	721	41%	0
Pochin Way	141	13%	0
A54 Holmes Chapel Road (west)	1,033	59%	0
	2018 PM peak hour (17:00–18:00) baseline results		
B5309 Centurion Way	420	31%	0
A54 Holmes Chapel Road (east)	510	24%	0
Pochin Way	336	24%	0
A54 Holmes Chapel Road (west)	719	47%	0

7.4.91 The assessment shows that this junction operates well within capacity in the 2018 baseline.

7.4.92 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-40. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 7-40: Future baseline performance at A54 Holmes Chapel Road/B5309 Centurion Way/Pochin Way junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2030 AM peak hour (08:00–09:00)		
B5309 Centurion Way	679	74%	2
A54 Holmes Chapel Road (east)	769	60%	1
Pochin Way	627	51%	1
A54 Holmes Chapel Road (west)	1,069	82%	2
	2030 PM peak hour (17:00–18:00)		
B5309 Centurion Way	606	62%	1
A54 Holmes Chapel Road (east)	823	60%	1

Approach	Flow, PCU/hr	VoC	Q, PCU
Pochin Way	771	59%	1
A54 Holmes Chapel Road (west)	891	73%	1

7.4.93 In the AM peak hour, the assessment shows that this junction operates within capacity in the 2030 future baseline with a maximum VoC of 82% on the A54 Holmes Chapel Road (west) approach with an associated queue length of two PCU. In the PM peak hour, the assessment shows that this junction operates well within capacity in the 2030 future baseline.

A54 Middlewich Road/Birch Lane/Bell Lane

7.4.94 This junction is a four-arm priority controlled (give way) crossroads with no controlled pedestrian crossing facilities. The operation of the junction has been assessed for the 2018 existing baseline AM and PM peak hours using Junctions 9 software and is shown in Table 7-41.

Table 7-41: 2018 baseline performance at A54 Middlewich Road/Birch Lane/Bell Lane junction

Approach	Flow, PCU/hr	RFC	Q, PCU
	2018 AM peak hour (08:00–09:00) baseline results		
Bell Lane (left and ahead)	167	0.27	0
Bell Lane (ahead and right)	5	0.20	0
A54 Middlewich Road (east) (left, ahead and right)	466	0.01	0
Birch Lane (left and ahead)	117	0.19	0
Birch Lane (ahead and right)	6	0.18	0
A54 Middlewich Road (west) (left, ahead and right)	464	0.03	0
	2018 PM peak hour (17:00–18:00) baseline results		
Bell Lane (left and ahead)	195	0.32	1
Bell Lane (ahead and right)	8	0.25	0
A54 Middlewich Road (east) (left, ahead and right)	363	0.01	0
Birch Lane (left and ahead)	122	0.19	0
Birch Lane (ahead and right)	3	0.18	0
A54 Middlewich Road (west) (left, ahead and right)	545	0.08	0

7.4.95 The assessment shows that this junction operates well within capacity in the 2018 baseline.

7.4.96 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-42. As the junction is affected by both construction and operation of the Proposed Scheme, future baseline results are presented for 2030, 2038 and 2046.

Table 7-42: Future baseline performance at A54 Middlewich Road/Birch Lane/Bell Lane junction

Approach	Flow, PCU/hr	RFC	Q, PCU	Flow, PCU/hr	RFC	Q, PCU	Flow, PCU/hr	RFC	Q, PCU
	2030 AM peak hour (08:00–09:00)			**2038 AM peak hour (08:00–09:00)**			**2046 AM peak hour (08:00–09:00)**		
Bell Lane (left and ahead)	186	0.32	1	197	0.35	0	208	0.38	1
Bell Lane (ahead and right)	5	0.24	0	5	0.26	0	6	0.28	0
A54 Middlewich Road (east) (left, ahead and right)	518	0.01	0	521	0.01	0	493	0.01	0
Birch Lane (left and ahead)	129	0.23	0	136	0.25	0	145	0.27	0
Birch Lane (ahead and right)	7	0.22	0	7	0.23	0	8	0.25	0
A54 Middlewich Road (west) (left, ahead and right)	518	0.03	0	547	0.04	0	579	0.04	0
	2030 PM peak hour (17:00–18:00)			**2038 PM peak hour (17:00–18:00)**			**2046 PM peak hour (17:00–18:00)**		
Bell Lane (left and ahead)	207	0.38	1	218	0.42	1	233	0.47	1
Bell Lane (ahead and right)	19	0.31	1	21	0.35	1	20	0.38	1
A54 Middlewich Road (east) (left, ahead and right)	414	0.00	0	451	0.00	0	442	0.00	0
Birch Lane (left and ahead)	137	0.23	0	145	0.26	0	153	0.28	0
Birch Lane (ahead and right)	3	0.21	0	3	0.23	0	3	0.25	0
A54 Middlewich Road (west) (left, ahead and right)	593	0.10	0	624	0.11	0	663	0.12	0

7.4.97 The assessment shows that this junction operates well within capacity in the 2030, 2038 and 2046 future baseline.

A54 Chester Road/A54 Middlewich Road/A553 Northwich Road

7.4.98 This junction is a three-arm priority controlled (give way) T-junction with no signal controlled pedestrian crossing facilities. The operation of the junction has been assessed for the 2017 existing baseline AM and PM peak hours using Junctions 9 software and is shown in Table 7-43.

Table 7-43: 2017 baseline performance at A54 Chester Road/A54 Middlewich Road/A533 Northwich Road junction

Approach	Flow, PCU/hr	RFC	Q, PCU
	2017 AM peak hour (08:00–09:00) baseline results		
A54 Middlewich Road (ahead and left)	422	-	-
A533 Northwich Road (left)	386	0.75	3
A533 Northwich Road (right)	1	0.01	0
A54 Chester Road (ahead and right)	816	1.01	29

Approach	Flow, PCU/hr	RFC	Q, PCU
	2017 PM peak hour (17:00–18:00) baseline results		
A54 Middlewich Road (ahead and left)	360	-	-
A533 Northwich Road (left)	323	0.61	2
A533 Northwich Road (right)	4	0.02	0
A54 Chester Road (ahead and right)	734	0.95	15

7.4.99 This junction operates over capacity in the 2017 baseline with a maximum RFC of 1.01 on the A54 Chester Road (ahead and right) approach in the AM peak hour with an associated queue of 29 PCU. In the PM peak hour, the assessment shows that this junction operates close to capacity in the 2017 baseline with a maximum RFC of 0.95 on the A54 Chester Road (ahead and right) approach with an associated queue length of 15 PCU.

7.4.100 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-44. As the junction is affected by both construction and operation of the Proposed Scheme, future baseline results are presented for 2030, 2038 and 2046.

Table 7-44: Future baseline performance at A54 Chester Road/A54 Middlewich Road/A533 Northwich Road junction

Approach	Flow, PCU/hr	RFC	Q, PCU	Flow, PCU/hr	RFC	Q, PCU	Flow, PCU/hr	RFC	Q, PCU
	2030 AM peak hour (08:00–09:00)			**2038 AM peak hour (08:00–09:00)**			**2046 AM peak hour (08:00–09:00)**		
A54 Middlewich Road (ahead and left)	466	-	-	468	-	-	444	-	-
A533 Northwich Road (left)	343	0.68	2	413	0.82	4	444	0.87	6
A533 Northwich Road (right)	1	0.01	0	1	0.01	0	1	0.02	0
A54 Chester Road (ahead and right)	827	0.96	19	791	0.84	8	783	0.88	10
	2030 PM peak hour (17:00–18:00)			**2038 PM peak hour (17:00–18:00)**			**2046 PM peak hour (17:00–18:00)**		
A54 Middlewich Road (ahead and left)	439	-	-	482	-	-	470	-	-
A533 Northwich Road (left)	330	0.65	2	381	0.77	3	416	0.83	5
A533 Northwich Road (right)	4	0.02	0	5	0.04	0	6	0.06	0
A54 Chester Road (ahead and right)	686	0.85	7	667	0.75	4	658	0.73	4

7.4.101 In the 2030 future baseline, the assessment shows that this junction operates close to capacity in the AM peak hour with a maximum RFC of 0.96 on the A54 Chester Road (ahead and right) approach with an associated queue length of 19 PCU. In the PM peak hour, the

maximum RFC of 0.85 is on the A54 Chester Road (ahead and right) approach with a queue length of seven PCU.

7.4.102 In the 2038 future baseline, the assessment shows that this junction operates within capacity in the AM peak hour with a maximum RFC of 0.84 on the A54 Chester Road (ahead and right) approach with an associated queue length of eight PCU. In the PM peak hour, the maximum RFC of 0.77 is on the A533 Northwich Road (left) approach with a queue length of three PCU.

7.4.103 In the 2046 future baseline, the assessment shows that this junction operates close to capacity in the AM peak hour with a maximum RFC of 0.88 on the A54 Chester Road (ahead and right) approach with an associated queue length of 10 PCU. In the PM peak hour, the assessment shows that this junction operates within capacity in the 2046 future baseline with a maximum RFC of 0.83 on the A533 Northwich Road (left) approach with an associated queue length of five PCU.

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

7.4.104 This junction is a four-arm priority controlled roundabout with no controlled pedestrian crossing facilities. The operation of the junction has been assessed for the 2018 existing baseline AM and PM peak hours using SATURN software and is shown in Table 7-45.

Table 7-45: 2018 baseline performance at A5018 Wharton Road/A5018 Wharton Park Road/B5355 Wharton Road/Collingtree Avenue junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2018 AM peak hour (08:00–09:00) baseline results		
A5018 Wharton Road	723	69%	0
B5355 Wharton Road	308	28%	0
A5018 Wharton Park Road	775	58%	0
Collingtree Avenue	157	20%	0
	2018 PM peak hour (17:00–18:00) baseline results		
A5018 Wharton Road	1,063	103%	3
B5355 Wharton Road	231	24%	0
A5018 Wharton Park Road	569	42%	0
Collingtree Avenue	74	7%	0

7.4.105 In the AM peak hour, the assessment shows that this junction operates well within capacity in the 2018 baseline. In the PM peak hour, this junction operates over capacity in the 2018 baseline with a maximum VoC of 103% on the A5018 Wharton Road approach with an associated queue length of three PCU.

7.4.106 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-46. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 7-46: Future baseline performance at A5018 Wharton Road/A5018 Wharton Park Road/B5355 Wharton Road/Collingtree Avenue junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2030 AM peak hour (08:00–09:00)		
A5018 Wharton Road	722	69%	0
B5355 Wharton Road	303	28%	0
A5018 Wharton Park Road	792	59%	0
Collingtree Avenue	161	20%	0
	2030 PM peak hour (17:00–18:00)		
A5018 Wharton Road	1,057	102%	3
B5355 Wharton Road	204	22%	0
A5018 Wharton Park Road	635	46%	0
Collingtree Avenue	67	7%	0

7.4.107 In the AM peak hour, the assessment shows that this junction operates well within capacity in the 2030 future baseline. In the PM peak hour, this junction operates over capacity in the 2030 future baseline with a maximum VoC of 102% on the A5018 Wharton Road approach with an associated queue length of three PCU.

A553 Bostock Road/Road One/A5018 Bostock Road/A533 Davenham Road

7.4.108 This junction is a four-arm priority controlled (give way) roundabout with no controlled pedestrian crossing facilities. The operation of the junction has been assessed for the 2018 existing baseline AM and PM peak hours using SATURN software and is shown in Table 7-47.

Table 7-47: 2018 baseline performance at A533 Bostock Road/Road One/A5018 Bostock Road/A533 Davenham Road junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2018 AM peak hour (08:00–09:00) baseline results		
A533 Bostock Road	247	14%	0
Road One	259	13%	0
A5018 Bostock Road	1,136	98%	2
A533 Davenham Bypass	877	102%	7
	2018 PM peak hour (17:00–18:00) baseline results		
A533 Bostock Road	131	7%	0
Road One	665	34%	0
A5018 Bostock Road	708	63%	0
A533 Davenham Bypass	875	81%	1

7.4.109 This junction operates over capacity in the 2018 baseline with a maximum VoC of 102% on the A533 Davenham Bypass approach in the AM peak hour with an associated queue length of seven PCU. In the PM peak hour, the assessment shows that this junction operates within capacity in the 2018 baseline with a maximum VoC of 81% on the A533 Davenham Bypass approach with an associated queue length of one PCU.

7.4.110 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-48. As the junction is affected by both construction and operation of the Proposed Scheme, future baseline results are presented for 2030, 2038 and 2046.

Table 7-48: Future baseline performance at A533 Bostock Road/Road One/A5018 Bostock Road/A533 Davenham Road junction

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
	2030 AM peak hour (08:00–09:00)			**2038 AM peak hour (08:00–09:00)**			**2046 AM peak hour (08:00–09:00)**		
A533 Bostock Road	296	17%	0	382	21%	0	583	33%	0
Road One	244	12%	0	176	9%	0	170	9%	0
A5018 Bostock Road	1,138	98%	2	1,189	100%	3	1,225	103%	3
A533 Davenham Bypass	839	102%	7	799	102%	7	722	104%	7
	2030 PM peak hour (17:00–18:00)			**2038 PM peak hour (17:00–18:00)**			**2046 PM peak hour (17:00–18:00)**		
A533 Bostock Road	277	14%	0	373	19%	0	420	21%	0
Road One	629	32%	0	612	32%	0	576	30%	0
A5018 Bostock Road	759	68%	0	765	69%	0	737	67%	0
A533 Davenham Bypass	754	74%	1	703	71%	0	684	70%	0

7.4.111 In the 2030 future baseline, this junction operates over capacity in the AM peak hour with a maximum VoC of 102% on the A533 Davenham Bypass approach with an associated queue length of seven PCU. In the PM peak hour, the assessment shows that this junction operates well within capacity in the 2030 future baseline with a maximum VoC of 74% on the A533 Davenham Bypass approach with an associated queue length of one PCU.

7.4.112 In the 2038 future baseline, this junction operates over capacity in the AM peak hour with a maximum VoC of 102% on the A533 Davenham Bypass approach with an associated queue length of seven PCU. In the PM peak hour, the assessment shows that this junction operates well within capacity in the 2038 future baseline.

7.4.113 In the 2046 future baseline, this junction operates over capacity in the AM peak hour with a maximum VoC of 104% on the A533 Davenham Bypass approach with an associated queue length of seven PCU. In the PM peak hour, the assessment shows that this junction operates well within capacity in the 2038 future baseline.

A556 Chester Road/Hartford Road/Hill Top Grange

7.4.114 This junction is a four-arm signal controlled crossroads with signal controlled pedestrian crossing facilities. The Hill Top Grange approach is a minor arm that is not included within the strategic traffic model. The operation of the junction has been assessed for the 2018 existing baseline AM and PM peak hours using SATURN software and is shown in Table 7-49.

Table 7-49: 2018 baseline performance at A556 Chester Road/Hartford Road/Hill Top Grange junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2018 AM peak hour (08:00–09:00) baseline results		
Hill Top Grange	-	-	-
A556 Chester Road (east)	1,409	76%	12
Hartford Road	577	105%	8
A556 Chester Road (west)	1,119	43%	7
	2018 PM peak hour (17:00–18:00) baseline results		
Hill Top Grange	-	-	-
A556 Chester Road (east)	1,106	60%	10
Hartford Road	83	15%	1
A556 Chester Road (west)	1,562	60%	9

7.4.115 The assessment shows that this junction operates over capacity in the 2018 baseline with a maximum VoC of 105% on the Hartford Road approach in the AM peak hour with an associated queue length of eight PCU. In the PM peak hour, the assessment shows that this junction operates well within capacity in the 2018 baseline.

7.4.116 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-50. As the junction is only affected by the operation of the Proposed Scheme and not the construction, future baseline results are presented for 2038 and 2046 only.

Table 7-50: Future baseline performance at A556 Chester Road/Hartford Road/Hill Top Grange junction

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
	2038 AM peak hour (08:00–09:00)			**2046 AM peak hour (08:00–09:00)**		
Hill Top Grange	-	-	-	-	-	-
A556 Chester Road (east)	1,191	56%	16	1,154	54%	16
Hartford Road	660	90%	15	633	86%	14
A556 Chester Road (west)	1,466	68%	19	1,552	73%	19
	2038 PM peak hour (17:00–18:00)			**2046 PM peak hour (17:00–18:00)**		
Hill Top Grange	-	-	-	-	-	-
A556 Chester Road (east)	1,239	57%	17	1,253	58%	17
Hartford Road	64	9%	1	60	9%	1

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
A556 Chester Road (west)	1,673	77%	22	1,715	79%	22

7.4.117 In the 2038 future baseline, the assessment shows that this junction operates close to capacity in the AM peak hour with a maximum VoC of 90% on the Hartford Road approach with an associated queue length of 15 PCU. In the PM peak hour, the junction operates within capacity with a maximum VoC of 77% on the A556 Chester Road (west) approach with an associated queue length of 22 PCU.

7.4.118 In the 2046 future baseline, the assessment shows that this junction operates close to capacity in the AM peak hour with a maximum VoC of 86% on the Hartford Road approach with an associated queue length of 14 PCU. In the PM peak hour, the junction operates within capacity with a maximum VoC of 79% on the A556 Chester Road (west) approach with an associated queue length of 22 PCU.

A530 King Street/A530 Croxton Lane/B5309 King Street

7.4.119 This junction is a three-arm priority controlled (give way) T-junction with no controlled pedestrian crossing facilities. The operation of the junction has been assessed for the 2018 existing baseline AM and PM peak hours using SATURN software and is shown in Table 7-51.

Table 7-51: 2018 baseline performance at A530 King Street/A530 Croxton Lane/B5309 King Street junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2018 AM peak hour (08:00–09:00) baseline results		
A530 King Street	623	68%	0
B5309 King Street	558	42%	0
A530 Croxton Lane	284	36%	0
	2018 PM peak hour (17:00–18:00) baseline results		
A530 King Street	757	100%	3
B5309 King Street	720	54%	0
A530 Croxton Lane	355	51%	1

7.4.120 In the 2018 baseline the assessment shows that this junction operates well within capacity in the AM peak hour. In the PM peak hour, the assessment shows that this junction operates over capacity in the 2018 baseline with a maximum VoC of 100% on the A530 King Street approach with an associated queue length of three PCU.

7.4.121 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-52. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 7-52: Future baseline performance at A530 King Street/A530 Croxton Lane/B5309 King Street junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2030 AM peak hour (08:00–09:00)		
A530 King Street	741	96%	2
B5309 King Street	732	55%	0
A530 Croxton Lane	256	40%	0
	2030 PM peak hour (17:00–18:00)		
A530 King Street	772	100%	2
B5309 King Street	788	59%	0
A530 Croxton Lane	378	70%	2

7.4.122 In the 2030 future baseline the assessment shows that this junction operates close to capacity in the AM peak hour with a maximum VoC of 96% on the A530 King Street approach with an associated queue length of two PCU. In the PM peak hour, the assessment shows that this junction operates over capacity in the 2030 future baseline with a maximum VoC of 100% on the A530 King Street approach with a queue length of two PCU.

A533 Davenham Bypass/Jack Lane

7.4.123 This junction is a three-arm priority controlled (give way) T-junction with no controlled pedestrian crossing facilities. The operation of the junction has been assessed for the 2018 existing baseline AM and PM peak hours using SATURN software and is shown in Table 7-53.

Table 7-53: 2018 baseline performance at A533 Davenham Bypass/Jack Lane junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2018 AM peak hour (08:00–09:00) baseline results		
A533 Davenham Bypass (north)	963	41%	0
A533 Davenham Bypass (south)	989	50%	0
Jack Lane	190	109%	5
	2018 PM peak hour (17:00–18:00) baseline results		
A533 Davenham Bypass (north)	824	35%	0
A533 Davenham Bypass (south)	1,024	52%	0
Jack Lane	98	55%	1

7.4.124 In the 2018 baseline the assessment shows that this junction operates over capacity in the AM peak hour with a maximum VoC of 109% on the Jack Lane approach with an associated queue length of five PCU. In the PM peak hour, the assessment shows that this junction operates well within capacity in the 2018 baseline with a maximum VoC of 55% on the Jack Lane approach with an associated queue length of one PCU.

7.4.125 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-54. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 7-54: Future baseline performance at A533 Davenham Bypass/Jack Lane junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2030 AM peak hour (08:00–09:00)		
A533 Davenham Bypass (north)	998	45%	0
A533 Davenham Bypass (south)	1,435	73%	0
Jack Lane	138	161%	4
	2030 PM peak hour (17:00–18:00)		
A533 Davenham Bypass (north)	1,071	47%	0
A533 Davenham Bypass (south)	1,277	65%	0
Jack Lane	99	93%	3

7.4.126 In the 2030 future baseline the assessment shows that this junction operates over capacity in the AM peak hour with a maximum VoC of 161% on the Jack Lane approach with an associated queue length of four PCU. In the PM peak hour, the assessment shows that this junction operates close to capacity in the 2030 future baseline with a maximum VoC of 93% on the Jack Lane approach with an associated queue length of three PCU.

London Road/Jack Lane

7.4.127 This junction is a three-arm priority controlled (give-way) T-junction with no controlled pedestrian crossing facilities. The operation of the junction has been assessed for the 2018 existing baseline AM and PM peak hours using SATURN software and is shown in Table 7-55.

Table 7-55: 2018 baseline performance at London Road/Jack Lane junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2018 AM peak hour (08:00–09:00) baseline results		
London Road (north)	317	20%	0
London Road (south)	147	7%	0
Jack Lane	649	114%	4
	2018 PM peak hour (17:00–18:00) baseline results		
London Road (north)	307	53%	0
London Road (south)	646	34%	0
Jack Lane	89	15%	0

7.4.128 In the AM peak hour, this junction operates over capacity in the 2018 baseline with a maximum VoC of 114% on the Jack Lane approach with an associated queue length of four PCU. In the PM peak hour, the assessment shows that this junction operates well within capacity in the 2018 baseline.

7.4.129 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-56. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 7-56: Future baseline performance at London Road/Jack Lane junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2030 AM peak hour (08:00–09:00) baseline results		
London Road (north)	312	19%	0
London Road (south)	488	25%	0
Jack Lane	784	161%	5
	2030 PM peak hour (17:00–18:00) baseline results		
London Road (north)	388	61%	0
London Road (south)	647	34%	0
Jack Lane	109	19%	0

7.4.130 In the AM peak hour, this junction operates over capacity in the 2030 future baseline with a maximum VoC of 161% on the Jack Lane approach with an associated queue length of five PCU. In the PM peak hour, the assessment shows that this junction operates well within capacity in the 2030 future baseline.

London Road/Church Street

7.4.131 This junction is a three-arm priority controlled (give-way) T-junction with no controlled pedestrian crossing facilities. The operation of the junction has been assessed for the 2018 existing baseline AM and PM peak hours using SATURN software and is shown in Table 7-57.

Table 7-57: 2018 baseline performance at London Road/Church Street junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2018 AM peak hour (08:00–09:00) baseline results		
London Road (north)	388	20%	0
Church Street	13	4%	0
London Road (south)	456	23%	0
	2018 PM peak hour (17:00–18:00) baseline results		
London Road (north)	326	17%	0
Church Street	247	68%	1
London Road (south)	428	22%	0

7.4.132 The assessment shows that this junction operates well within capacity in the 2018 baseline.

7.4.133 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-58. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 7-58: Future baseline performance at London Road/Church Street junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2030 AM peak hour (08:00–09:00) baseline results		
London Road (north)	781	43%	0
Church Street	13	4%	0

Approach	Flow, PCU/hr	VoC	Q, PCU
London Road (south)	778	59%	0
	2030 PM peak hour (17:00–18:00) baseline results		
London Road (north)	346	18%	0
Church Street	402	110%	5
London Road (south)	473	25%	0

7.4.134 In the AM peak hour, the assessment shows that this junction operates well within capacity in the 2030 future baseline. In the PM peak hour, this junction operates over capacity in the 2030 future baseline with a maximum VoC of 110% on the Church Street approach with an associated queue length of five PCU.

Shurlach Lane/Davenham Road/Shipbrook Road/Manor Lane

7.4.135 This junction is a four-arm priority controlled (give-way) crossroads with no controlled pedestrian crossing facilities. The Manor Lane approach is a minor arm that is not included within the strategic traffic model. The operation of the junction has been assessed for the 2018 existing baseline AM and PM peak hours using SATURN software and is shown in Table 7-59.

Table 7-59: 2018 baseline performance at Shurlach Lane/Davenham Road/Shipbrook Road/Manor Lane junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2018 AM peak hour (08:00–09:00) baseline results		
Shurlach Lane	5	1%	0
Davenham Road	288	39%	0
Manor Lane	-	-	-
Shipbrook Road	81	4%	0
	2018 PM peak hour (17:00–18:00) baseline results		
Shurlach Lane	16	2%	0
Davenham Road	257	14%	0
Manor Lane	-	-	-
Shipbrook Road	45	2%	0

7.4.136 The assessment shows that this junction operates well within capacity in the 2018 baseline.

7.4.137 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-60. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 7-60: Future baseline performance at Shurlach Lane/Daveham Road/Shipbrook Road/ Manor Lane junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2030 AM peak hour (08:00–09:00) baseline		
Shurlach Lane	89	13%	0
Davenham Road	477	93%	2
Manor Lane	-	-	-
Shipbrook Road	626	35%	0
	2030 PM peak hour (17:00–18:00) baseline results		
Shurlach Lane	593	93%	0
Davenham Road	104	12%	0
Manor Lane	-	-	-
Shipbrook Road	34	2%	0

7.4.138 The assessment shows that this junction operates close to capacity in the 2030 future baseline with a maximum VoC of 93% on the Davenham Road approach in the AM peak hour with an associated queue length of two PCU. In the PM peak hour, the maximum VoC of 93% is on the Shurlach Lane approach with no queue.

A556 Shurlach Road/A533 Davenham Bypass junction

7.4.139 This junction is a three-arm priority controlled roundabout with no signal controlled pedestrian crossing facilities. The operation of the junction has been assessed for the 2018 existing baseline AM and PM peak hours using SATURN software and is shown in Table 7-61.

Table 7-61: 2018 baseline performance at A556 Shurlach Road/A533 Davenham Bypass junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2018 AM peak hour (08:00–09:00) baseline results		
A556 Shurlach Road (off-slip)	266	28%	0
A533 Davenham Bypass (south)	1,054	88%	0
A533 Davenham Bypass (west)	446	37%	0
	2018 PM peak hour (17:00–18:00) baseline results		
A556 Shurlach Road (off-slip)	825	80%	1
A533 Davenham Bypass (south)	508	45%	0
A533 Davenham Bypass (west)	328	27%	0

7.4.140 In the AM peak hour, the assessment shows that this junction operates close to capacity in the 2018 baseline with a maximum VoC of 88% on the A533 Davenham Bypass (south) approach with no queue. In the PM peak hour, the assessment shows that this junction operates within capacity in the 2018 baseline with a maximum VoC of 80% on the A556 Shurlach Road (off-slip) approach with an associated queue length of one PCU.

7.4.141 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-62. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 7-62: Future baseline performance at A556 Shurlach Road/A533 Davenham Bypass junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2030 AM peak hour (08:00–09:00)		
A556 Shurlach Road (off-slip)	271	29%	0
A533 Davenham Bypass (south)	1,073	90%	0
A533 Davenham Bypass (west)	511	43%	0
	2030 PM peak hour (17:00–18:00)		
A556 Shurlach Road (off-slip)	892	91%	1
A533 Davenham Bypass (south)	726	63%	0
A533 Davenham Bypass (west)	413	34%	0

7.4.142 The assessment shows that this junction operates close to capacity in the 2030 future baseline with a maximum VoC of 90% on the A533 Davenham Bypass (south) approach in the AM peak hour with no queue. In the PM peak hour, the maximum VoC of 91% is on the A556 Shurlach Road (off-slip) approach with a queue length of one PCU.

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

7.4.143 This junction is a four-arm priority controlled (give way) roundabout with no controlled pedestrian crossing facilities. The operation of the junction has been assessed for the 2018 existing baseline AM and PM peak hours using SATURN software and is shown in Table 7-63.

Table 7-63: 2018 baseline performance at A556 Shurlach Road/A556 Chester Road/A533 London Road/London Road junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2018 AM peak hour (08:00–09:00) baseline results		
A533 London Road	580	73%	2
A556 Shurlach Road	1,107	58%	1
London Road (south)	732	111%	9
A556 Chester Road	1,378	77%	2
	2018 PM peak hour (17:00–18:00) baseline results		
A533 London Road	563	54%	1
A556 Shurlach Road	1,279	69%	1
London Road (south)	582	62%	1
A556 Chester Road	1,482	73%	3

7.4.144 In the AM peak hour, this junction operates over capacity in the 2018 baseline with a maximum VoC of 111% on the London Road (south) approach and an associated queue

length of nine PCU. In the PM peak hour, the assessment shows that this junction operates well within capacity in the 2018 baseline.

7.4.145 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-64. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 7-64: Future baseline performance at A556 Shurlach Road/A556 Chester Road/A533 London Road/London Road junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2030 AM peak hour (08:00–09:00)		
A533 London Road	569	100%	8
A556 Shurlach Road	994	59%	1
London Road (south)	890	105%	9
A556 Chester Road	1,666	100%	11
	2030 PM peak hour (17:00–18:00)		
A533 London Road	622	64%	1
A556 Shurlach Road	1,336	75%	1
London Road (south)	695	81%	2
A556 Chester Road	1,538	82%	1

7.4.146 In the AM peak hour, this junction operates over capacity in the 2030 future baseline with a maximum VoC of 105% on the London Road (south) approach and an associated queue length of nine PCU. In the PM peak hour, the assessment shows that this junction operates within capacity in the 2030 future baseline with the maximum VoC of 82% on both the London Road (south) and the A556 Chester Road approach. Queue length would be two PCU on the London Road (south) approach, and one PCU on the A556 Chester Road approach.

A530 King Street/Davenham Road/Crowders Lane

7.4.147 This junction is a four-arm priority controlled (give way) crossroads with no controlled pedestrian crossing facilities. The operation of the junction has been assessed for the 2018 existing baseline AM and PM peak hours using SATURN software and is shown in Table 7-65.

Table 7-65: 2018 baseline performance at A530 King Street/Davenham Road/Crowders Lane junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2018 AM peak hour (08:00–09:00) baseline results		
A530 King Street (north)	619	34%	0
Crowders Lane	144	38%	0
A530 King Street (south)	813	42%	0
Davenham Road	81	25%	0
	2018 PM peak hour (17:00–18:00) baseline results		
A530 King Street (north)	786	40%	0

Approach	Flow, PCU/hr	VoC	Q, PCU
Crowders Lane	200	61%	1
A530 King Street (south)	977	51%	0
Davenham Road	46	20%	0

7.4.148 The assessment shows that this junction operates well within capacity in the 2018 baseline.

7.4.149 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-66. As the junction is affected by both construction and operation of the Proposed Scheme, future baseline results are presented for 2030, 2038 and 2046.

Table 7-66: Future baseline performance at A530 King Street/Davenham Road/Crowders Lane junction

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
	2030 AM peak hour (08:00–09:00)			**2038 AM peak hour (08:00–09:00)**			**2046 AM peak hour (08:00–09:00)**		
A530 King Street (north)	702	38%	0	742	40%	0	777	42%	0
Crowders Lane	255	74%	1	244	68%	1	221	61%	1
A530 King Street (south)	870	45%	0	796	42%	0	789	42%	0
Davenham Road	237	73%	1	275	79%	2	297	83%	2
	2030 PM peak hour (17:00–18:00)			**2038 PM peak hour (17:00–18:00)**			**2046 PM peak hour (17:00–18:00)**		
A530 King Street (north)	805	40%	0	779	39%	0	775	39%	0
Crowders Lane	132	38%	0	157	43%	0	175	50%	1
A530 King Street (south)	931	54%	0	888	48%	0	900	48%	0
Davenham Road	212	111%	5	232	113%	6	238	114%	6

7.4.150 In the 2030 future baseline, the assessment shows that this junction operates well within capacity in the AM peak hour with a maximum VoC of 74% on the Crowders Lane approach with an associated queue length of one PCU. In the PM peak hour, the assessment shows that this junction operates over capacity in the 2030 future baseline with a maximum VoC of 111% on the Davenham Road approach with an associated queue length of five PCU.

7.4.151 In the 2038 future baseline, the assessment shows that this junction operates within capacity in the AM peak hour with a maximum VoC of 79% on the Davenham Road approach with an associated queue length of two PCU. In the PM peak hour, the assessment shows that this junction operates over capacity in the 2038 future baseline with a maximum VoC of 113% on the Davenham Road approach with an associated queue length of six PCU.

7.4.152 In the 2046 future baseline, the assessment shows that this junction operates within capacity in the AM peak hour with a maximum VoC of 83% on the Davenham Road approach

with an associated queue length of two PCU. In the PM peak hour, the assessment shows that this junction operates over capacity in the 2046 future baseline with a maximum VoC of 114% on the Davenham Road approach with an associated queue length of six PCU.

A533 Kingsmead/A533 London Road

7.4.153 This junction is a four-arm signal controlled crossroads with signal controlled pedestrian crossing facilities. The operation of the junction has been assessed for the 2018 existing baseline AM and PM peak hours using SATURN software and is shown in Table 7-67.

Table 7-67: 2018 baseline performance at A533 Kingsmead/A533 London Road junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2018 AM peak hour (08:00–09:00) baseline results		
London Road	454	53%	9
A533 Davenham Bypass (Kingsmead)	1,063	69%	20
A533 London Road	834	59%	13
A533 Kingsmead	1,067	72%	21
	2018 PM peak hour (17:00–18:00) baseline results		
London Road	278	24%	5
A533 Davenham Bypass (Kingsmead)	634	58%	13
A533 London Road	1,088	75%	17
A533 Kingsmead	857	62%	16

7.4.154 In the AM peak hour, the assessment shows that this junction operates well within capacity in the 2018 baseline. In the PM peak hour, the assessment shows that this junction operates within capacity in the 2018 baseline with a maximum VoC of 75% on the A533 London Road approach and an associated queue length of 17 PCU.

7.4.155 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-68. As the junction is affected by both construction and operation of the Proposed Scheme, future baseline results are presented for 2030, 2038 and 2046.

Table 7-68: Future baseline performance at A533 Kingsmead/A533 London Road junction

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
	2030 AM peak hour (08:00–09:00)			**2038 AM peak hour (08:00–09:00)**			**2046 AM peak hour (08:00–09:00)**		
London Road	512	60%	11	531	62%	11	572	66%	12
A533 Davenham Bypass (Kingsmead)	1,081	70%	20	1,109	72%	21	1,192	78%	22
A533 London Road	871	63%	14	872	63%	14	842	62%	13
A533 Kingsmead	1,220	82%	23	1,263	85%	24	1,306	88%	25

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
	2030 PM peak hour (17:00–18:00)			**2038 PM peak hour (17:00–18:00)**			**2046 PM peak hour (17:00–18:00)**		
London Road	335	28%	6	341	29%	6	355	30%	7
A533 Davenham Bypass (Kingsmead)	831	75%	17	842	76%	18	874	79%	18
A533 London Road	1,181	82%	19	1,209	84%	19	1,245	87%	20
A533 Kingsmead	910	65%	17	953	68%	18	983	70%	19

7.4.156 In the 2030 future baseline, the assessment shows that this junction operates within capacity in the AM peak hour with a maximum VoC of 82% on the A533 Kingsmead approach in the AM peak hour with an associated queue length of 23 PCU. In the PM peak hour, the maximum VoC of 82% is on the A533 London Road approach with a queue length of 19 PCU.

7.4.157 In the 2038 future baseline, the assessment shows that this junction operates close to capacity in the AM peak hour with a maximum VoC of 85% on the A533 Kingsmead approach and an associated queue length of 24 PCU. In the PM peak hour, the assessment shows that this junction operates within capacity with a maximum VoC of 84% on the A533 London Road approach with an associated queue length of 19 PCU.

7.4.158 In the 2046 future baseline, the assessment shows that this junction operates close to capacity in the AM peak hour with a maximum VoC of 88% on the A533 Kingsmead approach in the AM peak hour with an associated queue length of 25 PCU. In the PM peak hour, the maximum VoC of 87% is on the A533 London Road approach with a queue length of 20 PCU.

A556 Shurlach Road/Shurlach Lane

7.4.159 This junction is a three-arm priority controlled T-junction with no controlled pedestrian crossing facilities. The A556 Shurlach Road is one-way southbound and therefore no results are reported for the A556 Shurlach Road (west) approach. The operation of the junction has been assessed for the 2018 existing baseline AM and PM peak hours using SATURN software and is shown in Table 7-69.

Table 7-69: 2018 baseline performance at A556 Shurlach Road/Shurlach Lane junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2018 AM peak hour (08:00–09:00) baseline results		
A556 Shurlach Road (east)	1,079	27%	0
Shurlach Lane	300	86%	2
A556 Shurlach Road (west)	2,148	-	-
	2018 PM peak hour (17:00–18:00) baseline results		
A556 Shurlach Road (east)	2,121	53%	0
Shurlach Lane	11	8%	0
A556 Shurlach Road (west)	1,230	-	-

7.4.160 In the AM peak hour, the assessment shows that this junction operates close to capacity in the 2018 baseline with a maximum VoC of 86% on the Shurlach Lane approach with an associated queue length of two PCU. In the PM peak hour, the assessment shows that this junction operates well within capacity in the 2018 baseline.

7.4.161 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-70. As the junction is affected by both construction and operation of the Proposed Scheme, future baseline results are presented for 2030, 2038 and 2046.

Table 7-70: Future baseline performance at A556 Shurlach Road/Shurlach Lane junction

Approach	Flow, PCU/hr	VoC	Flow, PCU/hr	Flow, PCU/hr	RFC	Q, PCU	Flow, PCU/hr	RFC	Q, PCU
	2030 AM peak hour (08:00–09:00)			**2038 AM peak hour (08:00–09:00)**			**2046 AM peak hour (08:00–09:00)**		
A556 Shurlach Road (east)	1,090	28%	0	1,086	28%	0	1,098	28%	0
Shurlach Lane	340	88%	2	342	89%	2	346	90%	2
A556 Shurlach Road (west)	2,493	-	-	2,551	-	-	2,630	-	-
	2030 PM peak hour (17:00–18:00)			**2038 PM peak hour (17:00–18:00)**			**2046 PM peak hour (17:00–18:00)**		
A556 Shurlach Road (east)	2,136	54%	0	2,138	54%	0	2,152	54%	0
Shurlach Lane	153	114%	4	156	117%	4	159	123%	4
A556 Shurlach Road (west)	1,423	-	-	1,436	-	-	1,443	-	-

7.4.162 In the 2030 future baseline, the assessment shows that this junction operates close to capacity in the AM peak hour with a maximum VoC of 88% on the Shurlach Lane approach with an associated queue length of two PCU. In the PM peak hour, this junction operates over capacity in the 2030 future baseline with a maximum VoC of 114% on the Shurlach Lane approach with an associated queue length of four PCU.

7.4.163 In the 2038 future baseline, the assessment shows that this junction operates close to capacity in the AM peak hour with a maximum VoC of 89% on the Shurlach Lane approach with an associated queue length of two PCU. In the PM peak hour, this junction operates over capacity in the 2038 future baseline with a maximum VoC of 117% on the Shurlach Lane approach with an associated queue length of four PCU.

7.4.164 In the 2046 future baseline, the assessment shows that this junction operates close to capacity in the AM peak hour with a maximum VoC of 90% on the Shurlach Lane approach with an associated queue length of two PCU. In the PM peak hour, this junction operates over capacity in the 2046 future baseline with a maximum VoC of 123% on the Shurlach Lane approach with an associated queue length of four PCU.

A530 King Street/Gadbrook Distribution Centre

7.4.165 This junction is a three-arm priority controlled (give way) roundabout with no controlled pedestrian crossing facilities. The operation of the junction has been assessed for the 2018 existing baseline AM and PM peak hours using Junctions 9 software and is shown in Table 7-71.

Table 7-71: 2018 baseline performance at A530 King Street/Gadbrook Distribution Centre junction

Approach	Flow, PCU/hr	RFC	Q, PCU
	2018 AM peak hour (08:00–09:00) baseline results		
A530 King Street (north)	852	0.25	0
A530 King Street (south)	1,001	0.39	1
Gadbrook Distribution Centre	142	0.08	0
	2018 PM peak hour (17:00–18:00) baseline results		
A530 King Street (north)	876	0.26	0
A530 King Street (south)	828	0.32	1
Gadbrook Distribution Centre	188	0.10	0

7.4.166 The assessment shows that this junction operates well within capacity in the 2018 baseline.

7.4.167 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-72. As the junction is affected by both the construction and operation of the Proposed Scheme, future baseline results are presented for 2030, 2038 and 2046.

Table 7-72: Future baseline performance at A530 King Street/Gadbrook Distribution Centre junction

Approach	Flow, PCU/hr	RFC	Q, PCU	Flow, PCU/hr	RFC	Q, PCU	Flow, PCU/hr	RFC	Q, PCU
	2030 AM peak hour (08:00–09:00)			**2038 AM peak hour (08:00–09:00)**			**2046 AM peak hour (08:00–09:00)**		
A530 King Street (north)	813	0.24	0	706	0.21	0	658	0.20	0
A530 King Street (south)	1,123	0.43	1	1,188	0.46	1	1,247	0.48	1
Gadbrook Distribution Centre	142	0.08	0	142	0.09	0	142	0.09	0
	2030 PM peak hour (17:00–18:00)			**2038 PM peak hour (17:00–18:00)**			**2046 PM peak hour (17:00–18:00)**		
A530 King Street (north)	871	0.26	0	862	0.26	0	877	0.26	0
A530 King Street (south)	848	0.33	1	819	0.32	1	811	0.31	1
Gadbrook Distribution Centre	188	0.10	0	188	0.10	0	188	0.10	0

7.4.168 The assessment shows that this junction operates well within capacity in the 2030, 2038 and 2046 future baseline.

A556 Shurlach Road/A530 King Street

7.4.169 This junction is a four-arm priority controlled (give way) roundabout with no controlled pedestrian crossing facilities. The operation of the junction has been assessed for the 2018 existing baseline AM and PM peak hours using SATURN software and is shown in Table 7-73 .

Table 7-73: 2018 baseline performance at A556 Shurlach Road/A530 King Street junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2018 AM peak hour (08:00–09:00) baseline results		
A530 King Street (north)	864	91%	4
A556 Shurlach Road (east)	1,567	77%	1
A530 King Street (south)	689	108%	9
A556 Shurlach Road (west)	1,553	84%	1
	2018 PM peak hour (17:00–18:00) baseline results		
A530 King Street (north)	764	71%	1
A556 Shurlach Road (east)	1,853	97%	6
A530 King Street (south)	817	106%	9
A556 Shurlach Road (west)	1,329	85%	2

7.4.170 This junction operates over capacity in the 2018 baseline with a maximum VoC of 108% on the A530 King Street (south) approach in the AM peak hour with an associated queue length of nine PCU. In the PM peak hour, the maximum VoC of 106% is on the A530 King Street (south) approach with a queue length of nine PCU.

7.4.171 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-74. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 7-74: Future baseline performance at A556 Shurlach Road/A530 King Street junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2030 AM peak hour (08:00–09:00)		
A530 King Street (north)	829	102%	9
A556 Shurlach Road (east)	1,702	83%	1
A530 King Street (south)	667	110%	9
A556 Shurlach Road (west)	1,801	97%	4
	2030 PM peak hour (17:00–18:00)		
A530 King Street (north)	1,012	101%	10
A556 Shurlach Road (east)	1,771	105%	11
A530 King Street (south)	815	109%	9

Approach	Flow, PCU/hr	VoC	Q, PCU
A556 Shurlach Road (west)	1,465	92%	3

7.4.172 This junction operates over capacity in the 2030 future baseline with a maximum VoC of 110% on the A530 King Street (south) approach in the AM peak hour with an associated queue length of nine PCU. In the PM peak hour, the maximum VoC of 109% is on the A530 King Street (south) approach with a queue length of nine PCU.

Gadbrook Road/East Avenue

7.4.173 This junction is a three-arm priority controlled (give way) T-junction with no controlled pedestrian crossing facilities. The operation of the junction has been assessed for the 2018 existing baseline AM and PM peak hours using SATURN software and is shown in Table 7-75.

Table 7-75: 2018 baseline performance at Gadbrook Road/East Avenue junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2018 AM peak hour (08:00–09:00) baseline results		
East Avenue	42	8%	0
Gadbrook Road (south)	152	11%	0
Gadbrook Road (north)	250	12%	0
	2018 PM peak hour (17:00–18:00) baseline results		
East Avenue	9	2%	0
Gadbrook Road (south)	368	28%	0
Gadbrook Road (north)	244	12%	0

7.4.174 The assessment shows that this junction operates well within capacity in the 2018 baseline.

7.4.175 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-76. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 7-76: Future baseline performance at Gadbrook Road/East Avenue junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2030 AM peak hour (08:00–09:00)		
East Avenue	48	9%	0
Gadbrook Road (south)	164	12%	0
Gadbrook Road (north)	259	13%	0
	2030 PM peak hour (17:00–18:00)		
East Avenue	10	2%	0
Gadbrook Road (south)	388	33%	0
Gadbrook Road (north)	243	12%	0

7.4.176 The assessment shows that this junction operates well within capacity in the 2030 future baseline.

A556 Shurlach Road/B5082 Penny's Lane

7.4.177 This junction is a three-arm priority controlled (give way) T-junction with no controlled pedestrian crossing facilities. The operation of the junction has been assessed for the 2017 existing baseline AM and PM peak hours using Junctions 9 software and is shown in Table 7-77.

Table 7-77: 2017 baseline performance at A556 Shurlach Road/B5082 Penny's Lane junction

Approach	Flow, PCU/hr	RFC	Q, PCU
	2017 AM peak hour (08:00–09:00) baseline results		
A556 Shurlach Road (east) (ahead and left)	1,423	-	-
B5082 Penny's Lane (left)	334	0.59	2
A556 Shurlach Road (west) (right)	413	0.76	3
	2017 PM peak hour (17:00–18:00) baseline results		
A556 Shurlach Road (east) (ahead and left)	1,500	-	-
B5082 Penny's Lane (left)	369	0.67	2
A556 Shurlach Road (west) (right)	274	0.52	1

7.4.178 The assessment shows that this junction operates within capacity in the 2017 baseline with a maximum RFC of 0.76 on the A556 Shurlach Road (west) (right) approach in the AM peak hour with an associated queue length of three PCU. In the PM peak hour, the junction operates well within capacity in the 2017 baseline.

7.4.179 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-78. As the junction is affected by both the construction and operation of the Proposed Scheme, future baseline results are presented for 2030, 2038 and 2046.

Table 7-78: Future baseline performance at A556 Shurlach Road/B5082 Penny's Lane junction

Approach	Flow, PCU/hr	RFC	Q, PCU	Flow, PCU/hr	RFC	Q, PCU	Flow, PCU/hr	RFC	Q, PCU
	2030 AM peak hour (08:00–09:00)			**2038 AM peak hour (08:00–09:00)**			**2046 AM peak hour (08:00–09:00)**		
A556 Shurlach Road (east) (ahead and left)	1,640	-	-	1,769	-	-	1,849	-	-
B5082 Penny's Lane (left)	332	0.64	2	293	0.59	2	274	0.57	1
A556 Shurlach Road (west) (right)	374	0.75	3	320	0.67	2	284	0.61	2
	2030 PM peak hour (17:00–18:00)			**2038 PM peak hour (17:00–18:00)**			**2046 PM peak hour (17:00–18:00)**		
A556 Shurlach Road (east) (ahead and left)	1,611	-	-	1,640	-	-	1,634	-	-
B5082 Penny's Lane (left)	403	0.76	3	389	0.74	3	383	0.73	3
A556 Shurlach Road (west) (right)	285	0.56	1	293	0.58	1	296	0.59	1

7.4.180 In the 2030 future baseline, the assessment shows that this junction operates within capacity in the AM peak hour with a maximum RFC of 0.75 on the A556 Shurlach Road (west) (right) approach with an associated queue length of three PCU. In the PM peak hour, the maximum RFC of 0.76 is on the B5082 Penny's Lane (left) approach with a queue length of three PCU.

7.4.181 In the 2038 and 2046 future baselines, the assessments show that this junction operates within capacity in the AM and PM peak hours.

A533 London Road/A533 Kingsmead

7.4.182 This junction is a three-arm signalised controlled T-junction with signal controlled pedestrian crossing facilities. The operation of the junction has been assessed for the 2018 existing baseline AM and PM peak hours using SATURN software and is shown in Table 7-79.

Table 7-79: 2018 baseline performance at A533 London Road/A533 Kingsmead junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2018 AM peak hour (08:00–09:00) baseline results		
A533 London Road	705	45%	8
London Road	242	51%	3
A533 Kingsmead	888	72%	8
	2018 PM peak hour (17:00–18:00) baseline results		
A533 London Road	997	53%	11
London Road	109	37%	2
A533 Kingsmead	708	50%	5

7.4.183 The assessment shows that this junction operates well within capacity in the 2018 baseline.

7.4.184 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-80. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 7-80: Future baseline performance at A533 London Road/A533 Kingsmead junction

Approach	Flow, PCU/hr	RFC	Q, PCU
	2030 AM peak hour (08:00–09:00)		
A533 London Road	887	57%	10
London Road	280	59%	4
A533 Kingsmead	978	89%	9
	2030 PM peak hour (17:00–18:00)		
A533 London Road	1,176	63%	13
London Road	127	43%	2
A533 Kingsmead	829	60%	6

7.4.185 In the AM peak hour, the assessment shows that this junction operates close to capacity in the 2030 future baseline with a maximum VoC of 89% on the A533 Kingsmead approach

with an associated queue length of nine PCU. In the PM peak hour, the assessment shows that this junction operates well within capacity in the 2030 future baseline.

A530 Griffiths Road/A530 King Street/B5082 Middlewich Road

7.4.186 This junction is a four-arm priority controlled (give way) staggered crossroads with no controlled pedestrian crossing facilities. Penny's Lane approach is a minor arm that is not included within the strategic traffic model. The operation of the junction has been assessed for the 2018 existing baseline AM and PM peak hours using SATURN software and is shown in Table 7-81.

Table 7-81: 2018 baseline performance at A530 Griffiths Road/A530 King Street/B5082 Middlewich Road junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2018 AM peak hour (08:00–09:00) baseline results		
A530 Griffiths Road	558	35%	0
Penny's Lane	-	-	-
A530 King Street	461	26%	0
B5082 Middlewich Road	359	60%	2
	2018 PM peak hour (17:00–18:00) baseline results		
A530 Griffiths Road	333	20%	0
Penny's Lane	-	-	-
A530 King Street	746	40%	0
B5082 Middlewich Road	423	104%	5

7.4.187 In the 2018 baseline the assessment shows that this junction operates well within capacity in the AM peak hour with a maximum VoC of 60% on the B5082 Middlewich Road approach with an associated queue length of two PCU. In the PM peak hour, the assessment shows that this junction operates over capacity in the 2018 baseline with a maximum VoC of 104% on the B5082 Middlewich Road approach with an associated queue length of five PCU.

7.4.188 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-82. As the junction is affected by both construction and operation of the Proposed Scheme, future baseline results are presented for 2030, 2038 and 2046.

Table 7-82: Future baseline performance at A530 Griffiths Road/A530 King Street/B5082 Middlewich Road junction

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
	2030 AM peak hour (08:00–09:00)			**2038 AM peak hour (08:00–09:00)**			**2046 AM peak hour (08:00–09:00)**		
A530 Griffiths Road	525	48%	5	507	48%	5	518	50%	5
Penny's Lane	-	-	-	-	-	-	-	-	-

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
A530 King Street	495	50%	7	498	50%	7	480	49%	7
B5082 Middlewich Road	371	70%	9	372	69%	9	391	71%	9
	2030 PM peak hour (17:00–18:00)			**2038 PM peak hour (17:00–18:00)**			**2046 PM peak hour (17:00–18:00)**		
A530 Griffiths Road	531	45%	5	517	44%	5	559	53%	5
Penny's Lane	-	-	-	-	-	-	-	-	-
A530 King Street	701	70%	10	690	69%	10	650	64%	9
B5082 Middlewich Road	437	97%	10	444	98%	10	434	100%	10

7.4.189 In the 2030 future baseline the assessment shows that this junction operates well within capacity in the AM peak hour with a maximum VoC of 70% on the B5082 Middlewich Road approach with an associated queue length of nine PCU. In the PM peak hour, the assessment shows that this junction operates close to capacity in the 2030 future baseline with a maximum VoC of 97% on the B5082 Middlewich Road approach with an associated queue length of 10 PCU.

7.4.190 In the 2038 future baseline the assessment shows that this junction operates well within capacity in the AM peak hour with a maximum VoC of 69% on the B5082 Middlewich Road approach with an associated queue length of nine PCU. In the PM peak hour, the assessment shows that this junction operates close to capacity in the 2038 future baseline with a maximum VoC of 98% on the B5082 Middlewich Road approach with an associated queue length of 10 PCU.

7.4.191 In the 2046 future baseline the assessment shows that this junction operates well within capacity in the AM peak hour with a maximum VoC of 71% on the B5082 Middlewich Road approach with an associated queue length of nine PCU. In the PM peak hour, the assessment shows that this junction operates close to capacity in the 2046 future baseline with a maximum VoC of 100% on the B5082 Middlewich Road approach with an associated queue length of 10 PCU.

A556 Shurlach Road (southbound)/Birches Lane

7.4.192 This junction is a three-arm priority controlled (give way) T-junction with no controlled pedestrian crossing facilities. The A556 Shurlach Road is one-way southbound and therefore no results are reported for the A556 Shurlach Road (south) approach. The operation of the junction has been assessed for the 2017 existing baseline AM and PM peak hours using Junctions 9 software and is shown in Table 7-83.

Table 7-83: 2017 baseline performance at A556 Shurlach Road (southbound)/Birches Lane junction

Approach	Flow, PCU/hr	RFC	Q, PCU
	2017 AM peak hour (08:00–09:00) baseline results		
A556 Shurlach Road (north) (ahead)	1,439	0.00	0

Approach	Flow, PCU/hr	RFC	Q, PCU
A556 Shurlach Road (north) (left)	109	0.00	0
Birches Lane (left)	44	0.08	0
A556 Shurlach Road (south)	-	-	-
	2017 PM peak hour (17:00–18:00) baseline results		
A556 Shurlach Road (north) (ahead)	1,448	0.00	0
A556 Shurlach Road (north) (left)	72	0.00	0
Birches Lane (left)	71	0.14	0
A556 Shurlach Road (south)	-	-	-

7.4.193 The assessment shows that this junction operates within capacity in the 2017 baseline.

7.4.194 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-84. As the junction is only affected by both construction and operation of the Proposed Scheme, future baseline results are presented for 2030, 2038 and 2046.

Table 7-84: Future baseline performance at A556 Shurlach Road (southbound)/Birches Lane junction

Approach	Flow, PCU/hr	RFC	Q, PCU	Flow, PCU/hr	RFC	Q, PCU	Flow, PCU/hr	RFC	Q, PCU
	2030 AM peak hour (08:00–09:00)			**2038 AM peak hour (08:00–09:00)**			**2046 AM peak hour (08:00–09:00)**		
A556 Shurlach Road (north) (ahead)	1,622	0.00	0	1,776	0.00	0	1,899	0.00	0
A556 Shurlach Road (north) (left)	159	0.00	0	143	0.00	0	161	0.00	0
Birches Lane (left)	44	0.09	0	46	0.10	0	47	0.11	0
A556 Shurlach Road (south)	-	-	-	-	-	-	-	-	-
	2030 PM peak hour (17:00–18:00)			**2038 PM peak hour (17:00–18:00)**			**2046 PM peak hour (17:00–18:00)**		
A556 Shurlach Road (north) (ahead)	1,280	0.00	0	1,295	0.00	0	1,271	0.00	0
A556 Shurlach Road (north) (left)	217	0.00	0	288	0.00	0	340	0.00	0
Birches Lane (left)	152	0.28	0	186	0.35	1	233	0.44	1
A556 Shurlach Road (south)	-	-	-	-	-	-	-	-	-

7.4.195 The assessment shows that this junction operates well within capacity in the 2030, 2038 and 2046 future baseline.

A556 Shurlach Road (northbound)/Birches Lane

7.4.196 This junction is a three-arm priority controlled (give way) T-junction with no controlled pedestrian crossing facilities. The A556 Shurlach Road is one-way northbound and therefore

no results are reported for the A556 Shurlach Road (north) approach. The operation of the junction has been assessed for the 2017 existing baseline AM and PM peak hours using Junctions 9 software and is shown in Table 7-85.

Table 7-85: 2017 baseline performance at A556 Shurlach Road (northbound)/Birches Lane junction

Approach	Flow, PCU/hr	RFC	Q, PCU
	2017 AM peak hour (08:00–09:00) baseline results		
A556 Shurlach Road (north)	-	-	-
A556 Shurlach Road (south) (ahead)	1,493	0.00	0
A556 Shurlach Road (south) (left)	122	0.00	0
Birches Lane (left)	6	0.01	0
	2017 PM peak hour (17:00–18:00) baseline results		
A556 Shurlach Road (north)	-	-	-
A556 Shurlach Road (south) (ahead)	1,176	0.00	0
A556 Shurlach Road (south) (left)	182	0.00	0
Birches Lane (left)	4	0.00	0

7.4.197 The assessment shows that this junction operates well within capacity in the 2017 baseline.

7.4.198 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-86. As the junction is affected by both the construction and operation of the Proposed Scheme, future baseline results are presented for 2030, 2038 and 2046.

Table 7-86: Future baseline performance at A556 Shurlach Road (northbound)/Birches Lane junction

Approach	Flow, PCU/hr	RFC	Q, PCU	Flow, PCU/hr	RFC	Q, PCU	Flow, PCU/hr	RFC	Q, PCU
	2030 AM peak hour (08:00–09:00)			**2038 AM peak hour (08:00–09:00)**			**2046 AM peak hour (08:00–09:00)**		
A556 Shurlach Road (north)	-	-	-	-	-	-	-	-	-
A556 Shurlach Road (south) (ahead)	1,635	0.00	0	1,691	0.00	0	1,712	0.00	0
A556 Shurlach Road (south) (left)	174	0.00	0	184	0.00	0	177	0.00	0
Birches Lane (left)	6	0.01	0	6	0.01	0	94	0.20	0
	2030 PM peak hour (17:00–18:00)			**2038 PM peak hour (17:00–18:00)**			**2046 PM peak hour (17:00–18:00)**		
A556 Shurlach Road (north)	-	-	-	-	-	-	-	-	-
A556 Shurlach Road (south) (ahead)	1,328	0.00	0	1,359	0.00	0	1,361	0.00	0
A556 Shurlach Road (south) (left)	164	0.00	0	154	0.00	0	148	0.00	0
Birches Lane (left)	4	0.00	0	4	0.00	0	4	0.00	0

7.4.199 The assessment shows that this junction operates well within capacity in the 2030, 2038 and 2046 future baseline.

A559 Watling Street/Apple Market Street

7.4.200 This junction is a three-arm priority controlled (give way) T-junction with no controlled pedestrian crossing facilities. The A559 Watling Street is one-way. The operation of the junction has been assessed for the 2018 existing baseline AM and PM peak hours using SATURN software and is shown in Table 7-87.

Table 7-87: 2018 baseline performance at A559 Watling Street/Apple Market Street junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2018 AM peak hour (08:00–09:00) baseline results		
Apple Market Street	108	66%	1
A559 Watling Street (east)	-	-	-
A559 Watling Street (west)	2,082	35%	0
	2018 PM peak hour (17:00–18:00) baseline results		
Apple Market Street	222	88%	2
A559 Watling Street (east)	-	-	-
A559 Watling Street (west)	1,597	27%	0

7.4.201 In the 2018 baseline the assessment shows that this junction operates well within capacity in the AM peak hour with a maximum VoC of 66% on the Apple Market Street approach with an associated queue length of one PCU. In the PM peak hour, the assessment shows that this junction operates close to capacity in the 2018 baseline with a maximum VoC of 88% on the Apple Market Street approach with an associated queue length of two PCU.

7.4.202 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-88. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 7-88: Future baseline performance at A559 Watling Street/Apple Market Street junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2030 AM peak hour (08:00–09:00)		
Apple Market Street	117	98%	4
A559 Watling Street (east)	-	-	-
A559 Watling Street (west)	2,354	39%	0
	2030 PM peak hour (17:00–18:00)		
Apple Market Street	203	100%	5
A559 Watling Street (east)	-	-	-
A559 Watling Street (west)	1,834	31%	0

7.4.203 In the 2030 future baseline the assessment shows that this junction operates close to capacity in the AM peak hour with a maximum VoC of 98% on the Apple Market Street

approach with an associated queue length of four PCU. In the PM peak hour, the assessment shows that this junction operates over capacity in the 2030 future baseline with a maximum VoC of 100% on the Apple Market Street approach with an associated queue length of five PCU.

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

7.4.204 This junction is a four-arm signal controlled crossroad with signal controlled pedestrian crossing facilities. The operation of the junction has been assessed for the 2018 existing baseline AM and PM peak hours using SATURN software and is shown in Table 7-89.

Table 7-89: 2018 baseline performance at B5082 Station Road/B5062 Middlewich Road/Manchester Road/Victoria Road junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2018 AM peak hour (08:00–09:00) baseline results		
Manchester Road	186	25%	2
B5082 Middlewich Road	666	71%	8
Victoria Road	446	58%	6
B5082 Station Road	182	20%	2
	2018 PM peak hour (17:00–18:00) baseline results		
Manchester Road	415	52%	5
B5082 Middlewich Road	714	76%	8
Victoria Road	313	51%	4
B5082 Station Road	316	34%	4

7.4.205 In the AM peak hour, the assessment shows that this junction operates well within capacity in the 2018 baseline. In the PM peak hour, the assessment shows that this junction operates within capacity in the 2018 baseline with a maximum VoC of 76% on the B5082 Middlewich Road approach with an associated queue length of eight PCU.

7.4.206 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-90. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 7-90: Future baseline performance at B5082 Station Road/B5062 Middlewich Road/Manchester Road/Victoria Road junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2030 AM peak hour (08:00–09:00)		
Manchester Road	166	23%	2
B5082 Middlewich Road	848	91%	10
Victoria Road	450	58%	6
B5082 Station Road	200	22%	2

Approach	Flow, PCU/hr	VoC	Q, PCU
	2030 PM peak hour (17:00–18:00)		
Manchester Road	341	42%	4
B5082 Middlewich Road	766	82%	9
Victoria Road	311	51%	4
B5082 Station Road	329	35%	4

7.4.207 In the AM peak hour, the assessment shows that this junction operates close to capacity in the 2030 future baseline with a maximum VoC of 91% on the B5082 Middlewich Road approach with an associated queue length of 10 PCU. In the PM peak hour, the assessment shows that this junction operates within capacity in the 2030 future baseline with a maximum VoC of 82% on the B5082 Middlewich Road approach with an associated queue length of nine PCU.

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

7.4.208 This junction is a five-arm signal controlled roundabout with signal controlled pedestrian crossing facilities. The operation of the junction has been assessed for the 2018 existing baseline AM and PM peak hours using SATURN software and is shown in Table 7-91.

Table 7-91: 2018 baseline performance at A559 Chester Way/B5082 Station Road/B5075 New Warrington Road junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2018 AM peak hour (08:00–09:00) baseline results		
B5075 New Warrington Road	465	33%	0
A559 Chester Way (east)	373	38%	4
B5082 Station Road	778	82%	1
A559 Chester Way (west)	676	30%	6
Leicester Street	141	11%	2
	2018 PM peak hour (17:00–18:00) baseline results		
B5075 New Warrington Road	437	33%	0
A559 Chester Way (east)	604	61%	6
B5082 Station Road	755	95%	4
A559 Chester Way (west)	589	26%	5
Leicester Street	326	25%	4

7.4.209 In the AM peak hour, the assessment shows that this junction operates within capacity in the 2018 baseline with a maximum VoC of 82% on the B5082 Station Road approach with an associated queue length of one PCU. In the PM peak hour, the assessment shows that this junction is operates close to capacity in the 2018 baseline with a maximum VoC of 95% on the B5082 Station Road approach with an associated queue length of four PCU.

7.4.210 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-92. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 7-92: Future baseline performance at A559 Chester Way/B5082 Station Road/B5075 New Warrington Road junction

Approach	Flow, PCU/hr	VoC	Flow, PCU/hr
	2030 AM peak hour (08:00–09:00)		
B5075 New Warrington Road	539	36%	0
A559 Chester Way (east)	457	46%	5
B5082 Station Road	846	97%	4
A559 Chester Way (west)	844	37%	8
Leicester Street	129	10%	1
	2030 PM peak hour (17:00–18:00)		
B5075 New Warrington Road	876	70%	1
A559 Chester Way (east)	728	74%	8
B5082 Station Road	555	97%	6
A559 Chester Way (west)	742	32%	7
Leicester Street	414	31%	5

7.4.211 In the AM peak hour, the assessment shows that this junction operates close to capacity in the 2030 future baseline with a maximum VoC of 97% on the B5082 Station Road approach with an associated queue length of four PCU. In the PM peak hour, the maximum VoC of 97% is on the B5082 Station Road approach with a queue length of six PCU.

A530 Griffiths Road/A559 Manchester Road

7.4.212 This junction is a three-arm priority controlled (give way) T-junction with no controlled pedestrian crossing facilities. The operation of the junction has been assessed for the 2018 existing baseline AM and PM peak hours using SATURN software and is shown in Table 7-93.

Table 7-93: 2018 baseline performance at A530 Griffiths Road/A559 Manchester Road junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2018 AM peak hour (08:00–09:00) baseline results		
A599 Manchester Road (east)	883	47%	0
A530 Griffiths Road	135	40%	0
A599 Manchester Road (west)	758	65%	0
	2018 PM peak hour (17:00–18:00) baseline results		
A599 Manchester Road (east)	800	42%	0
A530 Griffiths Road	326	89%	2
A599 Manchester Road (west)	652	54%	0

7.4.213 In the AM peak hour, the assessment shows that this junction operates well within capacity in the 2018 baseline. In the PM peak hour, the assessment shows that this junction operates

close to capacity in the 2018 baseline with a maximum VoC of 89% on the A530 Griffiths Road approach with an associated queue length of two PCU.

7.4.214 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-94. As the junction is affected by both construction and operation of the Proposed Scheme, future baseline results are presented for 2030, 2038 and 2046.

Table 7-94: Future baseline performance at A530 Griffiths Road/A559 Manchester Road junction

Approach	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU	Flow, PCU/hr	VoC	Q, PCU
	2030 AM peak hour (08:00–09:00)			**2038 AM peak hour (08:00–09:00)**			**2046 AM peak hour (08:00–09:00)**		
A599 Manchester Road (east)	911	48%	0	899	48%	0	914	48%	0
A530 Griffiths Road	166	48%	0	183	55%	0	198	61%	1
A599 Manchester Road (west)	639	64%	0	665	66%	0	709	69%	0
	2030 PM peak hour (17:00–18:00)			**2038 PM peak hour (17:00–18:00)**			**2046 PM peak hour (17:00–18:00)**		
A599 Manchester Road (east)	834	44%	0	831	43%	0	880	46%	0
A530 Griffiths Road	332	96%	3	332	97%	4	326	96%	4
A599 Manchester Road (west)	851	84%	0	875	87%	0	927	97%	1

7.4.215 In the 2030 future baseline, the assessment shows that this junction operates well within capacity in the AM peak hour. In the PM peak hour, the assessment shows that this junction operates close to capacity in the 2030 future baseline with a maximum VoC of 96% on the A530 Griffiths Road approach with an associated queue length of three PCU.

7.4.216 In the 2038 future baseline, the assessment shows that this junction operates well within capacity in the AM peak hour. In the PM peak hour, the assessment shows that this junction operates close to capacity in the 2038 future baseline with a maximum VoC of 97% on the A530 Griffiths Road approach with an associated queue length of four PCU.

7.4.217 In the 2046 future baseline, the assessment shows that this junction operates well within capacity in the AM peak hour. In the PM peak hour, the assessment shows that this junction operates close to capacity in the 2046 future baseline with a maximum VoC of 97% on the A599 Manchester Road (west) approach with an associated queue length of one PCU.

A559 Manchester Road/A559 Hall Lane/Station Road

7.4.218 This junction is a four-arm signal controlled crossroad with signal controlled pedestrian crossing facilities. The operation of the junction has been assessed for the 2018 existing baseline AM and PM peak hours using SATURN software and is shown in Table 7-95.

Table 7-95: 2018 baseline performance at A559 Manchester Road/A559 Hall Lane/Station Road junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2018 AM peak hour (08:00–09:00) baseline results		
A559 Hall Lane	469	88%	9
A559 Manchester Road (east)	411	50%	7
Station Road	114	58%	3
A559 Manchester Road (west)	672	89%	12
	2018 PM peak hour (17:00–18:00) baseline results		
A559 Hall Lane	356	67%	7
A559 Manchester Road (east)	459	57%	8
Station Road	186	95%	5
A559 Manchester Road (west)	628	81%	11

7.4.219 The assessment shows that this junction operates close to capacity in the 2018 baseline with a maximum VoC of 89% on the A559 Manchester Road (west) approach in the AM peak hour with an associated queue length of 12 PCU. In the PM peak hour, the maximum VoC of 95% is on the Station Road approach with a queue length of five PCU.

7.4.220 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-96. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 7-96: Future baseline performance at A559 Manchester Road/A559 Hall Lane/Station Road junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2030 AM peak hour (08:00–09:00) baseline results		
A559 Hall Lane	297	56%	6
A559 Manchester Road (east)	639	78%	11
Station Road	139	71%	4
A559 Manchester Road (west)	547	71%	10
	2030 PM peak hour (17:00–18:00) baseline results		
A559 Hall Lane	381	71%	7
A559 Manchester Road (east)	463	58%	8
Station Road	189	97%	5
A559 Manchester Road (west)	717	100%	12

7.4.221 In the AM peak hour, the assessment shows that this junction operates within capacity in the 2030 future baseline with a maximum VoC of 78% on the A559 Manchester Road (east) approach with an associated queue length of 11 PCU. In the PM peak hour, this junction operates over capacity in the 2030 future baseline with a maximum VoC of 100% on the A559 Manchester Road (west) approach with an associated queue length of 12 PCU.

A559 Manchester Road/Stubbs Lane

7.4.222 This junction is a three-arm priority controlled (give way) T-junction with no controlled pedestrian crossing facilities. The operation of the junction has been assessed for the 2018 existing baseline AM and PM peak hours using SATURN software and is shown in Table 7-97.

Table 7-97: 2018 baseline performance at A559 Manchester Road/Stubbs Lane junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2018 AM peak hour (08:00–09:00) baseline results		
A559 Manchester Road (east)	361	18%	0
Stubbs Lane	266	63%	0
A559 Manchester Road (west)	414	37%	0
	2018 PM peak hour (17:00–18:00) baseline results		
A559 Manchester Road (east)	263	13%	0
Stubbs Lane	456	98%	3
A559 Manchester Road (west)	377	29%	0

7.4.223 The assessment shows that this junction operates well within capacity in the 2018 baseline. In the PM peak hour, the assessment shows that this junction operates close to capacity in the 2018 baseline with a maximum VoC of 98% on the Stubbs Lane approach with an associated queue length of three PCU.

7.4.224 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-98. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 7-98: Future baseline performance at A559 Manchester Road/Stubbs Lane junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2030 AM peak hour (08:00–09:00)		
A559 Manchester Road (east)	453	23%	0
Stubbs Lane	310	65%	0
A559 Manchester Road (west)	295	32%	0
	2030 PM peak hour (17:00–18:00)		
A559 Manchester Road (east)	278	14%	0
Stubbs Lane	443	101%	5
A559 Manchester Road (west)	491	39%	0

7.4.225 The assessment shows that this junction operates well within capacity in the 2030 future baseline. In the PM peak hour, the assessment shows that this junction operates over capacity in the 2030 future baseline with a maximum VoC of 101% on the Stubbs Lane approach with an associated queue length of five PCU.

B5075 Ollershaw Lane/B5075 New Warrington Road/Chapel Street

7.4.226 This junction is a three-arm priority controlled (give way) T-junction with no controlled pedestrian crossing facilities. The operation of the junction has been assessed for the 2018 existing baseline AM and PM peak hours using SATURN software and is shown in Table 7-99.

Table 7-99: 2018 baseline performance at B5075 Ollershaw Lane/B5075 New Warrington Road/Chapel Street junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2018 AM peak hour (08:00–09:00) baseline results		
B5075 Ollershaw Lane	256	13%	0
Chapel Street	232	40%	0
B5075 New Warrington Road	394	38%	0
	2018 PM peak hour (17:00–18:00) baseline results		
B5075 Ollershaw Lane	224	11%	0
Chapel Street	227	38%	0
B5075 New Warrington Road	367	29%	0

7.4.227 The assessment shows that this junction operates well within capacity in the 2018 baseline.

7.4.228 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-100. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 7-100: Future baseline performance at B5075 Ollershaw Lane/B5075 New Warrington Road/Chapel Street junction

Approach	Flow, PCU/hr	RFC	Q, PCU
	2030 AM peak hour (08:00–09:00)		
B5075 Ollershaw Lane	395	20%	0
Chapel Street	182	36%	0
B5075 New Warrington Road	753	89%	1
	2030 PM peak hour (17:00–18:00)		
B5075 Ollershaw Lane	373	19%	0
Chapel Street	560	105%	5
B5075 New Warrington Road	549	39%	0

7.4.229 In the AM peak hour, the assessment shows that this junction operates close to capacity in the 2030 future baseline with a maximum VoC of 89% on the B5075 New Warrington Road approach with an associated queue length of one PCU. In the PM peak hour, this junction operates over capacity in the 2030 future baseline with a maximum VoC of 105% on the Chapel Street approach with an associated queue length of five PCU.

A556 Chester Road/A556 Shurlach Road/A559 Manchester Road

7.4.230 This junction is a three-arm partially signal controlled gyratory junction with no controlled pedestrian crossing facilities. The operation of the junction has been assessed for the 2017 existing baseline AM and PM peak hours using LinSig software and is shown in Table 7-101 .

Table 7-101: 2017 baseline performance at A556 Chester Road/A556 Shurlach Road/A559 Manchester Road junction

Approach	Flow, PCU/hr	*DoS	Q, PCU
	2017 AM peak hour (08:00–09:00) baseline results		
A556 Shurlach Road (north) (nearside) (ahead)	790	40%	0
A556 Shurlach Road (north) (offside) (ahead)	808	41%	0
A556 Shurlach Road (south) (nearside) (left and ahead)	772	81%	18
A556 Shurlach Road (south) (offside) (ahead)	761	81%	18
A559 Manchester Road (nearside) (ahead)	408	79%	11
A559 Manchester Road (offside) (ahead)	409	79%	11
A556 Shurlach Road (internal past A556 (north) entry)	182	25%	4
A556 Shurlach Road (internal past A556 (south) entry) (nearside)	121	15%	2
A556 Shurlach Road (internal past A556 (south) entry) (offside)	131	16%	2
A556 Shurlach Road (internal past A559 Manchester Road entry) (nearside)	690	57%	1
A556 Shurlach Road (internal past A559 Manchester Road entry) (offside)	761	58%	1
	2017 PM peak hour (17:00–18:00) baseline results		
A556 Shurlach Road (north) (nearside) (ahead)	892	45%	0
A556 Shurlach Road (north) (offside) (ahead)	1,069	54%	1
A556 Shurlach Road (south) (nearside) (left and ahead)	560	57%	10
A556 Shurlach Road (south) (offside) (ahead)	555	58%	10
A559 Manchester Road (nearside) (ahead)	223	45%	5
A559 Manchester Road (offside) (ahead)	223	45%	5
A556 Shurlach Road (internal past A556 (north) entry)	121	22%	3
A556 Shurlach Road (internal past A556 (south) entry) (nearside)	244	31%	4
A556 Shurlach Road (internal past A556 (south) entry) (offside)	260	32%	5
A556 Shurlach Road (internal past A559 Manchester Road entry) (nearside)	493	40%	0
A556 Shurlach Road (internal past A559 Manchester Road entry) (offside)	555	42%	0

**DoS = Degree of Saturation*

7.4.231 The assessment shows that this junction operates within capacity in the 2017 baseline with a maximum DoS of 81% on the nearside and offside lanes of the A556 Shurlach Road (south) approach in the AM peak hour with an associated queue length of 18 PCU. The junction operates well within capacity in the 2017 baseline in the PM peak hour.

7.4.232 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-102. As the junction is affected by both construction and operation of the Proposed Scheme, future baseline results are presented for 2030, 2038 and 2046.

Table 7-102: Future baseline performance at A556 Chester Road/A556 Shurlach Road/A559 Manchester Road junction

Approach	Flow, PCU/ hr	DoS	Q, PCU	Flow, PCU/ hr	DoS	Q, PCU	Flow, PCU/ hr	DoS	Q, PCU
	2030 AM peak hour (08:00–09:00)			**2038 AM peak hour (08:00–09:00)**			**2046 AM peak hour (08:00–09:00)**		
A556 Shurlach Road (north) (nearside) (ahead)	940	47%	0	961	48%	1	1,022	52%	1
A556 Shurlach Road (north) (offside) (ahead)	1,073	54%	1	1,099	55%	1	1,160	58%	1
A556 Shurlach Road (south) (nearside) (left and ahead)	865	78%	18	891	80%	19	942	83%	21
A556 Shurlach Road (south) (offside) (ahead)	850	78%	18	878	80%	19	929	83%	21
A559 Manchester Road (nearside) (ahead)	266	74%	8	272	76%	8	279	83%	9
A559 Manchester Road (offside) (ahead)	270	75%	8	272	76%	8	279	83%	9
A556 Shurlach Road (internal past A556 (north) entry)	90	16%	2	94	17%	2	87	17%	2
A556 Shurlach Road (internal past A556 (south) entry) (nearside)	171	26%	3	175	27%	3	181	29%	4
A556 Shurlach Road (internal past A556 (south) entry) (offside)	184	28%	4	185	28%	4	193	30%	4
A556 Shurlach Road (internal past A559 Manchester Road entry) (nearside)	790	58%	1	813	59%	1	870	62%	1
A556 Shurlach Road (internal past A559 Manchester Road entry) (offside)	850	58%	1	878	60%	1	929	62%	1
	2030 PM peak hour (17:00–18:00)			**2038 PM peak hour (17:00–18:00)**			**2046 PM peak hour (17:00–18:00)**		
A556 Shurlach Road (north) (nearside) (ahead)	942	47%	1	1,008	51%	1	1,077	54%	1
A556 Shurlach Road (north) (offside) (ahead)	1,123	56%	1	1,191	60%	1	1,266	64%	1

Approach	Flow, PCU/ hr	DoS	Q, PCU	Flow, PCU/ hr	DoS	Q, PCU	Flow, PCU/ hr	DoS	Q, PCU
A556 Shurlach Road (south) (nearside) (left and ahead)	644	63%	12	661	66%	13	666	70%	14
A556 Shurlach Road (south) (offside) (ahead)	632	63%	12	647	66%	13	649	69%	13
A559 Manchester Road (nearside) (ahead)	251	56%	6	254	54%	6	256	49%	6
A559 Manchester Road (offside) (ahead)	249	55%	6	252	53%	6	252	49%	6
A556 Shurlach Road (internal past A556 (north) entry)	148	26%	4	155	29%	4	157	31%	4
A556 Shurlach Road (internal past A556 (south) entry) (nearside)	325	44%	6	348	45%	7	408	50%	8
A556 Shurlach Road (internal past A556 (south) entry) (offside)	340	45%	7	363	46%	7	424	51%	8
A556 Shurlach Road (internal past A559 Manchester Road entry) (nearside)	528	41%	0	537	43%	0	523	43%	0
A556 Shurlach Road (internal past A559 Manchester Road entry) (offside)	632	46%	0	647	48%	1	649	50%	1

7.4.233 In the 2030 future baseline, the assessment shows that this junction operates within capacity in the AM peak hour with a maximum DoS of 78% on the nearside and offside lanes of the A556 Shurlach Road (south) approach with an associated queue length of 18 PCU in each lane. In the PM peak hour, the assessment shows that this junction operates well within capacity in the 2030 future baseline.

7.4.234 In the 2038 future baseline, the assessment shows that this junction operates within capacity in the AM peak hour with a maximum DoS of 80% on the nearside and offside lanes of the A556 Shurlach Road (south) approach with an associated queue length of 19 PCU in each lane. In the PM peak hour, the assessment shows that this junction operates well within capacity in the 2038 future baseline.

7.4.235 In the 2046 future baseline, the assessment shows that this junction operates within capacity in the AM peak hour with a maximum DoS of 83% on the nearside and offside lanes of the A556 Shurlach Road (south) approach and on both lanes of the A559 Manchester Road approach with an associated queue length of 21 PCU in each lane of the A559 Shurlach Road (south) approach and nine PCU in each lane of the A559 Manchester Road approach. In the PM peak hour, the assessment shows that this junction operates well within capacity in the 2046 future baseline.

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

7.4.236 This junction is a four-arm signal controlled crossroads with no controlled pedestrian crossing facilities. The operation of the junction has been assessed for the 2018 existing baseline AM and PM peak hours using SATURN software and is shown in Table 7-103.

Table 7-103: 2018 baseline performance at A559 Marston Lane/A559 Hall Lane/B5391 Church Street/Wincham Lane junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2018 AM peak hour (08:00–09:00) baseline results		
B5391 Church Street	207	68%	3
A559 Hall Lane	360	39%	4
Wincham Lane	90	32%	1
A559 Marston Lane	383	39%	4
	2018 PM peak hour (17:00–18:00) baseline results		
B5391 Church Street	145	48%	2
A559 Hall Lane	450	45%	4
Wincham Lane	145	52%	2
A559 Marston Lane	182	18%	2

7.4.237 The assessment shows that this junction operates well within capacity in the 2018 baseline.

7.4.238 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-104. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 7-104: Future baseline performance at A559 Marston Lane/A559 Hall Lane/B5391 Church Street/Wincham Lane junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2030 AM peak hour (08:00–09:00)		
B5391 Church Street	235	76%	4
A559 Hall Lane	510	55%	5
Wincham Lane	165	56%	3
A559 Marston Lane	273	40%	3
	2030 PM peak hour (17:00–18:00)		
B5391 Church Street	101	34%	2
A559 Hall Lane	431	43%	4
Wincham Lane	309	103%	5
A559 Marston Lane	156	16%	2

7.4.239 In the AM peak hour, the assessment shows that this junction operates within capacity in the 2030 future baseline with a maximum VoC of 76% on the B5391 Church Street approach

with an associated queue length of four PCU. In the PM peak hour, this junction operates over capacity in the 2030 future baseline with a maximum VoC of 103% on the Wincham Lane approach with an associated queue length of five PCU.

7.4.240 The junction analysis indicates that the junction will be operating over its capacity in the PM peak hour in the 2030 future baseline. However, as the signal timings are determined by the baseline traffic flow, it is possible that the delays could to a degree be reduced by signal optimisation.

A556 Chester Road/B5569 Plumley Moor Road

7.4.241 This junction is a four-arm signal controlled crossroad with signal controlled pedestrian crossing facilities. B5569 Plumley Moor Road (west) is a one-way link eastbound. The operation of the junction has been assessed for the 2018 existing baseline AM and PM peak hours using SATURN software and is shown in Table 7-105.

Table 7-105: 2018 baseline performance at A556 Chester Road/B5569 Plumley Moor Road junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2018 AM peak hour (08:00–09:00) baseline results		
A556 Chester Road (north)	1,390	58%	17
B5569 Plumley Moor Road (east)	131	50%	2
A556 Chester Road (south)	1,601	79%	16
B5569 Plumley Moor Road (west)	199	103%	3
	2018 PM peak hour (17:00–18:00) baseline results		
A556 Chester Road (north)	1,588	87%	22
B5569 Plumley Moor Road (east)	37	8%	2
A556 Chester Road (south)	1,089	71%	13
B5569 Plumley Moor Road (west)	225	90%	4

7.4.242 In the AM peak hour, this junction operates over capacity in the 2018 baseline with a maximum VoC of 103% on the B5569 Plumley Moor Road (West) approach with an associated queue length of three PCU. In the PM peak hour, the assessment shows that this junction operates close to capacity in the 2018 baseline with a maximum VoC of 90% on the B5569 Plumley Moor Road (West) approach with an associated queue length of four PCU.

7.4.243 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-106. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 7-106: Future baseline performance at A556 Chester Road/B5569 Plumley Moor Road junction

Approach	Flow, PCU/hr	RFC	Q, PCU
	2030 AM peak hour (08:00–09:00)		
A556 Chester Road (north)	1,423	60%	18
B5569 Plumley Moor Road (east)	105	40%	2

Approach	Flow, PCU/hr	RFC	Q, PCU
A556 Chester Road (south)	1,629	81%	17
B5569 Plumley Moor Road (west)	200	102%	3
	2030 PM peak hour (17:00–18:00)		
A556 Chester Road (north)	1,583	71%	22
B5569 Plumley Moor Road (east)	41	22%	1
A556 Chester Road (south)	989	52%	11
B5569 Plumley Moor Road (west)	278	87%	5

7.4.244 In the AM peak hour, this junction operates over capacity in the 2030 future baseline with a maximum VoC of 102% on the B5569 Plumley Moor Road (West) approach with an associated queue length of three PCU. In the PM peak hour, the assessment shows that this junction operates close to capacity in the 2030 future baseline with a maximum VoC of 87% on the B5569 Plumley Moor Road (West) approach with an associated queue length of five PCU.

7.4.245 The junction analysis indicates that the junction will be over its capacity in the 2030 future baseline. However, as the signals timings are determined by the baseline traffic flow, it is possible that the delays could to a degree be reduced by signal optimisation.

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

7.4.246 This junction is a four-arm priority controlled staggered crossroads with no controlled pedestrian crossing facilities. The operation of the junction has been assessed for the 2018 existing baseline AM and PM peak hours using SATURN software and is shown in Table 7-107.

7.4.247 This junction is on the northern edge of the MA02 area and has been assessed using the M6 Junction 19 Model, which is primarily used to assess the impact of the Proposed Scheme in the Pickmere to Agden and Hulseheath (MA03) area and the western parts of the Hulseheath to Manchester Airport (MA06) area. Details of the model are set out in Section 8.

Table 7-107: 2018 baseline performance at B5391 Church Street/B5391 Pickmere Lane/Linnards Lane/Earles Lane junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2018 AM peak hour (08:00–09:00) baseline results		
B5391 Pickmere Lane	289	15%	0
Linnards Lane	128	27%	0
B5391 Church Street	129	6%	0
Earles Lane	110	17%	0
B5391 Church Street (north) (internal)	278	21%	0
B5391 Church Street (south) (internal)	236	21%	0

Approach	Flow, PCU/hr	VoC	Q, PCU
	2018 PM peak hour (17:00–18:00) baseline results		
B5391 Pickmere Lane	244	13%	0
Linnards Lane	112	22%	0
B5391 Church Street	203	10%	0
Earles Lane	136	22%	0
B5391 Church Street (north) (internal)	227	20%	0
B5391 Church Street (south) (internal)	334	30%	0

7.4.248 The assessment shows that this junction operates well within capacity in the 2018 baseline.

7.4.249 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-108. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 7-108: Future baseline performance at B5391 Church Street/B5391 Pickmere Lane/Linnards Lane/Earles Lane junction

Approach	Flow, PCU/hr	VoC	Flow, PCU/hr
	2030 AM peak hour (08:00–09:00)		
B5391 Pickmere Lane	395	20%	0
Linnards Lane	140	40%	0
B5391 Church Street	168	8%	0
Earles Lane	496	79%	0
B5391 Church Street (north) (internal)	386	34%	0
B5391 Church Street (south) (internal)	660	85%	1
	2030 PM peak hour (17:00–18:00)		
B5391 Pickmere Lane	380	20%	0
Linnards Lane	135	29%	0
B5391 Church Street	379	19%	0
Earles Lane	206	38%	0
B5391 Church Street (north)	393	55%	0
B5391 Church Street (south)	582	48%	0

7.4.250 In the AM peak hour, the assessment shows that this junction operates close to capacity in the 2030 future baseline with a maximum VoC of 85% on the B5391 Church Street (south) (internal) approach with an associated queue length of one PCU. In the PM peak hour, the assessment shows that this junction operates well within capacity in the 2030 future baseline.

A559 Marston Lane/B5075 Ollershaw Lane/Dark Lane

7.4.251 This junction is a four-arm priority controlled (give-way) crossroads with no controlled pedestrian crossing facilities. The operation of the junction has been assessed for the 2018

existing baseline AM and PM peak hours using SATURN software and is shown in Table 7-109.

Table 7-109: 2018 baseline performance at A559 Marston Lane Road/B5075 Ollershaw Lane/Dark Lane junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2018 AM peak hour (08:00–09:00) baseline results		
Dark Lane	0	0%	0
A559 Marston Lane (east)	266	13%	0
B5075 Ollershaw Lane	235	49%	0
A559 Marston Lane (west)	693	62%	0
	2018 PM peak hour (17:00–18:00) baseline results		
Dark Lane	0	0%	0
A559 Marston Lane (east)	314	16%	0
B5075 Ollershaw Lane	275	56%	0
A559 Marston Lane (west)	478	49%	0

7.4.252 The assessment shows that this junction operates well within capacity in the 2018 baseline.

7.4.253 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 7-110. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 7-110: Future baseline performance at A559 Marston Lane Road/B5075 Ollershaw Lane/Dark Lane junction

Approach	Flow, PCU/hr	VoC	Q, PCU
	2030 AM peak hour (08:00–09:00) baseline results		
Dark Lane	0	0%	0
A559 Marston Lane (east)	330	17%	0
B5075 Ollershaw Lane	344	93%	2
A559 Marston Lane (west)	952	85%	0
	2030 PM peak hour (17:00–18:00) baseline results		
Dark Lane	0	0%	0
A559 Marston Lane (east)	493	25%	0
B5075 Ollershaw Lane	478	101%	5
A559 Marston Lane (west)	546	64%	0

7.4.254 The assessment shows that this junction operates close to capacity in the 2030 future baseline with a maximum VoC of 93% on the B5075 Ollershaw Lane approach in the AM peak hour with an associated queue length of two PCU. In the PM peak hour, this junction operates over capacity in the 2030 future baseline with a maximum VoC of 101% on the B5075 Ollershaw Lane approach with an associated queue length of five PCU.

Accidents and safety

7.4.255 Accident records have been obtained from the information provided by the DfT. Within the MA02 area, a total of 432 accidents occurred over the three-year period July 2016 – June 2019, of which 350 (81%) were recorded as slight, 72 (17%) as serious and 10 (2%) as fatal. There were 132 accidents involving non-motorised users (i.e. pedestrians, cyclists, equestrians or mobility scooters).

7.4.256 The Transport Assessment policy and data (see BID TR-004-00001) illustrates the location of accidents, including their severity and whether pedestrians or cyclists were involved, recorded in the MA02 area over the three years between July 2016 and June 2019.

7.4.257 No accident clusters were identified in the MA02 area (i.e. locations recording nine or more accidents over the three years for which data were analysed).

7.4.258 No issues have been identified for the operation of the future baseline network as a result of changes to the highway network or travel demands, and the accident and safety records for the existing baseline are assumed to provide a relevant basis for assessment.

Parking and loading

7.4.259 Within the MA02 area there is public and private off-street parking in built-up areas such as Middlewich, Winsford and Northwich. Off-street staff car parking and operational HGV parking at the Gadbrook Distribution Centre, located on the A530 King Street to the south-east of Northwich, is expected to be affected by the Proposed Scheme.

7.4.260 It is not expected that on-street parking within the MA02 area will be affected by the Proposed Scheme.

7.4.261 Compared to the existing baseline, no changes are assumed to parking and loading in the future baseline.

7.5 Public transport

7.5.1 Public transport provision is focused on the local centres of Middlewich, Winsford and Northwich, with other more rural areas within MA02 being less well served. Bus routes cross the area along the principal highway corridors, serving a number of smaller settlements. National and local rail services can be accessed from Winsford, Greenback, Northwich, Lostock Gralam and Plumley stations. The following section describes the rail and bus services in the area.

Rail network

7.5.2 The MA02 area is intersected by three existing railways; the WCML, which passes through the CA on a south-east to north-west alignment to the west of the Proposed Scheme; the

Sandbach to Northwich Line, which extends on a south-east to north-west alignment and is crossed by the route of the Proposed Scheme between Middlewich and Northwich; and the Mid-Cheshire Line, which traverses the north of the CA on a south-west to north-east alignment and is crossed by the route of the Proposed Scheme to the east of Lostock Gralam.

7.5.3 Local rail services are accessible via Winsford Station, Greenbank Station, Northwich Station, Lostock Gralam Station and Plumley Station within the MA02 area. Winsford Station provides access to local services on the WCML to destinations including Crewe and Warrington. Greenbank Station, Northwich Station, Lostock Gralam Station and Plumley Station provide access to local services on the Mid-Cheshire Line, to destinations including Chester, Stockport and Manchester Piccadilly. The Sandbach to Northwich Line is primarily used by freight services.

7.5.4 Compared to the existing baseline, no changes are assumed to public transport in the future baseline.

Local bus network

7.5.5 Ten bus services operate on ten roads that are crossed by the route of the Proposed Scheme in the MA02 area. Where bus services and stops are expected to be affected by either the construction or operation of the Proposed Scheme, these are referred to in the relevant assessment sections. The bus routes that could be affected by the Proposed Scheme include:

- A530 Nantwich Road: route 30 (Shavington - Crewe - Leighton Hospital - Middlewich - Winsford - Northwich); and route 42 (Crewe - Leighton Hospital - Middlewich - Congleton);
- A54 St Michael's Way: route 37/37A/37E (Crewe - Sandbach - Middlewich - Winsford - Northwich);
- A54 Kinderton Street/Holmes Chapel Road: route 42 (Crewe - Leighton Hospital - Middlewich - Holmes Chapel – Congleton);
- B5309 Centurion Way: route 43 (Crewe - Leighton Hospital - Middlewich - Holmes Chapel - Congleton);
- A54 Middlewich Road: route 30 (Shavington - Crewe - Leighton Hospital - Middlewich - Winsford - Northwich); route 37/37A/37E (Crewe - Sandbach - Middlewich - Winsford - Northwich); and route 42 (Crewe - Leighton Hospital - Middlewich - Congleton);
- Road One: route 29 (Northwich - Winsford - Over St Johns);
- A533 Davenham Bypass/London Road: route X29 (Northwich - Winsford); route 29 (Northwich – Winsford - Over St Johns); route 31 (Northwich - Winsford - Crewe); and route 37E (Northwich - Winsford - Sandbach - Crewe);
- A533 Davenham Bypass: route 37/37A (Crewe - Sandbach - Middlewich - Winsford - Northwich);

- A559 Manchester Road: route 89 (Northwich- Wincham - Knutsford); and
- A556 Chester Road: route 89 (Northwich- Wincham - Knutsford).

7.5.6 Bus service provision in the MA02 area is focused on connections to and from Middlewich. Buses are operated by D&G Bus and Arriva North West within the area.

7.5.7 Since it is not possible to forecast how services may change in the future, it has been assumed that bus services for the future years of assessment will be the same as those currently operating.

Public transport interchanges

7.5.8 There are no major public transport interchange facilities in the MA02 area potentially affected by the Proposed Scheme and no committed proposals for public transport interchanges in this area.

7.5.9 Compared to the existing baseline, no changes are assumed to public transport interchanges in the future baseline.

7.6 Pedestrians, cyclists and equestrians

7.6.1 There are pedestrian footways adjacent to many of the roads in the built-up areas of Middlewich, Winsford and Northwich. There is a network of advisory cycle routes[13], a number of National Cycle Network (NCN) national and regional routes and a number of PRoW in the vicinity of the Proposed Scheme. The following sections identify the pedestrian, cycle and equestrian facilities in the study area.

Pedestrian facilities

7.6.2 Roadside footways in the built-up areas within MA02 vary in width and condition. Where there is no formal roadside footway provision, non-motorised user numbers are generally low.

7.6.3 The route of the Proposed Scheme will cross five roads with roadside footways within the Wimboldsley to Lostock Gralam area. These are the A54 Middlewich Road, the A533 Northwich Road, the A556 Shurlach Road, the A559 Manchester Road and Birches Lane.

7.6.4 In addition to the pedestrian facilities on the public roads, there are a number of PRoW in the MA02 area:

- Footpath Wimboldsley 5/2 - between A530 Nantwich Road and Lea Green Lane;
- Footpath Wimboldsley 1/1 - between A530 Nantwich Road and Clive Back Lane;

[13] Advisory cycle routes are locally promoted routes for use by cyclists that do not generally have any formal cycle infrastructure provision, such as cycle lanes.

- Footpath Winsford 3/4 - between Footpath Wimboldsley 1/1 and Clive Green Lane;
- Footpath Winsford 3/1 and Footpath Stanthorne 3/1 – between Clive Green Lane and Coalpit Lane;
- Footpath Winsford 37/1 and Footpath Stanthorne 1/1 – between A533 Bostock Road and Road Five;
- Footpath Middlewich 14/2, Footpath Middlewich 25/1, Footpath Byley 3/1, Footpath Davenham 6/1, Footpath Davenham 6X/2, Footpath Rudheath 6X/1 and Footpath Rudheath 10/1 (which together form part of the Trent and Mersey Canal towpath) - between A530 Croxton Lane and Davenham Road;
- Footpath Rudheath 3/4, Footpath Rudheath 3/3, Footpath Lach Dennis 3X/2 and Lach Dennis 3X/1 - between Footpath Lach Dennis 2/1 and Cookes Lane;
- Restricted Byway Lostock Gralam 1/1 - between Birches Lane and Restricted Byway Lostock Gralam 1/2;
- Restricted Byway Lostock Gralam 1/2 - between Footpath Lostock Gralam 14/3 and Restricted Byway Lostock Gralam 1/1; and
- Footpath Lostock Gralam 14/3 - between Restricted Byway Lostock Gralam 1/2 and Footpath Lostock Gralam 14/5.

7.6.5 Two promoted walking routes pass through the Wimboldsley to Lostock Gralam area: the Cheshire Ring Canal Walk; and the Dane Valley Way.

7.6.6 There are no known proposals for changes to pedestrian facilities and routes that affect the future baseline.

Cycle facilities

7.6.7 In MA02, three national routes and one regional route on the National Cycle Network pass through the area. These are:

- National Route 5, which runs from south-east to north-west through the MA02 area between Middlewich and Weaverham, connecting Winsford and Northwich;
- National Route 551, which runs from south to north through Winsford;
- National Route 573, which runs from east to west through the MA02 area between Goostrey and Davenham; and
- Regional Route 71, which runs from east to west through the MA02 area, connecting Winsford, Stanthorne and Middlewich.

7.6.8 Compared to the existing baseline, no changes are assumed to cycle facilities in the future baseline.

Equestrian facilities

7.6.9 There are no bridleways or Byways Open to All Traffic (BOAT) in the vicinity of the route of the Proposed Scheme in the Wimboldsley to Lostock Gralam area.

7.6.10 Compared to the existing baseline, no changes are assumed to equestrian facilities in the future baseline.

7.7 Waterways and canals

7.7.1 There are two navigable waterways in the MA02 area. The Shropshire Union Canal (Middlewich Branch) is located to the south of the CA and is crossed by the route of the Proposed Scheme between Winsford and Middlewich. The Trent and Mersey Canal is located between Middlewich and Northwich and is crossed by the Proposed Scheme in three locations: between Bostock and Byley; between Lach Dennis and Rudheath; and between Davenham and Lach Dennis.

7.7.2 Compared to the existing baseline, no changes are assumed to waterways and canals in the future baseline.

7.8 Air transport

7.8.1 There is no relevant air transport in the MA02 area. Consequently, this topic is not considered further in this assessment.

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