Suffolk County Council

ISPA LOCAL PLAN MODELLING

Forecasting Report – Updated 2026 and 2036 forecasts with demand adjustments

ISPA 6.1
AUGUST 2019

PUBLIC

Suffolk County **Council**

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Forecasting Report – Updated 2026 and 2036 forecasts with demand adjustments

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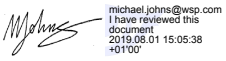
Signature				
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REPORT PURPOSE

WSP have been commissioned to undertake an updated assessment of the emerging Local Plans for the following Local Planning Authorities (LPAs):

- Babergh District Council (BDC)
- Ipswich Borough Council (IBC)
- Mid Suffolk District Council (MSDC)
- Suffolk Coastal Planning Area (SCPA)

The purpose of this report is to assess the impact upon the highway network of scenarios for growth within the respective Local Plans for a forecast year of 2036 and interim year of 2026. This report represents an update to strategic modelling reported in January 2019 related to the Preferred Option for IBC and SCPA, as well as development options for BDC and MSDC. This report identifies junctions and links that are likely to experience significant peak hour congestion in the future. This report focuses on forecast traffic assignments where a reduction in forecast car demand has been implemented based on assumptions about the likelihood of achieving a model shift away from private car travel. The details of the methodology are included within the ISPA Local Plan Modelling Methodology Report.

For the purpose of the assessment of individual junctions within this report, the volume to capacity (V/C) percentage is used. V/C percentages above 100% show a traffic flow beyond its capacity. These locations show the greatest network stress and suggest delays are likely. At these locations the network may cease to function efficiently and blocking back from queuing may occur, constraining the capacity and potentially causing congestion on adjacent links and junctions. Locations at which the V/C percentage is between 85-99% are also considered likely to experience congestion and are highlighted within the analysis.

WHAT HAS BEEN DONE

The Suffolk County Transport Model (SCTM) includes a strategic highway model built in SATURN which has been calibrated and validated to reflect traffic conditions for a base year of 2016. Traffic forecasts have been generated from this base year model to reflect forecast years of 2026 and 2036.

The forecast modelling contained within this report represents the cumulative impact of potential developments or potential growth areas coming forward up to 2036. The preferred option scenario consists of the preferred housing and job growth options for Ipswich and developments in line with development to be planned for through the Suffolk Coastal Final Draft Local Plan which have been tested to determine the impact these developments have on the highway network.

Details of potential development sites and their locations (assigned to SCTM zones) were provided by each LPA and included within the modelling, along with existing permissions and allocations, and completions since 2016. The remaining growth within each district has been accounted for using the Alternative Planning Assumptions tool in TEMPRO; the combination of potential development sites and background growth obtained from TEMPRO ensures that growth is applied in line with the proposed overall Local Plan target for each LPA. The approach of using TEMPRO for residual housing growth was undertaken for Babergh, Mid Suffolk and Suffolk Coastal. The approach of using TEMPRO for residual job growth was undertaken for Babergh, Mid Suffolk and Ipswich.

The exceptions to this were the housing growth in Ipswich, all of which was assigned to specific developments or potential broad growth areas identified for testing purposes, as the dwelling total for these closely matched the overall Local Plan target. In Suffolk Coastal, all the Local Plan target job growth could be related to specific developments.

WSP have previously undertaken traffic modelling to support the Waveney Local Plan. Model runs which include specific development assumptions in Suffolk Coastal also utilise the assumptions from the Preferred Option scenario for Waveney.

The development information has been processed by WSP by specifically modelling developments, allocating growth to specific model zones or adjusting planning data in TEMPRO to generate adjusted background traffic growth factors. Employment density calculations have been applied to commercial developments using the 2016 Economic Land Needs Assessment (ELNA) and reports from The Home and Communities Agency (HCA)[1].

Developments greater than 500 dwellings / jobs have been explicitly modelled in terms of their specific site accesses and internal network being included in the model. All other developments between 10-499 dwellings / jobs have been allocated to a base year model zone and its respective loading point.

TRICS trip rates have been applied to the majority of developments based on land use type. The exception to this are developments included within background growth derived from TEMPRO. For larger developments, the specific Transport Assessment trip rates were collated and applied in place of the general TRICS trip rates.

TEMPRO background growth factors have been adjusted to match the residual housing and job growth which results from the difference between the overall Local Plan targets and the specific developments modelled. LGV and HGV growth has been calculated and derived the 2018 Road Traffic Forecasts available from the National Transport Model (NTM). In accordance with DfT

[1] The Home and Communities Agency is now known as Homes England.

WebTAG guidance, fuel and income factor adjustments have further been added to the car traffic growth within the forecasts.

The forecast traffic generation detailed in this report leads to increases of between 22% in terms of growth in traffic between 2016 and 2026, which decreases to 16% as a result of targeted demand adjustments. Traffic growth between 2016 and 2036 was calculated at 40%, reducing to 34% as result of the demand changes.

The results within this report focus only on roads which are part of SCC's highway network. Impacts of adjusted ISPA Local Plan growth on the Strategic Road Network (SRN), namely the A14 and A12 (between Essex and A14 J55 Copdock Interchange) is reported in a separate report to be completed in July 2019.

WHAT THE RESULTS SHOW

Models have been generated to show future traffic growth for 2026 and 2036.This growth in traffic is a result of changing patterns of travel behaviour and predicted future growth in housing and jobs across Suffolk. The transport modelling factors in an element of growth when predicting future traffic impacts and has been adapted for the purposes of this assessment to consider the specific growth locations identified in the named local authorities. The results cannot therefore be interpreted as simply as 'Local Plan vs no Local Plan', i.e. it could not reasonably be assumed that if there were no Local Plan traffic patterns would be the same in 2026 and 2036 as they were in 2016.

The growth assumptions for the modelling consider population growth and specific development locations, as well as car ownership and relative vehicle operating costs. This information comes from the Local Plans and the use of the Department for Transport TEMPro software

Numerous locations across the network are shown to have capacity issues, measured using the volume to capacity (V/C) percentage which compares the capacity of the network to the assigned traffic flow. This report provides a summary of the results for all four LPAs with the ISPA boundary

Previous modelling results reported in relation to Local Plan growth in Suffolk Coastal and Ipswich is detailed below

- Forecasting Report Volume 1 – Suffolk Coastal and Ipswich (August 2018) which outlines the junctions within Suffolk Coastal and Ipswich which showed capacity issues for various option tests of housing and job distributions

The specific results from the modelling related to Babergh and Mid Suffolk are to be published in the following document:

- Forecasting Report Volume 2 – Suffolk Coastal and Ipswich (January 2019 which outlines the junctions within Suffolk Coastal and Ipswich which showed capacity issues for the Preferred Options of housing and job distributions

WHAT DOES THIS MEAN

The analysis has shown that while many junctions may be close to or exceed capacity in 2026 and 2036; there are also many parts of the network that will operate well within their theoretical capacity. For junctions where the V/C is shown to approach or exceed operational capacity, the individual development proposals assessed within the model would, as part of their planning applications, need to consider additional measures to help mitigate any impact.

It is also necessary to remember that improvements in capacity through the removal of bottlenecks whilst desirable in one location can have knock on impacts which would be less desirable than the existing congestion. For example, as traffic is more freely able to move into the network, the problem will simply move to another location. Equally, hard engineering and infrastructure solutions are not the only solutions available. Other solutions involve the optimisation of existing infrastructure and an emphasis on sustainable transport, through for example personal travel planning. Over the lifetime of the plan it is reasonable to assume that policies on sustainable transport will help to mitigate some of the increase in stress, and technological changes, such as those associated with Connected and Autonomous Vehicles, have the potential to independently improve traffic flow and conditions.

WHAT IS BEING DONE TO ADDRESS THIS

As the respective Local Plans progress within each LPA, additional assessment will be undertaken to inform any mitigation scenarios.

Whilst the development quantum and matrix development process differs between scenarios, there are committed highway infrastructure schemes across Suffolk which have been included within the appraisal. Specific schemes within Babergh, Ipswich, Mid Suffolk and Suffolk Coastal include the following:

- Ipswich Radial Corridor Route improvements on Felixstowe Road, Spring Road and in Kesgrave
- A12 corridor improvements associated with Brightwell Lakes[2] between the Martlesham roundabout and Seven Hills Interchange (A14 Junction 58)
- Bixley Road / Heath Road / Foxhall Road junction improvement
- Nacton Road / Maryon Road junction improvement
- Walton link road, between Walton High Street and Candlet Road, Felixstowe

WHAT HAPPENS NEXT

The ISPA demand adjustments which have been made represent a form of mitigation based on a combination of measures which can implemented to reduce the level of car travel. This is car travel associated with both existing travel patterns and new developments which will come forward in the future. SCC will look to work with the various LPAs to come up some further mitigation measures which can be implemented to deal with the congestion issues which have been highlighted. Where applicable and possible, these mitigation measures will be implemented in the strategic model to demonstrate the impact they have on reducing congestion.

[2] Brightwell Lakes is the development formerly referred to as Adastral Park

1

GLOSSARY

1. GLOSSARY

- **Adjusted Planning Data** – TEMPro (see below) allows for the use of alternative assumptions which are different to the standard set of assumptions. This allows for specific allocated developments to be discounted from the assumptions or to adjust the overall assumptions to tie in with alternative data sources.
- **AM Peak** – the morning peak hour (08:00 – 09:00)
- **Assignment** – A Traffic Assignment Model, in this case SATURN, has been used. An assignment model requires two general inputs – a "trip matrix" and a "network" (thought of as the "demand" and "supply" inputs – provided by the user). These are input into a "route choice" model which allocates or assigns trips to "routes" through the network, as a result total flows along links in the network may be summed and the corresponding network "costs" (e.g. times) calculated.
- **BDC** – Babergh District Council
- **Committed Development** – All land with current planning permission or allocated for development in adopted development plans (particularly residential development) (Planning Portal Glossary).
- **IBC** – Ipswich Borough Council
- **Links** – Connect nodes together and represent the road network within the model
- **LinSig** – Industry standard software used to assess Signal-Controlled junctions
- **Local Plan** - A Local Plan is a set of documents that determine how development will be planned over time.
- **LPA** – Local Planning Authority
- **Matrix** – see Trip Matrix
- **MSDC** – Mid Suffolk District Council
- **Network** – specifies the physical structure of the roads, etc upon which trips take place and the parameters within it. In this report, parameters is being used as a generic descriptor of all of the pieces of information / options that go into the Saturn network, it is not a specific modelling term.
- **Nodes** – Nodes represent a change in speed or direction; most often they represent a junction.
- **NTEM** – National Trip End Model, Latest version 7.2. The National Trip End Model produces estimates of person travel by all modes based on 2011 Census boundaries. The model outputs trip productions (e.g. homes) and trip attractions (e.g. sites of employment) in each zone (collectively known as trip-ends), which may be separated by mode, journey purpose, household car ownership category and time period.
- **NTM** – National Transport Model provides a means of comparing the consequences of national transport policies or widely-applied local transport policies, against a range of background scenarios which take into account the major factors affecting future patterns of travel. The model produces future forecasts of road traffic growth, vehicle tailpipe emissions, congestion and journey time (Department for Transport website).
- **PCU – Passenger Car Unit**, is a method used in Transport Modelling to allow for the different vehicle types within a traffic flow group to be assessed in a consistent manner. Measured to be

5.75 m. Factors used in the SCTM are 1 for a car or light goods vehicle and 2.3 for heavy goods vehicle.

- **Permitted Development** - Permission to carry out certain limited forms of development without the need to make an application to a local planning authority, as granted under the terms of the Town and Country Planning (General Permitted Development) Order (Planning Portal Glossary).
- **Person Trip Rate** – The number of people making a given trip as opposed to the number of vehicles making a trip.
- **PM Peak** – Afternoon Peak (17:00 – 18:00)
- **SATURN** – Simulation and Assignment of Traffic to Urban Road Networks is a suite of network analysis programs used to assess the impact of road-investment schemes. Current version 11.3.12U. See also assignment. Further information can be found here: https://saturnsoftware.co.uk/
- **SCC** – Suffolk County Council
- **SCPA** – Suffolk Coastal Planning; now part of East Suffolk, formerly Suffolk Coastal District Council
- **SCTM** – Suffolk County Transport Model
- **TEMPro** - TEMPro is the Trip End Model Presentation Program. The National Trip End Model (NTEM) forecasts and the TEMPro software are used for transport planning purposes. The forecast includes: population, employment, households by car ownership, trip ends, and simple traffic growth factors based on data from the National Transport Model. The current version, and the version used for this work, is NTEM 7.2. Further information can be found at: https://www.gov.uk/government/collections/tempro
- **Trip Matrix** – the “Trip Matrix” Tij specifies the number of trips from zone i to zone j
- **V/C Ratio** – Volume / Capacity Ratio. The assigned model flow is the volume of traffic in PCUs per hour, with the V/C percentage calculated as the volume relative to the capacity in percentage terms.
- **WDC** – Waveney District Council
- **WebTAG** – Web Transport Appraisal Guidance. Documentation produced by the Department for Transport (DfT) to assist in transport appraisal and modelling to ensure consistency and robustness.
- **Windfall Sites** – sites for housing that have yet to be identified, accounted for through background growth.
- **Zone Loading Point** – the origins and destinations of trips within a network

A further glossary of planning terms can be found here:
https://www.planningportal.co.uk/directory/4/glossary

2

INTRODUCTION

2. INTRODUCTION

2.1. BACKGROUND

2.1.1. WSP have been commissioned to undertake an assessment of the impact of Local Plan development assumptions for multiple Local Planning Authorities (LPAs) within Suffolk. The focus of this report is on the modelling results for all four of the LPAs within the ISPA boundary:

- Ipswich Borough
- Suffolk Coastal Planning Area
- Babergh District
- Mid Suffolk District

2.1.2. The Local Plan development has been tested in terms of the impact on the highway network for a forecast year of 2036 representing the end of the Local Plan period for each LPA. An interim forecast year of 2026 has also been modelled.

2.2. TRANSPORT MODEL

2.2.1. The Suffolk County Transport Model (SCTM) has been developed by WSP as multi-purpose modelling toolkit to enable Suffolk County Council (SCC), LPAs and other parties to test a variety of transport related improvements including for example:

- Highway scheme appraisal
- Major public transport scheme appraisal
- Inputs for transport business cases and funding applications
- Inputs for environmental appraisals
- Local plan / core strategy assessment
- Development impact assessment.

2.2.2. The assessment within this report uses the Highway Assignment Model (HAM)[3] only as the focus of the modelling is on how the highway network within Suffolk is affected by the proposed housing and job growth with the emerging Local Plans. A highway only assignment is considered proportionate and sufficiently robust to test the assumptions for each LPA.

2.2.3. The SCTM has been developed to an extent that it is able to serve as a high-level strategic assessment tool for various applications. However, no strategic model is capable of representing a whole county in fine detail, so the level of detail required for each application is reviewed prior to testing. It is often necessary to enhance a particular local area for a specific testing purpose.

2.2.4. A review of the SCTM within the four LPAs was undertaken with the need for additional network detail and zone disaggregation undertaken. This was undertaken for the 2016 base year model which underpins the forecast modelling undertaken to assess the Local Plans. The validation of the

[3] The SCTM comprises a Highway Assignment Model (HAM) built in SATURN, as well as a Public Transport Assignment Model (PTAM) and Variable Demand Model (VDM) developed in VISUM.

2016 base year model is presented for each of the LPAs in TN1 – SCTM Base Year Validation Version 2.1 (July 2018).

2.3. STUDY AREA

2.3.1. The study areas in this forecasting report focus on Suffolk Coastal Planning Area, Ipswich Borough, Babergh District and Mid Suffolk District

2.3.2. Figure 1 shows the borough boundary for Ipswich Borough, detailing the strategic highway network and main urban areas.

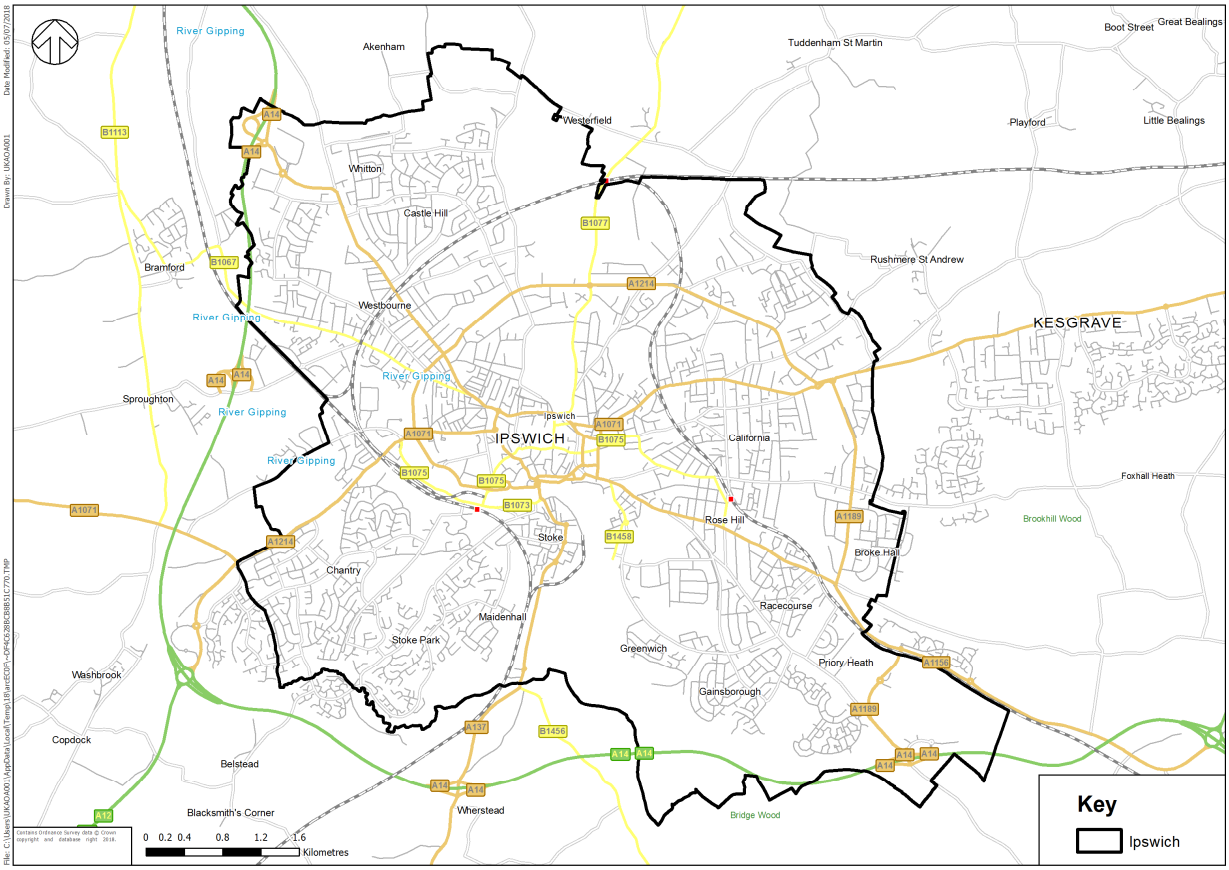

Figure 1 – Ipswich Borough boundary

2.3.3. The Ipswich Borough boundary covers the majority of the Ipswich urban area, though parts of the Ipswich urban area are included within the boundaries of Babergh, Mid Suffolk and Suffolk Coastal. Sections of the A14 are included within the Ipswich Borough boundary, including Junction 53 (Bury Road) and Junction 57 (Nacton).

2.3.4. Figure 2 shows the district boundary for Suffolk Coastal, detailing the strategic highway network and main urban areas.

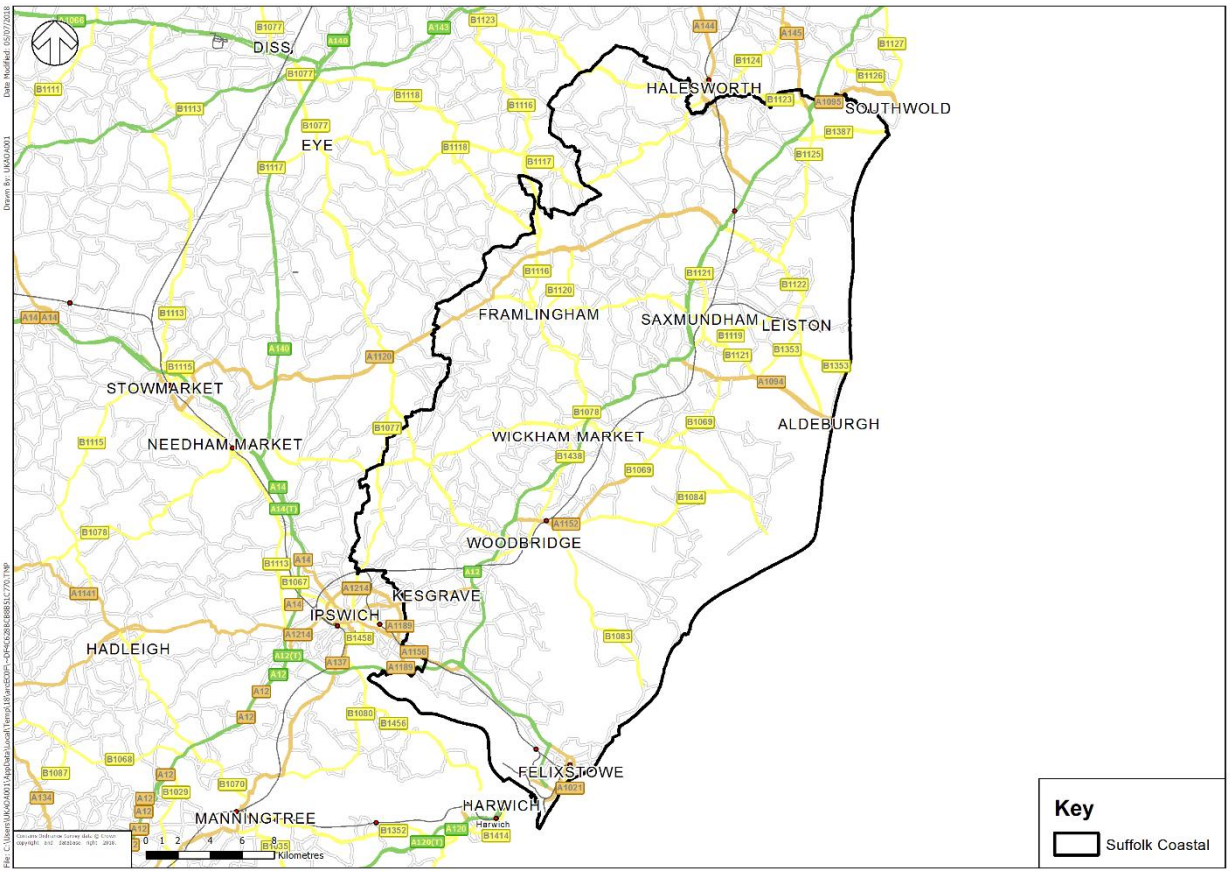

Figure 2 – Suffolk Coastal Planning Area boundary

2.3.5. The key strategic highway route through Suffolk Coastal is the A12, extending from the Seven Hills Interchange (A14 Junction 58) to Blythburgh. The A14 extends into Suffolk Coastal, culminating at Felixstowe.

2.3.6. Figure 1 shows the district boundary for Babergh, detailing the strategic highway network and main urban areas.

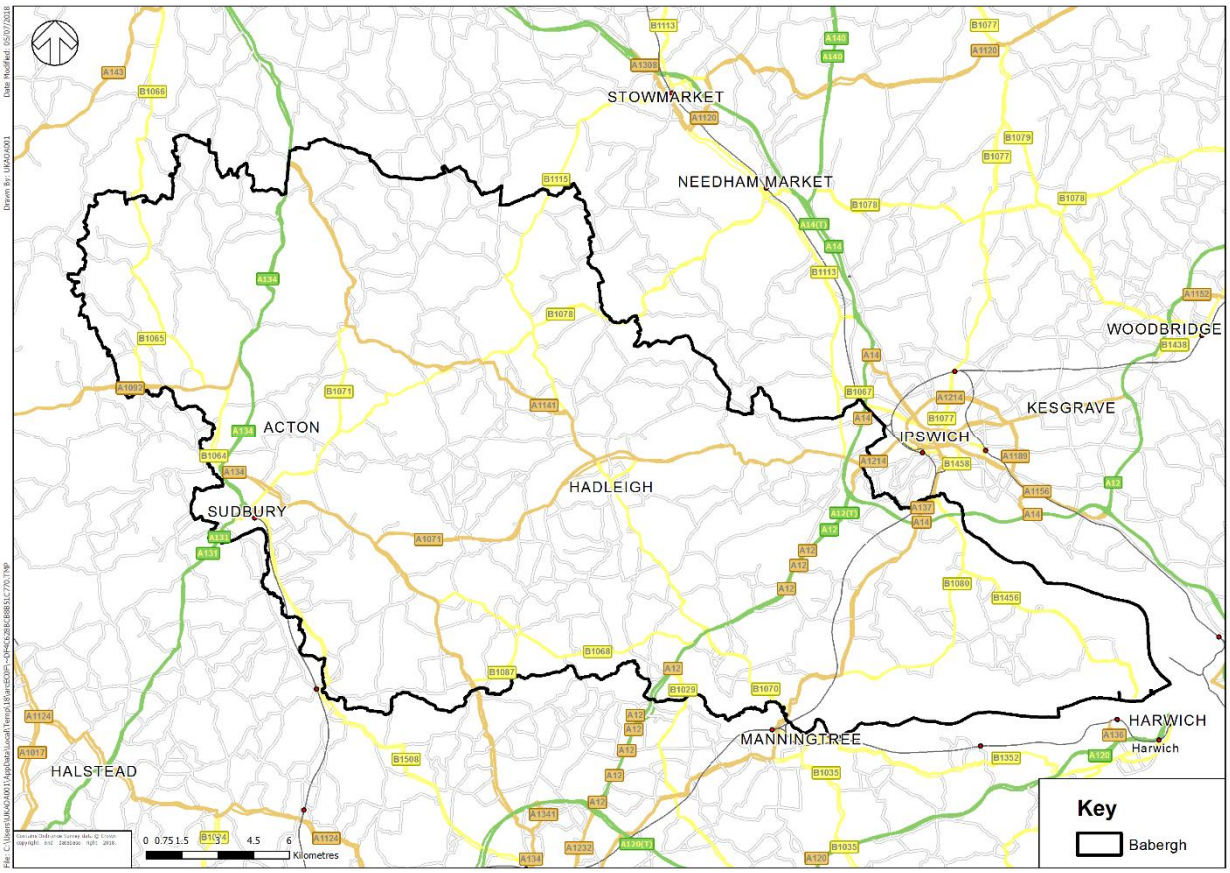

Figure 3 – Babergh District boundary[4]

2.3.7. Stowmarket is the largest urban area within Mid Suffolk, with the A14 Junction 46 east of Bury St Edmunds to Junction 52 (Claydon) included within the district boundary. The other major strategic route within Mid Suffolk is the A140 which extends between the A14 and Norfolk.

[4] The figure should not be considered as placing emphasis on the particular importance of any locations within Babergh

2.3.8. Figure 1 shows the district boundary for Babergh, detailing the strategic highway network and main urban areas.

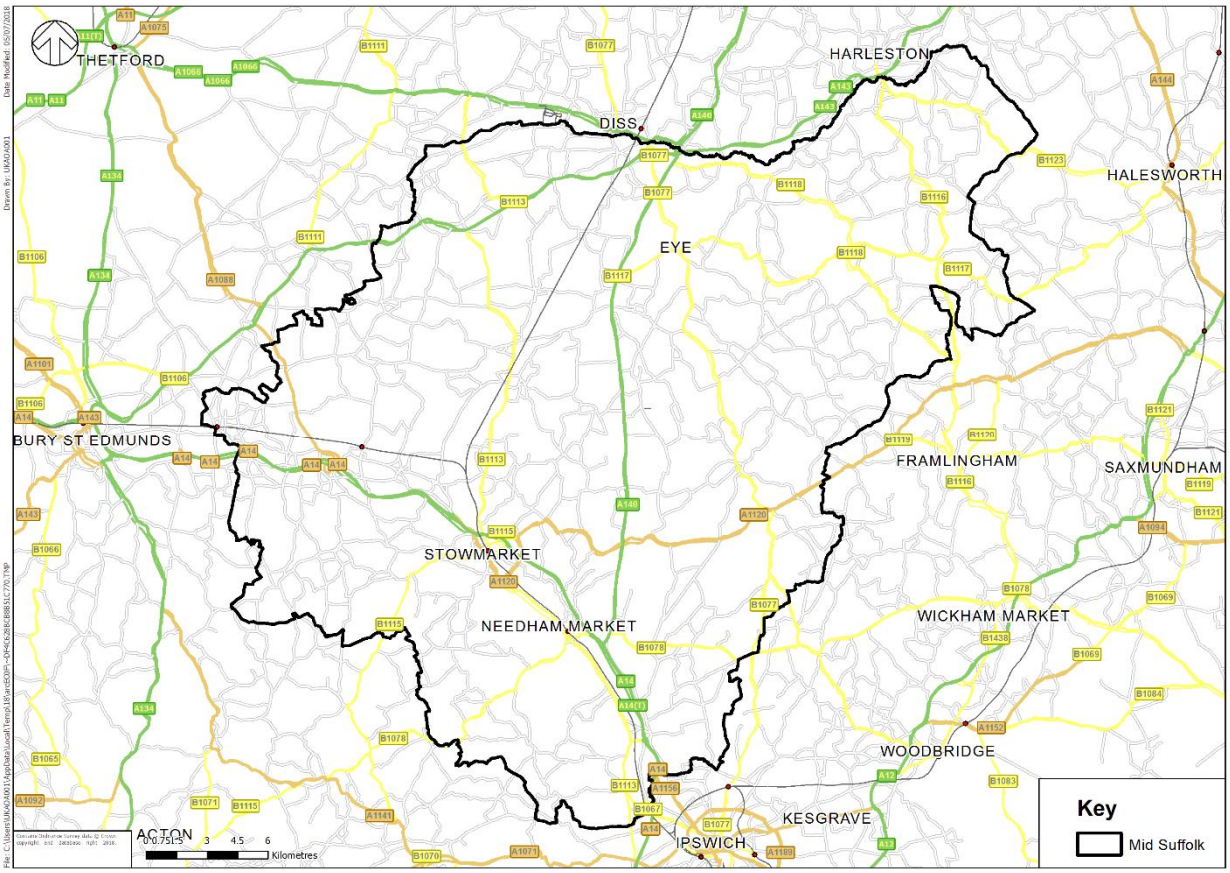

Figure 4 – Mid Suffolk District boundary

2.3.9. Stowmarket is the largest urban area within Mid Suffolk, with the A14 Junction 46 east of Bury St Edmunds to Junction 52 (Claydon) included within the district boundary. The other major strategic route within Mid Suffolk is the A140 which extends between the A14 and Norfolk.

2.4. FUTURE HIGHWAY SCHEMES

2.4.1. It is assumed the highway schemes in Table 1 will be in place by 2036 and have therefore been included within all forecast scenarios.

Table 1 – List of future highway schemes

District / Borough	Description	Mitigation
Ipswich	Bixley Road / Heath Road / Foxhall Road	Additional lane NB for Bixley Road / Additional lane SB for Heath Road
Ipswich	Nacton Road / Maryon Road	Turn WB Nacton to two lanes, and EB Nacton to one lane
Waveney	Lake Lothing Third Crossing, Lowestoft	Additional crossing within Lowestoft, priority controlled roundabouts at both ends
St Edmundsbury	Bury St Edmunds Eastern Relief Road	Now built and open, but included in forecast only as base year model is 2016 i.e prior to opening
St Edmundsbury	Haverhill NW Relief Road	Relief Road between A1307 and A143
Waveney	Beccles Southern Relief Road	Relief Road between A145 and Ellough Road. Now built and open but included in forecast only as base year model is 2016 i.e prior to opening.
Ipswich	Ipswich Radial Corridor Route improvements - Felixstowe Road	Capacity increase to Felixstowe Road & Bixley Road arms of roundabout with A1156 Bucklesham Road. Capacity increase at Bixley Road / Ashdown Way junction
Ipswich	Ipswich Radial Corridor Route improvements - Spring Road	Increased capacity at A1156 Grimwade Street / St Helen's Street. Upper Orwell Street reverted to one-way southbound only
Ipswich	Ipswich Radial Corridor Route improvements - Kesgrave	Ban of right turn from A1214 onto Dr Watson Lane. Signalised junction of A1214 / Bell Lane changed to priority controlled roundabout
Suffolk Coastal	Brightwell Lakes - A12 corridor improvement[5]	A12 / Eagle Way / Anson Road roundabout signalisation
Suffolk Coastal	Brightwell Lakes - A12 corridor improvement	A12 / Eagle Way / Gloster Road roundabout signalisation

[5] Brightwell Lakes is the development formerly referred to as Adastral Park

District / Borough	Description	Mitigation
Suffolk Coastal	Brightwell Lakes - A12 corridor improvement	A12 / Foxhall Road / Newbourne Road roundabout signalisation
Suffolk Coastal	Brightwell Lakes - A12 corridor improvement	A14 Junction 58 signalisation
Suffolk Coastal	Brightwell Lakes - Main site access	Signalised junction between Gloster Road & Foxhall Road roundabouts
Suffolk Coastal	Brightwell Lakes - Other site accesses	Phase 2 access onto Newbourne Road, Phase 3 access onto link forming junction with Gloster Road
St Edmundsbury	Bury St Edmunds South Eastern Relief Road	Link road south of A14 Junction 44
Suffolk Coastal	Walton Link Road	Connecting road between Walton High Road and Candlet Road in Felixstowe
Suffolk Coastal	A14 overbridge, between A14 J58 and J59	Access strategy associated with Innocence Farm

2.5. FORECAST DEVELOPMENT ASSUMPTIONS

2.5.1. Each LPA provided details of the overall target in terms of housing and job growth up to 2036 detailed in their respective emerging Local Plan. Interim forecasts have been generated for a forecast year of 2026. This is summarised in Table 2.

Table 2 – Overall housing and job growth modelled by LPA

LPA	Scenario	Housing growth (2016 to 2026)	Job growth (2016 to 2026)	Housing growth (2016 to 2036)	Job growth (2016 to 2036)
Ipswich	Preferred Option	5,463	10,874	9,248[6]	17,309
Suffolk Coastal	Preferred Option	7,682	7,201	13,298[7]	13,472
Mid Suffolk	Development Options	6,522	5,574	11,120	5,864
Babergh	Development Options	5,000	2,694	8,400	3,309

2.5.2. The ISPA Local Plan Modelling Methodology Report provides greater detail on the approach taken for each of the model runs and their associated development inputs.

[6] Projected growth is 8,622 dwellings (2018-2036), higher quantum has been modelled following totalling of each individual residential development for Ipswich Preferred Option.

[7] This includes completions 2016-18, permissions, existing allocations and development with a resolution to grant permission as at 31.03/18 (which are included in the core assumptions), site allocations, housing requirements for the Neighbourhood Plan areas and the windfall assumptions

3

RESULTS

3. RESULTS

3.1. SUFFOLK HIGHWAY FOCUS

3.1.1. The results within this report focus only on roads which are part of SCC's highway network. Impacts of adjusted ISPA Local Plan growth on the Strategic Road Network (SRN), namely the A14 and A12 (between Essex and A14 J55 Copdock Interchange) is reported in a separate report to be completed in July 2019.

3.2. VOLUME TO CAPACITY RATIO

3.2.1. Analysis has been undertaken to determine which junctions within the model are forecast to experience congestion. The Volume to Capacity (V/C) percentage has been focused on to determine which junctions are approaching or over capacity. The V/C percentage has been taken directly from SATURN and is based on a combination of flow, delay and capacity for each approach arm and turning movement at a junction.

3.2.2. Table 3 describes the typology used to distinguish between whether junctions are forecast to experience congestion problems in both peak hours or single peak hour, and considers the severity of the congestion.

Table 3 – Volume to capacity ratio categorisation, Junctions

Type	Description
1	100%+ both peaks
2	100%+ in one peak / 85-99% in other peak
3	100%+ in one peak / Less than 85% in other peak
4	85-99% in both peaks
5	85-99% in one peak / Less than 85% in the other peak

3.2.3. Link based V/C has also been analysed representing individual approaches to junctions and intermediary links between junctions. The maximum V/C between the respective AM and PM peak hour assignments for each forecast year is graphically presented alongside overall junction V/C in this report.

3.3. MODEL RUNS COMPARED

The model runs considered within this report are as follows:

- 2026/36 AM/PM
- 2026/36 AM/PM with demand adjustments

3.3.1. The first set of model runs represent modelling which is broadly consistent with the previous Local Plan modelling undertaken to support the Suffolk Coastal and Ipswich Preferred Options.

3.3.2. The second set of model runs represent assignments were targeted reductions have been made to the forecast traffic demand.

3.4. OVERALL JUNCTION V/C SUMMARY BY LPA – DEMAND ADJUSTMENT IMPACT

3.4.1. Analysis of the junctions in the forecast modelling which are shown to experience congestion have been analysed for the four ISPA LPAs.

3.4.2. The number junctions which reach an overall V/C of 85%+ is shown in Table 4 and Table 6 for the AM and PM peak respectively. This analysis demonstrates the following:

- Ipswich Borough contains the highest number of congested junctions with a V/C of 85%+ in all time periods
- In 2026 AM, the demand adjustment leads to three fewer junctions reaching a V/C of 85%+. The description of these junctions is as follows:
  - A140 / A1120 (Mid Suffolk)
  - A1214 / Tuddenham Road (Ipswich)
  - Landseer Road / Nacton Road (Ipswich)
- In 2036 AM, the demand adjustment leads to five fewer junctions reaching a V/C of 85%+. The description of these junctions is as follows:
  - B1078 Coddenham Road / Kettle Lane / A14 SB slip road (Mid Suffolk)
  - Buck Horn's Lane / Church Lane (Babergh)
  - Upper Orwell Street / Old Foundry Road / St Helen's Street (Ipswich)
  - College Street / Foundry Lane (Ipswich)
  - A1214 / A1189 (Ipswich)
  - Central Avenue (Ipswich)

Table 4 – Junctions with overall V/C ratio of 85%+ (AM Peak)

	2016 Base	2026 ISPA NoAdj	2026 ISPA wAdj	2036 ISPA NoAdj	2036 ISPA wAdj
Ipswich	2	8	6	15	12
Suffolk Coastal	1	2	2	3	3
Mid Suffolk	0	1	0	3	2
Babergh	1	3	3	5	4
Total	**4**	**14**	**11**	**26**	**21**

- In 2026 PM, the demand adjustment leads to six fewer junctions reaching a V/C of 85%+, all six being in Ipswich:
  - Upper Orwell Street / Old Foundry Road / St Helen's Street (Ipswich)
  - Northgate Street / Old Foundry Road (Ipswich)
  - College Street / Foundry Lane (Ipswich)
  - Rushmere Road / Colchester Road (Ipswich)
  - B1067 / Sproughton Road (Ipswich)
  - Landseer Road / Nacton Road (Ipswich)
- In 2036 PM, the demand adjustment leads to ten fewer junctions reaching a V/C of 85%+, eight in Ipswich, one in Suffolk Coastal and one in Babergh, described below:
  - A140 / A1120 (Mid Suffolk)
  - Langer Road / Beach Station Road (Suffolk Coastal)
  - A1214 / A1189 (Ipswich)
  - Slade Street / A1156 (Ipswich)
  - Great Colman Street / A1156 St Margaret's St (Ipswich)
  - Bond Street / St Margaret's St (Ipswich)
  - A1214 / A137 / A1071 / Yarmouth Road (Ipswich)
  - Woodbridge Road / Albion Hill / Belvedere Road (Ipswich)
  - Salthouse Street / Common Quay / Key Street (Ipswich)

Table 5 – Junctions with overall V/C ratio of 85%+ (PM Peak)

	2016 Base	2026 ISPA NoAdj	2026 ISPA wAdj	2036 ISPA NoAdj	2036 ISPA wAdj
Ipswich	1	12	6	23	16
Suffolk Coastal	1	2	2	4	3
Mid Suffolk	0	0	0	1	0
Babergh	1	4	4	6	6
Total	**3**	**18**	**12**	**34**	**25**

3.5. OVERALL LINK V/C SUMMARY BY LPA – DEMAND ADJUSTMENT IMPACT

3.5.1. Link based V/C will now be focused on across each ISPA LPA. Links which are over capacity with a V/C of 100%+ have been focused on as these represent the most congested locations on the road network which are likely to cause delay.

3.5.2. Table 6 shows a comparison of over-capacity links in the AM peak with and without the ISPA demand adjustment. The results in this table show:

- Around 50% of the over-capacity links are in Ipswich
- The number of over-capacity links reduces by around 40% in 2026 AM following the adjustment
- Over-capacity links reduce by around 24% in 2036 AM following the adjustment

Table 6 – Over-capacity links with V/C ratio of 100%+ (AM Peak)

	2016 Base	2026 ISPA NoAdj	2026 ISPA wAdj	2036 ISPA NoAdj	2036 ISPA wAdj
Ipswich	7	33	19	60	43
Suffolk Coastal	3	9	7	26	17
Mid Suffolk	3	11	6	20	16
Babergh	1	13	7	15	16
Total	**14**	**66**	**39**	**121**	**92**

3.5.3. Table 7 shows a comparison of over-capacity links in the PM peak with and without the ISPA demand adjustment. The results in this table show:

- Around 50-57% of the over-capacity links are in Ipswich in the PM peak
- The number of over-capacity links reduces by around 50% in 2026 PM following the adjustment. Ipswich increases most significantly with a 60% reduction in over-capacity links
- Over-capacity links reduce by around 25% in 2036 PM following the adjustment

Table 7 – Over-capacity links with V/C ratio of 100%+ (PM Peak)

	2016 Base	2026 ISPA NoAdj	2026 ISPA wAdj	2036 ISPA NoAdj	2036 ISPA wAdj
Ipswich	6	33	13	69	49
Suffolk Coastal	1	7	4	21	13
Mid Suffolk	2	11	5	17	15
Babergh	0	14	11	19	17
Total	**8**	**65**	**33**	**126**	**94**

3.6. RESULTS SUMMARIES POST ADJUSTMENT

3.6.1. Following the demand adjustment which has been made to the 2026 and 2036 forecasts. The resultant locations which still continue to show capacity issues will be focused on based on study areas within each LPA as follows:

- Suffolk Coastal
  - Saxmundham
  - Woodbridge & Melton
  - Felixstowe
  - Innocence Farm
- Ipswich
- Babergh
  - West & South West Ipswich
  - Sudbury
  - Brantham
- Mid Suffolk
  - A140 corridor
  - Stowmarket

3.7. SUFFOLK COASTAL RESULTS SUMMARY

SAXMUNDHAM

3.7.1. Junctions near Saxmundham operate with an overall V/C less than 85%. However, individual movements operate nearing or at capacity

- B1121 / Chantry Road
  - AM Peak: East approach at capacity in 2026/2036
  - PM Peak, East and west approaches nearing capacity in 2026/2036

3.7.2. Figure 5 shows the link approaching capacity within Saxmundham in 2026.

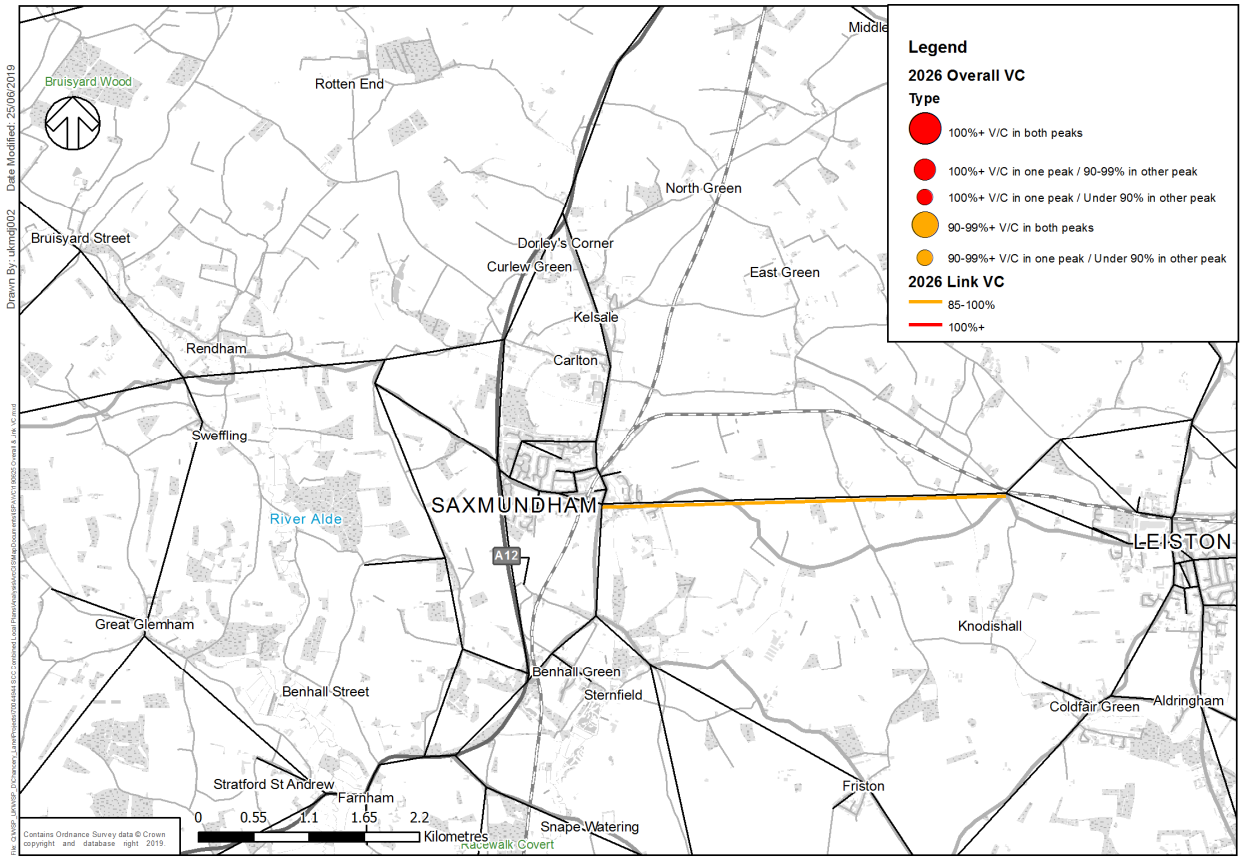

Figure 5 – Saxmundham – 2026 Links and Junctions with V/C 85%+

3.7.3. Figure 6 shows the link at capacity within Saxmundham in 2036

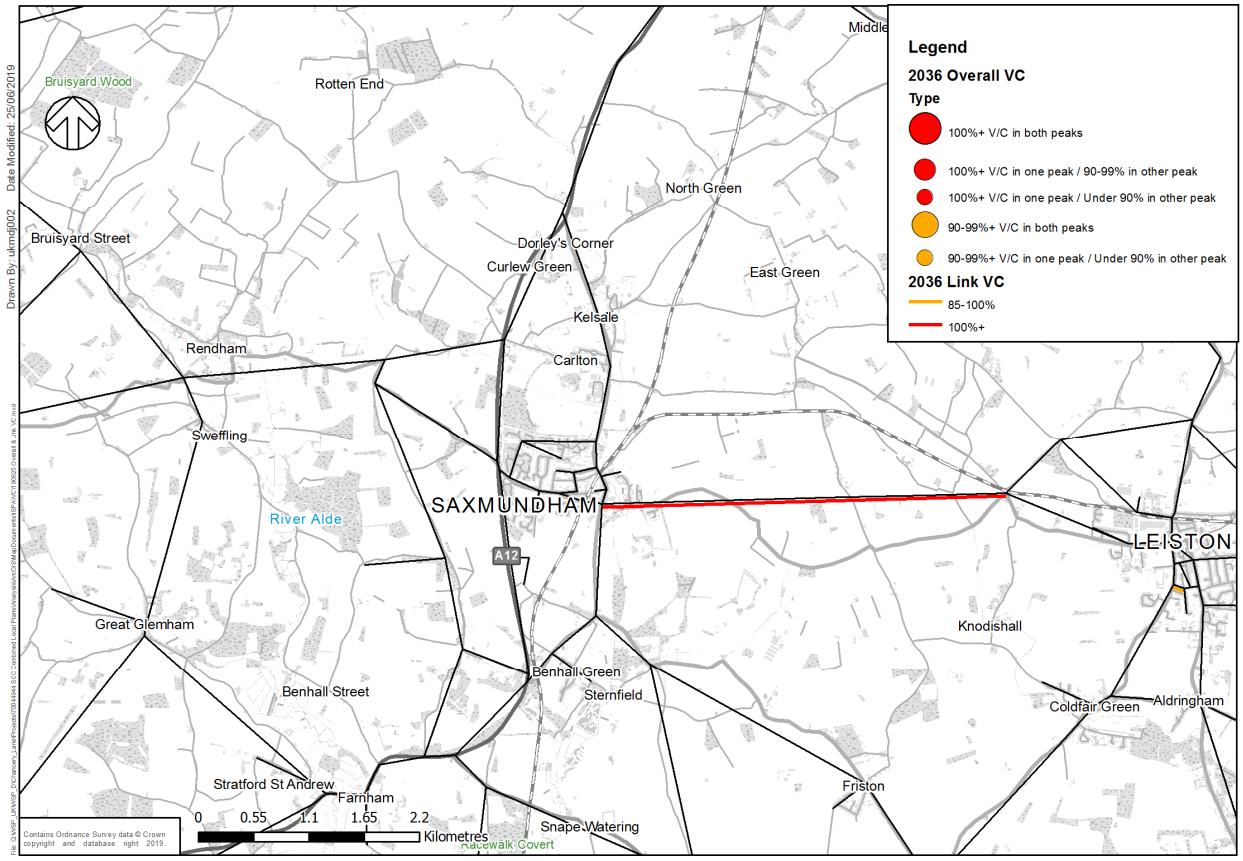

Figure 6 – Saxmundham – 2036 Links and Junctions with V/C 85%+

WOODBRIDGE / MELTON

3.7.4. Junctions near Melton operate with an overall V/C less than 85%. However, individual movements operate nearing or at capacity

- B1438 / A1152
  - AM Peak: North approach over capacity in 2026/2036, west approach nearing capacity in 2026, over capacity in 2036
  - PM Peak, North approach over capacity in 2026/2036

3.7.5. Several of the A12 corridor junctions, west of Woodbridge, operate with an overall V/C greater than 85%.

- A12 / A1152 – approaching capacity in AM/PM peaks in 2026/2036
- A12 / Grundisburgh Road – approaching capacity in AM/PM peaks in 2026/2036
- A12 / B1438 – approaching capacity in PM peak in 2036

3.7.6. Link V/C ratios show that on the A12 corridor;

- AM peak,

- the A12 is over capacity southbound at the A1152 and at Grundisburgh Road in 2026 and 2036
- the A12 is approaching capacity northbound at Grundisburgh Road in 2026 and at Grundisburgh Road and the A1152 in 2036

- PM peak,
  - the A12 is approaching capacity southbound at Grundisburgh Road and at the A1214 in 2026 and 2036, and also at the A1152 in 2036
  - the A12 is over capacity northbound at Grundisburgh Road in 2026/2036, and approaching capacity at the A1152 and at the B1438 in 2026/2036

3.7.7. Figure 7 presents the overall junction and link based V/C for both Woodbridge and Melton in 2026.

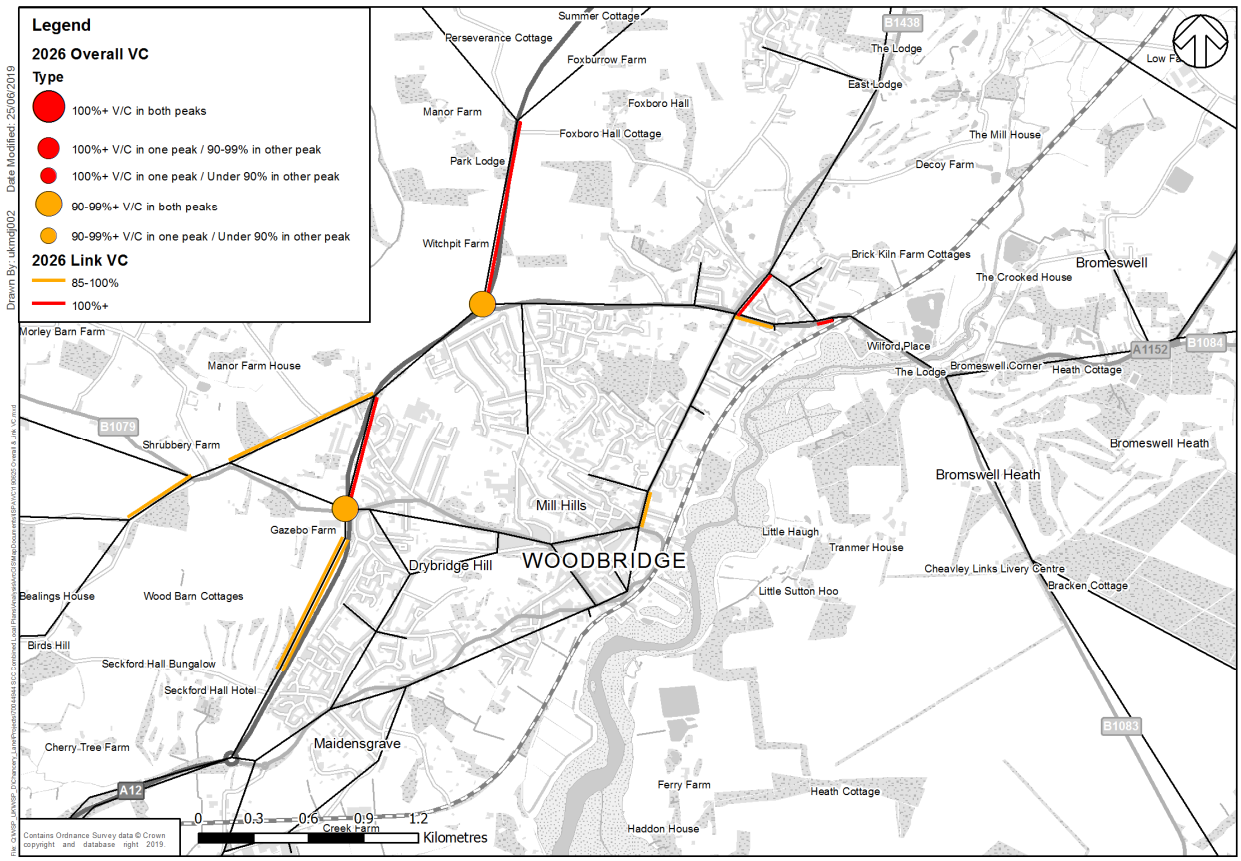

Figure 7 – Woodbridge & Melton – 2026 Links and Junctions with V/C 85%+

3.7.8. Figure 8 presents the overall junction and link based V/C for both Woodbridge and Melton in 2036

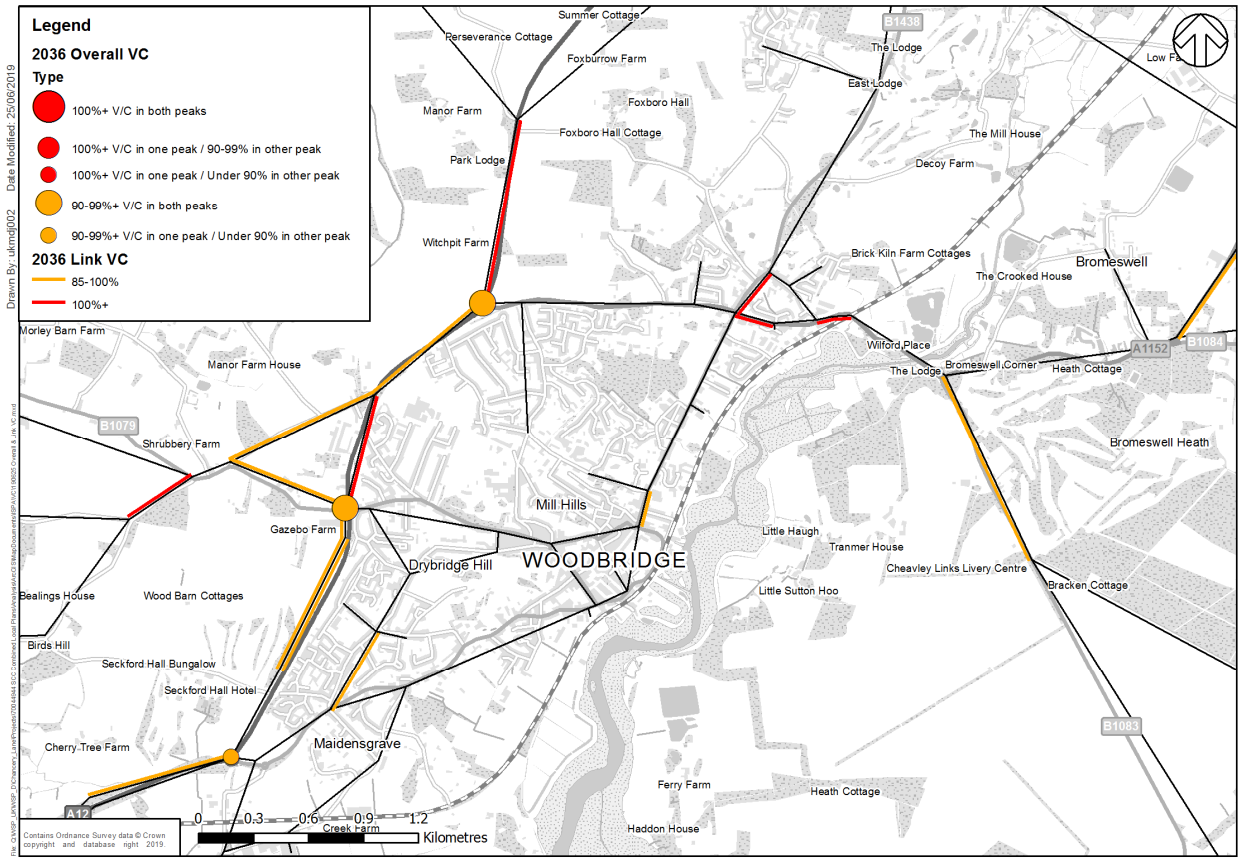

Figure 8 – Woodbridge & Melton – 2036 Links and Junctions with V/C 85%+

FELIXSTOWE

3.7.9. Analysis of link V/C ratios within Felixstowe indicate the A154 route (Candlet Road / Garrison Lane / Langer Road) is approaching or exceeding capacity in AM and PM peak periods in 2026/2036. Figure 9 presents the links approaching capacity within Felixstowe in 2026.

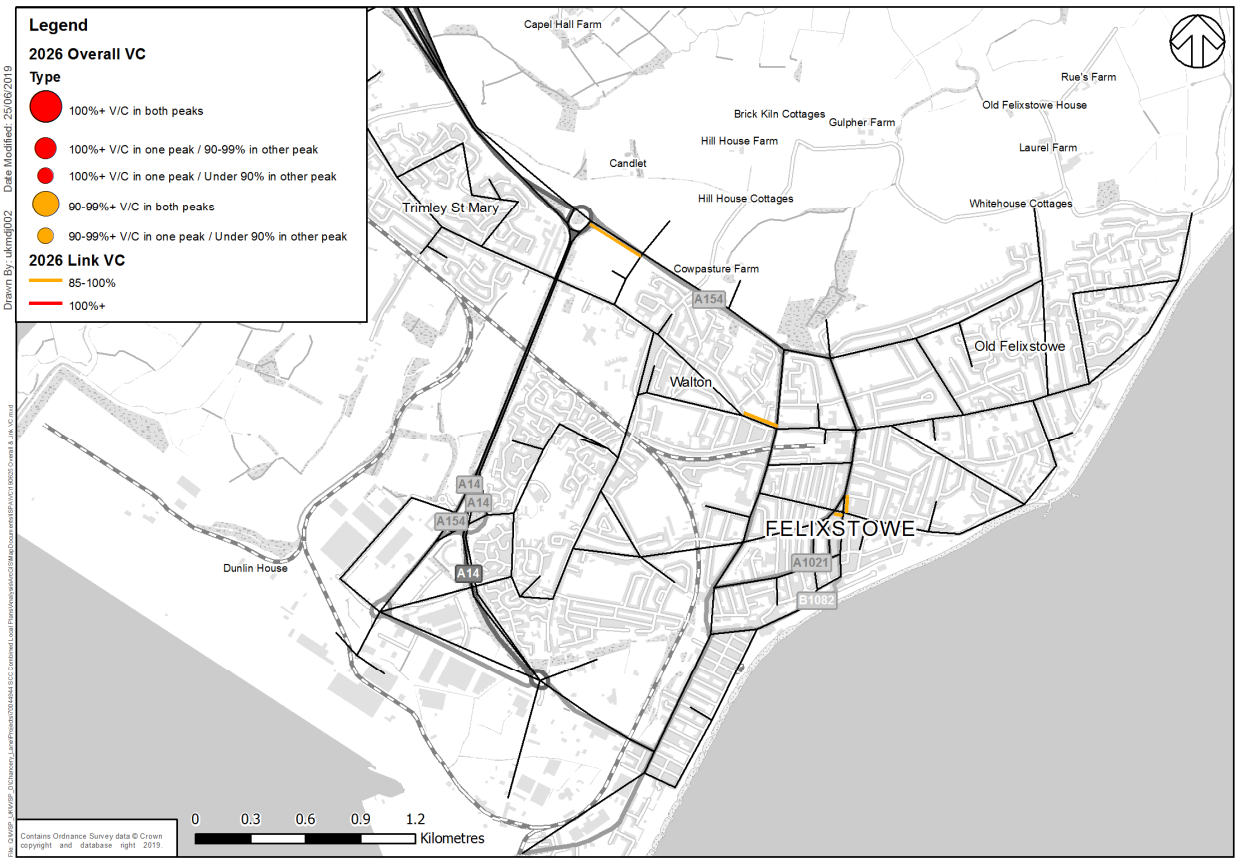

Figure 9 – Felixstowe – 2026 Links and Junctions with V/C 85%+

3.7.10. Figure 10 shows the over-capacity and close to capacity links within Felixstowe in 2036.

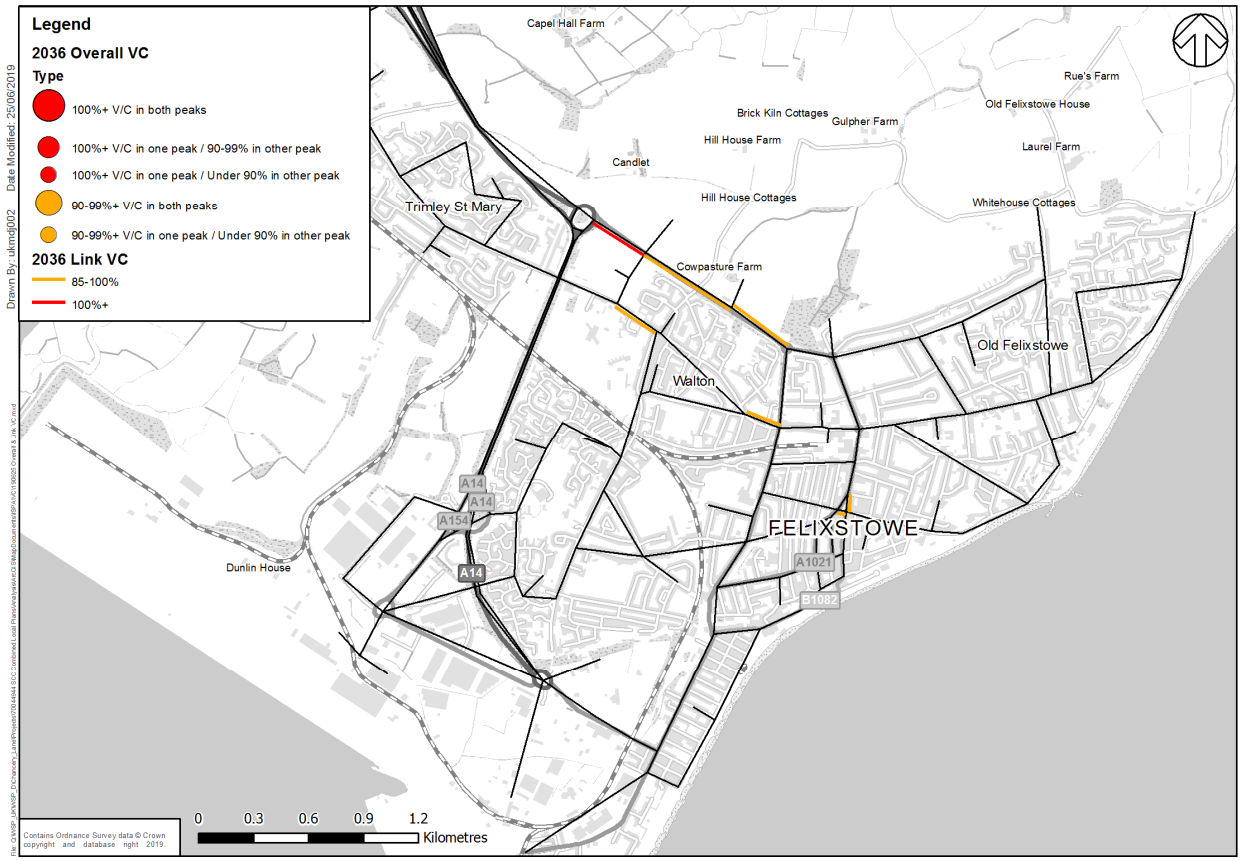

Figure 10 – Felixstowe – 2036 Links and Junctions with V/C 85%+

INNOCENCE FARM

3.7.11. Junctions near Innocence Farm operate with an overall V/C less than 85%. However, individual movements operate close to capacity;

- AM Peak has all links operating with V/C <85% in 2026/36
- PM Peak
  - The minor road parallel to the A14 is approaching capacity in 2026/2036
  - The Croft Lane approach to the A14 is approaching capacity in 2036

3.7.12. Figure 11 shows the link which is close to capacity adjacent to Innocence Farm in 2026.

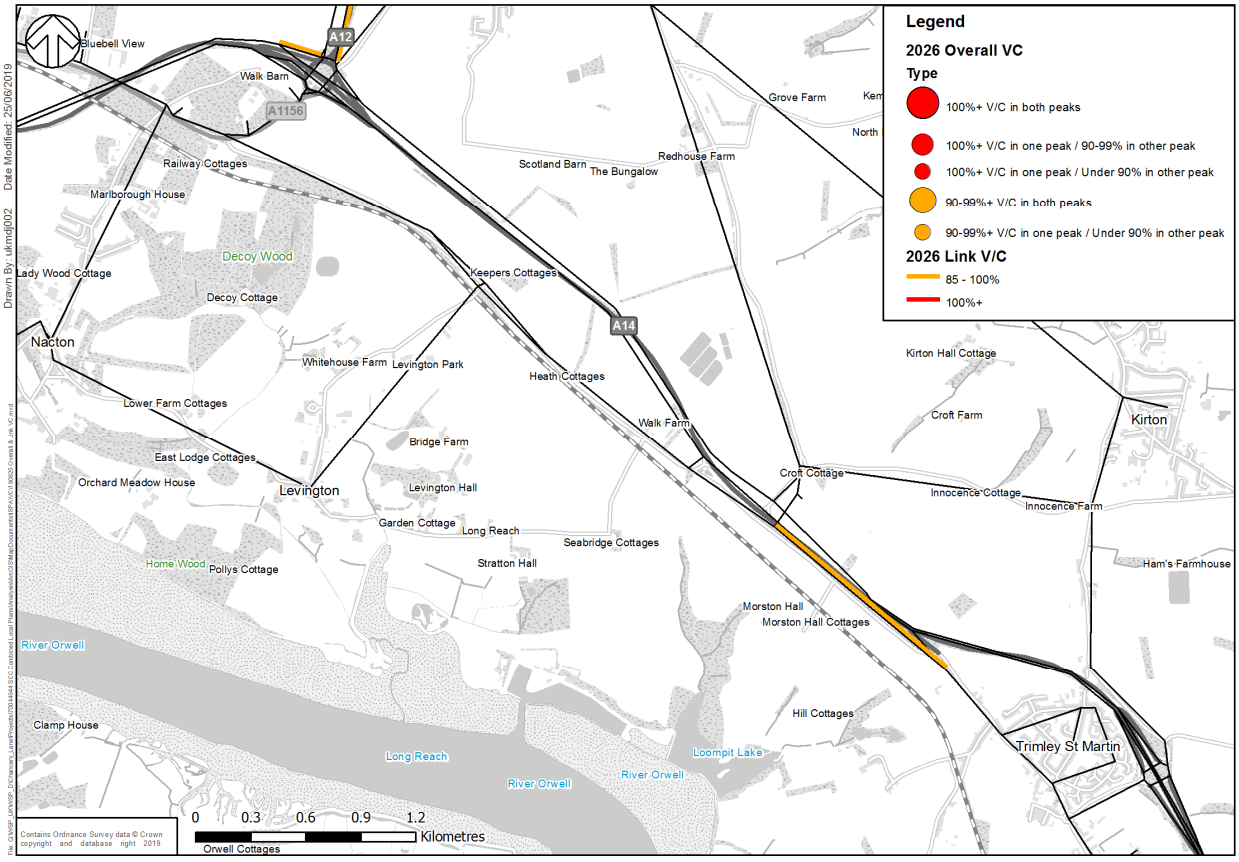

Figure 11 – Innocence Farm – 2026 Links and Junctions with V/C 85%+

3.7.13. Figure 12 shows the links which are over capacity or close to capacity in 2036.

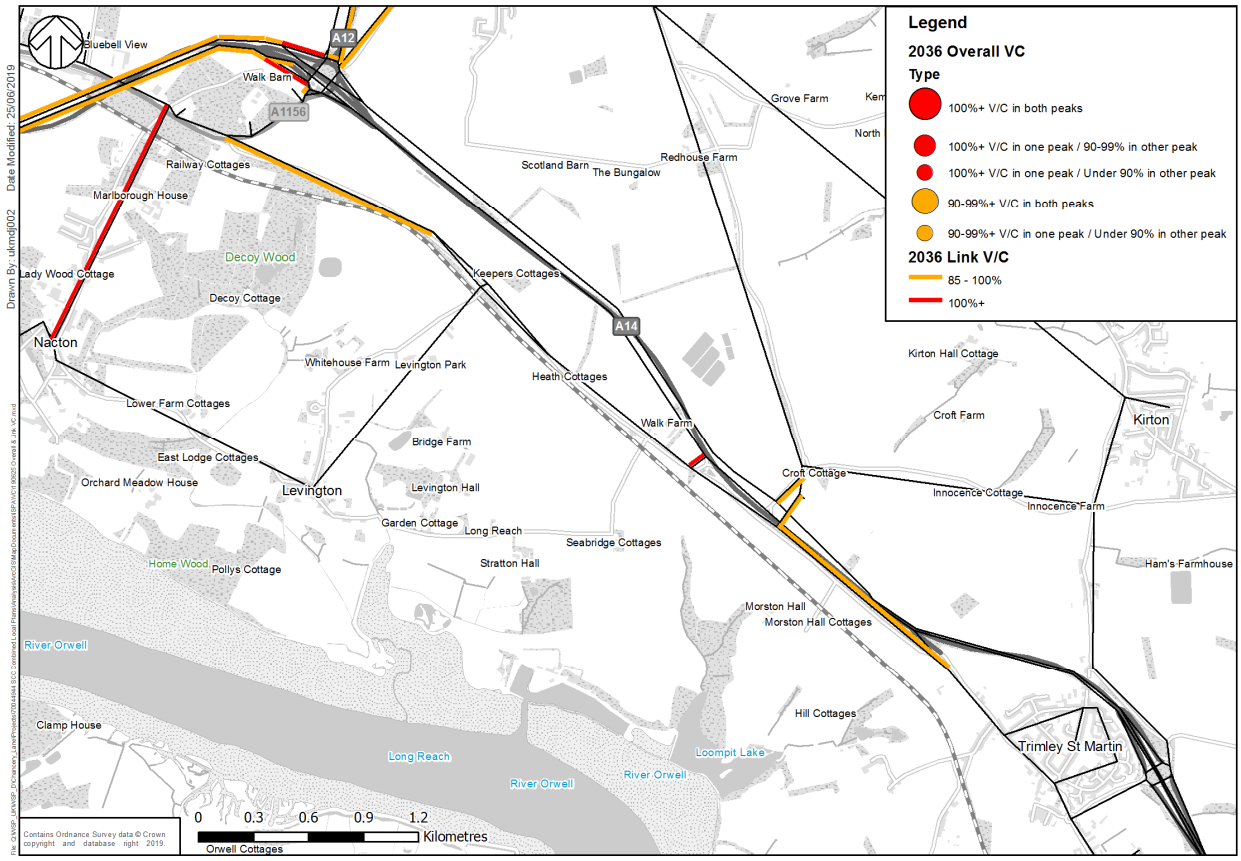

Figure 12 – Innocence Farm – 2036 Links and Junctions with V/C 85%+

3.8. IPSWICH RESULTS SUMMARY

3.8.1. Several of the A1214 corridor junctions operate with an overall V/C greater than 85%.

- A1214 / Dale Hill Lane – approaching capacity in AM/PM peaks in 2036
- A1214 / Henley Road – AM Peak approaching capacity in 2026, over capacity in 2036. PM Peak approaching capacity in 2036
- A1214 / Westerfield Road – approaching capacity in AM/PM peaks in 2026, over capacity in 2036 AM/PM peaks
- A1214 / Tuddenham Road – approaching capacity in AM/PM peaks in 2026/2036, over capacity in 2036 AM/PM peaks
- A1214 / Rushmere Road – approaching capacity in PM peaks

3.8.2. V/C results show congestion in the AM and PM peak on Key Street/College St and St Helens Street / Old Foundry Road / Crown Street corridors in Ipswich town centre.

3.8.3. Figure 13 shows the overall junction V/C and link based V/C above 85% within Ipswich in 2026.

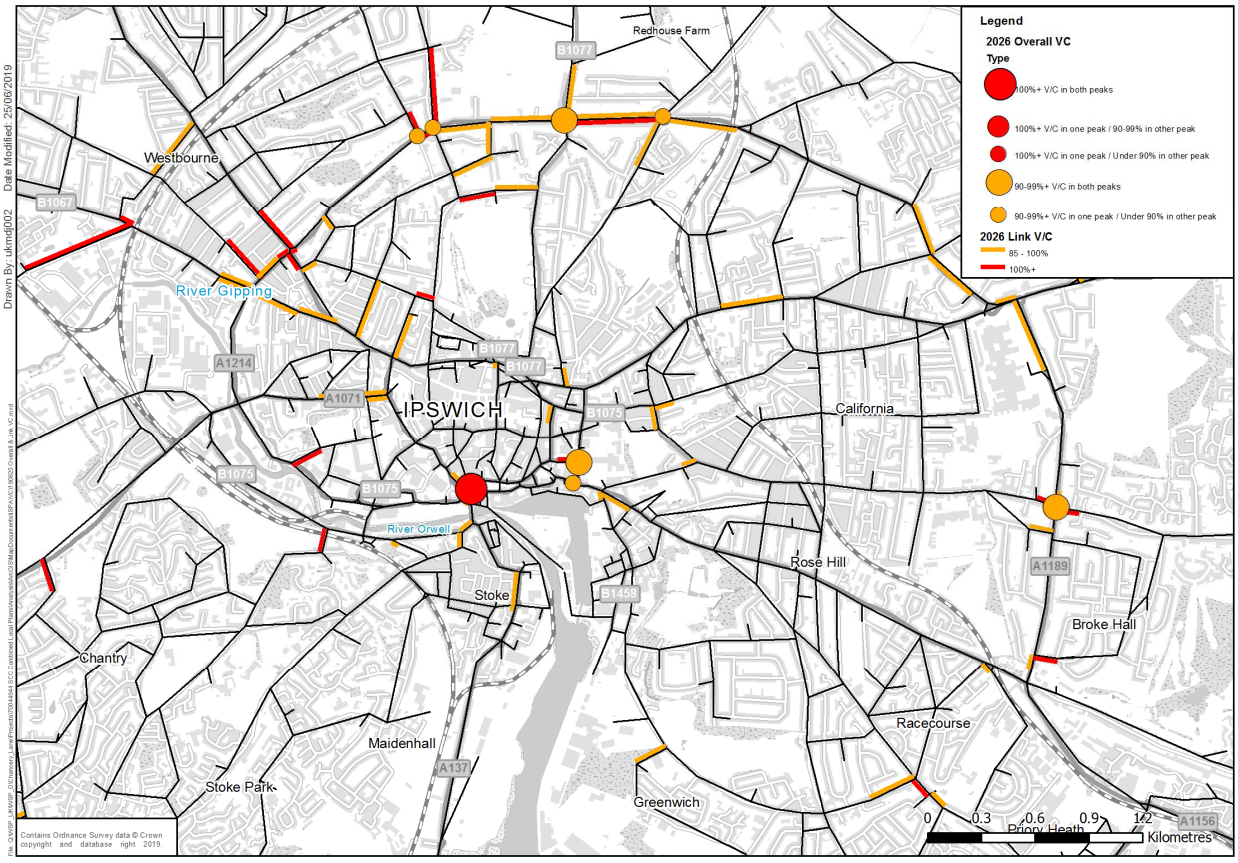

Figure 13 – Ipswich – 2026 Links and Junctions with V/C 85%+

Figure 14 shows the overall junction V/C and link based V/C above 85% within Ipswich in 2036.

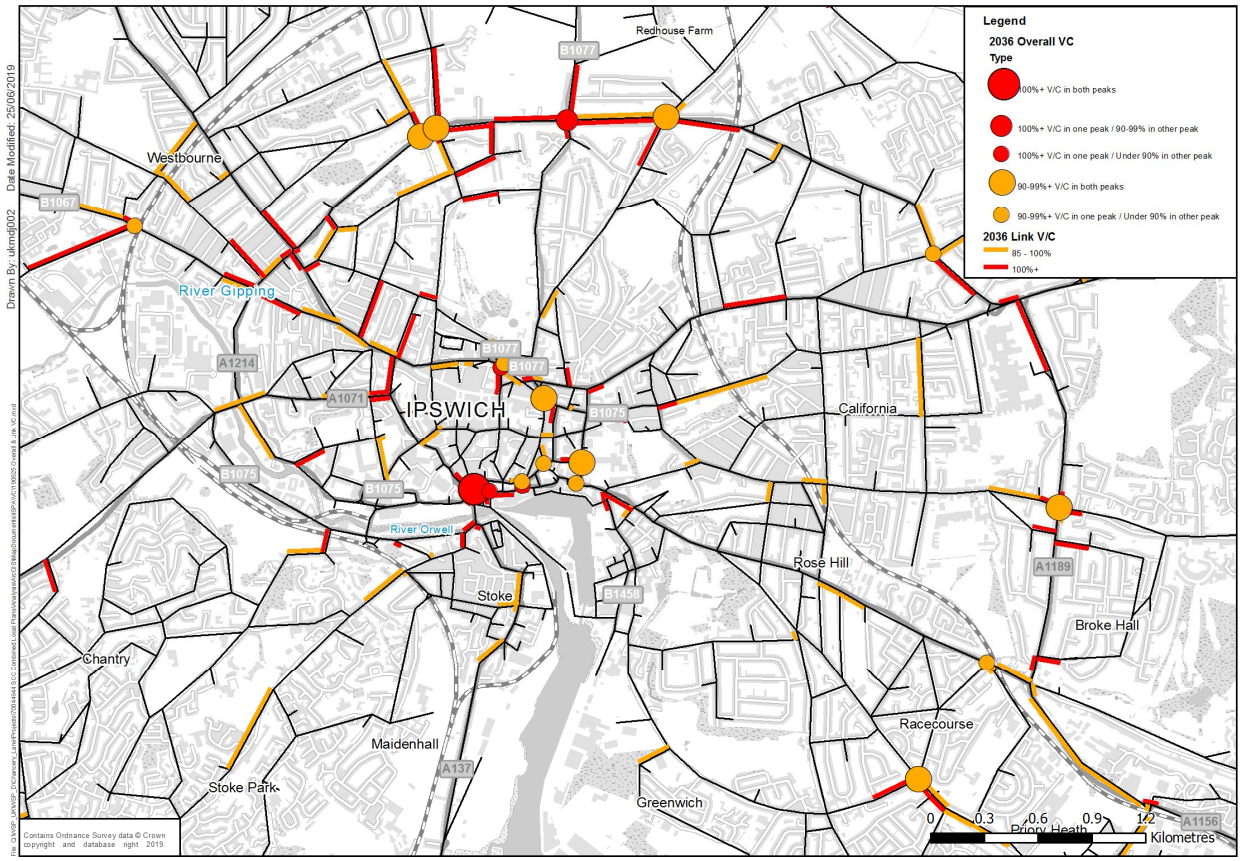

Figure 14 – Ipswich – 2036 Links and Junctions with V/C 85%+

3.9. BABERGH RESULTS SUMMARY

WEST / SOUTH WEST OF IPSWICH

3.9.1. The A1071 is over capacity on the west approach to Hadleigh Road in the AM and PM peaks in 2026/36. The A1071 / B1113 (Beagle roundabout) is also approaching or over capacity on multiple arms during the PM peak in 2026/36. Congestion in this area is significantly affected by the increasing delay at the A12 approach to the Copdock Interchange (A14 Junction 55) which does not include any mitigation in the modelling. The high delay on the A12 approach leads to increased pressure on adjacent non-SRN road network as traffic opts to seek alternative routes.

3.9.2. Figure 15 shows the 2026 V/C performance for the west and south-western edge of Ipswich which is within Babergh.

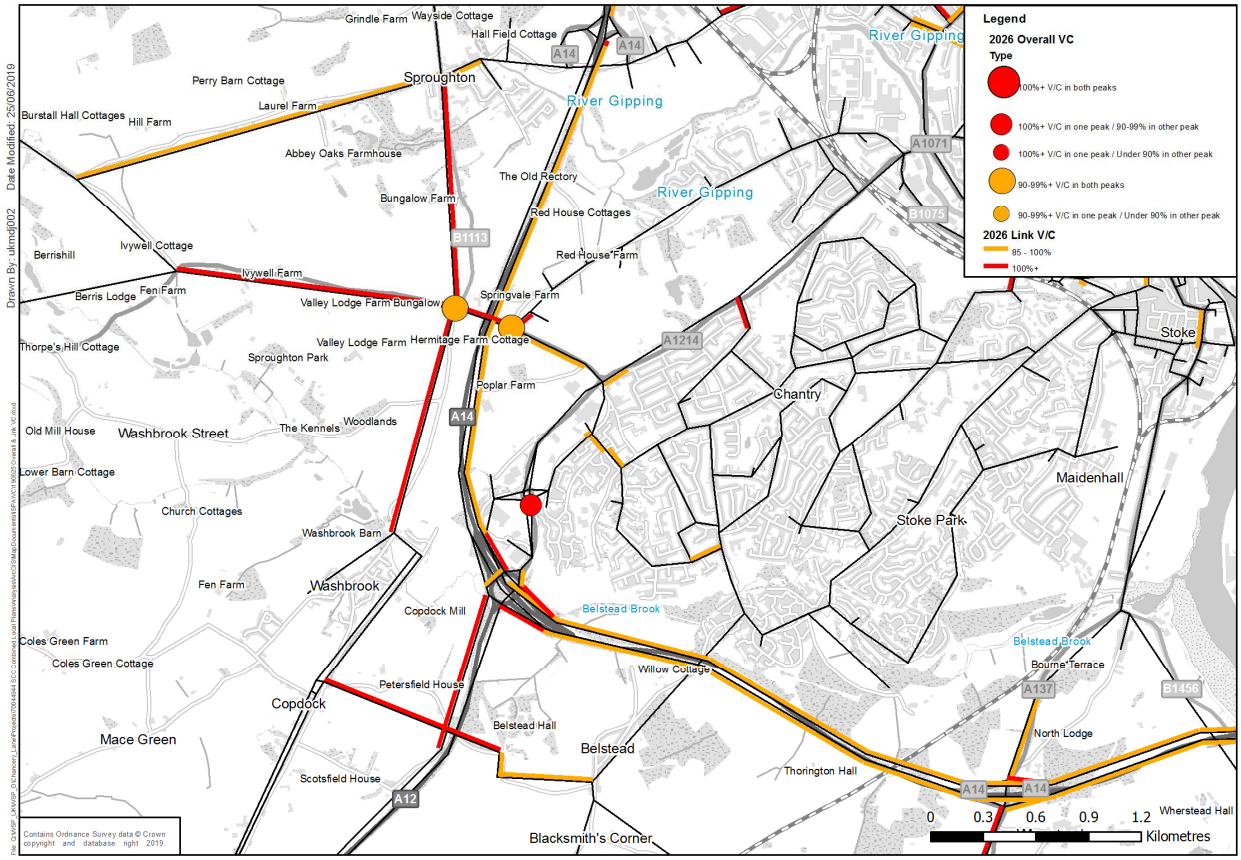

Figure 15 – West / South West of Ipswich – 2026 Links and Junctions with V/C 85%+

3.9.3. Figure 16 shows the 2026 V/C performance for the west and south-western edge of Ipswich which is within Babergh.

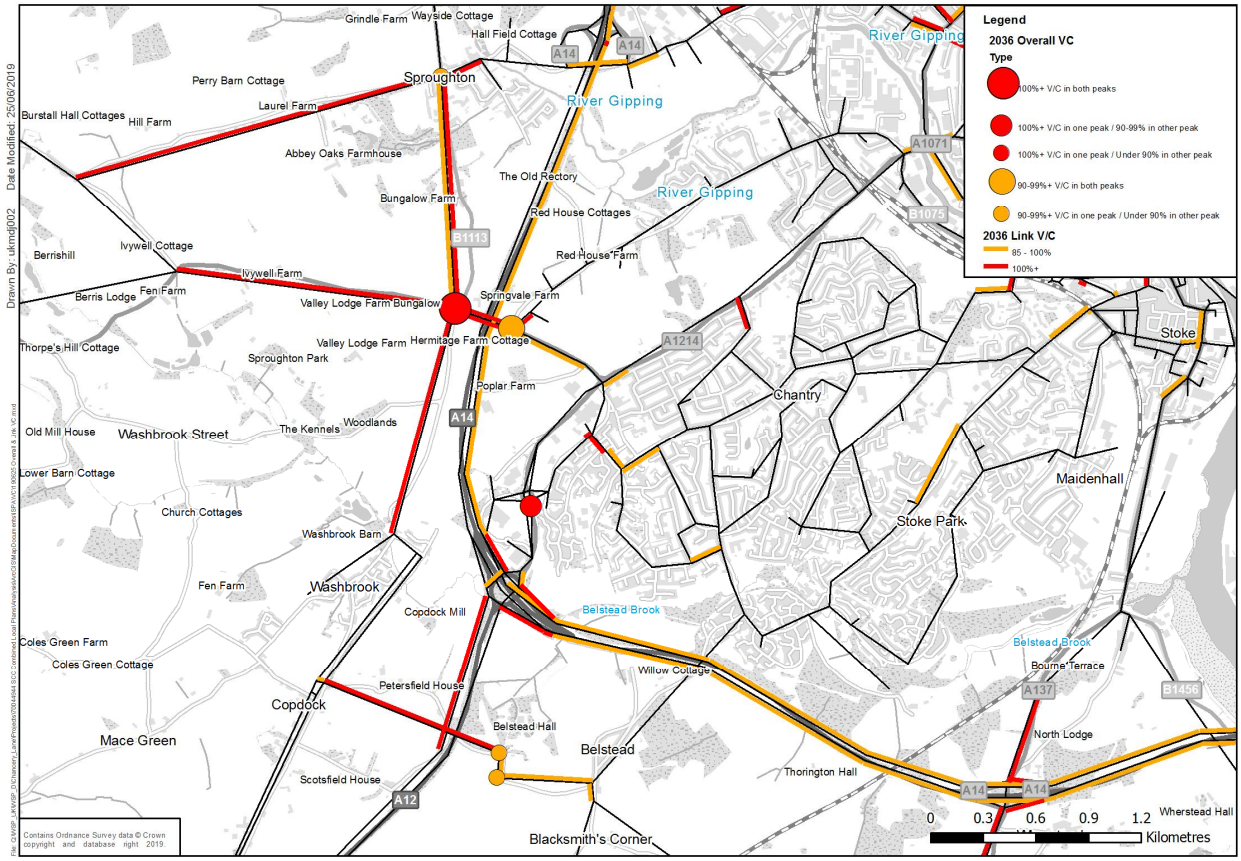

Figure 16 – West / South West of Ipswich – 2036 Links and Junctions with V/C 85%+

SUDBURY

3.9.4. There is congestion within Sudbury and on the approach routes to Sudbury. The A134 is congested between Valley Road and the A1071 in both directions in AM/PM 2026/36. The A131 is congested between Bulmer Road and the B1115 in both directions in AM/PM 2026/36.

3.9.5. Figure 17 presents the V/C performance for Sudbury in 2026.

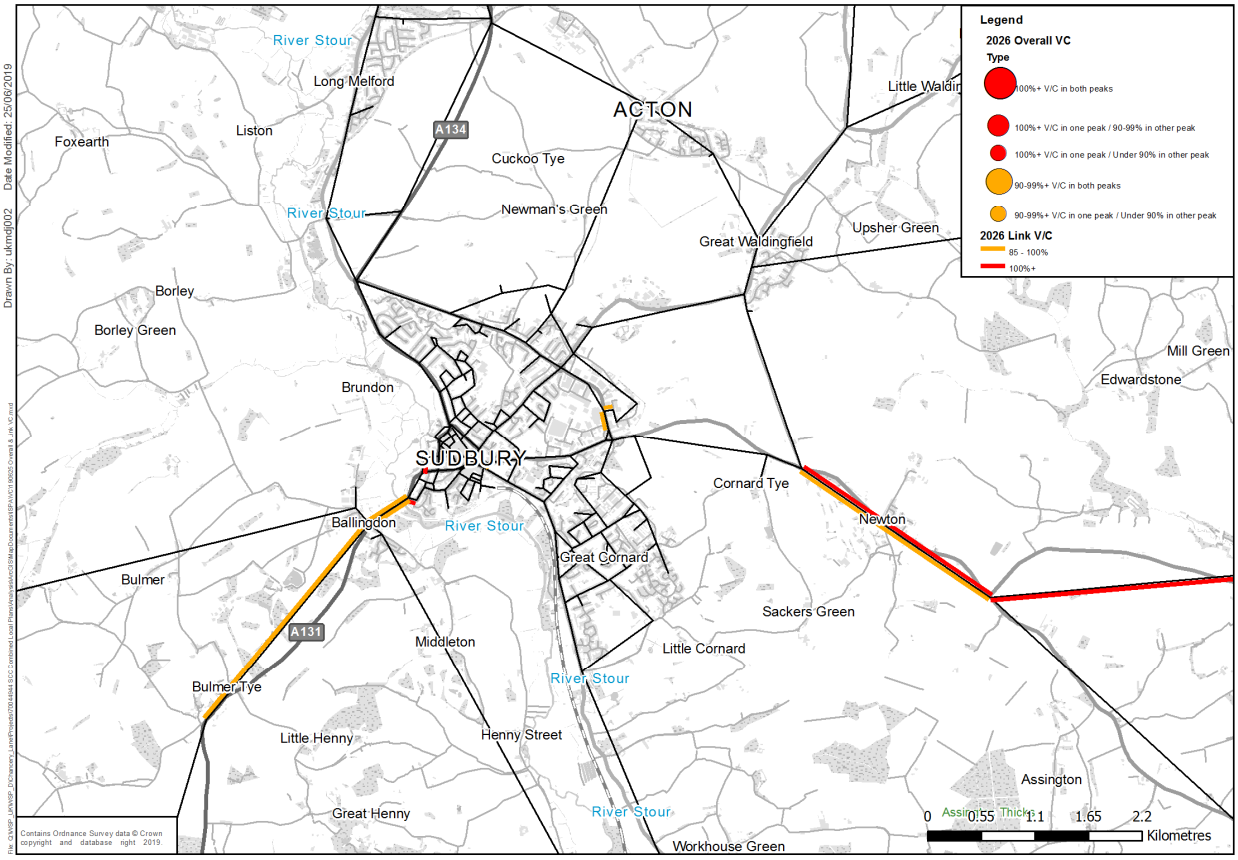

Figure 17 – Sudbury – 2026 Links and Junctions with V/C 85%+

3.9.6. Figure 18 shows the V/C performance for Sudbury in 2036.

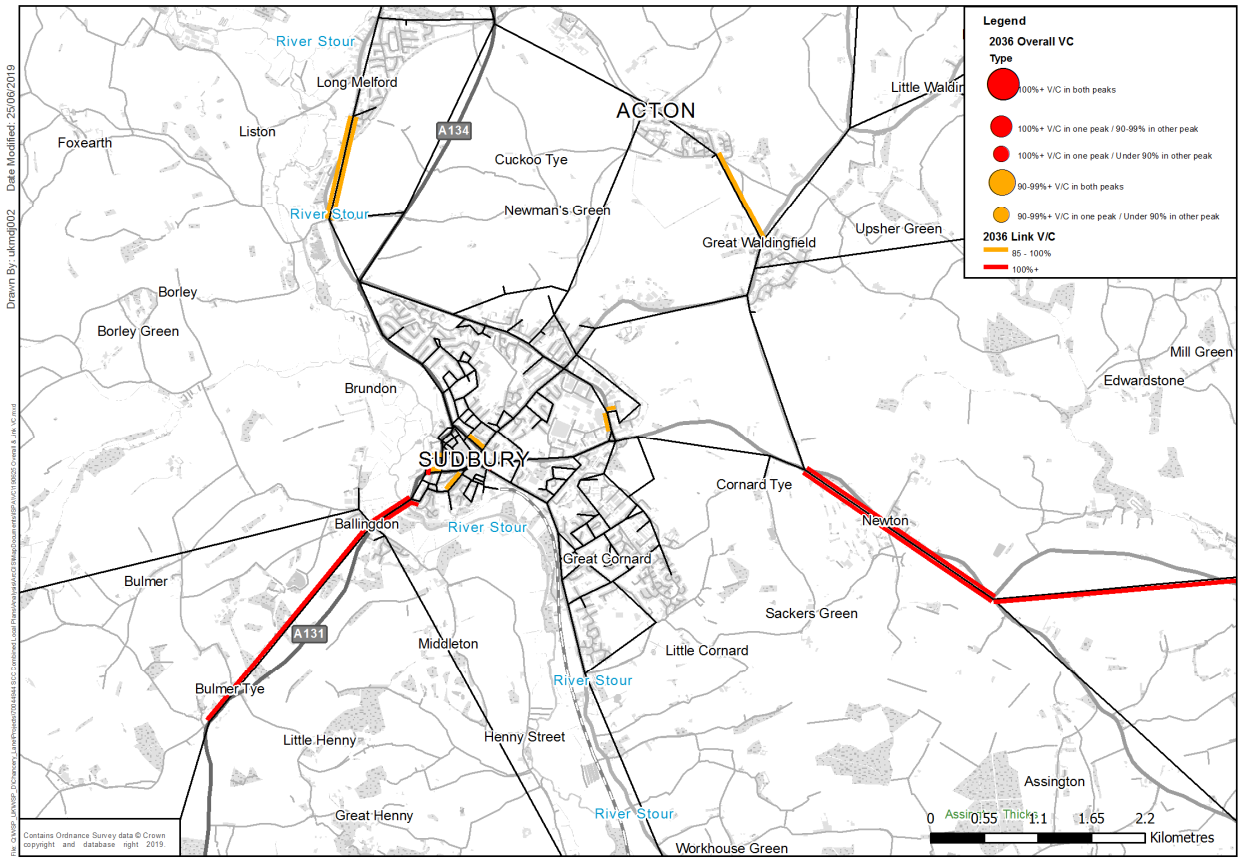

Figure 18 – Sudbury – 2036 Links and Junctions with V/C 85%+

BRANTHAM

3.9.7. The A137 through Brantham is shown to be operating close to and over-capacity in 2026 and 2036. The issues at Brantham are in part to due to a potential lack of model detail at this location given this location is at the edge of the detailed simulation network within the model. There is a significant level of development associated with the Brantham Industrial Estate which has been included at this location.

3.9.8. Figure 19 shows V/C performance around Brantham in 2026.

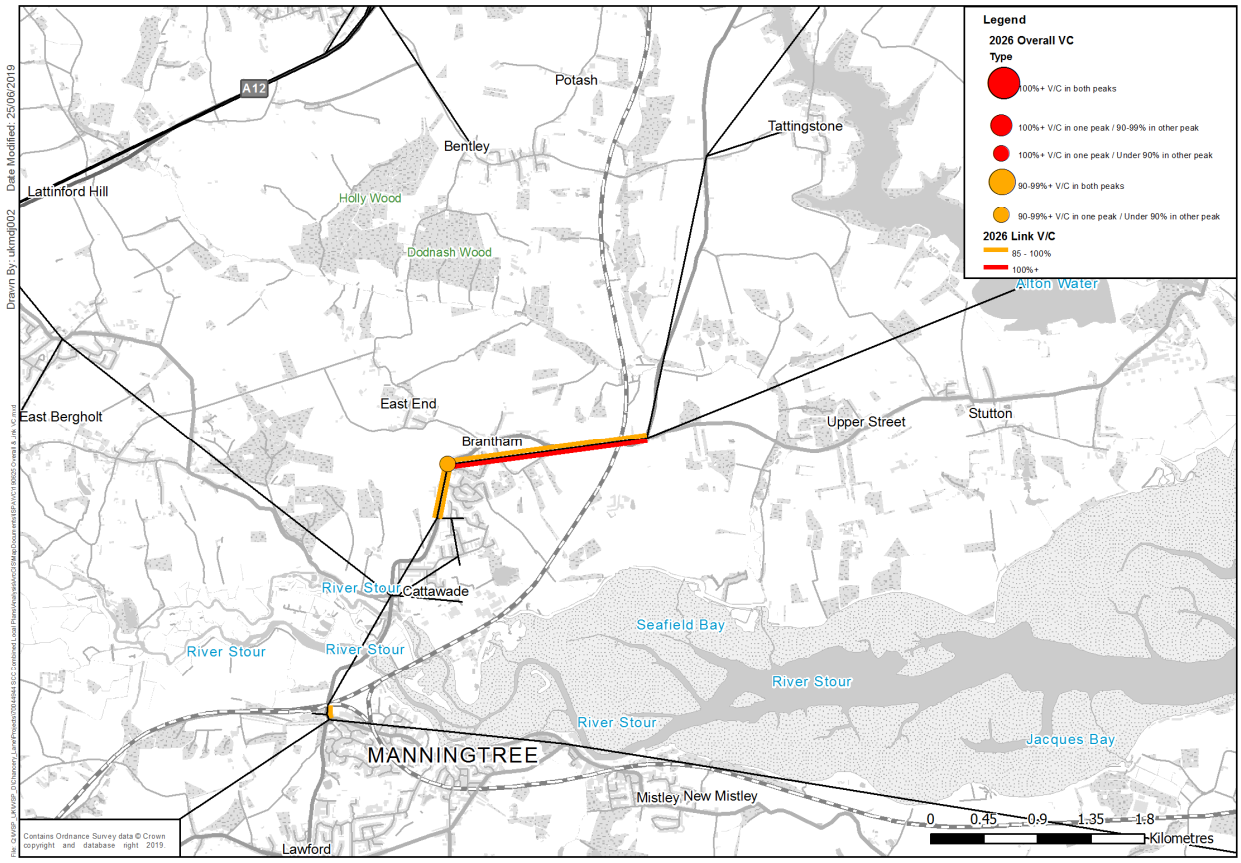

Figure 19 – Brantham – 2026 Links and Junctions with V/C 85%+

3.9.9. Figure 20 highlights the V/C performance in 2036 around Brantham.

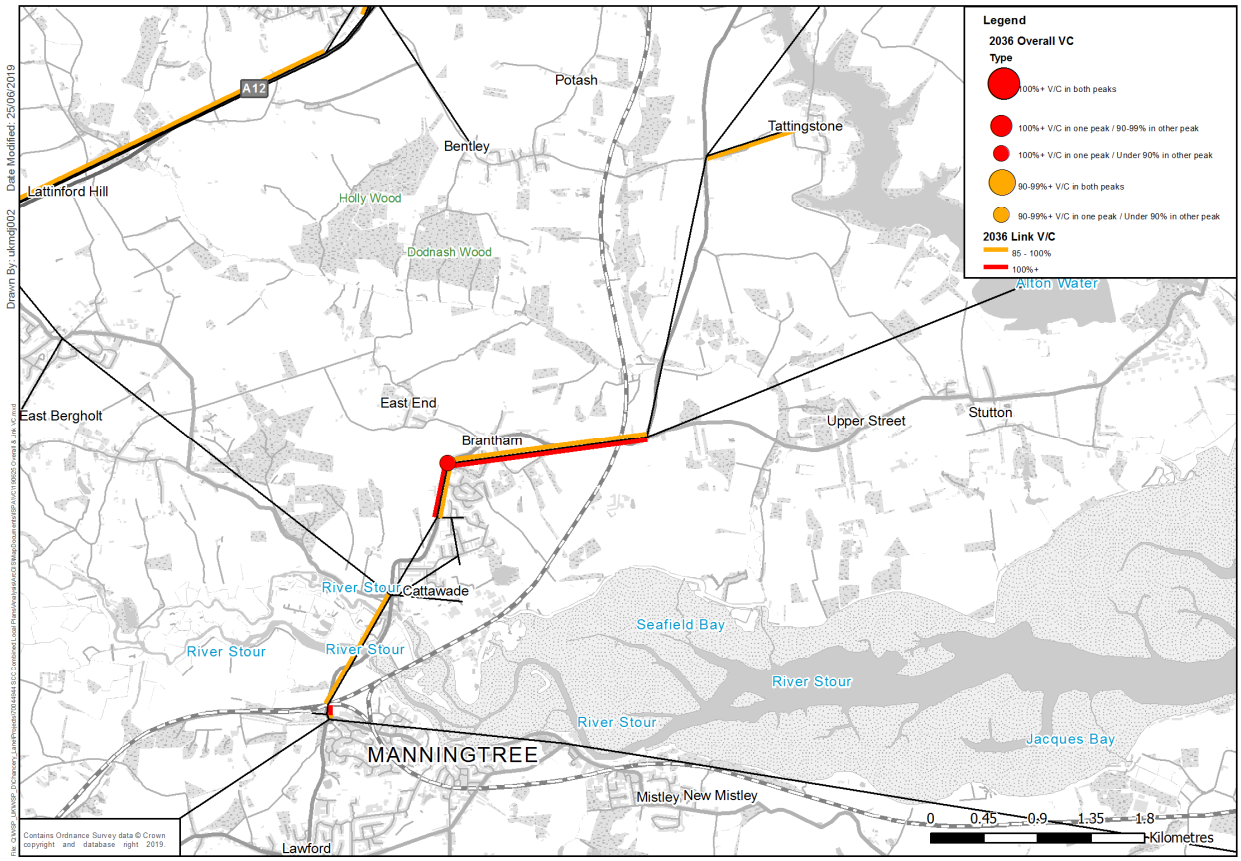

Figure 20 – Brantham – 2026 Links and Junctions with V/C 85%+

3.10. MID SUFFOLK RESULTS SUMMARY

A140 CORRIDOR

3.10.1. The A140/A1120 Junction is over capacity in the AM and PM peaks periods in 2026/36

3.10.2. The A140/ Workhouse Road / Stoke Road Junction is over capacity in the AM and PM peaks periods in 2026/36

3.10.3. Several approach roads to the A140 between Workhouse Road and the Scole Bridge are nearing or over capacity in the AM/PM peak in 2026/36. The A140 at the Scole Bridge is over capacity in the 2026/36 AM Peak.

3.10.4. Figure 21 shows the V/C performance along the A140 corridor in 2026.

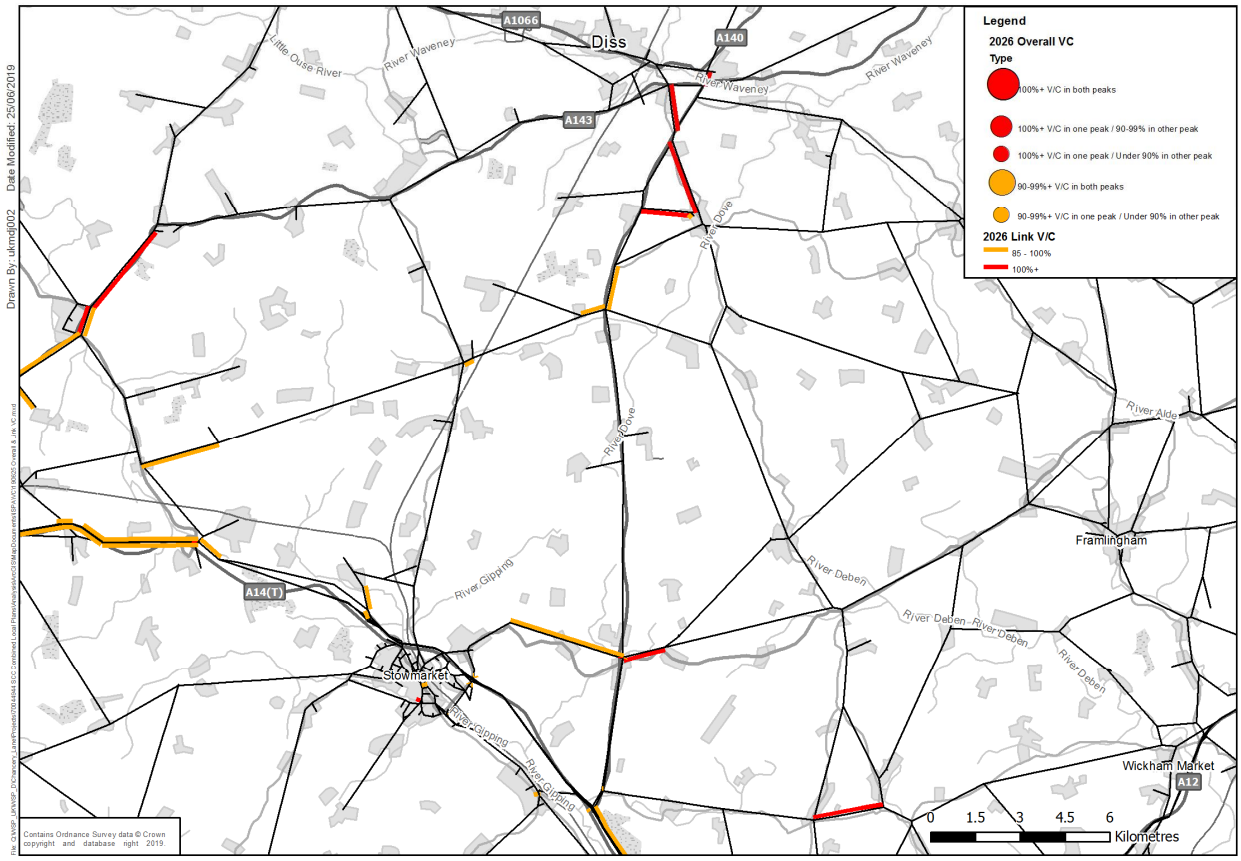

Figure 21 – A140 Corridor – 2026 Links and Junctions with V/C 85%+

3.10.5. Figure 22 shows the V/C performance along the A140 corridor in 2036.

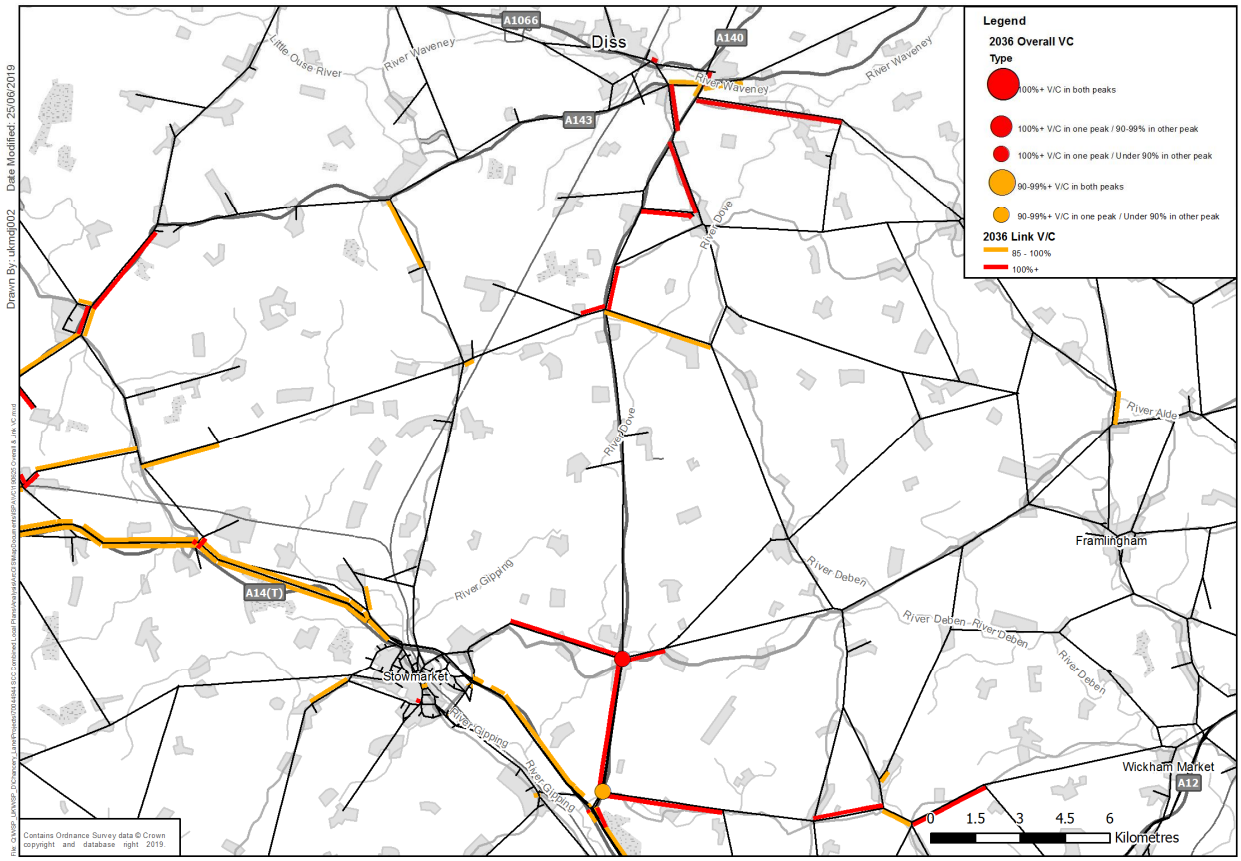

Figure 22 – A140 Corridor – 2036 Links and Junctions with V/C 85%+

STOWMARKET

3.10.6. There is localised congestion within Stowmarket in the 2026/36 AM and PM peaks. The south and east approaches of the B1115 / Combs Lane junction is approaching capacity in the 2026/36 PM peak. The north approach of the Fishponds Way / Tot Hill junction is approaching capacity in the AM peak in 2026, and over-capacity in the AM peak in 2036. The south approach is approaching capacity in the PM peak in 2026/36. Figure 23 presents the V/C performance in and around Stowmarket in 2026.

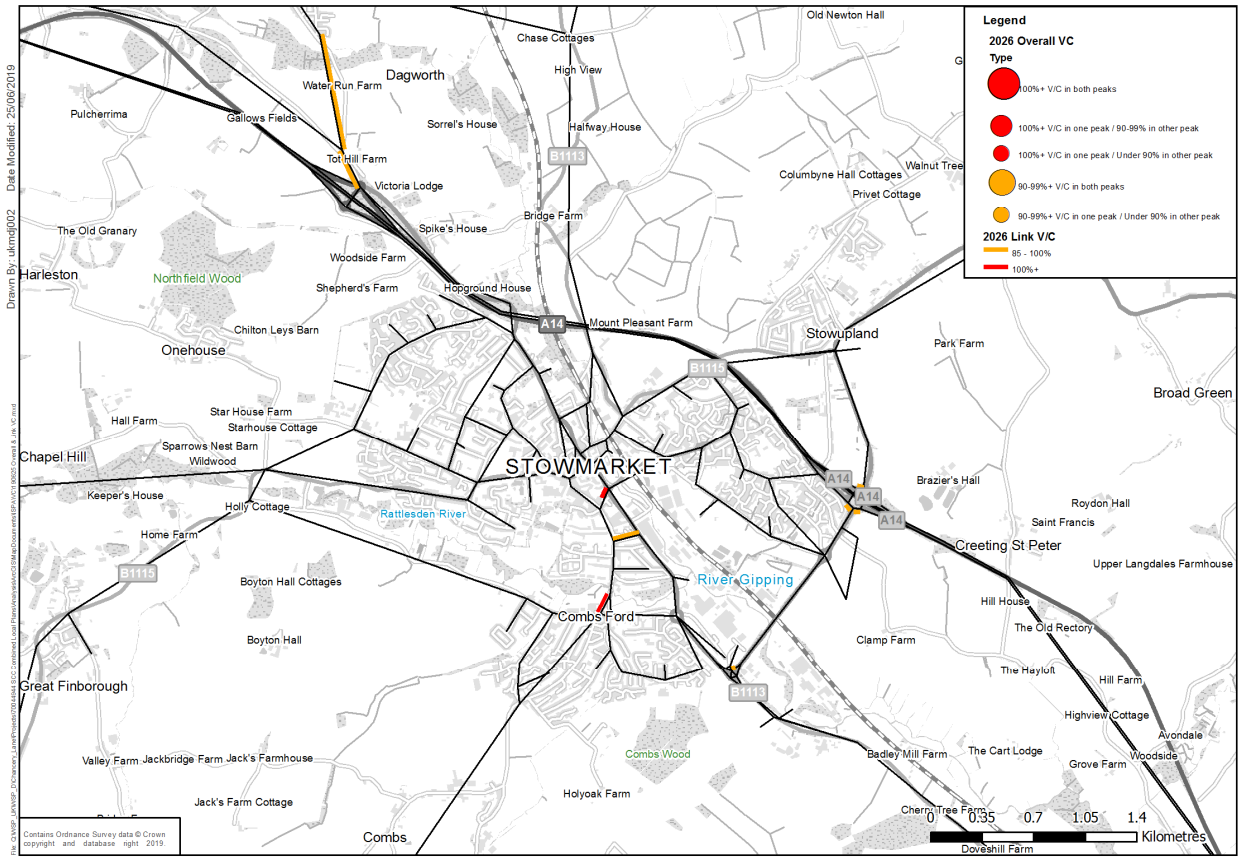

Figure 23 – Stowmarket – 2026 Links and Junctions with V/C 85%+

3.10.7. Figure 24 shows the V/C performance in and around Stowmarket in 2036.

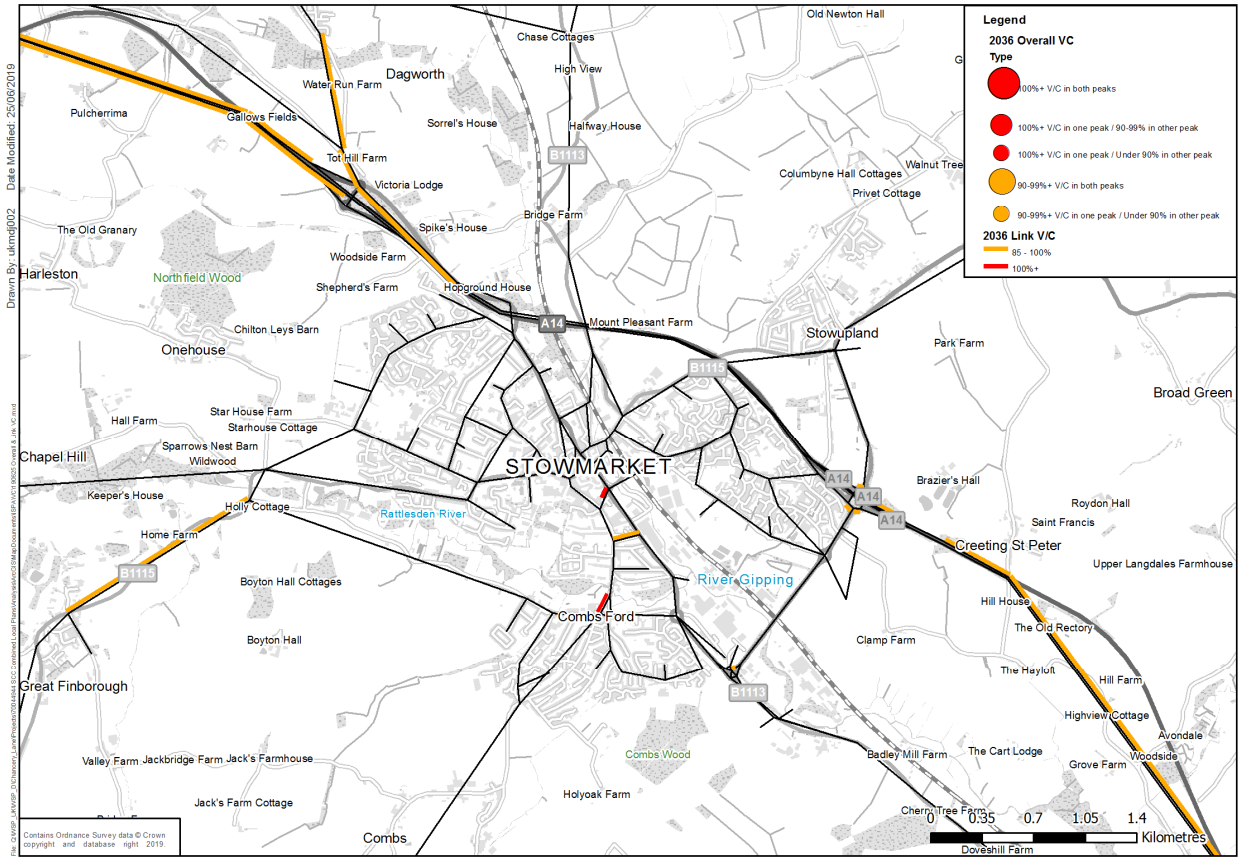

Figure 24 – Stowmarket – 2036 Links and Junctions with V/C 85%+

4

CONCLUSIONS

4. CONCLUSIONS

4.1. INTRODUCTION

4.1.1. WSP have undertaken additional strategic traffic modelling to inform an assessment of the Local Plans for all LPAs within the ISPA. The focus of this report is on the following forecast years:

- 2026; representing an interim forecast year in the middle of the period between the 2016 base year model and the end of the Local Plan period
- 2036; representing the end of the Local Plan period

4.1.2. The SATURN based Highway Assignment Model (HAM) within the Suffolk County Transport Model (SCTM) has been used to assess the forecast growth in housing and jobs. The SCTM has been updated and validated for a base year of 2016 to ensure it provides a suitable basis from which to generate 2026 and 2036 traffic forecasts.

4.2. MODEL RUNS AND REPORTING

4.2.1. The following forecast model runs have been considered:

- 2026/36 AM/PM
- 2026/36 AM/PM with demand adjustments

4.2.2. The methodology underpinning the forecast modelling is detailed within the following reports

- MR1 SCTM Methodology Report v2 (January 2019)
- ISPA Local Plan Modelling Methodology Report (June 2019)

4.2.3. The model runs have been developed to assess the highway impacts of the preferred option for Ipswich Borough and Suffolk Coastal Planning Area, as well as development options for Babergh and Mid Suffolk.

4.2.4. Demand adjustments have been made to both 2026 and 2036 forecasts representing a targeted model shift away from private car travel. The model assignments including the demand adjustment are the focus of the results within this report.

4.3. SUFFOLK COASTAL MODELLING RESULTS

4.3.1. Saxmundham is highlighted as showing capacity issues at the B1121 / Chantry Road signals, particularly the eastern approach to this junction, though by 2036 the Chantry Road arm also shows issues.

4.3.2. Melton shows issues at the signalised crossroads (B1438 / A1152) has approaches which are over-capacity in both 2026 and 2036. The junction overall operates within capacity in 2026 and 2036.

4.3.3. The A12 corridor to the west of Woodbridge is shown to have capacity issues at both the A12 / B1079 and A12 / A1152 roundabouts in both 2026 and 2036, with southbound approaches from the A12 going over-capacity. The A12 / B1438 roundabout has overall capacity issues in 2036. The single carriageway section of the A12 is shown to be approaching capacity in both 2026 and 2036.

4.3.4. The majority of locations within Felixstowe are shown to operate within capacity in 2026 and 2036. Candlet Road and approaches along Garrison Lane are show to be nearing capacity in both forecast

years. The Candlet Road approach to the A14 Dockspur roundabout is shown to be over-capacity in 2036.

4.3.5. Access links to / from the A14 adjacent to Innocence Farm are shown to operate within capacity in 2026, but are over capacity or reaching capacity in 2036. The overbridge included as part of the access strategy for this development is shown to be nearing capacity in the southbound direction in 2036.

4.4. IPSWICH MODELLING RESULTS

4.4.1. Ipswich is highlighted as the location which benefits the most from the ISPA demand adjustments which have been applied.

4.4.2. Numerous junction approaches along the A1214 corridor around Ipswich are shown to be over or close to capacity in both 2026 and 2036. Junctions in and around the Star Lane gyratory are shown to have capacity issues in both forecast years. Other junctions which show overall capacity issues include Nacton Road / Landseer Road and the St Augustine roundabout (Bucklesham Road / Felixstowe Road)

4.5. BABERGH MODELLING RESULTS

4.5.1. To the west and south-west of Ipswich, the Beagle roundabout (A1071 / B1113 / Swan Hill) is shown to have overall capacity issues, with multiple arms over-capacity in both 2026 and 2036. The A1071 / Hadleigh signalised junction is highlighted as having capacity issues in both forecast years. The congestion in this area is heavily influenced by delays at the A14 J55 Copdock Interchange which is not migrated in the modelling detailed within this report. Delays on the A12 approach, as well as the slip road approaches, is very significant which leads to traffic to use alternative routes to avoid this delay, increasing pressure on the surrounding SCC highway network.

4.5.2. Sudbury is shown generally operate within capacity with the town itself in both forecast years. The southern A131 approach to / from Sudbury and A134 / A1071 junction show capacity issues in both forecast years, going over capacity in 2036.

4.5.3. Brantham is shown to have capacity issues in both forecast years, with the A137 over capacity in both forecast years. This is in part due to the level of network detail within the model as well as the high level of development associated with Brantham Industrial Estate.

4.6. MID SUFFOLK MODELLING RESULTS

4.6.1. The A140 corridor is shown to have capacity issues at multiple locations including the A140 / A1120 staggered crossroads, A140 / Workhouse Road / Stoke Road junction and multiple locations around Eye.

4.6.2. Stowmarket is shown to generally operate within capacity in both forecast years, though isolated link approaches to Gipping Way and Ipswich Road are shown to have capacity issues in both forecast years.

4.7. SUMMARY

4.7.1. The modelling detailed within this report is considered to be a robust basis which enables each of the LPAs to be able to test the transport impacts of the proposed housing and job growth within their respective Local Plans.

4.7.2. The modelling detailed in this report represents an update Preferred Option modelling undertaken for Ipswich and Suffolk Coastal, and development options modelled for Babergh and Mid Suffolk. The modelling tasks account of demand adjustments based on assumptions on the propensity for a shift away from private car travel within locations within the ISPA boundary. The results have been presented to identify key junctions and links where overall V/C is shown to approach or go over capacity.

4.7.3. It is therefore recommended that this assessment is updated as reviews of Local Plans progress within each of the LPAs and the impact of specific allocations or mitigation tested using the strategic model where appropriate. The Preferred Option related to Babergh and Mid Suffolk can be incorporated in future modelling.

Appendix A

OVERALL V/C SUMMARY TABLES

Node	Description	LPA	Sector	2016 Base AM	2026 ISPA NoAdj AM	2026 ISPA wAdj AM	2036 ISPA NoAdj AM	2036 ISPA wAdj AM	2016 Base PM	2026 ISPA NoAdj PM	2026 ISPA wAdj PM	2036 ISPA NoAdj PM	2036 ISPA wAdj PM
5732	A1214 SB (south of Scrivener Drive Roundabout	Babergh	820 Babergh East	86	96	97	96	99	99	104	102	110	107
10061	Grimwade Street / Fore Street 2	Ipswich	800 Ipswich Central	86	92	90	95	93	71	79	77	84	85
10062	Fore Street / Grimwade St / Neptune Square	Ipswich	800 Ipswich Central	87	67	66	67	68	88	74	71	72	72
30107	A12 / Foxhall Road / Newbourne Road	Suffolk Coastal	832 Kesgrave/Martlesham/Rushm	91	0	0	0	0	88	0	0	0	0
3158	A12 / Woods Lane	Suffolk Coastal	822 Suffolk Coastal Central	76	89	87	92	92	70	86	85	91	89
3203	A140 Angel Hill / A1120 (West)	Mid Suffolk	816 Mid Suffolk Central	57	91	83	105	102	53	78	71	86	84
5805	A137 (near Brantham)	Babergh	820 Babergh East	61	78	80	82	83	73	100	97	107	107
10010	A1022 College St / Bridge St (by St Peter's)	Ipswich	800 Ipswich Central	78	101	100	102	102	72	103	102	103	103
10018	Star Lane A1156 / Grimwade Street	Ipswich	803 Ipswich SE	84	93	89	97	95	73	90	87	94	92
10048	Upper Orwell Street / Old Foundry Road / St Helen's Street	Ipswich	800 Ipswich Central	44	81	71	86	85	48	88	71	96	94
10067	Northgate Street / Old Foundry Road	Ipswich	800 Ipswich Central	6	6	7	6	6	9	97	13	113	103
10115	College Street / Foundry Lane	Ipswich	800 Ipswich Central	73	45	44	97	73	66	102	66	103	103
20043	Dale Hall Ln / A1214	Ipswich	801 Ipswich NW	70	82	83	90	88	82	90	86	98	96
20044	A1214 / Henley Road	Ipswich	801 Ipswich NW	69	91	85	104	100	67	77	71	97	93
20047	A1214 / B1077	Ipswich	802 Ipswich NE	69	95	95	107	105	64	91	86	100	99
20048	A1214 / Tuddenham Road	Ipswich	802 Ipswich NE	74	92	82	98	95	70	92	87	95	93
20061	Rushmere Road / Colchester Road	Ipswich	802 Ipswich NE	64	76	69	84	79	64	88	77	89	87
30142	B1067 / Sproughton Road	Ipswich	801 Ipswich NW	70	78	77	80	79	71	87	85	90	90
30150	A1071 / Hadleigh Road	Babergh	820 Babergh East	67	92	90	98	95	64	99	96	99	99
30241	Landseer Road / Nacton Road	Ipswich	803 Ipswich SE	54	87	74	90	86	64	89	78	99	89
30275	Heath Road / Foxhall Road	Ipswich	802 Ipswich NE	75	91	89	94	93	79	90	90	93	92
50034	B1113 / A1071	Babergh	820 Babergh East	82	99	99	101	103	67	93	90	106	103
50053	A12 / Grundisburgh Road	Suffolk Coastal	808 Woodbridge/Melton	73	89	87	93	92	68	94	91	97	96
3146	A140 southbound / B1078 Needham Road	Mid Suffolk	816 Mid Suffolk Central	67	84	83	88	86	52	75	71	81	80
5760	B1078 Coddenham Road / Kettle Lane / slip to A14 northbound	Mid Suffolk	816 Mid Suffolk Central	60	77	73	86	83	46	66	59	77	73
10068	Star Lane / Fore Street	Ipswich	800 Ipswich Central	48	42	40	94	92	54	52	46	55	51
30135	B1113 / Lower Street / High Street	Babergh	820 Babergh East	43	73	65	89	86	36	64	58	76	73
30225	Buck's Horns Lane/Church Lane	Babergh	820 Babergh East	25	68	56	89	76	25	83	77	107	99
30296	A1214 / A1189	Ipswich	802 Ipswich NE	62	84	78	86	85	65	84	77	86	84
30406	A12 / A1214 Roundabout – A1214 EB entry	Suffolk Coastal	832 Kesgrave/Martlesham/Rushm	76	85	83	88	87	54	65	62	68	66
30667	Central Avenue	Ipswich	803 Ipswich SE	60	77	70	86	80	9	11	9	11	10
70313	A1156 St Margaret's Street	Ipswich	800 Ipswich Central	47	80	72	90	87	47	75	61	85	84
2866	Langer Road / Beach Station Road - Felixstowe	Suffolk Coastal	809 Felixstowe	49	57	52	67	56	67	76	67	93	81
10013	Lower Orwell Street / Key Street	Ipswich	800 Ipswich Central	64	40	39	44	42	57	35	35	103	101
10014	Slade Street / A1156	Ipswich	800 Ipswich Central	72	44	43	45	44	62	40	40	97	43
10024	Great Colman St / A1156 St Margaret's St	Ipswich	800 Ipswich Central	26	52	43	54	55	32	48	40	88	78
10049	Bond Street / St Margaret's Street	Ipswich	800 Ipswich Central	58	68	60	73	72	54	78	63	88	84
10057	Lower Orwell Street / Star Lane	Ipswich	800 Ipswich Central	51	44	42	45	46	57	50	46	95	87
20014	A1214 / A137 / A1071 / Yarmouth Road	Ipswich	801 Ipswich NW	45	61	57	67	66	57	80	74	86	82
20057	Woodbridge Rd / Albion Hill / Belvedere Rd	Ipswich	802 Ipswich NE	60	70	59	78	73	61	76	68	86	82
30224	Buck's Horns Lane	Babergh	820 Babergh East	25	61	53	77	64	25	80	77	99	92
30250	Felixstowe Road/King's Way/Cobham Road	Ipswich	803 Ipswich SE	49	67	58	79	70	72	83	76	91	86
50050	A12 / B1438 (near Woodbridge)	Suffolk Coastal	808 Woodbridge/Melton	72	81	77	83	82	70	84	78	89	86
70008	Salthouse Street / Common Quay / Key Street	Ipswich	800 Ipswich Central	69	41	41	44	42	57	33	34	101	37

Appendix B

LINK BASED V/C SUMMARY TABLES

All	Name	District	Sector	2016 - WorstApproach	2026 NoAdj - WorstApproac	2026 wAdj - WorstApproach	2036 NoAdj - WorstApproac	2036 wAdj - WorstApproach	2016 - WorstApproach	2026 NoAdj - WorstApproac	2026 wAdj - WorstApproach	2036 NoAdj - WorstApproac	2036 wAdj - WorstApproach
30107	A12 / Foxhall Road / Newbourne Road	Suffolk Coastal	832 Kesgrave/Martl	109	0	0	0	0	99	0	0	0	0
3208	B1077 Stuston Lane / A140	Mid Suffolk	815 Mid Suffolk Nor	105	106	106	107	106	78	102	101	104	104
50034	B1113 / A1071	Babergh	820 Babergh East	104	117	114	133	129	84	111	108	122	118
50003	Norwich Rd / Station Rd	Mid Suffolk	816 Mid Suffolk Cer	103	105	105	111	109	103	105	105	108	106
3207	B1077 / A140	Mid Suffolk	815 Mid Suffolk Nor	103	106	106	107	107	105	112	111	119	119
20027	Norwich Rd / A1214 Valley Rd	Ipswich	801 Ipswich NW	103	113	108	124	118	100	104	102	111	107
10061	Grimwade Street / Fore Street 2	Ipswich	800 Ipswich Central	103	106	105	106	106	93	105	102	106	106
2910	A154 Garrison Lane/ High Rd West	Suffolk Coastal	809 Felixstowe	102	99	94	103	98	97	100	96	108	102
30273	A1189 Bixley Rd / Ashdown Way	Ipswich	803 Ipswich SE	102	110	102	119	111	64	103	97	111	106
30124	Old Norwich Rd / A1156 Bury Rd	Ipswich	801 Ipswich NW	102	103	102	103	102	97	100	99	102	100
3159	A1152 / Melton Rd / The Street	Suffolk Coastal	808 Woodbridge/M	93	107	105	113	112	89	108	103	112	109
20047	A1214 / B1077	Ipswich	802 Ipswich NE	101	107	105	119	114	87	103	102	109	108
30167	Ranelagh Rd / Ancaster Rd	Ipswich	804 Ipswich SW	101	107	102	108	107	72	92	76	95	91
30275	Heath Road / Foxhall Road	Ipswich	802 Ipswich NE	100	106	101	116	109	89	103	101	103	103
20014	A1214 / A137 / A1071 / Yarmouth Road	Ipswich	801 Ipswich NW	63	92	81	101	98	75	88	85	98	95
20026	A1214 Chevallier St / Norwich Rd	Ipswich	801 Ipswich NW	97	100	100	101	101	101	105	103	105	104
30240	Maryon Rd / Nacton Rd	Ipswich	803 Ipswich SE	88	96	87	102	100	101	88	77	103	91
10017	A1156 / Grimwade St	Ipswich	800 Ipswich Central	78	63	61	64	63	75	62	60	63	63
20043	Dale Hall Ln / A1214	Ipswich	801 Ipswich NW	97	110	105	111	111	95	104	101	109	107
30239	Nacton Rd / Lindbergh Rd	Ipswich	803 Ipswich SE	51	67	62	86	67	100	83	73	94	86
30225	Buck's Horns Lane/Church Lane	Babergh	820 Babergh East	46	113	107	126	123	43	106	102	117	114
30332	Lower Rd / Church Lane / Westerfield Rd	Suffolk Coastal	823 Suffolk Coastal	87	110	106	123	117	59	104	100	112	110
20044	A1214 / Henley Road	Ipswich	801 Ipswich NW	90	108	102	122	115	85	100	81	113	108
30158	A1214 London Rd / Robin Drive	Ipswich	804 Ipswich SW	99	107	101	124	109	52	57	52	69	56
3203	A140 Angel Hill / A1120 (West)	Mid Suffolk	816 Mid Suffolk Cer	65	107	94	130	125	63	101	85	112	110
3158	A12 / Woods Lane	Suffolk Coastal	822 Suffolk Coastal	88	106	104	112	112	80	93	93	93	95
30145	Chevallier Street / Bramford Lane	Ipswich	801 Ipswich NW	63	105	100	117	109	45	88	68	104	100
3153	B1079 Church Road / B1078 Swilland Roa	Suffolk Coastal	822 Suffolk Coastal	80	105	105	115	112	62	98	91	107	105
10018	Star Lane A1156 / Grimwade Street	Ipswich	803 Ipswich SE	85	105	102	106	106	90	102	99	106	103
3316	A134 / A1141	Babergh	818 Babergh West	62	105	103	107	106	66	65	65	65	65
20042	Park Rd / Henley Rd	Ipswich	801 Ipswich NW	93	105	101	112	108	70	93	76	109	105
50053	A12 / Grundisburgh Road	Suffolk Coastal	808 Woodbridge/M	99	104	104	106	104	83	102	101	109	102
10008	A137 Grafton Way / Bridge St	Ipswich	800 Ipswich Central	65	104	93	106	106	49	80	64	93	81
30142	B1067 / Sproughton Road	Ipswich	801 Ipswich NW	99	104	103	107	104	93	101	98	104	102
30135	B1113 / Lower Street / High Street	Babergh	820 Babergh East	68	104	90	122	119	71	96	96	102	101
30161	Scrivener Drive / Shepherd Drive Roundab	Babergh	820 Babergh East	66	104	92	119	106	98	102	100	102	101
10025	A1156 St Margaret's Street / B1077 St Ma	Ipswich	802 Ipswich NE	55	83	78	97	87	75	83	75	91	89
1905	A12 / Foxhall Road / Newbourne Road	Suffolk Coastal	832 Kesgrave/Martl	0	83	81	85	83	0	88	83	79	88
30210	B1073 Burrell Rd / Willoughby Rd	Ipswich	804 Ipswich SW	89	103	93	113	104	61	83	67	88	77
20072	Back Hamlet / Fore Hamlet / Duck St	Ipswich	800 Ipswich Central	68	103	92	111	105	56	98	67	108	105
10020	St Helens Street / Grimwade St / Argyle S	Ipswich	800 Ipswich Central	90	83	76	92	90	70	70	56	80	77
3202	Stowmarket Road / Pains Hill / Angel Hill -	Mid Suffolk	816 Mid Suffolk Cer	76	103	102	110	106	68	100	100	109	107
5456	A1152 / Station Rd	Suffolk Coastal	808 Woodbridge/M	93	103	102	103	103	89	93	93	88	90
30150	A1071 / Hadleigh Road	Babergh	820 Babergh East	100	102	101	109	104	93	103	101	106	105
10009	Bridge St / College St	Ipswich	800 Ipswich Central	94	102	102	102	102	96	101	102	101	101
2787	A134 Sudbury Road / Boxford Lane	Babergh	819 Babergh Centra	98	102	102	105	104	98	103	103	107	105
10007	Grey Friars Rd / Star Ln / College St / Bridg	Ipswich	800 Ipswich Central	76	102	102	102	102	76	102	102	104	102
2779	Milner Rd / Mid Link	Babergh	813 Sudbury	98	102	93	102	99	41	43	38	45	41
3146	A140 southbound / B1078 Needham Roa	Mid Suffolk	816 Mid Suffolk Cer	69	102	100	102	102	60	101	95	104	102
3697	Stowmarket Road / B1113 Bramford Rd /	Mid Suffolk	817 Mid Suffolk Sou	64	79	75	94	94	66	74	72	83	81
30296	A1214 / A1189	Ipswich	802 Ipswich NE	73	101	98	103	103	81	100	92	105	101
3245	A143 Old Bury Road / A143 Scole Stuston	Mid Suffolk	815 Mid Suffolk Nor	70	101	101	107	106	61	77	76	89	86
2325	Ipswich Rd / Poplar Hill	Mid Suffolk	810 Stowmarket	68	101	100	104	103	46	66	60	86	78
10010	A1022 College St / Bridge St (by St Peter's	Ipswich	800 Ipswich Central	78	101	100	102	102	72	103	102	103	103
2715	A131 Cross St / Walnut Tree Lane	Babergh	813 Sudbury	84	101	95	102	102	88	103	102	103	102
20005	Princes St / A137 W End Road / Commerc	Ipswich	800 Ipswich Central	49	57	53	59	58	39	48	41	51	47
20261	Henley Rd / Elsmere Rd / Constitution Hil	Ipswich	801 Ipswich NW	83	101	96	103	99	62	92	94	106	103
20069	St Helens Street / Spring Rd / Warwick Rd	Ipswich	802 Ipswich NE	51	101	94	109	103	53	93	48	96	57
30241	Landseer Road / Nacton Road	Ipswich	803 Ipswich SE	79	101	95	101	100	87	103	103	104	103
20025	B1067 Bramford Rd / Yarmouth Rd / Chev	Ipswich	801 Ipswich NW	76	100	92	108	104	75	101	94	107	103
70377	Bixley Road / Penshurst Rd	Ipswich	802 Ipswich NE	56	101	59	111	103	51	60	56	59	59
10049	Bond Street / St Margaret's Street	Ipswich	800 Ipswich Central	58	101	96	102	103	56	97	80	107	100
2785	A131 Cross St / B1115 Church St	Babergh	813 Sudbury	74	101	93	102	102	89	102	102	103	102
3931	Workhouse Rd / Stoke Rd / A140	Mid Suffolk	816 Mid Suffolk Cer	81	100	99	107	106	86	100	100	105	105
10022	Woodbridge Rd / Christchurch St	Ipswich	800 Ipswich Central	70	100	96	107	103	74	95	89	101	98
3883	A1088 Ixworth Rd / The Street / Heath Rd	Mid Suffolk	816 Mid Suffolk Cer	74	100	98	99	99	39	49	48	59	58
70001	Duke Street / Coprolite Street	Ipswich	803 Ipswich SE	34	100	38	111	101	41	57	48	105	102
30215	A137 Vernon St / Mather Way / Hawes St	Ipswich	804 Ipswich SW	58	100	87	100	99	44	57	51	61	58
30114	A12 / A1214 / Main Rd	Suffolk Coastal	832 Kesgrave/Martl	48	54	53	58	54	57	68	65	69	68
2678	A131 / Newton Rd	Babergh	813 Sudbury	74	100	89	101	100	70	81	76	96	88
30125	Norwich Rd / White House Rd	Ipswich	801 Ipswich NW	98	100	100	98	98	65	94	88	101	95
5885	A1152 Wilford Bridge Rd / Melton Station	Suffolk Coastal	808 Woodbridge/M	45	100	48	103	101	43	46	45	45	45
30223	Buck's Horns Ln / Grove Hill	Babergh	820 Babergh East	46	100	100	100	100	43	100	100	100	100
30224	Buck's Horns Lane	Babergh	820 Babergh East	46	100	100	100	100	43	100	100	100	100
5805	A137 (near Brantham)	Babergh	820 Babergh East	75	92	100	98	101	84	106	105	111	112
6014	B1438 / California / Old Barrack Rd	Suffolk Coastal	808 Woodbridge/M	77	87	78	96	87	97	105	103	116	106
1008	A140 / Castleton Way	Mid Suffolk	815 Mid Suffolk Nor	56	92	91	101	101	94	105	105	112	112
5732	A1214 SB (south of Scrivener Drive Round	Babergh	820 Babergh East	86	96	97	96	99	99	104	102	110	107
20028	Norwich Rd / Anglesea Rd	Ipswich	801 Ipswich NW	77	95	95	97	96	53	103	70	108	105
5637	Valley Rd A1214 / Graham Avenue	Ipswich	801 Ipswich NW	33	35	37	41	40	65	103	97	104	104
10115	College Street / Foundry Lane	Ipswich	800 Ipswich Central	79	70	74	117	111	73	103	79	104	104
20016	Portman Road / Handford Road	Ipswich	801 Ipswich NW	82	92	89	93	90	91	103	99	108	105
10002	A1071 / Civic Drive	Ipswich	800 Ipswich Central	82	95	81	101	102	100	102	98	104	101
20017	Portman Road / Sir Alf Ramsey Way	Ipswich	801 Ipswich NW	38	43	36	43	38	75	102	83	113	89
2400	A1308 Gipping Way / B1115 Navigation A	Mid Suffolk	810 Stowmarket	68	77	62	81	68	98	102	100	103	101
20031	Anglesea Rd / Henley Rd	Ipswich	801 Ipswich NW	75	95	93	97	97	99	101	100	101	101
1920	A12 / Eagle Way / Anson Rd	Suffolk Coastal	832 Kesgrave/Martl	0	76	47	106	84	0	99	81	129	102
10027	Margaret's St / Northgate St	Ipswich	800 Ipswich Central	43	68	65	69	70	55	101	93	101	101
50055	B1079 Grundisburgh Rd / Mid Link	Suffolk Coastal	822 Suffolk Coastal	72	100	91	105	103	66	101	97	104	104
20012	Westend Rd / Portman's Walk	Ipswich	800 Ipswich Central	33	47	41	51	48	95	101	100	102	100
10067	Northgate Street / Old Foundry Road	Ipswich	800 Ipswich Central	7	7	7	6	7	10	101	14	114	104
2792	B1064 Hall St / Westgate St	Babergh	818 Babergh West	33	41	40	59	57	45	63	61	71	69
2336	B1115 Tavern St / Gipping Way A1308 / S	Mid Suffolk	810 Stowmarket	55	74	64	86	79	67	82	75	88	82
3540	A131 / Bulmer Rd / Middleton Rd	Babergh	813 Sudbury	79	92	90	100	99	88	100	98	107	106
20057	Woodbridge Rd / Albion Hill / Belvedere R	Ipswich	802 Ipswich NE	99	98	98	100	100	95	100	99	102	101
2331	A1308 Gipping Way / Hollingsworth Rd	Mid Suffolk	810 Stowmarket	85	94	87	100	91	88	100	88	101	100
20048	A1214 / Tuddenham Road	Ipswich	802 Ipswich NE	90	99	88	103	101	81	100	97	106	103
30229	Sandy Hill Lane / Landseer Road	Ipswich	803 Ipswich SE	30	53	46	60	49	47	100	87	110	88
30274	A1189 Bixley Rd / Chilton Rd	Ipswich	802 Ipswich NE	52	98	87	104	102	64	100	92	102	101
80405	A137 Brantham Hill / Palfrey Heights	Babergh	820 Babergh East	0	75	78	75	75	0	100	100	100	100
30258	Felixstowe Rd / The Street	Suffolk Coastal	833 Suffolk Coastal	32	50	42	68	63	34	47	38	87	107
5874	Barton Rd / Station Hill / New Rd	Mid Suffolk	816 Mid Suffolk Cer	44	82	80	114	111	43	70	69	90	88
3145	Coddenham Rd / B1078 Needham Rd / A1	Mid Suffolk	816 Mid Suffolk Cer	18	28	22	28	28	20	25	25	33	33
30171	Gippeswyk Avenue / Ancaster Rd / Kestev	Ipswich	804 Ipswich SW	24	89	25	112	93	28	34	31	35	33
10021	Woodbidge Rd / Argyle Street	Ipswich	802 Ipswich NE	59	97	63	109	101	44	71	63	90	84
30655	Ashdown Way / Blandford Rd	Ipswich	803 Ipswich SE	9	11	10	108	11	14	18	16	18	17
3152	B1078 / B1079 Grundisburgh	Suffolk Coastal	822 Suffolk Coastal	50	84	75	108	105	41	57	53	101	92
30214	A137 Vernon St / B1075 Burrell Rd	Ipswich	804 Ipswich SW	88	98	96	108	104	60	87	72	92	83
20270	Cotswold Avenue / Dale Hall Lane	Ipswich	801 Ipswich NW	35	83	31	107	98	26	35	30	76	31
1906	A12 / Foxhall Road / Newbourne Road (W	Suffolk Coastal	832 Kesgrave/Martl	0	99	94	107	101	0	64	62	84	75
70018	A137 Vernon St / Little Whip St	Ipswich	804 Ipswich SW	43	78	67	107	77	35	48	42	53	46
20071	Milner St / Rope Walk	Ipswich	803 Ipswich SE	27	71	70	106	92	25	93	64	105	101
30406	A12 / A1214 Roundabout – A1214 EB ent	Suffolk Coastal	832 Kesgrave/Martl	87	99	94	105	101	58	65	64	68	68
3328	A12 / A145	Suffolk Coastal	821 Suffolk Coastal	61	87	86	105	104	57	72	70	84	83
30815	Heath Road / Mid Link	Ipswich	802 Ipswich NE	34	41	39	45	42	60	80	70	95	84
30309	Bealings Rd / School Ln / Main Rd /The Str	Suffolk Coastal	832 Kesgrave/Martl	68	93	78	104	99	45	65	60	79	73
70359	Spring Rd / Nottidge Rd	Ipswich	803 Ipswich SE	15	29	26	104	90	12	16	14	24	19
30212	Stoke St / Austin St	Ipswich	804 Ipswich SW	16	22	19	48	23	15	23	19	29	27
30213	Stoke St / Burrell Rd	Ipswich	804 Ipswich SW	70	97	84	103	100	66	95	87	95	95
10054	Star Lane A1022 / Bond St	Ipswich	800 Ipswich Central	34	53	41	55	55	39	52	47	69	63
30764	Barrack Square / Gloster Rd	Suffolk Coastal	832 Kesgrave/Martl	69	73	68	103	85	55	87	61	106	100
30330	Tuddenham Rd / Humber Doucy Lane	Ipswich	802 Ipswich NE	54	92	79	103	100	52	81	77	101	96
30256	Felixstowe Road / Ransomes Way	Suffolk Coastal	833 Suffolk Coastal	66	88	78	102	100	60	81	75	100	91
30301	Woodbridge Rd A1214 / Beech Rd	Suffolk Coastal	832 Kesgrave/Martl	65	88	72	95	88	49	69	61	66	65
30760	Fore Hamlet / Pownall Rd	Ipswich	803 Ipswich SE	76	87	82	102	85	82	93	84	100	96
20263	Park Rd / Zone Access Link	Ipswich	801 Ipswich NW	29	28	27	102	30	33	36	35	35	32
30143	Bramford Rd / Pitcairn Rd	Ipswich	801 Ipswich NW	37	97	46	102	96	41	50	45	83	68
50025	Bramford Rd B1113 / Bramford Rd	Mid Suffolk	817 Mid Suffolk Sou	70	90	86	102	101	73	92	88	101	98
30758	Duke Street / Pownall Rd	Ipswich	803 Ipswich SE	43	54	49	102	50	49	73	65	79	71
30343	Henley Rd / Lower Rd	Mid Suffolk	816 Mid Suffolk Cer	55	84	72	102	93	49	92	81	108	104
10001	A1156 / Civic Drive	Ipswich	800 Ipswich Central	93	98	91	101	100	77	93	80	106	100
20061	Rushmere Road / Colchester Road	Ipswich	802 Ipswich NE	77	93	87	101	96	82	99	90	101	100
30155	A1214 London / A1071 / Scrivener Dr	Babergh	820 Babergh East	63	89	88	97	98	74	92	88	99	97
3182	Chantry Rd / South Entrance / Church Hill	Suffolk Coastal	807 Saxmundham	84	100	99	101	101	82	93	93	95	94
20034	Soane St / Bolton Ln / St Margaret's Green	Ipswich	801 Ipswich NW	15	29	20	101	85	13	25	17	25	25
3247	Old Bury Rd / A140 / B1118	Mid Suffolk	815 Mid Suffolk Nor	46	78	75	101	100	46	54	54	86	70
30588	Martinsyde / Gloster Rd	Suffolk Coastal	832 Kesgrave/Martl	96	98	91	101	92	21	36	28	40	37
3895	Tot Hill / Bury Rd / Fishponds Way	Mid Suffolk	816 Mid Suffolk Cer	75	88	86	101	99	75	92	90	98	97
30193	Belstead Rd / Luther Rd	Ipswich	804 Ipswich SW	61	90	75	101	95	66	96	83	95	95
30211	Belstead Rd / Willoughby Rd	Ipswich	804 Ipswich SW	40	53	48	100	53	63	84	71	93	85
3194	B1119 Rendham Rd / A12	Suffolk Coastal	807 Saxmundham	34	43	43	100	69	40	50	49	63	59
3217	A12 London Rd / A1444	Suffolk Coastal	821 Suffolk Coastal	43	67	66	100	97	45	68	67	91	89
50031	B1113 Loraine Way / Somersham Rd	Mid Suffolk	817 Mid Suffolk Sou	31	50	36	100	93	29	34	34	41	37
2923	B1082 Hamilton Rd / Cobbold Rd	Suffolk Coastal	809 Felixstowe	94	99	93	100	95	57	62	55	62	57
10046	Northgate Street / Great Colman St	Ipswich	800 Ipswich Central	54	92	77	100	101	63	72	70	86	54
1908	A12 / Foxhall Road / Newbourne Road (E	Suffolk Coastal	833 Suffolk Coastal	0	71	60	91	86	0	40	37	42	40
30308	Main Rd / Felixstowe Rd	Suffolk Coastal	832 Kesgrave/Martl	28	35	29	70	36	66	90	66	125	96
10057	Lower Orwell Street / Star Lane	Ipswich	800 Ipswich Central	51	44	42	45	46	57	50	46	95	87
21004	Gloster Rd / Zone Access	Suffolk Coastal	832 Kesgrave/Martl	0	17	15	24	22	0	20	15	118	23
10024	Great Colman St / A1156 St Margaret's St	Ipswich	800 Ipswich Central	41	77	61	79	81	82	92	75	111	105
20264	Valley Rd A1214 / The Avenue	Ipswich	801 Ipswich NW	74	80	80	97	96	73	93	85	110	108
10011	College Street / Foundation St	Ipswich	800 Ipswich Central	81	78	76	84	80	74	98	68	107	107
10013	Lower Orwell Street / Key Street	Ipswich	800 Ipswich Central	68	40	40	46	44	61	62	57	105	105
50052	A12 (near A12 / B1079)	Suffolk Coastal	808 Woodbridge/M	71	89	87	91	94	88	100	98	105	103
30236	Brazier's Wood Rd / Clapgate Ln	Ipswich	803 Ipswich SE	5	7	6	17	8	14	80	28	105	102
85000	Candlet Rd / Zone Access	Suffolk Coastal	809 Felixstowe	0	76	59	90	79	0	89	83	105	98
30671	Nacton Rd / Mildmay Rd	Ipswich	803 Ipswich SE	47	65	59	95	88	61	99	64	104	101
5834	A134 Sudbury Road / Valley Road	Babergh	819 Babergh Centra	82	88	88	89	89	81	97	96	104	103
20077	Caudwell Hall Rd / Foxhall Rd	Ipswich	803 Ipswich SE	54	79	70	90	81	70	93	77	103	99
3928	Castleton Way/ Hospital Access	Mid Suffolk	815 Mid Suffolk Nor	45	59	59	70	69	78	93	92	103	102
30250	Felixstowe Road/King's Way/Cobham Roa	Ipswich	803 Ipswich SE	57	75	61	88	84	79	95	94	103	96
2881	Mill Lane /Garrison Lane / Crescent Road	Suffolk Coastal	809 Felixstowe	71	78	48	90	68	68	89	64	103	93
30775	Nacton Road / Ransome Rd / Queens Wa	Ipswich	803 Ipswich SE	31	40	37	85	41	24	55	41	103	70
10004	Princes St / Civic Dr / Franciscan Way	Ipswich	800 Ipswich Central	52	46	45	44	43	56	87	66	102	90
85004	Candlet Rd / Zone Access	Suffolk Coastal	809 Felixstowe	0	80	77	96	92	0	98	97	102	102
50004	Norwich Road / Church Lane	Mid Suffolk	816 Mid Suffolk Cer	83	94	91	98	90	61	78	71	102	101
20302	Henley Rd / Woodstone Avenue	Ipswich	801 Ipswich NW	13	18	14	19	20	18	29	24	102	96
30246	Felixstowe Rd / Hatfield Rd / Derby Rd	Ipswich	803 Ipswich SE	42	68	56	98	81	58	93	68	101	97
70008	Salthouse Street / Common Quay / Key St	Ipswich	800 Ipswich Central	69	41	41	44	42	57	33	34	101	37
5446	B1079 / Naunton Rd	Suffolk Coastal	808 Woodbridge/M	42	44	40	48	41	24	33	24	101	33
70361	St Helens St (Near Dove Street)	Ipswich	802 Ipswich NE	47	90	82	99	97	43	87	70	101	97
70368	A1156 Felixstowe Road (south of A1156 R	Ipswich	803 Ipswich SE	64	79	72	87	88	66	79	69	101	93
80101	Henley Rd/ Zone Access	Ipswich	801 Ipswich NW	0	28	29	34	35	0	49	50	50	50
20259	Graham Avenue / Graham Rd	Ipswich	801 Ipswich NW	21	31	25	28	23	42	56	60	101	95
50050	A12 / B1438 (near Woodbridge)	Suffolk Coastal	808 Woodbridge/M	81	85	83	86	87	77	92	85	101	97
20273	A1156 Norwich Road / Orford Street	Ipswich	801 Ipswich NW	70	88	77	92	89	66	94	88	101	100
30137	A1156 Norwich Road / Deben Road	Ipswich	801 Ipswich NW	55	88	86	97	95	69	92	84	100	93
20074	Back Hamlet / B1075 Grove Lane	Ipswich	803 Ipswich SE	46	65	74	65	65	61	97	88	100	97
2866	Langer Road / Beach Station Road - Felixs	Suffolk Coastal	809 Felixstowe	51	69	59	84	72	95	95	94	100	96
10068	Star Lane / Fore Street	Ipswich	800 Ipswich Central	54	44	43	98	96	57	68	46	100	87
1919	A12 / Eagle Way / Anson Rd	Suffolk Coastal	832 Kesgrave/Martl	0	92	88	96	93	0	87	80	91	89
3105	A137 Ipswich Rd / B1080	Babergh	820 Babergh East	75	92	100	98	100	61	93	89	100	100
5730	A1214 London Rd / Scrivener Drive	Babergh	820 Babergh East	34	42	47	45	43	50	52	54	79	68
70371	Ransomes Way A1189 / Felixstowe Road	Suffolk Coastal	833 Suffolk Coastal	47	70	67	98	100	38	63	64	96	96

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