

High Speed Rail (Crewe – Manchester) Environmental Statement

Volume 5: Appendix TR-002-00001

Traffic and transport

MA01: Hough to Walley's Green

Transport Assessment Part 2

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MA01: Hough to Walley's Green

Transport Assessment Part 2



Department for Transport

High Speed Two (HS2) Limited has been tasked by the Department for Transport (DfT) with managing the delivery of a new national high speed rail network. It is a non-departmental public body wholly owned by the DfT.

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5 Existing and future baseline conditions

5.1 Introduction

- 5.1.1 This section of the Transport Assessment (TA) outlines the existing and forecast future baseline condition of the transport networks for each community area (CA) in turn along the route of the Proposed Scheme (MA01 to MA08) from south to north. It describes the transport infrastructure and operations that could potentially be affected by the construction or operation of the Proposed Scheme. It also sets out the expected changes to baseline conditions for the forecast assessment years.
- 5.1.2 The scope of work and study area has been discussed with the key transport authorities. All modes of transport have been considered along the route of the Proposed Scheme. Existing transport network conditions have been identified using various methods including desk-top research, baseline surveys, site visits and engagement with local transport authorities. Where relevant, existing transport models have also been used to determine baseline conditions.
- 5.1.3 Due to the size and complexity of the overall route-wide study area of the TA, the description of baseline conditions has been split into areas for ease of understanding. Reporting runs from south to north along the route of the Proposed Scheme, from Hough to Hulseheath, the West Coast Main Line (WCML) connection (from Hulseheath to Bamfurlong) and the HS2 Manchester spur (from Hulseheath to Manchester Piccadilly station).

5.2 Surveys and information sources

- 5.2.1 Primary data has been collected for public transport, traffic, and non-motorised users to establish a baseline for existing conditions. Due to the diverse nature of the local transport networks, (particularly between metropolitan and rural areas) and the different levels of intervention of the Proposed Scheme, not all types of survey have been required in each area. The Background Information and Data (BID): Transport Assessment policy and data (BID TR-004-00001)¹ provides information on the type and timings of the baseline transport surveys undertaken.
- 5.2.2 Alongside the baseline transport surveys used to inform the existing situation, a number of transport models have been used to inform the existing and future baseline traffic conditions. These models include the suite of Greater Manchester Transport Models owned by Transport for Greater Manchester. In some other locations, models have been used to either inform the existing and future baseline traffic conditions or to develop growth

¹ 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>.

forecasts. These include models owned by local authorities and Highways England which are summarised in the Transport Assessment (TA) Part 1 (see Volume 5: Appendix TR-001-00000) Section 3 Methodology.

- 5.2.3 Baseline data and information on expected changes, particularly in relation to development and growth and changes to the transport network have been obtained directly from Highways England and local transport authorities.

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

6.1 Study area

- 6.1.1 The study area for traffic and transport includes the settlements of Crewe, Chorlton, Hough, Shavington, Weston, Basford, Coppenhall Moss, Bradfield Green, Warmingham, Sandbach and Elworth. National and local rail services are accessible via Crewe Station and Sandbach Station.
- 6.1.2 One strategic road is potentially impacted by the Proposed Scheme in the Hough to Walley's Green (MA01) area, which is the M6 (including junction 16 and junction 17).
- 6.1.3 Local roads in the MA01 area potentially affected by the Proposed Scheme include the A531 Newcastle Road, the A500 Newcastle Road/Shavington Bypass, the A51 Nantwich Bypass/Newcastle Road, the A5020 David Whitby Way/University Way, the A530 Middlewich Road/Nantwich Road, the A532 Weston Road/Macon Way/Manchester Bridge/Earle Street/Vernon Way/West Street/Coppenhall Lane, the A534 Nantwich Road/Crewe Road/Crewe Green Road/Haslington Bypass/Wheelock Bypass/Old Mill Road/Congleton Road, the A5019 Vernon Way, the A5078 Oak Street/Dunwoody Way, the A533 Old Mill Road, the B5071 Jack Mills Way, the B5338 Crewe Road, the B5334 Middlewich Road, the B5472 Weston Road, the B5078 Radway Green Road, the B5077 Crewe Road, the B5076 Vernon Way/Middlewich Street/North Street/Bradfield Road/Flowers Lane, Newcastle Road, Casey Lane, Sydney Road, Remer Street, Groby Road, Broughton Road, Parkers Road and Warmingham Road.
- 6.1.4 There are a number of passenger and freight railways that run through the MA01 area:
- WCML;
 - Crewe to Shrewsbury Line;
 - Crewe to Derby Line;
 - North Wales Coast Line;
 - Crewe to Manchester Line; and
 - Sandbach to Northwich Line.

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- 6.1.5 There is one planned major change to the transport network that has been taken into account in the future baseline. This is the proposed upgrading to dual carriageway standard of the section of the A500 between the junction of the A500 Shavington Bypass/B5472 Weston Road/A531 Newcastle Road (known locally as Meremoor Moss roundabout) and the M6 junction 16. The scheme was the subject of a planning application by Cheshire East Council (CEC) and was approved in April 2020. At the time of the assessment, the scheme was programmed to commence (subject to final funding approvals) in 2022 and due to be completed by approximately 2024/25. The scheme is included within the A500 Crewe Area Wide Transport model in the 2030, 2038 and 2046 future baselines.
- 6.1.6 The assessment also takes into account other recently completed changes to the transport network in the baseline and future baseline, including:
- the Crewe Green Roundabout scheme, comprising modifications to the existing five-arm signal-controlled roundabout and adjacent signal-controlled T-junction at Sydney Road/Hungerford Road. The scheme included the formation of an enlarged roundabout encompassing both junctions and improved pedestrian and cycle facilities. The scheme was promoted by CEC and opened in November 2018; and
 - the Sydney Road Bridge improvement scheme, comprising the replacement of the previous single-lane structure over the WCML with a wider structure capable of carrying two-way traffic. The scheme was promoted by CEC and opened in 2019.
- 6.1.7 In addition, there is a committed improvement scheme for the Sydney Road/Maw Green Road, Remer Street/Sydney Road/Elm Drive and Remer Street/Groby Drive junctions associated with the nearby Coppenhall East residential development (MA01/148 in Volume 5: Appendix CT-004-00000, Planning data). This involves the replacement of the three existing priority T-junctions with a single elongated priority controlled (give-way) roundabout. The timing of delivery of this scheme is uncertain and, consequently, these junctions have been assessed with and without the improvement scheme in place.
- 6.1.8 The A500 Crewe Area Wide Transport model has been used to model the majority of the traffic-related impacts across the MA01 area during construction and operation of the Proposed Scheme. In the MA01 area the model covers the area from Stoke-on-Trent in the south, Bunbury in the west, Kidsgrove in the east and the M6 junction 18 in the north.
- 6.1.9 For ease of reference, the existing and future baseline conditions are considered together, for each transport topic.

6.2 Local land uses

- 6.2.1 The MA01 area comprises the town of Crewe and surrounding rural areas. In the south of the MA01 area are the settlements of Chorlton, Hough, Weston, Basford and Shavington. The settlements of Willaston and Wistaston are in the west of MA01 between Crewe and Nantwich. To the east is the settlement of Haslington. To the north of MA01 are the

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settlements of Coppenhall Moss, Bradfield Green and Warmingham. The settlements of Sandbach and Elworth are located in the north-east of MA01.

- 6.2.2 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)²; saved policies of the adopted Macclesfield Borough Local Plan (2004)³; saved policies of the adopted Congleton Borough Local Plan First Review (2005)⁴; saved policies of the adopted Borough of Crewe and Nantwich Replacement Local Plan (2011)⁵; adopted Newcastle-under-Lyme and Stoke-on-Trent Core Spatial Strategy (2009)⁶; saved policies of the adopted Newcastle-under-Lyme Local Plan (2003)⁷; Cheshire East Local Transport Plan 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 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
 - A500 Crewe Area Wide Transport model developed by CEC which is based on agreed committed developments in the MA01 area.
- 6.2.3 The committed developments identified through this review have been taken into account in the development of the future baseline.

² 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>.

³ Cheshire East Council (2004), *Saved policies of the adopted Macclesfield Borough Local Plan*. Available online at: <https://www.cheshireeast.gov.uk/planning/spatial-planning/saved-and-other-policies/macclesfield-local-plan/macclesfield-local-plan.aspx>.

⁴ Cheshire East Council (2005), *Saved policies of the adopted Congleton Local Plan*. Available online at: <https://www.cheshireeast.gov.uk/planning/spatial-planning/saved-and-other-policies/congleton-local-plan/congleton-local-plan.aspx>.

⁵ Cheshire East Council (2011), *Borough of Crewe and Nantwich Replacement Local Plan*. Available online at: <https://www.cheshireeast.gov.uk/pdf/planning/spatial-planning/strategic-planning/en-ldf-cnbclocalplan.pdf>.

⁶ Newcastle-Under-Lyme and Stoke-on-Trent (2009), *Core Spatial Strategy 2006-2026*. Available online at: https://www.newcastle-staffs.gov.uk/sites/default/files/IMCE/Planning/Planning_Policy/SpatialStrategy/Core%20Strategy%20Final%20Version%20-%2028th%20October.pdf.

⁷ Newcastle-Under-Lyme and Stoke-on-Trent (2003), *Schedule of Saved Policies beyond September 2007*, Newcastle-Under-Lyme Local Plan. Available online at: https://www.newcastle-staffs.gov.uk/sites/default/files/IMCE/Planning/Planning_Policy/Saved%20Policies%20of%20the%20Newcastle-under-Lyme%20Local%20Plan%20154KB.pdf.

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

6.3 Baseline surveys

- 6.3.1 Surveys were undertaken to understand the use of highways and public rights of way (PRoW) within the area. The survey types and locations are shown in the baseline survey report in Transport Assessment policy and data (see BID TR-004-00001).

Traffic surveys

- 6.3.2 Traffic surveys, comprising junction turning counts (JTC), manual classified counts (MCC), queue length surveys (QLS) and automatic traffic counts (ATC), were undertaken in November 2017 with additional surveys undertaken in February 2018, July 2018 and November 2019. These data have been supplemented by existing traffic data from other sources, including from Highways England and CEC. Where possible, ATC data were gathered for a two-week period. In total 62 traffic surveys have been undertaken in the MA01 area.

Non-motorised user surveys

- 6.3.3 Non-motorised user surveys were undertaken on various routes used by pedestrians, cyclists and equestrians in August 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.
- 6.3.4 The baseline survey report in Transport Assessment policy and data (see BID TR-004-00001) provides a summary of non-motorised user survey data within the MA01 area. For ease of reference the data have been presented for each parish within the area, from south to north.
- 6.3.5 The surveys indicated that the majority of PRoW crossed by the route of the Proposed Scheme are used by pedestrians for recreational purposes.
- 6.3.6 Compared to the existing baseline, no changes are assumed to non-motorised user provision in the future baseline.

Accident data

- 6.3.7 Accident⁹ data have been sourced from official Department of Transport (DfT) STATS19 statistics¹⁰. Data for the three-year period from July 2016 to June 2019 have been assessed.

6.4 Highway network

Strategic and primary 'A' road network

- 6.4.1 One motorway and two primary 'A' roads run through the study area: the M6, the A500 and the A530.
- 6.4.2 The M6 extends on a south to north alignment to the east of MA01 and is managed by Highways England. The M6 junction 16 is a grade-separated junction with the A500 and is located in the south-east of the MA01 area. To the north of junction 16, the M6 operates as a smart motorway incorporating four lanes in each direction (all-lanes running) and variable speed limits. To the south of junction 16, the M6 has three lanes and a hard shoulder in each direction and traffic is subject to the national speed limit. The M6 junction 17 is located in the north-east of the MA01 area and is a grade-separated junction with the A534. The road is not crossed by the route of the Proposed Scheme.
- 6.4.3 The A500 Newcastle Road/Shavington Bypass extends on a west to east alignment through the MA01 area between Nantwich in the west and the M6 junction 16 to the east. The western section of the A500 is a dual carriageway known as the A500 Shavington Bypass and terminates at a roundabout junction with the A531 Newcastle Road/B5472 Weston Road. To the east of the roundabout the A500 Newcastle Road continues to the M6 junction 16 and is a single carriageway road. Traffic is subject to the national speed limit. Within the MA01 area, the A500 is managed by CEC. The only grade separated junction along the A500 Shavington Bypass is the M6 junction 16 which is located to the east of MA01. The route of the Proposed Scheme intersects the A500 Shavington Bypass approximately 950m west of its junction with the A5020 David Whitby Way.
- 6.4.4 The A530 Middlewich Road/Nantwich Road extends on a south to north alignment between Nantwich and Middlewich (located in the Wimboldsley to Lostock Gralam area (MA02)). The A530 Middlewich Road/Nantwich Road is a single carriageway road and is managed by CEC. Traffic is subject to a 50mph speed limit. There are no grade separated junctions on the A530 Middlewich Road/Nantwich Road. The road is not crossed by the route of the Proposed Scheme.

⁹ 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.

¹⁰ 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>.

Local road network

6.4.5 The key local roads in the MA01 area, including roads likely to be affected by the Proposed Scheme, are:

- A531 Newcastle Road, which follows a south-west to north-east alignment and connects Newcastle Road in the south-west with the A500 Newcastle Road/Shavington Bypass in the north-east. The A531 Newcastle Road is a single carriageway road and traffic is subject to the national speed limit. The road does not cross the route of the Proposed Scheme;
- A5020 David Whitby Way/University Way, which follows a south to north alignment and connects the A500 Newcastle Road/Shavington Bypass in the south with the centre of Crewe in the north. The A5020 David Whitby Way/University Way is a dual carriageway with a 50mph speed limit. The road does not cross the route of the Proposed Scheme;
- A51 Nantwich Bypass/Newcastle Road, which follows a south-east to north-west alignment and connects the A500 Shavington Bypass in the south-east with the A530 Middlewich Road in the north-west. The A51 Nantwich Bypass/Newcastle Road is a single carriageway road with a 50mph speed limit. The road is not crossed by the route of the Proposed Scheme;
- A532 Weston Road/Macon Way/Manchester Bridge/Earle Street/Vernon Way/West Street/Coppenhall Lane, which follows a south-east to north-west alignment and connects the A5020 David Whitby Way/University Way in the south-east with the A530 Nantwich Road/Middlewich Road in the north-west. The A532 Weston Road/Macon Way/Manchester Bridge/Earle Street/Vernon Way/West Street/Coppenhall Lane is a single carriageway road for most of its length with a 30mph speed limit. The road does not cross the route of the Proposed Scheme;
- A534 Nantwich Road/Crewe Road/Crewe Green Road/Haslington Bypass/Wheelock Bypass/Old Mill Road/Congleton Road, which follows a west to east alignment from the A51 Nantwich Bypass in the west to the M6 junction 17 in the east. The A534 Nantwich Road/Crewe Road/Crewe Green Road/Haslington Bypass/Wheelock Bypass/Old Mill Road/Congleton Road is a single carriageway road for most of its length. West of the A532 Weston Road it has a speed limit of 30mph. East of the A5020 David Whitby Way/University Way traffic is subject to the national speed limit. The road does not cross the route of the Proposed Scheme;
- A5019 Vernon Way, which follows a south to north alignment between the A5019 Mill Street in the south and the A532 West Street in the north. The A5019 Vernon Way is a single carriageway road with a 30mph speed limit. The road does not cross the route of the Proposed Scheme;
- A5078 Oak Street/Dunwoody Way, which follows a south-east to north-west alignment between the A5078 Wistaston Road in the south-east and the A532 West Street in the north-west. The A5078 Oak Street/Dunwoody Way is a single carriageway road with a 30mph speed limit. The road does not cross the route of the Proposed Scheme; and

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- B5076 Vernon Way/Middlewich Street/North Street/Bradfield Road/Flowers Lane, which follows a south-east to north-west alignment from the A532 West Street in the south-east to the A530 Nantwich Road/Middlewich Road in the north-west. The B5076 Middlewich Street/North Street/Bradfield Road is a single carriageway road with a 30mph speed limit. Flowers Lane is a single carriageway road and traffic is subject to the national speed limit. The road does not cross by the route of the Proposed Scheme.

6.4.6 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. These are:

- Newcastle Road, between Casey Lane and the A531 Newcastle Road;
- Casey Lane, between Newcastle Road and Casey Bridge;
- Sydney Road/Remer Street, between the A5020 University Way and the B5076 North Street;
- Groby Road, between Remer Street and Warmingham Road;
- Broughton Road, between the B5076 North Street and Parkers Road; and
- Parkers Road/Warmingham Road, between the B5076 Bradfield Road and Groby Road.

Growth in traffic

6.4.7 In considering the future baseline, traffic will vary across MA01. The use of strategic transport models¹¹, 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 MA01 calculated using the total link flows for each future year. These illustrative overall growth factors are summarised in Table 6-1.

Table 6-1: MA01 traffic growth summary

Period years	AM peak hour	PM peak hour
2018–2030	15%	20%
2018–2038	25%	28%
2018–2046	46%	48%

6.4.8 In the assessment of the Proposed Scheme, construction traffic associated with HS2 Phase 2a is included in the future baseline in addition to these growth rates. However, the assessment considers both the impact of the Proposed Scheme in isolation and the combined impact together with Phase 2a.

¹¹ A500 Crewe Area Wide Transport model (Cheshire East Council).

Baseline traffic flows

6.4.9 The 2018 baseline traffic flows derived from the A500 Crewe Area Wide Transport model for strategic, primary 'A' roads and local roads for the MA01 area are summarised in Table 6-2 for the weekday AM (08:00–09:00) and weekday PM (17:00–18:00) peak hours and in Table 6-3 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 6-2: MA01 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
Back Lane (between Casey Lane and Newcastle Road)	NB	86	0	51	0
	SB	52	0	161	0
Newcastle Road (between Chorlton Lane and A531 Newcastle Road)	EB	321	10	347	2
	WB	375	9	415	3
Newcastle Road (between Casey Lane and Chorlton Lane)	EB	316	9	331	2
	WB	356	9	424	3
Casey Lane (between Back Lane and Weston Lane)	NB	49	2	25	0
	SB	59	6	53	1
A531 Newcastle Road (between Main Road and A500 Shavington Bypass)	EB	308	9	186	1
	WB	242	10	394	3
A500 Shavington Bypass (between A51 Newcastle Road and B5071 Jack Mills Way)	EB	1,193	77	1,102	48
	WB	1,045	65	1,425	41
A51 Nantwich Bypass (between A51 Newcastle Road and A534 Crewe Road)	NB	871	77	870	37
	SB	595	58	796	42
Cemetery Road (between Whites Lane and Mere Road)	EB	53	0	24	0
	WB	65	0	17	0
A500 Shavington Bypass (between A5020 David Whitby Way and A500 Newcastle Road)	EB	877	89	1,116	59
	WB	1,182	87	965	63
A500 Newcastle Road (between A500 Shavington Bypass and M6 junction 16)	EB	1,189	121	1,400	60
	WB	1,348	95	1,365	66
A500 Shavington Bypass (between A51 Nantwich Bypass and B5071 Jack Mills Way)	EB	1,193	77	1,102	48
	WB	1,045	65	1,425	41
A500 Shavington Bypass (between B5071 Jack Mills Way and A5020 David Whitby Way)	EB	1,311	78	1,094	54
	WB	1,163	78	1,502	44

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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
A5020 David Whitby Way (between A500 Shavington Bypass and B5472 Weston Road)	NB	748	35	337	31
	SB	295	37	895	17
A51 Nantwich Bypass (between A534 Crewe Road and A530 Middlewich Road)	NB	894	71	808	38
	SB	624	53	791	33
Barthomley Road (between Radway Green Road and B5077 Butterton Lane)	NB	100	3	27	1
	SB	67	1	105	0
A530 Middlewich Road (between A51 Nantwich Bypass and Colleys Lane)	NB	923	41	826	11
	SB	762	26	685	7
A532 Weston Road (between A5020 David Whitby Way and Western Road Service Road (southern access))	EB	376	46	1,264	16
	WB	1,168	45	372	27
A532 Weston Road (between Western Road Service Road (northern access) and A534 Crewe Road)	NB	690	24	588	8
	SB	496	21	653	13
A534 Crewe Road (between A532 Weston Road and Ludlow Avenue)	EB	843	23	456	6
	WB	535	25	601	12
A534 Crewe Road (between Gateway and A5020 University Way)	EB	605	24	495	6
	WB	712	25	396	16
A530 Middlewich Road (between Peach Lane and Wistaston Green Road)	NB	1,060	40	889	10
	SB	922	33	795	9
A534 Crewe Green Road (between Electra Way and A5020 University Way)	EB	476	23	566	6
	WB	801	24	384	16
A532 Macon Way (between A534 Crewe Road and Hungerford Road)	NB	430	12	690	3
	SB	673	13	517	5
A5020 University Way (between A534 Crewe Green Road and A532 Weston Road)	NB	502	17	478	7
	SB	474	21	628	11
A530 Middlewich Road (between Wistaston Green Road and A532 Coppenhall Lane)	NB	1,137	40	885	14
	SB	1,095	34	1,107	10
A5078 Oak Street (between A5078 Edleston Road and Cross Street)	EB	201	2	88	1
	WB	271	2	526	1
A5019 Vernon Way (between A5019 Mill Street and Lyon Street)	NB	460	2	365	1
	SB	302	1	745	1
A5078 Dunwoody Way (between Flag Lane and A5078 Wistaston Road)	EB	345	10	308	3
	WB	247	12	565	4
A532 Coppenhall Lane (between A530 Middlewich Road and Sunnybank Road)	EB	371	13	454	7
	WB	475	18	407	6

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A5019 Vernon Way (between Lyon Street and A532 Earle Street)	NB	502	4	727	1
	SB	631	6	653	1
Sydney Road (between Hungerford Road and Shakespeare Drive)	NB	462	11	568	1
	SB	499	11	552	4
A532 Manchester Bridge (between Vincent Street and Hungerford Road)	EB	1,051	17	1,048	7
	WB	767	20	1,063	12
A532 Earle Street (between A5019 Vernon Way and William Street)	EB	759	12	899	6
	WB	713	18	930	11
A5078 Dunwoody Way (between The Four Eagles PH access Harrison Drive)	EB	328	8	356	3
	WB	294	10	502	3
Coleridge Way (between Hungerford Road and Wordsworth Drive)	NB	28	2	53	2
	SB	38	0	82	0
Shakespeare Drive (between Sydney Road and Laureston Avenue)	EB	4	1	4	0
	WB	12	0	76	0
Laureston Avenue (between Shakespeare Drive and Wordsworth Drive)	NB	12	0	76	0
	SB	4	1	4	0
Sydney Road (between Shakespeare Drive and Lansdowne Road)	NB	325	10	410	1
	SB	367	11	380	3
Wordsworth Drive (between Tennyson Avenue and Kipling Way)	EB	7	0	5	0
	WB	8	0	74	0
Wordsworth Drive (between Kipling Way and Laureston Avenue)	EB	5	0	4	0
	WB	10	0	75	0
Wordsworth Drive (between Coleridge Way and Tennyson Avenue)	EB	11	0	8	0
	WB	10	0	75	0
A532 Vernon Way (between A532 Earle Street and A532 West Street)	NB	487	7	753	13
	SB	701	11	598	14
Coleridge Way (between Lansdowne Road and Wordsworth Drive)	NB	21	2	47	2
	SB	31	0	9	0
A532 West Street (between Bilton Way and Victoria Avenue)	EB	390	17	776	12
	WB	757	22	482	13
A530 Middlewich Road (between A532 Coppenhall Lane and Pyms Lane)	NB	821	28	575	8
	SB	741	19	775	5
A532 West Street (between Broad Street and A532 Vernon Way)	EB	250	5	297	3
	WB	296	4	237	3
	EB	604	15	690	11

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A532 West Street (between Victoria Avenue and Minshull New Road)	WB	691	24	671	9
A5078 Dunwoody Way (between Joseph Reddrop Way and Dale Way)	NB	298	10	577	7
	SB	363	7	368	7
B5076 Vernon Way (between A532 West Street and Market Street)	NB	328	4	642	11
	SB	584	7	425	12
A532 West Street (between Bright Street and West Avenue)	EB	389	8	337	7
	WB	301	8	163	7
Lansdowne Road (between Coleridge Way and Pelican Close)	NB	5	2	7	2
	SB	15	0	4	0
A532 West Street (between Goddard Street and Ford Lane)	EB	291	7	435	6
	WB	292	7	132	6
A532 West Street (between Darlington Avenue and Frank Webb Avenue)	EB	513	7	612	4
	WB	639	10	715	4
Lansdowne Road (between Lansdowne Road and Sydney Road)	EB	11	2	12	2
	WB	54	0	35	0
A532 West Street (between Underwood Lane and Goddard Street)	EB	296	7	479	6
	WB	402	8	223	6
A532 West Street (between A5078 Dunwoody Way and Underwood Lane)	EB	308	5	430	4
	WB	221	4	94	3
B5076 Middlewich Road (between B5076 Vernon Way and Henry Street)	EB	308	0	599	10
	WB	492	2	374	12
A534 Haslington Bypass (between Sydney Road and Clay Lane)	NB	755	29	827	9
	SB	747	27	709	19
B5076 Middlewich Street (between Henry Street and Elm Drive)	NB	300	3	694	11
	SB	736	5	438	14
Sydney Road (between Herbert Street and Maw Green Road)	NB	278	12	381	3
	SB	365	10	386	3
B5076 Middlewich Road (between Elm Drive and Stamp Avenue)	NB	237	3	595	1
	SB	661	5	400	14
Stamp Avenue (between Greenway and B5076 Middlewich Street)	EB	33	0	15	0
	WB	19	0	14	0
B5076 Middlewich Street (between Stamp Avenue and Lime Tree Avenue)	NB	341	3	533	2
	SB	545	5	202	14
	EB	68	1	34	0

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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
Lime Tree Avenue (between B5076 Middlewich Street and Sycamore Avenue)	WB	38	1	30	0
A530 Middlewich Road (between Pym's Lane and Middlewich Road)	NB	805	35	675	15
	SB	692	21	606	7
Lime Tree Avenue (between Sycamore Avenue and Acer Avenue)	EB	67	0	31	0
	WB	35	0	27	0
Greenway (between Stamp Avenue and B5076 Middlewich Street)	NB	18	1	28	0
	SB	12	0	7	0
Lime Tree Avenue (between Prunus Road and Elm Drive)	EB	48	1	21	0
	WB	41	1	31	0
Elm Drive (between Lime Tree Avenue and Remer Street)	NB	108	4	155	13
	SB	201	6	167	5
Lime Tree Avenue (between Acer Avenue and Prunus Road)	EB	47	0	20	0
	WB	39	0	30	0
B5076 Middlewich Street (between Lime Tree Avenue and Remer Street)	NB	277	3	504	2
	SB	511	5	177	14
Sydney Road (between Maw Green Road and Elm Drive)	NB	503	21	457	6
	SB	499	16	528	7
Remer Street (between Groby Road and Elm Drive)	EB	599	16	627	7
	WB	510	19	545	14
Clay Lane (between Newtons Lane and Maw Lane)	EB	47	0	107	0
	WB	56	1	10	0
Acer Avenue (between Remer Street and Lime Tree Avenue)	NB	24	0	15	0
	SB	0	0	1	0
Remer Street (between Acer Avenue and Groby Road)	EB	352	10	452	7
	WB	418	16	381	13
Groby Road (between Remer Street and Stoneley Road)	NB	119	4	182	1
	SB	273	6	193	0
Remer Street (between B5076 Middlewich Street and Acer Avenue)	EB	332	10	440	7
	WB	422	16	383	14
Selworthy Drive (between B5076 Bradfield Road and Underwood Lane)	NB	131	0	138	0
	SB	26	1	85	0
B5076 Middlewich Street (between Broad Street and Remer Street)	EB	841	13	605	9
	WB	697	17	876	3
	EB	44	0	102	0

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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
Newtons Lane (between Clay Lane and Nesfield Drive)	WB	46	1	5	0
Underwood Lane (between Cliffe Road and Newbury Avenue)	EB	44	2	119	4
	WB	172	3	73	4
B5076 North Street (between Broughton Road and Broad Street)	EB	901	18	664	9
	WB	532	24	827	4
Newtons Lane (between Nesfield Drive and Crewe Road)	EB	99	0	104	0
	WB	97	1	49	0
Underwood Lane (between Newbury Avenue and Pear Tree Avenue)	NB	40	2	112	4
	SB	164	3	72	4
Underwood Lane (between Pear Tree Avenue and B5076 Bradfield Road)	NB	40	2	108	4
	SB	162	3	73	4
B5076 Bradfield Road (between Underwood Lane and Broughton Road)	EB	501	17	570	9
	WB	546	21	655	3
B5076 Bradfield Road (between Selworthy Drive and Mablins Lane)	EB	278	13	445	8
	WB	426	16	362	5
B5076 Bradfield Road (between Mablins Lane and Cliffe Road)	EB	445	23	587	16
	WB	484	30	569	10
B5076 Bradfield Road (between Cliffe Road and Underwood Lane)	EB	467	18	473	13
	WB	390	22	593	6
B5076 Bradfield Road (between Parkers Road and Selworthy Drive)	EB	326	12	502	6
	WB	512	15	405	5
Stoneley Road (between B5076 Broad Street and Waldron's Lane)	NB	11	0	21	0
	SB	17	1	23	0
A530 Middlewich Road (between Middlewich Road and Smithy Lane)	NB	733	34	630	14
	SB	671	20	495	7
A534 Haslington Bypass (between Clay Lane and Elton Lane)	NB	759	34	827	13
	SB	871	35	816	23
Broughton Road (between Maplins Moss Place and Parkers Road)	NB	47	2	61	1
	SB	77	2	44	0
B5076 Bradfield Road (between Parkers Road and B5076 Flowers Lane)	EB	575	30	982	14
	WB	855	28	618	12
Parkers Road (between B5076 Bradfield Road and Higher Croft Drive)	EB	257	17	469	9
	WB	421	13	198	7
	EB	249	16	362	9

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Parkers Road (between Higher Croft Drive and Parkfield)	WB	239	13	257	7
Parkers Road (between Parkfield and Mablins Lane)	EB	250	14	351	10
	WB	243	13	279	7
Parkers Road (between Mablins Lane and Broughton Road)	EB	309	8	391	4
	WB	413	4	258	3
Groby Road (between Stoneley Road and Warmingham Road)	NB	118	3	183	0
	SB	264	2	187	0
Warmingham Road (between Broughton Road and Waldron's Lane)	EB	293	5	319	4
	WB	401	4	269	3
B5076 Flowers Lane (between A530 Middlewich Road and B5076 Bradfield Road)	EB	492	16	327	6
	WB	300	13	412	7
A530 Middlewich Road (between Smithy Lane and B5076 Flowers Lane)	NB	544	32	474	20
	SB	350	17	298	10
Warmingham Road (between Waldron's Lane and Groby Road)	EB	299	5	335	5
	WB	411	5	290	3
A534 Wheelock Bypass (between B5079 Crewe Road and Mill Lane)	NB	783	34	677	13
	SB	645	35	784	23
A530 Middlewich Road (between B5076 Flowers Lane and Eardswick Lane)	NB	451	33	443	18
	SB	519	23	379	12
A530 Middlewich Road (between Eardswick Lane and Brookhouse Lane)	NB	451	33	443	18
	SB	519	23	379	12
A534 Wheelock Bypass (between Mill Lane and A533 Old Mill Road)	NB	844	35	694	13
	SB	694	35	807	24
Warmingham Road/School Lane (between Hall Lane and Crabmill Lane)	NB	211	5	291	2
	SB	312	5	250	2
A534 Old Mill Road (between Brookhouse Road and A533 The Hill)	NB	916	38	889	16
	SB	694	36	730	26
A534 Old Mill Road (between A533 The Hill and Congleton Road)	NB	764	36	537	14
	SB	600	36	608	24
B5074 Over Road/B5074 Swanlow Lane (between Cross Lane and Moor Lane)	NB	390	19	506	5
	SB	305	13	356	4

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

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Table 6-3: MA01 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
Back Lane (between Casey Lane and Newcastle Road)	NB	755	0
	SB	1,188	1
Newcastle Road (between Chorlton Lane and A531 Newcastle Road)	EB	3,703	66
	WB	4,375	67
Newcastle Road (between Casey Lane and Chorlton Lane)	EB	3,584	61
	WB	4,323	64
Casey Lane (between Back Lane and Weston Lane)	NB	409	13
	SB	620	39
A531 Newcastle Road (between Main Road and A500 Shavington Bypass)	EB	2,727	53
	WB	3,530	68
A500 Shavington Bypass (between A51 Newcastle Road and B5071 Jack Mills Way)	EB	12,708	689
	WB	13,700	585
A51 Nantwich Bypass (between A51 Newcastle Road and A534 Crewe Road)	NB	9,640	630
	SB	7,711	554
Cemetery Road (between Whites Lane and Mere Road)	EB	427	0
	WB	447	2
A500 Shavington Bypass (between A5020 David Whitby Way and A500 Newcastle Road)	EB	11,055	813
	WB	11,880	829
A500 Newcastle Road (between A500 Shavington Bypass and M6 junction 16)	EB	14,351	999
	WB	15,024	887
A500 Shavington Bypass (between A51 Nantwich Bypass and B5071 Jack Mills Way)	EB	12,708	689
	WB	13,700	585
A500 Shavington Bypass (between B5071 Jack Mills Way and A5020 David Whitby Way)	EB	13,310	728
	WB	14,775	675
A5020 David Whitby Way (between A500 Shavington Bypass and B5472 Weston Road)	NB	5,990	365
	SB	6,624	298
A51 Nantwich Bypass (between A534 Crewe Road and A530 Middlewich Road)	NB	9,421	604
	SB	7,848	479
Barthomley Road (between Radway Green Road and B5077 Butterton Lane)	NB	701	23
	SB	953	4
A530 Middlewich Road (between A51 Nantwich Bypass and Colleys Lane)	NB	9,678	285
	SB	8,009	183
A532 Weston Road (between A5020 David Whitby Way and Western Road Service Road (southern access))	EB	9,127	346
	WB	8,491	395
	NB	7,069	178

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A532 Weston Road (between Western Road Service Road (northern access) and A534 Crewe Road)	SB	6,370	189
A534 Crewe Road (between A532 Weston Road and Ludlow Avenue)	EB	7,176	157
	WB	6,298	207
A534 Crewe Road (between Gateway and A5020 University Way)	EB	6,087	167
	WB	6,120	226
A530 Middlewich Road (between Peach Lane and Wistaston Green Road)	NB	10,788	279
	SB	9,502	237
A534 Crewe Green Road (between Electra Way and A5020 University Way)	EB	5,771	162
	WB	6,541	219
A532 Macon Way (between A534 Crewe Road and Hungerford Road)	NB	6,216	82
	SB	6,581	99
A5020 University Way (between A534 Crewe Green Road and A532 Weston Road)	NB	5,425	133
	SB	6,111	176
A530 Middlewich Road (between Wistaston Green Road and A532 Coppenhall Lane)	NB	11,181	302
	SB	12,198	243
A5078 Oak Street (between A5078 Edleston Road and Cross Street)	EB	1,595	18
	WB	4,430	21
A5019 Vernon Way (between A5019 Mill Street and Lyon Street)	NB	4,566	14
	SB	5,820	14
A5078 Dunwoody Way (between Flag Lane and A5078 Wistaston Road)	EB	3,617	70
	WB	4,514	87
A532 Coppenhall Lane (between A530 Middlewich Road and Sunnybank Road)	EB	4,575	108
	WB	4,878	131
A5019 Vernon Way (between Lyon Street and A532 Earle Street)	NB	6,817	26
	SB	7,112	37
Sydney Road (between Hungerford Road and Shakespeare Drive)	NB	5,710	63
	SB	5,823	82
A532 Manchester Bridge (between Vincent Street and Hungerford Road)	EB	11,628	136
	WB	10,148	177
A532 Earle Street (between A5019 Vernon Way and William Street)	EB	9,187	101
	WB	9,111	161
A5078 Dunwoody Way (between The Four Eagles PH access Harrison Drive)	EB	3,794	57
	WB	4,418	72
Coleridge Way (between Hungerford Road and Wordsworth Drive)	NB	453	22
	SB	670	0

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Shakespeare Drive (between Sydney Road and Laureston Avenue)	EB	45	6
	WB	491	4
Laureston Avenue (between Shakespeare Drive and Wordsworth Drive)	NB	491	4
	SB	45	6
Sydney Road (between Shakespeare Drive and Lansdowne Road)	NB	4,078	61
	SB	4,138	77
Wordsworth Drive (between Tennyson Avenue and Kipling Way)	EB	62	0
	WB	456	0
Wordsworth Drive (between Kipling Way and Laureston Avenue)	EB	50	1
	WB	477	1
Wordsworth Drive (between Coleridge Way and Tennyson Avenue)	EB	102	0
	WB	476	0
A532 Vernon Way (between A532 Earle Street and A532 West Street)	NB	6,881	109
	SB	7,187	140
Coleridge Way (between Lansdowne Road and Wordsworth Drive)	NB	378	22
	SB	221	0
A532 West Street (between Bilton Way and Victoria Avenue)	EB	6,479	160
	WB	6,843	193
A530 Middlewich Road (between A532 Coppenhall Lane and Pyms Lane)	NB	7,717	202
	SB	8,401	130
A532 West Street (between Broad Street and A532 Vernon Way)	EB	3,032	41
	WB	2,946	36
A532 West Street (between Victoria Avenue and Minshull New Road)	EB	7,169	141
	WB	7,540	184
A5078 Dunwoody Way (between Joseph Reddrop Way and Dale Way)	NB	4,855	95
	SB	4,054	83
B5076 Vernon Way (between A532 West Street and Market Street)	NB	5,386	86
	SB	5,577	110
A532 West Street (between Bright Street and West Avenue)	EB	4,019	82
	WB	2,563	79
Lansdowne Road (between Coleridge Way and Pelican Close)	NB	67	22
	SB	104	0
A532 West Street (between Goddard Street and Ford Lane)	EB	4,027	72
	WB	2,340	70
A532 West Street (between Darlington Avenue and Frank Webb Avenue)	EB	6,238	61
	WB	7,503	77

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Location	Direction	Annual Average Daily Traffic (AADT) - all vehicles	Annual Average Daily Traffic (AADT) - HGV
Lansdowne Road (between Lansdowne Road and Sydney Road)	EB	129	26
	WB	491	3
A532 West Street (between Underwood Lane and Goddard Street)	EB	4,299	73
	WB	3,450	76
A532 West Street (between A5078 Dunwoody Way and Underwood Lane)	EB	4,091	47
	WB	1,737	39
B5076 Middlewich Road (between B5076 Vernon Way and Henry Street)	EB	5,038	55
	WB	4,792	77
A534 Haslington Bypass (between Sydney Road and Clay Lane)	NB	8,765	209
	SB	8,058	257
B5076 Middlewich Street (between Henry Street and Elm Drive)	NB	5,522	80
	SB	6,489	103
Sydney Road (between Herbert Street and Maw Green Road)	NB	3,655	83
	SB	4,158	75
B5076 Middlewich Road (between Elm Drive and Stamp Avenue)	NB	4,626	24
	SB	5,866	101
Stamp Avenue (between Greenway and B5076 Middlewich Street)	EB	269	3
	WB	180	2
B5076 Middlewich Street (between Stamp Avenue and Lime Tree Avenue)	NB	4,853	27
	SB	4,119	103
Lime Tree Avenue (between B5076 Middlewich Street and Sycamore Avenue)	EB	565	4
	WB	376	6
A530 Middlewich Road (between Pyms Lane and Middlewich Road)	NB	8,192	273
	SB	7,182	156
Lime Tree Avenue (between Sycamore Avenue and Acer Avenue)	EB	543	3
	WB	344	2
Greenway (between Stamp Avenue and B5076 Middlewich Street)	NB	255	6
	SB	107	2
Lime Tree Avenue (between Prunus Road and Elm Drive)	EB	379	5
	WB	403	5
Elm Drive (between Lime Tree Avenue and Remer Street)	NB	1,463	94
	SB	2,035	59
Lime Tree Avenue (between Acer Avenue and Prunus Road)	EB	367	3
	WB	381	3
B5076 Middlewich Street (between Lime Tree Avenue and Remer Street)	NB	4,338	28
	SB	3,793	102

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Sydney Road (between Maw Green Road and Elm Drive)	NB	5,317	152
	SB	5,689	128
Remer Street (between Groby Road and Elm Drive)	EB	6,793	124
	WB	5,849	184
Clay Lane (between Newtons Lane and Maw Lane)	EB	857	4
	WB	362	8
Acer Avenue (between Remer Street and Lime Tree Avenue)	NB	216	1
	SB	4	0
Remer Street (between Acer Avenue and Groby Road)	EB	4,455	94
	WB	4,421	161
Groby Road (between Remer Street and Stoneley Road)	NB	1,669	26
	SB	2,580	34
Remer Street (between B5076 Middlewich Street and Acer Avenue)	EB	4,279	95
	WB	4,457	162
Selworthy Drive (between B5076 Bradfield Road and Underwood Lane)	NB	1,490	4
	SB	620	5
B5076 Middlewich Street (between Broad Street and Remer Street)	EB	7,995	120
	WB	8,718	113
Newtons Lane (between Clay Lane and Nesfield Drive)	EB	809	3
	WB	285	7
Underwood Lane (between Cliffe Road and Newbury Avenue)	EB	903	37
	WB	1,355	41
B5076 North Street (between Broughton Road and Broad Street)	EB	8,652	149
	WB	7,540	149
Newtons Lane (between Nesfield Drive and Crewe Road)	EB	1,120	3
	WB	808	7
Underwood Lane (between Newbury Avenue and Pear Tree Avenue)	NB	848	36
	SB	1,305	40
Underwood Lane (between Pear Tree Avenue and B5076 Bradfield Road)	NB	821	36
	SB	1,299	40
B5076 Bradfield Road (between Underwood Lane and Broughton Road)	EB	5,932	141
	WB	6,658	132
B5076 Bradfield Road (between Selworthy Drive and Mablins Lane)	EB	4,015	120
	WB	4,366	118
B5076 Bradfield Road (between Mablins Lane and Cliffe Road)	EB	5,721	212
	WB	5,834	216

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B5076 Bradfield Road (between Cliffe Road and Underwood Lane)	EB	5,211	172
	WB	5,458	159
B5076 Bradfield Road (between Parkers Road and Selworthy Drive)	EB	4,597	99
	WB	5,071	109
Stoneley Road (between B5076 Broad Street and Waldron's Lane)	NB	173	2
	SB	224	5
A530 Middlewich Road (between Middlewich Road and Smithy Lane)	NB	7,544	270
	SB	6,450	151
A534 Haslington Bypass (between Clay Lane and Elton Lane)	NB	8,790	261
	SB	9,338	321
Broughton Road (between Maplins Moss Place and Parkers Road)	NB	598	17
	SB	670	10
B5076 Bradfield Road (between Parkers Road and B5076 Flowers Lane)	EB	8,641	244
	WB	8,151	219
Parkers Road (between B5076 Bradfield Road and Higher Croft Drive)	EB	4,034	145
	WB	3,413	110
Parkers Road (between Higher Croft Drive and Parkfield)	EB	3,392	138
	WB	2,752	106
Parkers Road (between Parkfield and Mablins Lane)	EB	3,336	129
	WB	2,896	107
Parkers Road (between Mablins Lane and Broughton Road)	EB	3,877	62
	WB	3,707	39
Groby Road (between Stoneley Road and Warmingham Road)	NB	1,673	19
	SB	2,495	14
Warmingham Road (between Broughton Road and Waldron's Lane)	EB	3,396	53
	WB	3,709	40
B5076 Flowers Lane (between A530 Middlewich Road and B5076 Bradfield Road)	EB	4,527	120
	WB	3,952	109
A530 Middlewich Road (between Smithy Lane and B5076 Flowers Lane)	NB	5,634	287
	SB	3,585	153
Warmingham Road (between Waldron's Lane and Groby Road)	EB	3,509	51
	WB	3,877	44
A534 Wheelock Bypass (between B5079 Crewe Road and Mill Lane)	NB	8,076	263
	SB	7,923	321
A530 Middlewich Road (between B5076 Flowers Lane and Eardswick Lane)	NB	4,950	280
	SB	4,963	192

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Location	Direction	Annual Average Daily Traffic (AADT) - all vehicles	Annual Average Daily Traffic (AADT) - HGV
A530 Middlewich Road (between Eardswick Lane and Brookhouse Lane)	NB	4,950	280
	SB	4,963	192
A534 Wheelock Bypass (between Mill Lane and A533 Old Mill Road)	NB	8,511	269
	SB	8,317	325
Warmingham Road/School Lane (between Hall Lane and Crabmill Lane)	NB	2,787	42
	SB	3,109	36
A534 Old Mill Road (between Brookhouse Road and A533 The Hill)	NB	9,990	296
	SB	7,890	342
A534 Old Mill Road (between A533 The Hill and Congleton Road)	NB	7,193	275
	SB	6,692	333
B5074 Over Road/B5074 Swanlow Lane (between Cross Lane and Moor Lane)	NB	4,879	131
	SB	3,599	92

6.4.10 Table 6-4, Table 6-5 and Table 6-6 summarise the 2030, 2038 and 2046 future baseline traffic flows for the weekday AM peak hour (08:00–09:00), weekday PM peak hour (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 6-4: MA01 strategic and local road network future baseline flows AM peak hour 08:00–09:00

Location	Direction	AM peak 2030 all vehicles	AM peak 2030 HGV	AM peak 2038 all vehicles	AM peak 2038 HGV	AM peak 2046 all vehicles	AM peak 2046 HGV
Back Lane (between Casey Lane and Newcastle Road)	NB	112	0	122	0	156	0
	SB	60	0	116	0	225	0
Newcastle Road (between Chorlton Lane and A531 Newcastle Road)	EB	378	10	405	10	615	15
	WB	461	10	528	11	990	20
Newcastle Road (between Casey Lane and Chorlton Lane)	EB	363	9	393	9	606	14
	WB	427	10	494	11	957	20
Casey Lane (between Back Lane and Weston Lane)	NB	85	3	130	2	350	2
	SB	62	7	66	7	81	6
	EB	317	9	280	9	375	13

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Location	Direction	AM peak 2030 all vehicles	AM peak 2030 HGV	AM peak 2038 all vehicles	AM peak 2038 HGV	AM peak 2046 all vehicles	AM peak 2046 HGV
A531 Newcastle Road (between Main Road and A500 Shavington Bypass)	WB	301	10	336	11	745	14
A500 Shavington Bypass (between A51 Newcastle Road and B5071 Jack Mills Way)	EB	1,432	34	1,416	23	1,161	4
	WB	1,314	67	1,462	62	943	23
A51 Nantwich Bypass (between A51 Newcastle Road and A534 Crewe Road)	NB	1,005	43	1,070	38	1,018	29
	SB	611	31	646	21	411	10
Cemetery Road (between Whites Lane and Mere Road)	EB	40	0	44	0	96	0
	WB	68	0	76	0	97	3
A500 Shavington Bypass (between A5020 David Whitby Way and A500 Newcastle Road)	EB	1,123	45	1,103	35	842	16
	WB	1,349	86	1,392	80	1,186	44
A500 Newcastle Road (between A500 Shavington Bypass and M6 junction 16)	EB	1,535	80	1,547	70	1,477	54
	WB	1,683	96	1,857	92	2,071	63
A500 Shavington Bypass (between A51 Nantwich Bypass and B5071 Jack Mills Way)	EB	1,432	34	1,416	23	1,161	4
	WB	1,314	67	1,462	62	943	23
A500 Shavington Bypass (between B5071 Jack Mills Way and A5020 David Whitby Way)	EB	1,597	36	1,638	26	1,424	5
	WB	1,576	80	1,809	74	1,707	33
A5020 David Whitby Way (between A500 Shavington Bypass and B5472 Weston Road)	NB	996	32	953	31	1,094	22
	SB	748	35	867	36	1,223	29
A51 Nantwich Bypass (between A534 Crewe Road and A530 Middlewich Road)	NB	1,006	38	1,047	32	1,016	24
	SB	561	26	595	17	560	7
Barthomley Road (between Radway Green Road and B5077 Butterson Lane)	NB	96	1	99	1	118	1
	SB	68	0	99	1	78	1
A530 Middlewich Road (between A51	NB	952	20	934	19	1,042	18
	SB	836	23	838	22	879	18

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Location	Direction	AM peak 2030 all vehicles	AM peak 2030 HGV	AM peak 2038 all vehicles	AM peak 2038 HGV	AM peak 2046 all vehicles	AM peak 2046 HGV
Nantwich Bypass and Colleys Lane)							
A532 Weston Road (between A5020 David Whitby Way and Western Road Service Road (southern access))	EB	343	45	357	45	415	44
	WB	1,136	44	1,234	44	1,369	39
A532 Weston Road (between Western Road Service Road (northern access) and A534 Crewe Road)	NB	622	24	584	24	334	21
	SB	439	19	449	19	554	19
A534 Crewe Road (between A532 Weston Road and Ludlow Avenue)	EB	804	26	791	27	814	23
	WB	531	26	610	27	757	24
A534 Crewe Road (between Gateway and A5020 University Way)	EB	577	27	566	28	587	25
	WB	752	27	835	27	1,041	25
A530 Middlewich Road (between Peach Lane and Wistaston Green Road)	NB	1,036	20	1,034	18	1,178	18
	SB	1,039	31	1,063	30	1,106	29
A534 Crewe Green Road (between Electra Way and A5020 University Way)	EB	555	26	544	28	547	24
	WB	946	26	1,031	27	1,209	24
A532 Macon Way (between A534 Crewe Road and Hungerford Road)	NB	371	13	364	13	166	12
	SB	611	13	716	16	736	22
A5020 University Way (between A534 Crewe Green Road and A532 Weston Road)	NB	787	13	738	11	595	5
	SB	882	21	965	20	1,173	14
A530 Middlewich Road (between Wistaston Green Road and A532 Coppenthal Lane)	NB	1,105	20	1,066	19	1,086	18
	SB	1,231	33	1,278	32	1,394	32
A5078 Oak Street (between A5078 Edleston Road and Cross Street)	EB	258	2	198	2	144	2
	WB	284	2	338	2	325	2
A5019 Vernon Way (between A5019 Mill	NB	547	2	612	2	718	2
	SB	400	2	458	2	553	2

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Street and Lyon Street)							
A5078 Dunwoody Way (between Flag Lane and A5078 Wistaston Road)	EB	406	9	410	9	423	8
	WB	259	10	251	10	201	10
A532 Coppenhall Lane (between A530 Middlewich Road and Sunnybank Road)	EB	609	11	636	11	650	12
	WB	603	19	648	18	709	17
A5019 Vernon Way (between Lyon Street and A532 Earle Street)	NB	597	5	662	5	761	5
	SB	778	6	857	6	934	6
Sydney Road (between Hungerford Road and Shakespeare Drive)	NB	914	6	808	3	487	2
	SB	1,007	13	1,028	11	1,028	9
A532 Manchester Bridge (between Vincent Street and Hungerford Road)	EB	1,044	17	1,220	20	1,349	27
	WB	765	21	857	21	778	20
A532 Earle Street (between A5019 Vernon Way and William Street)	EB	983	13	1,139	16	1,412	22
	WB	868	18	978	19	1,001	19
A5078 Dunwoody Way (between The Four Eagles PH access Harrison Drive)	EB	390	7	393	7	389	6
	WB	297	8	291	8	249	8
Coleridge Way (between Hungerford Road and Wordsworth Drive)	NB	35	2	41	2	49	2
	SB	84	0	134	0	312	0
Shakespeare Drive (between Sydney Road and Laureston Avenue)	EB	4	1	3	1	2	1
	WB	56	0	103	0	157	0
Laureston Avenue (between Shakespeare Drive and Wordsworth Drive)	NB	56	0	103	0	157	0
	SB	4	1	3	1	2	1
Sydney Road (between Shakespeare Drive and Lansdowne Road)	NB	830	6	701	3	372	2
	SB	980	12	1,025	11	1,054	8
Wordsworth Drive (between Tennyson	EB	7	0	7	0	7	0
	WB	52	0	98	0	154	0

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Avenue and Kipling Way)							
Wordsworth Drive (between Kipling Way and Laureston Avenue)	EB	5	0	5	0	4	0
	WB	54	0	100	0	156	0
Wordsworth Drive (between Coleridge Way and Tennyson Avenue)	EB	11	0	13	0	13	0
	WB	53	0	101	0	157	0
A532 Vernon Way (between A532 Earle Street and A532 West Street)	NB	489	7	528	7	514	7
	SB	767	11	789	12	915	12
Coleridge Way (between Lansdowne Road and Wordsworth Drive)	NB	26	2	32	2	40	2
	SB	34	0	37	0	159	0
A532 West Street (between Bilton Way and Victoria Avenue)	EB	657	16	707	16	732	17
	WB	755	21	744	21	769	19
A530 Middlewich Road (between A532 Coppenhall Lane and Pyms Lane)	NB	573	10	519	9	524	7
	SB	763	17	770	17	802	17
A532 West Street (between Broad Street and A532 Vernon Way)	EB	280	5	283	4	411	7
	WB	256	4	244	4	224	4
A532 West Street (between Victoria Avenue and Minshull New Road)	EB	832	13	847	13	856	16
	WB	734	23	750	22	841	20
A5078 Dunwoody Way (between Joseph Reddrop Way and Dale Way)	NB	307	7	301	7	264	8
	SB	331	7	322	7	299	6
B5076 Vernon Way (between A532 West Street and Market Street)	NB	341	4	367	4	392	5
	SB	591	7	585	8	603	6
A532 West Street (between Bright Street and West Avenue)	EB	419	8	433	7	504	10
	WB	268	7	295	7	277	7
Lansdowne Road (between Coleridge Way and Pelican Close)	NB	7	2	7	2	9	2
	SB	17	0	18	0	137	0

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A532 West Street (between Goddard Street and Ford Lane)	EB	534	7	583	6	589	11
	WB	259	7	280	7	245	6
A532 West Street (between Darlington Avenue and Frank Webb Avenue)	EB	731	6	757	6	711	9
	WB	645	9	629	8	596	8
Lansdowne Road (between Lansdowne Road and Sydney Road)	EB	13	2	13	2	14	2
	WB	54	0	51	0	164	0
A532 West Street (between Underwood Lane and Goddard Street)	EB	537	7	604	6	693	11
	WB	350	7	401	7	428	7
A532 West Street (between A5078 Dunwoody Way and Underwood Lane)	EB	564	4	598	4	636	8
	WB	264	4	267	4	253	4
B5076 Middlewich Road (between B5076 Vernon Way and Henry Street)	EB	262	0	290	0	344	0
	WB	492	2	500	2	518	2
A534 Haslington Bypass (between Sydney Road and Clay Lane)	NB	903	32	937	33	1,007	24
	SB	1,010	28	1,310	29	1,557	24
B5076 Middlewich Street (between Henry Street and Elm Drive)	NB	266	3	290	3	336	2
	SB	763	4	845	4	589	3
Sydney Road (between Herbert Street and Maw Green Road)	NB	757	8	618	5	277	4
	SB	922	12	937	10	1,037	8
B5076 Middlewich Road (between Elm Drive and Stamp Avenue)	NB	225	3	243	2	233	2
	SB	659	3	752	3	505	3
Stamp Avenue (between Greenway and B5076 Middlewich Street)	EB	35	1	133	1	175	1
	WB	25	0	26	0	25	0
B5076 Middlewich Street (between Stamp Avenue and Lime Tree Avenue)	NB	211	3	240	3	258	3
	SB	430	3	432	3	161	3
	EB	40	1	56	1	68	1

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Lime Tree Avenue (between B5076 Middlewich Street and Sycamore Avenue)	WB	46	1	47	1	43	1
A530 Middlewich Road (between Pyms Lane and Middlewich Road)	NB	533	13	473	12	442	10
	SB	752	18	761	18	770	18
Lime Tree Avenue (between Sycamore Avenue and Acer Avenue)	EB	38	1	54	1	66	1
	WB	42	0	42	0	39	0
Greenway (between Stamp Avenue and B5076 Middlewich Street)	NB	16	1	17	1	22	1
	SB	41	0	124	0	164	0
Lime Tree Avenue (between Prunus Road and Elm Drive)	EB	3	1	3	1	256	2
	WB	47	1	47	1	44	1
Elm Drive (between Lime Tree Avenue and Remer Street)	NB	212	5	223	5	315	5
	SB	273	6	249	6	229	6
Lime Tree Avenue (between Acer Avenue and Prunus Road)	EB	1	1	1	1	253	1
	WB	43	0	44	0	40	0
B5076 Middlewich Street (between Lime Tree Avenue and Remer Street)	NB	177	3	190	3	195	2
	SB	389	3	390	3	123	2
Sydney Road (between Maw Green Road and Elm Drive)	NB	911	14	823	11	558	9
	SB	1,014	20	1,098	17	1,294	19
Remer Street (between Groby Road and Elm Drive)	EB	1,221	20	1,282	17	1,355	18
	WB	1,057	13	982	10	704	7
Clay Lane (between Newtons Lane and Maw Lane)	EB	29	0	60	0	194	8
	WB	26	0	29	1	138	8
Acer Avenue (between Remer Street and Lime Tree Avenue)	NB	39	0	55	0	2	0
	SB	0	0	0	0	187	1
Remer Street (between Acer Avenue and Groby Road)	EB	1,028	13	1,060	11	1,211	13
	WB	355	9	333	8	248	6
Groby Road (between Remer Street and Stoneley Road)	NB	1,136	4	1,116	2	911	1
	SB	628	7	695	6	622	5
	EB	991	13	1,007	11	1,397	14

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Remer Street (between B5076 Middlewich Street and Acer Avenue)	WB	357	9	335	8	250	6
Selworthy Drive (between B5076 Bradfield Road and Underwood Lane)	NB	109	0	145	0	173	1
	SB	76	1	54	1	176	1
B5076 Middlewich Street (between Broad Street and Remer Street)	EB	1,377	14	1,395	13	1,519	15
	WB	531	10	523	9	443	7
Newtons Lane (between Clay Lane and Nesfield Drive)	EB	24	0	56	0	188	8
	WB	16	0	19	1	126	8
Underwood Lane (between Cliffe Road and Newbury Avenue)	EB	40	2	44	2	50	2
	WB	212	2	243	3	302	3
B5076 North Street (between Broughton Road and Broad Street)	EB	906	17	886	16	930	14
	WB	423	16	413	15	363	13
Newtons Lane (between Nesfield Drive and Crewe Road)	EB	81	0	168	0	287	8
	WB	64	0	70	1	166	8
Underwood Lane (between Newbury Avenue and Pear Tree Avenue)	NB	43	2	47	2	54	2
	SB	211	2	243	3	302	3
Underwood Lane (between Pear Tree Avenue and B5076 Bradfield Road)	NB	43	2	48	2	53	2
	SB	210	2	242	3	300	3
B5076 Bradfield Road (between Underwood Lane and Broughton Road)	EB	688	16	711	15	672	12
	WB	514	13	549	13	561	12
B5076 Bradfield Road (between Selworthy Drive and Mablins Lane)	EB	411	12	424	11	353	9
	WB	515	10	531	10	577	8
B5076 Bradfield Road (between Mablins Lane and Cliffe Road)	EB	789	23	751	21	626	16
	WB	393	22	388	23	387	22
B5076 Bradfield Road (between Cliffe Road and Underwood Lane)	EB	652	17	670	16	626	14
	WB	311	15	314	15	268	13

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Location	Direction	AM peak 2030 all vehicles	AM peak 2030 HGV	AM peak 2038 all vehicles	AM peak 2038 HGV	AM peak 2046 all vehicles	AM peak 2046 HGV
B5076 Bradfield Road (between Parkers Road and Selworthy Drive)	EB	443	11	458	10	456	8
	WB	537	9	606	8	618	7
Stoneley Road (between B5076 Broad Street and Waldron's Lane)	NB	42	1	53	1	33	1
	SB	13	0	18	0	133	1
A530 Middlewich Road (between Middlewich Road and Smithy Lane)	NB	405	13	356	11	341	10
	SB	733	18	742	18	752	17
A534 Haslington Bypass (between Clay Lane and Elton Lane)	NB	898	40	985	39	1,163	27
	SB	995	35	1,266	37	1,527	24
Broughton Road (between Maplins Moss Place and Parkers Road)	NB	45	2	49	2	50	2
	SB	65	2	163	3	262	3
B5076 Bradfield Road (between Parkers Road and B5076 Flowers Lane)	EB	661	29	631	25	573	19
	WB	894	18	928	17	926	13
Parkers Road (between B5076 Bradfield Road and Higher Croft Drive)	EB	244	17	213	14	139	11
	WB	478	10	488	10	472	8
Parkers Road (between Higher Croft Drive and Parkfield)	EB	1,162	16	1,481	14	1,532	10
	WB	212	10	223	9	203	8
Parkers Road (between Parkfield and Mablins Lane)	EB	1,185	16	1,505	14	1,556	10
	WB	238	12	251	12	231	11
Parkers Road (between Mablins Lane and Broughton Road)	EB	795	8	1,026	7	1,018	5
	WB	356	3	279	3	255	3
Groby Road (between Stoneley Road and Warmingham Road)	NB	417	3	385	1	408	1
	SB	759	4	809	3	977	3
Warmingham Road (between Broughton Road and Waldron's Lane)	EB	797	6	989	5	909	3
	WB	352	4	342	5	351	5
B5076 Flowers Lane (between A530 Middlewich Road and B5076 Bradfield Road)	EB	615	16	669	15	687	13
	WB	279	5	295	5	369	2

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Location	Direction	AM peak 2030 all vehicles	AM peak 2030 HGV	AM peak 2038 all vehicles	AM peak 2038 HGV	AM peak 2046 all vehicles	AM peak 2046 HGV
A530 Middlewich Road (between Smithy Lane and B5076 Flowers Lane)	NB	312	11	311	11	293	10
	SB	463	19	551	19	672	19
Warmingham Road (between Waldron's Lane and Groby Road)	EB	718	6	900	5	773	4
	WB	330	5	320	5	349	5
A534 Wheelock Bypass (between B5079 Crewe Road and Mill Lane)	NB	877	38	947	37	958	27
	SB	647	34	701	36	1,127	24
A530 Middlewich Road (between B5076 Flowers Lane and Eardswick Lane)	NB	531	14	547	14	611	10
	SB	1,018	33	1,160	32	1,307	30
A530 Middlewich Road (between Eardswick Lane and Brookhouse Lane)	NB	186	8	176	8	133	6
	SB	529	20	669	20	822	22
A534 Wheelock Bypass (between Mill Lane and A533 Old Mill Road)	NB	963	39	1,028	38	1,059	29
	SB	721	35	780	36	819	24
Warmingham Road/School Lane (between Hall Lane and Crabmill Lane)	NB	700	7	810	7	821	6
	SB	527	6	618	6	1,026	8
A534 Old Mill Road (between Brookhouse Road and A533 The Hill)	NB	991	39	1,057	39	1,135	30
	SB	672	36	724	37	844	25
A534 Old Mill Road (between A533 The Hill and Congleton Road)	NB	783	39	843	39	872	31
	SB	576	36	618	37	800	29
B5074 Over Road/B5074 Swanlow Lane (between Cross Lane and Moor Lane)	NB	433	21	492	21	568	18
	SB	382	14	435	14	507	15

Table 6-5: MA01 strategic and local road network future baseline flows PM peak hour 17:00-18:00

Location	Direction	2030 all vehicles	2030 HGV	2038 all vehicles	2038 HGV	2046 all vehicles	2046 HGV
Back Lane (between Casey Lane and Newcastle Road)	NB	87	0	126	0	184	0
	SB	145	0	138	0	117	0
Newcastle Road (between Chorlton Lane and A531 Newcastle Road)	EB	529	4	580	4	728	8
	WB	521	4	552	5	706	10

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Location	Direction	2030 all vehicles	2030 HGV	2038 all vehicles	2038 HGV	2046 all vehicles	2046 HGV
Newcastle Road (between Casey Lane and Chorlton Lane)	EB	516	4	569	4	720	8
	WB	536	4	571	5	728	10
Casey Lane (between Back Lane and Weston Lane)	NB	27	0	32	0	40	0
	SB	87	0	84	0	152	0
A531 Newcastle Road (between Main Road and A500 Shavington Bypass)	EB	142	1	153	2	187	5
	WB	307	3	302	4	429	4
A500 Shavington Bypass (between A51 Newcastle Road and B5071 Jack Mills Way)	EB	967	19	1,051	15	1,298	11
	WB	1,504	34	1,505	31	1,383	15
A51 Nantwich Bypass (between A51 Newcastle Road and A534 Crewe Road)	NB	993	31	1,032	29	1,138	19
	SB	837	24	810	17	944	11
Cemetery Road (between Whites Lane and Mere Road)	EB	31	0	37	0	42	0
	WB	18	0	20	0	22	0
A500 Shavington Bypass (between A5020 David Whitby Way and A500 Newcastle Road)	EB	1,285	28	1,258	26	1,231	20
	WB	1,069	59	1,055	57	1,038	43
A500 Newcastle Road (between A500 Shavington Bypass and M6 junction 16)	EB	1,590	25	1,592	24	1,594	22
	WB	1,405	63	1,412	63	1,518	49
A500 Shavington Bypass (between A51 Nantwich Bypass and B5071 Jack Mills Way)	EB	967	19	1,051	15	1,298	11
	WB	1,504	34	1,505	31	1,383	15
A500 Shavington Bypass (between B5071 Jack Mills Way and A5020 David Whitby Way)	EB	1,047	26	1,266	22	1,532	15
	WB	1,297	38	1,289	35	1,233	21
A5020 David Whitby Way (between A500 Shavington Bypass and B5472 Weston Road)	NB	862	31	959	30	1,228	27
	SB	1,325	12	1,184	12	1,120	12
A51 Nantwich Bypass (between A534 Crewe Road and A530 Middlewich Road)	NB	1,046	35	1,094	31	1,144	20
	SB	805	17	900	9	1,065	4
Barthomley Road (between Radway Green Road and B5077 Butterson Lane)	NB	23	0	23	0	26	0
	SB	203	0	178	1	180	1
A530 Middlewich Road (between A51 Nantwich Bypass and Colleys Lane)	NB	768	8	649	5	531	4
	SB	726	6	704	6	691	5
A532 Weston Road (between A5020 David Whitby Way and Western Road Service Road (southern access))	EB	1,310	17	1,267	16	1,089	15
	WB	255	25	264	26	222	25
A532 Weston Road (between Western Road Service Road (northern access) and A534 Crewe Road)	NB	483	7	629	8	887	8
	SB	675	14	640	13	342	12
A534 Crewe Road (between A532 Weston Road and Ludlow Avenue)	EB	620	7	765	8	1,319	8
	WB	611	15	557	15	555	14
A534 Crewe Road (between Gateway and A5020 University Way)	EB	736	7	910	8	1,467	9
	WB	464	18	384	18	314	16

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Location	Direction	2030 all vehicles	2030 HGV	2038 all vehicles	2038 HGV	2046 all vehicles	2046 HGV
A530 Middlewich Road (between Peach Lane and Wistaston Green Road)	NB	817	8	858	6	791	5
	SB	964	8	976	9	1,105	9
A534 Crewe Green Road (between Electra Way and A5020 University Way)	EB	801	7	984	8	1,513	9
	WB	445	17	372	17	301	15
A532 Macon Way (between A534 Crewe Road and Hungerford Road)	NB	479	5	530	5	731	5
	SB	604	6	574	7	660	7
A5020 University Way (between A534 Crewe Green Road and A532 Weston Road)	NB	681	7	721	5	908	3
	SB	785	5	802	6	920	7
A530 Middlewich Road (between Wistaston Green Road and A532 Coppenhall Lane)	NB	779	9	802	8	762	6
	SB	1,235	8	1,274	9	1,511	10
A5078 Oak Street (between A5078 Edleston Road and Cross Street)	EB	111	1	114	1	93	1
	WB	503	1	511	1	490	1
A5019 Vernon Way (between A5019 Mill Street and Lyon Street)	NB	357	1	395	1	507	1
	SB	833	1	879	1	1,020	1
A5078 Dunwoody Way (between Flag Lane and A5078 Wistaston Road)	EB	328	3	336	3	350	3
	WB	447	4	469	4	523	4
A532 Coppenhall Lane (between A530 Middlewich Road and Sunnybank Road)	EB	408	6	413	6	397	6
	WB	537	6	545	6	734	6
A5019 Vernon Way (between Lyon Street and A532 Earle Street)	NB	744	1	765	1	776	1
	SB	746	1	794	1	909	1
Sydney Road (between Hungerford Road and Shakespeare Drive)	NB	604	1	620	1	639	1
	SB	571	1	322	1	127	1
A532 Manchester Bridge (between Vincent Street and Hungerford Road)	EB	1,095	8	1,005	9	815	9
	WB	862	13	905	13	1,136	13
A532 Earle Street (between A5019 Vernon Way and William Street)	EB	861	7	800	8	723	9
	WB	1,024	11	1,042	11	1,161	11
A5078 Dunwoody Way (between The Four Eagles PH access Harrison Drive)	EB	327	3	334	3	386	3
	WB	334	3	361	3	444	3
Coleridge Way (between Hungerford Road and Wordsworth Drive)	NB	48	2	131	2	306	2
	SB	242	0	393	0	374	0
Shakespeare Drive (between Sydney Road and Laureston Avenue)	EB	1	0	74	0	211	0
	WB	202	0	251	0	306	0
Laureston Avenue (between Shakespeare Drive and Wordsworth Drive)	NB	202	0	251	0	306	0
	SB	1	0	74	0	211	0
Sydney Road (between Shakespeare Drive and Lansdowne Road)	NB	503	1	587	1	730	1
	SB	538	1	299	1	120	1
Wordsworth Drive (between Tennyson Avenue and Kipling Way)	EB	3	0	76	0	214	0
	WB	201	0	250	0	306	0

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Wordsworth Drive (between Kipling Way and Laureston Avenue)	EB	2	0	74	0	213	0
	WB	202	0	250	0	307	0
Wordsworth Drive (between Coleridge Way and Tennyson Avenue)	EB	7	0	80	0	219	0
	WB	204	0	253	0	310	0
A532 Vernon Way (between A532 Earle Street and A532 West Street)	NB	722	12	745	12	747	12
	SB	609	14	615	14	488	13
Coleridge Way (between Lansdowne Road and Wordsworth Drive)	NB	43	2	53	2	89	2
	SB	40	0	142	0	66	0
A532 West Street (between Bilton Way and Victoria Avenue)	EB	732	12	737	12	791	13
	WB	587	11	569	11	642	11
A530 Middlewich Road (between A532 Coppenthal Lane and Pyms Lane)	NB	514	4	543	4	545	2
	SB	771	3	811	5	884	6
A532 West Street (between Broad Street and A532 Vernon Way)	EB	291	3	250	3	212	3
	WB	241	2	205	2	224	2
A532 West Street (between Victoria Avenue and Minshull New Road)	EB	611	11	648	11	627	11
	WB	800	9	797	9	873	8
A5078 Dunwoody Way (between Joseph Reddrop Way and Dale Way)	NB	418	8	451	8	545	8
	SB	350	7	358	7	418	7
B5076 Vernon Way (between A532 West Street and Market Street)	NB	619	11	630	11	636	11
	SB	456	12	454	11	387	11
A532 West Street (between Bright Street and West Avenue)	EB	319	7	283	7	274	7
	WB	132	6	140	6	151	6
Lansdowne Road (between Coleridge Way and Pelican Close)	NB	7	2	8	2	24	2
	SB	31	0	132	0	56	0
A532 West Street (between Goddard Street and Ford Lane)	EB	390	7	372	7	378	8
	WB	107	5	115	5	143	5
A532 West Street (between Darlington Avenue and Frank Webb Avenue)	EB	593	5	592	5	562	5
	WB	600	3	604	4	566	3
Lansdowne Road (between Lansdowne Road and Sydney Road)	EB	10	2	10	2	27	2
	WB	57	0	148	0	78	0
A532 West Street (between Underwood Lane and Goddard Street)	EB	420	7	397	7	414	8
	WB	191	6	230	6	358	6
A532 West Street (between A5078 Dunwoody Way and Underwood Lane)	EB	468	5	474	5	584	6
	WB	81	3	77	3	106	2
B5076 Middlewich Road (between B5076 Vernon Way and Henry Street)	EB	585	9	553	9	447	9
	WB	377	10	381	10	400	9
A534 Haslington Bypass (between Sydney Road and Clay Lane)	NB	843	8	965	8	1,163	5
	SB	864	17	887	17	1,034	15
	NB	625	11	605	11	580	11

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B5076 Middlewich Street (between Henry Street and Elm Drive)	SB	566	13	562	12	518	11
Sydney Road (between Herbert Street and Maw Green Road)	NB	428	3	485	3	592	3
	SB	532	1	373	1	121	1
B5076 Middlewich Road (between Elm Drive and Stamp Avenue)	NB	534	1	507	2	470	2
	SB	517	12	508	12	458	10
Stamp Avenue (between Greenway and B5076 Middlewich Street)	EB	15	0	17	0	20	0
	WB	16	0	151	0	251	0
B5076 Middlewich Street (between Stamp Avenue and Lime Tree Avenue)	NB	453	2	303	2	186	2
	SB	288	11	282	10	231	8
Lime Tree Avenue (between B5076 Middlewich Street and Sycamore Avenue)	EB	29	0	44	0	48	0
	WB	14	0	13	0	15	0
A530 Middlewich Road (between Pymys Lane and Middlewich Road)	NB	590	8	620	8	646	6
	SB	587	6	644	9	798	10
Lime Tree Avenue (between Sycamore Avenue and Acer Avenue)	EB	23	0	39	0	42	0
	WB	11	0	11	0	12	0
Greenway (between Stamp Avenue and B5076 Middlewich Street)	NB	24	0	156	0	252	1
	SB	8	0	7	0	6	0
Lime Tree Avenue (between Prunus Road and Elm Drive)	EB	15	0	9	0	2	0
	WB	35	0	35	0	35	0
Elm Drive (between Lime Tree Avenue and Remer Street)	NB	36	11	39	11	69	11
	SB	235	2	201	2	154	2
Lime Tree Avenue (between Acer Avenue and Prunus Road)	EB	14	0	8	0	2	0
	WB	34	0	34	0	33	0
B5076 Middlewich Street (between Lime Tree Avenue and Remer Street)	NB	430	2	264	2	142	2
	SB	279	11	274	10	221	8
Sydney Road (between Maw Green Road and Elm Drive)	NB	450	4	504	4	588	4
	SB	1,081	3	1,120	4	1,191	4
Remer Street (between Groby Road and Elm Drive)	EB	1,263	3	1,268	3	1,268	4
	WB	435	12	492	12	583	12
Clay Lane (between Newtons Lane and Maw Lane)	EB	202	1	454	2	746	2
	WB	10	0	9	0	9	0
Acer Avenue (between Remer Street and Lime Tree Avenue)	NB	38	0	58	0	63	0
	SB	7	0	5	0	2	0
Remer Street (between Acer Avenue and Groby Road)	EB	339	5	356	5	430	5
	WB	422	12	471	12	562	11
Groby Road (between Remer Street and Stoneley Road)	NB	42	0	54	0	69	0
	SB	995	0	986	0	926	0
	EB	329	5	331	5	397	5

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Remer Street (between B5076 Middlewich Street and Acer Avenue)	WB	444	12	499	12	590	11
Selworthy Drive (between B5076 Bradfield Road and Underwood Lane)	NB	134	0	265	1	571	1
	SB	41	0	43	0	42	0
B5076 Middlewich Street (between Broad Street and Remer Street)	EB	596	7	590	7	602	6
	WB	864	3	753	3	722	2
Newtons Lane (between Clay Lane and Nesfield Drive)	EB	198	1	450	2	741	2
	WB	7	0	7	0	6	0
Underwood Lane (between Cliffe Road and Newbury Avenue)	EB	132	4	136	4	251	4
	WB	92	4	49	3	28	3
B5076 North Street (between Broughton Road and Broad Street)	EB	762	9	826	9	803	8
	WB	842	4	1,137	3	1,385	3
Newtons Lane (between Nesfield Drive and Crewe Road)	EB	209	2	462	2	730	2
	WB	46	0	48	0	50	0
Underwood Lane (between Newbury Avenue and Pear Tree Avenue)	NB	125	4	129	4	247	4
	SB	91	4	48	3	29	3
Underwood Lane (between Pear Tree Avenue and B5076 Bradfield Road)	NB	121	4	125	4	242	4
	SB	92	4	49	3	28	3
B5076 Bradfield Road (between Underwood Lane and Broughton Road)	EB	668	8	706	8	613	7
	WB	599	2	704	2	912	2
B5076 Bradfield Road (between Selworthy Drive and Mablins Lane)	EB	484	7	574	8	664	7
	WB	297	5	283	4	445	3
B5076 Bradfield Road (between Mablins Lane and Cliffe Road)	EB	648	14	664	15	614	13
	WB	587	9	713	8	1,063	7
B5076 Bradfield Road (between Cliffe Road and Underwood Lane)	EB	558	11	592	12	494	11
	WB	519	5	667	5	1,008	5
B5076 Bradfield Road (between Parkers Road and Selworthy Drive)	EB	488	5	500	5	352	4
	WB	326	4	364	5	597	3
Stoneley Road (between B5076 Broad Street and Waldron's Lane)	NB	0	0	0	0	0	0
	SB	237	0	403	0	527	0
A530 Middlewich Road (between Middlewich Road and Smithy Lane)	NB	529	8	558	7	587	6
	SB	473	6	527	9	672	9
A534 Haslington Bypass (between Clay Lane and Elton Lane)	NB	1,100	9	1,158	8	1,185	7
	SB	894	19	919	19	1,004	18
Broughton Road (between Maplins Moss Place and Parkers Road)	NB	143	2	349	1	428	1
	SB	59	1	82	1	111	1
B5076 Bradfield Road (between Parkers Road and B5076 Flowers Lane)	EB	1,031	13	1,112	13	999	11
	WB	530	11	577	11	803	10
	EB	543	9	612	9	662	7

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Parkers Road (between B5076 Bradfield Road and Higher Croft Drive)	WB	196	6	214	6	243	7
Parkers Road (between Higher Croft Drive and Parkfield)	EB	372	9	373	9	263	8
	WB	282	6	334	6	479	6
Parkers Road (between Parkfield and Mablins Lane)	EB	362	10	362	9	252	8
	WB	304	6	359	6	513	6
Parkers Road (between Mablins Lane and Broughton Road)	EB	443	4	632	4	779	3
	WB	262	3	292	3	374	3
Groby Road (between Stoneley Road and Warmingham Road)	NB	414	0	294	0	219	0
	SB	19	0	20	0	21	0
Warmingham Road (between Broughton Road and Waldron's Lane)	EB	404	5	798	4	1,033	4
	WB	231	3	276	3	390	3
B5076 Flowers Lane (between A530 Middlewich Road and B5076 Bradfield Road)	EB	331	6	317	6	328	6
	WB	266	5	276	5	310	5
A530 Middlewich Road (between Smithy Lane and B5076 Flowers Lane)	NB	328	14	353	13	390	11
	SB	310	9	384	11	537	12
Warmingham Road (between Waldron's Lane and Groby Road)	EB	976	3	1,190	3	1,301	3
	WB	257	3	282	3	396	3
A534 Wheelock Bypass (between B5079 Crewe Road and Mill Lane)	NB	1,010	10	1,074	9	1,144	8
	SB	765	21	789	21	818	20
A530 Middlewich Road (between B5076 Flowers Lane and Eardswick Lane)	NB	554	18	589	18	662	16
	SB	602	14	662	17	826	17
A530 Middlewich Road (between Eardswick Lane and Brookhouse Lane)	NB	213	7	208	7	180	6
	SB	274	10	293	12	331	13
A534 Wheelock Bypass (between Mill Lane and A533 Old Mill Road)	NB	1,027	10	1,051	9	1,078	8
	SB	790	21	817	22	874	21
Warmingham Road/School Lane (between Hall Lane and Crabmill Lane)	NB	1,049	1	1,143	1	1,227	1
	SB	210	2	253	2	490	2
A534 Old Mill Road (between Brookhouse Road and A533 The Hill)	NB	1,163	13	1,165	11	1,167	10
	SB	707	24	707	24	707	23
A534 Old Mill Road (between A533 The Hill and Congleton Road)	NB	902	13	918	11	901	10
	SB	601	23	591	23	653	22
B5074 Over Road/B5074 Swanlow Lane (between Cross Lane and Moor Lane)	NB	528	3	568	2	578	3
	SB	348	4	365	4	438	5

Table 6-6: MA01 strategic and local road network future baseline flows AADT

Location	Direction	AADT 2030	AADT 2038	AADT 2046
Back Lane (between Casey Lane and Newcastle Road)	NB	1,101	1,373	1,884

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Location	Direction	AADT 2030	AADT 2038	AADT 2046
	SB	1,139	1,406	1,888
Newcastle Road (between Chorlton Lane and A531 Newcastle Road)	EB	5,032	5,466	7,441
	WB	5,442	5,983	9,375
Newcastle Road (between Casey Lane and Chorlton Lane)	EB	4,875	5,337	7,350
	WB	5,343	5,901	9,316
Casey Lane (between Back Lane and Weston Lane)	NB	619	892	2,146
	SB	828	832	1,295
A531 Newcastle Road (between Main Road and A500 Shavington Bypass)	EB	2,537	2,395	3,100
	WB	3,367	3,529	6,485
A500 Shavington Bypass (between A51 Newcastle Road and B5071 Jack Mills Way)	EB	13,261	13,644	13,623
	WB	15,614	16,435	12,905
A51 Nantwich Bypass (between A51 Newcastle Road and A534 Crewe Road)	NB	11,064	11,638	11,945
	SB	8,032	8,071	7,530
Cemetery Road (between Whites Lane and Mere Road)	EB	397	448	762
	WB	479	527	659
A500 Shavington Bypass (between A5020 David Whitby Way and A500 Newcastle Road)	EB	13,342	13,086	11,502
	WB	13,378	13,533	12,309
A500 Newcastle Road (between A500 Shavington Bypass and M6 junction 16)	EB	17,307	17,385	17,017
	WB	17,088	18,078	19,847
A500 Shavington Bypass (between A51 Nantwich Bypass and B5071 Jack Mills Way)	EB	13,261	13,644	13,623
	WB	15,614	16,436	12,905
A500 Shavington Bypass (between B5071 Jack Mills Way and A5020 David Whitby Way)	EB	14,618	16,060	16,379
	WB	15,896	17,133	16,255
A5020 David Whitby Way (between A500 Shavington Bypass and B5472 Weston Road)	NB	10,285	10,589	12,863
	SB	11,514	11,376	12,967
A51 Nantwich Bypass (between A534 Crewe Road and A530 Middlewich Road)	NB	11,362	11,859	11,966
	SB	7,575	8,292	9,024
Barthomley Road (between Radway Green Road and B5077 Butterson Lane)	NB	653	675	791
	SB	1,507	1,539	1,437
A530 Middlewich Road (between A51 Nantwich Bypass and Colleys Lane)	NB	9,513	8,751	8,685
	SB	8,643	8,533	8,687
A532 Weston Road (between A5020 David Whitby Way and Western Road Service Road (southern access))	EB	9,201	9,043	8,362
	WB	7,654	8,247	8,752
A532 Weston Road (between Western Road Service Road (northern access) and A534 Crewe Road)	NB	6,109	6,720	6,789
	SB	6,178	6,042	4,951
A534 Crewe Road (between A532 Weston Road and Ludlow Avenue)	EB	7,878	8,613	11,836
	WB	6,328	6,459	7,252
A534 Crewe Road (between Gateway and A5020 University Way)	EB	7,279	8,192	11,423
	WB	6,723	6,726	7,467

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Location	Direction	AADT 2030	AADT 2038	AADT 2046
A530 Middlewich Road (between Peach Lane and Wistaston Green Road)	NB	10,249	10,467	10,883
	SB	11,092	11,292	12,244
A534 Crewe Green Road (between Electra Way and A5020 University Way)	EB	7,521	8,483	11,456
	WB	7,678	7,740	8,316
A532 Macon Way (between A534 Crewe Road and Hungerford Road)	NB	4,710	4,961	4,996
	SB	6,730	7,140	7,728
A5020 University Way (between A534 Crewe Green Road and A532 Weston Road)	NB	8,123	8,077	8,342
	SB	9,223	9,779	11,576
A530 Middlewich Road (between Wistaston Green Road and A532 Coppenthal Lane)	NB	10,419	10,334	10,219
	SB	13,657	14,134	16,095
A5078 Oak Street (between A5078 Edleston Road and Cross Street)	EB	2,034	1,724	1,311
	WB	4,365	4,714	4,522
A5019 Vernon Way (between A5019 Mill Street and Lyon Street)	NB	5,001	5,567	6,770
	SB	6,851	7,427	8,735
A5078 Dunwoody Way (between Flag Lane and A5078 Wistaston Road)	EB	4,059	4,128	4,277
	WB	3,918	3,999	4,029
A532 Coppenthal Lane (between A530 Middlewich Road and Sunnybank Road)	EB	5,622	5,800	5,785
	WB	6,308	6,599	7,991
A5019 Vernon Way (between Lyon Street and A532 Earle Street)	NB	7,431	7,910	8,514
	SB	8,437	9,140	10,206
Sydney Road (between Hungerford Road and Shakespeare Drive)	NB	8,392	7,896	6,244
	SB	8,719	7,440	6,349
A532 Manchester Bridge (between Vincent Street and Hungerford Road)	EB	11,848	12,312	11,959
	WB	9,018	9,758	10,619
A532 Earle Street (between A5019 Vernon Way and William Street)	EB	10,201	10,722	11,788
	WB	10,483	11,189	11,980
A5078 Dunwoody Way (between The Four Eagles PH access Harrison Drive)	EB	3,966	4,020	4,294
	WB	3,496	3,612	3,847
Coleridge Way (between Hungerford Road and Wordsworth Drive)	NB	457	958	1,979
	SB	1,812	2,930	3,802
Shakespeare Drive (between Sydney Road and Laureston Avenue)	EB	30	429	1,193
	WB	1,438	1,963	2,576
Laureston Avenue (between Shakespeare Drive and Wordsworth Drive)	NB	1,438	1,963	2,576
	SB	30	429	1,193
Sydney Road (between Shakespeare Drive and Lansdowne Road)	NB	7,367	7,130	6,121
	SB	8,389	7,294	6,453
Wordsworth Drive (between Tennyson Avenue and Kipling Way)	EB	58	460	1,238
	WB	1,409	1,931	2,555
Wordsworth Drive (between Kipling Way and Laureston Avenue)	EB	40	441	1,211

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	WB	1,426	1,951	2,569
Wordsworth Drive (between Coleridge Way and Tennyson Avenue)	EB	101	514	1,299
	WB	1,433	1,965	2,596
A532 Vernon Way (between A532 Earle Street and A532 West Street)	NB	6,717	7,061	6,994
	SB	7,612	7,767	7,750
Coleridge Way (between Lansdowne Road and Wordsworth Drive)	NB	384	472	714
	SB	407	993	1,240
A532 West Street (between Bilton Way and Victoria Avenue)	EB	7,694	7,999	8,439
	WB	7,423	7,257	7,807
A530 Middlewich Road (between A532 Coppenhall Lane and Pyms Lane)	NB	6,019	5,879	5,917
	SB	8,495	8,759	9,342
A532 West Street (between Broad Street and A532 Vernon Way)	EB	3,164	2,954	3,439
	WB	2,748	2,481	2,483
A532 West Street (between Victoria Avenue and Minshull New Road)	EB	7,983	8,266	8,200
	WB	8,498	8,567	9,494
A5078 Dunwoody Way (between Joseph Reddrop Way and Dale Way)	NB	4,017	4,172	4,498
	SB	3,768	3,769	3,975
B5076 Vernon Way (between A532 West Street and Market Street)	NB	5,330	5,535	5,704
	SB	5,792	5,745	5,475
A532 West Street (between Bright Street and West Avenue)	EB	4,085	3,959	4,293
	WB	2,211	2,397	2,363
Lansdowne Road (between Coleridge Way and Pelican Close)	NB	77	82	188
	SB	265	839	1,061
A532 West Street (between Goddard Street and Ford Lane)	EB	5,110	5,283	5,342
	WB	2,021	2,180	2,143
A532 West Street (between Darlington Avenue and Frank Webb Avenue)	EB	7,324	7,462	7,040
	WB	6,893	6,827	6,435
Lansdowne Road (between Lansdowne Road and Sydney Road)	EB	123	130	229
	WB	613	1,110	1,336
A532 West Street (between Underwood Lane and Goddard Street)	EB	5,296	5,534	6,117
	WB	2,988	3,484	4,351
A532 West Street (between A5078 Dunwoody Way and Underwood Lane)	EB	5,709	5,931	6,751
	WB	1,902	1,897	1,982
B5076 Middlewich Road (between B5076 Vernon Way and Henry Street)	EB	4,708	4,680	4,387
	WB	4,805	4,870	5,080
A534 Haslington Bypass (between Sydney Road and Clay Lane)	NB	9,667	10,537	12,025
	SB	10,371	12,147	14,318
B5076 Middlewich Street (between Henry Street and Elm Drive)	NB	4,956	4,971	5,086
	SB	7,352	7,777	6,127

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Sydney Road (between Herbert Street and Maw Green Road)	NB	6,545	6,100	4,832
	SB	8,034	7,225	6,369
B5076 Middlewich Road (between Elm Drive and Stamp Avenue)	NB	4,218	4,166	3,909
	SB	6,508	6,964	5,332
Stamp Avenue (between Greenway and B5076 Middlewich Street)	EB	278	825	1,070
	WB	230	988	1,535
B5076 Middlewich Street (between Stamp Avenue and Lime Tree Avenue)	NB	3,691	3,014	2,453
	SB	3,964	3,946	2,175
Lime Tree Avenue (between B5076 Middlewich Street and Sycamore Avenue)	EB	377	549	639
	WB	333	330	317
A530 Middlewich Road (between Pyms Lane and Middlewich Road)	NB	6,222	6,061	6,037
	SB	7,404	7,776	8,690
Lime Tree Avenue (between Sycamore Avenue and Acer Avenue)	EB	341	514	601
	WB	293	291	282
Greenway (between Stamp Avenue and B5076 Middlewich Street)	NB	225	963	1,527
	SB	273	723	934
Lime Tree Avenue (between Prunus Road and Elm Drive)	EB	97	68	1,416
	WB	457	456	434
Elm Drive (between Lime Tree Avenue and Remer Street)	NB	1,362	1,442	2,116
	SB	2,811	2,488	2,117
Lime Tree Avenue (between Acer Avenue and Prunus Road)	EB	85	53	1,396
	WB	426	429	406
B5076 Middlewich Street (between Lime Tree Avenue and Remer Street)	NB	3,373	2,519	1,865
	SB	3,689	3,671	1,909
Sydney Road (between Maw Green Road and Elm Drive)	NB	7,517	7,334	6,353
	SB	11,605	12,281	13,762
Remer Street (between Groby Road and Elm Drive)	EB	13,761	14,122	14,523
	WB	8,234	8,137	7,121
Clay Lane (between Newtons Lane and Maw Lane)	EB	1,286	2,868	5,232
	WB	196	209	808
Acer Avenue (between Remer Street and Lime Tree Avenue)	NB	428	626	362
	SB	39	28	1,033
Remer Street (between Acer Avenue and Groby Road)	EB	7,534	7,807	9,048
	WB	4,304	4,461	4,502
Groby Road (between Remer Street and Stoneley Road)	NB	6,473	6,421	5,380
	SB	9,004	9,329	8,591
Remer Street (between B5076 Middlewich Street and Acer Avenue)	EB	7,278	7,375	9,886
	WB	4,440	4,629	4,668
	NB	1,347	2,279	4,141

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Location	Direction	AADT 2030	AADT 2038	AADT 2046
Selworthy Drive (between B5076 Bradfield Road and Underwood Lane)	SB	648	541	1,198
B5076 Middlewich Street (between Broad Street and Remer Street)	EB	10,886	10,954	11,699
	WB	7,744	7,079	6,465
Newtons Lane (between Clay Lane and Nesfield Drive)	EB	1,242	2,822	5,172
	WB	129	145	725
Underwood Lane (between Cliffe Road and Newbury Avenue)	EB	958	999	1,675
	WB	1,679	1,608	1,811
B5076 North Street (between Broughton Road and Broad Street)	EB	9,230	9,479	9,590
	WB	7,024	8,618	9,734
Newtons Lane (between Nesfield Drive and Crewe Road)	EB	1,613	3,503	5,656
	WB	610	649	1,188
Underwood Lane (between Newbury Avenue and Pear Tree Avenue)	NB	936	984	1,674
	SB	1,664	1,601	1,816
Underwood Lane (between Pear Tree Avenue and B5076 Bradfield Road)	NB	916	962	1,648
	SB	1,668	1,599	1,806
B5076 Bradfield Road (between Underwood Lane and Broughton Road)	EB	7,511	7,848	7,114
	WB	6,169	6,947	8,174
B5076 Bradfield Road (between Selworthy Drive and Mablins Lane)	EB	4,957	5,531	5,652
	WB	4,486	4,497	5,653
B5076 Bradfield Road (between Mablins Lane and Cliffe Road)	EB	7,950	7,831	6,866
	WB	5,440	6,114	8,067
B5076 Bradfield Road (between Cliffe Road and Underwood Lane)	EB	6,694	6,984	6,194
	WB	4,604	5,452	7,102
B5076 Bradfield Road (between Parkers Road and Selworthy Drive)	EB	5,160	5,309	4,471
	WB	4,768	5,363	6,728
Stoneley Road (between B5076 Broad Street and Waldron's Lane)	NB	232	293	184
	SB	1,394	2,353	3,676
A530 Middlewich Road (between Middlewich Road and Smithy Lane)	NB	5,180	5,072	5,154
	SB	6,665	7,020	7,880
A534 Haslington Bypass (between Clay Lane and Elton Lane)	NB	11,075	11,876	13,002
	SB	10,457	12,080	13,990
Broughton Road (between Mablins Moss Place and Parkers Road)	NB	1,052	2,222	2,662
	SB	684	1,350	2,055
B5076 Bradfield Road (between Parkers Road and B5076 Flowers Lane)	EB	9,391	9,673	8,728
	WB	7,864	8,316	9,571
Parkers Road (between B5076 Bradfield Road and Higher Croft Drive)	EB	4,375	4,590	4,466
	WB	3,719	3,873	3,950
Parkers Road (between Higher Croft Drive and Parkfield)	EB	8,453	10,216	9,877

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	WB	2,739	3,093	3,789
Parkers Road (between Parkfield and Mablins Lane)	EB	8,525	10,286	9,946
	WB	3,005	3,385	4,135
Parkers Road (between Mablins Lane and Broughton Road)	EB	6,837	9,166	9,937
	WB	3,417	3,163	3,489
Groby Road (between Stoneley Road and Warmingham Road)	NB	4,602	3,757	3,458
	SB	4,271	4,550	5,475
Warmingham Road (between Broughton Road and Waldron's Lane)	EB	6,629	9,889	10,762
	WB	3,224	3,424	4,106
B5076 Flowers Lane (between A530 Middlewich Road and B5076 Bradfield Road)	EB	5,225	5,442	5,600
	WB	3,017	3,159	3,756
A530 Middlewich Road (between Smithy Lane and B5076 Flowers Lane)	NB	3,543	3,679	3,787
	SB	4,275	5,169	6,690
Warmingham Road (between Waldron's Lane and Groby Road)	EB	9,393	11,590	11,516
	WB	3,248	3,328	4,126
A534 Wheelock Bypass (between B5079 Crewe Road and Mill Lane)	NB	10,457	11,201	11,653
	SB	7,823	8,257	10,755
A530 Middlewich Road (between B5076 Flowers Lane and Eardswick Lane)	NB	6,012	6,291	7,050
	SB	8,953	10,064	11,792
A530 Middlewich Road (between Eardswick Lane and Brookhouse Lane)	NB	2,216	2,129	1,734
	SB	4,432	5,309	6,363
A534 Wheelock Bypass (between Mill Lane and A533 Old Mill Road)	NB	11,023	11,519	11,837
	SB	8,371	8,850	9,376
Warmingham Road/School Lane (between Hall Lane and Crabmill Lane)	NB	9,705	10,835	11,361
	SB	4,066	4,810	8,371
A534 Old Mill Road (between Brookhouse Road and A533 The Hill)	NB	11,939	12,316	12,748
	SB	7,641	7,928	8,582
A534 Old Mill Road (between A533 The Hill and Congleton Road)	NB	9,337	9,760	9,822
	SB	6,517	6,695	8,039
B5074 Over Road/B5074 Swanlow Lane (between Cross Lane and Moor Lane)	NB	5,231	5,769	6,242
	SB	3,976	4,358	5,144

Junction operation

- 6.4.11 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.
- 6.4.12 SATURN software has been used to calculate the existing capacity of the majority of priority-controlled junctions, roundabouts and signal-controlled junctions within the MA01 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 MA01 area and LinSig software has been used to calculate the existing capacity of signal-controlled junctions.
- 6.4.13 The results for the MA01 area are presented from south to north, firstly for junctions on the strategic road network, followed by junctions on other roads.
- 6.4.14 Where a junction will be affected by construction of the Proposed Scheme, future baseline results are included for 2030 (both with and without associated construction traffic from HS2 Phase 2a). 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 16/A500 Newcastle Road/B5078 Radway Green Road/A500 (Barthomley Interchange)

- 6.4.15 This junction is a grade separated five-arm signal-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 6-7.

Table 6-7: 2018 baseline performance at M6 junction 16/A500 Newcastle Road/B5078 Radway Green Road/A500 (Barthomley Interchange) junction

Approach	Flow, PCU*/hr	VoC**	Q***, PCU
2018 AM peak hour (08:00–09:00) baseline results			
B5078 Radway Green Road	411	95%	5
M6 junction 16 off-slip (north)	1,087	60%	9
A500 (east)	1,816	76%	9
M6 junction 16 off-slip (south)	666	43%	6
A500 Newcastle Road	1,357	75%	11
2018 PM peak hour (17:00–18:00) baseline results			
B5078 Radway Green Road	293	75%	2

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Approach	Flow, PCU*/hr	VoC**	Q***, PCU
M6 junction 16 off-slip (north)	1,102	53%	9
A500 (east)	1,607	80%	10
M6 junction 16 off-slip (south)	624	41%	5
A500 Newcastle Road	1,502	83%	12

*PCU = Passenger Car Unit

**VoC = Volume over Capacity

***Q = Queue

6.4.16 In the AM peak hour, the assessment shows that this junction operates close to capacity in the 2018 baseline with a maximum VoC of 95% on the B5078 Radway Green Road approach and an associated queue length of five PCU. In the PM peak hour, the assessment shows that this junction operates within capacity in the 2018 baseline with a maximum VoC of 83% on the A500 Newcastle Road approach and an associated queue length of 12 PCU.

6.4.17 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 6-8. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 6-8: Future baseline performance at M6 junction 16/A500 Newcastle Road/B5078 Radway Green Road/A500 (Barthomley Interchange) junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2030 AM peak hour (08:00–09:00)			
B5078 Radway Green Road	290	105%	6
M6 junction 16 off-slip (north)	1,277	70%	10
A500 (east)	2,155	94%	12
M6 junction 16 off-slip (south)	702	46%	6
A500 Newcastle Road	1,650	91%	14
2030 PM peak hour (17:00–18:00)			
B5078 Radway Green Road	209	110%	5
M6 junction 16 off-slip (north)	1,200	57%	9
A500 (east)	1,784	91%	11
M6 junction 16 off-slip (south)	635	41%	6
A500 Newcastle Road	1,650	91%	14

6.4.18 This junction operates over capacity in the 2030 future baseline with a maximum VoC of 105% on the B5078 Radway Green Road approach in the AM peak hour with an associated queue length of six PCU. In the PM peak hour, the maximum VoC of 110% is on the B5078 Radway Green Road approach with a queue length of five PCU.

M6 junction 17/A534 Congleton Road

6.4.19 This junction is a grade separated four-arm priority controlled (give way) roundabout and four-arm signal-controlled crossroads with no controlled pedestrian crossing facilities. The

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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 6-9.

Table 6-9: 2018 baseline performance at M6 junction 17/A534 Congleton Road junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2018 AM peak hour (08:00–09:00) baseline results			
M6 southbound off-slip (junction 17)	293	52%	3
A534 Congleton Road (east)	613	102%	7
A534 Congleton Road (east) (left slip)	279	26%	0
M6 northbound off-slip (junction 17) (roundabout entry)	337	42%	0
M6 northbound off-slip (junction 17) (left slip)	134	19%	0
A534 Old Mill Road (west)	724	60%	0
A534 Old Mill Road (motorway overbridge eastbound)	1,061	90%	9
A534 Old Mill Road (motorway overbridge westbound)	893	54%	0
2018 PM peak hour (17:00–18:00) baseline results			
M6 southbound off-slip (junction 17)	406	85%	6
A534 Congleton Road (east)	597	83%	7
A534 Congleton Road (east) (left slip)	343	30%	0
M6 northbound off-slip (junction 17) (roundabout entry)	477	70%	3
M6 northbound off-slip (junction 17) (left slip)	244	41%	1
A534 Old Mill Road (west)	617	57%	2
A534 Old Mill Road (motorway overbridge eastbound)	1,094	70%	11
A534 Old Mill Road (motorway overbridge westbound)	1,003	61%	0

6.4.20 This junction operates over capacity in the 2018 baseline with a maximum VoC of 102% on the A534 Congleton Road (east) approach in the AM peak hour with an associated queue length of seven PCU. This junction operates close to capacity in the 2018 baseline with a maximum VoC of 85% on the M6 southbound off-slip (junction 17) approach in the PM peak hour with an associated queue length six PCU.

6.4.21 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 6-10. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

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Table 6-10: Future baseline performance at M6 junction 17/A534 Congleton Road junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2030 AM peak hour (08:00–09:00)			
M6 southbound off-slip (junction 17)	263	47%	3
A534 Congleton Road (east)	614	102%	7
A534 Congleton Road (east) (left slip)	345	32%	0
M6 northbound off-slip (junction 17) (roundabout entry)	271	32%	0
M6 northbound off-slip (junction 17) (left slip)	131	18%	0
A534 Old Mill Road (west)	823	65%	0
A534 Old Mill Road (motorway overbridge eastbound)	1,094	93%	9
A534 Old Mill Road (motorway overbridge westbound)	863	53%	0
2030 PM peak hour (17:00–18:00)			
M6 southbound off-slip (junction 17)	386	81%	6
A534 Congleton Road (east)	612	85%	7
A534 Congleton Road (east) (left slip)	451	40%	0
M6 northbound off-slip (junction 17) (roundabout entry)	464	68%	3
M6 northbound off-slip (junction 17) (left slip)	233	33%	1
A534 Old Mill Road (west)	659	68%	2
A534 Old Mill Road (motorway overbridge eastbound)	1,123	73%	11
A534 Old Mill Road (motorway overbridge westbound)	998	61%	0

6.4.22 This junction operates over capacity in the 2030 future baseline with a maximum VoC of 102% on the A534 Congleton Road (east) approach in the AM peak hour with an associated queue length of seven PCU. The assessment shows that this junction operates close to capacity in the 2030 future baseline with a maximum VoC of 85% on the A534 Congleton Road (east) approach in the PM peak hour with an associated queue length of seven PCU.

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

6.4.23 This junction is a five-arm priority-controlled (give way) roundabout with a controlled pedestrian and cycle crossing on the A51 Nantwich Bypass 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 6-11.

Table 6-11: 2018 baseline performance at A500 Shavington Bypass/A51 Newcastle Road/A51 Nantwich Bypass/Cheerbrook Road/Newcastle Road (Cheerbrook Roundabout) junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2018 AM peak hour (08:00–09:00) baseline results			
A51 Nantwich Bypass	675	56%	1
Cheerbrook Road	270	32%	0
A500 Shavington Bypass	1,138	60%	0
Newcastle Road	377	42%	0
A51 Newcastle Road	1,113	83%	2
2018 PM peak hour (17:00–18:00) baseline results			
A51 Nantwich Bypass	865	61%	1
Cheerbrook Road	124	16%	0
A500 Shavington Bypass	1,503	84%	1
Newcastle Road	264	41%	0
A51 Newcastle Road	815	62%	1

6.4.24 The assessment shows that this junction operates within capacity in the 2018 baseline with a maximum VoC of 83% on the A51 Newcastle Road approach in the AM peak hour with an associated queue length of two PCU. In the PM peak hour, the maximum VoC of 84% is on the A500 Shavington Bypass approach with a queue length of one PCU.

6.4.25 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 6-12. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 6-12: Future baseline performance at A500 Shavington Bypass/A51 Newcastle Road/A51 Nantwich Bypass/Cheerbrook Road/Newcastle Road (Cheerbrook Roundabout) junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2030 AM peak hour (08:00–09:00)			
A51 Nantwich Bypass	656	61%	1
Cheerbrook Road	305	40%	0
A500 Shavington Bypass	1,411	73%	1
Newcastle Road	416	61%	1
A51 Newcastle Road	1,124	107%	10

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Approach	Flow, PCU/hr	VoC	Q, PCU
2030 PM peak hour (17:00–18:00)			
A51 Nantwich Bypass	882	59%	1
Cheerbrook Road	197	25%	0
A500 Shavington Bypass	1,574	102%	9
Newcastle Road	282	49%	1
A51 Newcastle Road	793	65%	1

6.4.26 This junction operates over capacity in the 2030 future baseline with a maximum VoC of 107% on the A51 Newcastle Road approach in the AM peak hour with an associated queue length of 10 PCU. In the PM peak hour, the maximum VoC of 102% is on the A500 Shavington Bypass approach with a queue length of nine PCU.

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

6.4.27 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 6-13.

Table 6-13: 2018 baseline performance at A500 Newcastle Road/A500 Shavington Bypass/A531 Newcastle Road/B5472 Weston Road (Meremoor Moss Roundabout) junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2018 AM peak hour (08:00–09:00) baseline results			
B5472 Weston Road	343	31%	0
A500 Newcastle Road	1,481	67%	0
A531 Newcastle Road	321	71%	1
A500 Shavington Bypass	1,000	52%	0
2018 PM peak hour (17:00–18:00) baseline results			
B5472 Weston Road	414	43%	0
A500 Newcastle Road	1,475	69%	0
A531 Newcastle Road	190	39%	0
A500 Shavington Bypass	1,213	64%	0

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

6.4.29 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 6-14. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

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Table 6-14: Future baseline performance at A500 Newcastle Road/A500 Shavington Bypass/A531 Newcastle Road/B5472 Weston Road (Meremoor Moss Roundabout) junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2030 AM peak hour (08:00–09:00)			
B5472 Weston Road	307	38%	0
A500 Newcastle Road	1,821	58%	0
A531 Newcastle Road	331	96%	5
A500 Shavington Bypass	1,190	67%	1
2030 PM peak hour (17:00–18:00)			
B5472 Weston Road	423	115%	4
A500 Newcastle Road	1,512	44%	0
A531 Newcastle Road	147	28%	0
A500 Shavington Bypass	1,343	109%	3

6.4.30 The assessment shows that this junction operates close to capacity in the 2030 future baseline with a maximum VoC of 96% on the A531 Newcastle Road approach in the AM peak hour with an associated queue length of five PCU. This junction operates over capacity in the 2030 future baseline with a maximum VoC of 115% on the B5472 Weston Road approach in the PM peak hour with an associated queue length of four PCU.

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

6.4.31 This junction is a five-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 6-15.

Table 6-15: 2018 baseline performance at A51 Nantwich Bypass/A534 Crewe Road/B5338 Crewe Road/Park Road junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2018 AM peak hour (08:00–09:00) baseline results			
A51 Nantwich Bypass (north)	699	42%	0
A534 Crewe Road	623	75%	1
Park Road	71	13%	0
A51 Nantwich Bypass (south)	978	81%	1
B5338 Crewe Road	619	97%	5
2018 PM peak hour (17:00–18:00) baseline results			
A51 Nantwich Bypass (north)	849	47%	0
A534 Crewe Road	496	69%	1
Park Road	98	19%	0
A51 Nantwich Bypass (south)	934	78%	1
B5338 Crewe Road	450	66%	1

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- 6.4.32 The assessment shows that this junction operates close to capacity in the 2018 baseline with a maximum VoC of 97% on the B5338 Crewe Road in the AM peak hour with an associated queue length of five PCU. The assessment shows that this junction operates within capacity in the 2018 baseline with a maximum VoC of 78% on the A51 Nantwich Bypass (south) approach with a queue length of one PCU.
- 6.4.33 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 6-16. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 6-16: Future baseline performance at A51 Nantwich Bypass/A534 Crewe Road/B5338 Crewe Road/Park Road junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2030 AM peak hour (08:00-09:00)			
A51 Nantwich Bypass (north)	599	36%	0
A534 Crewe Road	818	94%	3
Park Road	114	23%	0
A51 Nantwich Bypass (south)	1,069	89%	2
B5338 Crewe Road	627	110%	7
2030 PM peak hour (17:00-18:00)			
A51 Nantwich Bypass (north)	840	45%	0
A534 Crewe Road	718	101%	7
Park Road	165	39%	0
A51 Nantwich Bypass (south)	1,051	88%	2
B5338 Crewe Road	516	84%	2

- 6.4.34 This junction operates over capacity in the 2030 future baseline with a maximum VoC of 110% on the B5338 Crewe Road approach in the AM peak hour with an associated queue length of seven PCU. In the PM peak hour, the maximum VoC of 101% is on the A534 Crewe Road approach with a queue length of seven PCU.

A500 Shavington Bypass/B5071 Jack Mills Way

- 6.4.35 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 6-17.

Table 6-17: 2018 baseline performance at A500 Shavington Bypass/B5071 Jack Mills Way junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2018 AM peak hour (08:00-09:00) baseline results			
B5071 Jack Mills Way	377	34%	0
A500 Shavington Bypass (east)	1,273	56%	0
B5071	158	16%	0
A500 Shavington Bypass (west)	1,303	63%	0

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Approach	Flow, PCU/hr	VoC	Q, PCU
2018 PM peak hour (17:00–18:00) baseline results			
B5071 Jack Mills Way	354	29%	0
A500 Shavington Bypass (east)	1,585	73%	0
B5071	127	17%	0
A500 Shavington Bypass (west)	1,184	56%	0

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

6.4.37 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 6-18. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 6-18: Future baseline performance at A500 Shavington Bypass/B5071 Jack Mills Way junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2030 AM peak hour (08:00–09:00)			
B5071 Jack Mills Way	620	64%	1
A500 Shavington Bypass (east)	1,692	82%	1
B5071	245	42%	1
A500 Shavington Bypass (west)	1,487	91%	2
2030 PM peak hour (17:00–18:00)			
B5071 Jack Mills Way	781	54%	0
A500 Shavington Bypass (east)	1,368	76%	1
B5071	160	24%	0
A500 Shavington Bypass (west)	1,009	48%	0

6.4.38 The assessment shows that this junction operates close to capacity in the 2030 future baseline with a maximum VoC of 91% on the A500 Shavington Bypass (west) approach in the AM peak hour with an associated queue length of two PCU. The assessment shows that this junction operates within capacity in the 2030 future baseline with a maximum VoC of 76% on the A500 Shavington Bypass (east) approach in the PM peak with an associated queue length of one PCU.

A500 Shavington Bypass/A5020 David Whitby Way

6.4.39 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 6-19.

Table 6-19: 2018 baseline performance at A500 Shavington Bypass/A5020 David Whitby Way junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2018 AM peak hour (08:00–09:00) baseline results			
A5020 David Whitby Way	346	27%	0
A500 Shavington Bypass (east)	1,305	64%	0

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Approach	Flow, PCU/hr	VoC	Q, PCU
A500 Shavington Bypass (west)	1,422	72%	0
2018 PM peak hour (17:00–18:00) baseline results			
A5020 David Whitby Way	933	69%	1
A500 Shavington Bypass (east)	1,064	64%	1
A500 Shavington Bypass (west)	1,184	52%	0

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

6.4.41 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 6-20. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 6-20: Future baseline performance at A500 Shavington Bypass/A5020 David Whitby Way junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2030 AM peak hour (08:00–09:00)			
A5020 David Whitby Way	800	63%	1
A500 Shavington Bypass (east)	1,471	87%	2
A500 Shavington Bypass (west)	1,656	85%	1
2030 PM peak hour (17:00–18:00)			
A5020 David Whitby Way	1,364	75%	1
A500 Shavington Bypass (east)	1,165	65%	0
A500 Shavington Bypass (west)	1,100	54%	0

6.4.42 The assessment shows that this junction operates close to capacity in the 2030 future baseline with a maximum VoC of 87% on the A500 Shavington Bypass (east) approach in the AM peak hour with an associated queue length of two PCU. The assessment shows that this junction operates within capacity in the 2030 future baseline with a maximum VoC of 75% on the A5020 David Whitby Way in the PM peak hour with an associated queue length of one PCU.

A530 Middlewich Road/A51 Nantwich Bypass/B5334 Middlewich Road (Alvaston Roundabout)

6.4.43 This junction is a five-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 6-21.

Table 6-21: 2018 baseline performance at A530 Middlewich Road/A51 Nantwich Bypass/B5334 Middlewich Road (Alvaston Roundabout) junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2018 AM peak hour (08:00–09:00) baseline results			
Alvaston Business Park Approach	229	23%	0
A530 Middlewich Road	802	108%	7

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Approach	Flow, PCU/hr	VoC	Q, PCU
A51 Nantwich Bypass (east)	994	83%	2
B5334 Middlewich Road	539	105%	7
A51 Nantwich Bypass (west)	859	111%	7
2018 PM peak hour (17:00-18:00) baseline results			
Alvaston Business Park Approach	187	20%	0
A530 Middlewich Road	707	103%	7
A51 Nantwich Bypass (east)	872	73%	1
B5334 Middlewich Road	659	102%	7
A51 Nantwich Bypass (west)	923	108%	6

- 6.4.44 This junction operates over capacity in the 2018 baseline with a maximum VoC of 111% on the A51 Nantwich Bypass (west) approach in the AM peak hour with an associated queue length of seven PCU. In the PM peak hour, the maximum VoC of 108% is on the A51 Nantwich Bypass (west) approach with a queue length of six PCU.
- 6.4.45 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 6-22. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 6-22: Future baseline performance at A530 Middlewich Road/A51 Nantwich Bypass/B5334 Middlewich Road (Alvaston Roundabout) junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2030 AM peak hour (08:00-09:00) baseline results			
Alvaston Business Park Approach	222	21%	0
A530 Middlewich Road	872	112%	7
A51 Nantwich Bypass (east)	1,063	89%	2
B5334 Middlewich Road	503	110%	7
A51 Nantwich Bypass (west)	995	120%	6
2030 PM peak hour (17:00-18:00) baseline results			
Alvaston Business Park Approach	193	19%	0
A530 Middlewich Road	747	111%	7
A51 Nantwich Bypass (east)	1,109	92%	3
B5334 Middlewich Road	495	104%	7
A51 Nantwich Bypass (west)	963	108%	6

- 6.4.46 This junction operates over capacity in the 2030 future baseline with a maximum VoC of 120% on the A51 Nantwich Bypass (west) approach in the AM peak hour with an associated queue of six PCU. In the PM peak hour, the maximum VoC of 111% is on the A530 Middlewich Road approach with a queue length of seven PCU.

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

6.4.47 This junction is a five-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 6-23.

Table 6-23: 2018 baseline performance at A532 Weston Road/A5020 University Way/A5020 David Whitby Way/B5472 Weston Road/Savoy Road junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2018 AM peak hour (08:00–09:00) baseline results			
A5020 University Way	523	29%	0
B5472 Weston Road	985	82%	1
A5020 David Whitby Way	783	68%	1
Savoy Road	36	12%	0
A532 Weston Road	439	26%	0
2018 PM peak hour (17:00–18:00) baseline results			
A5020 University Way	652	68%	1
B5472 Weston Road	461	38%	0
A5020 David Whitby Way	382	21%	0
Savoy Road	126	17%	0
A532 Weston Road	1,308	74%	1

6.4.48 The assessment shows that this junction operates within capacity in the 2018 baseline with a maximum VoC of 82% on the B5472 Weston Road approach in the AM peak hour 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 2018 baseline with a maximum VoC of 74% on the A532 Weston Road approach with an associated queue length of one PCU.

6.4.49 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 6-24. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 6-24: Future baseline performance at A532 Weston Road/A5020 University Way/A5020 David Whitby Way/B5472 Weston Road/Savoy Road junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2030 AM peak hour (08:00–09:00)			
A5020 University Way	930	49%	0
B5472 Weston Road	1,047	87%	2
A5020 David Whitby Way	1,032	88%	3
Savoy Road	35	15%	0
A532 Weston Road	404	28%	0
2030 PM peak hour (17:00–18:00)			
A5020 University Way	794	103%	9

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Approach	Flow, PCU/hr	VoC	Q, PCU
B5472 Weston Road	251	26%	0
A5020 David Whitby Way	910	42%	0
Savoy Road	121	20%	0
A532 Weston Road	1,355	99%	9

6.4.50 The assessment shows that this junction operates close to capacity in the 2030 future baseline with a maximum VoC of 88% on the A5020 David Whitby Way approach in the AM peak hour with an associated queue length of three PCU. This junction operates over capacity in the 2030 future baseline with a maximum VoC of 103% on the A5020 University Way approach in the PM peak hour with an associated queue length of nine PCU.

Valley Road/Wistaston Green Road

6.4.51 This junction is a three-arm priority (give-way) 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 6-25.

Table 6-25: 2018 baseline performance at Valley Road/Wistaston Green Road junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2018 AM peak hour (08:00–09:00) baseline results			
Wistaston Green Road	436	57%	0
Valley Road (north)	263	29%	0
Valley Road (south)	767	72%	0
2018 PM peak hour (17:00–18:00) baseline results			
Wistaston Green Road	634	70%	0
Valley Road (north)	611	83%	1
Valley Road (south)	569	65%	0

6.4.52 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 83% on the Valley Road (north) approach with an associated queue length of one PCU.

6.4.53 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 6-26. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 6-26: Future baseline performance at Valley Road/Wistaston Green Road junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2030 AM peak hour (08:00–09:00)			
Wistaston Green Road	439	59%	0
Valley Road (north)	381	42%	0

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Approach	Flow, PCU/hr	VoC	Q, PCU
Valley Road (south)	786	75%	0
2030 PM peak hour (17:00–18:00)			
Wistaston Green Road	655	72%	0
Valley Road (north)	592	83%	1
Valley Road (south)	542	58%	0

6.4.54 In the AM peak hour, the assessment shows that this junction operates within capacity in the 2030 future baseline with a maximum VoC of 75% on the Valley Road (south) approach with no queue. In the PM peak hour, the maximum VoC of 83% is on the Valley Road (north) approach with a queue length of one PCU.

Wistaston Green Road/Capesthorpe Road

6.4.55 This junction is a three-arm priority (give-way) controlled T-junction 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 6-27.

Table 6-27: 2018 baseline performance at Wistaston Green Road/Capesthorpe Road junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2018 AM peak hour (08:00–09:00) baseline results			
Capesthorpe Road	279	47%	0
Wistaston Green Road (east)	359	33%	0
Wistaston Green Road (west)	892	55%	0
2018 PM peak hour (17:00–18:00) baseline results			
Capesthorpe Road	469	91%	3
Wistaston Green Road (east)	589	38%	0
Wistaston Green Road (west)	792	48%	0

6.4.56 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 91% on the Capesthorpe Road approach with an associated queue length of three PCU.

6.4.57 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 6-28. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 6-28: Future baseline performance at Wistaston Green Road/Capesthorpe Road junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2030 AM peak hour (08:00–09:00)			
Capesthorpe Road	257	42%	0
Wistaston Green Road (east)	374	34%	0
Wistaston Green Road (west)	936	58%	0

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Approach	Flow, PCU/hr	VoC	Q, PCU
2030 PM peak hour (17:00–18:00)			
Capesthorpe Road	524	91%	2
Wistaston Green Road (east)	473	31%	0
Wistaston Green Road (west)	733	45%	0

6.4.58 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, the assessment shows that this junction operates close to capacity in the 2030 future baseline with a maximum VoC of 91% on the Capesthorpe Road approach with an associated queue length of two PCU.

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

6.4.59 This junction is a five-arm signal-controlled roundabout with controlled pedestrian crossing facilities on three-arms. 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 6-29.

Table 6-29: 2018 baseline performance at A534 Crewe Road/A534 Nantwich Road/A532 Weston Road/A532 Macon Way/Tommy's Lane junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2018 AM peak hour (08:00–09:00) baseline results			
A532 Macon Way	702	76%	6
A534 Crewe Road	572	51%	5
A532 Weston Road	722	50%	7
A534 Nantwich Road	884	55%	5
Tommy's Lane	66	5%	0
2018 PM peak hour (17:00–18:00) baseline results			
A532 Macon Way	630	67%	5
A534 Crewe Road	629	49%	6
A532 Weston Road	687	35%	6
A534 Nantwich Road	750	45%	5
Tommy's Lane	74	5%	0

6.4.60 The assessment shows that this junction operates within capacity in the 2018 baseline with a maximum VoC of 76% on the A532 Macon Way approach in the AM peak hour with an associated queue length of six PCU. In the PM peak hour, the assessment shows that this junction operates well within capacity in the 2018 baseline.

6.4.61 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 6-30. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

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Table 6-30: Future baseline performance at A534 Crewe Road/A534 Nantwich Road/A532 Weston Road/A532 Macon Way/Tommy's Lane junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2030 AM peak hour (08:00–09:00)			
A532 Macon Way	621	67%	5
A534 Crewe Road	569	50%	5
A532 Weston Road	658	46%	6
A534 Nantwich Road	891	55%	5
Tommy's Lane	66	5%	0
2030 PM peak hour (17:00–18:00)			
A532 Macon Way	727	78%	6
A534 Crewe Road	642	50%	6
A532 Weston Road	501	26%	5
A534 Nantwich Road	868	52%	6
Tommy's Lane	75	5%	0

6.4.62 The assessment shows that this junction operates well within capacity in the 2030 future baseline 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 A532 Macon Way approach in the PM peak hour with an associated queue length of six PCU.

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

6.4.63 This junction formed part of the Crewe Green Roundabout improvement scheme, which was promoted by CEC and opened in November 2018. The former arrangement comprised two junctions:

- A534/A534 Crewe Green Road/A5020 University Way/B5077 Crewe Road/Sydney Road - a five-arm signal-controlled roundabout; and
- Sydney Road/Hungerford Road - a signal-controlled T-junction.

6.4.64 The operation of the former A534/A534 Crewe Green Road/A5020 University Way/B5077 Crewe Road/Sydney Road junction has been assessed for the 2018 existing baseline AM and PM peak hours using SATURN software and is shown in Table 6-31.

Table 6-31: 2018 baseline performance at A534/A534 Crewe Green Road/A5020 University Way/B5077 Crewe Road/Sydney Road junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2018 AM peak hour (08:00–09:00) baseline results			
Sydney Road	463	33%	5
A534	788	38%	5
B5077 Crewe Road	731	85%	8
A5020 University Way	528	21%	5

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Approach	Flow, PCU/hr	VoC	Q, PCU
A534 Crewe Green Road	517	53%	7
Hungerford Road	483	69%	6
2018 PM peak hour (17:00–18:00) baseline results			
Sydney Road	668	40%	5
A534	746	101%	9
B5077 Crewe Road	484	75%	6
A5020 University Way	495	20%	4
A534 Crewe Green Road	639	38%	8
Hungerford Road	658	56%	7

6.4.65 The assessment shows that this junction operates close to capacity in the 2018 baseline with a maximum VoC of 85% on the B5077 Crewe Road approach in the AM peak hour and an associated queue length of eight PCU. This junction operates over capacity in the 2018 baseline with a maximum VoC of 101% on the A534 approach in the PM peak hour with an associated queue length of nine PCU.

6.4.66 The operation of the former Sydney Road/Hungerford Road junction has been assessed for the 2018 existing baseline AM and PM peak hours using SATURN software and is shown in Table 6-32.

Table 6-32: 2018 baseline performance at Sydney Road/Hungerford Road junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2018 AM peak hour (08:00–09:00)			
Sydney Road (north)	517	51%	4
Sydney Road (south)	759	54%	7
Hungerford Road	483	69%	6
2018 PM peak hour (17:00–18:00)			
Sydney Road (north)	566	87%	6
Sydney Road (south)	753	77%	8
Hungerford Road	658	56%	7

6.4.67 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 87% on the Sydney Road (north) approach with an associated queue length of six PCU.

6.4.68 The Crewe Green Roundabout improvement scheme included the formation of an enlarged six-arm priority-controlled (give-way) roundabout, encompassing both junctions and controlled pedestrian and cycle crossing facilities. The assessment takes into account the recently completed changes in the future baseline. The future year baseline performance and the results for the AM and PM peak hours are shown in Table 6-33. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

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Table 6-33: Future baseline performance at A534/A534 Crewe Green Road/A5020 University Way (Crewe Green Roundabout) junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2030 AM peak hour (08:00–09:00)			
Sydney Road	1,032	92%	4
A534	1,053	52%	1
B5077 Crewe Road	789	97%	7
A5020 University Way	809	57%	1
A534 Crewe Green Road	601	29%	0
Hungerford Road	563	54%	1
2030 PM peak hour (17:00–18:00)			
Sydney Road	582	104%	8
A534	901	50%	1
B5077 Crewe Road	363	27%	0
A5020 University Way	701	22%	0
A534 Crewe Green Road	880	30%	0
Hungerford Road	702	72%	2

6.4.69 The assessment shows that this junction operates close to capacity in the 2030 future baseline with a maximum VoC of 97% on the B5077 Crewe Road approach in the AM peak hour with an associated queue length of seven PCU. In the PM peak hour, this junction operates over capacity in the 2030 future baseline with a maximum VoC of 104% on the Sydney Road approach with an associated queue length of eight PCU.

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

6.4.70 This junction is a four-arm priority (give-way) 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 6-34.

Table 6-34: 2018 baseline performance at A532 Earle Street/A532 Manchester Bridge/William Street/Grand Junction Way junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2018 AM peak hour (08:00–09:00)			
William Street	525	68%	1
A532 Manchester Bridge	801	37%	0
Grand Junction Way	21	2%	0
A532 Earle Street	781	37%	0
2018 PM peak hour (17:00–18:00)			
William Street	325	47%	0
A532 Manchester Bridge	1,097	49%	0

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Approach	Flow, PCU/hr	VoC	Q, PCU
Grand Junction Way	16	2%	0
A532 Earle Street	923	44%	0

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

6.4.72 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 6-35. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 6-35: Future baseline performance at A532 Earle Street/A532 Manchester Bridge/William Street/Grand Junction Way junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2030 AM peak hour (08:00–09:00)			
William Street	594	78%	1
A532 Manchester Bridge	800	39%	0
Grand Junction Way	25	2%	0
A532 Earle Street	1,007	46%	0
2030 PM peak hour (17:00–18:00)			
William Street	564	82%	1
A532 Manchester Bridge	894	44%	0
Grand Junction Way	16	2%	0
A532 Earle Street	885	40%	0

6.4.73 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 William Street approach with an associated queue length of one PCU. In the PM peak hour, the maximum VoC of 82% is on the William Street approach with a queue length of one PCU.

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

6.4.74 This junction is a four-arm priority (give-way) 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 6-36.

Table 6-36: 2018 baseline performance at A532 Vernon Way/A532 Earle Street/A5019 Vernon Way/Earle Street junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2018 AM peak hour (08:00–09:00) baseline results			
A532 Vernon Way	721	41%	0
A532 Earle Street	768	64%	0
A5019 Vernon Way	510	29%	0
Earle Street	239	20%	0

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Approach	Flow, PCU/hr	VoC	Q, PCU
2018 PM peak hour (17:00–18:00) baseline results			
A532 Vernon Way	629	37%	0
A532 Earle Street	979	82%	1
A5019 Vernon Way	740	44%	0
Earle Street	321	27%	0

6.4.75 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 82% on the A532 Earle Street approach with an associated queue length of one PCU.

6.4.76 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 6-37. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 6-37: Future baseline performance at A532 Vernon Way/A532 Earle Street/A5019 Vernon Way/Earle Street junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2030 AM peak hour (08:00–09:00)			
A532 Vernon Way	788	51%	0
A532 Earle Street	926	77%	1
A5019 Vernon Way	607	36%	0
Earle Street	362	30%	0
2030 PM peak hour (17:00–18:00)			
A532 Vernon Way	640	37%	0
A532 Earle Street	1,076	90%	1
A5019 Vernon Way	757	46%	0
Earle Street	337	28%	0

6.4.77 In the AM peak hour, the assessment shows that this junction operates within capacity in the 2030 future baseline with a maximum VoC of 77% on the A532 Earle 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 2030 future baseline with a maximum VoC of 90% on the A532 Earle Street approach with an associated queue length of one PCU.

A532 West Street/A5078 Dunwoody Way/Bessemer Way

6.4.78 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 6-38.

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Table 6-38: 2018 baseline performance at A532 West Street/A5078 Dunwoody Way/Bessemer Way junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2018 AM peak hour (08:00–09:00) baseline results			
A532 West Street (east)	229	69%	8
A5078 Dunwoody Way	303	25%	6
Bessemer Way	52	45%	2
A532 West Street (west)	601	79%	15
2018 PM peak hour (17:00–18:00) baseline results			
A532 West Street (east)	99	69%	4
A5078 Dunwoody Way	638	54%	9
Bessemer Way	40	32%	2
A532 West Street (west)	756	80%	13

6.4.79 The assessment shows that this junction operates within capacity in the 2018 baseline with a maximum VoC of 79% on the A532 West Street (west) approach in the AM peak hour with an associated queue length of 15 PCU. In the PM peak hour, the maximum VoC of 80% is on the A532 West Street (west) approach with an associated queue length of 13 PCU.

6.4.80 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 6-39. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 6-39: Future baseline performance at A532 West Street/A5078 Dunwoody Way/Bessemer Way junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2030 AM peak hour (08:00–09:00)			
A532 West Street (east)	272	82%	9
A5078 Dunwoody Way	333	31%	7
Bessemer Way	47	41%	2
A532 West Street (west)	681	95%	17
2030 PM peak hour (17:00–18:00)			
A532 West Street (east)	86	60%	3
A5078 Dunwoody Way	480	39%	6
Bessemer Way	40	32%	2
A532 West Street (west)	767	81%	14

6.4.81 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 95% on the A532 West Street (west) approach with an associated queue length of 17 PCU. In the PM peak hour, the junction operates within capacity in the 2030 future baseline with the maximum VoC of 81% on the A532 West Street (west) approach with an associated queue length of 14 PCU.

Badger Avenue/Broad Street

6.4.82 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 6-40.

Table 6-40: 2018 baseline performance at Badger Avenue/Broad Street junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2018 AM peak hour (08:00–09:00) baseline results			
Broad Street (north)	622	88%	9
Badger Avenue (east)	260	31%	3
Broad Street (south)	355	47%	5
Badger Avenue (west)	203	39%	4
2018 PM peak hour (17:00–18:00) baseline results			
Broad Street (north)	497	71%	7
Badger Avenue (east)	391	49%	5
Broad Street (south)	340	49%	5
Badger Avenue (west)	294	53%	5

6.4.83 In the AM peak hour, the assessment shows that this junction operates close to capacity in the 2018 baseline with a maximum VoC of 88% on the Broad Street (north) 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 2018 baseline.

6.4.84 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 6-41. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 6-41: Future baseline performance at Badger Avenue/Broad Street junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2030 AM peak hour (08:00–09:00)			
Broad Street (north)	651	98%	9
Badger Avenue (east)	261	35%	3
Broad Street (south)	363	53%	5
Badger Avenue (west)	383	86%	7
2030 PM peak hour (17:00–18:00)			
Broad Street (north)	565	94%	8
Badger Avenue (east)	299	39%	4
Broad Street (south)	332	47%	5
Badger Avenue (west)	300	54%	5

6.4.85 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 Broad Street (north) approach with an associated queue length of nine PCU. In the PM peak hour, the maximum

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VoC of 94% is on the Broad Street (north) approach with an associated queue length of eight PCU.

Badger Avenue/Underwood Lane

6.4.86 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 6-42.

Table 6-42: 2018 baseline performance at Badger Avenue/Underwood Lane junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2018 AM peak hour (08:00–09:00) baseline results			
Underwood Lane (north)	271	47%	4
Badger Avenue (east)	574	100%	6
Underwood Lane (south)	458	87%	6
Badger Avenue (west)	242	27%	2
2018 PM peak hour (17:00–18:00) baseline results			
Underwood Lane (north)	283	55%	4
Badger Avenue (east)	470	67%	5
Underwood Lane (south)	452	88%	6
Badger Avenue (west)	228	27%	3

6.4.87 In the AM peak hour, this junction operates over capacity in the 2018 baseline with a maximum VoC of 100% on the Badger Avenue (east) approach with an associated queue length of six 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 Underwood Lane (south) approach with an associated queue length of six PCU.

6.4.88 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 6-43. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 6-43: Future baseline performance at Badger Avenue/Underwood Lane junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2030 AM peak hour (08:00–09:00)			
Underwood Lane (north)	285	48%	4
Badger Avenue (east)	586	101%	6
Underwood Lane (south)	485	96%	7
Badger Avenue (west)	257	29%	3
2030 PM peak hour (17:00–18:00)			
Underwood Lane (north)	371	66%	5
Badger Avenue (east)	603	96%	7
Underwood Lane (south)	454	88%	6
Badger Avenue (west)	263	31%	3

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6.4.89 In the 2030 future baseline the assessment shows that this junction operates over capacity in the AM peak hour with a maximum VoC of 101% on the Badger Avenue (east) approach with an associated queue length of six 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 96% on the Badger Avenue (east) approach with an associated queue length of seven PCU.

Broad Street/Davenport Street/McLaren Street

6.4.90 This junction is a four-arm priority (give-way) controlled crossroads with no signal controlled pedestrian crossing facilities. Davenport Street approach is a minor arm that is not included within the SATURN 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 6-44.

Table 6-44: 2018 baseline performance at Broad Street/Davenport Street/McLaren Street junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2018 AM peak hour (08:00-09:00) baseline results			
Broad Street (north)	479	32%	0
Davenport Street	-	-	-
Broad Street (south)	379	24%	0
McLaren Street	473	65%	0
2018 PM peak hour (17:00-18:00) baseline results			
Broad Street (north)	303	21%	0
Davenport Street	-	-	-
Broad Street (south)	438	28%	0
McLaren Street	379	51%	0

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

6.4.92 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 6-45. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 6-45: Future baseline performance at Broad Street/Davenport Street/McLaren Street junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2030 AM peak hour (08:00-09:00)			
Broad Street (north)	352	24%	0
Davenport Street	-	-	-
Broad Street (south)	646	39%	0
McLaren Street	605	92%	2
2030 PM peak hour (17:00-18:00)			
Broad Street (north)	627	45%	0
Davenport Street	-	-	-
Broad Street (south)	426	27%	0
McLaren Street	349	54%	0

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6.4.93 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 92% on the McLaren Street 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.

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

6.4.94 The Sydney Road/Maw Green Road/Remer Street/Elm Drive/Groby Road network incorporates three priority-controlled (give-way) T-junctions located in close proximity. The network comprises:

- Sydney Road/Maw Green Road;
- Remer Street/Sydney Road/Elm Drive; and
- Remer Street/Groby Road.

6.4.95 There is a committed improvement scheme for the Sydney Road/Maw Green Road, Remer Street/Sydney Road/Elm Drive and Remer Street/Groby Drive junctions associated with the nearby Coppenhall East residential development (MA01/148 in Volume 5: Appendix CT-004-00000, Planning data). This involves the replacement of the three existing priority T-junctions with a single elongated priority controlled (give-way) roundabout. The timing of delivery of this scheme is uncertain and, consequently, these junctions have been assessed with and without the improvement scheme in place.

6.4.96 The three junctions are reported separately below, but it should be noted that due to the close proximity of these three junctions, if queues at one of the junctions extend beyond the available storage capacity of the right turn lane, they could impact on the operation of the upstream junction(s).

Sydney Road/Maw Green Road

6.4.97 The Sydney Road/Maw Green Road 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 2019 existing baseline AM and PM peak hours using Junctions 9 software and is shown in Table 6-46.

Table 6-46: 2019 baseline performance at Sydney Road/Maw Green Road junction

Approach	Flow, PCU/hr	RFC	Q, PCU
2019 AM peak hour (08:00–09:00) baseline results			
Sydney Road (north) (ahead)	739	-	-
Sydney Road (north) (left)	74	-	-
Maw Green Road (left)	60	0.17	0
Maw Green Road (right)	164	0.54	1
Sydney Road (south) (ahead and right)	532	0.07	0

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Approach	Flow, PCU/hr	RFC	Q, PCU
2019 PM peak hour (17:00–18:00) baseline results			
Sydney Road (north) (ahead)	630	-	-
Sydney Road (north) (left)	134	-	-
Maw Green Road (left)	46	0.10	0
Maw Green Road (right)	72	0.25	0
Sydney Road (south) (ahead and right)	686	0.03	0

6.4.98 The assessment shows that this junction operates well within capacity in the 2019 baseline.

6.4.99 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 6-47. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 6-47: Future baseline performance at Sydney Road/Maw Green Road junction

Approach	Flow, PCU/hr	RFC	Q, PCU
2030 AM peak hour (08:00–09:00)			
Sydney Road (north) (ahead)	912	-	-
Sydney Road (north) (left)	94	-	-
Maw Green Road (left)	32	0.16	0
Maw Green Road (right)	158	0.72	2
Sydney Road (south) (ahead and right)	808	0.07	0
2030 PM peak hour (17:00–18:00)			
Sydney Road (north) (ahead)	533	-	-
Sydney Road (north) (left)	554	-	-
Maw Green Road (left)	8	0.02	0
Maw Green Road (right)	28	0.08	0
Sydney Road (south) (ahead and right)	454	0.05	0

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

Remer Street/Sydney Road/Elm Drive

6.4.101 The Remer Street/Sydney Road/Elm Drive 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 2019 existing baseline AM and PM peak hours using Junctions 9 software and is shown in Table 6-48.

Table 6-48: 2019 baseline performance at Remer Street/Sydney Road/Elm Drive junction

Approach	Flow, PCU/hr	RFC	Q, PCU
2019 AM peak hour (08:00–09:00) baseline results			
Remer Street (ahead and right)	883	0.16	0
Sydney Road (ahead)	605	-	-
Sydney Road (left)	57	-	-

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Approach	Flow, PCU/hr	RFC	Q, PCU
Elm Drive (left)	55	0.11	0
Elm Drive (right)	14	0.06	0
2019 PM peak hour (17:00–18:00) baseline results			
Remer Street (ahead and right)	792	0.13	0
Sydney Road (ahead)	698	-	-
Sydney Road (left)	47	-	-
Elm Drive (left)	59	0.12	0
Elm Drive (right)	39	0.17	0

6.4.102 The assessment shows that this junction operates well within capacity in the 2019 baseline.

6.4.103 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 6-49. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 6-49: Future baseline performance at Remer Street/Sydney Road/Elm Drive junction

Approach	Flow, PCU/hr	RFC	Q, PCU
2030 AM peak hour (08:00–09:00)			
Remer Street (ahead and right)	1,216	0.43	1
Sydney Road (ahead)	885	-	-
Sydney Road (left)	85	-	-
Elm Drive (left)	198	0.50	1
Elm Drive (right)	29	0.35	1
2030 PM peak hour (17:00–18:00)			
Remer Street (ahead and right)	1,280	0.33	1
Sydney Road (ahead)	429	-	-
Sydney Road (left)	45	-	-
Elm Drive (left)	35	0.06	0
Elm Drive (right)	19	0.10	0

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

Remer Street/Groby Road

6.4.105 The Remer Street/Groby Road 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 2019 existing baseline AM and PM peak hours using Junctions 9 software and is shown in Table 6-50.

Table 6-50: 2019 baseline performance at Remer Street/Groby Road junction

Approach	Flow, PCU/hr	RFC	Q, PCU
2019 AM peak hour (08:00–09:00) baseline results			
Remer Street (north) (ahead)	568	-	-

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Approach	Flow, PCU/hr	RFC	Q, PCU
Remer Street (north) (left)	13	-	-
Groby Road (left and right)	338	0.73	3
Remer Street (south) (ahead and right)	660	0.20	0
2019 PM peak hour (17:00–18:00) baseline results			
Remer Street (north) (ahead)	633	-	-
Remer Street (north) (left)	10	-	-
Groby Road (left and right)	171	0.39	1
Remer Street (south) (ahead and right)	757	0.37	1

6.4.106 The assessment shows that this junction operates well within capacity in the 2019 baseline.

6.4.107 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 6-51. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 6-51: Future baseline performance at Remer Street/Groby Road junction

Approach	Flow, PCU/hr	RFC	Q, PCU
2030 AM peak hour (08:00–09:00)			
Remer Street (north) (ahead)	706	-	-
Remer Street (north) (left)	314	-	-
Groby Road (left and right)	608	N/A*	644
Remer Street (south) (ahead and right)	1,148	1.93	510
2030 PM peak hour (17:00–18:00)			
Remer Street (north) (ahead)	351	-	-
Remer Street (north) (left)	1	-	-
Groby Road (left and right)	1,011	1.92	201
Remer Street (south) (ahead and right)	437	0.07	0

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

6.4.108 This junction operates over capacity in the 2030 future baseline with a maximum RFC on the Groby Road approach in the AM peak hour which is in excess of the upper limit of the software and is not reported. The RFC on the Remer Street (south) (ahead and right) approach is 1.93 in the AM peak hour with an associated queue length of 510 PCU. This will result in queuing that will exceed the length of the right turn lane which will impact on neighbouring junctions. However due to limitations of the modelling software this is not reflected in the 2030 future baseline results presented at the Sydney Road/Maw Green Road junction or Remer Street/Sydney Road/Elm Drive junction. In the PM peak hour, the maximum RFC of 1.92 is on the Groby Road approach with a queue length of 201 PCU.

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

- 6.4.109 The committed improvement scheme associated with the nearby Coppenhall East development (MA01/148 in Volume 5: Appendix CT-004-00000, Planning data) replaces the three existing priority T-junctions with an elongated priority controlled roundabout.
- 6.4.110 The operation of the junction has been assessed for the future baseline using Junctions 9 software. The future year baseline performance and the results for the AM and PM peak hours are shown in Table 6-52. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 6-52: Future baseline performance at Remer Street/Groby Road/Sydney Road/Elm Drive/Maw Green Road junction

Approach	Flow, PCU/hr	RFC	Q, PCU
2030 AM peak hour (08:00–09:00)			
Groby Road	619	0.74	3
Maw Green Road	189	0.42	1
Sydney Road	800	0.81	4
Elm Drive	227	0.31	1
Remer Street	1,033	1.36	164
2030 PM peak hour (17:00–18:00)			
Groby Road	990	1.10	59
Maw Green Road	34	0.04	0
Sydney Road	429	0.39	1
Elm Drive	52	0.05	0
Remer Street	343	0.29	0

- 6.4.111 This junction operates over capacity in the 2030 future baseline with a maximum RFC of 1.36 on the Groby Road approach in the AM peak hour with an associated queue length of 164 PCU. In the PM peak hour, the maximum RFC of 1.10 is on the Groby Road approach with a queue length of 59 PCU.

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

- 6.4.112 This junction is a six-arm priority (give-way) controlled roundabout with signal controlled pedestrian crossing facilities. Broad Street (north) approach is a minor arm that is not included within the SATURN 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 6-53.

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Table 6-53: 2018 baseline performance at B5076 Middlewich Street/B5076 North Street/Broad Street/Stoneley Road junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2018 AM peak hour (08:00–09:00) baseline results			
Stoneley Road	14	2%	0
Broad Street (north)	-	-	-
B5076 Middlewich Street	724	60%	0
Greenway	20	3%	0
Broad Street (south)	236	23%	0
B5076 North Street	932	73%	0
2018 PM peak hour (17:00–18:00) baseline results			
Stoneley Road	17	2%	0
Broad Street (north)	-	-	-
B5076 Middlewich Street	895	70%	0
Greenway	28	5%	0
Broad Street (south)	172	20%	0
B5076 North Street	687	52%	0

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

6.4.114 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 6-54. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 6-54: Future baseline performance at B5076 Middlewich Street/B5076 North Street/Broad Street/Stoneley Road junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2030 AM peak hour (08:00–09:00)			
Stoneley Road	165	37%	0
Broad Street (north)	-	-	-
B5076 Middlewich Street	548	45%	0
Greenway	17	2%	0
Broad Street	619	57%	0
B5076 North Street	935	95%	3
2030 PM peak hour (17:00–18:00)			
Stoneley Road	238	30%	0
Broad Street (north)	-	-	-
B5076 Middlewich Street	882	86%	1
Greenway	25	6%	0
Broad Street	179	21%	0
B5076 North Street	787	59%	0

6.4.115 The assessment shows that this junction operates close to capacity in the 2030 future baseline with a maximum VoC of 95% on the B5076 North Street approach in the AM peak

hour with an associated queue length of three PCU. In the PM peak hour, the maximum VoC of 86% is on the B5076 Middlewich Street approach with a queue length of one PCU.

B5076 Bradfield Road/B5076 North Street/Broughton Road

- 6.4.116 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 6-55.

Table 6-55: 2018 baseline performance at B5076 Bradfield Road/B5076 North Street/Broughton Road junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2018 AM peak hour (08:00–09:00) baseline results			
Broughton Road	141	17%	0
B5076 North Street	596	37%	0
B5076 Bradfield Road	527	31%	0
2018 PM peak hour (17:00–18:00) baseline results			
Broughton Road	75	9%	0
B5076 North Street	720	45%	0
B5076 Bradfield Road	592	35%	0

- 6.4.117 The assessment shows that this junction operates well within capacity in the 2018 baseline.
- 6.4.118 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 6-56. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 6-56: Future baseline performance at B5076 Bradfield Road/B5076 North Street/Broughton Road junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2030 AM peak hour (08:00–09:00)			
Broughton Road	222	26%	0
B5076 North Street	483	31%	0
B5076 Bradfield Road	715	42%	0
2030 PM peak hour (17:00–18:00)			
Broughton Road	95	11%	0
B5076 North Street	755	52%	0
B5076 Bradfield Road	690	41%	0

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

B5076 Bradfield Road/Mablins Lane

6.4.120 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 6-57.

Table 6-57: 2018 baseline performance at B5076 Bradfield Road/Mablins Lane junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2018 AM peak hour (08:00–09:00) baseline results			
Mablins Lane	280	36%	0
B5076 Bradfield Road (east)	528	34%	0
B5076 Bradfield Road (west)	298	18%	0
2018 PM peak hour (17:00–18:00) baseline results			
Mablins Lane	165	19%	0
B5076 Bradfield Road (east)	592	41%	0
B5076 Bradfield Road (west)	464	27%	0

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

6.4.122 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 6-58. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 6-58: Future baseline performance at B5076 Bradfield Road/Mablins Lane junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2030 AM peak hour (08:00–09:00)			
Mablins Lane	702	101%	6
B5076 Bradfield Road (east)	427	30%	0
B5076 Bradfield Road (west)	430	25%	0
2030 PM peak hour (17:00–18:00)			
Mablins Lane	192	23%	0
B5076 Bradfield Road (east)	610	45%	0
B5076 Bradfield Road (west)	502	30%	0

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

B5076 Bradfield Road/Parkers Road

6.4.124 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 6-59.

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Table 6-59: 2018 baseline performance at B5076 Bradfield Road/Parkers Road junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2018 AM peak hour (08:00–09:00) baseline results			
Parkers Road	420	99%	6
B5076 Bradfield Road (south)	519	54%	4
B5076 Bradfield Road (north)	620	74%	8
2018 PM peak hour (17:00–18:00) baseline results			
Parkers Road	266	48%	5
B5076 Bradfield Road (south)	433	40%	4
B5076 Bradfield Road (north)	1,019	75%	14

6.4.125 In the AM peak hour, this junction operates close to capacity in the 2018 baseline with a maximum VoC of 99% on the Parkers Road approach with an associated queue length of six PCU. 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 B5076 Bradfield Road (north) approach with an associated queue length of 14 PCU.

6.4.126 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 6-60. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 6-60: Future baseline performance at B5076 Bradfield Road/Parkers Road junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2030 AM peak hour (08:00–09:00)			
Parkers Road	463	109%	5
B5076 Bradfield Road (south)	535	57%	5
B5076 Bradfield Road (north)	706	94%	10
2030 PM peak hour (17:00–18:00)			
Parkers Road	258	47%	5
B5076 Bradfield Road (south)	354	33%	3
B5076 Bradfield Road (north)	1,067	77%	15

6.4.127 In the AM peak hour, this junction operates over capacity in the 2030 future baseline with a maximum VoC of 109% on the Parkers Road approach and 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 77% on the B5076 Bradfield Road (north) approach with an associated queue length of 15 PCU.

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

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

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the 2018 existing baseline AM and PM peak hours using SATURN software and is shown in Table 6-61.

Table 6-61: 2018 baseline performance at B5076 Flowers Lane/B5076 Bradfield Road/Minshull New Road/Smithy Lane junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2018 AM peak hour (08:00-09:00) baseline results			
B5076 Flowers Lane	516	63%	0
B5076 Bradfield Road	900	101%	5
Minshull New Road	134	24%	0
Smithy Lane	318	39%	0
2018 PM peak hour (17:00-18:00) baseline results			
B5076 Flowers Lane	341	59%	1
B5076 Bradfield Road	646	62%	0
Minshull New Road	463	66%	1
Smithy Lane	527	82%	1

6.4.129 The assessment shows that this junction operates over capacity in the AM peak with a maximum VoC of 101% on the B5076 Bradfield Road approach with an associated queue length of five PCU. In the PM peak hour, the assessment shows that this junction operates within capacity with a maximum VoC of 82% is on the Smithy Lane approach with an associated queue length of one PCU.

6.4.130 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 6-62. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 6-62: Future baseline performance at B5076 Flowers Lane/B5076 Bradfield Road/Minshull New Road/Smithy Lane junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2030 AM peak hour (08:00-09:00)			
B5076 Flowers Lane	641	65%	0
B5076 Bradfield Road	926	98%	3
Minshull New Road	108	18%	0
Smithy Lane	194	21%	0
2030 PM peak hour (17:00-18:00)			
B5076 Flowers Lane	344	45%	0
B5076 Bradfield Road	554	52%	0
Minshull New Road	369	47%	0
Smithy Lane	528	57%	0

6.4.131 The 2030 future baseline assessment shows that this junction operates close to capacity in the AM peak hour with a maximum VoC of 98% on the B5076 Bradfield Road approach with an associated queue length of three PCU. In the PM peak hour, the assessment shows that this junction operates well within capacity in the 2030 future baseline.

A534/Crewe Road

6.4.132 This junction is a four-arm priority (give-way) 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 6-63.

Table 6-63: 2018 baseline performance at A534/Crewe Road junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2018 AM peak hour (08:00–09:00) baseline results			
Crewe Road (north)	298	25%	0
A534 Wheelock Bypass	695	58%	0
Crewe Road (south)	503	42%	0
A534 Haslington Bypass	816	68%	0
2018 PM peak hour (17:00–18:00) baseline results			
Crewe Road (north)	387	32%	0
A534 Wheelock Bypass	828	69%	1
Crewe Road (south)	400	33%	0
A534 Haslington Bypass	866	72%	0

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

6.4.134 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 6-64. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 6-64: Future baseline performance at A534/Crewe Road junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2030 AM peak hour (08:00–09:00)			
Crewe Road (north)	480	40%	0
A534 Wheelock Bypass	697	58%	0
Crewe Road (south)	468	39%	0
A534 Haslington Bypass	961	80%	1
2030 PM peak hour (17:00–18:00)			
Crewe Road (north)	489	42%	0
A534 Wheelock Bypass	805	67%	1
Crewe Road (south)	489	41%	0
A534 Haslington Bypass	1,138	95%	2

6.4.135 In the AM peak hour, the assessment shows that this junction operates within capacity in the 2030 future baseline with a maximum VoC of 80% on the A534 Haslington Bypass 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 2030 future baseline with a maximum VoC of 95% on the A534 Haslington Bypass approach with an associated queue length of two PCU.

Warmingham Road/Waldrons Lane

6.4.136 This junction is a three-arm priority (give-way) controlled 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 6-65.

Table 6-65: 2018 baseline performance at Warmingham Road/Waldrons Lane junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2018 AM peak hour (08:00–09:00) baseline results			
Warmingham Road (north)	420	26%	0
Waldrons Lane	18	3%	0
Warmingham Road (south)	303	18%	0
2018 PM peak hour (17:00–18:00) baseline results			
Warmingham Road (north)	300	18%	0
Waldrons Lane	24	4%	0
Warmingham Road (south)	331	20%	0

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

6.4.138 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 6-66. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 6-66: Future baseline performance at Warmingham Road/Waldrons Lane junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2030 AM peak hour (08:00–09:00)			
Warmingham Road (north)	339	21%	0
Waldrons Lane	79	14%	0
Warmingham Road (south)	810	50%	0
2030 PM peak hour (17:00–18:00)			
Warmingham Road (north)	266	16%	0
Waldrons Lane	636	109%	6
Warmingham Road (south)	419	25%	0

6.4.139 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, this junction operates over capacity in the 2030 future baseline with a maximum VoC of 109% on the Waldrons Lane approach with an associated queue length of six PCU.

Warmingham Road/Groby Road

6.4.140 This junction is a three-arm priority (give-way) controlled T-junction 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 6-67.

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Table 6-67: 2018 baseline performance at Warmingham Road/Groby Road junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2018 AM peak hour (08:00–09:00) baseline results			
Warmingham Road (north)	605	37%	0
Groby Road	123	8%	0
Warmingham Road	307	20%	0
2018 PM peak hour (17:00–18:00) baseline results			
Warmingham Road (north)	425	26%	0
Groby Road	187	12%	0
Warmingham Road	347	21%	0

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

6.4.142 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 6-68. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 6-68: Future baseline performance at Warmingham Road/Groby Road junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2030 AM peak hour (08:00–09:00)			
Warmingham Road (north)	942	59%	0
Groby Road	424	76%	4
Warmingham Road	731	53%	0
2030 PM peak hour (17:00–18:00)			
Warmingham Road (north)	285	17%	0
Groby Road	425	130%	6
Warmingham Road	996	61%	0

6.4.143 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 Groby Road 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 130% on the Groby Road approach with an associated queue length of six PCU.

A530 Middlewich Road/B5076 Flowers Lane/Eardswick Lane

6.4.144 This junction is a four-arm signal 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 6-69.

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Table 6-69: 2018 baseline performance at A530 Middlewich Road/B5076 Flowers Lane/Eardswick Lane junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2018 AM peak hour (08:00–09:00) baseline results			
A530 Middlewich Road (north)	552	82%	13
B5076 Flowers Lane	319	97%	9
A530 Middlewich Road (south)	590	92%	13
Eardswick Lane	354	104%	10
2018 PM peak hour (17:00–18:00) baseline results			
A530 Middlewich Road (north)	401	54%	10
B5076 Flowers Lane	428	95%	13
A530 Middlewich Road (south)	509	72%	13
Eardswick Lane	261	102%	9

- 6.4.145 The assessment shows that this junction operates over capacity in the 2018 baseline with a maximum VoC of 104% on the Eardswick Lane approach in the AM peak hour with an associated queue length of 10 PCU. In the PM peak hour, the maximum VoC of 102% is on the Eardswick Lane approach with an associated queue length of nine PCU.
- 6.4.146 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 6-70. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 6-70: Future baseline performance at A530 Middlewich Road/B5076 Flowers Lane/Eardswick Lane junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2030 AM peak hour (08:00–09:00)			
A530 Middlewich Road (north)	560	66%	9
B5076 Flowers Lane	288	35%	0
A530 Middlewich Road (south)	329	21%	0
Eardswick Lane	527	103%	13
2030 PM peak hour (17:00–18:00)			
A530 Middlewich Road (north)	291	34%	5
B5076 Flowers Lane	277	31%	0
A530 Middlewich Road (south)	352	23%	0
Eardswick Lane	341	67%	9

- 6.4.147 In the 2030 future baseline the assessment shows that this junction operates over capacity in the AM peak hour with a maximum VoC of 103% on the Eardswick Lane approach with an associated queue length of 13 PCU. In the PM peak hour, the assessment shows that this junction operates well within capacity in 2030 future baseline.

Warmingham Road/Hall Lane

6.4.148 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 6-71.

Table 6-71: 2018 baseline performance at Warmingham Road/Hall Lane junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2018 AM peak hour (08:00–09:00) baseline results			
Warmingham Road (north)	320	20%	0
Hall Lane	522	33%	0
Warmingham Road (south)	328	24%	0
2018 PM peak hour (17:00–18:00) baseline results			
Warmingham Road (north)	257	16%	0
Hall Lane	407	25%	0
Warmingham Road (south)	491	34%	0

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

6.4.150 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 6-72. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 6-72: Future baseline performance at Warmingham Road/Hall Lane junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2030 AM peak hour (08:00–09:00)			
Warmingham Road (north)	538	33%	0
Hall Lane	700	56%	1
Warmingham Road (south)	988	72%	0
2030 PM peak hour (17:00–18:00)			
Warmingham Road (north)	216	14%	0
Hall Lane	353	27%	0
Warmingham Road (south)	1,352	85%	0

6.4.151 The 2030 future baseline 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 with a maximum VoC of 85% on the Warmingham Road (south) approach with no queue.

A534/A533 Old Mill Road

6.4.152 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 6-73.

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Table 6-73: 2018 baseline performance at A534/A533 Old Mill Road junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2018 AM peak hour (08:00–09:00) baseline results			
Brookhouse Road	67	6%	0
A533 Old Mill Road (east)	747	75%	0
A534 Wheelock Bypass	897	75%	0
A533 Old Mill Road (west)	599	50%	0
2018 PM peak hour (17:00–18:00) baseline results			
Brookhouse Road	192	20%	0
A533 Old Mill Road (east)	777	92%	2
A534 Wheelock Bypass	723	60%	0
A533 Old Mill Road (west)	953	79%	1

6.4.153 The assessment shows that this junction operates within capacity in the 2018 baseline with a maximum VoC of 75% on both the A533 Old Mill Road (east) and A534 Wheelock Bypass approaches in the AM peak hour with no queue on either approach. In the PM peak hour, the assessment shows that this junction operates close to capacity in the 2018 baseline with a maximum VoC of 92% on the A533 Old Mill Road (east) approach with an associated queue length of two PCU.

6.4.154 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 6-74. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 6-74: Future baseline performance at A534/A533 Old Mill Road junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2030 AM peak hour (08:00–09:00)			
Brookhouse Road	66	7%	0
A533 Old Mill Road (east)	725	74%	0
A534 Wheelock Bypass	1,021	85%	1
A533 Old Mill Road (west)	663	55%	0
2030 PM peak hour (17:00–18:00)			
Brookhouse Road	194	29%	0
A533 Old Mill Road (east)	751	88%	2
A534 Wheelock Bypass	1,057	88%	1
A533 Old Mill Road (west)	948	79%	1

6.4.155 The assessment shows that this junction operates close to capacity in the 2030 future baseline with a maximum VoC of 85% on the A534 Wheelock Bypass approach in the AM peak hour with an associated queue length of one PCU. In the PM peak hour, the maximum VoC of 88% is on both the A533 Old Mill Road (east) and A534 Wheelock Bypass approach with an associated queue length of two PCU and one PCU respectively.

Brookhouse Lane/Eardswick Lane/Cross Lane

6.4.156 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 6-75.

Table 6-75: 2018 baseline performance at Brookhouse Lane/Eardswick Lane/Cross Lane junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2018 AM peak hour (08:00–09:00) baseline results			
Brookhouse Lane	348	65%	1
Eardswick Lane	413	25%	0
Cross Lane	976	61%	0
2018 PM peak hour (17:00–18:00) baseline results			
Brookhouse Lane	209	38%	0
Eardswick Lane	463	28%	0
Cross Lane	643	40%	0

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

6.4.158 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 6-76. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 6-76: Future baseline performance at Brookhouse Lane/Eardswick Lane/Cross Lane junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2030 AM peak hour (08:00–09:00)			
Brookhouse Lane	444	86%	2
Eardswick Lane	297	18%	0
Cross Lane	1,321	82%	0
2030 PM peak hour (17:00–18:00)			
Brookhouse Lane	234	39%	0
Eardswick Lane	267	16%	0
Cross Lane	732	45%	0

6.4.159 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 86% on the Brookhouse 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 2030 future baseline.

A533 London Road/B5079 Station Road

6.4.160 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 6-77.

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Table 6-77: 2018 baseline performance at A533 London Road/B5079 Station Road junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2018 AM peak hour (08:00–09:00) baseline results			
A533 London Road (north)	589	58%	7
A533 London Road (south)	415	65%	8
B5079 Station Road	266	61%	6
2018 PM peak hour (17:00–18:00) baseline results			
A533 London Road (north)	674	66%	8
A533 London Road (south)	416	65%	8
B5079 Station Road	245	56%	5

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

6.4.162 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 6-78. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 6-78: Future baseline performance at A533 London Road/B5079 Station Road junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2030 AM peak hour (08:00–09:00)			
A533 London Road (north)	787	69%	10
A533 London Road (south)	511	80%	10
B5079 Station Road	364	84%	8
2030 PM peak hour (17:00–18:00)			
A533 London Road (north)	786	69%	10
A533 London Road (south)	600	94%	11
B5079 Station Road	409	94%	9

6.4.163 The assessment shows that this junction operates within capacity in the 2030 future baseline with a maximum VoC of 84% on the B5079 Station 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 close to capacity in the 2030 future baseline with a maximum VoC of 94% on both the A533 London Road (south) and B5079 Station Road approaches with an associated queue length of 11 PCU and nine PCU respectively.

A534 Congleton Road/A534 Old Mill Road/Congleton Road

6.4.164 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 6-79.

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Table 6-79: 2018 baseline performance at A534 Congleton Road/A534 Old Mill Road/Congleton Road junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2018 AM peak hour (08:00–09:00) baseline results			
A534 Congleton Road	890	52%	0
A534 Old Mill Road	816	48%	0
A534 Old Mill Road (left turn slip)	47	5%	0
Congleton Road	640	73%	2
2018 PM peak hour (17:00–18:00) baseline results			
A534 Congleton Road	1,124	66%	0
A534 Old Mill Road	564	33%	0
A534 Old Mill Road (left turn slip)	6	1%	0
Congleton Road	481	47%	1

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

6.4.166 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 6-80. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 6-80: Future baseline performance at A534 Congleton Road/A534 Old Mill Road/Congleton Road junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2030 AM peak hour (08:00–09:00)			
A534 Congleton Road	853	50%	0
A534 Old Mill Road	840	49%	0
A534 Old Mill Road (left turn slip)	43	4%	0
Congleton Road	745	90%	5
2030 PM peak hour (17:00–18:00)			
A534 Congleton Road	967	57%	0
A534 Old Mill Road	933	55%	0
A534 Old Mill Road (left turn slip)	2	0%	0
Congleton Road	590	100%	8

6.4.167 The assessment shows that this junction operates close to capacity in the 2030 future baseline with a maximum VoC of 90% on the Congleton Road approach in the AM peak hour with an associated queue length of five PCU. In the PM peak hour, the junction operates over capacity in the 2030 future baseline with the maximum VoC of 100% on the Congleton Road approach with an associated queue length of eight PCU.

A533 London Road/Moss Lane

6.4.168 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 6-81.

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Table 6-81: 2018 baseline performance at A533 London Road/Moss Lane junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2018 AM peak hour (08:00–09:00) baseline results			
A533 London Road (north)	564	34%	0
A533 London Road (south)	684	41%	0
Moss Lane	74	16%	0
2018 PM peak hour (17:00–18:00) baseline results			
A533 London Road (north)	620	38%	0
A533 London Road (south)	664	39%	0
Moss Lane	154	33%	0

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

6.4.170 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 6-82. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 6-82: Future baseline performance at A533 London Road/Moss Lane junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2030 AM peak hour (08:00–09:00)			
A533 London Road (north)	736	45%	0
A533 London Road (south)	879	52%	0
Moss Lane	134	37%	0
2030 PM peak hour (17:00–18:00)			
A533 London Road (north)	751	48%	0
A533 London Road (south)	1,015	60%	0
Moss Lane	361	86%	2

6.4.171 The assessment shows that this junction operates well within capacity in the 2030 future baseline in the AM peak hour. In the PM peak hour, the junction operates close to capacity in the 2030 future baseline with the maximum VoC of 86% on the Moss Lane approach with an associated queue length of two PCU.

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

6.4.172 This junction is a four-arm priority controlled (give way) staggered crossroads with no controlled pedestrian crossing facilities. Tetton Lane approach is a minor arm that is not included within the SATURN 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 6-83.

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Table 6-83: 2018 baseline performance at Forge Mill Lane/Dragons Lane/Tetton Lane/White Hall Lane junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2018 AM peak hour (08:00–09:00) baseline results			
Tetton Lane	-	-	-
Dragons Lane	132	8%	0
White Hall Lane	244	22%	0
Forge Mill Lane	469	31%	0
2018 PM peak hour (17:00–18:00) baseline results			
Tetton Lane	-	-	-
Dragons Lane	128	8%	0
White Hall Lane	310	28%	0
Forge Mill Lane	339	23%	0

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

6.4.174 The future year baseline performance and the results for the AM and PM peak hours are shown in Table 6-84. As the junction is only affected by the construction of the Proposed Scheme, future baseline results are presented for 2030 only.

Table 6-84: Future baseline performance at Forge Mill Lane/Dragons Lane/Tetton Lane/White Hall Lane junction

Approach	Flow, PCU/hr	VoC	Q, PCU
2030 AM peak hour (08:00–09:00)			
Tetton Lane	-	-	-
Dragons Lane	155	9%	0
White Hall Lane	742	69%	0
Forge Mill Lane	679	46%	0
2030 PM peak hour (17:00–18:00)			
Tetton Lane	-	-	-
Dragons Lane	233	14%	0
White Hall Lane	1,082	104%	5
Forge Mill Lane	284	20%	0

6.4.175 The assessment shows that this junction operates well within capacity in the 2030 future baseline in the AM peak hour. In the PM peak hour, the junction operates over capacity in the 2030 future baseline with the maximum VoC of 104% on the White Hall Lane approach with an associated queue length of five PCU.

Accidents and safety

- 6.4.176 Accident records have been obtained from the information provided by the DfT. Within the MA01 area, a total of 596 accidents occurred over the three-year period July 2016 – June 2019, of which 488 (82%) were recorded as slight, 101 (17%) as serious and seven (1%) as fatal. There were 202 accidents involving non-motorised users (i.e. pedestrians, cyclists, equestrians or mobility scooters).
- 6.4.177 The baseline survey report in 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 MA01 area over the three years between July 2016 and June 2019.
- 6.4.178 One accident cluster was identified in the MA01 area at the A532 Vernon Way/A532 Earle Street/A5019 Vernon Way/Earle Street junction. In total, there were 13 accidents, of which three were classified as serious and 10 were classified as slight.
- 6.4.179 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

- 6.4.180 Within MA01, there is on-street parking in a number of areas, including the B5076 Middlewich Street and Broughton Road. On these roads, on-street parking occurs on one or both sides of the carriageway.
- 6.4.181 Off-street HGV parking associated with the Crewe Truck Stop and Café, located off the A532 Weston Road in Crewe, is expected to be affected by the Proposed Scheme. Off-street parking at McColl's convenience store, located off the B5076 Middlewich Street in Crewe, is also expected to be affected by the Proposed Scheme.
- 6.4.182 Compared to the existing baseline, no changes to parking are assumed in the future baseline.

6.5 Public transport

- 6.5.1 Public transport provision is focused on Crewe, with other more rural areas within MA01 being less well served. Bus routes cross the area along the principal highway corridors, serving a number of smaller settlements. Local and national rail services can be accessed from Crewe Station and Sandbach Station. The following sections describe the rail and bus services in the area.

Rail network

6.5.2 The WCML, Crewe to Shrewsbury Line, Independent Lines, Crewe to Derby Line, North Wales Coast Line and Crewe to Manchester Line traverse the MA01 area and are served by Crewe Station or Sandbach Station. Rail services travel through MA01 along the following routes:

- The WCML, which carries national services between London Euston and Edinburgh Waverley calling at stops including Birmingham, Crewe, Liverpool and Glasgow;
- The Crewe to Shrewsbury Line, which carries local rail services between Crewe and Shrewsbury calling at stops including Nantwich;
- The Independent Lines, which carry local and national services, including services between Crewe and Cardiff calling at stops including Shrewsbury, Leominster, Hereford and Cardiff;
- The Crewe to Derby Line, which carries local services calling at stops including Stoke-on-Trent and Uttoxeter;
- The North Wales Coast Line, which carries national services between Crewe and Holyhead calling at stops including Chester and Bangor; and
- The Crewe to Manchester Line, which carries local services between Crewe and Manchester Piccadilly calling at stops including Sandbach, Wilmslow and Stockport.

6.5.3 Compared to the existing baseline, no changes are assumed to the rail network in the future baseline.

Local bus network

6.5.4 Thirteen bus services operate on 17 roads that will potentially be impacted by the Proposed Scheme in MA01. There are also bus stops primarily located to serve the main built up areas. 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 Middlewich Road: route 85 (Nantwich - Crewe - Keele University - Newcastle - Hanley); route 31 (Crewe - Leighton Hospital - Winsford/Northwich); route 31A (Crewe - Leighton Hospital - Winsford/Northwich); route 42 (Crewe - Middlewich - Holmes Chapel - Congleton);
- A532 Weston Road: route 85 (Nantwich - Crewe - Keele University - Newcastle - Hanley);
- A532 Manchester Bridge/Earle Street/Vernon Way: route 8 (Wistaston Green - Crewe - Sydney - Elm Drive);
- A532 Merill's Bridge: route 85 (Nantwich - Crewe - Keele University - Newcastle - Hanley);
- A532 Coppenhall Lane: route 85 (Nantwich - Crewe - Keele University - Newcastle - Hanley);

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- A532 West Street: route 6 (Leighton Hospital - Crewe - Shavington); route 6E (Leighton Hospital - Crewe - Shavington); route 8 (Wistaston Green - Crewe - Sydney - Elm Drive); route 31 (Crewe - Leighton Hospital - Winsford/Northwich); route 31A (Crewe - Leighton Hospital - Winsford/Northwich); route 85 (Nantwich - Crewe - Keele University - Newcastle - Hanley);
- A534 Crewe Road/Crewe Green Road: route 3 (Crewe - Haslington - Alsager - Tunstall - Hanley); route 37 (Crewe - Sandbach - Winsford/Northwich); route 38 (Crewe - Sandbach - Congleton - Macclesfield);
- A5078 Oak Street: route 39 (Crewe - Wybunbury - Walgherton - Nantwich);
- A5078 Wistaston Road/Dunwoody Way: route 42 (Crewe - Middlewich - Holmes Chapel - Congleton);
- B5076 Middlewich Street: route 8 (Wistaston Green - Crewe - Sydney - Elm Drive);
- B5076 North Street: route 12 (Shavington - Crewe - Leighton Hospital);
- B5076 Bradfield Road: route 12 (Shavington - Crewe - Leighton Hospital); route 317 (Leighton Hospital - Sandbach - Rode Heath - Alsager); route 31 (Crewe - Leighton Hospital - Winsford/Northwich); route 31A (Crewe - Leighton Hospital - Winsford/Northwich); route 6 (Leighton Hospital - Crewe - Shavington); route 6E (Leighton Hospital - Crewe - Shavington);
- B5076 Flowers Lane: route 31 (Crewe - Leighton Hospital - Winsford/Northwich); route 31A (Crewe - Leighton Hospital - Winsford/Northwich); route 42 (Crewe - Middlewich - Holmes Chapel - Congleton);
- Underwood Lane: route 6 (Leighton Hospital - Crewe - Shavington); route 6E (Leighton Hospital - Crewe - Shavington); route 31 (Crewe - Leighton Hospital - Winsford/Northwich); route 31A (Crewe - Leighton Hospital - Winsford/Northwich);
- Sydney Road: route 8 (Wistaston Green - Crewe - Sydney - Elm Drive);
- Remer Street: route 8 (Wistaston Green - Crewe - Sydney - Elm Drive); and
- Parkers Road: route 12 (Shavington - Crewe - Leighton Hospital); route 317 (Leighton Hospital - Sandbach - Rode Heath - Alsager).

6.5.5 Bus service provision in MA01 is focused on connections to and from Crewe. Buses are operated by D&G Bus, Mikro Coaches, GHA Coaches and Arriva Buses within the area.

6.5.6 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

6.5.7 Crewe Station is located within MA01 on the WCML and provides a multi-modal interchange for Crewe town centre. The railway station provides access to national and local rail services, with a number of bus stops located directly adjacent on the A534 Crewe Road to facilitate easy interchange between both modes.

- 6.5.8 There are two car parks associated with Crewe Station to facilitate park and ride trips. These are located on Pedley Street and Weston Road, and have capacity for up to 550 and 227 vehicles respectively.
- 6.5.9 Compared to the existing baseline, no changes are assumed to public transport interchanges in the future baseline.

6.6 Pedestrians, cyclists and equestrians

- 6.6.1 There are pedestrian footways adjacent to many of the roads in the built-up areas of Crewe, Chorlton, Hough, Shavington, Weston, Basford, Coppenhall Moss, Bradfield Green, Warmingham, Sandbach and Elworth. There is a network of advisory cycle routes¹², 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

- 6.6.2 Roadside footways in the built-up areas within MA01 vary in width and condition. Where there is no formal roadside footway provision, non-motorised user numbers are generally low.
- 6.6.3 The route of the Proposed Scheme will cross one road with roadside footways within the Hough to Walley's Green area. This is Parkers Road.
- 6.6.4 In addition to the pedestrian facilities on the public roads, there are a number of PRoW in the MA01 area:
- Footpath Crewe 13/1 - between Hayling Close and Parkers Road;
 - Footpath Crewe 12/1 - between Footpath Crewe 12/2 and Footpath Minshull Vernon 17/1;
 - Footpath Crewe 29/1 - between Footpath Crewe 12/1 and Footpath Crewe 30/1;
 - Footpath Minshull Vernon 17/1 - between Footpath Crewe 12/1 and Footpath Leighton 7/1;
 - Footpath Leighton 7/1 - between Footpath Minshull Vernon 17/1 and Moss Lane;
 - Footpath Minshull Vernon 2/1 - between Moss Lane and Footpath Warmingham 16/2;
 - Footpath Warmingham 16/2 - between Footpath Minshull Vernon 2/1 and Footpath Warmingham 16/1;
 - Footpath Minshull Vernon 13/1 - between Footpath Minshull Vernon 12/1 and Footpath Warmingham 4/2; and

¹² 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.

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- Footpath Minshull Vernon 8/1 - between Footpath Minshull Vernon 12/2 and Footpath Wimboldsley 3/1.

6.6.5 There are proposals for changes to the pedestrian networks associated with HS2 Phase 2a:

- Footpath Basford 5 - diverted on to new route of Newcastle Road and link to Chorlton Footpath 11 closed;
- Footpath Chorlton 11 - closed with alternative route via the realigned Newcastle Road;
- Footpath Chorlton 17 - closed with alternative route via the realigned Newcastle Road;
- Footpath Basford 4 - rerouted on to Casey Lane diversion and across embankment for diverted route of Newcastle Road; and
- Footpath Basford 3 - truncated at junction with new Casey Lane and Footpath Basford 4, due to the diversion of Casey Lane.

Cycle facilities

6.6.6 In MA01, there is a network of advisory cycle routes connecting Crewe with surrounding settlements.

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

- National Route 451, which runs from north-east to south-west through the MA01 area between Nantwich and Crewe;
- National Route 551, which runs from north to south through the MA01 area between Nantwich and Winsford;
- National Route 5, which runs from north to south through the MA01 area between Winsford and Sandbach, connecting the settlements of Middlewich and Elworth; and
- Regional Route 70, which runs from east to west through the MA01 area between Barthomley and Hatherton, connecting with the settlements of Hough and Wybunbury.

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

Equestrian facilities

6.6.9 There are no bridleways or Byways Open to All Traffic (BOAT) in the vicinity of the Proposed Scheme in the Hough to Walley's Green area.

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

6.7 Waterways and canals

- 6.7.1 There are two navigable waterways in the MA01 area; the Shropshire Union Canal (Middlewich Branch) and the Trent and Mersey Canal are located to the west and east of the Proposed Scheme respectively. The Shropshire Union Canal (Middlewich Branch) passes through the north-west section of the study area on a south-west to north-east alignment and extends between Barbridge Junction and Middlewich. The Trent and Mersey Canal passes through the north-east section of the study area on a south to north alignment and extends between Shardlow and Runcorn. It is not expected that there will be any effects on upon navigable waterways or canals in MA01 during construction or operation of the Proposed Scheme.
- 6.7.2 Compared to the existing baseline, no changes are assumed to waterways and canals in the future baseline.

6.8 Air transport

- 6.8.1 There is no relevant air transport in MA01.

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