MOTT MACDONALD

Cheshire West and Chester

Northwich Transport Strategy

Recommendations Report (DRAFT)

April 2018

Mott MacDonald
Ground floor
Royal Liver Building
Pier Head
Liverpool L3 1JH
United Kingdom

T +44 (0)151 482 9910
F +44 (0)151 236 2985
mottmac.com

Northwich Transport Strategy

Recommendations Report (DRAFT)

April 2018

Issue and Revision Record

Revision	Date	Originator	Checker	Approver	Description
A	Mar 18	Katie Daniels	Caroline Ella	Kevin Riley	Draft for client comment
B	April 18	Katie Daniels	Caroline Ella	Kevin Riley	Final draft for client issue
C	April 18	Katie Daniels	Caroline Ella	Kevin Riley	Final draft revision with client comments

Document reference: 383472 | 5 | C

Information class: Standard

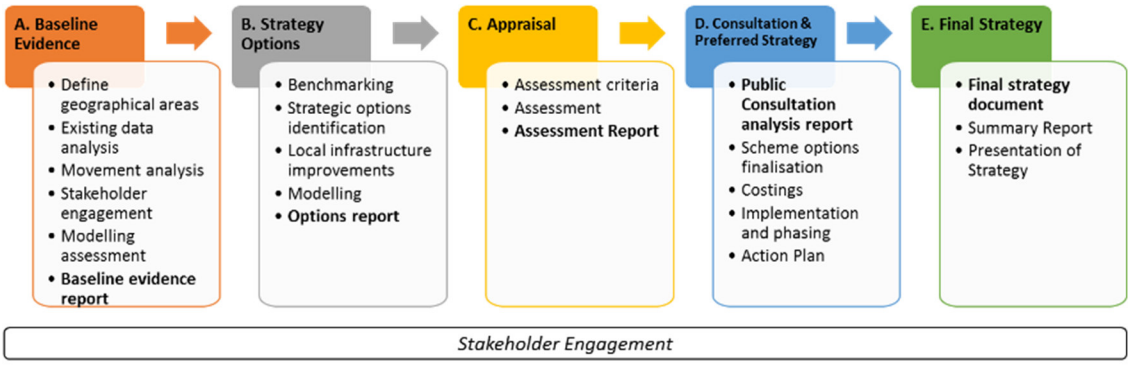
Contents

Executive Summary

This Transport Strategy has been prepared to support the vibrant and growing economy of Northwich, providing a joined-up approach in addressing a number of key regeneration and sustainability aspirations, issues and priorities, not least the delivery of housing and development ambitions set out in the Local Plan and emerging Neighbourhood Plans and to ensure the continued success of the town and the surrounding areas. To enable this to happen, the Strategy will impact on current and future accessibility, movement and connectivity. Through transformative transport interventions that improve journey times, improve capacity and resilience, while supporting economic growth right across the town and within Northwich's wider travel to work area.

This Transport Strategy has been developed following a five-step process, demonstrated in Figure 1. This report provides a summary of the findings from each of the first four stages of the project and then focusses on presenting the Transport Strategy itself (step five), including recommendations, timescales, an action plan and indicative costings.

Figure 1: Transport Strategy Development Process



Source: Mott MacDonald

Baseline Evidence

The **Baseline Report** provided an understanding of existing transportation provisions in Northwich and across the wider urban area and the identification of issues which the strategy would need to seek to address. These were summarised into a list of issues and opportunities across the three geographical areas of the study area (Town Centre, Wider Urban Area, Longer Distance) for focusing the development of schemes to address these issues. This first stage of the project helped inform understanding of how the study area functioned in terms of transport, and highlighted future growth areas where there is likely to be increased demand upon the highway and public transport networks.

Strategy Options and Appraisal

For the second and third stages, in response to the key issues identified, a long list of measures were developed and appraised against an extensive list of criteria, covering:

- Supporting economic growth
- Opening up of housing sites
- Reducing Congestion
- Safety
- Environmental
- Policy Alignment

- Deliverability
- Cost/Affordability (*not scored*)
- Implementation timescale (*not scored*)

Three sensitivity tests were applied to the appraisal scores to further review suitability of schemes. These were to consider:

- Supporting local and sub-regional growth;
- Directly supporting access to employment or key services or enables new sites to be accessed; and
- Improves journey times and accessibility to the local transport network.

The appraisal process showed that whilst there were higher scoring schemes, there were none that were considered necessary to eliminate at this stage, with the full list being taken to public consultation.

The consultation was therefore focused on 11 schemes for the Town Centre, 24 for the Wider Urban Area and 10 for the Longer Distance study area, giving a total of 45 schemes, with a number of sub-options within these. To make this number a little more manageable, schemes were grouped as follows:

- Junction Improvements
- Highway Schemes Walking and Cycling
- Public Transport
- Parking
- Demand Management

Consultation

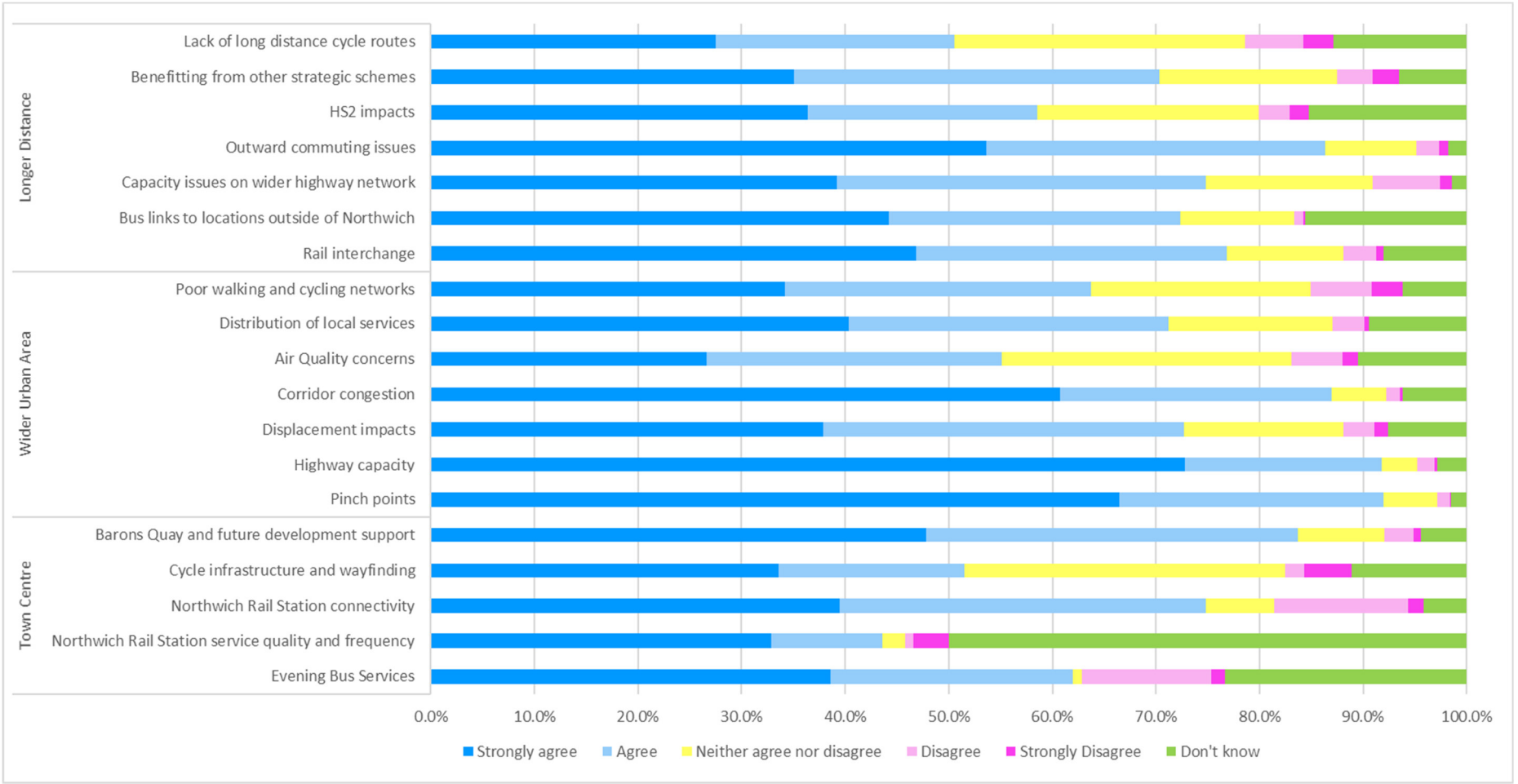
A fourteen week public consultation event from 25 September 2017 – 31 December 2017 was held where members of the public were asked to provide feedback and comments on the schemes by completing a survey either online or by post. They were also able to take part by sending comments by email, letter or telephone or by attending a number of drop-in sessions held across the town centre and adjacent villages. The consultation was publicised widely in local media and on social media.

A total of 1,059 survey responses were received which is considered a robust sample size, and generally representative of the age and gender split for the study area.

The survey results generally demonstrate a strong level of agreement with the key issues identified across all three geographic areas, with respondents agreeing they are issues that are important to address within this final Northwich Transport Strategy. **Figure 2** summarises the consultation responses levels of agreement/disagreement to the key issues for each of the geographical study areas.

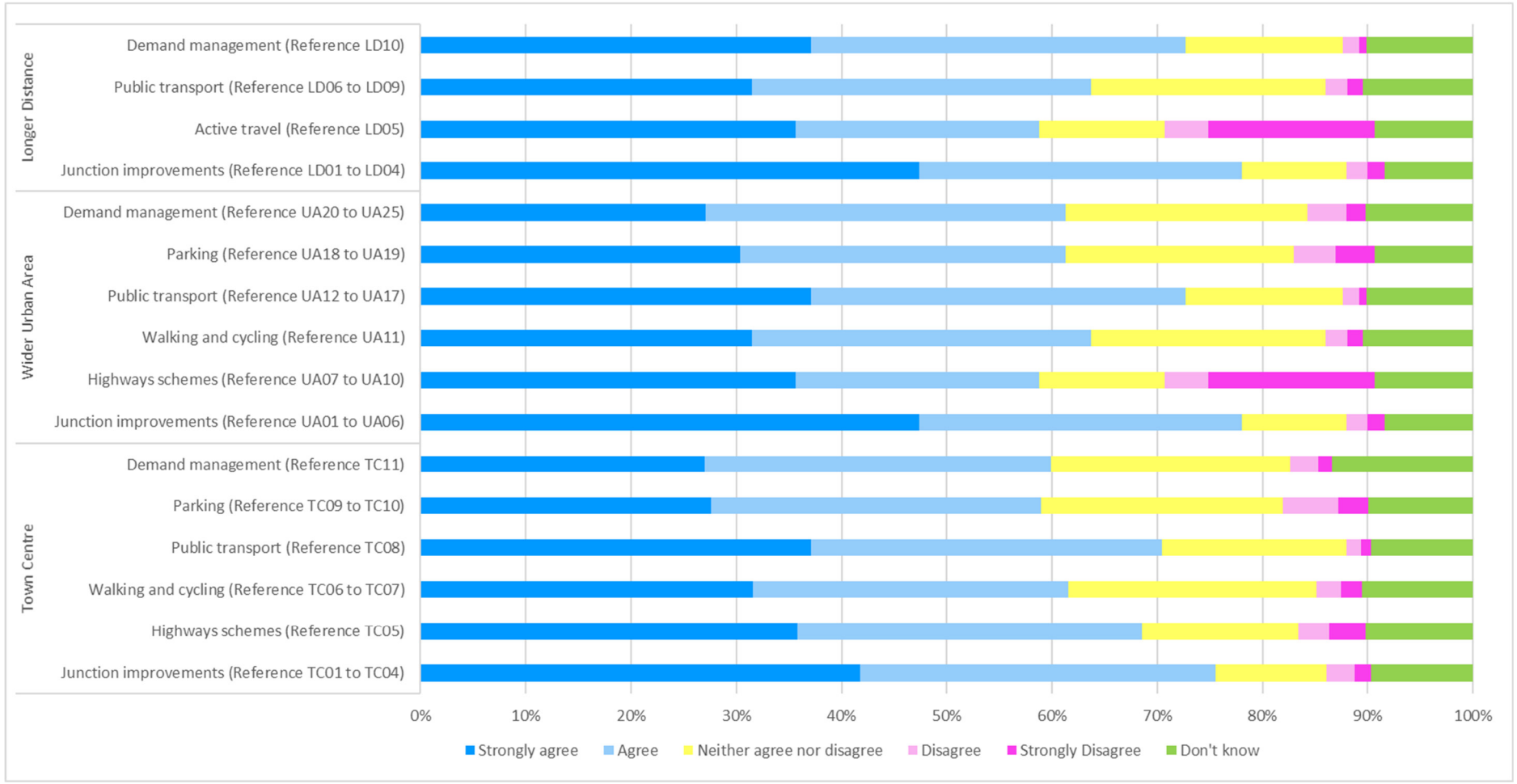
Figure 3 summarises the consultation responses levels of agreement/disagreement to the proposed schemes groupings within each of the geographical areas.

Figure 2: Summary of survey results - Level of agreement/disagreement on key issues



Source: Mott MacDonald

Figure 3: Summary of survey results - Level of agreement on proposed schemes



Source: Mott MacDonald

Figure 2 demonstrates that the key issues noted across the study area received a high level of agreement (generally all 50% or higher), indicating they were important for considering within the final Transport Strategy.

As can be seen in **Figure 3,** generally each scheme group across all three study areas received a good level of agreement of around 60% or more. The schemes with the most agreement were junction improvements (all areas) and Town Centre demand management.

When considering the responses to the proposed schemes, longer distance active travel (LD05) and highway schemes UA07-UA10 appear above to have the highest level of disagreement, totalling around 30% each.

The level of disagreement to these schemes, particularly to UA07, was also clearly demonstrated within the general comments. The survey results presented a large number of comments expressing strong views against the reopening of Marbury Lane due to the significance of Marbury Country Park and perceptions that the scheme could provide little benefit to relieving congestion. A petition against this particular scheme signed by local residents was also submitted as part of the consultation.

More detail on the consultation results are contained within the **Consultation Report.**

Preferred / Final Strategy

Whilst the consultation was underway, a number of the schemes were tested in detail using the Northwich Transport Model, a study area wide SATURN highway model. This was used to understand the baseline traffic flow conditions and to test how these would change in respect of local housing and employment growth through to 2030. Several of the proposals were also tested in the model to understand the impact they could have upon addressing congestion hotspots and pinch points on the network. The results of this exercise have been used to shape the final strategy. More details on the modelling process are outlined in **chapter 4**.

Following completion of the consultation process and review of modelling information, a number of schemes were dropped from further consideration (TC04, UA07, UA19, LD04, LD09) and 4 new schemes were also identified (UA15e, UA26, UA03b, UA11h) which include for example new crossing points, walking and cycling routes and changes to public transport. A number of schemes have also not been considered further due to their implementation timescales likely exceeding those of this Transport Strategy (TC05, UA08, UA10, UA14). These have not been discounted but should be reviewed at a later date upon future review or update of this strategy.

The remaining schemes which make up the final NTS were put into 14 delivery packages, which were based on five themes as summarised in **Table 1**.

Table 1: Final Strategy Schemes and Packages

Theme	Package	Scheme ref	Description
The Town Centre	**A**	TC01	Widening of junction Winnington Hill/Town Bridge/Castle Street
	B	TC02	Improve the town centre one-way system at the junction of Town Bridge, Dane Street and Watling Street (A533)
		TC03	Improve junction capacity at the traffic lights at Chester Way/Venables Road
	C	TC07	Encourage private sector bike hire scheme at Northwich Rail station and key points across the town centre
		TC08	Support Network Rail and Northern Rail to deliver a major enhancement of Northwich Station to improve accessibility
		UA12	Help the train operating companies to be more proactive at offering solutions to contain demand for car parking space
		UA13	Support opportunities to increase parking supply at stations in the Northwich wider area
	D	TC09	Following the completion of town centre development, consider appropriate locations for taxi provision
		TC10	Enhance Electric Vehicle parking offer
		TC11	Review service vehicle time restrictions in Town Centre
		UA18	Implement recommendations of Gadbrook Parking Study
Improving Local Capacity	**E**	UA01	Deliver scheme to reduce congestion at the key pinch points at the Winnington/Barnton Swing Bridge
	F	UA02	Reduced congestion along A559 Greenbank/Hartford Corridor
	G	UA04a	Develop a new junction on the A556 to the west of the existing Gadbrook Park
		UA04b	Consider opportunities to introduce a second southern access to Gadbrook Park
		UA04c	Implement improvement scheme at Gadbrook Road/A556 junction
		UA04d	Junction improvement at roundabout junction with the A556/A530
		UA04e	Junction improvement scheme at A530 King Street/B5082 Middlewich Road
		UA04f	Junction improvement scheme at A556/B5082 Penny's Lane
	H	UA03(a)	Junction improvement at A533/A556 at Davenham to support increased use and better accessibility to the A556
		UA05a	Junction improvement, Wincham: A559/B5075 New Warrington Road/Chapel Street
		UA05b	Junction improvement, Wincham: A559/A559 Marston Lane/Church Street
		UA06a	Junction improvement, Lostock Gralam: A559 Manchester Road/A559 Hall Lane/Station Road
		UA06b	Junction improvement, Lostock Gralam: A559 Manchester Road/Stubbs Lane
		UA06c	Junction improvement, Lostock Gralam: A556/A559 roundabout junction

Theme	Package	Scheme ref	Description
		LD01	Implement junction capacity improvements at junction of A533/A49
		LD03	Implement junction capacity improvements at pinch points on A530
Safe and Sustainable	**I**	UA24	Continue to implement the programme of 20mph speed limits across the Northwich wider urban area
		LD10	Implement speed reduction measures on key local routes affected by speeding issues
		LD02	Monitor identified incident hotspots and implement safety measures as appropriate
		UA26	Pedestrian crossing at iron bridge at Moss Road/A559 signalised junction to improve pedestrian safety
		UA03b	Monitor Jack Lane/A533 incident hotspot and implement safety measures as appropriate
	J	UA15a	Where appropriate introduce evening bus services
		UA15b	Implement measures of Winsford Transport Strategy for better bus services
		UA15c	Review and promote opportunities to extend flexible/specialist bus services
		UA15d	Explore options for enhanced bus travel to hospitals
		UA17	Review and identify opportunities to enhance bus priority at junctions with traffic signals
		UA15e	Consider bus service to Gadbrook Park from wider urban area
	K	UA16	Support Transport for the North (TfN) in implementing integrated ticketing system
		UA20	Encourage schools to stagger school start and finish times to reduce congestion.
		UA21	Support extensions to the Cheshire West and Chester Parent Parking Charter
		UA25	Examine opportunity for Area Travel Plan for schools in Hartford
	L	TC06	Review of cycle route condition and deliver resurfacing improvements to off-road routes where possible
		UA11a	Improved cycling and pedestrian connection between Northwich Town Centre, Winnington (UA11a);
		UA11b	Walking and cycling route utilising waterway into Northwich Town Centre from Winnington and Anderton (UA11b);
		UA11c	Review plans for radial corridor improvements from Northwich Cycling Strategy (UA11c);
		UA11d	Liaise with Hartford campus schools to open pedestrian/ cycling link from Manor Lane along River Weaver (UA11d);
		UA11e	New pedestrian/cycle bridge to enhance walking route between Barnton and Winnington at Winnington Lane historic bridge (currently no suitable footway along the bridge) (UA11e);
		UA11f	Cycle link utilising former rail alignment from A559 Chester Road to Greenbank Station (UA11f);

Theme	Package	Scheme ref	Description
		UA11g	Implementation of a footpath at Marbury Hollows to improve pedestrian access (UA11g).
		UA11h	Upgrade of cycling route from Sandiway/Cuddington along A556
		LD05	Work with Cheshire East to implement cycling schemes between Middlewich – Winsford – Northwich – Knutsford and also explore opportunities for cycle link to run broadly parallel to HS2 line
Improving Longer Distance Connectivity	**M**	LD06	Reopening of Middlewich Branch Line, re-opening station at Middlewich and exploring potential for station at Gadbrook Park
		LD07	Support proposals for an Airport Western Rail Link to link the Mid-Cheshire Line and Manchester Airport
		LD08	Lobby Northern to introduce timetable changes on the Mid-Cheshire Line
Longer Term Major Schemes	**N**	UA09	Introduce a road link from Wallascote Road to A49

Source: Mott MacDonald

Key

- TC = Town Centre
- UA = Wider Urban Area
- LD = Longer Distance

Package Letters:

- A Winnington Hill/Castle Street/Town Bridge junction improvement
- B Town Centre Junction Improvements
- C Rail Station Enhancements
- D Parking
- E Increasing capacity at Winnington/Barnton Swing Bridge
- F A559 Greenbank/Hartford Corridor
- G A556 congestion and access to Gadbrook Park
- H Longer Term Road Congestion Pinch Point Schemes
- I Road Safety & Traffic Calming
- J Improved bus connectivity
- K Smarter Choices, Behaviour Change and Active Travel
- L Walking and Cycling
- M Rail connectivity improvements
- N Wallascote Road Link

Conclusion

It is important to us that over the lifetime of this Strategy, we ensure that Northwich can cope with likely future trends and opportunities to support economic growth. By increasing awareness and access to sustainable and public transport for residents and commuters, while improving highway conditions to ensure that Northwich maintains its place as a premier destination and continues to play a major role in the sub-regional economy. This plan provides the basis to turn this vision into a reality.

1 Introduction

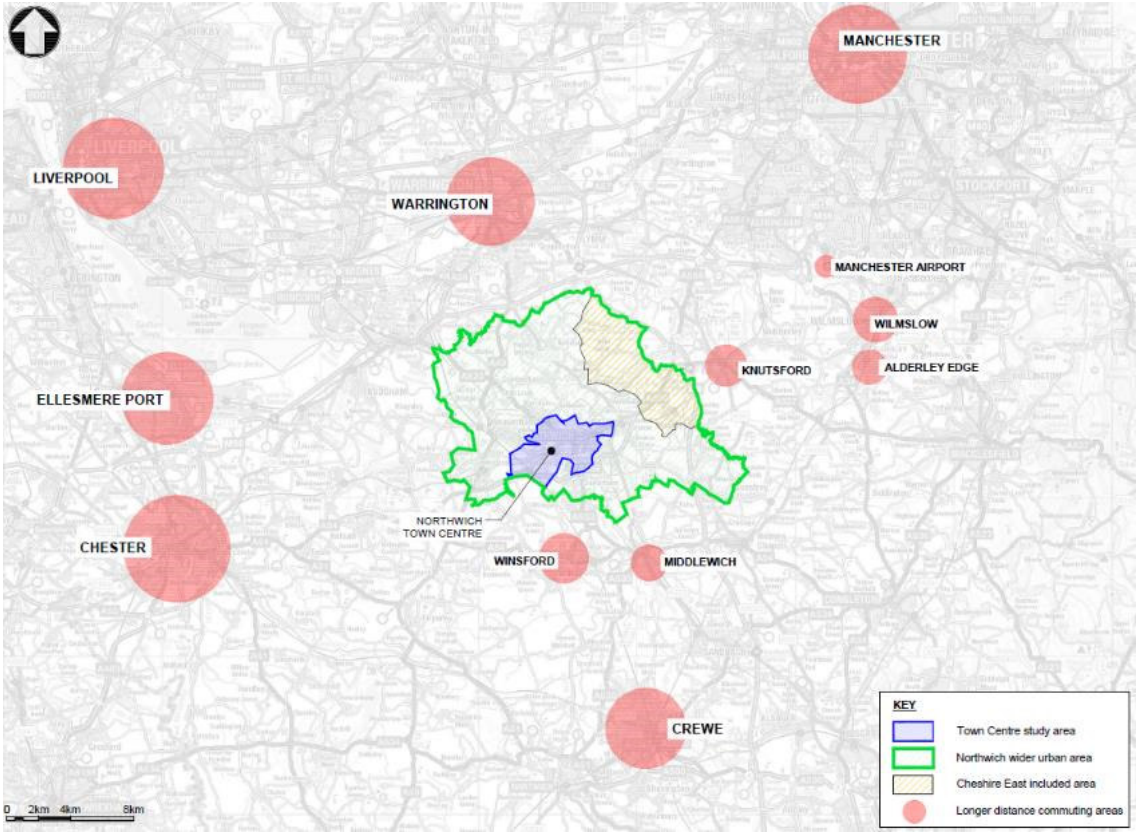
1.1 Overview

Mott MacDonald has been commissioned by Cheshire West and Chester Council (CWaCC) to produce this Northwich Transport Strategy (NTS), which identifies appropriate transport measures which support future developments and improve the current conditions of highway, public transport and walking and cycling networks in and around Northwich. It is intended that the strategy will provide a framework from which efforts and funding can be focussed to improve transport across Northwich and the wider area and support residential and employment growth and improve local accessibility.

This strategy has sought to identify and address transport issues and opportunities across Northwich and the surrounding area, realising the importance of connectivity, not just to/from and within the town centre, but to and between the wider areas and adjacent villages, as well as covering connectivity with regional employment destinations to support travel to work movements.

The study area in which issues, opportunities and packages of measures have been identified comprises three geographical areas; the town Centre, Wider Urban Area and Longer Distance Connections. The overall study area is shown in **Figure 4**.

Figure 4: NTS Study Area



Source: Mott MacDonald

The study area faces many challenges as transport networks become increasingly constrained. A number of upcoming or in-progress housing, industrial and mixed-use developments all have access and movement implications at both a local and strategic level. These include Barons Quay, Winnington Urban Village and Wincham Industrial Estate as examples. Significant housing growth in particular is increasing network pressures and emphasizing the need for transport and accessibility improvements in the Town Centre and Wider Urban Area. The need for a more resilient network will

also become more apparent once the Barons Quay leisure and retail development is fully operational, as more visitors and residents will be attracted to the area.

Proposals identified within this strategy are based on supporting and enabling developments within the Local Plan and therefore aim to make the transport network resilient for the next 12 years, through to 2030. There are several local policy documents which form the backbone of the NTS, including the Northwich, Hartford and (emerging) Davenham & Whatcroft and Moulton Neighbourhood Plans, the Cheshire West and Chester Local Transport Plan and the Cheshire West and Chester Local Plan. The NTS also supports proposals put forward in the neighbouring Winsford Transport Strategy which was completed in 2016.

This strategy will be vital to fully realise the potential of Northwich and its future aspirations to support the continued success of the town and surrounding areas, and ensure that local and sub-regional connectivity and accessibility improvements are developed that will underpin and support these opportunities and drive forward growth. Key outputs from the study will help identify and test appropriate measures and plans that will improve access and connectivity for the town and surrounding area in the years to come.

1.2 History of the Strategy

The Northwich Vision Regeneration Framework prepared in 2003 and adopted by the former Borough Council in February 2004 was an early predecessor to the new Northwich Transport Strategy. The vision has now largely been accomplished and there was therefore a requirement to begin looking further forwards, with the development of a new strategy to support growth aspirations through the current Local Plan period to 2030.

The Local Plan (Part One) sets out the spatial strategy and strategic objectives for the borough to 2030, including setting out the level and location of new housing and employment land, as well as the identification of strategic sites, was adopted by the Council in 2015. The Local Plan (Part Two) document is being prepared and includes detailed policies and land allocations to support the Local Plan (Part One). It was submitted to the Secretary of State in March 2018, for examination during summer 2018, and is anticipated to be adopted by the end of the year.

Prior to this Recommendations Report, Mott MacDonald has produced a number of reports to support the development of this final Northwich Transport Strategy and provide more detail to support the decision made in its development.

The initial *'Baseline Report',* produced in July 2017 presented a robust evidence base of the baseline transport situation alongside upcoming developments in order to highlight key issues with connectivity and accessibility. These issues were considered further in the subsequent stages of the project to inform the development of schemes. Stakeholders were also consulted at this stage to contribute to the development of schemes and a modelling exercise was carried out to assess the impact of the proposed development growth in Northwich upon the highway network and provide information on which junctions would exceed capacity.

The following *'Options Report'* in September 2017 outlined the process of options identification and appraisal and provided a summary of the key issues emerging from the *'Baseline Report'*. This report presented the list of potential schemes broken down by geographical area and type, and was made available to the public throughout the consultation period to provide context and additional information.

The appraised schemes formed the basis of consultation with the public through a series of drop in sessions and a consultation survey. The results of the public consultation are documented within the '*Consultation Report'* produced in February 2018 following completion of the consultation period.

Transport modelling has also been undertaken to support the development of the strategy and test the benefits of the proposed schemes. The results of this exercise have used been to suggest which schemes should be taken forward into the final strategy as outlined in this document.

A number of other separate topic or site specific studies commissioned by CWaCC have also been considered in this report, such as the Cheshire West and Chester Parking Strategy, and studies at Gadbrook Park.

Going forwards this NTS needs to be seen as a dynamic guidance document, as opposed to restrictive and prescriptive. This is particularly important since the growth agenda in the wider environment is evolving rapidly and therefore transport matters are too.

1.3 Report Structure

The remainder of this report will set out the following content:

- **Chapter 2 Setting the Scene: Baseline Evidence**. A summary of the baseline situation with regards to transport as identified within our Baseline Report.
- **Chapter 3 Options Identification**. An overview of the optioneering and appraisal process applied to develop schemes.
- **Chapter 4 Highway Modelling.** A summary of the modelling work undertaken in support of the NTS.
- **Chapter 5 What You Said: Public Consultation**. A summary of the key points from the public consultation held between September and December 2017, including a summary of which schemes have been dropped from further consideration.
- **Chapter 6 The Strategy.** Presentation of the packages of measures which together form the NTS, and more information on each of these.
- **Chapter 7 Costing and Funding.** An indicative cost is presented for each scheme and summed by package. Funding opportunities are also discussed.
- **Chapter 8 Action Plan.** The phasing of the implementation of the measures is presented, giving an indication of the timescales for the key tasks of each individual measure. An action plan for the first five years of the strategy is also presented, providing more information on the tasks required by package during this first phase of the strategy.
- **Chapter 9 Conclusion and Next Steps.** Conclusions from the process and a short summary of next steps in relation to supporting implementation of the NTS as a whole.
- **Appendices.** The following appendices are contained within this report.
  a. Appraisal Scoring
  b. Modelling Results and Plans

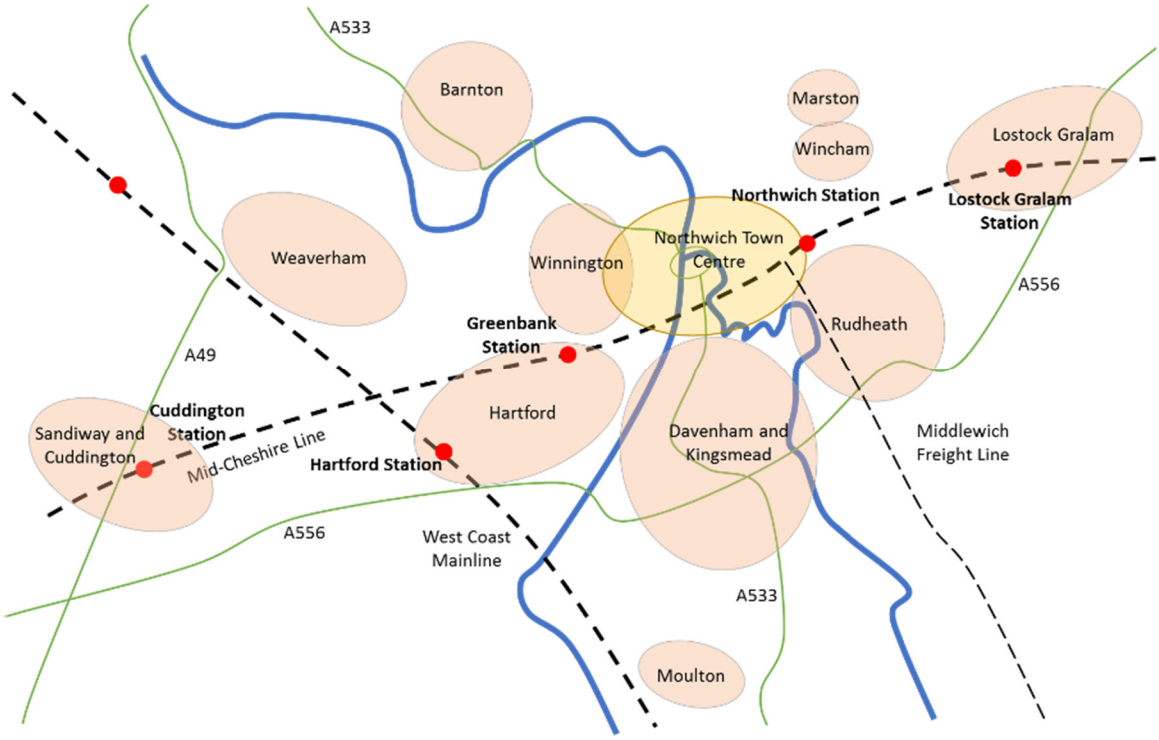
2 Setting the Scene: Baseline Evidence

This chapter provides an overview of the baseline transport situation in Northwich and across the study area identifying the key issues across highway, public transport and active travel networks.

2.1 Overview

Northwich is located within the borough of Cheshire West and Chester and forms one of the four key centres within the local authority area. **Figure 5** demonstrates the location of Northwich in relation to the surrounding areas key strategic road and rail links and the River Weaver. Northwich has a legacy of industrial use focussed around salt mining, and following stabilisation of the salt mines, is continuing to thrive with employment, leisure and retail growth occurring across the area.

Figure 5: Key locations and transport links in the study area



Source: Mott MacDonald

Barons Quay provides a new retail and leisure offer for the area, as well as the proposed development of Weaver Square and several large housing sites (such as Winnington Urban Village), with more development proposed in the Local Plan, demonstrating demand for growth in the area. The area is also home to a number of key employment sites, spread across industrial sites and business parks. Of particular note are Lostock Works, Wincham Industrial Estate, TATA Steel in Winnington, Gadbrook Business Park in Rudheath and Cheshire Business Park in Lostock Gralam.

Photo 1: Barons Quay Development

Source: Mott MacDonald Ltd

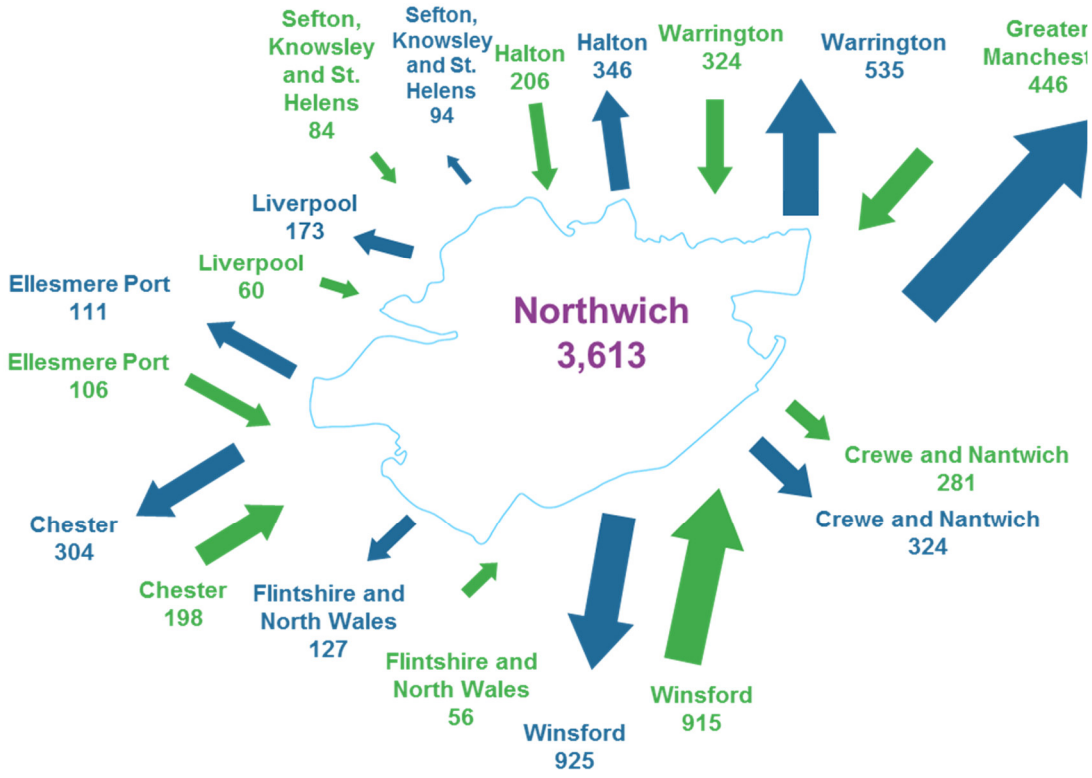
However, growth is somewhat constrained due to a number of pinch points and congestion hotspots on the network, and in places poor public transport and active travel (walking and cycling) connectivity which the NTS will seeks to address.

These include the town centre gyratory, the A533 (particularly Winnington Street, Castle Street and Town Bridge), the A556 around Gadbrook Business Park and the A559 Hartford corridor.

Northwich has a high level of interaction with nearby towns and strategic locations further afield in terms of travel to work. The area is more or less balanced in terms of the number of people who commute into the town for work compared to the number of people who commute out. Key commuting destinations include Greater Manchester, Knutsford, Wilmslow & Alderley Edge as well as Winsford and Warrington. For journeys to work from Northwich, 77% of people travel either as a car driver or passenger, whilst both bus and rail account for just 2% of travel to work journeys from the area.

Northwich is also an attractor of travel to work trips, the origins of these trips is shown in the following figure, with Winsford being one of the biggest shares. The modal splits for work journeys completed into Northwich town centre are broadly similar to those for journeys completed from the area. 78% of commuter's travel either as a car passenger or driver, with a further 14% of journeys completed on foot. Only 1% of all travel to work trips into the Northwich town centre area are completed by train, with a marginally larger proportion of trips being completed by bus (3%). Travel to work origins and destinations for Northwich are shown in **Figure 6.**

Figure 6: Regional travel to work movements to and from Northwich



Source: Mott MacDonald

Based on 2011 Census Data. Total Sample = 3613

2.2 Road Network

Northwich wider urban area benefits from a number of strategic highway connections. The town is directly served by several 'A' roads providing connectivity to the wider strategic area such as the A533, A556 and A559.

Northwich is also well positioned between key strategic locations such as Manchester and Liverpool which are easily accessible due to their proximity to the motorway network. The M6 motorway runs north-south to the east of the study area offering connectivity to Liverpool and Preston, while the M56 motorway runs east-west to the north of the study area, providing routes to Manchester in the east and North Wales, the Wirral and intermediate locations to the west.

The town centre of Northwich is bound to the south by the A559 Watling Street and Chester Way which is the primary vehicular route passing through Northwich running east-west. A gyratory system was implemented in September 2014 resulting in a clockwise, one-way movement eastbound along the A559 Watling Street as it borders the bus interchange.

Photo 2: Access to gyratory at Winnington Hill

Source: Mott MacDonald Ltd

The majority of residential areas around Northwich are characterised by housing estates with limited through routes. As a consequence, there is a heavy reliance on the core access routes to enter Northwich such as the A533 from Winnington and Barnton from the north and Kingsmead and Davenham from the south. When accessing the town centre from the north, the A533 is subject to two pinch points, the first at Barnton / Winnington swing bridge and the second on the approach down Winnington Hill into the town centre where traffic merges on the swing bridge across the River Weaver on the gyratory (Photo 2).

Photo 3: Barnton / Winnington swing bridge

Source: Mott McDonald Ltd

Key constraints that currently exist within the local and strategic roads network include the A559 Hartford corridor which experiences high volumes of traffic, particularly during peak times, in part due to the density of education facilities in the area. These constraints are reflected in the modelling outputs which demonstrate for example that Winnington Lane is functioning over capacity (defined as greater than 85%) and routes along the A559 Hartford Corridor are experiencing delays of over 30 seconds.

2.2.1 Key Road Issues Identified

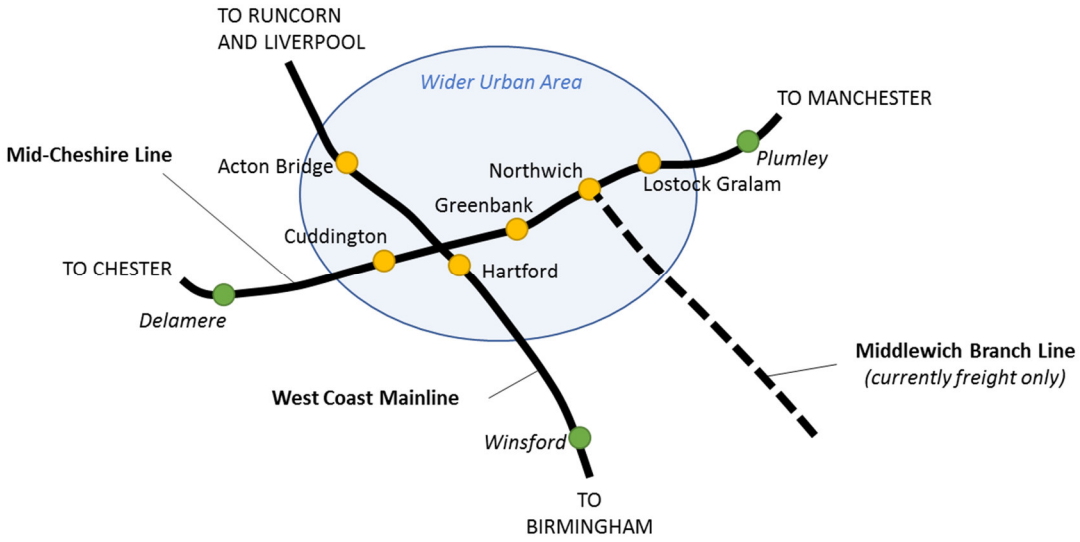
In summary, a number of key constraints on the road network within the study area were noted as part of the baseline assessment which informed the transport strategy and the shortlist of schemes. The key constraints are as follows:

- Key routes into the town centre are constrained due to the significant amount of housing generating demand, and few alternative routes.
- High volumes of traffic along the A559 Hartford corridor due to number of educational establishments.
- Pinch point areas present at A533 Winnington swing bridge and the town bridge on approach from Winnington Lane hill.

2.3 Rail Network

Northwich railway station benefits from direct services to Manchester and Chester and the Northwich wider urban area has six rail stations within its boundary providing further strategic connectivity. Four of these stations (Cuddington, Greenbank, Northwich and Lostock Gralam) are situated on the Mid-Cheshire Line between Chester and Manchester Piccadilly, while the remaining two (Acton Bridge and Hartford) are situated on the West Coast Mainline, benefitting from services between Liverpool Lime Street and Birmingham New Street.

Figure 7: Local Rail Context



Source: Mott MacDonald Ltd

Northern operate an hourly service in each direction between Chester and Manchester Piccadilly on the Mid-Cheshire Line. There is generally one train per hour in each direction from Hartford to both Birmingham and Liverpool; Acton Bridge is served less regularly with more services in the morning and evening peak than at inter-peak, and no Sunday services.

Despite the West Coast Mainline crossing the Mid-Cheshire Line just outside of Northwich, there is no direct interchange between the two lines. To interchange, passengers have to disembark at Hartford Station, and travel one mile along Chester Road to Greenbank Station.

Northwich station is located to the eastern edge of the town centre, a 15 minute walk away from the centre and the Barons Quay development, and there are limited on-ward connections by bus from the station. The station provides a car park with the capacity of 50 spaces as well as cycle parking which is limited to only two spaces and of a poor quality. Parking provision at Northwich and Hartford

stations is particularly limited with demand significantly exceeding capacity. Both of these station car parks charge for parking.

Photo 4: Northwich Railway Station

Source: Mott MacDonald Ltd

The Northwich – Crewe line (Middlewich Branch Line) is a single-track freight line via Middlewich and Sandbach which does not support passenger services, except when the West Coast Mainline is undergoing maintenance in the area and the chord is then used as a diversion. There are local aspirations to reopen this line to passenger services to provide a connection between Northwich and Crewe and to serve a station at Middlewich, which would involve re-establishing the station which closed to passengers in 1960.

2.3.1 Key Rail Issues Identified

The following points summarise the key conclusions from the baseline study in relation to rail to inform the Transport Strategy:

- Infrequent services between Manchester and Chester serving Cuddington, Greenbank, Northwich and Lostock Gralam.
- Services to Manchester and Chester are slow in comparison to private car journey times and the quality of rolling stock is poor.
- Interchange between the Mid-Cheshire Line and West Coast Mainline requires interchange, travelling by road between Hartford and Greenbank stations.
- Parking at Northwich and Hartford stations in particular exceed capacity on a daily basis causing an overspill of vehicles into residential streets, notably in Hartford.
- The location of Northwich rail station in relation to the town centre is fairly remote and access by modes other than a car is limited, with bus interchange times note fully aligned to train times.
- There are aspirations for opening up the Middlewich Branch Line to support passenger services.

2.4 Bus Network

The town is served by a network of local bus services which connect most of the surrounding villages to the town centre at the bus interchange located on Watling Street with seven bus stands, as shown in **Photo 5**. The use of these stands can sometimes cause delay to traffic and effect the performance of the gyratory.

Photo 5: Northwich Town Centre Bus Interchange

Source: Mott MacDonald Ltd

Service levels in the evenings and weekends are reduced in comparison to weekdays, making travel by bus more difficult during these times and limiting their opportunity for supporting an evening leisure economy at Barons Quay, which is expected to generate additional demand for trips to the town centre once it becomes fully operational. Similarly, some areas are not well served by bus, with routes not being adapted or altered to match development growth and demand.

All bus routes tend to run around the gyratory system due to the location of the bus interchange whilst few serve the north west of the town centre where the Barons Quay development is located.

2.4.1 Key Bus Issues Identified

The following issues identified as part of the baseline study have been used to develop options in an effort to improve bus options in Northwich:

- Infrequent bus services at evening and weekends which does not support retail, leisure and entertainment economies in the town centre.
- The bus interchange is located at the gyratory to the south of the town centre reducing its effectiveness to support Barons Quay to the north.

2.5 Walking and Cycling Networks

There are numerous Public Rights of Way serving the wider, rural area, as well as provisions in the Town Centre, however some of these need improvement or further connectivity. Pedestrian and cyclist access to the town centre from local surrounding areas such as Castle and Winnington can be gained from crossing the River Weaver at Hunts Lock. Within the town centre, footways are provided along both sides of the A559 of generous width and good quality. There are existing cycle routes through Furey Wood and Odhams Hill also in the vicinity of the Town Centre.

There are pedestrian underpasses within the Town Centre, in additional signalised controlled pedestrian crossings around the gyratory to assist pedestrians to cross safely. There has also been an increase in cycle parking facilities in the Town Centre with facilities provided at:

- Sainsbury's car park, Venables Road (20 spaces)
- Zion Street (3 spaces)
- Waitrose car park (6 spaces)
- Weaver Square car park (3 spaces)
- Memorial Court (20 spaces)
- Northwich Station (2 spaces)

Photo 6: Cycle parking at Memorial Court

Source: Mott MacDonald Ltd

The existing cycle network is relatively limited in its extent and relies upon a mix of signed on-road routes with limited provisions and a number of off-road routes which range in quality from good quality to narrow poorly designed link paths.

Photo 7: Cycling infrastructure in Kingsmead

Source: Mott MacDonald Ltd

The Northwich Cycling Strategy, produced in August 2015, suggests a number of options to improve cycling in the town centre and the radial corridors from the immediately adjacent residential communities of Hartford, Leftwich, Rudheath, Wincham/Marston, and Winnington into the town. The NTS supports these recommendations to facilitate better cycling connectivity in the area.

2.5.1 Key Issues Identified with Walking and Cycling

Constraints on the walking and cycling network were identified as part of the baseline study. The key issues noted include:

- Cycle infrastructure in town centre and wider urban area is limited and where available is of poor quality making cycling unattractive.
- There are a number of options suggested within the Northwich Cycling Strategy which should be considered and supported within the NTS.
- Pedestrian footways to and around the town centre need upgrading and extending.

2.6 Air Quality

There are no Air Quality Management Areas within the study area. CWaCC use diffusion tubes to monitor air quality at over 80 locations in the borough; there are 19 roadside tubes in the Northwich wider urban area. Ten of these are in the Town Centre, with the remainder spread out across the wider urban area.

The annual objective for nitrogen dioxide (NO2) is 40 micrograms per cubic metre. The overall trend of NO2 emissions at these 19 sites has been downward with all but one site (Warrington Road, Bartington) recording a level below the objective in the most recent measurement.

Despite issues associated with congestion, there are no recorded air quality issues within Northwich Town Centre or in other locations subject to congestion such as the Hartford corridor.

2.7 Stakeholder engagement

Key stakeholders were consulted early at the baseline stage of the study between April and July 2017 in order to gain a detailed understanding of the local issues and opportunities. Those consulted included:

- Arriva
- Cheshire East Council
- Cheshire Fire and Rescue
- Cheshire West and Chester - Officers
- Gadbrook Business Improvement District (BID)
- Local Members – Town, Parish and Ward Councillors
- Mid Cheshire College
- Mid Cheshire Development Board
- Mid Cheshire Hospitals NHS Trust (Victoria Infirmary)
- Northwich BID
- Sir John Deane's Sixth Form College

Individual stakeholders were contacted by telephone and were informed about the strategy and offered an opportunity to raise any transport related issues and potential schemes or solutions. Northwich Member Working Group meetings were also attended to report progress of the study and discuss key issues and opportunities.

As part of this engagement, existing information was also provided including previous scheme designs which had been considered, baseline data from other studies and information collected for example the Northwich Town Council funded Northwich Cycling Strategy and data and studies undertaken as part of the Barons Quay development was shared to inform a robust baseline evidence base.

2.8 Key Issues and Opportunities

The findings from the full assessment of baseline evidence were finalised into a list of key issues and opportunities for each geographical area of the study; the town centre, wider urban area and long distance. The key issues and opportunities are noted below:

2.8.1 Issues

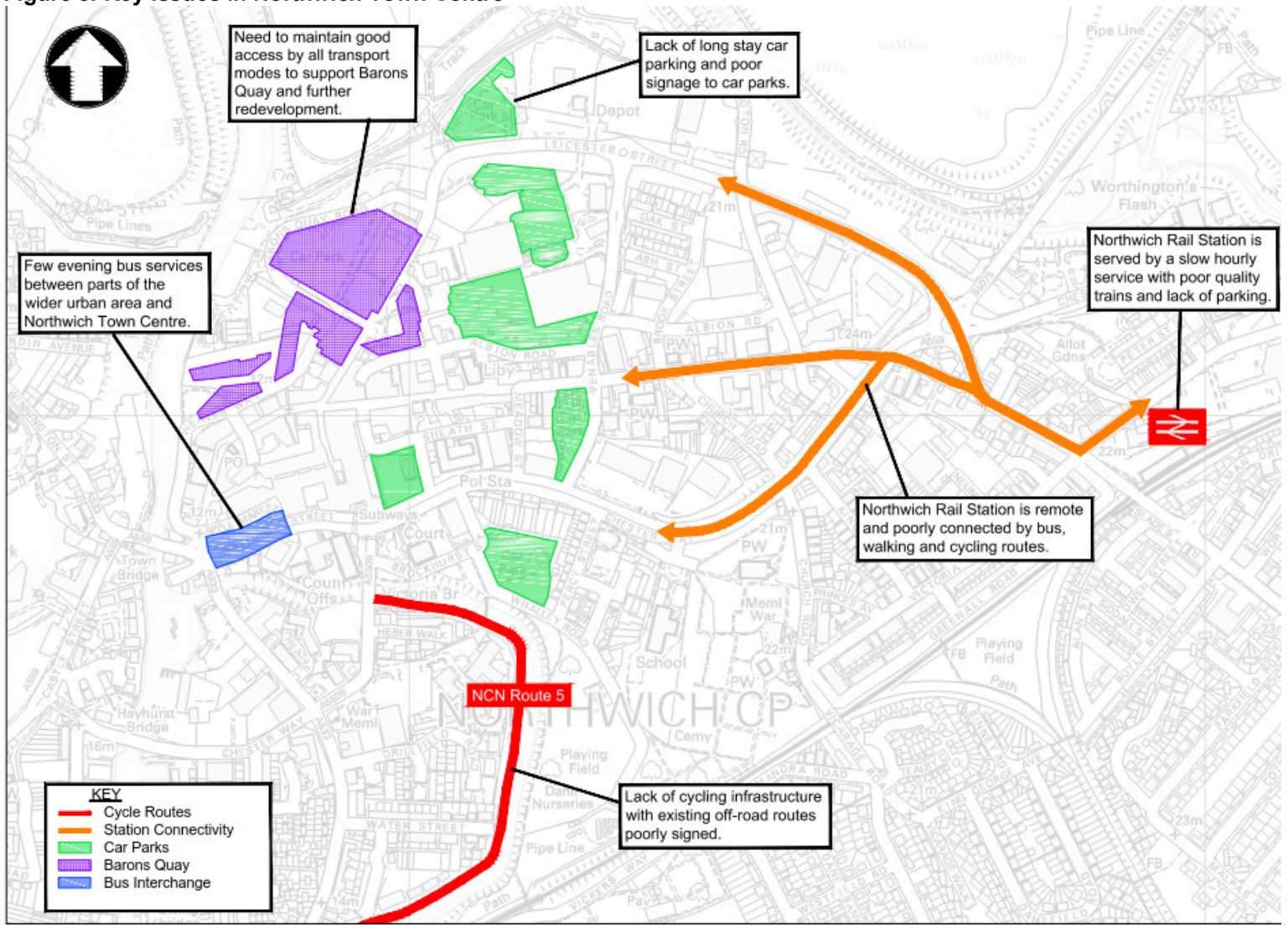
2.8.1.1 Town Centre

- There are few evening bus services between parts of the wider urban area and Northwich Town Centre e.g. to serve new leisure facilities.
- Northwich Rail Station is served by an hourly train service which has poor quality trains and an uncompetitive journey time to Manchester in comparison to travel by car.
- Northwich Rail Station is remote from the town centre and is poorly connected by bus, walking and cycling routes.
- There is a lack of cycling infrastructure to, within and around the town centre and existing off-road routes are poorly signed.
- Need to maintain good access by all modes to support Barons Quay and further town centre redevelopment.
- Issues identified in Cheshire West and Chester Parking Strategy:

- Lack of long stay car parking is a key issue within the town centre causing issues for employees and discouraging spending in the town centre.
- Poor signage to car parks within Northwich.
- There is insufficient car parking at Northwich rail station.

The key issues identified in the town centre are summarised in **Figure 8**.

Figure 8: Key Issues in Northwich Town Centre



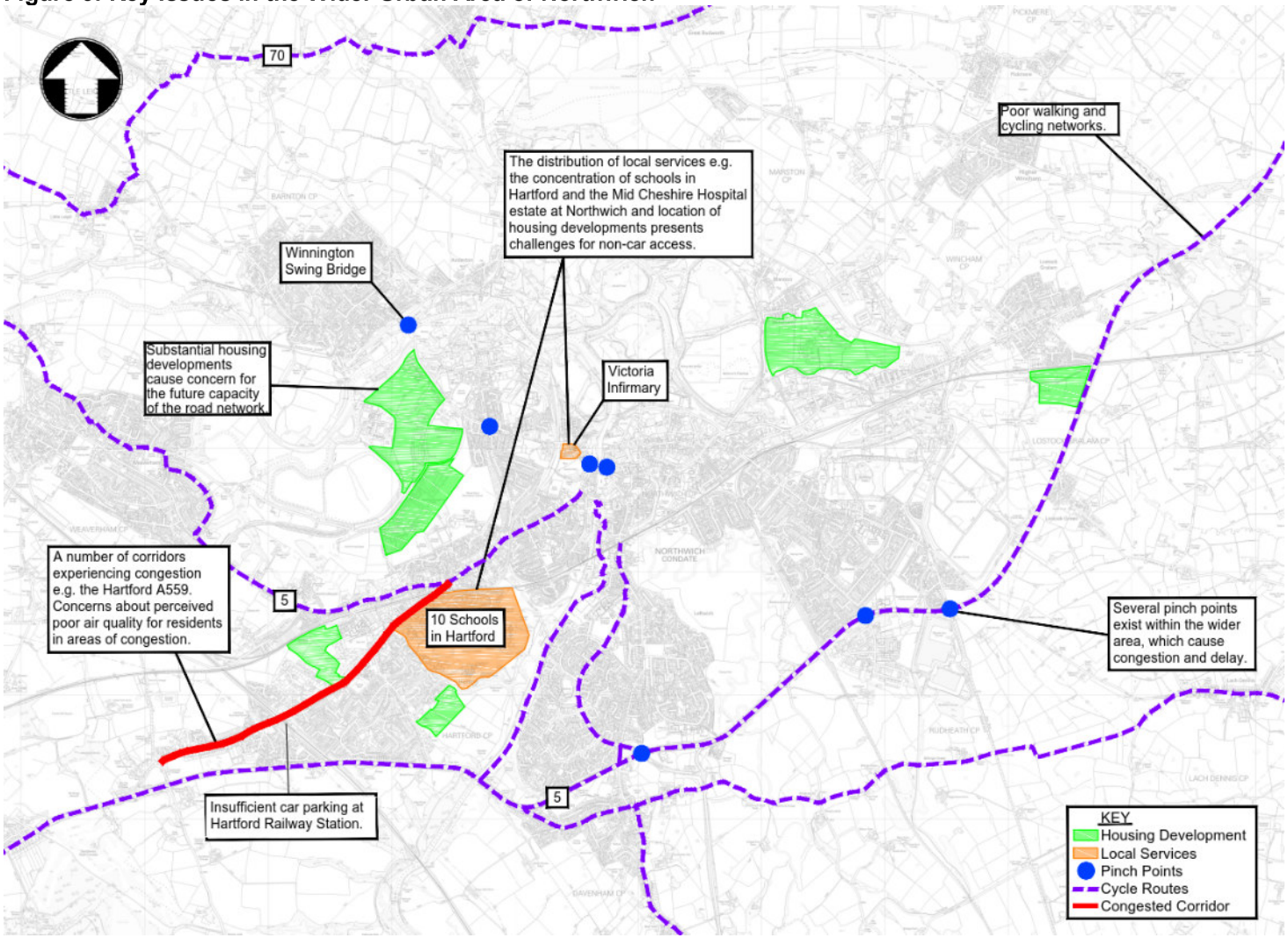
Source: Mott MacDonald

2.8.1.2 Wider Urban Area

- Several pinch points exist within the wider area, which cause congestion and delay. These include the entrance/exit to Gadbrook Park, the Winnington Street/Castle Street junction and the swing bridge at Winnington Lane crossing the River Weaver, the A556/A530 King Street junction; and the A559 Chester Way/Venables Road junction.
- Due to the success of the Winnington Urban Village Development, and other development coming forwards across the Wider Urban Area, the future capacity of the road needs attention to ensure the additional demand can be accommodated.
- There is the potential for some solutions to have a displacement impact on other parts of the network which will need to be carefully considered.
- There are a number of corridors experiencing congestion e.g. the A559 Hartford corridor experiences severe levels of school related congestion, particularly during peak hours due to the high concentration of educational establishments in the area including sixth form provision for a wide catchment.
- There are concerns about perceived poor air quality for residents in areas of congestion.
- Insufficient parking at Hartford Railway Station.
- The distribution of local services e.g. the concentration of schools in Hartford and the Mid Cheshire Hospital estate at Northwich, Leighton and Winsford and location of housing and employment development presents transport challenges for non-car access to services and jobs.
- Poor walking and cycling networks.

The key issues in the wider urban area of Northwich are summarised in **Figure 9**.

Figure 9: Key Issues in the Wider Urban Area of Northwich



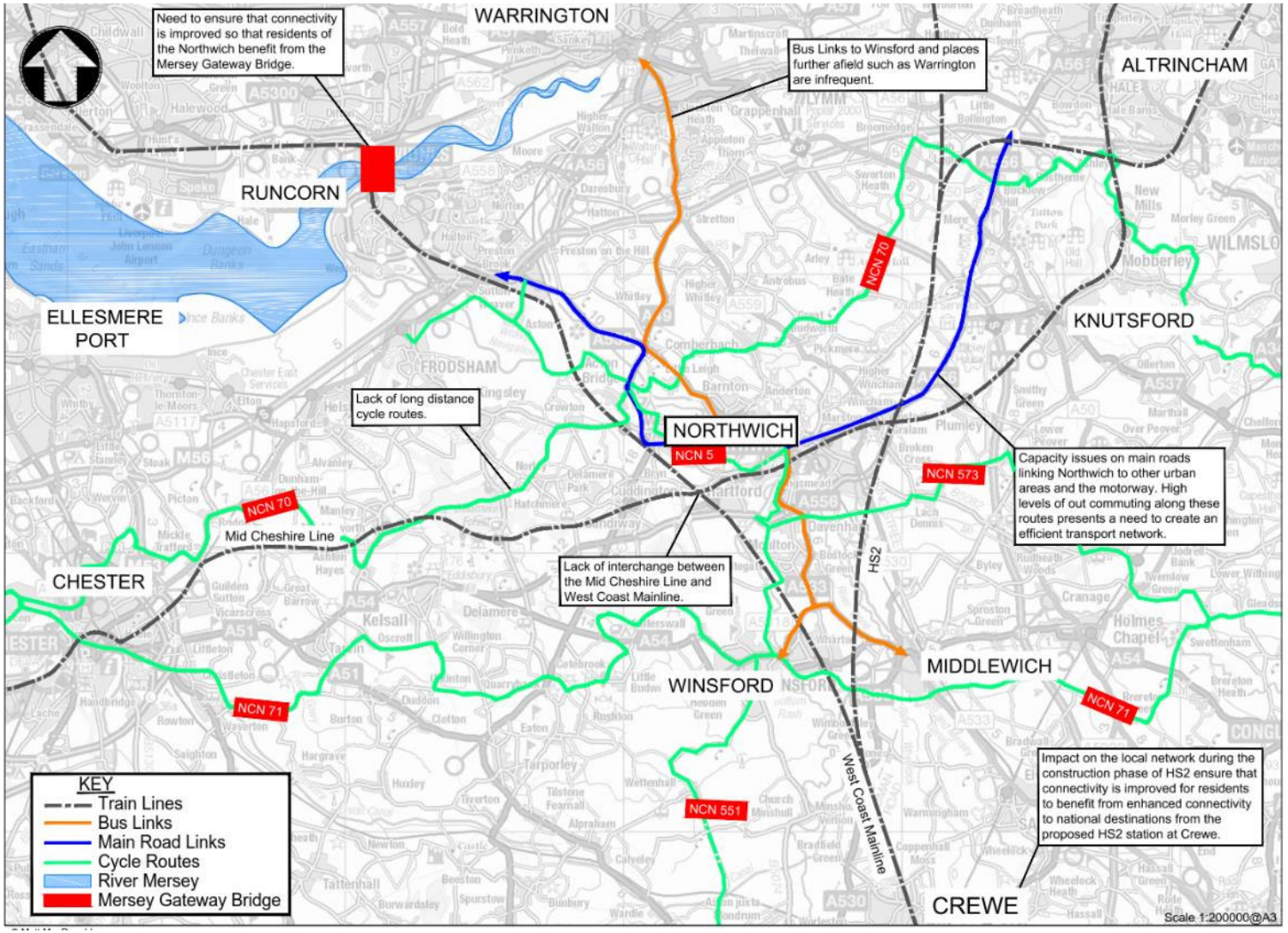
Source: Mott MacDonald

2.8.1.3 Longer Distance

- Lack of interchange between the Mid-Cheshire Line and West Coast Mainline reduces rail connectivity to strategic locations.
- Bus links to locations e.g. Winsford and Leighton Hospital and further afield such as Altrincham and Warrington are infrequent, particularly at weekends, and unavailable during the evening period.
- Capacity issues on main roads linking Northwich to other urban areas and the motorway network.
- High levels of out commuting in Northwich presents a need to create an efficient transport network to remain an attractive area for residents.
- Specific impact on the local network of HS2 during the construction phase.
- There is a need to ensure that connectivity is improved so that residents of Northwich and the wider urban area benefit from the Mersey Gateway Bridge and enhanced connectivity to national destinations from the proposed HS2 station at Crewe.
- Lack of long distance cycle routes.

The key issues in the Longer Distance area of Northwich are summarised in **Figure 10**.

Figure 10: Key Issues in the Longer Distance Area of Northwich



Source: Mott MacDonald

2.8.2 Opportunities

2.8.2.1 Town Centre

- Review current bus routes to identify ways to increase services to enhance access to opportunities and enhance leisure economy.
- Consult measures suggested in the Cheshire West and Chester Borough Wide Parking Strategy to reduce issues of insufficient parking and look at new ways of managing and controlling parking.
- Install new and upgrade any current walking and cycling infrastructure to encourage modes of active travel into and around the town centre.
- Improve pedestrian/cycle signage to Northwich Rail Station and review timing of bus services to improve interchange between rail and bus.

2.8.2.2 Wider Urban Area

- Explore options to reduce congestion along key routes and pinch points in order to reduce pressure but ensuring schemes do not increase traffic through villages. E.g. new road utilising the alignment of the old railway line from Winnington to the A49.
- Review the routing and signage strategy from main corridors into and through Northwich to reduce network pressures in light of recent and future development.
- Implement radial corridor improvements suggested within Northwich Cycling Strategy.

2.8.2.3 Longer Distance

- Junction improvements to support increased use and better accessibility to the A556 and key motorways.
- Consider the long-term possibility of connecting the Mid-Cheshire and West Coast Mainline railway lines to increase connectivity to key economic centres in order to support the Northern Powerhouse and Northern Gateway Development Zone.
- Support proposals for the re-opening of the Northwich-Crewe line to passengers including a station at Gadbrook Park.

Following the identification of these issues and opportunities strategy options were developed for discussion with stakeholders and community groups to address the points above. The process of developing and appraising potential schemes is outlined in the following chapter.

3 Options Identification

This chapter outlines the process of identifying schemes and carrying out appraisal to produce a smaller list of schemes for consultation and modelling which was later refined to make up the final strategy.

3.1 Overview

Following identification of the baseline conditions and key issues and opportunities for Northwich, a long list of schemes was developed by the project team which aimed to address the identified issues. The next stage of this process was to assess these schemes against policy, safety, environmental and deliverability objectives as well as their ability to reduce congestion, open up housing sites and support economic growth.

The long list of schemes was organised by their respective mode type (junction improvements, highways, demand management, public transport, active travel, relief roads and parking), their geographical area (town centre, wider urban area, long distance) and their estimated implementation timescale (short, medium or long term).

3.2 Appraisal Methodology

In order to assess this long list of schemes, an appraisal exercise was carried out scoring the schemes against various criteria to ensure only the most strategically beneficial measures were taken forward. Assessment criteria for this appraisal included:

- Supporting economic growth;
- Opening up of housing sites;
- Reducing congestion;
- Safety;
- Environmental;
- Policy alignment; and
- Deliverability.

Scoring parameters were assigned to each of the points below and totalled at the end of the assessment. The assessment output is contained within **Appendix A**.

3.2.1 Supporting Economic Growth

Each scheme was assessed against the following points which provide an overview of the schemes ability to support economic growth:

- Supporting local economic growth;
- Supporting sub-regional economic growth;
- Directly supports access to employment or key services; and
- Supports leisure and tourism aspirations.

3.2.2 Opening up of Housing Sites

Opening up of housing sites was an important part of the assessment criteria due to the significant housing growth in the area and current constraints associated with developments. The schemes were scored against the points noted below:

- Enables new sites (i.e. sites which may not be allocated or may not have previously been considered for development) to be facilitated or accessed;

- Supports sustainable access to existing housing sites; and
- Removal of severance.

3.2.3 Reducing Congestion

The importance of reducing congestion in the town centre, wider urban area and on longer distance routes has also been recognised due to the number of pinch points and congested corridors within the study area. Therefore, each scheme was scored against the following:

- Increased access to local transport system;
- Increased access to the regional transport system;
- Improved journey time;
- Improved transport interchange; and
- Supporting access to or use of sustainable transport (walking, cycling, bus, rail).

3.2.4 Safety

The safety impact appraisal was made up of the following sub-categories:

- Impact upon road safety (highway)
- Security - improved user security
- Pedestrian/Cyclist Safety

3.2.5 Environmental

The schemes were also scored against the following points to assess environmental impacts:

- Noise and Air Quality (local)
- Protecting or enhancing landscape
- Enhancing townscape
- Journey ambience

3.2.6 Policy Alignment

Adherence of the schemes to policy documents was assessed against local and regional policy including:

- Local Plan (Part 1 which was available at the time of appraisal)
- The Local Transport Plan
- Neighbourhood Plans

3.2.7 Deliverability

Scheme deliverability was also appraised. The three factors considered were:

- Public Approval
- Stakeholder Approval
- Technical/Operational Viability

As part of the financial appraisal the indicative cost of the schemes was reviewed but not taken into consideration within the scoring. This is due to the costs being indicative and unknown at this stage, subject to much further work. The categories considered for the costs were:

- Low <£500K;
- Moderate £500K - £5M;
- High £5M - £10M
- Very High £10M - £25M;

- Major >£25M.

3.3 Results

The results of this appraisal showed that none of the schemes scored negatively against the identified criteria (see Appendix A). Therefore, it was decided that all schemes in the long list should be presented to the public for feedback.

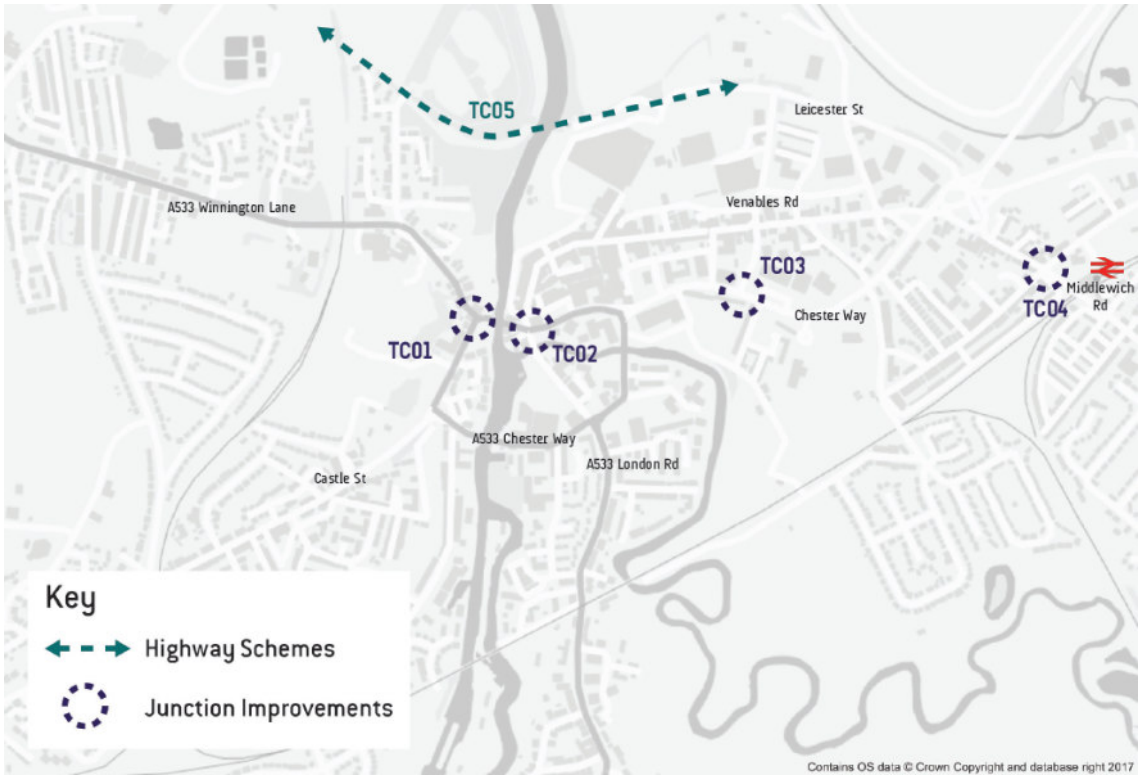
As a number of identified schemes aimed to deliver improvements around the same location, schemes were organised into groups within their geographical area and type. The list of schemes taken forward to consultation is presented in **Table 2** to **Table 4** and **Figure 11** to **Figure 13**.

Table 2: Town Centre Proposals

Ref	Junction Improvements
TC01	Winnington Hill Junction at Town Bridge, widening of the junction
TC02	Improve the town centre one way system at the junction of Town Bridge, Dane Street and Watling Street (A533)
TC03	Improve junction capacity at the traffic lights at Chester Way/Venables Road.
TC04	B5082 Middlewich Road/Manchester Road undertake improvements to enable right turn movements from Rudheath into Tesco and Northwich Station
	Highway Schemes
TC05	Develop a new link road between Winnington and Leicester Street at Barons Quay, aligning along from TATA Winnington to the A533
	Walking and Cycling
TC06	Walking and Cycling Infrastructure improvements to be identified within Local Cycling and Walking Infrastructure Plan: -Review of cycle route condition and deliver resurfacing improvements to off-road routes where possible (TC06a); -Explore options to deliver a new off-road, town centre walking and cycling network making use of the canal and river systems (TC06b); -Undertake Town Centre cycle parking review and enhance cycle parking offer to support active travel (TC06c).
TC07	Encourage private sector bike hire scheme at Northwich Rail station and key points across the town centre to support visitor connectivity, commuting and cycling opportunity and improved links to locations such as Gadbrook Park.
	Public Transport
TC08	Support Network Rail and Northern Rail to deliver a major enhancement of Northwich Station including new step free access to the Chester platform, improved interchange between bus and rail services and an improved station building.
	Parking
TC09	Following the completion of town centre development, consider appropriate locations for taxi provision.
TC10	Enhance Electric Vehicle parking offer through introducing electric vehicle charging infrastructure within town centre car parks to meet Council Parking Supplementary Planning Document standards.
	Demand Management
TC11	Review service vehicle time restrictions to reduce HGV movement and pedestrian conflict, once Barons Quay is fully operational.

Source: Mott MacDonald

Figure 11: Location of Town Centre Proposals



Source: Mott MacDonald

Table 3: Wider Urban Area Proposals

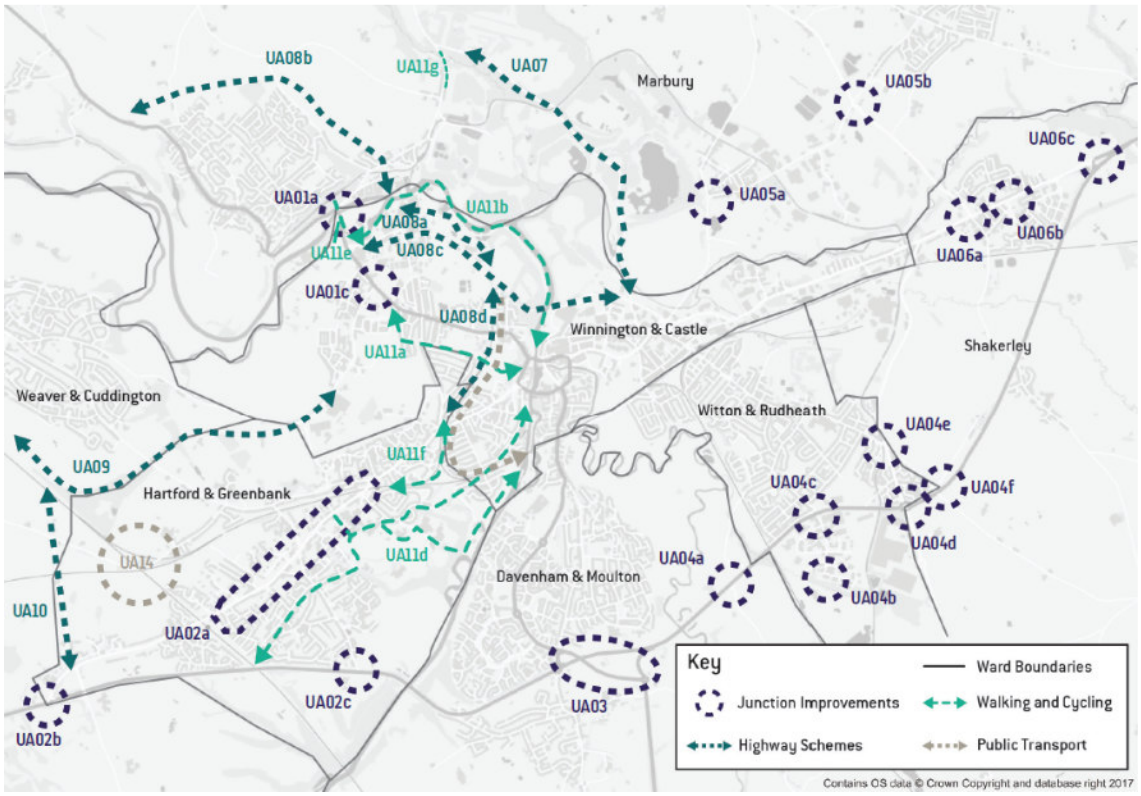
Ref	Scheme
	Junction Improvements
UA01	Deliver schemes to reduce congestion at the Winnington/Barnton Swing Bridge pinch point: -In the short term by increasing junction capacity (UA01a); -In the long-term by providing a new bridge to provide an alternative route (UA01b); -Junction improvement at A533 Winnington Lane / Winnington Avenue (UA01c).
UA02	Reduced congestion along A559 Greenbank/Hartford Corridor through: Junction capacity improvements along Greenbank/Hartford Corridor to reduce congestion (UA02a); Explore options for facilitating a west bound exit from A556 at Hartford (UA02b); Investigate opportunity to reduce congestion through Hartford through introduction of a right turn movement at A556 School Lane (UA02c).
UA03	A533/A556 junction improvements at Davenham to support increased use and better accessibility to the A556.
UA04	Deliver junction improvements to reduce congestion along A556 in the vicinity of Gadbrook Park: -Develop a new junction on the A556 to the west of the existing Gadbrook Park site to open up expansion land to the SW of Gadbrook Park as noted in Local Plan Two (UA04a); -Consider opportunities to introduce a second southern access to Gadbrook Park (UA04b); -Implement improvement scheme at Gadbrook Road/A556 junction to reduce congestion caused by traffic entering and exiting Gadbrook Park (UA04c); -Junction improvement at roundabout junction with the A556/A530 (UA04d);

Ref	Scheme
	-Junction improvement scheme at A530 King Street/B5082 Middlewich Road (UA04e); -Junction improvement scheme at A556/B5082 Penny's Lane (UA04f).
UA05	Junction improvements in Wincham along signed route into Northwich from A559: -B5075 New Warrington Road/Chapel Street (UA05a) -A559 Marston Lane/ Church Street (UA05b)
UA06	Junction improvements in Lostock Gralam: -A559 Manchester Road/A559 Hall Lane/Station Road(UA06a); -A559 Manchester Road/Stubbs Lane (UA06b); -A556/A559 roundabout junction (UA06c).
	Highway Schemes
UA07	Bring closed private road up to required standard to support alternative route north through Marbury Country Park.
UA08	Utilisation of former TATA railway to the south of the River Weaver to form a road link and new bridge crossing linking to Cosgrove Business Park (UA08a); -Road link from new bridge crossing joining to the A533 to the north of Barnton (UA08b); -Utilisation of former TATA railway line for use as road scheme to link to Winnington Avenue (UA08c); -Utilisation of former TATA railway line as a road through Winnington near to Victoria Infirmary to A559 or new rail link joining the Mid-Cheshire Line and Middlewich Branch line with a new Winnington Station (UA08d).
UA09	Introduce a road scheme from Wallascote Road to A49 using the former rail alignment
UA10	Link the above road scheme to the A556 via the introduction of a further link road
	Walking and Cycling
UA11	Walking and Cycling Infrastructure improvements to be identified within Local Cycling and Walking Infrastructure Plan: -Improved cycling and pedestrian connection between Northwich Town Centre, Winnington (UA11a); -Walking and cycling route utilising waterway into Northwich Town Centre from Winnington and Anderton (UA11b); -Review plans for radial corridor improvements from Northwich Cycling Strategy (UA11c); -Liaise with Hartford campus schools to open pedestrian/cycling link from Manor Lane along River Weaver (UA11d); -New pedestrian/cycle bridge to enhance walking route between Barnton and Winnington at Winnington Lane historic bridge (currently no suitable footway along the bridge) (UA11e); -Cycle link utilising former rail alignment from A559 Chester Road to Greenbank Station (UA11f); and -Implementation of a footpath at Marbury Hollows to improve pedestrian access (UA11g).
	Public Transport
UA12	Help the train operating companies to be more proactive at offering solutions to contain demand for car parking space through measures such as car sharing incentives, taxi sharing and cost effective incentives to encourage travel to/from stations by bus.
UA13	Support opportunities to increase parking supply at stations in Northwich wider area to meet forecast demand in rail patronage and increase attractiveness of rail based park and ride

Ref	Scheme
UA14	Investigate long term possibility of connecting Mid-Cheshire and West Coast Mainline railway lines at their intersection north of Hartford to enable interchange.
UA15	As part of borough wide Route and Branch Bus Service Review consider the following: -Where appropriate introduce evening bus services to residential areas e.g. Rudheath, Comberbach to access town centre and leisure facilities (UA15a); -Implement measures of Winsford Transport Strategy for better bus services between Winsford, Middlewich and Northwich (UA15b); -Review and promote opportunities to extend flexible/specialist bus services (UA15c); -Explore options for enhanced bus travel to hospitals, possibly a new shuttle service similar to the Leighton Link Service that has been successfully introduced for Leighton Hospital in Crewe (UA15d).
UA16	Support smart, integrated ticketing system for all users of bus and rail services in the Northwich area and introduce a new system of subsidised travel cards for students across Northwich and the wider area.
UA17	Review and identify opportunities to enhance bus priority at junctions with traffic signals.
	Parking
UA18	Implement recommendations of Gadbrook Parking Study and continue to monitor the impact of these.
UA19	Implementation of waiting restrictions on residential roads impacted by on street parking near Hartford Rail Station
	Demand Management
UA20	Encourage other schools to follow St Wilfrid's Greenbank in investigating staggering school start and finish times to reduce congestion
UA21	Support extensions to the CWaCC Parent Parking Charter to encourage parents to leave cars further from schools and complete their journeys on foot
UA22	Introduce traffic calming measures on Hartford Road in Davenham
UA23	Introduce a package of urban traffic control measures to improve linking of junction signal timings along congested corridors in Northwich.
UA24	Continue to implement the programme of 20mph speed limits across the Northwich wider urban area
UA25	Examine opportunity for Area Travel Plan for schools in Hartford

Source: Mott MacDonald

Figure 12: Location of Wider Urban Area Proposals



Source: Mott MacDonald

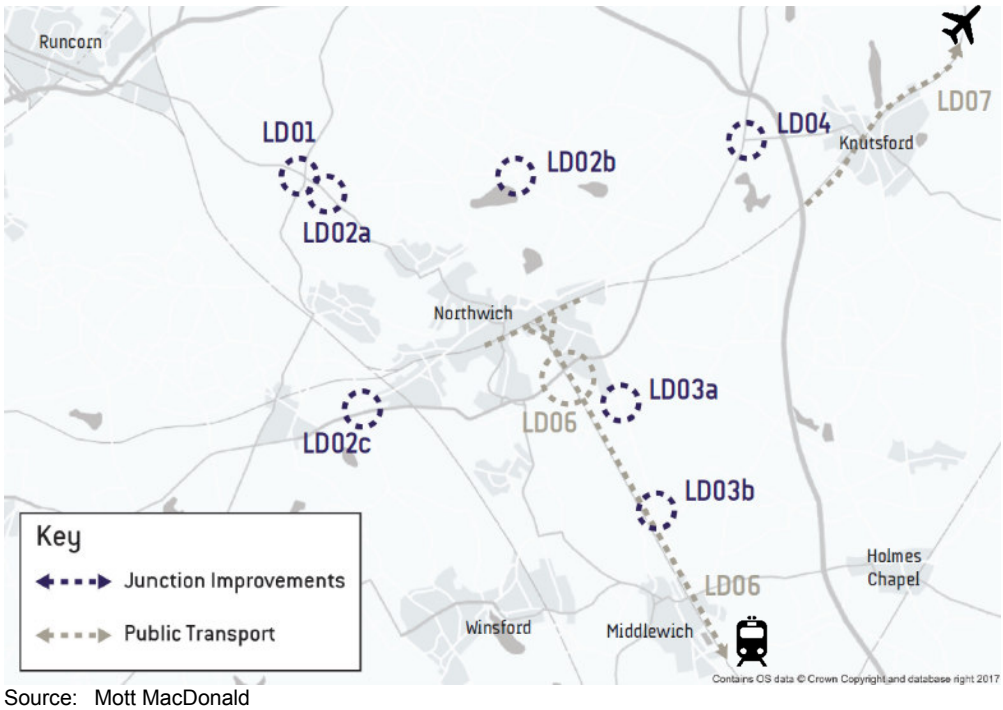
Table 4: Long Distance Proposals

Ref	Scheme
	Junction Improvements
LD01	Implement junction capacity improvements at junction of A533/A49.
LD02	Improved safety measures for incident hotspots, identified as: -Smithy Lane/Ash Lane/A533, Little Leigh (LD02a); -Budworth Lane/A559/High Street, Great Budworth (LD02b); -A556/A559 junction through improved road alignment at Cinder Hill, Hartford (LD02c).
LD03	Implement junction capacity improvements at pinch points on A530: -A530/Davenham Road/ Crowder's Lane (LD03a); -A530/B5309 King Street (LD03b).
LD04	Support junction capacity improvements to support access to M6 J19 at A556/A5033 junction.
	Walking and Cycling
LD05	Walking and Cycling infrastructure improvements to be identified within Local Cycling and Walking Infrastructure Plan: -Support Cheshire East Council to implement schemes identified within their March 2017 Cycling Strategy including a Middlewich – Winsford – Northwich – Knutsford cycle connection by delivering new connections within Cheshire West (LD05a); -In partnership with Cheshire East Council, explore opportunities for a cycle link that runs broadly parallel to the new HS2 line (LD05b).
	Public Transport
LD06	Reopening of Middlewich Branch Line:

Ref	Scheme
	-Lobby Network Rail and work with Cheshire East Council to ensure that the Middlewich Branch Line is reopened for regular passenger rail services (LD06a); -Work with Cheshire East to support proposals for a new station at Middlewich on the Middlewich Branch line (LD06b); -Explore options for a new station at Gadbrook Park on the Middlewich Branch Line to serve Gadbrook and south Northwich (LD06c).
LD07	Support proposals for an Airport Western Rail Link to link the Mid-Cheshire Line and Manchester Airport.
LD08	Lobby Northern to introduce timetable changes on the Mid-Cheshire Line to better support rail commuting between Northwich and Chester and Northwich and Manchester.
LD09	As part of borough wide Route and Branch Bus Service Review work with bus operators to explore possibilities of introducing an evening bus service to Warrington.
	Demand Management
LD10	Implement speed reduction measures on key local routes affected by speeding issues including the A556 Cuddington-Davenham-Allostock and the A559 up to the A56.

Source: Mott MacDonald

Figure 13: Location of Long Distance Proposals



Source: Mott MacDonald

4 Highway Modelling

To help inform the identification of options, highway modelling was undertaken to help understand where there were existing issues on the network in relation to delay and congestion, and where these may appear in the future year of 2030, accounting for proposed growth in the local area.

The models were then also used to test the impact of some of the emerging schemes.

4.1 Northwich Transport Model

The 2016 Northwich Traffic Model (NTM) developed in SATURN covers Northwich and the surrounding satellite villages of:

- Acton Bridge
- Anderton
- Barnton
- Bostock Green
- Comberbach
- Cuddington and Sandiway
- Davenham
- Hartford
- Leftwich
- Lostock Gralam
- Marston
- Moulton
- Rudheath
- Weaverham
- Wincham and Higher Wincham

The NTM has been developed for the following time periods:

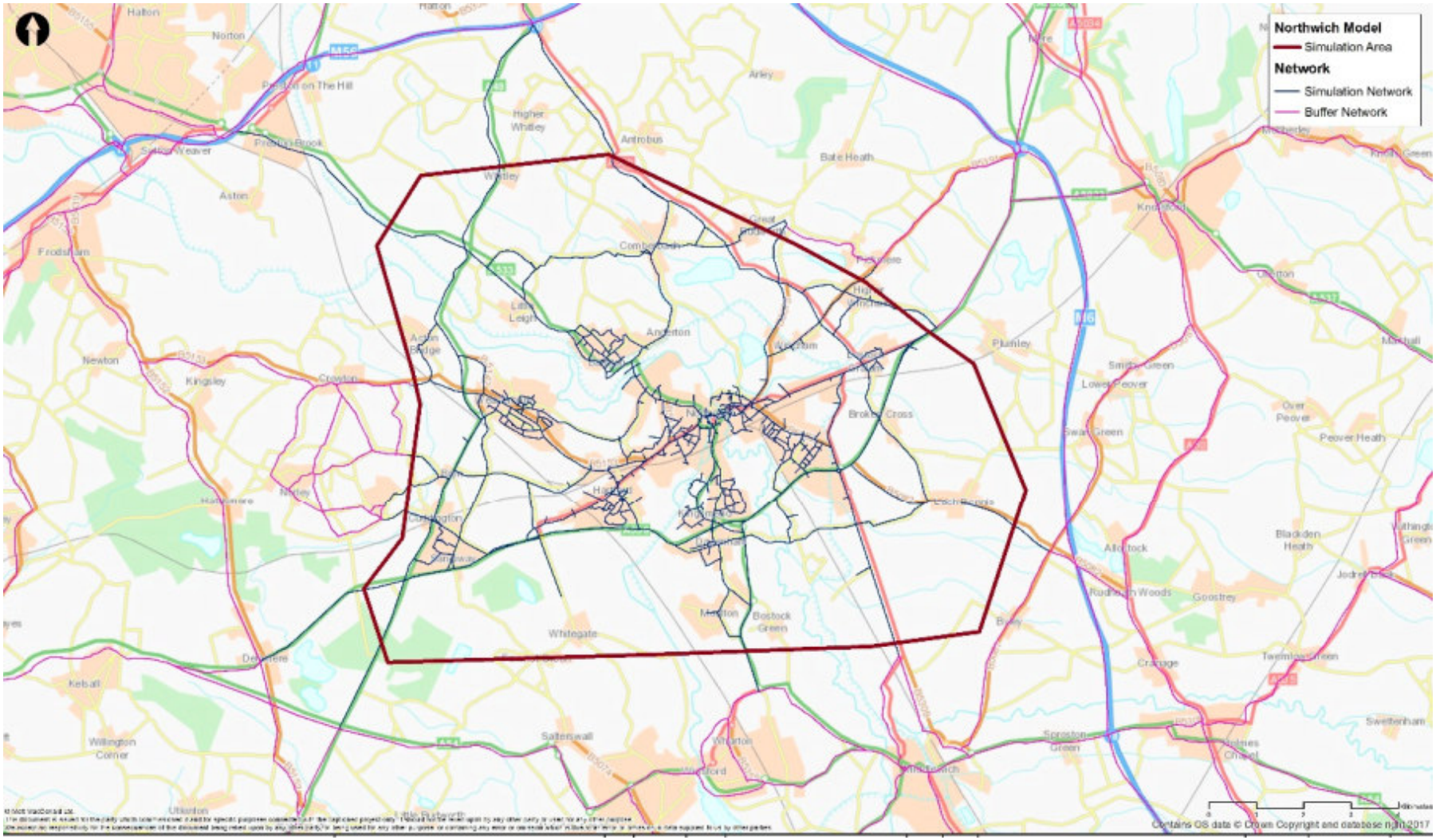
- AM peak hour (08:00-09:00);
- Average interpeak hour (10:00-16:00); and
- PM peak hour (17:00-18:00).

Three assessment scenarios were considered:

- Base Year (2016) – To simulate 2016 conditions.
- Future Year Do Minimum (2030) – Uplift of 2016 Base Year to reflect 2030 growth. No NTS schemes considered.
- Future Year Do Something (2030) – Use of the Do Minimum scenario but including schemes.

The extent of the modelling area can be seen in **Figure 14**.

Figure 14: Northwich Traffic Model Extent



4.2 Base year assessment

Across all time periods the base year (2016) model indicates that locations such as Gadbrook Park, Winnington Lane and approaches to the town centre are over capacity which is defined as volume/capacity being greater than 85%. Along these routes there are links which produce delay of greater than 30 seconds. These delays mainly relate to signalised junctions, and again Gadbrook Park, Winnington Lane and locations on the bypass are highlighted.

The model traffic flow for the AM peak across the A533 Winnington Swing bridge is 1,200 passenger car units per hour (pcu/hr) and is similar in the PM peak. This flow level means the junction is operating over capacity and has delays of over 30 seconds per vehicle.

The model flow in the AM peak northbound along the A559 through Hartford is around 400 pcu/hr and southbound 500 pcu/hr. The traffic flow along the A533 through Kingsmead is around 800 pcu/hr northbound and 550 pcu/hr southbound. These flows are similar in the PM peak. Delays along these routes are found at signalised junctions with the junction between the A533 and London Road experiencing delays of over 30 seconds per vehicle. By comparison, the traffic flow along the A559 through Lostock Gralam in the AM eastbound towards the M6 is 600 pcu/hr and westbound towards Northwich is 500 pcu/hr.

Another major route is the A556 bypass. In the AM peak the model traffic flow eastbound ranges between 1,500 pcu/hr to 2,100 pcu/hr and westbound between 1,000 pcu/hr to 1,300 pcu/hr with the greatest traffic flows around Gadbrook Park. The traffic flows for the PM peak are similar but in the opposite direction due to tidality. Along the bypass the model indicates that the signalised junction at Gadbrook Park is over capacity with all arms experience delays of greater than 30 seconds.

The operational performance of the local highway network has been reviewed based on the volume over capacity (v/c) relationships for turning movements at junctions. The turning movement with the maximum volume over capacity value for each junction has been plotted and colour classified according to the following bands:

- **>100% (Red):** This junction is operating over capacity for at least one turning movement. Queues and delays at this location are likely to grow exponentially.
- **>85% to 100% (Yellow):** This junction is operating with a least one turning movement that is approaching capacity and as a result there are increased queue lengths and delays. 85% v/c is the value typically used to indicate there is a problem with capacity at the junction.
- **<85% (No Colour):** This junction is operating with all turning movements below 85% and would incur low levels of queues and delays over the model period. However, there may be times during the peak hours where there are short periods of increased traffic flows, which may cause an increase in queues and delay.

Larger scale copies of these can be seen in **Appendix B**. **Figure 15** presents a plot of the junction locations.

Figure 16 and **Figure 17** show locations that have been identified as having a turning movement being over capacity in the AM and PM peaks respectively in 2016. There are 20 junctions in the AM peak and 21 junctions in the PM peak that have a turning movement approaching capacity or operating over capacity in the 2016 Base.

Table 5 presents the junctions operating over capacity (with a volume over capacity flow of 85% or greater) in the Base Year in either the AM or PM peaks (or in some instances both).

Figure 15: Junction Locations

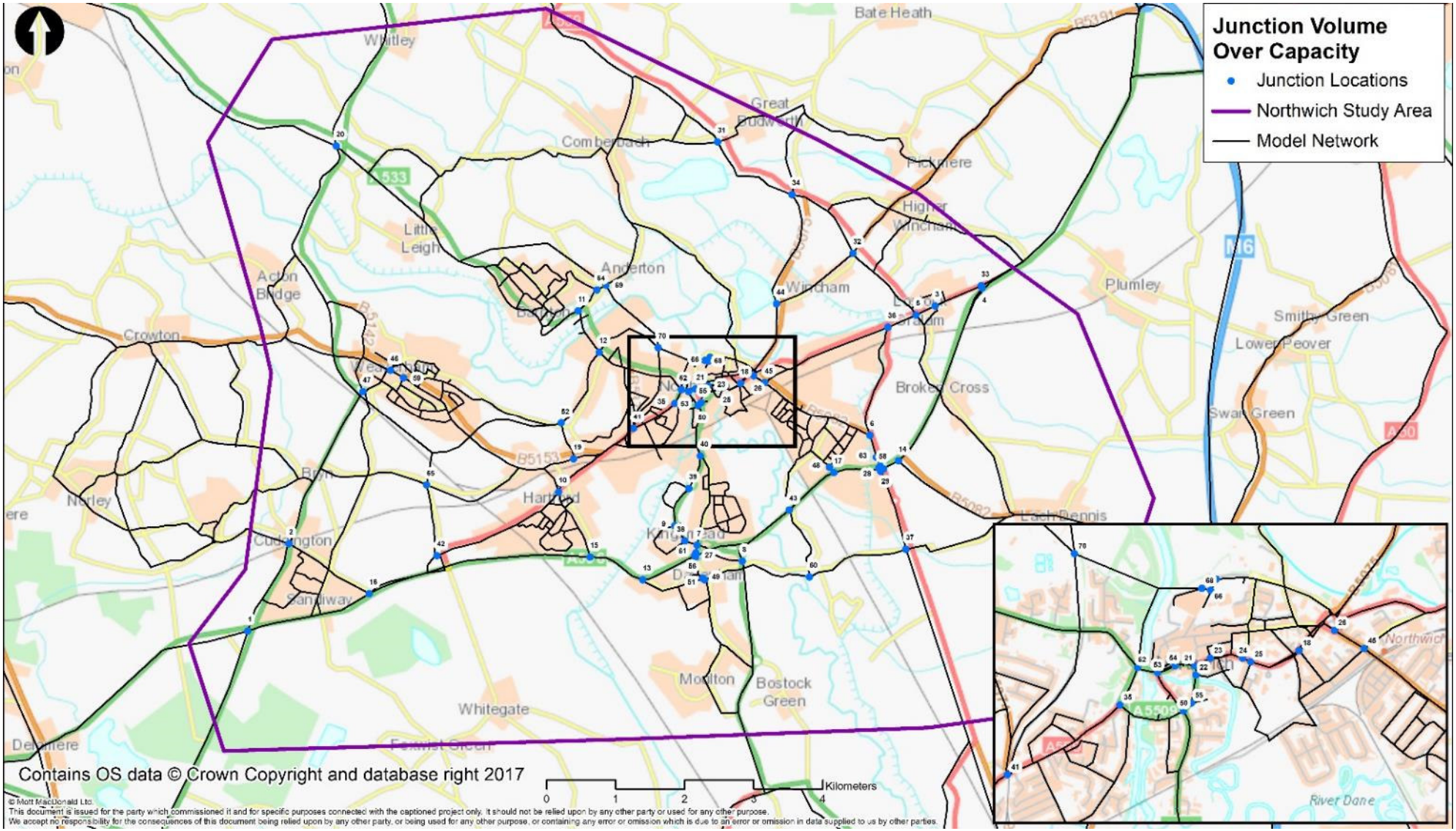


Figure 16: Junction Volume over Capacity – AM Base Year 2016

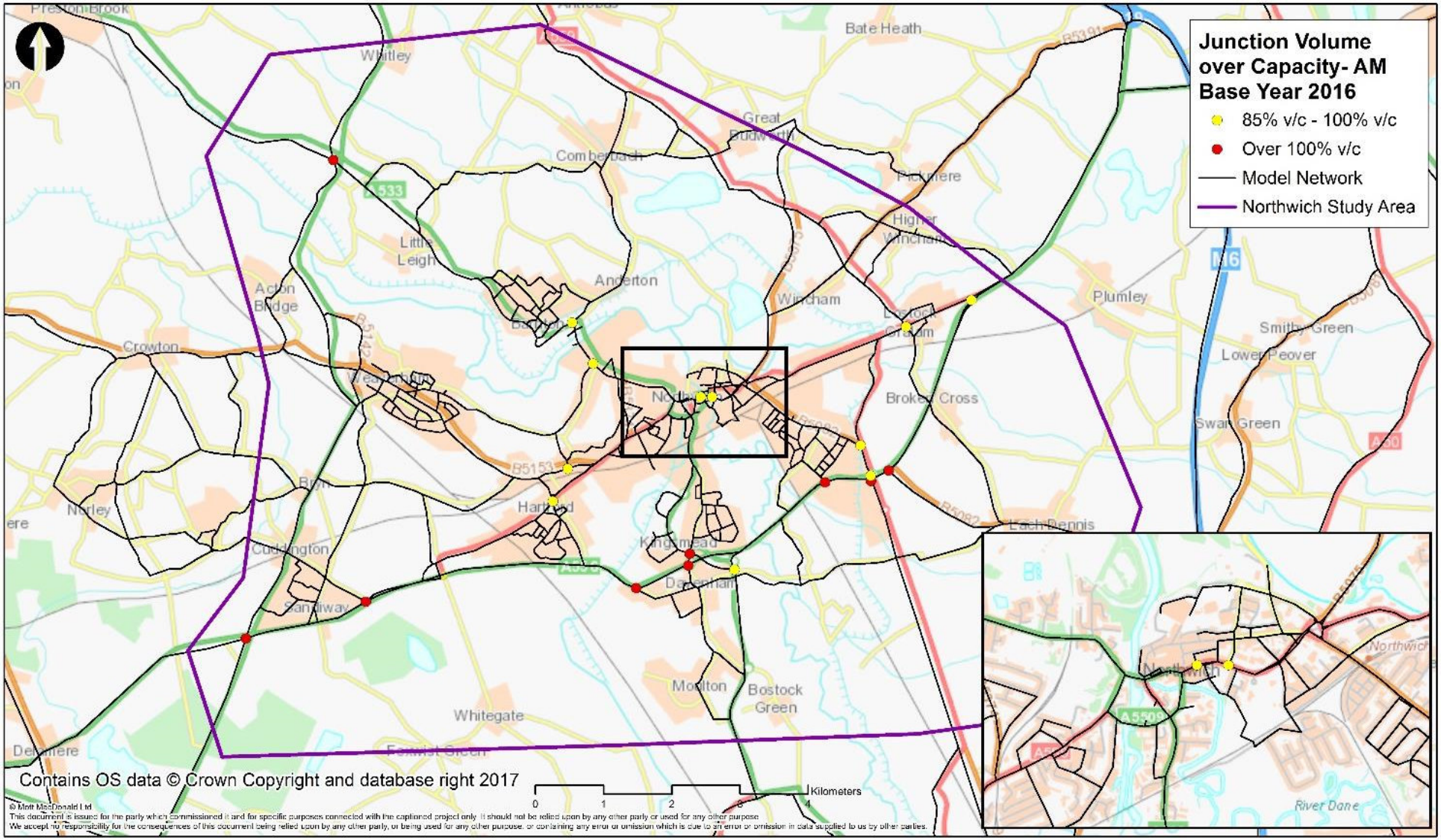


Figure 17: Junction Volume over Capacity – PM Base Year 2016

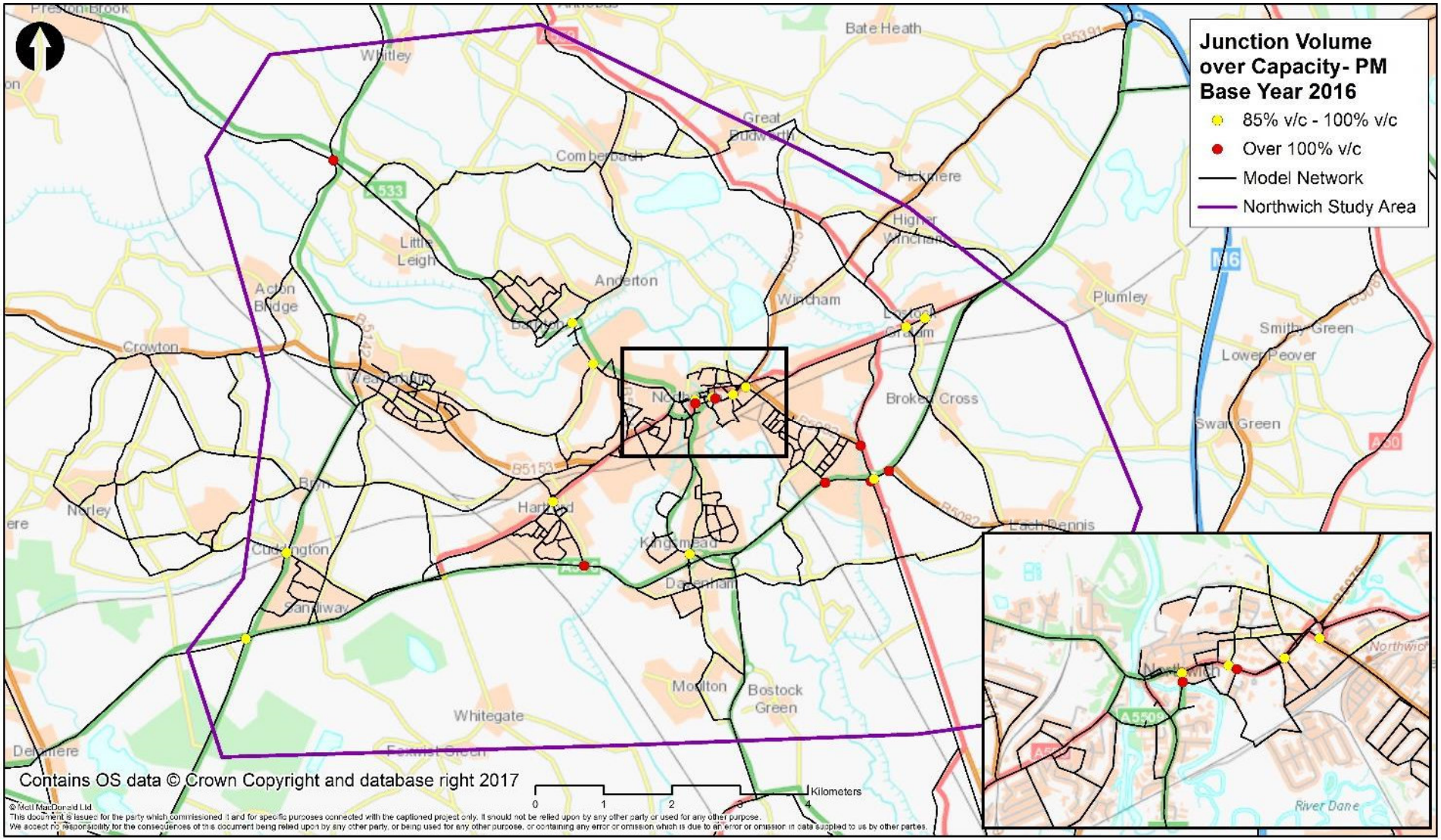


Table 5: Junctions over Capacity in Base Year

ID	Location	AM	PM
1	A556 Chester Road / A49 Forest Road	Y > 100%	Y > 100%
2	A49 Forest Road / Norley Road	Y > 100%	Y- 85 to 100%
3	A559 Manchester Road / Stubbs Lane	N	Y- 85 to 100%
4	A556 / A559 Manchester Road Gyratory	Y- 85 to 100%	N
5	A559 Manchester Road / A559 Hall Lane / Station Road	Y- 85 to 100%	Y- 85 to 100%
6	A530 King Street / B5082 Middlewich Road	Y- 85 to 100%	Y > 100%
7	A533 Kingsmead / London Road (nr. A556)	Y > 100%	Y- 85 to 100%
8	St Wilfrids Roundabout - A533 Kingsmead	Y- 85 to 100%	N
9	A533 Kingsmead / Moor Parkway Roundabout	Y > 100%	N- 80 to 85%
10	A559 Chester Road / School Lane	Y > 100%	Y- 85 to 100%
11	A533 Runcorn Road / A533 Winnington Lane / Soot Hill	Y- 85 to 100%	Y- 85 to 100%
12	A533 Winnington Lane / Winnington Avenue	Y- 85 to 100%	Y- 85 to 100%
13	A556 / Hartford Road	Y > 100%	N
14	A556 / B5082 Penny's Lane	Y > 100%	Y > 100%
15	A556 / School Lane	N	Y > 100%
16	A556 Chester Road / Norley Road	Y > 100%	N
17	A556 / Gadbrook Road	Y > 100%	Y > 100%
18	A559 Chester Way / Kingsway	N	Y- 85 to 100%
19	B5153 Beach Road / Burrows Hill	Y- 85 to 100%	N
20	A533 Northwich Road / A49 Warrington Road	Y > 100%	Y > 100%
21	A559 Watling Street / A559 Chester Way / A5509 Chester Way	N	Y- 85 to 100%
22	A5509 / Brockhurst Street	N	Y > 100%
23	A559 Chester Way / Crum Hill	Y- 85 to 100%	N
24	A559 Chester Way / Venables Road	Y- 85 to 100%	Y- 85 to 100%
25	A559 Chester Way / Percy Street	N	Y > 100%
26	Leicester Street Roundabout	N	Y- 85 to 100%
27	A556 / A533	Y > 100%	N
28	A556 / A530	Y > 100%	Y > 100%
29	A556 / A530	N	Y- 85 to 100%
30	A556 / A530	Y- 85 to 100%	N

Source: NTM, 2017

Detailed tabulations of the v/c and traffic volumes for each turn can be found in the accompanying spreadsheet.[1]

[1] NTS_JunctionCapacityComparison.xlsx

Figure 15: Junction Locations

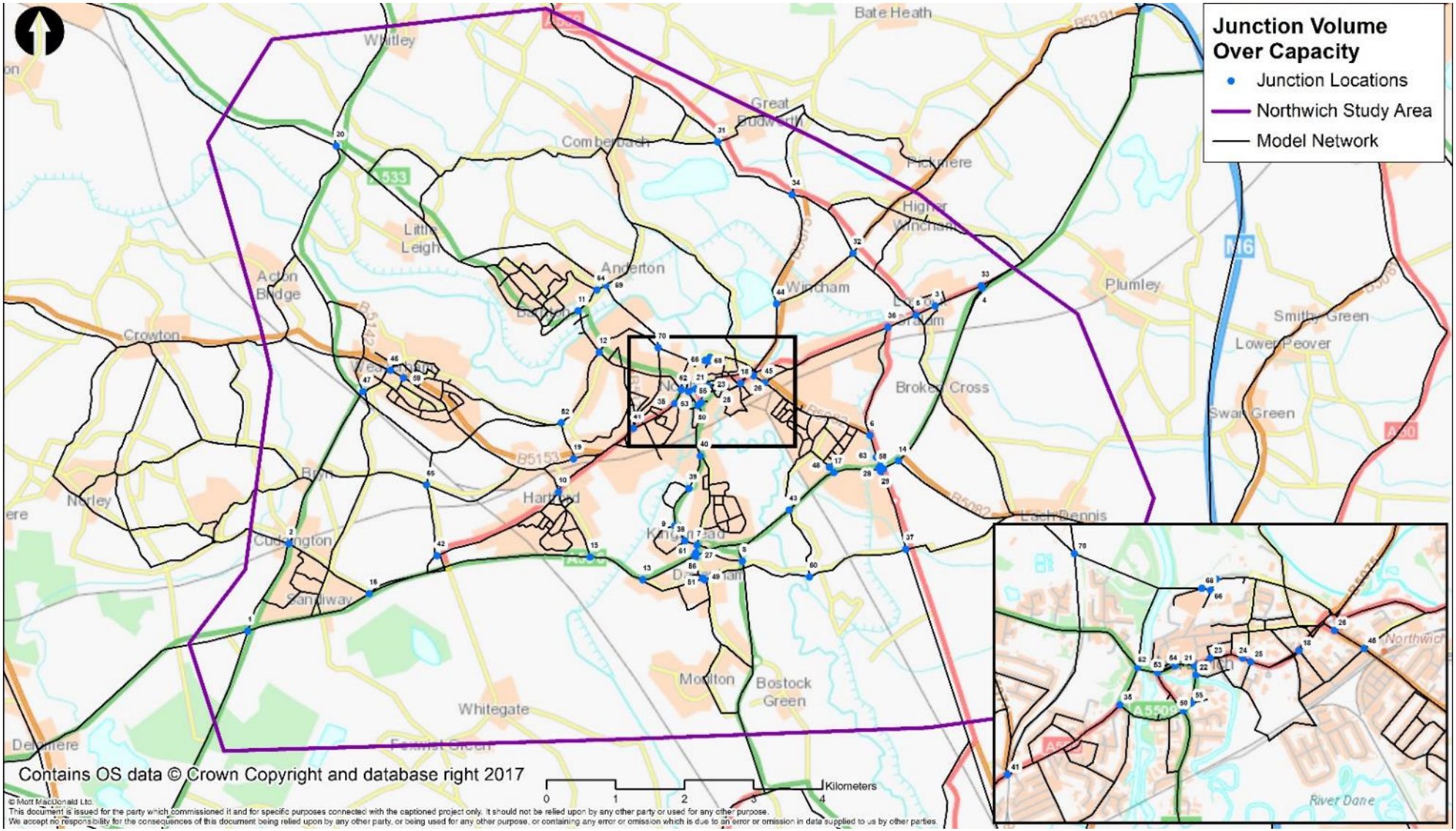


Figure 16: Junction Volume over Capacity – AM Base Year 2016

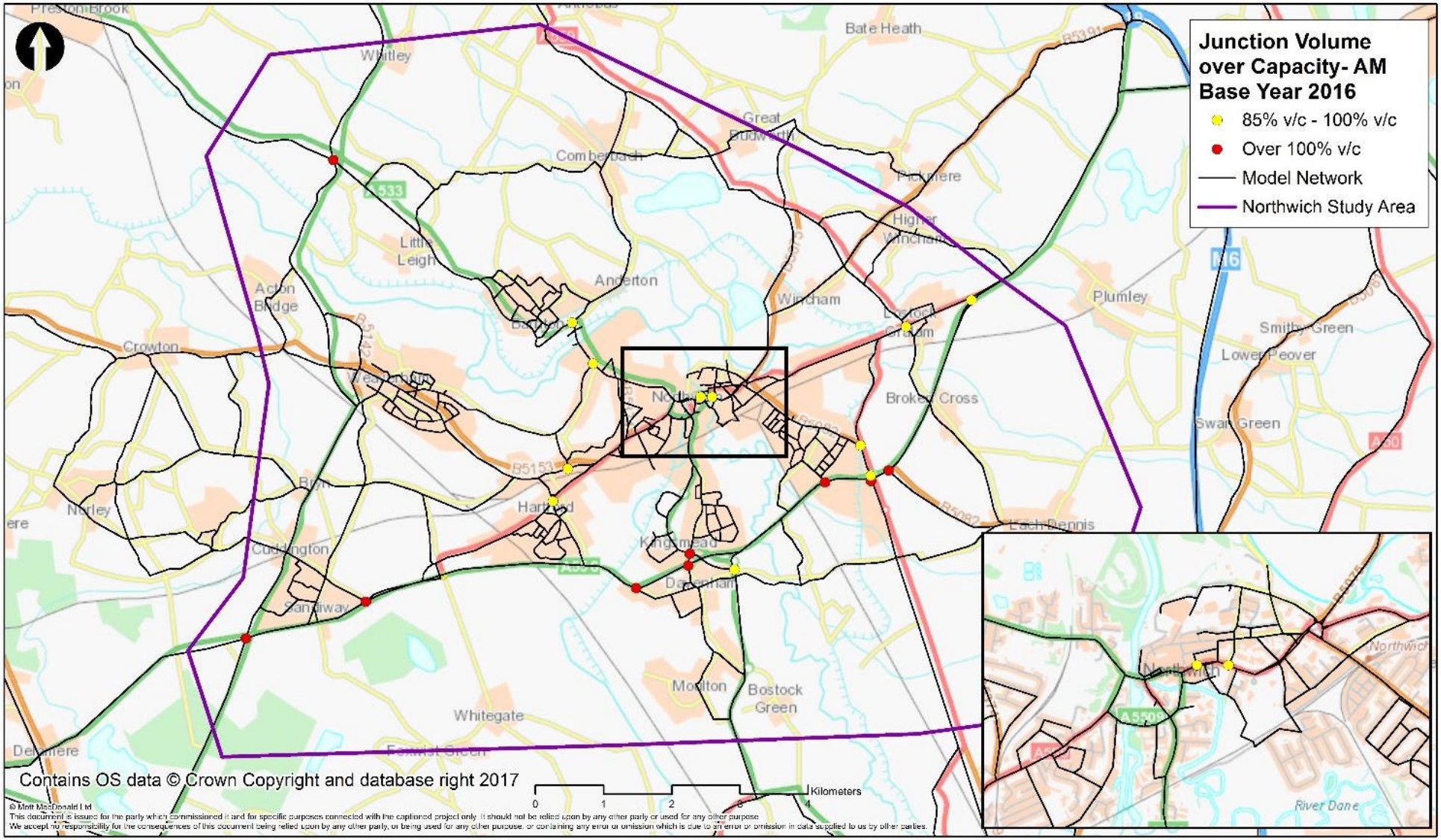
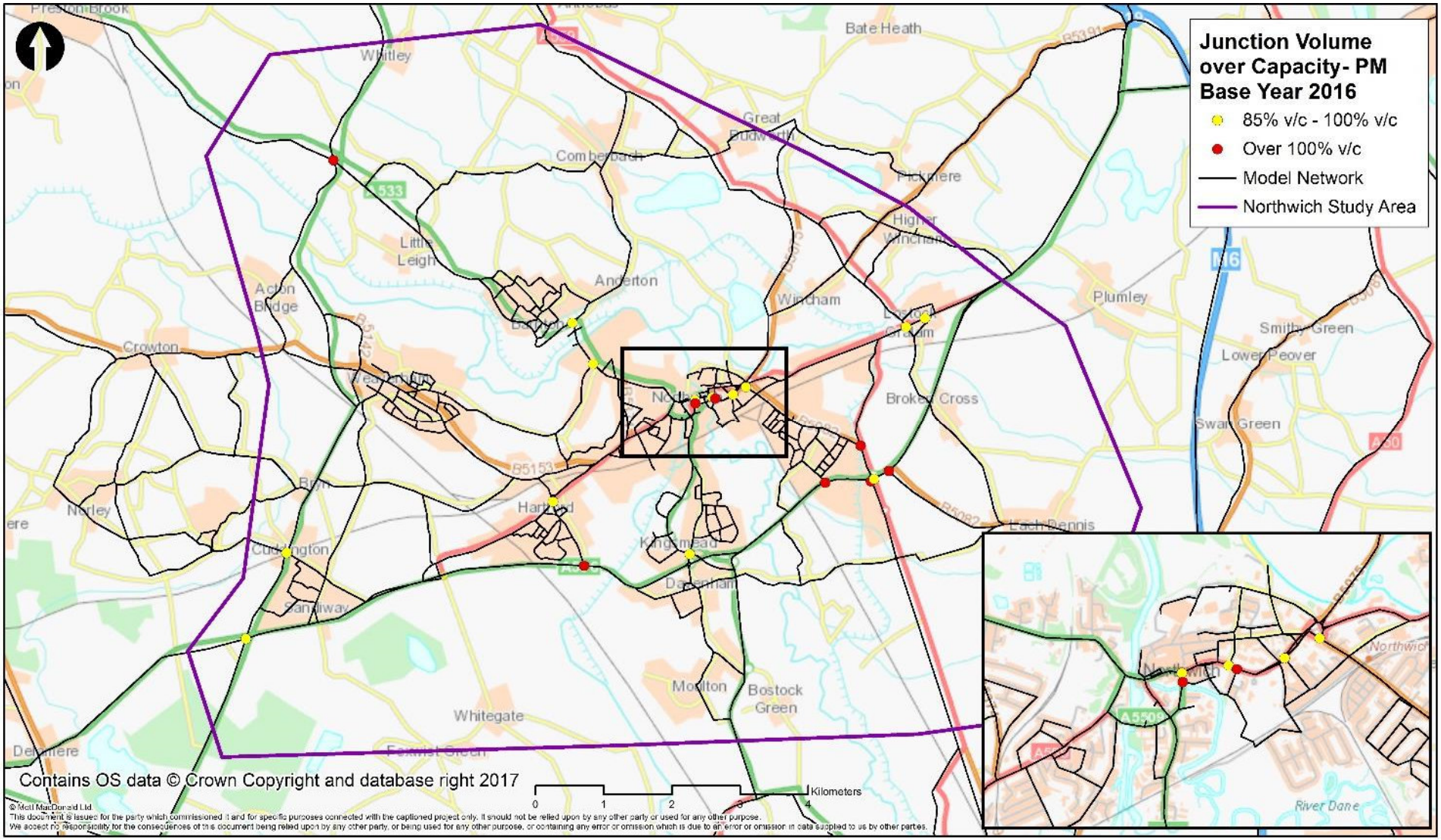


Figure 17: Junction Volume over Capacity – PM Base Year 2016



4.3 Future year (2030) assessment

The Base Year model was updated to reflect a 2030 year scenario, accounting for traffic growth based on the CWaCC local plan allocations for both residential and employment sites. This scenario is referred to as the Do Minimum. Further technical detail can be found in the Northwich Transport Strategy Baseline Modelling Assessment.[2]

Table 6 provides details of the total number of junctions with one turn over capacity and **Table 7** provides details of these junctions alongside a classification of the v/c.

Figure 18 and **Figure 19** show junctions that have been identified as having a turning movement over capacity in the AM and PM peaks in 2030.

There are 43 junctions in the AM peak and 46 junctions in the PM peak that have a turning movement approaching or operating over capacity in the 2030 Future Year scenario, which is almost double the number of junctions in the 2016 Base Year.

Junctions which are forecast to be operating near or over capacity by 2030 are mainly located around Northwich gyratory, A533 Winnington Lane, A559 Chester Road towards Hartford, A559 Manchester Road towards Lostock Gralam and the A556 Bypass.

Table 6: Number of junctions with a turning movement approaching or operating over capacity, 2030 Do Minimum

Scenario	AM	PM
2016 Base Year	20	21
2030 Future Year	43	46

Table 7: Junctions over Capacity, 2030 Do Minimum compared to Base

ID	Location	AM - Base	PM - Base	AM - 2030	PM - 2030
1	A556 Chester Road / A49 Forest Road	Y > 100%	Y > 100%	Y >100%	Y >100%
2	A49 Forest Road / Norley Road	Y > 100%	Y - 85 to 100%	Y - 85 to 100%	Y - 85 to 100%
3	A559 Manchester Road / Stubbs Lane	N	Y - 85 to 100%	N	Y >100%
4	A556 / A559 Manchester Road Gyratory	Y - 85 to 100%	N	N - 80 to 85%	Y - 85 to 100%
5	A559 Manchester Road / A559 Hall Lane / Station Road	Y - 85 to 100%	Y - 85 to 100%	Y - 85 to 100%	Y >100%
6	A530 King Street / B5082 Middlewich Road	Y - 85 to 100%	Y > 100%	Y - 85 to 100%	Y - 85 to 100%
7	A533 Kingsmead / London Road (nr A556)	Y > 100%	Y - 85 to 100%	Y >100%	Y - 85 to 100%
8	St Wilfrids Roundabout - A533 Kingsmead	Y - 85 to 100%	N	Y - 85 to 100%	Y - 85 to 100%
9	A533 Kingsmead / Moor Parkway Roundabout	Y > 100%	N - 80 to 85%	Y - 85 to 100%	Y >100%
10	A559 Chester Road / School Lane	Y > 100%	Y - 85 to 100%	Y >100%	Y - 85 to 100%
11	A533 Runcorn Road / A533 Winnington Lane / Soot Hill	Y - 85 to 100%	Y - 85 to 100%	Y >100%	Y >100%
12	A533 Winnington Lane / Winnington Avenue	Y - 85 to 100%	Y - 85 to 100%	Y >100%	Y >100%
13	A556 / Hartford Road	Y > 100%	N	Y >100%	N - 80 to 85%
14	A556 / B5082 Pennys Lane	Y > 100%	Y > 100%	Y >100%	Y >100%

[2] NorthwichTransportStrategy_BaselineModellingAssessment_RevA.pdf

ID	Location	AM - Base	PM - Base	AM - 2030	PM - 2030
15	A556 / School Lane	N	Y > 100%	N - 80 to 85%	Y >100%
16	A556 Chester Road / Norley Road	Y > 100%	N	Y >100%	N
17	A556 / Gadbrook Road	Y > 100%	Y > 100%	Y >100%	Y >100%
18	A559 Chester Way / Kingsway	N	Y - 85 to 100%	N	Y - 85 to 100%
19	B5153 Beach Road / Burrows Hill	Y - 85 to 100%	N	N	N - 80 to 85%
20	A533 Northwich Road / A49 Warrington Road	Y > 100%	Y > 100%	Y >100%	Y >100%
21	A559 Watling Street / A559 Chester Way / A5509 Chester Way	N	Y - 85 to 100%	N - 80 to 85%	Y >100%
22	A5509 / Brockhurst Street	N	Y > 100%	N	Y >100%
23	A559 Chester Way / Crun Hill	Y - 85 to 100%	N	Y - 85 to 100%	N - 80 to 85%
24	A559 Chester Way / Venables Road	Y- 85 to 100%	Y - 85 to 100%	Y - 85 to 100%	Y - 85 to 100%
25	A559 Chester Way / Percy Street	N	Y > 100%	N	Y >100%
26	Leicester Street Roundabout	N	Y- 85 to 100%	Y - 85 to 100%	Y - 85 to 100%
27	A556 / A533	Y > 100%	N	Y >100%	N - 80 to 85%
28	A556 / A530	Y > 100%	Y > 100%	Y >100%	Y >100%
29	A556 / A530	N	Y - 85 to 100%	Y - 85 to 100%	Y >100%
30	A556 / A530	Y- 85 to 100%	N	Y >100%	Y >100%
31	A559 Warrington Road / Budworth Lane	N - 80 to 85%	N	Y - 85 to 100%	N
32	A559 Marston Lane/ Church Street	N	N	N	Y >100%
33	A556 / A559 Manchester Road Gyratory	Y > 100%	N - 80 to 85%	Y >100%	Y >100%
34	A559 Marston Lane/ Ollershaw Lane	N	N	Y >100%	Y >100%
35	A559 Castle Street / A5509 Chester Way	N	N - 80 to 85%	N	Y - 85 to 100%
36	A559 Manchester Road/ A530 Griffith Road	N	N	N	Y - 85 to 100%
37	A530 Roman Road/ Davenham Road	N	N	N	Y >100%
38	A533 Kingsmead/ Regency Way	N	Y > 100%	N	Y - 85 to 100%
39	A533 Kingsmead/ St Georges Way Gyratory	N	N	Y - 85 to 100%	N
40	A533 Kingsmead / London Road	N - 80 to 85%	N	Y - 85 to 100%	N
41	A559 Chester Road / B5374 Moss Road	N	N - 80 to 85%	N	Y - 85 to 100%
42	A559 Chester Road/ Littledales Lane	N	N	N	Y - 85 to 100%
43	A556 / Shipbrook Road	N	N	Y - 85 to 100%	Y >100%
44	B5075 New Warrington Road/ Chapel Street	N	N	Y - 85 to 100%	Y >100%
45	B5082 Station Road / Manchester Road / Middlewich Road / Victoria Road	N	N	Y - 85 to 100%	N
46	B5153 High Street/ Church Street	N	N	N	Y - 85 to 100%
47	B5144 West Road/ Forest Street	N	N	Y - 85 to 100%	N
48	Gadbrook Road/ East Avenue	N	N	Y >100%	N

ID	Location	AM - Base	PM - Base	AM - 2030	PM - 2030
49	London Road/ Hartford Road	N	N	Y - 85 to 100%	Y - 85 to 100%
50	A5509 Chester Way / A533 London Road	N	N - 80 to 85%	Y - 85 to 100%	Y - 85 to 100%
51	Church Street / London road	N	N	N	Y >100%
52	Winnington Avenue/ Burrows Hill	N	N	N	Y - 85 to 100%
53	A559 Town Bridge / A533 London Road	N	N	Y - 85 to 100%	Y - 85 to 100%
54	A533 Watling Street/ Apple Market Street	N	N - 80 to 85%	Y >100%	Y >100%
55	A5509 Chester Way/ A533 London Road	N	N	Y - 85 to 100%	Y >100%
56	A556/ A533 Kingsmead Gyratory	N	N	Y >100%	N
57	A556/ A533 Kingsmead Gyratory	N	N	Y >100%	N - 80 to 85%
58	A556/ A530 King Street Gyratory	N - 80 to 85%	N - 80 to 85%	Y >100%	Y - 85 to 100%
59	B5153 High Street/ Withen's Lane	N	N	Y - 85 to 100%	N
60	Shipbrook Road / Davenham Road / Manor Lane	N	N	Y - 85 to 100%	Y - 85 to 100%
61	A556 / A533	N	N	Y >100%	N

Appendix B presents a tabulation of maximum junction volume over capacity band (v/c) for each junction, more detailed tabulations of the v/c and traffic volumes for each turn can be found in the accompanying spreadsheet.[3]

[3] NTS_JunctionCapacityComparison.xlsx

Figure 18: Junction Volume over Capacity – AM Future Year Do Minimum 2030

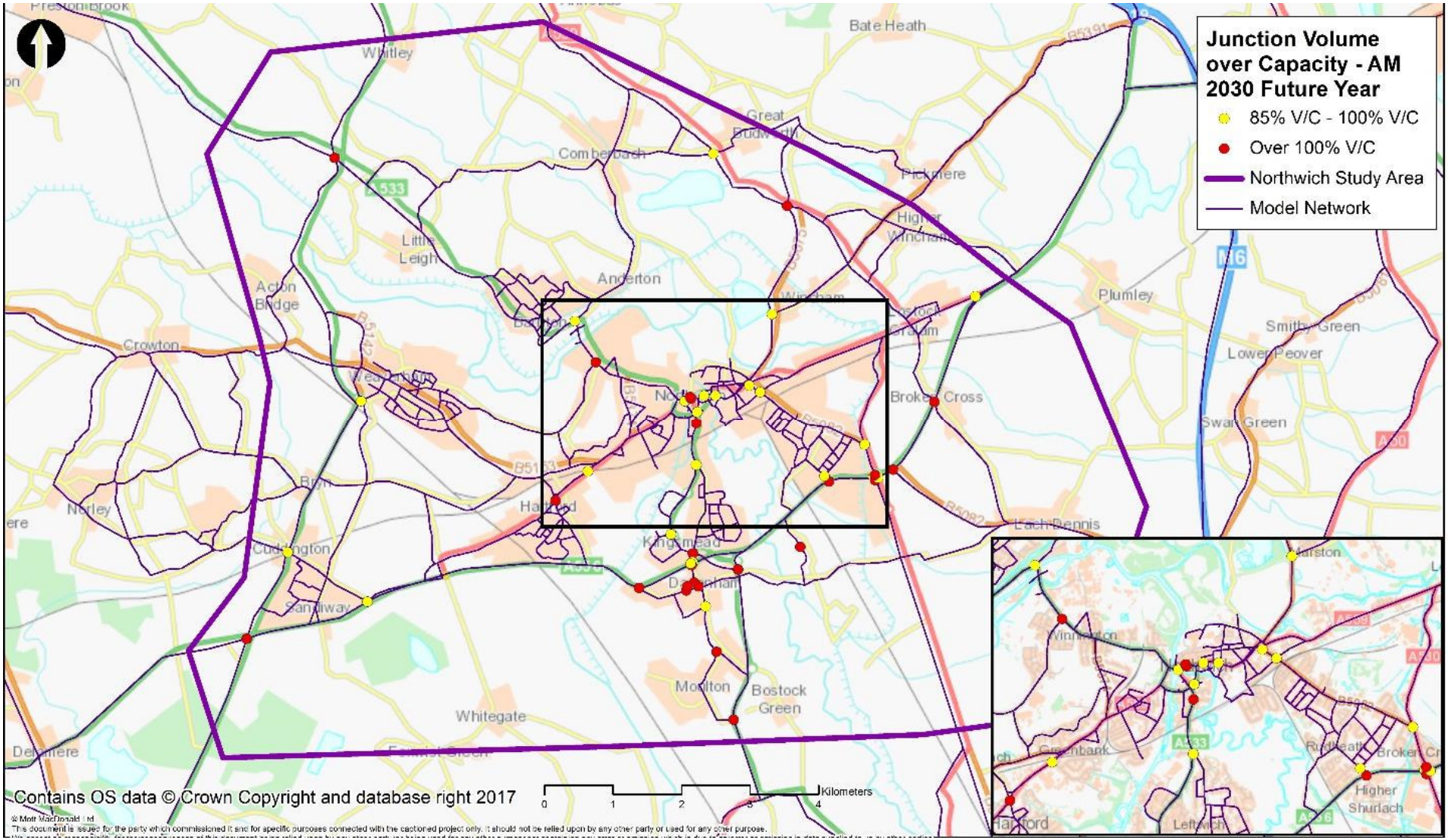
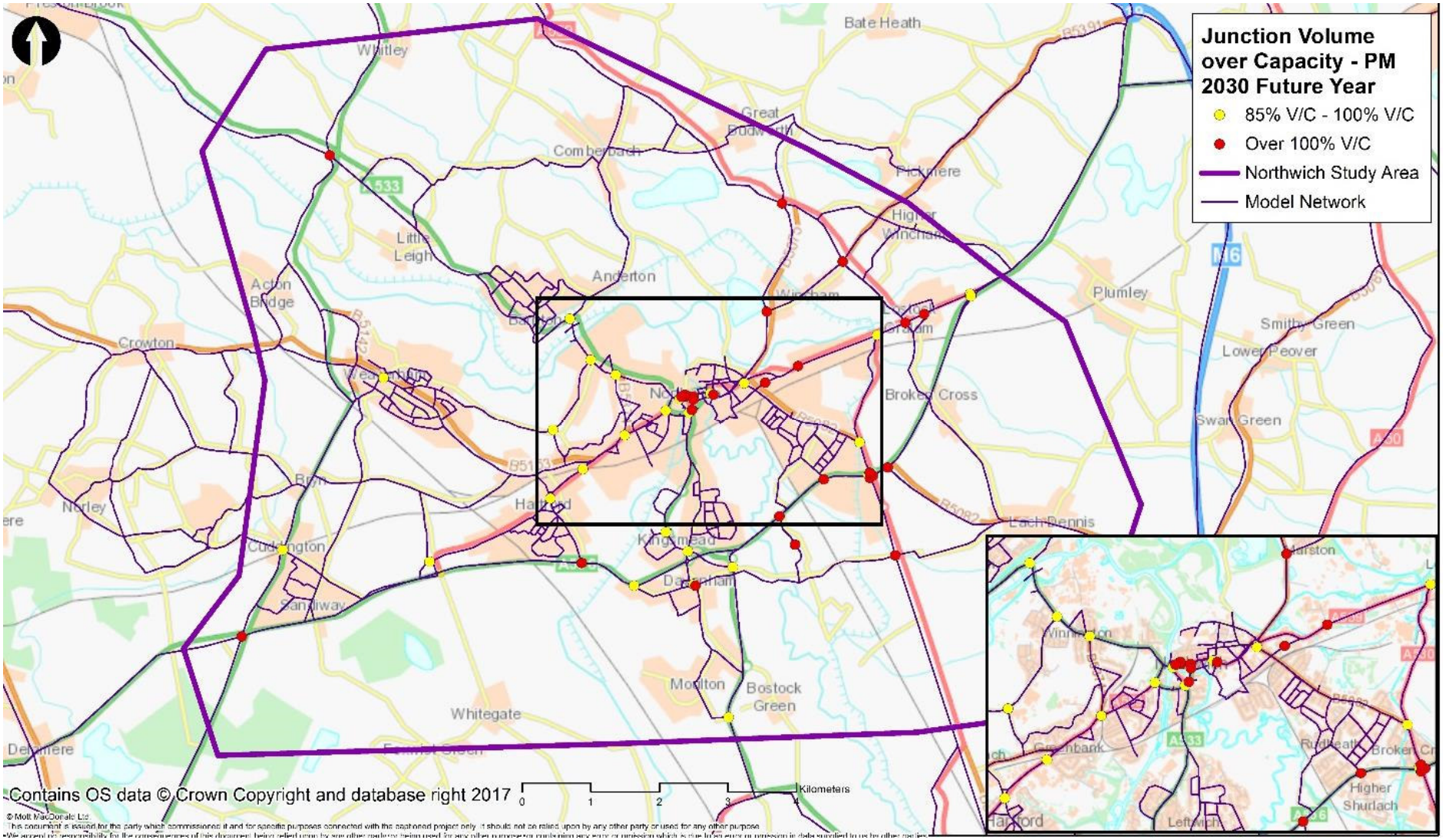


Figure 19: Junction Volume over Capacity – PM Future Year Do Minimum 2030



4.4 Future year 'Do Something' assessment

Following review of the information presented in the Base Year and Future Year assessments, and the generation of options to address the issues and opportunities noted, the model was used to test some of the proposed options to understand their effectiveness at relieving capacity constraints and improving traffic flow and route choice. This is the 'Do Something' assessment, where the model assumes that certain schemes from the NTS are implemented.

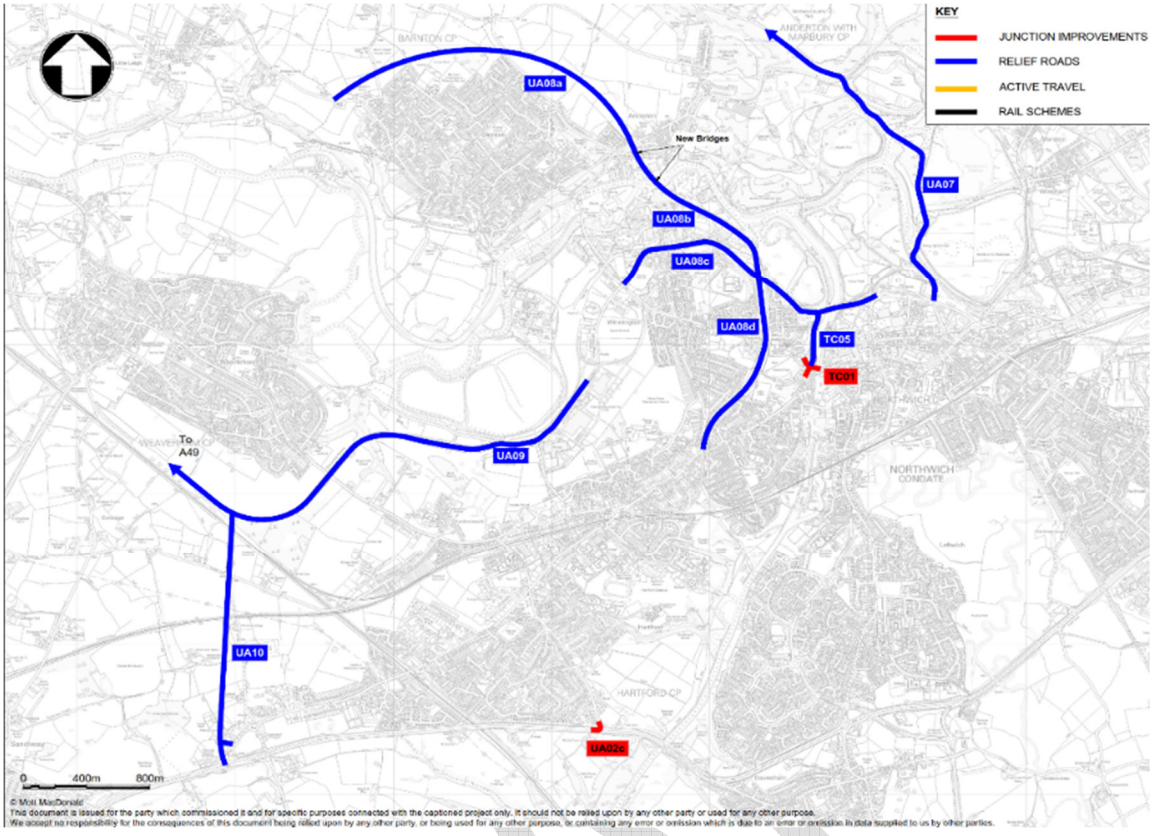
The following scenarios were agreed to be tested in the Future Year model to see how they affected future demand in 2030. These were chosen for assessment because they represent some of the largest infrastructure schemes within the study which are aimed at specifically addressing congestion and accommodating highway traffic. Given the scale of the schemes, it is not expected that many of them will be deliverable within the timescales of the NTS so this exercise was also used as an opportunity to assess the impact each has to inform thinking on their priority. The schemes tested were:

- UA07
- UA09
- UA09 + UA010
- UA08c + TC05 (excluding the southern link)
- UA08a + UA08b + TC05 (excluding the southern link)
- UA01 Winnington Swing Bridge increased to 1 lane in each direction
- All schemes listed above tested together

This section provides plots showing the junctions over capacity and commentary on the changes compared to the Do Minimum. Appendix B presents for each scheme a tabulation of maximum junction v/c band for each junction; more detailed tabulations of the v/c and traffic volumes for each turn can be found in the accompanying spreadsheet.[4]

[4] NTS_JunctionCapacityComparison.xlsx

Figure 20: Scheme locations



4.4.1 Do Something Modelling Results

Each of the schemes were tested wither individually or in combination as explained above. **Table 8** presents a summary of the number of junctions over or approaching capacity in each scenario, and an indication of areas where there are less junctions over capacity (i.e. where there has been an improvement) and areas where there are more junctions over capacity (i.e. that have been affected by additional traffic using the scheme). This gives an indication of how well each scheme performed and allows a comparison between schemes.

Appendix B presents more technical detail for each scheme, setting out the performance of each junction by scenario, again allowing a comparison between schemes. A summary is provided below.

Table 8: Junction Volume over Capacity, Summary Future Year Do Something

Scenario	AM	PM	Areas with network performance improvements	Areas with network performance deterioration
Do Minimum	43	46	N/A	N/A
UA07	38	46	Northwich Gyratory Winnington	N/A
UA09	40	45	Weaverham	N/A
UA09 and UA10	39	46	Weaverham Hartford	Winnington
UA08c and TC05	38	43	Northwich Gyratory	Winnington
UA08a, UA08b and TC05	39	48	Northwich Gyratory Winnington	Barnton
UA01 Winnington Bridge	39	45	Winnington	N/A

Scenario	AM	PM	Areas with network performance improvements	Areas with network performance deterioration
All Schemes	45	45	Northwich Gyratory Winnington/Barnton Weaverham	Junctions around schemes UA08 and TC05

From this assessment, it is apparent that each scheme has its own merits and relieves congestion on relevant parts of the network. In some instances, additional junctions become over capacity which is typically due to traffic re-routeing to use the scheme and therefore passing through different junctions.

UA07 provides an improvement on the Northwich gyratory and through Winnington, and as it provides a new route into the town centre, it doesn't cause any network deterioration in other locations.

UA09, similarly to UA07, provides a new route which diverts traffic away from the existing network and therefore doesn't cause deterioration in the wider study area.

By comparison, when UA09 is paired with UA10, it causes some routes to divert and has an impact within Winnington, as a new through route to the A556 is opened up.

UA08 and TC05, as well as UA08a, UA08b and TC05 both had a positive impact upon relieving congestion around the gyratory but both caused network deterioration, in Winnington and then Barnton.

As could be expected, making the Winnington swing bridge two way (UA01) had a positive impact at addressing the congestion in Winnington, with no network deterioration elsewhere.

When combined together, the schemes had positive impacts at the gyratory, in Winnington and in Weaverham, but had negative impacts specifically at junctions in the vicinity of UA08 and TC05

In summary, it can be seen that whilst all the schemes have a positive impact, those schemes which don't contribute to network deterioration are UA07 re-opening Marbury Lane, UA09 Wallerscote Link Road and UA01 Winnington Swing Bridge. It is therefore recommended that these schemes are considered in the NTS and the others are deferred to reconsideration at a later stage, when they become required to support additional development aspirations.

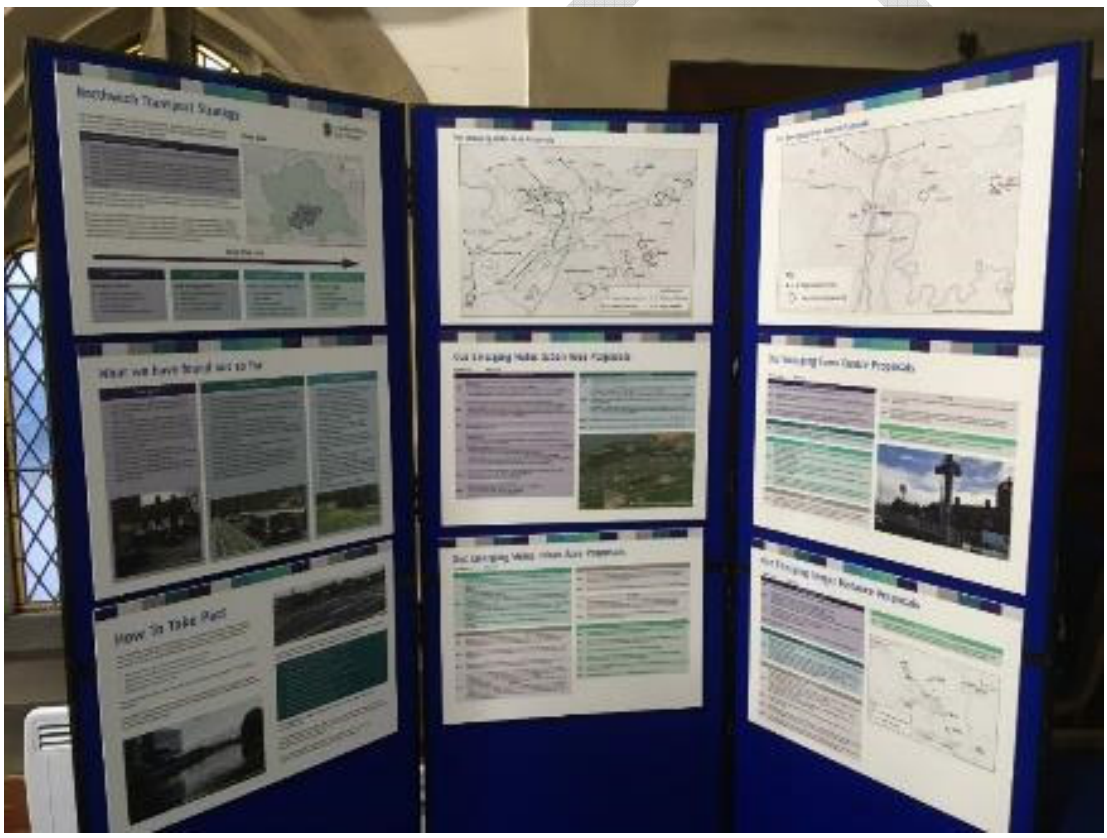
5 What you Said: Public Consultation

This chapter provides a summary of the consultation process and results for each of the schemes consulted on at this stage. A more detailed breakdown of results is documented in the **Consultation Report**.

5.1 Consultation

A fourteen-week consultation period was held between Monday 25th September to Sunday 31st December 2017. Consultation materials were available online within this period for the public to review and complete the survey. Drop in events were also held at Barnton, Hartford, Weaverham, Lostock, Northwich town centre and Gadbrook Business Park providing a chance for the public to discuss proposals with members of the project team from Mott MacDonald and Cheshire West and Chester. The events were publicised in the local media and the public were asked to provide comments via a questionnaire about the shortlisted schemes.

Photo 8: Consultation boards



Source: Mott MacDonald Ltd

To support the consultation period a suite of materials was created to provide information to the public on the Transport Strategy and the schemes being consulted on. This included:

- A series of display boards which were shown at all the public events, with a set left on display in the Northwich Information Centre for the duration of the consultation period, and a second set left in Memorial Court following completion of the consultation events.
- A leaflet which outlined the schemes, the reason for the strategy and advised on how the public could participate in the consultation and provide feedback. Copies of the leaflet were left with the display boards and also distributed to local libraries.

- A questionnaire – Both a paper and electronic version were produced with copies and weblink distributed at events. The online version was publicised on the Cheshire West and Chester website along with links to copies of the display boards, leaflet and the Options Report produced for the strategy.
- There was a dedicated email address for the consultation period, through which people could get in touch with the project team and raise additional comments or feedback.

Support was provided by the Council's Insight & Intelligence team to develop the survey and supporting information and to ensure a wide survey sample was achieved. The Joint Member Group acted as the steering group for this consultation exercise.

Figure 21: Consultation Leaflet

Source: Mott MacDonald

5.2 Raising awareness

Cheshire West and Chester Council produced a press release with information for local outlets providing brief information about the strategy and details of consultation events, information and surveys. Soon after the consultation period began, the Northwich Guardian, Chester Chronicle and Winsford Guardian featured online articles outlining the purpose of the strategy, a number of schemes being consulted on and details of each consultation event alongside the link to further information and the online survey. Similar articles were also published online on news pages for the sites listed below following emails from the project team:

- Your West Cheshire
- Mid Cheshire Rail
- Cheshire and Warrington Local Enterprise Partnership
- Cheshire Police Alert

Social media posts were posted on Twitter by Cheshire West and Chester, the Chester Chronicle and Northwich Town BID throughout the consultation period. The Cheshire West and Chester Facebook account was also used to generate discussion and interest.

Press releases and social media posts were issued at regular intervals throughout the consultation period to engage with people, alert them about forthcoming drop in sessions and generally encourage them to participate in the exercise.

Emails were distributed to Northwich disability and community groups, all schools and all Northwich bus operators to raise awareness amongst local stakeholders.

5.3 Responses to the key issues

Over the course of the fourteen-week consultation period a total of 1,059 surveys were completed by members of the public, or by representatives from local organisations or businesses. This was considered a representative sample size gaining a good understanding of views from a variety of local areas. The split of these responses in terms of gender was roughly even. Out of the 700 respondents that answered this question, 52% were male and 44% were female. The remaining 3% of these respondents answered prefer not to say/prefer to use own term.

A total of 450 valid postcodes were provided by respondents as part of the consultation responses. There was a good distribution of responses across the study area with a concentration in areas surrounding the Town Centre. Particularly well represented areas include:

- Barnton
- Castle
- Comberbach
- Cuddington
- Davenham
- Hartford
- Lostock Gralam
- Moulton
- Weaverham
- Winnington

5.3.1 Level of agreement with the issues identified

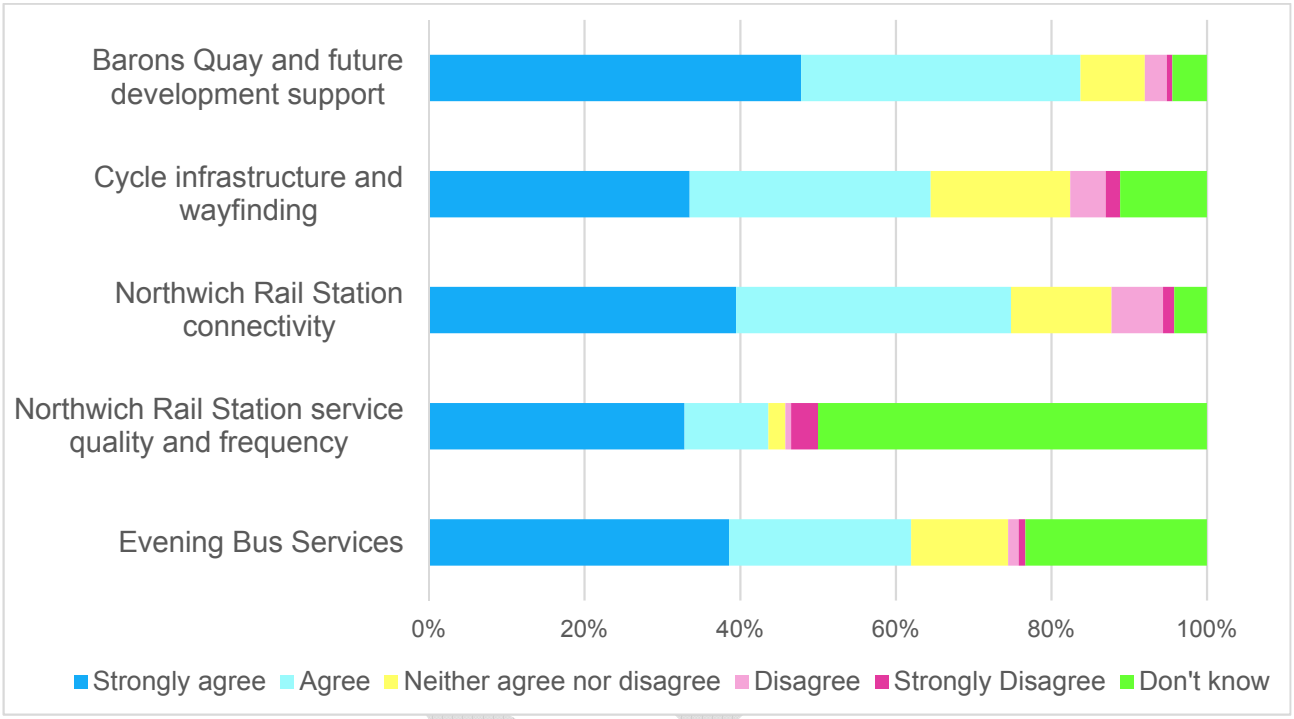
Of the issues identified for each study area, there was generally a high level of agreement that these were things that the NTS needed to seek to address to improve transport across the study area.

5.3.1.1 Town Centre

Overall, as shown in the figure below, responses from the NTS consultation survey have shown a good level of agreement with the key issues identified in the Town Centre:

- Between 44% and 84% of respondents agree with the town centre key issues compared to 3%-14% who disagree;
- An average of 10% of responded neither agree or disagree; and
- Around one in five said they did not know.

Figure 22: Town Centre issues identified needing to be addressed in the Strategy

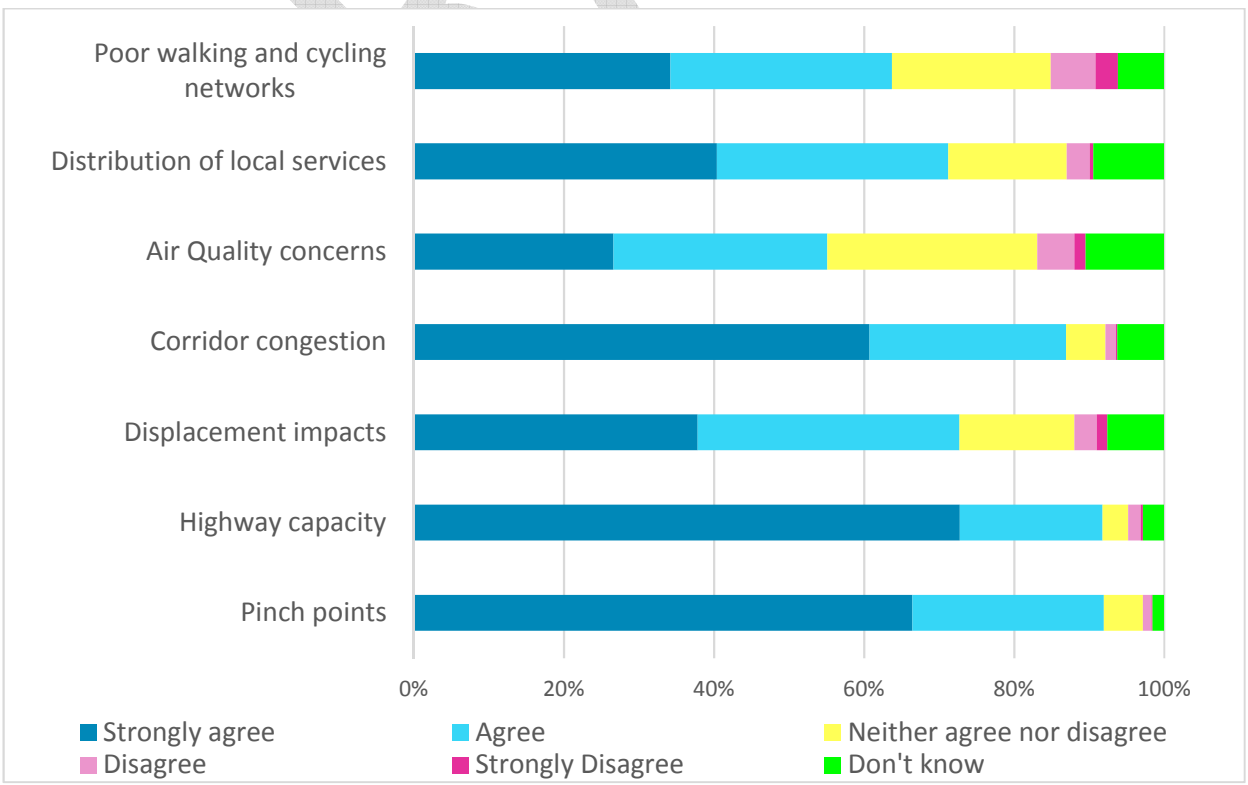


Source: Mott MacDonald

5.3.1.2 Wider Urban Area

There was a particularly high level of agreement with the key issues identified for the wider urban area of Northwich.

Figure 23: Wider Urban Area issues identified needing to be addressed in the Transport Strategy



Source: Mott MacDonald

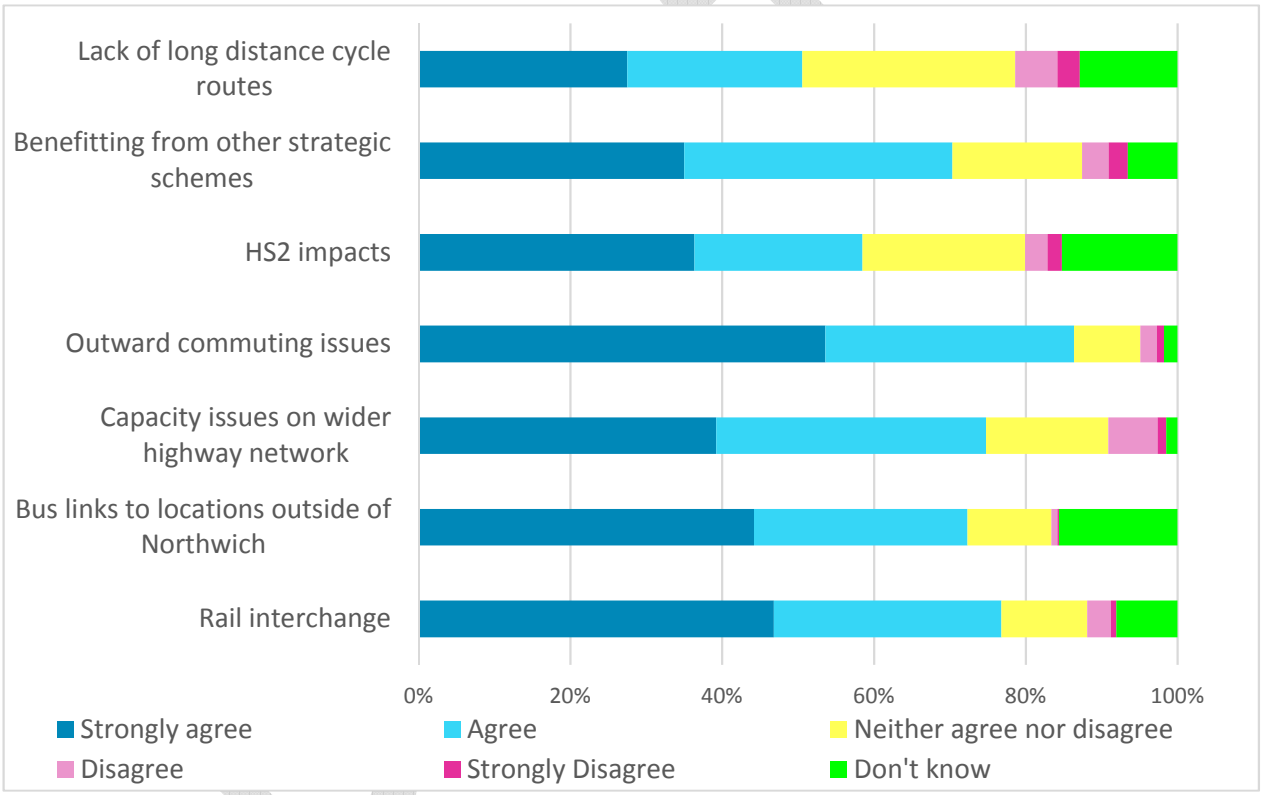
The results show above 80% agreement for three of the issues (corridor congestion, highway capacity and pinch points) and above 50% for all identified issues in this geographic study area. Therefore, there was sustainably more agreement than disagreement with these issues with only 4% of respondents (on average) who disagreed.

Around 13% of respondents neither agree nor disagree with the issues identified in this study area and around 6% said they do not know.

5.3.1.3 Longer Distance

The figure below shows a strong level of agreement for each of the key issues identified with longer distance connectivity to Northwich particularly with the outward commuting issues which saw a level of agreement over 85%.

Figure 24: Longer Distance issues identified needing to be addressed in the Transport Strategy



Source: Mott MacDonald

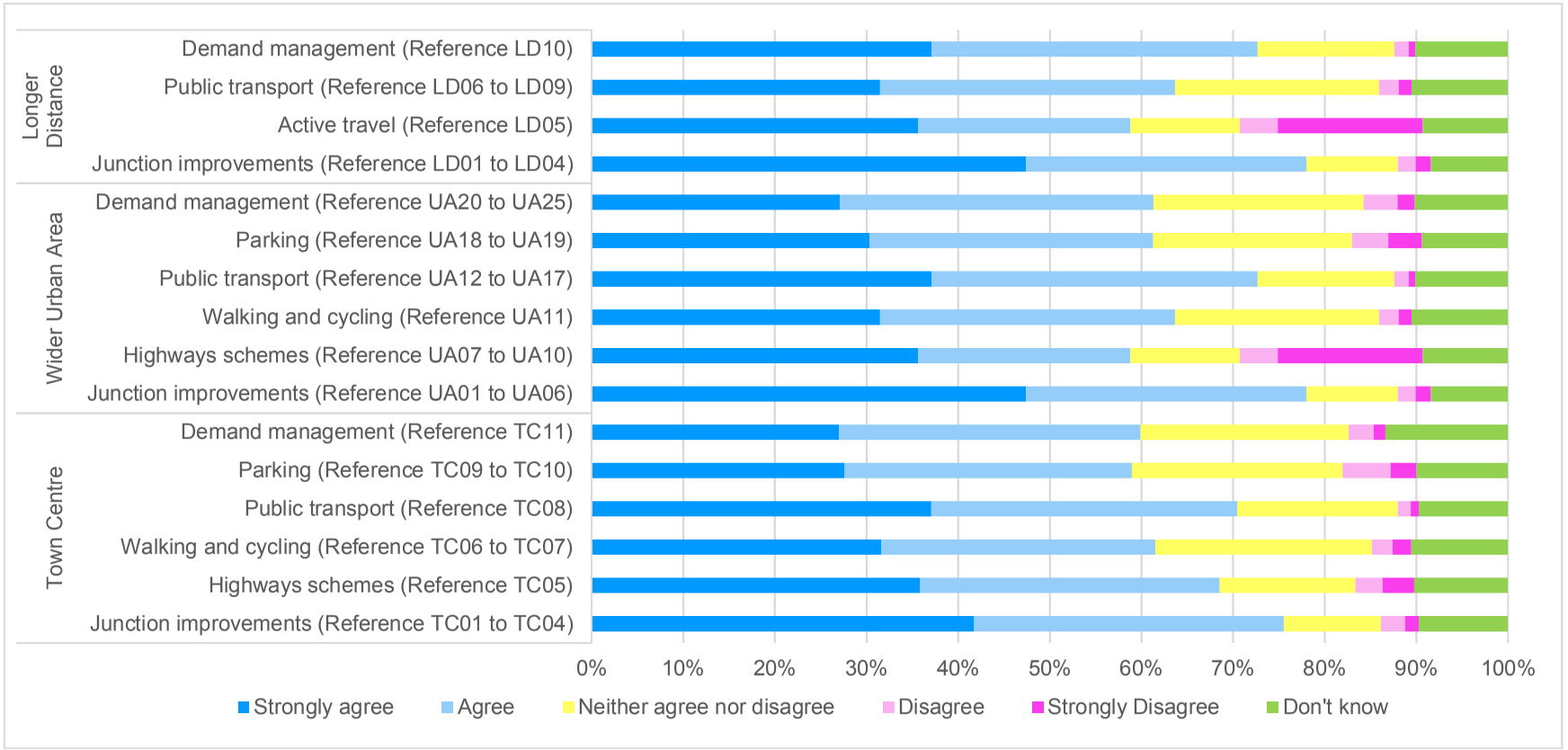
Overall, there was substantially more agreement than disagreement with the longer distance issues identified needing to be addressed in the Transport Strategy:

- The level of agreement ranted from between 50% and 86% and between 1% and 9% for disagreement;
- On average, 16% of respondents neither agree nor disagree; and
- Around 8% stated they do not know.

5.4 Responses to the schemes

Figure 25 summarises the level of agreement and disagreement to scheme groups in all three study areas showing the strongest levels of agreement with junction improvements in all areas and Town Centre demand management.

Figure 25: Response to all identified scheme groups



Source: Mott MacDonald

Although highway schemes UA07-UA10 as a group received a good level of agreement, individual schemes within this group such as UA07 (re-opening of Marbury Lane) received a significant amount of comments opposing the scheme within the survey as well as at the consultation events.

5.5 Post-Consultation Changes to the Schemes

Following a review of the consultation responses, there are several new schemes noted that have been included within the strategy. There were also some schemes that have been decided to be removed from consideration within the NTS, either because they were not popular with the public, they are not collectively feasible within the timescales of the NTS but should be considered more longer term (post 2030) or during the process of the development of the NTS, they have already been implemented.

Table 9 provides a summary of which schemes are being taken forward and which have been discounted, with the remainder of this section providing additional commentary on why schemes have been discounted and also introducing new schemes that were identified through the consultation process.

For a reminder of the locations of these schemes, see **Figure 11** to **Figure 13**.

Table 9: Summary of which schemes taken forwards

Town Centre

Ref.	Schemes	Taken forward to final strategy?
	Junction Improvements	
TC01	Winnington Hill Junction at Town Bridge, widening of the junction	Yes
TC02	Improve the town centre one way system at the junction of Town Bridge, Dane Street and Watling Street (A533)	Yes
TC03	Improve junction capacity at the traffic lights at Chester Way/Venables Road.	Yes
TC04	B5082 Middlewich Road/Manchester Road undertake improvements to enable right turn movements from Rudheath into Tesco and Northwich Station	No - Dropped
	Highway Schemes	
TC05	Develop a new link road between Winnington and Leicester Street at Barons Quay, aligning along from TATA Winnington to the A533	No - Deferred
	Walking and Cycling	
TC06	Walking and Cycling Infrastructure improvements to be identified within Local Cycling and Walking Infrastructure Plan: -Review of cycle route condition and deliver resurfacing improvements to off-road routes where possible (TC06a); -Explore options to deliver a new off-road, town centre walking and cycling network making use of the canal and river systems (TC06b); -Undertake Town Centre cycle parking review and enhance cycle parking offer to support active travel (TC06c).	Yes
TC07	Encourage private sector bike hire scheme at Northwich Rail station and key points across the town centre to support visitor connectivity, commuting and cycling	Yes

Ref.	Schemes	Taken forward to final strategy?
	opportunity and improved links to locations such as Gadbrook Park.	
	Public Transport	
TC08	Support Network Rail and Northern Rail to deliver a major enhancement of Northwich Station including new step free access to the Chester platform, improved interchange between bus and rail services and an improved station building.	Yes
	Parking	
TC09	Following the completion of town centre development, consider appropriate locations for taxi provision.	Yes
TC10	Enhance Electric Vehicle parking offer through introducing electric vehicle charging infrastructure within town centre car parks to meet Council Parking Supplementary Planning Document standards.	Yes
	Demand Management	
TC11	Review service vehicle time restrictions to reduce HGV movement and pedestrian conflict, once Barons Quay is fully operational.	Yes

Wider Urban Area

Ref	Scheme	Taken forward to final strategy?
	Junction Improvements	
UA01	Deliver schemes to reduce congestion at the Winnington/Barnton Swing Bridge pinch point: -In the short term by increasing junction capacity (UA01a); -In the long-term by providing a new bridge to provide an alternative route (UA01b); -Junction improvement at A533 Winnington Lane / Winnington Avenue (UA01c).	Yes
UA02	Reduced congestion along A559 Greenbank/Hartford Corridor through: Junction capacity improvements along Greenbank/Hartford Corridor to reduce congestion (UA02a); Explore options for facilitating a west bound exit from A556 at Hartford (UA02b); Investigate opportunity to reduce congestion through Hartford through introduction of a right turn movement at A556 School Lane (UA02c).	Yes
UA03	A533/A556 junction improvements at Davenham to support increased use and better accessibility to the A556.	Yes
UA04	Deliver junction improvements to reduce congestion along A556 in the vicinity of Gadbrook Park: -Develop a new junction on the A556 to the west of the existing Gadbrook Park site to open up expansion land to the SW of Gadbrook Park as noted in Local Plan Two (UA04a); -Consider opportunities to introduce a second southern access to Gadbrook Park (UA04b);	Yes

Ref	Scheme	Taken forward to final strategy?
	-Implement improvement scheme at Gadbrook Road/A556 junction to reduce congestion caused by traffic entering and exiting Gadbrook Park (UA04c); -Junction improvement at roundabout junction with the A556/A530 (UA04d); -Junction improvement scheme at A530 King Street/B5082 Middlewich Road (UA04e); -Junction improvement scheme at A556/B5082 Penny's Lane (UA04f).	
UA05	Junction improvements in Wincham along signed route into Northwich from A559: -B5075 New Warrington Road/Chapel Street (UA05a) -A559 Marston Lane/ Church Street (UA05b)	Yes
UA06	Junction improvements in Lostock Gralam: -A559 Manchester Road/A559 Hall Lane/Station Road(UA06a); -A559 Manchester Road/Stubbs Lane (UA06b); -A556/A559 roundabout junction (UA06c).	Yes
	Highway Schemes	
UA07	Bring closed private road up to required standard to support alternative route north through Marbury Country Park.	No - Dropped
UA08	Utilisation of former TATA railway to the south of the River Weaver to form a road link and new bridge crossing linking to Cosgrove Business Park (UA08a); -Road link from new bridge crossing joining to the A533 to the north of Barnton (UA08b); -Utilisation of former TATA railway line for use as road scheme to link to Winnington Avenue (UA08c); -Utilisation of former TATA railway line as a road through Winnington near to Victoria Infirmary to A559 or new rail link joining the Mid-Cheshire Line and Middlewich Branch line with a new Winnington Station (UA08d).	No - Deferred
UA09	Introduce a road scheme from Wallascote Road to A49 using the former rail alignment	Yes
UA10	Link the above road scheme to the A556 via the introduction of a further link road	No - Deferred
	Walking and Cycling	
UA11	Walking and Cycling Infrastructure improvements to be identified within Local Cycling and Walking Infrastructure Plan: -Improved cycling and pedestrian connection between Northwich Town Centre, Winnington (UA11a); -Walking and cycling route utilising waterway into Northwich Town Centre from Winnington and Anderton (UA11b); -Review plans for radial corridor improvements from Northwich Cycling Strategy (UA11c); -Liaise with Hartford campus schools to open pedestrian/cycling link from Manor Lane along River Weaver (UA11d); -New pedestrian/cycle bridge to enhance walking route between Barnton and Winnington at Winnington Lane	Yes

Ref	Scheme	Taken forward to final strategy?
	historic bridge (currently no suitable footway along the bridge) (UA11e); -Cycle link utilising former rail alignment from A559 Chester Road to Greenbank Station (UA11f); and -Implementation of a footpath at Marbury Hollows to improve pedestrian access (UA181g).	
	Public Transport	
UA12	Help the train operating companies to be more proactive at offering solutions to contain demand for car parking space through measures such as car sharing incentives, taxi sharing and cost effective incentives to encourage travel to/from stations by bus.	Yes
UA13	Support opportunities to increase parking supply at stations in Northwich wider area to meet forecast demand in rail patronage and increase attractiveness of rail based park and ride.	Yes
UA14	Investigate long term possibility of connecting Mid-Cheshire and West Coast Mainline railway lines at their intersection north of Hartford to enable interchange.	No - Deferred
UA15	As part of borough wide Route and Branch Bus Service Review consider the following: -Where appropriate introduce evening bus services to residential areas e.g. Rudheath, Comberbach to access town centre and leisure facilities (UA15a); -Implement measures of Winsford Transport Strategy for better bus services between Winsford, Middlewich and Northwich (UA15b); -Review and promote opportunities to extend flexible/specialist bus services (UA15c); -Explore options for enhanced bus travel to hospitals, possibly a new shuttle service similar to the Leighton Link Service that has been successfully introduced for Leighton Hospital in Crewe (UA15d).	Yes
UA16	Support smart, integrated ticketing system for all users of bus and rail services in the Northwich area and introduce a new system of subsidised travel cards for students across Northwich and the wider area.	Yes
UA17	Review and identify opportunities to enhance bus priority at junctions with traffic signals.	Yes
	Parking	
UA18	Implement recommendations of Gadbrook Parking Study and continue to monitor the impact of these.	Yes
UA19	Implementation of waiting restrictions on residential roads impacted by on street parking near Hartford Rail Station.	No – Already implemented
	Demand Management	
UA20	Encourage other schools to follow St Wilfrid's Greenbank in investigating staggering school start and finish times to reduce congestion.	Yes
UA21	Support extensions to the CWaCC Parent Parking Charter to encourage parents to leave cars further from schools and complete their journeys on foot.	Yes

Ref	Scheme	Taken forward to final strategy?
UA22	Introduce traffic calming measures on Hartford Road in Davenham.	Yes
UA23	Introduce a package of urban traffic control measures to improve linking of junction signal timings along congested corridors in Northwich.	Yes
UA24	Continue to implement the programme of 20mph speed limits across the Northwich wider urban area.	Yes
UA25	Examine opportunity for Area Travel Plan for schools in Hartford.	Yes

Longer Distance

Ref	Scheme	Taken forward to final strategy?
	Junction Improvements	
LD01	Implement junction capacity improvements at junction of A533/A49.	Yes
LD02	Improved safety measures for incident hotspots, identified as: -Smithy Lane/Ash Lane/A533, Little Leigh (LD02a); -Budworth Lane/A559/High Street, Great Budworth (LD02b); -A556/A559 junction through improved road alignment at Cinder Hill, Hartford (LD02c).	Yes
LD03	Implement junction capacity improvements at pinch points on A530: -A530/Davenham Road/ Crowder's Lane (LD03a); -A530/B5309 King Street (LD03b).	Yes
LD04	Support junction capacity improvements to support access to M6 J19 at A556/A5033 junction.	No
	Walking and Cycling	
LD05	Walking and Cycling Infrastructure improvements to be identified within Local Cycling and Walking Infrastructure Plan: -Support Cheshire East Council to implement schemes identified within their March 2017 Cycling Strategy including a Middlewich – Winsford – Northwich – Knutsford cycle connection by delivering new connections within Cheshire West (LD05a); -In partnership with Cheshire East Council, explore opportunities for a cycle link that runs broadly parallel to the new HS2 line (LD05b).	Yes
	Public Transport	
LD06	Reopening of Middlewich Branch Line: -Lobby Network Rail and work with Cheshire East Council to ensure that the Middlewich Branch Line is reopened for regular passenger rail services (LD06a);	Yes

Ref	Scheme	Taken forward to final strategy?
	-Work with Cheshire East to support proposals for a new station at Middlewich on the Middlewich Branch line (LD06b); -Explore options for a new station at Gadbrook Park on the Middlewich Branch Line to serve Gadbrook and south Northwich (LD06c).	
LD07	Support proposals for an Airport Western Rail Link to link the Mid-Cheshire Line and Manchester Airport.	Yes
LD08	Lobby Northern to introduce timetable changes on the Mid-Cheshire Line to better support rail commuting between Northwich and Chester and Northwich and Manchester.	Yes
LD09	As part of borough wide Route and Branch Bus Service Review work with bus operators to explore possibilities of introducing an evening bus service to Warrington.	No
	Demand Management	
LD10	Implement speed reduction measures on key local routes affected by speeding issues including the A556 Cuddington-Davenham-Allostock and the A559 up to the A56.	Yes

Further information on those schemes not being progressed is provided below.

5.5.1 Schemes no longer being progressed as part of the NTS

Following the consultation review process, the following schemes are not being progressed as part of the Northwich Transport Strategy:

TC04 - B5082 Middlewich Road/Manchester Road undertake improvements to enable right turn movements from Rudheath into Tesco and Northwich Station.

There was little support through the public consultation comments for this scheme, with the costs considered to outweigh any potential benefits. This scheme is therefore not considered further within the NTS.

UA07- Bring closed private road up to required standard to support alternative route north through Marbury Country Park.

There was a lot of public opposition to this scheme due to its route through Marbury Country Park, and its popularity as a leisure route for walkers and cyclists as a link to the Town Centre. A petition against this particular scheme signed by local residents was submitted as part of the consultation.

It was noted that the route is used by students, particularly in the summer months as a traffic-free route between Comberbach and the Town Centre as an alternative to lengthy, indirect bus journeys before and after school/college.

There are a number of constraints along the route which would make upgrading it expensive (for example the canal bridge would require upgrading) and third-party land issues associated with widening the route to improve its capacity and safety.

Assessment of this scheme within the modelling showed that whilst it could have some benefit to addressing local congestion, this was not significant and in light of the public consultation feedback, it was not felt that these benefits were significant enough to warrant further consideration of the scheme.

It is therefore recommended that this scheme is not considered further as a highway scheme.

UA19 - Implementation of waiting restrictions on residential roads impacted by on street parking near Hartford Rail Station.

During the process of developing the NTS, this scheme has already been implemented and is therefore not considered any further.

LD04 -Support junction capacity improvements to support access to M6 J19 at A556/A5033 junction

Given that this scheme falls under the responsibility and remit of Cheshire East (with Highways England) it is not something that the NTS can itself deliver or implement. Support however should be given to Cheshire East in ensuring issues at this junction are addressed as quickly as possible as it forms a key eastern gateway into the Northwich area.

LD09 - As part of borough wide Route and Branch Bus Service Review work with bus operators to explore possibilities of introducing an evening bus service to Warrington.

Feedback from the consultation exercise suggested that this was not a priority for the area, and not generally something that was necessary given the new evening leisure offer in Northwich following the opening of the Odeon cinema and increase in restaurants. As part of the review however, it should be considered if the extents of the current service offered is sufficient for those travelling for work purposes.

5.5.2 Schemes which have been deferred post the lifetime of the strategy

The following schemes are not considered further within this strategy as it is not expected that they would be in a position to be considered around the 2030 cut off of the strategy. This is due to the majority of these being largescale infrastructure schemes which will require significant funding and require growth to continue at a steady trajectory to be realised.

TC05 - Develop a new link road between Winnington and Leicester Street at Barons Quay, aligning along from TATA Winnington to the A533.

This scheme, whilst it could deliver benefits in relation to town centre access and supporting the development of brownfield sites is likely to be outside the timescales of the Northwich Transport Strategy and it is therefore recommended that this scheme is not included in the strategy but is reserved for future consideration, post 2030. It may become the case that development demands require this scheme to be re-reviewed earlier. This scheme has therefore been deferred for now but should be re-considered if development proposals come forward on the TATA development site.

UA08 - Utilisation of former TATA railway to the south of the River Weaver to form a road link (including UA08a – UA08d)

These schemes are not considered beneficial or deliverable within the time period of this strategy, and should therefore be re-assessed in the future to see if they become feasible as future growth comes forwards. This scheme has therefore been deferred.

UA10 - Link the above road scheme from Wallascote Road to A49 using the former rail alignment to the A556 via the introduction of a further link.

The modelling showed that there was little to no benefit from this scheme in relieving congestion and there would be significant cost associated with crossing the West Coast mainline and Mid-Cheshire Railways. This scheme would also be reliant upon the delivery of UA09 first, delaying possible implementation timescales. It is therefore recommended that this scheme is not considered further within the NTS, but may be re-reviewed at a later date if demand changes.

UA14 - Investigate long term possibility of connecting Mid-Cheshire and West Coast Mainline railway lines at their intersection north of Hartford to enable interchange.

Whilst there is support for this scheme, it is a major infrastructure scheme that is outside of the remit of Cheshire West and Chester to deliver, requiring major funding and support from Rail operators and the DfT. The delivery of such a scheme would be outside of the timescales of the NTS and will therefore not be considered further. It should however be noted that if this scheme were to be brought forward by third parties, CWaCC would be supportive of this as it has the potential to greatly enhance rail connectivity with the Northwich and wider area.

5.5.3 Additional schemes to be added to the NTS

The following schemes were identified through the consultation process and have been included in the final NTS.

- UA15e - Consider bus service to Gadbrook Park from wider urban area.
- UA26 - Pedestrian crossing at Iron Bridge at Moss Road/A559 signalised junction to improve pedestrian safety, particularly for those with mobility impairments or vulnerable pedestrians.
- UA03b - Monitor identified incident hotspots and implement safety measures as appropriate at Jack Lane/A533.
- UA11h - Cycling route from Sandiway/Cuddington could be achieved by creating a cycle way behind the hedge alongside the A556 north side (the quarry side) to create a safe corridor - investigate an upgrade of this route.

6 The Strategy

The 46 schemes initially identified for the strategy and consulted upon have been refined to consider feedback received during the consultation period, with some schemes being dropped and several new ones being considered (as noted in Chapter 4). The remaining schemes have been combined into 14 packages under 5 overarching themes which take into account any inter-dependencies between schemes and provide complete sets of measures to address particular issues or locations.

6.1 Packages

Packages have been put together which are largely grouped by mode and fit within the following five themes:

- **The Town Centre;**
- **Improving Local Capacity;**
- **Safe and Sustainable;**
- **Improving Longer Distance Connectivity; and**
- **Longer Term Major Schemes.**

Fourteen packages (labelled A - N) have been developed within the themes which cover:

The Town Centre

- A Winnington Hill/Castle Street/Town Bridge junction improvement
- B Town Centre Junction Improvements
- C Rail Station Enhancements
- D Parking

Improving Local Capacity

- E Increasing capacity at Winnington/Barnton Swing Bridge
- F A559 Greenbank/Hartford Corridor
- G A556 congestion and access to Gadbrook Park
- H Longer Term Road Congestion Pinch Point Schemes

Safe and Sustainable

- I Road Safety & Traffic Calming
- J Improved bus connectivity
- K Smarter Choices, Behaviour Change and Active Travel
- L Walking and Cycling

Improving Longer Distance Connectivity

- M Rail connectivity improvements

Longer Term Major Schemes

- N Wallascote Road Link

The following table shows how the measures have been grouped together into these packages:

Table 10: Packaging of measures

Theme	Package	Scheme ref	Description
The Town Centre	A	TC01	Widening of junction Winnington Hill/Town Bridge/Castle Street
	B	TC02	Improve the town centre one-way system at the junction of Town Bridge, Dane Street and Watling Street (A533)
		TC03	Improve junction capacity at the traffic lights at Chester Way/Venables Road
	C	TC07	Encourage private sector bike hire scheme at Northwich Rail station and key points across the town centre
		TC08	Support Network Rail and Northern Rail to deliver a major enhancement of Northwich Station to improve accessibility
		UA12	Help the train operating companies to be more proactive at offering solutions to contain demand for car parking space
		UA13	Support opportunities to increase parking supply at stations in the Northwich wider area
	D	TC09	Following the completion of town centre development, consider appropriate locations for taxi provision
		TC10	Enhance Electric Vehicle parking offer
		TC11	Review service vehicle time restrictions in Town Centre
		UA18	Implement recommendations of Gadbrook Parking Study
Improving Local Capacity	E	UA01	Deliver scheme to reduce congestion at the key pinch points at the Winnington/Barnton Swing Bridge
	F	UA02	Reduced congestion along A559 Greenbank/Hartford Corridor
	G	UA04a	Develop a new junction on the A556 to the west of the existing Gadbrook Park
		UA04b	Consider opportunities to introduce a second southern access to Gadbrook Park
		UA04c	Implement improvement scheme at Gadbrook Road/A556 junction
		UA04d	Junction improvement at roundabout junction with the A556/A530
		UA04e	Junction improvement scheme at A530 King Street/B5082 Middlewich Road
		UA04f	Junction improvement scheme at A556/B5082 Penny's Lane
	H	UA03(a)	A533/A556 at Davenham to support increased use and better accessibility to the A556
		UA05a	Wincham: A559/B5075 New Warrington Road/Chapel Street
		UA05b	Wincham: A559/A559 Marston Lane/Church Street
		UA06a	Lostock Gralam: A559 Manchester Road/A559 Hall Lane/Station Road
		UA06b	Lostock Gralam: A559 Manchester Road/Stubbs Lane
		UA06c	Lostock Gralam: A556/A559 roundabout junction
		UA23	Introduce a package of urban traffic control measures to improve linking of junction signal timings along congested corridors in Northwich.

Theme	Package	Scheme ref	Description
		LD01	Implement junction capacity improvements at junction of A533/A49
		LD03	Implement junction capacity improvements at pinch points on A530
Safe and Sustainable	I	UA22	Introduce traffic calming measures on Hartford Road in Davenham
		UA24	Continue to implement the programme of 20mph speed limits across the Northwich wider urban area
		LD10	Implement speed reduction measures on key local routes affected by speeding issues
		LD02	Monitor identified incident hotspots and implement safety measures as appropriate
		UA26	Pedestrian crossing at Iron Bridge at Moss Road/A559 signalised junction to improve pedestrian safety
		UA03b	Monitor Jack Lane/A533 incident hotspot and implement safety measures as appropriate
	J	UA15a	Where appropriate introduce evening bus services
		UA15b	Implement measures of Winsford Transport Strategy for better bus services
		UA15c	Review and promote opportunities to extend flexible/specialist bus services
		UA15d	Explore options for enhanced bus travel to hospitals
		UA17	Review and identify opportunities to enhance bus priority at junctions with traffic signals
		UA15e	Consider bus service to Gadbrook Park from wider urban area
	K	UA16	Support TfN in implementing integrated ticketing system
		UA20	Encourage schools to stagger school start and finish times to reduce congestion.
		UA21	Support extensions to the CWaCC Parent Parking Charter
		UA25	Examine opportunity for Area Travel Plan for schools in Hartford
	L	TC06	Review of cycle route condition and deliver resurfacing improvements to off-road routes where possible
		UA11a	Improved cycling and pedestrian connection between Northwich Town Centre, Winnington (UA11a);
		UA11b	Walking and cycling route utilising waterway into Northwich Town Centre from Winnington and Anderton (UA11b);
		UA11c	Review plans for radial corridor improvements from Northwich Cycling Strategy (UA11c);
		UA11d	Liaise with Hartford campus schools to open pedestrian/ cycling link from Manor Lane along River Weaver (UA11d);
		UA11e	New pedestrian/cycle bridge to enhance walking route between Barnton and Winnington at Winnington Lane historic bridge (currently no suitable footway along the bridge) (UA11e);
		UA11f	Cycle link utilising former rail alignment from A559 Chester Road to Greenbank Station (UA11f);

Theme	Package	Scheme ref	Description
		UA11g	Implementation of a footpath at Marbury Hollows to improve pedestrian access (UA11g).
		UA11h	Upgrade of cycling route from Sandiway/Cuddington along A556
		LD05	Work with Cheshire East to implement cycling schemes between Middlewich – Winsford – Northwich – Knutsford and also explore opportunities for cycle link to run broadly parallel to HS2 line
Improving Longer Distance Connectivity	M	LD06	Reopening of Middlewich Branch Line, re-opening station at Middlewich and exploring potential for station at Gadbrook Park
		LD07	Support proposals for an Airport Western Rail Link to link the Mid-Cheshire Line and Manchester Airport
		LD08	Lobby Northern to introduce timetable changes on the Mid-Cheshire Line
Longer Term Major Schemes	N	UA09	Introduce a road link from Wallascote Road to A49

Source: Mott MacDonald

The detail of scheme packages noted in **Table 10** are summarised within a series of proformas on the subsequent pages. All proformas outline each scheme identified with the package, their potential benefits and recommendations and highlights the key findings on each of the schemes in terms of the consultation.

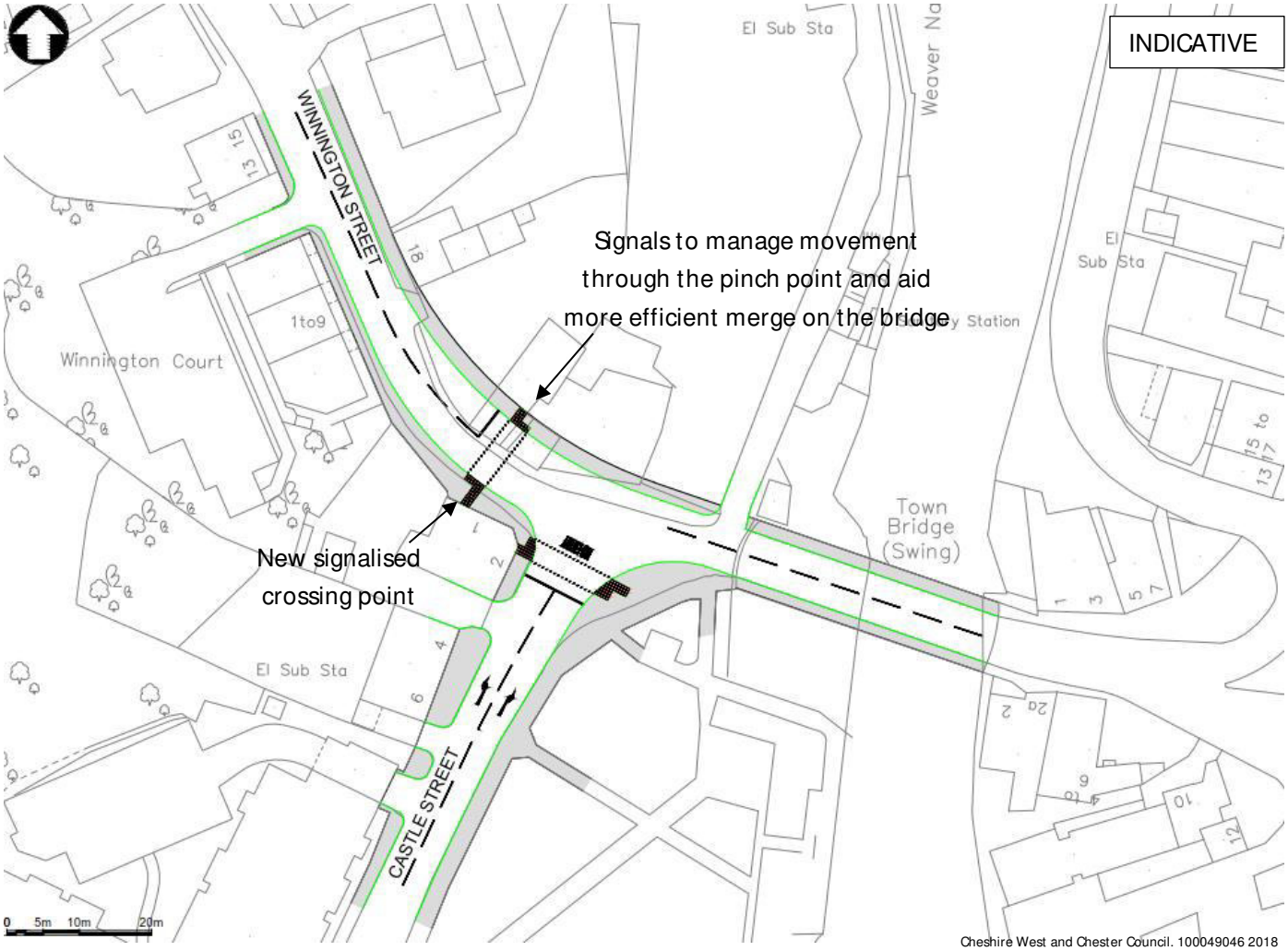
PACKAGE A: Winnington Hill/ Castle Street/ Town Bridge junction improvement

Theme: The Town Centre
Scheme ref: *TC01*

Location:	Town Centre	✓	Wider Urban Area		Longer Distance	

Schemes Outline

Junction improvements at Winnington Hill/Town Bridge/Castle Street to increase capacity and reduce congestion. The following improvements have been designed for this package including widening of the junction and footways to improve safety for pedestrians.



Issue / Opportunities

- Several pinch points exist within the wider area, which cause congestion and delay. These include the Winnington Street/Castle Street/Town Bridge junction.
- This is a key gateway to the Town Centre and causes delays in its current layout due to large vehicles needing more space to turn left from Castle Street onto Winnington Street.
- No pedestrian crossing facility on Winnington Street.

Evidence

- A review of accident data shows that there is a cluster of incidents at this location due to the alignment of the road and the inability for large vehicles to turn left from Castle Street without utilising space in the on-coming lane.
- Modelling evidence suggests that the Castle Street approach to this junction will operate significantly over capacity (85-100%) by the year 2030 if no interventions are put in place.

PACKAGE A: Winnington Hill/ Castle Street/ Town Bridge junction improvement

Benefits

- Improving safety at the junction for both vehicles and pedestrians through improved forward visibility and widened footpaths, with controlled crossing points.
- Reducing congestion at a key pinch point.
- Will support safer lane manoeuvres on Town Bridge due to the control of movements from the signals.
- Improving access to the Town Centre to support current and future development.
- Enhancing a key gateway to the Town Centre and supporting redevelopment of derelict buildings.

Consultation

Summary of consultation feedback:

- Needs to be priority to improve access to the Town Centre
- Also required from a safety perspective as HGV vehicles struggle to safely enter/exit the junction
- Removal of derelict buildings at bottom of Winnington Hill would be welcomed

Consultation survey comments

"TC01 needs to be looked at now, and is clearly dangerous."

"TC01 absolute must. Had several near misses there with lorries / buses"

"TC01, I presume this means knocking down the dangerous buildings at the bottom of Winnington Hill. about time too"

"TC01=Agree needs widening to facilitate large vehicle access to Winnington Hill"

Recommendations / Comments

- Investigate third party land requirements to accommodate design.
- Develop detailed designs for and implement junction improvements to reduce congestion and improve safety.
- Undertake modelling of potential scheme options to develop solution with maximum benefit.
- Remove derelict buildings and utilise land to the north of Winnington Street to widen the junction and improve gateway feature.

Indicative timescales and priority

Scheme	Headline description of scheme	Timescale	Priority
TC01	Widening of junction Winnington Hill/Town Bridge/Castle Street	2018-2020	High

Indicative package cost

Cost:	Major >£25M	Very High £10M - £25M	High £5M - £10M	Moderate £500K - £5M	Low <£500K
	☐	☐	☐	☐	✓

PACKAGE B: Town Centre Junction Improvements

Theme: The Town Centre
Scheme ref: *TC02; TC03*

Location:	Town Centre	✓	Wider Urban Area		Longer Distance	

Schemes Outline

Improvements at the junction of Town Bridge/Dane Street/Watling Street (A533) and the signalised junction of Chester Way / Venables Road, the locations of which are demonstrated below.

TC02 Town Bridge/Dane Street/Watling Street (A533)
Put up no left turn signage on Town Bridge to help prevent movements left into Weaver Way. Weaver Way should only be accessed in a straight on movement from Dane Street (requiring travel via the gyratory system). This signage could be implemented fairly quickly and would be inexpensive.

Improve the alignment of the A533 carriageway to the east of Dane Street – this does not currently provide a smooth movement with vehicles observed straying into the opposite lane, and could be improved by being straightened to reduce collision potential. This should be assessed as part of improvements to the wider area associated with Weaver Square.

TC03 Chester Way / Venables Road
Review signal timings on junction to improve optimisation of junction and address congestion. Review the possibility of enhancing the layout of the junction or restricting certain movemetns to support improved flows during peak periods.

Other Town Centre Proposals
As part of optimising the operation of the Town Centre network, optimisation of the signals on the gyratory using Urban Traffic Control (UTC) systems would greatly improve the functionality of the gyratory, particularly during peak periods. This could also include reviewing permitted movements onto and from the gyratory and limiting these as much as feasible to support the effiency of the system, for example restricting movements to/from Crum Hill.

PACKAGE B: Town Centre Junction Improvements

Issue / Opportunities

- Both of these junctions are in the centre of the Town and need to function as part of the wider gyratory system to ensure successful and efficient flows of traffic on the network.
- The wider gyratory itself, whilst an improvement on the historical set up, still requires some optimisation to ensure it is as efficient as possible.
- The Weaver Square development provides an opportunity to review how the gyratory functions and interface with this from the Weaver Square area.

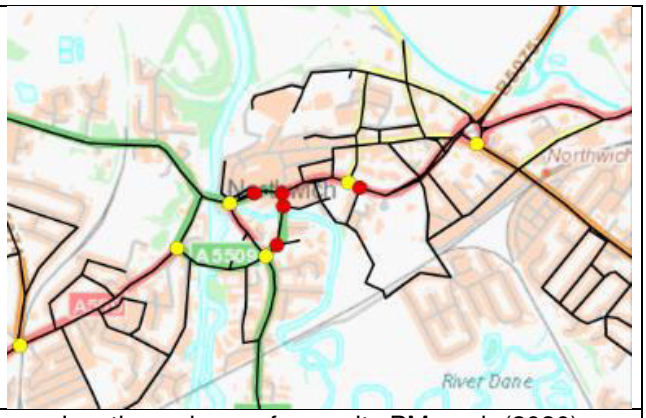
Evidence

- Concerns over the safety of movements from Town Bridge to Weaver Way were raised during the consultation process.
- A review of modelling data shows that come the future year 2030, the town centre gyratory experiences congestion during the AM and PM peak periods. The following diagrams show the extent of the congestion at specific junctions, applying the following key. (See **Appendix B** for large scale plans).

85% v/c - 100% v/c
Over 100% v/c
Model Network
Northwich Study Area

(v/c = volume/capacity)

Junction volume of capacity AM peak (2030)



Junction volume of capacity PM peak (2030)

Benefits

- Reducing congestion at a key pinch point to support future growth.
- Improving safety at the Town Bridge/Dane Street/Watling Street (A533) junction for both vehicles and pedestrians.
- Will support safer lane manoeuvres on Town Bridge due to the control of movements from the signals.
- Improving access to the Town Centre to support current and future development.
- Enhancing a key gateway to the Town Centre and supporting redevelopment of derelict buildings.

Consultation

Summary of consultation feedback:

- Some responses concerned that the junctions are fairly new and should not require further modification.
- Generally these junction should not be a priority.

Consultation survey comments

"The junction of Chesterway/Crum Hill also needs attention - traffic lights here cause long delays on Chesterway eastbound which backs up onto the gyratory"

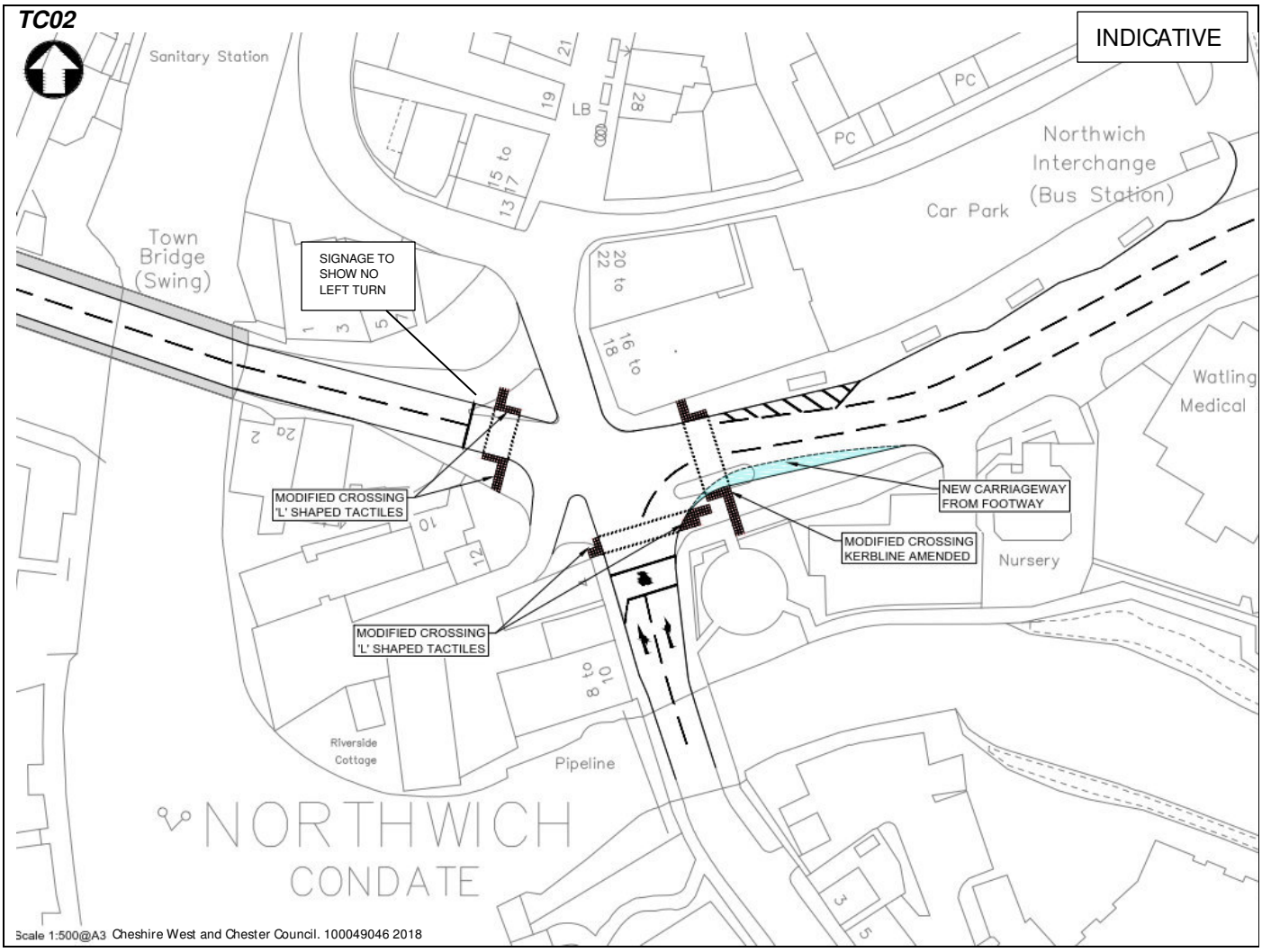
"TC02 and 3 are not urgent"

Recommendations / Comments

- Quick wins such as signage at Town Bridge and signal optimisation should be implemented in the short term.

PACKAGE B: Town Centre Junction Improvements

- Junction amendments should be considered in the medium to longer term to accommodate growing demand and in tandem with Weaver Square proposals.
- Modelling should be undertaken at the detailed design stage of any junction amendments to determine the most appropriate solution.
- See the following indicative design for TC02. This should also have no left turn signs erected on Town Bridge to make it clear movements left into Weaver Way are not permitted.



Indicative timescales and priority

Scheme	Headline description of scheme	Timescale	Priority
TC02	Improve the town centre one-way system at the junction of Town Bridge, Dane Street and Watling Street (A533)	2021-2025	Medium
TC03	Improve junction capacity at the traffic lights at Chester Way / Venables Road	2021-2025	Medium
N/A	Whilst not a specific measure, general signal UTC enhancement on gyratory	2018-2020	High

Indicative package cost

Cost:	Major >£25M	Very High £10M - £25M	High £5M - £10M	Moderate £500K - £5M	Low <£500K
	☐	☐	☐	☐	✓

PACKAGE C: Rail Station Enhancements

Theme: The Town Centre

Scheme ref: *TC07; TC08; UA12; UA13*

Location:	Town Centre	✓	Wider Urban Area	✓	Longer Distance	

Schemes Outline

This package consists of the following elements aimed at improving accessibility at, to and from local railway stations:

- TC07 - Encourage private sector bike hire scheme at Northwich Rail station and key points across the town centre.
- TC08 - Support Network Rail and Northern Rail to deliver a major enhancement of Northwich Station including new step free access to the Chester platform, improved interchange between bus and rail services and an improved station building.
- UA12 - Help the train operating companies to be more proactive at offering solutions to contain demand for car parking space through measures such as car sharing incentives, taxi sharing, cost effective incentives to encourage travel to / from stations by bus.
- UA13 - Support opportunities to increase parking supply at stations in Northwich wider area such as Greenbank and Hartford to meet forecast demand in rail patronage and increase attractiveness of rail based park and ride.

Issue / Opportunities

- Northwich rail station is somewhat remote from the town centre and poorly connected by bus, walking and cycling routes.
- There is currently no step free access to the Chester platform at Northwich Station meaning those with mobility impairments or prams/pushchairs are unable to easily utilise the westbound rail services (from Manchester, to Chester).
- Possibility to deliver an upgrade to the station as part of the remodelling when the Middlewich Branch is brought into use.
- Supporting car parking at key rail stations to enable park and ride and remove reliance upon private cars for whole journeys.

Evidence

- Northwich station is location almost a mile from Baron Quay and surrounding shops, along an indirect route, although some signage does exist.
- Current bus timetables do not align with train times.

No step free access at Northwich Station

Limited car parking capacity at Hartford to meet demand

Benefits

- Better accessibility at stations will improve access to public transport for all users as well as the attractiveness of services.

PACKAGE C: Rail Station Enhancements

- This will reduce reliance upon private cars for some journeys and encourage sustainable transport use.

Consultation

Summary of consultation feedback:

- Mixed responses with regards to TC07
- Support for better interchange with bus and rail services
- Support for improved access to Northwich Station.
- Support for better parking facilities at rail stations.
- Support for better services (quality of rolling stock and frequency of services) was considered more important than the station facilities by some.

Consultation survey comments

"TC08- strongly agree as currently impossible to take a pram or wheelchair up from the platform. Also, please consider options for linking Northwich trains to Hartford trainline."

"TC08 - the step free access is urgently needed at the station since the station is not fully manned"

"With reference to the car parking in and around Hartford it needs to be remembered that not everyone can walk to the station and have no option but to park"

"UA12 only works if there are frequent buses available"

Recommendations / Comments

- Obtaining step free access to Northwich Station should be a priority to pursue to ensure accessibility for all.
- TC07 private bike hire scheme should be a commercially led initiative.
- Parking provisions at stations should be reviewed in partnership with Network Rail and Train operating companies.
- Encourage better alignment of rail and bus services, including the potential for connections between Northwich/Greenbank and Hartford to support service interchange.

Indicative timescales and priority

Scheme	Headline description of scheme	Timescale	Priority
TC07	Encourage private sector bike hire scheme at Northwich Rail station and key points across the town centre	On-going	Low
TC08	Support Network Rail and Northern Rail to deliver a major enhancement of Northwich Station to improve accessibility	On-going	Medium
UA12	Help the train operating companies to be more proactive at offering solutions to contain demand for car parking space	On-going	Medium
UA13	Support opportunities to increase parking supply at stations in the Northwich wider area	2021-2025	High

Indicative package cost

Cost:	Major >£25M	Very High £10M - £25M	High £5M - £10M	Moderate £500K - £5M	Low <£500K
	☐	☐	☐	☐	✓*

*N.B. Cost to CWaCC for lobbying and support is negligible – this package would be commercially led or undertaken by Network Rail / Train Operators at their own costs.

PACKAGE D: Parking

Theme: The Town Centre

Scheme ref: *TC09; TC10; TC11; UA18*

Location:	Town Centre	✓	Wider Urban Area	✓	Longer Distance	

Schemes Outline

This package consists of the following elements aimed at addressing parking across the Town Centre and Wider Urban Area:

- TC09 - Following the completion of town centre development, consider appropriate locations for taxi provision.
- TC10 - Enhance Electric Vehicle (EV) parking offer through introducing electric vehicle charging infrastructure within town centre car parks to meet Council Parking Supplementary Planning Document standards.
- TC11 - Review service vehicle time restrictions to reduce HGV movement and pedestrian conflict, once Barons Quay is fully operational. This could also include a review of any other access issues (such as signage).
- UA18 - Implement recommendations of Gadbrook Parking Study to increase car parking, implement TROs in Rudheath and implement travel planning measures to reduce demand and introduce multi storey car park options to cater for future demand.

Issue / Opportunities

- There is a reliance upon taxis in the area due to Northwich rail station being remote from the town centre and poorly connected by bus; as well as few evening bus services between parts of the wider area and Northwich Town Centre.
- As Barons Quay becomes fully occupied there will be a greater level of service requirements to present meaning the potential for greater conflict between pedestrians and HGVs.

Evidence

- The Cheshire West and Chester Parking Strategy and the Gadbrook Parking Study both highlighted a range of initiatives to improve parking in and around Northwich.
- There are parking constraints in and around Gadbrook Park, exacerbated by lack of alternative travel choices and insufficient parking supply to meet demand. This causes obstructions on nearby residential roads.
- Stakeholder consultation revealed taxi parking at the station is a key issue for Northwich's taxi trade and Northern (station operator) have previously raised issues over taxis parking within the station complex as the land is privately owned.

EV Parking demand at Barons Quay car park

Taxi parked at Northwich Station

Benefits

PACKAGE D: Parking

- As further development at Barons Quay comes forward, demand for taxi travel to and from the area is likely to increase and the introduction of dedicated taxi ranks at Barons Quay could help to reduce issues of taxis waiting informally on the carriageway.
- Addressing concerns with regards to parking in and around Gadbrook Park.
- There is increasing demand for EVs which should be encouraged due to their reduced impact upon air quality.

Consultation

Summary of consultation feedback:

- Mixed responses in relation to supporting taxi parking.
- No issues mentioned of HGVs in town centre but suggestions for improved signage.
- Lots of support fort UA18, Gadbrook Park is a key concern for many respondents.

Consultation survey comments

"Parking for electric vehicles and taxi provisioning isn't a major concern in the area"

"need clear signage for all HGV traffic that finds itself in town including signs into Barons Quay loading areas. Signage to M and S loading areas"

"If parking charges are to be implemented, my view is that it should apply from 09:00 - 12:00, and from 14:00 - 15:00 only to discourage commuter use and encourage shopper/ leisure visits to the town centre."

"More parking is urgently required on Gadbrook Park."

Recommendations / Comments

- Continue to implement recommendations of CWaCC Parking Strategy following publication of the Action Plan for Northwich (expected in due course).
- Continue to implement recommendations of the Gadbrook Parking Study.
- Review accessibility for HGVs and taxis as Barons Quay becomes more operational.
- Review provisions for EV as other changes are suggested, and ensure this is provided in line with Council Supplementary Planning Document requirements.

Indicative timescales and priority

Scheme	Headline description of scheme	Timescale	Priority
TC09	Following the completion of town centre development, consider appropriate locations for taxi provision	2021-2025	Medium
TC10	Enhance Electric Vehicle parking offer	2021-2025	Low
TC11	Review service vehicle time restrictions in Town Centre.	2021-2025	Low
UA18	Implement recommendations of Gadbrook Parking Study	2018 - 2020	High

Indicative package cost

Cost:	Major >£25M	Very High £10M - £25M	High £5M - £10M	Moderate £500K - £5M	Low <£500K
	☐	☐	☐	☐	✓

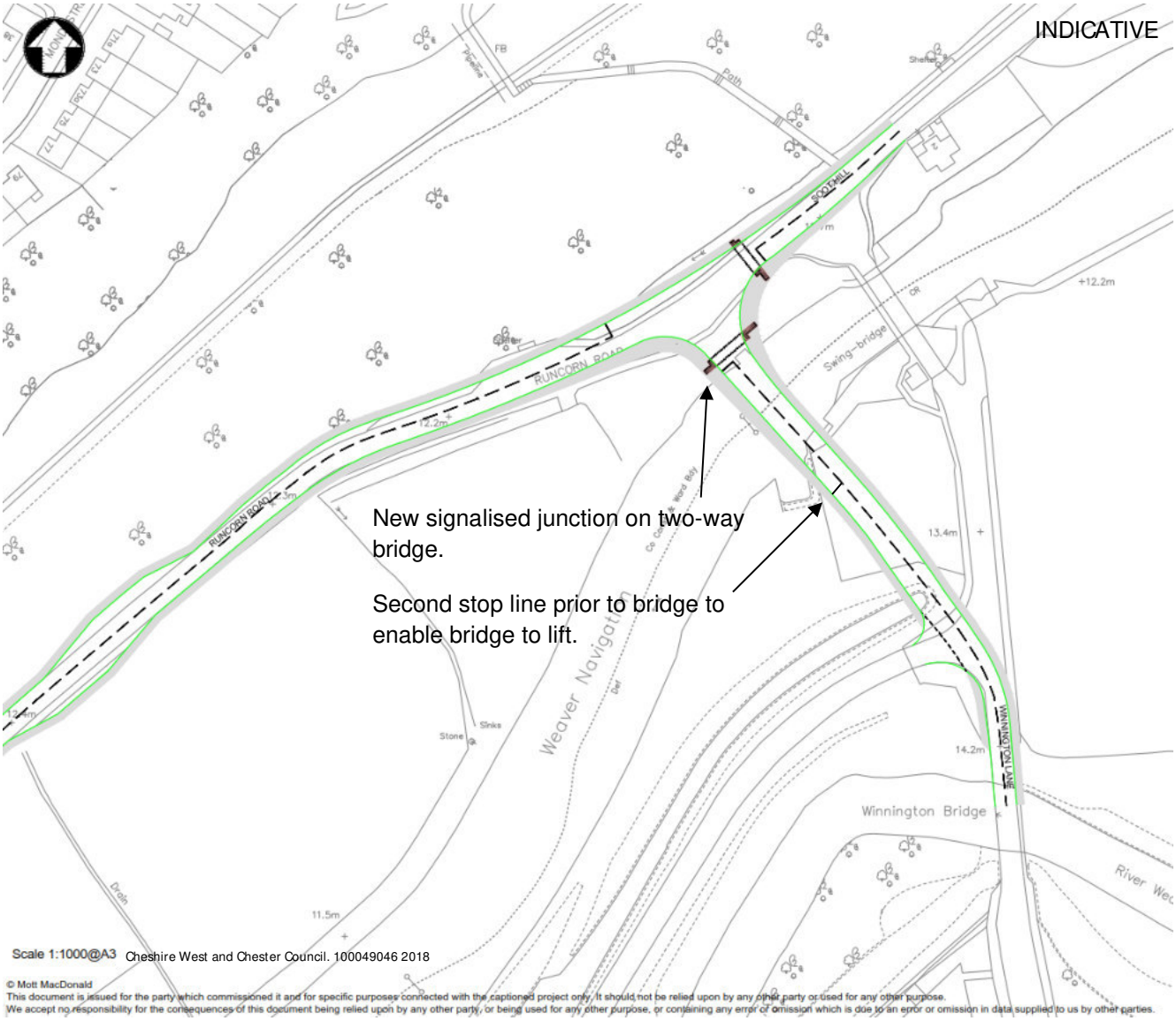
PACKAGE E: Increasing capacity at Winnington/ Barnton Swing Bridge

Theme: Improving Local Capacity
Scheme ref: *UA01*

Location:	Town Centre		Wider Urban Area	✓	Longer Distance	

Schemes Outline

- Provision of a new crossing over the River Weaver, in addition to or replacement of the current single carriageway signal operated swing bridge junction.
- The current swing bridge is listed meaning widening or alterations to it are not permitted.
- Any new bridge will need to be able to continue to allow vessels to pass along the river.
- A concept layout including a new bridge and signalised crossing is shown below, which allows for two-way movements on the bridge:



Issue / Opportunities

- This is a key congestion pinch point and causes significant delay in this area.
- Its proximity to Winnington Urban Village and the extra demand this will generate through its on-going delivery will place additional pressure on this pinch point.

PACKAGE E: Increasing capacity at Winnington/ Barnton Swing Bridge

Evidence

- The modelling work demonstrated long delays are experienced at this junction but that changing the bridge to accommodate two lanes showed a notable decrease in delay.

	
Queue of traffic on approach to Winnington/Barnton swing bridge	Single carriageway bridge crossing causing capacity constraints

Benefits

- Will relieve congestion in the area and address the pinch point.
- Support the on-going delivery of Winnington Urban Village.
- Improved access to the Mersey Gateway bridge, increasing access to opportunities for residents.

Consultation

Summary of consultation feedback:

- Support for increasing capacity at this pinch point.
- Considered a top priority for the council
- Concern that further development at Winnington Urban Village will exacerbate the current problems.

Consultation survey comments

"UA01 is an absolute priority for the council."

"UA01 New bridge is essential"

"UA01 with all the new housing developments it is essential to have a new bridge"

Recommendations / Comments

- Undertake initial feasibility work into ground conditions and land ownerships.
- Optioneering of potential crossing opportunities should be undertaken to inform the development of a business case to support funding applications. This should be developed in line with WebTAG guidance.
- Seeking funding opportunities and gather stakeholder support.

Indicative timescales and priority

Scheme	Headline description of scheme	Timescale	Priority
UA01	Deliver scheme to reduce congestion at the key pinch points at the Winnington/Barnton Swing Bridge	2018-2020 for scheme development; 2021-2025 for implementation	High

Indicative package cost

Cost:	Major >£25M	Very High £10M - £25M	High £5M - £10M	Moderate £500K - £5M	Low <£500K
	☐	✓	☐	☐	☐

PACKAGE F: Reducing congestion along the A559 Greenbank / Hartford Corridor

Theme: Improving Local Capacity
Scheme ref: *UA02*

Location:	Town Centre		Wider Urban Area	✓	Longer Distance	

Schemes Outline

UA02a - Capacity improvements along Greenbank/ Hartford Corridor to reduce congestion

- There are pinch points along the Hartford Corridor which require review, especially as further residential development comes forwards. A first step should be ensuring the signal timings at the junction of Bradburn's Lane / School Lane / A559 are operating efficiently.
- A review of on-street parking should be undertaken to ascertain if this could be relocated off-street to provide additional capacity on the highway for widening other junction pinch points, having multiple lane running at some points, or turning lanes to remove traffic waiting to turn from the main flow.
- A change or reversal of the one way system on The Green and School Lane at the northern end should be studied.

UA02b - Explore options for facilitating a west bound exit from A556 at Hartford

- There is no off-slip on the A556 west bound at Whitegate Lane, with on-slips available and an eastbound off-slip.
- A U-turn manoeuvre is currently permitted to the west of the junction, enabling use of the east bound off-slip to access Hartford (and Whitegate to the south).
- Improving this connection will remove through traffic from Hartford, enabling it to access the village at the right 'end' of the corridor. This could be through signage and reviewing the requirement for signals at this location to ensure safe movements on a high-speed (70mph) route. This may require a reduction of the speed limit although there is good forward visibility.

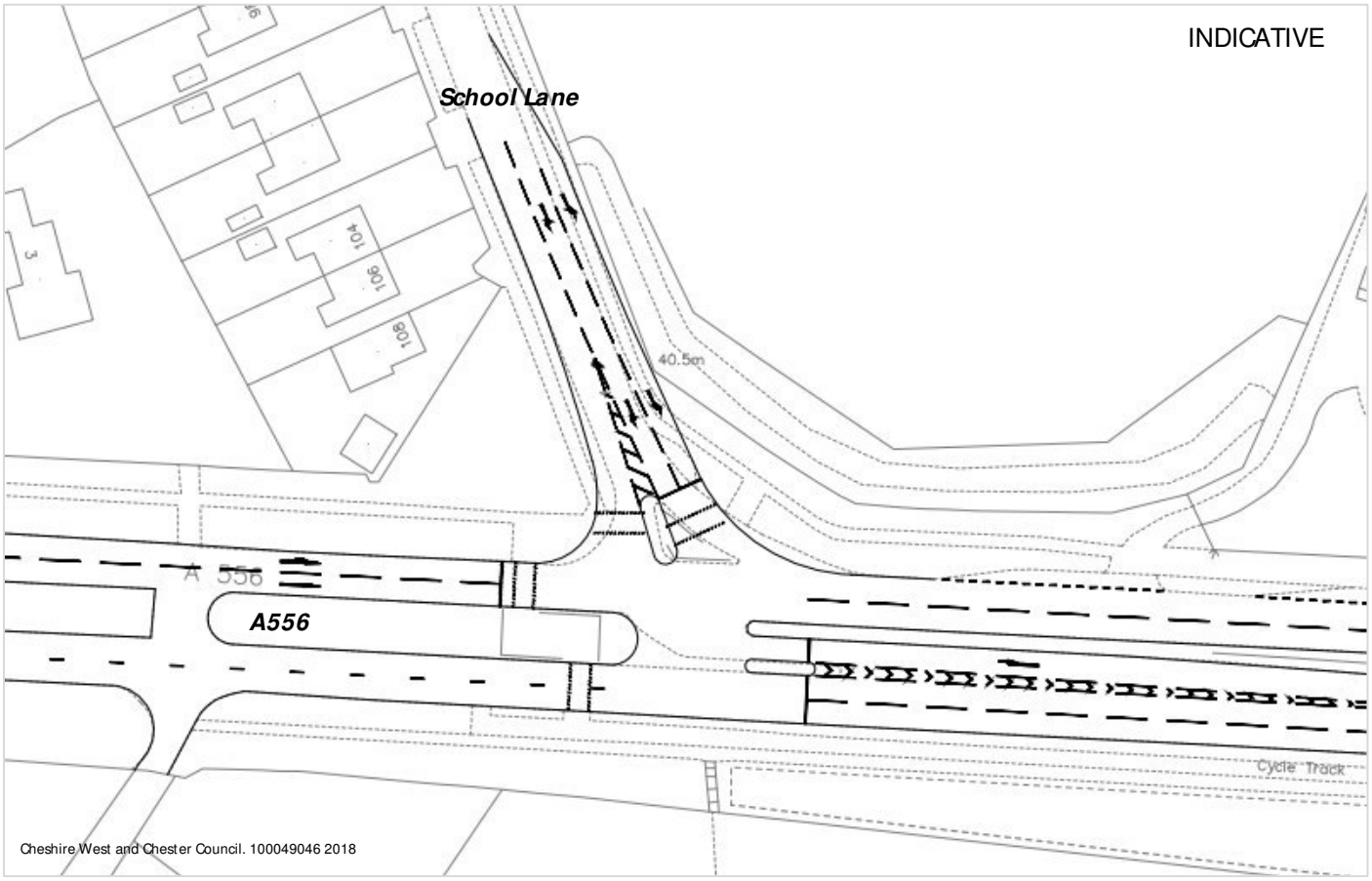
Source: Google satellite mapping

Alternative solutions to explore include providing a standard off-slip onto Whitegate Lane on the south side of the A556, however this would require third party land.

PACKAGE F: Reducing congestion along the A559 Greenbank / Hartford Corridor

UA02c - Investigate opportunity to reduce congestion through Hartford through introduction of a right turn movement at A556/School Lane

- Right turn movements at this junction are not currently permitted, which means traffic wanting to travel west must pass through the Hartford Corridor on the A559, adding to the congestion along this route.
- The junction is already signalised and could be modified to permit right turn movements from School Lane onto the A556 westbound. A concept layout is shown below.



Issue / Opportunities

- This is a constrained corridor which is particularly affected by traffic generated by schools, with over 10 educational establishments within the immediate area.
- On-street parking causes constraints and obstructions but is in demand due to local businesses and a thriving high street, coupled with limited off-street parking provisions.
- There are a number of new housing development proposed or being developed, particularly off School Lane and around Walnut Lane. These will introduce additional pressure on the highway network.

Evidence

- The modelling process showed that there are a number of junctions within the Hartford area which are over capacity in the AM and PM peaks and will continue to be so in the 2030 assessment year without intervention.

Benefits

- Will improve traffic flow in and around Hartford and provide greater route choices, dissipating traffic.
- Local air quality improved as a result of less congestion.

PACKAGE F: Reducing congestion along the A559 Greenbank / Hartford Corridor

Consultation

Summary of consultation feedback:	***Consultation survey comments***
• Mixed responses in relation to schemes suggested with more information required on the impacts of schemes on addressing the issues.	*"Definitely required (UA02c) -. No idea why it was closed off when the junction was improved."* *"I worry that UA02b would have a detrimental effect on westbound flows on the A556 in view of the delays caused by the creation of the recent Hilltop Estate junction."*

Recommendations / Comments

- Undertake detailed assessment of combined schemes in Hartford to understand traffic redistribution impacts and how capacity is changed as a result. This should include further assessment into how the highway could be changed to accommodate additional capacity.
- Implement the School Lane junction improvement.
- Support travel demand management initiatives to reduce travel demand or re-time it to spread demand over the course of a day. *See **Package K**.*

Indicative timescales and priority

Scheme	Headline description of scheme	Timescale	Priority
UA02	Reduced congestion along A559 Greenbank/Hartford Corridor	2018 - 2020	High

Indicative package cost

Cost:	Major >£25M	Very High £10M - £25M	High £5M - £10M	Moderate £500K - £5M	Low <£500K
	☐	☐	☐	✓	☐

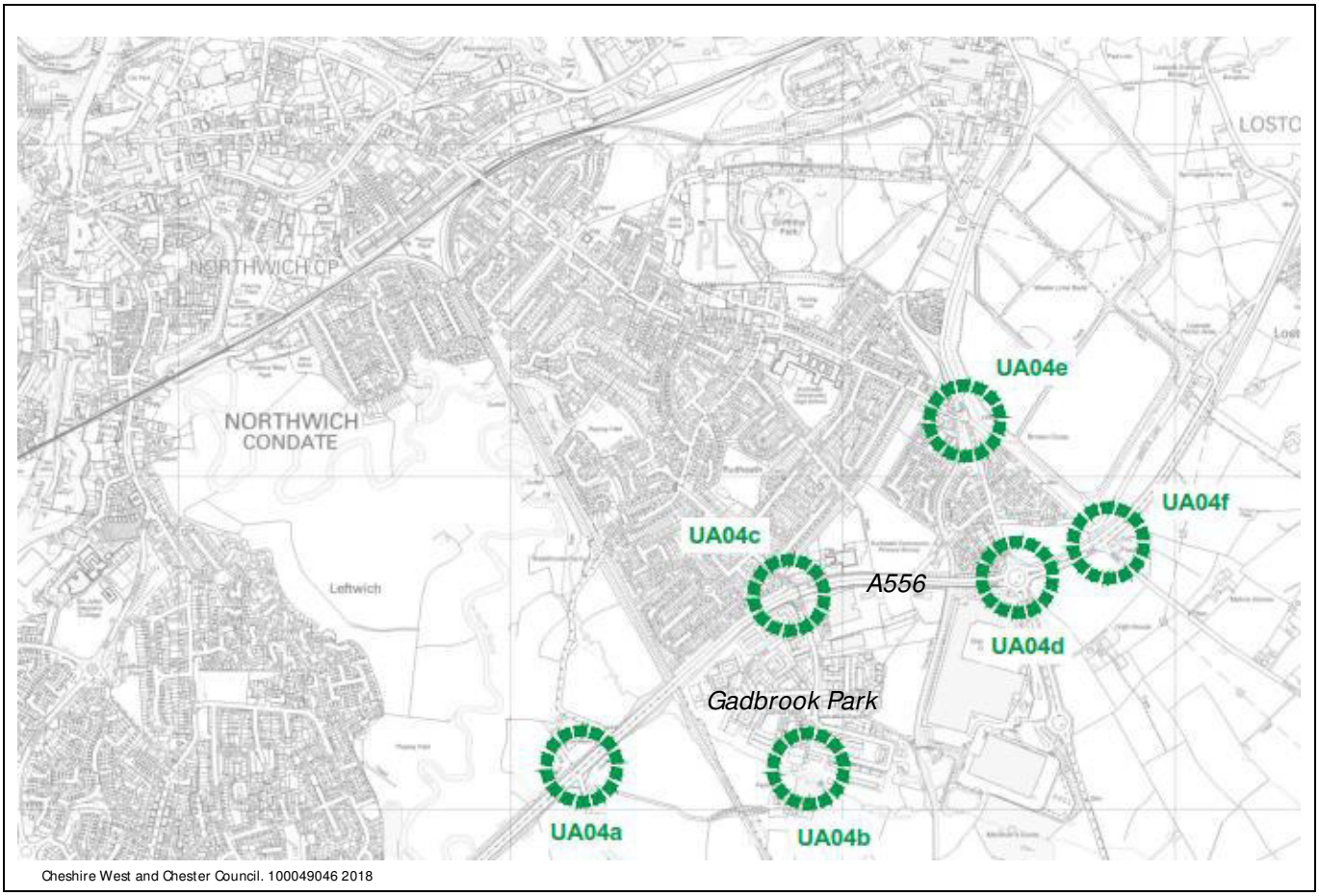
PACKAGE G: A556 congestion and access to Gadbrook Park

Theme: Improving Local Capacity
Scheme ref: *UA04*

Location:	Town Centre		Wider Urban Area	✓	Longer Distance	

Schemes Outline

This package ulines a series of junctions improvents to improve access to Gadbook Park and reduce congestion along the A556. The location of improvemnts is summarised in the following image.



- UA04a-Develop a new junction on the A556 to the west of the existing Gadbrook Park site to open up development land and support the future expansion of businesses. This should be designed as part of masterplanning for the expansion land.
- UA04b- Consider opportunities to introduce a second southern access to Gadbrook Park for either vehicles, or pedestrians/cyclists. This should be consdiered in conjunction with UA04a.
- UA04c-Implement the approved improvement scheme at Gadbrook Road/ A556 junction to reduce congestion caused by traffic entering and existing Gadbrook Park.
- UA04d-Junction improvement at roundabout junction with the A556/ A530. This should be considered once the alignment of HS2 is confirmed.
- UA04e-Junction improvement scheme at A530 King Street / B5082 Middlewich Road
- UA04f-Junction improvement scheme at A556 / B5082 Penny's Lane

Issue / Opportunities

- Several pinch points exist within the wider area, which cause congestion and delay. These include the entrance/exit to Gadbrook Park and the A556 / A530 King Street junction.
- There are concerns about perceived poor air quality for residents in areas of congestion.
- Capacity issues on main roads linking Northwich to other urban areas and the motorway network.

PACKAGE G: A556 congestion and access to Gadbrook Park

- There are concerns that congestion and delay around the entrance/exit to Gadbrook Park may affect the future success of the park.

Evidence

- Consultation with the Mid-Cheshire Development Board highlighted that queues into Gadbrook Park during the AM peak are blocking a major trunk road, reducing the attractiveness of the site.
- The Gadbrook Parking study highlighted the car dependent culture and capacity constraints at Gadbrook Business Park.
- The modelling process showed that there are a number of junctions along the A556, particularly around Gadbrook Park which are over capacity in the AM and PM peaks and will continue to be so in the 2030 assessment year without intervention. The following table summarises when each junction in this area is operating over capacity in the year 2030.

Scheme	AM Peak	PM Peak
UA04c	Yes	Yes
UA04d	Yes	No
UA04e	Yes	Yes
UA04F	Yes	Yes

Benefits

- Reducing congestion at a key pinch point.
- Improving access to Gadbrook Park to support current business and future growth.
- Enhancing connectivity to strategic locations through ensuring efficient access to key motorway junctions.

Consultation

Summary of consultation feedback:

- Strong support for any schemes that will ease congestion or alleviate parking constraints around Gadbrook Park.
- Concerns from Rudheath residents and Gadbrook employees
- Car parks need to be managed if spaces increased or more people will drive

Consultation survey comments

"Offering southern entrance to Gadbrook park should massively improve congestion"

"Improved and suitable access to Gadbrook Park is required urgently."

"Better access and parking is required around Gadbrook Park - URGENTLY."

Recommendations / Comments

- Support the identification of these junction improvements in line with Local Plan (Part Two) policy N4 and N5 and a comprehensive development brief being prepared for the site.
- Review signal timings of the signalised junctions to improve traffic flow at peak periods.
- See the following designs for suggested amendments for UA04e and UA04f.

Indicative timescales and priority

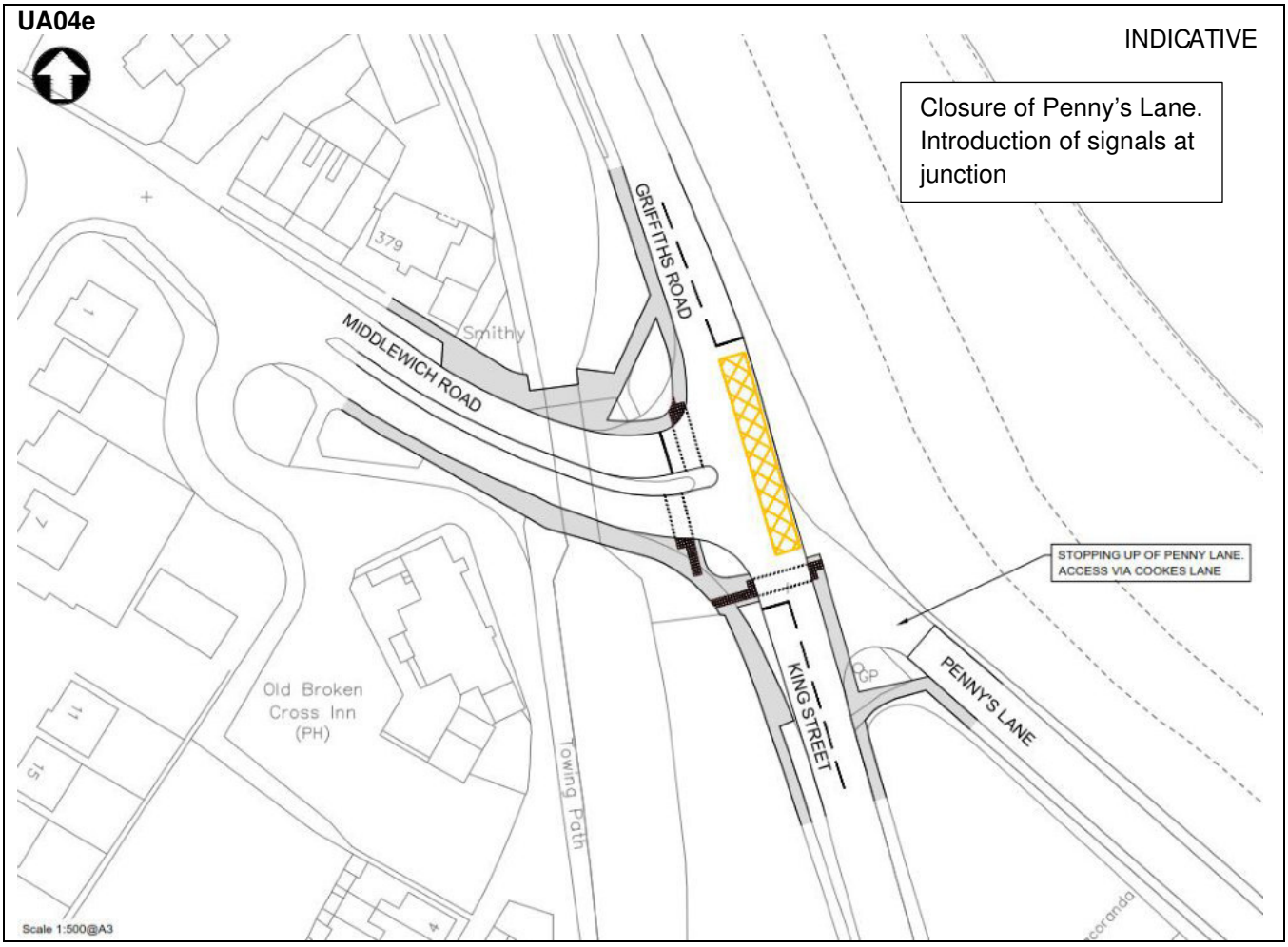
Scheme	Headline description of scheme	Timescale	Priority
UA04a	Develop a new junction on the A556 to the west of the existing Gadbrook Park	2030+	Medium
UA04b	Consider opportunities to introduce a second southern access to Gadbrook Park	2030+	Medium
UA04c	Implement improvement scheme at Gadbrook Road/A556 junction	2018-2020	High
UA04d	Junction improvement at roundabout junction with the A556/A530	2021-2025	Low

PACKAGE G: A556 congestion and access to Gadbrook Park

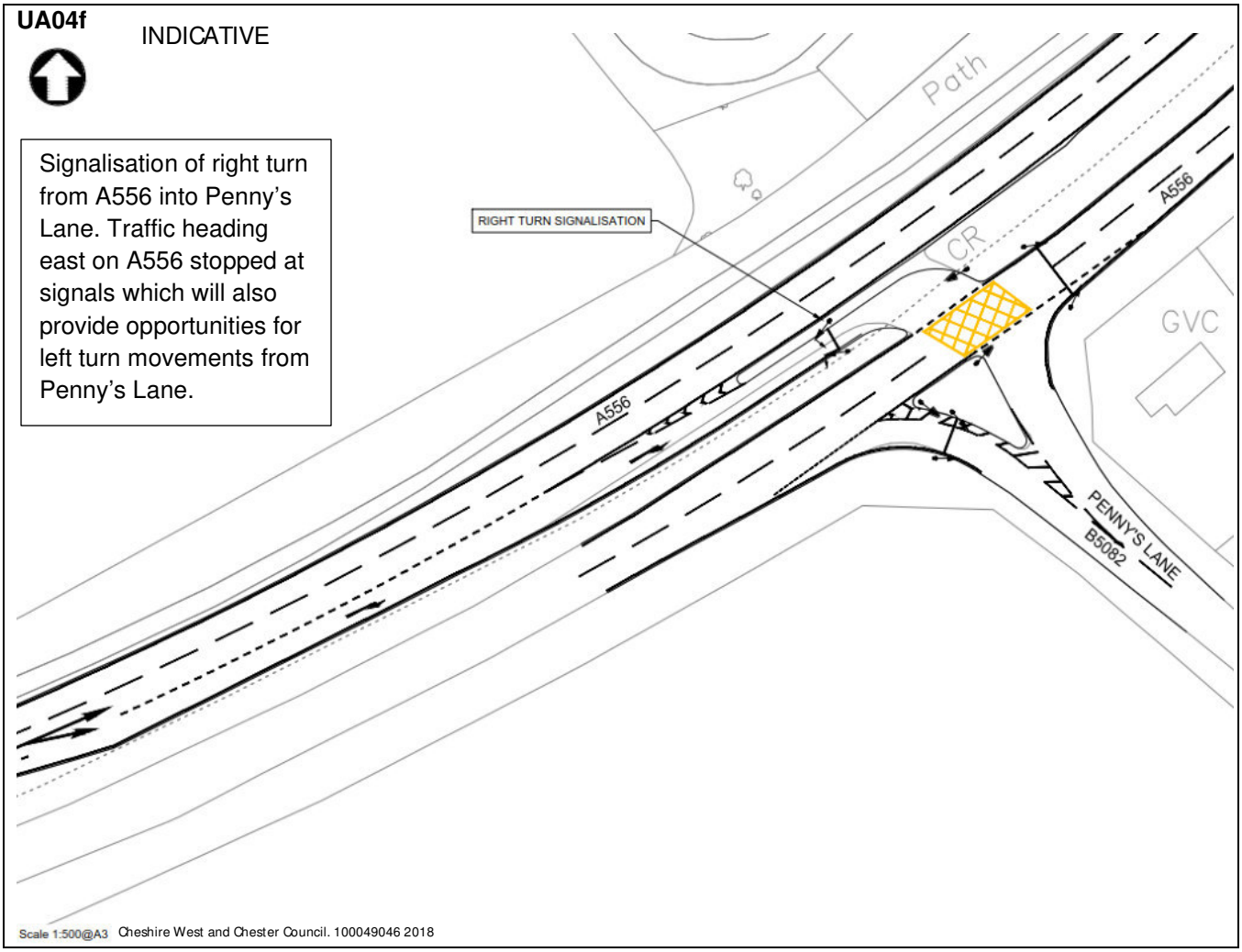
Scheme	Headline description of scheme	Timescale	Priority
UA04e	Junction improvement scheme at A530 King Street/B5082 Middlewich Road	2021-2025	Medium
UA04f	Junction improvement scheme at A556/B5082 Penny's Lane	2021-2025	Medium

Indicative package cost

Cost:	Major >£25M	Very High £10M - £25M	High £5M - £10M	Moderate £500K - £5M	Low <£500K
	☐	☐	✓	☐	☐



PACKAGE G: A556 congestion and access to Gadbrook Park



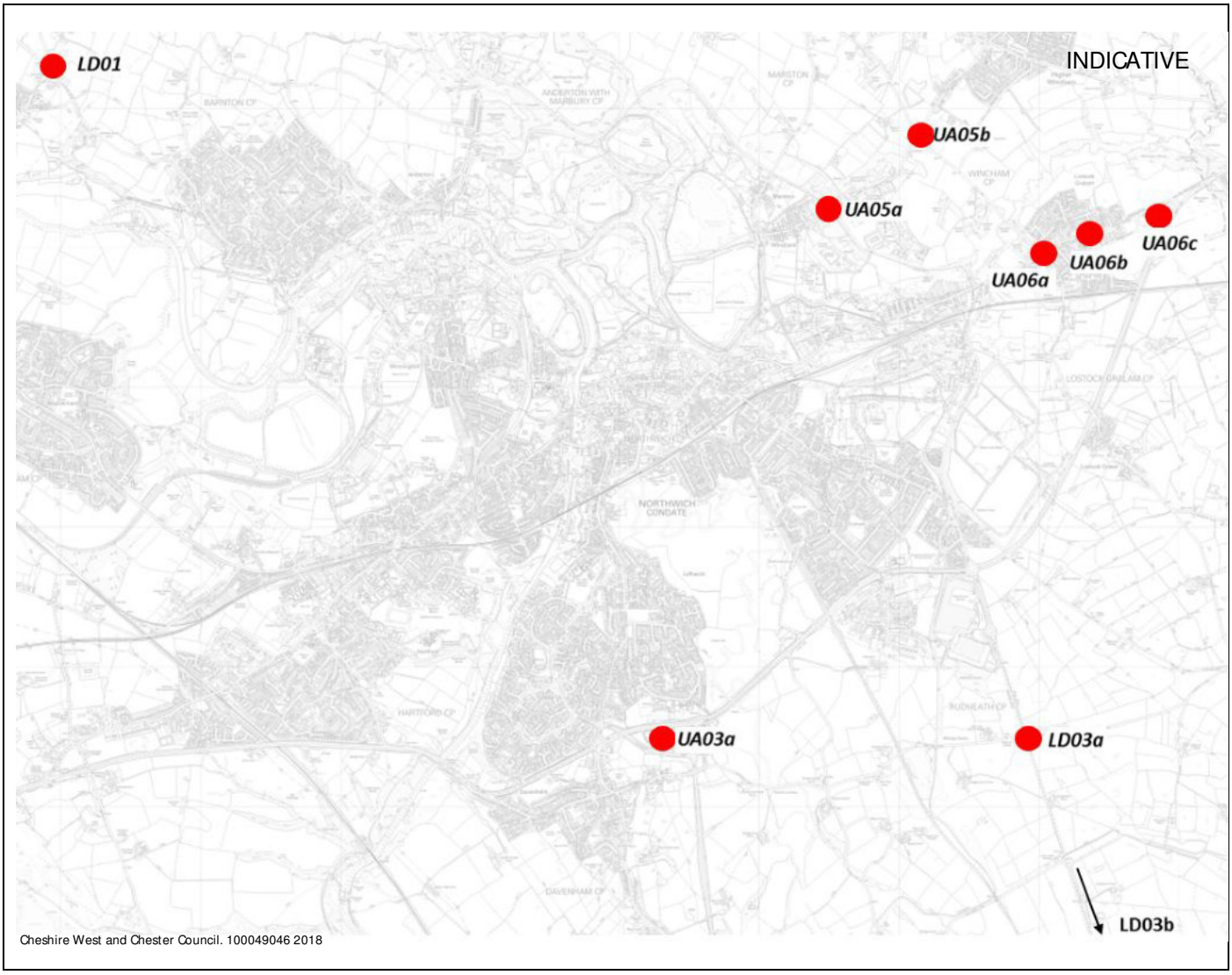
PACKAGE H: Longer Term Road Congestion Pinch Point Schemes

Theme: Improving Local Capacity

Scheme ref: *UA03a; UA05a; UA05b; UA06a; UA06b; UA06c; UA23; LD01; LD03a; LD03b*

Location:	Town Centre		Wider Urban Area	✓	Longer Distance	✓

This package identifies a number of junctions which require improvements in term of capacity safety. These junctions are less urgently required than others and so have been suggested for implementation in the near future. The location of all identified junctions is summarised in the image below.



PACKAGE H: Longer Term Road Congestion Pinch Point Schemes

Ref.	Scheme	Evidence	Benefits	Issues/Opportunities
UA03a	A533/A556 at Davenham to support increased use and better accessibility to the A556. This scheme should consider the provision of all movement slips from the A556 to provide a more direct connection between the A533 and the A556, particularly for traffic travelling south to west. This scheme was noted in the Winsford Transport Strategy and should be supported by the Northwich Transport Strategy.	• The modelling process has shown that this junction will operate over capacity in the AM peak period by 2030. • This junction was also identified for improvements in the Winsford Transport Strategy in 2016.	• Better access to A556 supporting economic activity at Gadbrook Park and connectivity to key motorway junctions.	• Several pinch points exist within the wider area, which cause congestion and delay. • There are a number of corridors experiencing congestion such as the A556 around Gadbrook Park.
UA05a	Wincham- along signed route from A559: B5075 New Warrington Road/ Chapel Street. Introduction of a right turn pocket to prevent traffic waiting to turn right holding up through flow.	• Consultation with CWaC Planning & Regen teams highlighted capacity constraints at this junction in light of future development. • The modelling process has shown that this junction will operate over capacity in the both the AM and PM peak periods by 2030.	• Increased capacity at junctions to support future development.	• The future capacity of the road network is of concern due to the number of substantial developments planned or currently under construction in the wider area of Northwich.
UA05b	Wincham- signalised junction at A559 Marston Lane/ Church Street junction. This scheme should involve improving the signal stages to improve flow through the junction at peak periods. Amending the signal stages may also allow an opportunity for reviewing the provision of pedestrian crossings at this junction to improve pedestrian safety.	• Consultation with CWaC Planning & Regen teams highlighted capacity constraints at this junction in light of future development. • The modelling process has shown that this junction will operate over capacity in the PM peak period by 2030.	• Increased capacity at junctions to support future development.	• The future capacity of the road network is of concern due to the number of substantial developments planned or currently under construction in the wider area of Northwich.
UA06a	Lostock Gralam: A559 Manchester Road/ A559 Hall Lane/Station Road. This scheme should involve improving the signal stages to improve flow through the junction at peak periods.	• Consultation with CWaC Planning & Regen teams highlighted capacity constraints at this junction • The modelling process has shown that this junction will operate over capacity in the both the AM and PM peak periods by 2030.	• Reduced congestion at key junctions. • Improved air quality as a result of reduced congestion.	• Several pinch points exist within the wider area, which cause congestion and delay.

PACKAGE H: Longer Term Road Congestion Pinch Point Schemes

Ref.	Scheme	Evidence	Benefits	Issues/Opportunities
UA06b	Lostock Gralam: A559 Manchester Road / Stubbs Lane. This junction may be improved through changes to signal times at UA06a preventing backlogs of traffic at this point. This location should therefore be assessed for a scheme following amendments to UA06a.	• Consultation with CWaC Planning & Regen teams highlighted capacity constraints at this junction. • The modelling process has shown that this junction will operate over capacity in the PM peak period by 2030.	• Reduced congestion at key junctions. • Improved air quality as a result of reduced congestion.	• Several pinch points exist within the wider area, which cause congestion and delay.
UA06c	Lostock Gralam: A556/A559 roundabout junction. This should be looked at as a longer term scheme, once HS2 alignment has been confirmed and the impact upon local roads from that can be taken into account.	• The modelling process has shown that this junction will operate over capacity in the both the AM and PM peak periods by 2030.	• Reduced congestion at key junctions. • Improved air quality as a result of reduced congestion.	• Several pinch points exist within the wider area, which cause congestion and delay.
UA23	Introduce a package of urban traffic control measures to improve linking of junction signal timings along congested corridors in Northwich.	• There are several signalised junctions across the Northwich and Wider Urban Area that are experiencing congestion at peak periods.	• Linking adjacent signalised junctions along corridors can improve traffic flow by synchronising passage of the corridor in platoons rather than vehicles being stopped at every light.	• This would provide an opportunity for smoother traffic flows which would improve journey times and reduce congestion. • This is relatively quick and easy to implement, involving a change to the signal staging.
LD01	Implement junction capacity improvements at junction of A533/A49.	• Consultation with Cheshire East highlighted capacity constraints at this junction. • The modelling process has shown that this junction will operate over capacity in the both the AM and PM peak periods by 2030.	• Increased capacity and reduced congestion. • Better access to strategic road network including key motorway junctions.	• Several pinch points exist within the wider area, which cause congestion and delay. • High levels of out commuting in Northwich presents a need to create an efficient transport network to remain an attractive area for residents. • Capacity issues on main roads linking Northwich to other urban areas and the motorway network.
LD03a	A530 / Davenham Road/ Crowder's Lane. Introduction of a roundabout at this crossroads.	• The modelling process has shown that this junction will operate over capacity in the PM peak period by 2030.	• Increased capacity and reduced congestion on key routes to neighbouring towns.	• Several pinch points exist within the wider area, which cause congestion and delay. • There is a need to ensure that connectivity is improved so that residents of Northwich and the wider urban area benefit

PACKAGE H: Longer Term Road Congestion Pinch Point Schemes

Ref.	Scheme	Evidence	Benefits	Issues/Opportunities
				from the proposed HS2 station at Crewe. • Capacity issues on main roads linking Northwich to other urban areas and the motorway network.
LD03b	A530/ B5309 King Street. Introduction of a roundabout at this crossroads.	• Consultation with Cheshire East highlighted safety concerns at this junction.	• Increased capacity and reduced congestion on key routes to neighbouring towns.	• Several pinch points exist within the wider area, which cause congestion and delay. • There is a need to ensure that connectivity is improved so that residents of Northwich benefit from the proposed HS2 station at Crewe. • Capacity issues on main roads linking Northwich to other urban areas and the motorway network.

PACKAGE H: Longer Term Road Congestion Pinch Point Schemes

Consultation

Summary of consultation feedback:	***Consultation survey comments***
• General support for addressing these issues, with some considered higher priority (LD01, UA03a) than others.	*"UA05a - part of the problem here is caused by poor choice of signal phasing at the existing A559/Church Street junction".* *"Lack of right turning lanes means that traffic backs up at the Manchester Road/Hall Lane junction. Installing a right turn lane here on each side of the Manchester road carriageway would CONSIDERABLY improve traffic flows."* *"UA01-UA06 generally highly desirable"* *"LD01 - I agree that this junction needs an urgent review"*

Recommendations / Comments

- Review signal timings of the signalised junctions to improve traffic flow at peak periods.
- See the following designs for suggested amendments for UA05a, LD03a and LD03b.
- No designs have been produced for UA06a,b,c as these may be affected by HS2 and benefit from upgrades or improvements associated with the final route of the scheme.

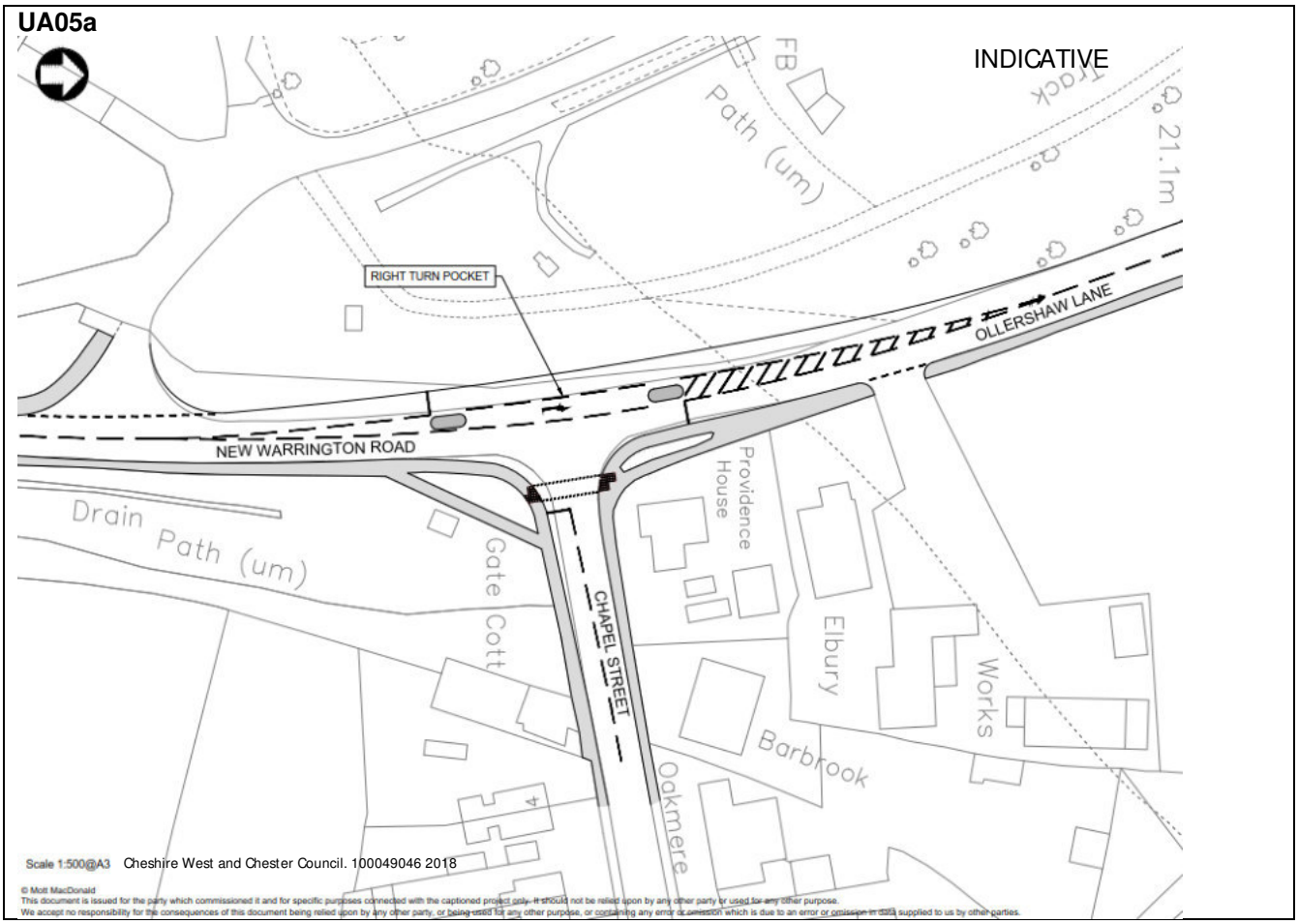
Indicative timescales and priority

Scheme	Headline description of scheme	Timescale	Priority
UA03a	A533/A556 at Davenham to support increased use and better accessibility to the A556	2021-2025	Low
UA05a	Wincham- along signed route from A559: B5075 New Warrington Road/ Chapel Street	2021-2025	Medium
UA05b	Wincham- along signed route from A559: A559 Marston Lane/Church Street	2021-2025	Medium
UA06a	Lostock Gralam: A559 Manchester Road/A559 Hall Lane/Station Road	2021-2025	Medium
UA06b	Lostock Gralam: A559 Manchester Road/Stubbs Lane	2026-2030	Low
UA06c	Lostock Gralam: A556/A559 roundabout junction	2026-2030	Low
UA23	Introduce a package of urban traffic control measures to improve linking of junction signal timings along congested corridors in Northwich.	2018-2020	High
LD01	Implement junction capacity improvements at junction of A533/A49	2021-2025	Medium
LD03	Implement junction capacity improvements at pinch points on A530	2026-2030	Low

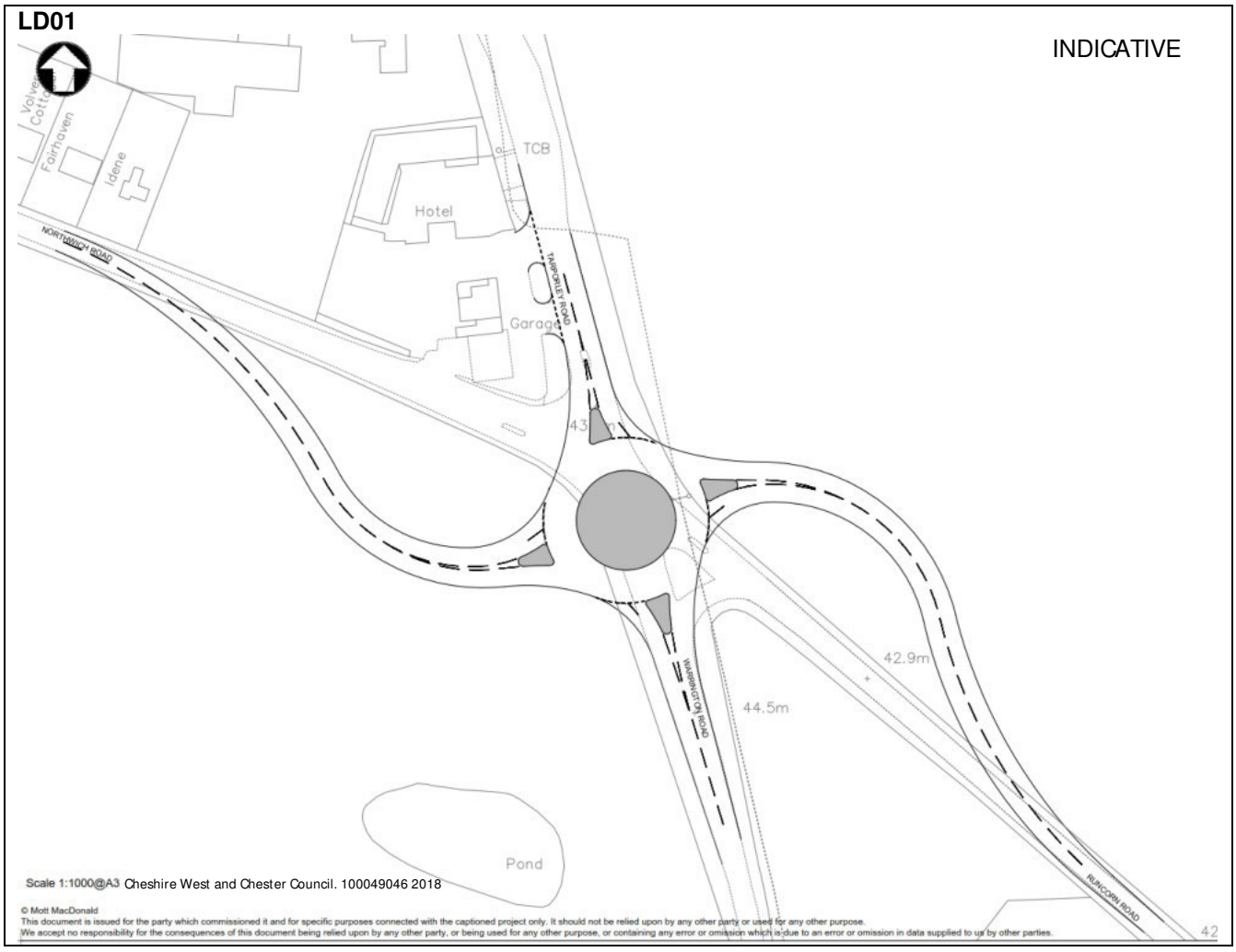
Indicative package cost

Cost:	Major >£25M	Very High £10M - £25M	High £5M - £10M	Moderate £500K - £5M	Low <£500K
	☐	✓	☐	☐	☐

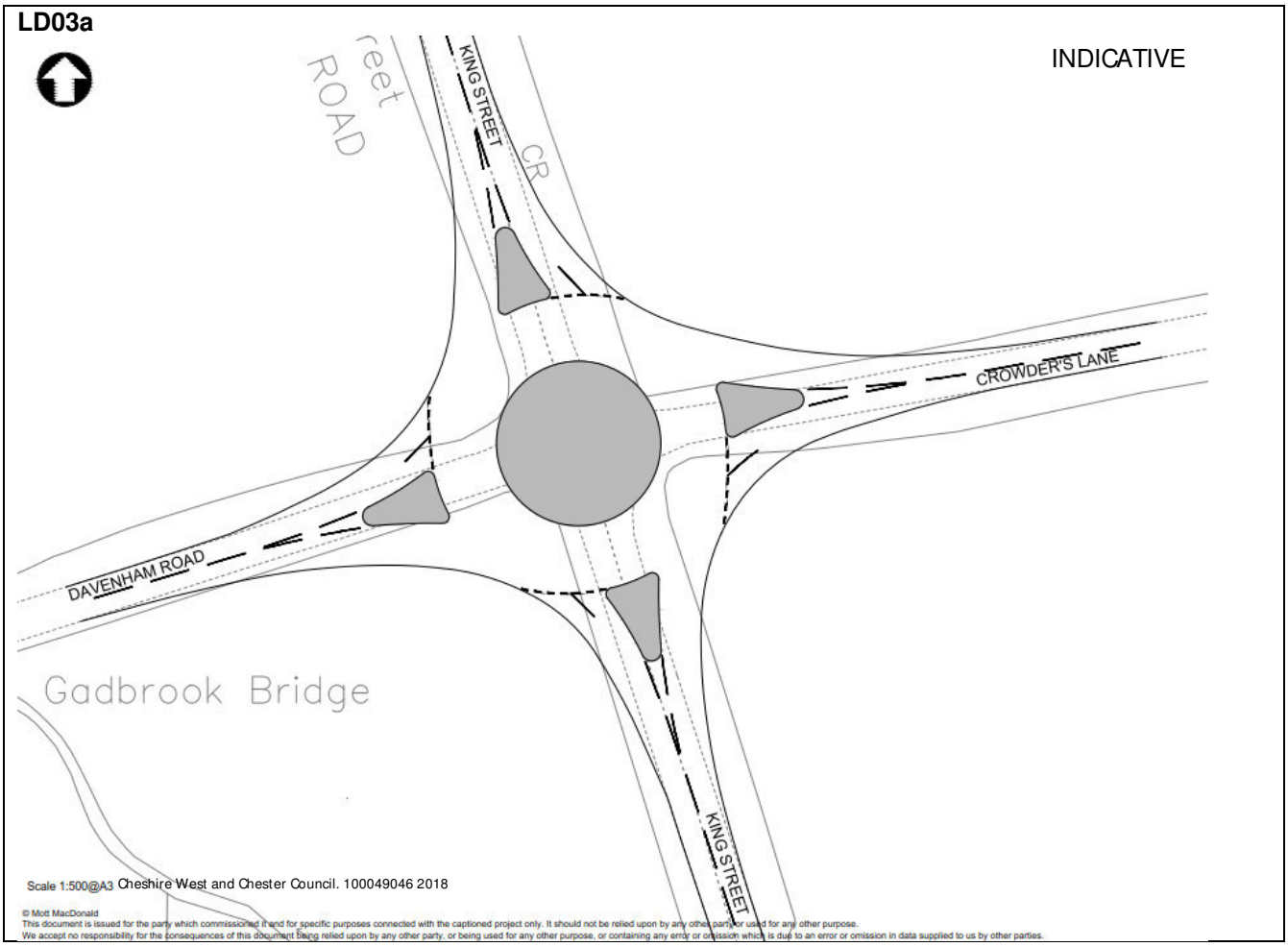
PACKAGE H: Longer Term Road Congestion Pinch Point Schemes



PACKAGE H: Longer Term Road Congestion Pinch Point Schemes

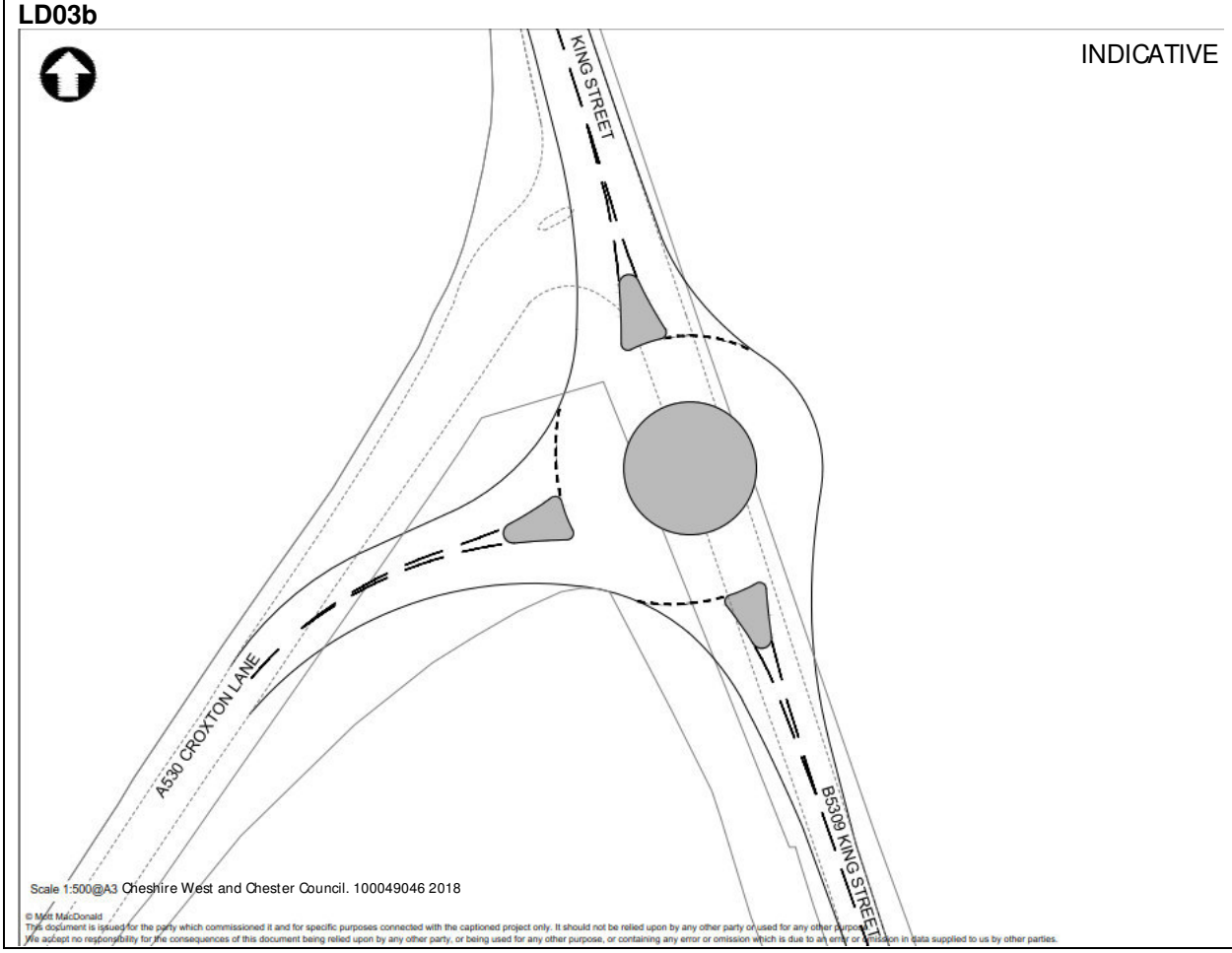


PACKAGE H: Longer Term Road Congestion Pinch Point Schemes



PACKAGE H: Longer Term Road Congestion Pinch Point Schemes

LD03b



PACKAGE I: Road Safety & Traffic Calming

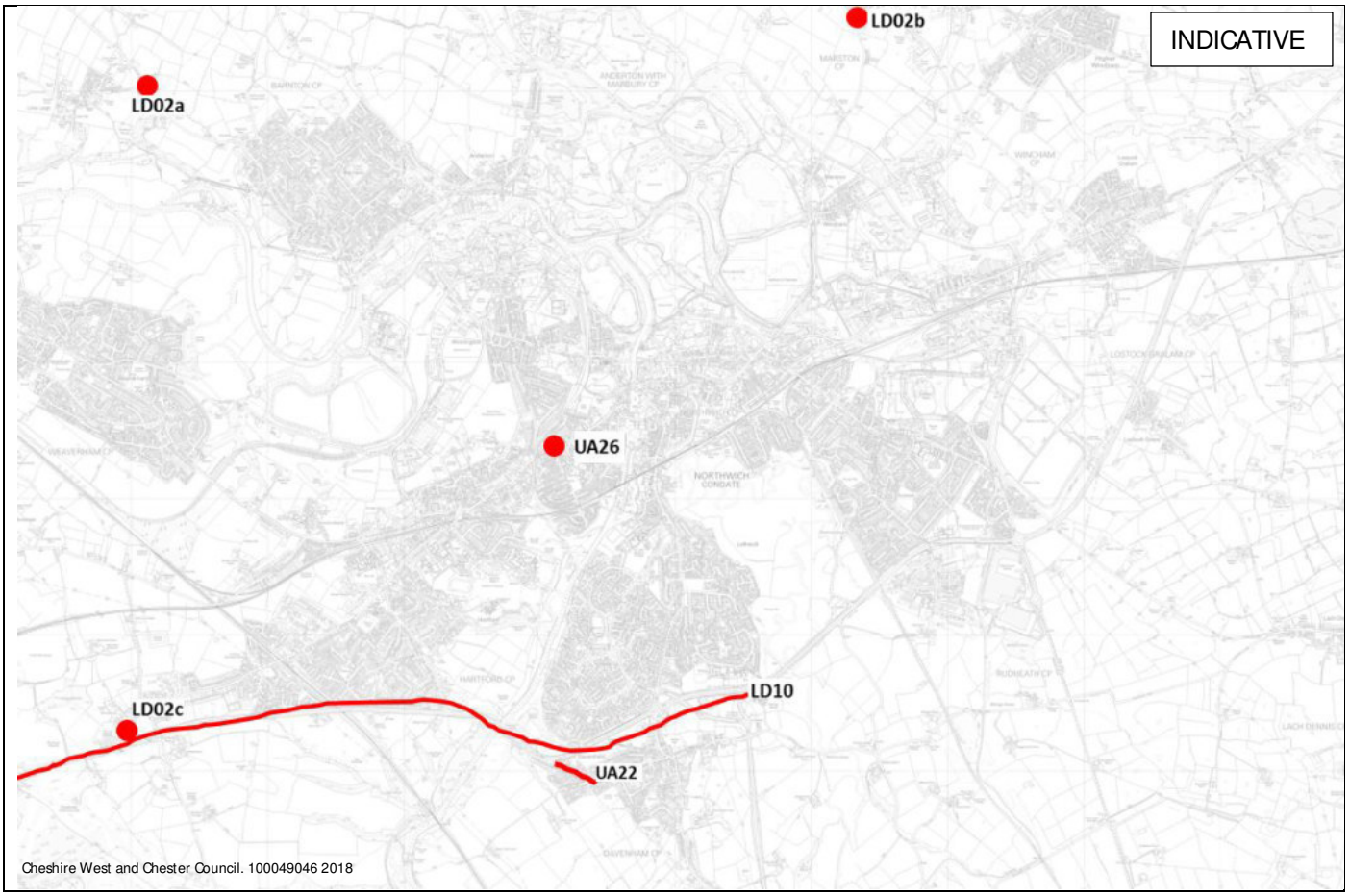
Theme: Safe and Sustainable

Scheme ref: *UA22, UA24, LD10, LD02, UA26 (new), UA03b (new)*

Location:	Town Centre		Wider Urban Area	✓	Longer Distance	✓

Schemes Outline

This package sets out a number of schemes to improve safety on the road network around Northwich and the wider urban area. The following image shows the location of schemes within the package.

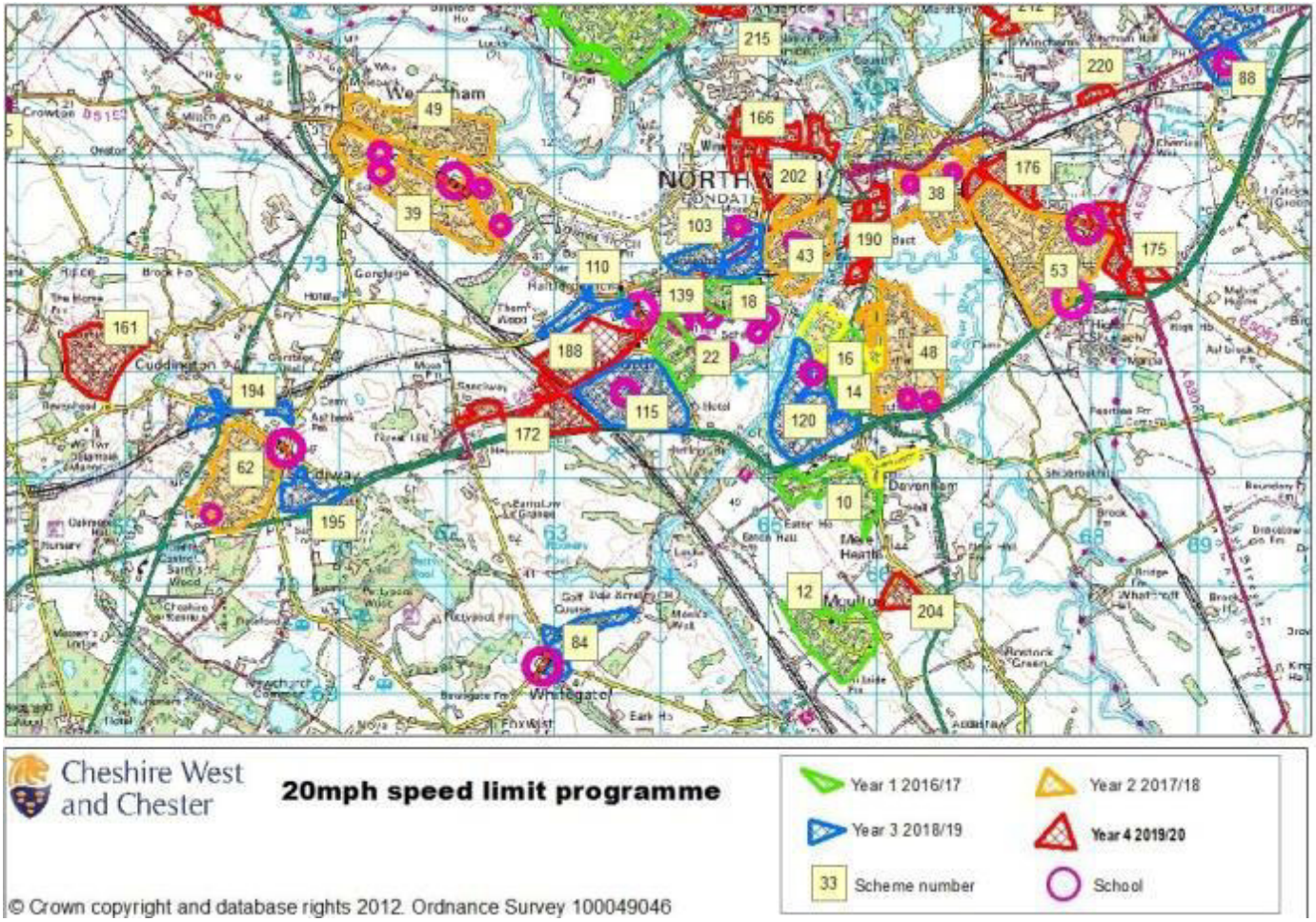


- UA22 - Introduce traffic calming measures on Hartford Road in Davenham.
- LD10 - Implement speed reduction measures on key local routes affected by speeding issues including the A556 Cuddington-Davenham-Allostock and the A559 up to the A56
- LD02a - Monitor identified incident hotspots and implement safety measures as appropriate: Smithy Lane / Ash Lane / A533, Little Leigh.
- LD02b - Monitor identified incident hotspots and implement safety measures as appropriate: Budworth Lane / A559 / High Street, Great Budworth.
- LD02c - Monitor identified incident hotspots and implement safety measures as appropriate: A556/A559 junction through improved road alignment at Cinder Hill, Hartford.
- UA26 (new)- Pedestrian crossing at Iron Bridge at Moss Road/A559 signalised junction to improve pedestrian safety.
- UA03b (new) - Monitor identified incident hotspots and implement safety measures as appropriate: Jack Lane/A533.
- UA24 (Continue to implement the programme of 20mph speed limits across the Northwich wider urban area) is also supported through this package. Years 1 and 2 of the four year programe are complete, but the following are proposed for years 3 and 4:
    - Year 3 2018/19 – 88 Lostock Gralam (School Lane), 89 Antrobus (School Lane), 90 Little Leigh (Shutley Lane), 103 Greenbank (Firdale Road), 110 Hartford (Beachwood Avenue), 111 The Grange

School (Bradburns Lane), 115 Hartford (Riddings Lane), 118 Higher Wincham (Church Street), 120 Kingsmead (Regency Way), 122 Comberbach (Village),

- Year 4 2019/20 – 161 Cuddington (Delamere Park), 166 Winnington (Winnington Lane), 172 Hartford (Mornant Avenue), 175 Broken Cross (Lavender Drive), 176 Rudheath (Royle Street), 188 Hartford (Walnut Lane),190 Northwich (Queen Street), 194 Cuddington (Glebe Road), 195 Sandiway (Hadrian Way), 196 Acton Bridge(Cliff Road), 202 Winnington (Cromwell Road), 204 Moulton (area), 209 Higher Marston (Hall Drive), 212 Wincham Marston (Chapel Street), 215 Anderton (Old Road), 220 Northwich (Renshaw Road).
- The locations of these can be seen in the following plans, extracted from the CWaCC Programme for 20 mph Speed Limits – Borough Wide Delivery (2016).

- Linked to this package, there are also two on-going speed limit reviews of which the recommendations from the review should be implemented:
  - (i) Investigating the introduction of a 30mph limit on Winnington Avenue and
  - (ii) considering a reduction from 60mph to 50 mph on Gorstage Lane between the A49 and Hartford.



PACKAGE I: Road Safety & Traffic Calming

Issue / Opportunities

- A number of serious incidents along key routes into the town centre and within the town centre study area.
- Significant number of serious incidents occurred in the wider urban area between 2014-2016 including at least one fatal incident each year.

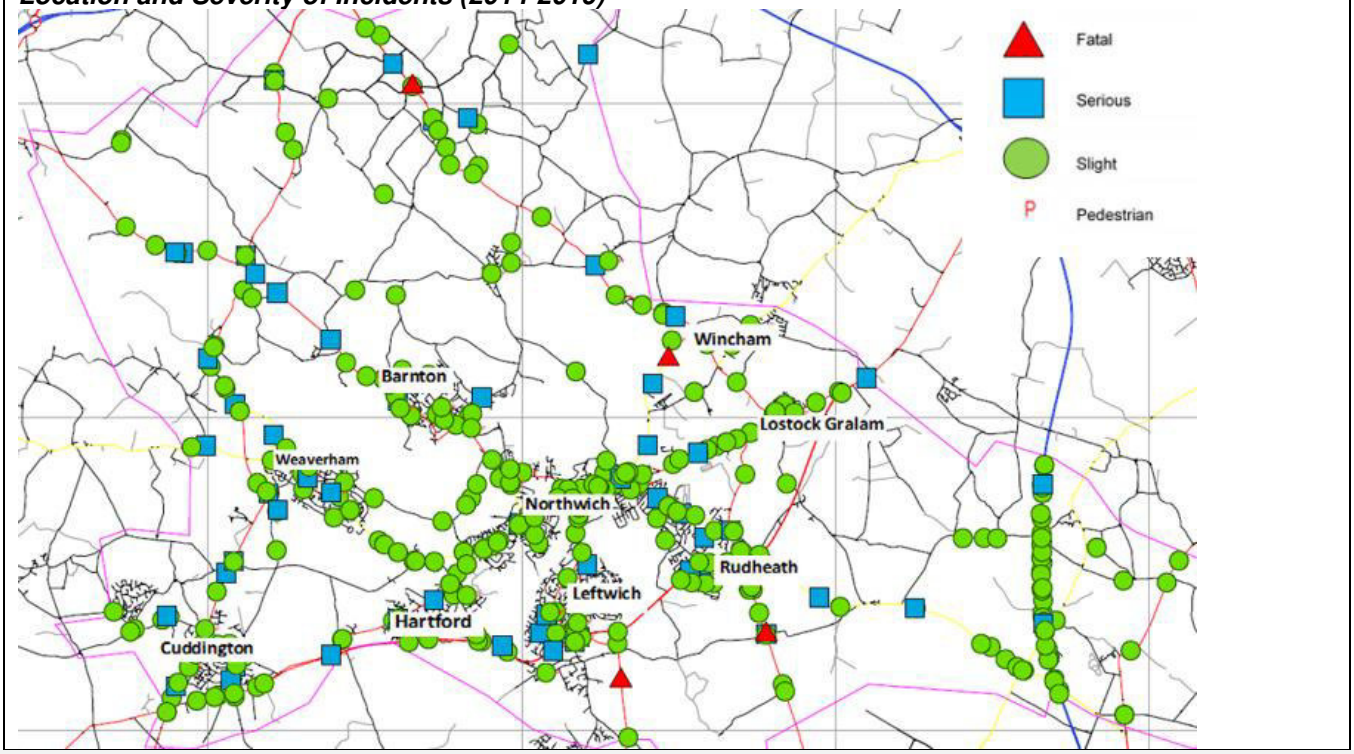
Evidence

- Speeding through villages was outlined as an issue during consultation with Northwich Town, and Parish Councillors.
- A review of accident data shows that road safety is of concern for the town centre and wider urban area with a significant number of serious and fatal accidents occurring between 2014 and 2016 (see below).

PACKAGE I: Road Safety & Traffic Calming

-

Location and Severity of Incidents (2014-2016)



Benefits

- Improving safety of the local road network for both vehicles and pedestrians.
- Creating more attractive environments and increasing opportunities for pedestrians and cyclists.
- Reduced costs of accidents.

Consultation

Summary of consultation feedback:

- Would be more supportive if could guarantee would improve safety (UA24)
- Safety concerns A559 and High Street/Budworth Road junction (LD02)
- Other incident hot spots identified such as Jack Lane Moulton (LD02)
- Need to be properly enforced to effective (LD10)

Consultation survey comments

"From Hartford west junction A556 to Davenham is now a hell hole route over 40 years the speed and 'race course' ideas have vastly increased need 50mph and CAMERAS as no one takes notice"

"A556 from school lane to Davenham roundabout is where traffic calming should be focused."

"Strongly support LD02C as an important local junction."

"Re LD10 speed limits can help but they have got to be reasonable and flexible and specific to the stretch of road. Too often this is not the case"

Recommendations / Comments

- Maintain a phased programme of speed limit reviews on roads in Northwich and the surrounding area and change speed limits as recommended by the reviews as appropriate.
- Examine accident hotspots in the wider urban area to identify areas where traffic calming or speed reduction measures can be focused.
- Consider and implement methods of enforcement to ensure measures are effective in improving road safety.
- Continue implementation of 20mph speed limits (up to end of the 4 year programme which completes in 2020)

PACKAGE I: Road Safety & Traffic Calming

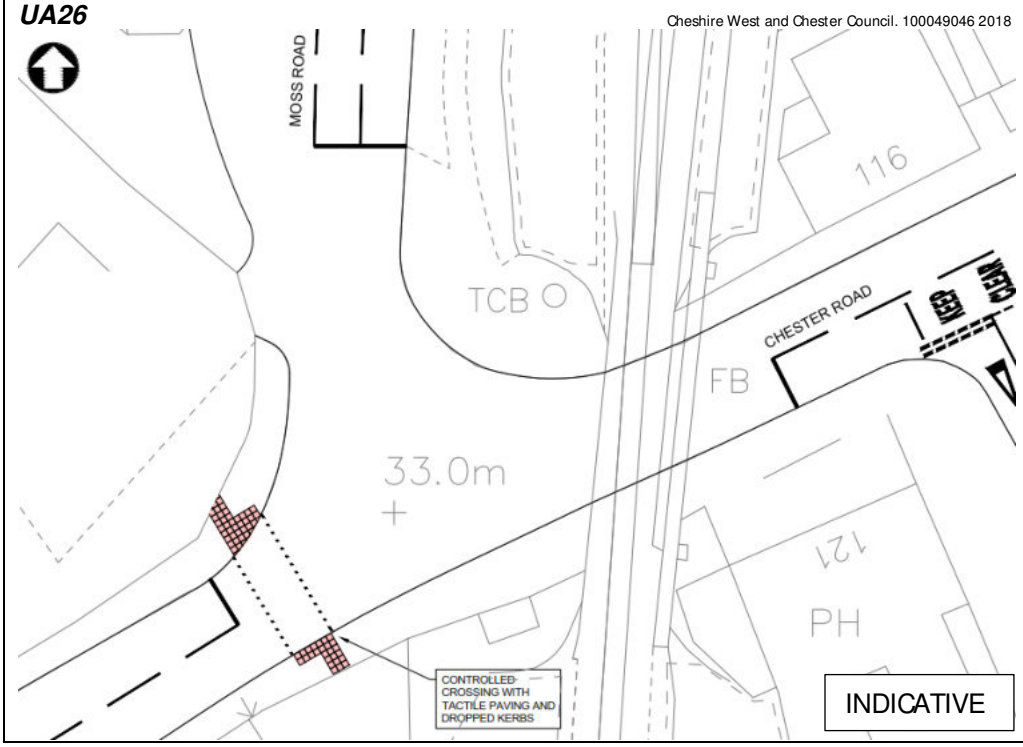
Indicative timescales and priority

Scheme	Headline description of scheme	Timescale	Priority
UA22	Introduce traffic calming measures on Hartford Road in Davenham.	2021-2025	Medium
UA24	Continue to implement the programme of 20mph speed limits across the Northwich wider urban area	On-going	High
LD10	Implement speed reduction measures on key local routes affected by speeding issues	2018-2020	High
LD02	Monitor identified incident hotspots and implement safety measures as appropriate	2018-2020	High
UA26	Pedestrian crossing at Iron Bridge at Moss Road/A559 signalised junction to improve pedestrian safety	2021-2025	Medium
UA03b	Monitor Jack Lane/A533 incident hotspot and implement safety measures as appropriate	2018-2020	Medium

Indicative package cost

Cost:	Major >£25M	Very High £10M - £25M	High £5M - £10M	Moderate £500K - £5M	Low <£500K
•				✓	

UA26



The following design as a suggestion for UA26, which was a new scheme raised through consultation. The crossing has been added across Chester Road, as a private access on the western side of Moss Road/Moss Lane restricts the implementation of a crossing on Moss Road itself. The signal phasing would need amending to allow a pedestrian crossing phase, to operate on demand.

PACKAGE J: Improved Bus Connectivity

Theme: Safe and Sustainable

Scheme ref: *UA15, UA15e (new), UA17*

Location:	Town Centre		Wider Urban Area	✓	Longer Distance	

Schemes Outline

- UA15a - Where appropriate introduce evening bus services to residential areas e.g. Rudheath, Comberbach to access town centre and leisure facilities.
- UA15b - Implement measures of Winsford Transport Strategy for better bus services between Winsford, Middlewich and Northwich.
- UA15c - Review and promote opportunities to extend flexible/specialist bus services.
- UA15d - Explore options for enhanced bus travel to hospitals, possibly a new shuttle service similar to the Leighton Link Service that has been successfully introduced for Leighton Hospital in Crewe.
- UA15e - Consider bus service to Gadbrook Park from wider urban area.
- UA17 - Review and identify opportunities to enhance bus priority at junctions with traffic signals when implementing urban traffic control measures.

Northwich Bus Interchange

Issue / Opportunities

- There are few evening bus services between parts of the wider urban area and Northwich Town Centre e.g. to serve new leisure facilities.
- Bus links to locations e.g. Winsford and Leighton Hospital and further afield such as Altrincham and Warrington are infrequent, particularly at weekends, and unavailable during the evening period.
- Public transport access to Gadbrook Park is currently limited increasing congestion and exacerbating parking constraints.
- Need to maintain good access by all modes to support Barons Quay and further town centre redevelopment.

Evidence

- Consultation with CWaC highlighted a need for bus connectivity to the wider area and access to key services particularly hospitals.
- There is only one bus service serving the town centre (linking to Winsford) which operates after 8.30pm.
- The bus service to Crewe is only an hourly service which does not operate after 6.00pm.

Benefits

- Improving access to opportunities and facilities in the town centre for people without access to a car.
- Increasing opportunities for sustainable travel to the town centre and key employment sites such as Gadbrook Park.
- Improved access to key services such as Leighton Hospital in Crewe.
- More efficient services increases attartiveness of bus tarvel for commuting and leisure purpose.

PACKAGE J: Improved Bus Connectivity

Consultation

Summary of consultation feedback:

- Improved bus links to Weaverham i.e. later in the evening
- Needs to be supported by improvements to reduce congestion and improve journey times for buses
- Lots of support for improving bus services to help reduce congestion.

Consultation survey comments

"All about rail links at Hartford/Winnington
What about improved services (I.E. bus) to and from Weaverham in the evenings"

"Bus service from Weaverham to Northwich last bus 19.40 last from Northwich to Weaverham 19.25"

"Strongly support a review of the entire bus service network to reflect current patterns of land use"

Recommendations / Comments

- Work with bus operators to update bus routes and timetables ensuring services support commuting, leisure and retail opportunities in the town centre and access to key services and facilities.
- Investigate feasibility of bus services to Gadbrook Park from key local residential areas based on staff postcodes. This will likely be commercially driven.
- Review signal timings at key junctions around the town centre and wider urban area to consider priority for buses improving the efficiency of services.

Indicative timescales and priority

Scheme	Headline description of scheme	Timescale	Priority
UA15a	Where appropriate introduce evening bus services	On-going	Medium
UA15b	Implement measures of Winsford Transport Strategy for better bus services	On-going	Medium
UA15c	Review and promote opportunities to extend flexible/specialist bus services	2021-2025	Medium
UA15d	Explore options for enhanced bus travel to hospitals	2021-2025	Medium
UA17	Review and identify opportunities to enhance bus priority at junctions with traffic signals	2018-2020	High
UA15e	Consider bus service to Gadbrook Park from wider urban area	2021-2025	Low

Indicative package cost

Cost:	Major >£25M	Very High £10M - £25M	High £5M - £10M	Moderate £500K - £5M	Low <£500K
	☐	☐	☐	☐	✓

PACKAGE K: Smarter Choices, Behaviour Change and Active Travel

Theme: Safe and Sustainable
Scheme ref: *UA16, UA20, UA21, UA25*

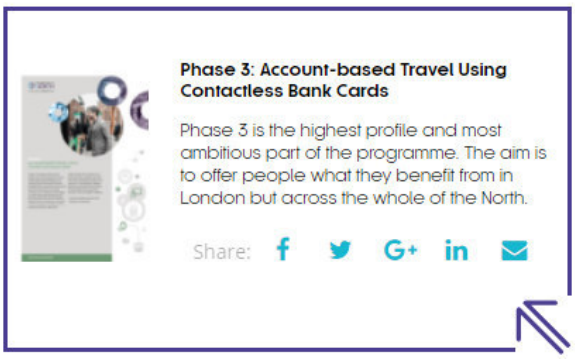
Location:	Town Centre		Wider Urban Area	✓	Longer Distance	

Schemes Outline

- UA16 - Support TfN in implementing integrated ticketing system for all users of bus and rail services in the Northwich area and introduce a new system of subsidised travel cards for students across Northwich and the wider area.
- UA20 - Encourage other schools to follow St Wilfred's Greenbank in investigating staggering school start and finish times to reduce congestion.
- UA21 - Support extensions to the CWaCC Parent Parking Charter to encourage parents to leave cars further from schools and complete their journeys on foot.
- UA25 - Examine opportunity for Area Travel Plan for schools in Hartford.

TfN Integrated and Smart Travel Programme

TRANSPORT FOR THE NORTH



Issue / Opportunities

- There are a number of corridors experiencing congestion e.g. the A559 Hartford corridor experiences severe levels of school related congestion, particularly during peak hours due to the high concentration of educational establishments in the area including sixth form provision for a wide catchment.
- The distribution of local services e.g. the concentration of schools in Hartford.
- Poor walking and cycling networks.

Evidence

- Consultation with Sir John Deane's College highlighted opportunities for smarter travel for students.
- Consultation with Ward Members raised concerns over the concentration of schools in Hartford causing congestion and poor air quality.
- Severe congestion around schools, particular in Hartford around school drop off and pick up times.

PACKAGE K: Smarter Choices, Behaviour Change and Active Travel

Benefits

- Smarter ticketing for public transport to increase the efficiency and attractiveness of services for commuting and leisure purposes.
- Reduced congestion around schools, particularly in Hartford, at school drop off and pick up times improving the flow of traffic and local air quality.
- An increase in sustainable travel in Northwich will help to reduce congestion in the town centre, improve local air quality and improve health and wellbeing of residents.

Consultation

Summary of consultation feedback:

- Support for schemes as may help to reduce congestion
- Lots of students travel separately by car
- Extensions to the CWaCC Parent Parking Charter already encouraged by The Grange
- Concerns of school related traffic were noted
- Dropping off at St Nicholas High School also noted as an issue due to limited access to Greenbank estate
- Some support-travel planning to be aimed at schools

Consultation survey comments

"Student travel pass - vital, my children have finished but the cost of travel to S J Deane's from Hartford was ridiculous."

"Smart cards like Oyster cards would be very practical."

"Staggered school times are a good idea"

"Dropping off and picking up children from Greenbank and Hartford schools can be a nightmare due to limited access to Greenbank estate."

"Area travel plans need desperately sorting out for schools in the Northwich"

Recommendations / Comments

- Investigate opportunities for active and sustainable travel for children at schools in Hartford through the implementation of Area Travel Plans.
- Take full account of the Council's Travel Planning Guidance to work with developers to create a sustainable transport network and support the adoption and use of workplace, school, residential, station and personalised travel plans.
- Undertake travel behaviour and awareness campaigns and projects that help encourage the use of sustainable types of transport.
- Support TfN led initiatives to promote integrated ticketing for public transport use across Northwich.
- Work with schools in the wider urban area to investigate ways to reduce congestion at school pick up and drop off times. Encourage this to be school led to ensure schemes are appropriate for each school.

Indicative timescales and priority

Scheme	Headline description of scheme	Timescale	Priority
UA16	Support TfN in implementing integrated ticketing system	On-going	Medium
UA20	Encourage schools to stagger school start and finish times to reduce congestion.	2018-2020	Medium
UA21	Support extensions to the CWaCC Parent Parking Charter	2018-2020	Medium
UA25	Examine opportunity for Area Travel Plan for schools in Hartford	2018-2020	High

Indicative package cost

Cost:	Major >£25M	Very High £10M - £25M	High £5M - £10M	Moderate £500K - £5M	Low <£500K
	☐	☐	☐	☐	✓

-

PACKAGE L: Walking and Cycling

Theme: Safe and Sustainable

Scheme ref: *TC06, UA11, LD05*

Location:	Town Centre ✓	Wider Urban Area ✓	Longer Distance ✓

Schemes Outline

This package outlines a number of schemes to improve walking and cycling connectivity across all three geographic study areas.

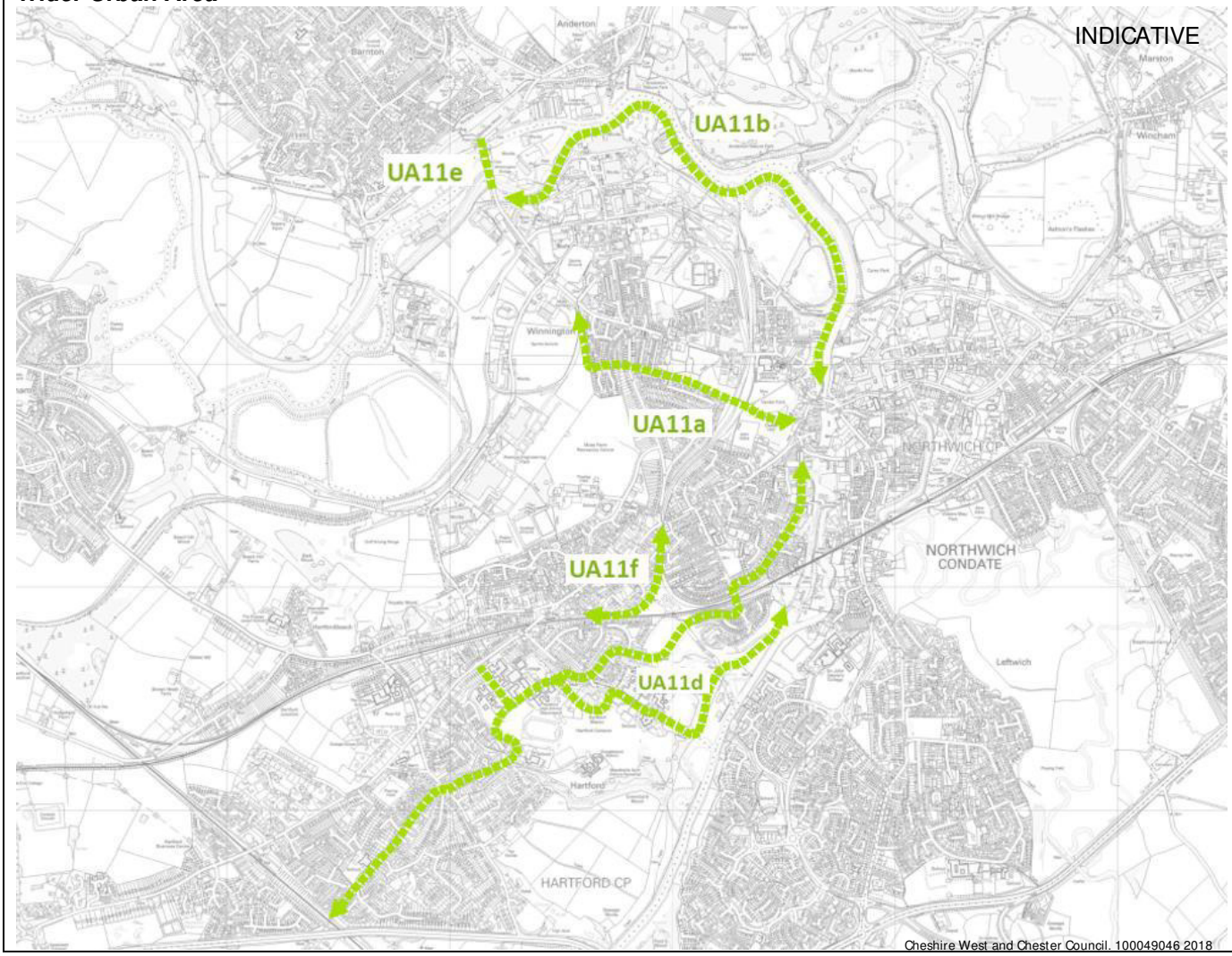
Town Centre

- TC06a - Review of cycle route condition and deliver resurfacing improvements to off-road routes where possible.
- TC06b -Explore options to deliver a new off-road town centre walking and cycling network making use of the canal and river systems.
- TC06c -Undertake Town Centre cycle parking review and enhance cycle parking offer to support active travel.
- TC06d (new) -Contiguous route for walking and cycling along the Weaver from Hunt's Lock to Marbury.

Wider Urban Area

The location of various schemes across the wider urban area is shown in the following image.

Wider Urban Area



- UA11a- Improved cycling and pedestrian connection between Northwich Town Centre, Winnington.

PACKAGE L: Walking and Cycling

- UA11b- Walking and cycling route utilising waterway into Northwich Town Centre from Winnington and Anderton.
- UA11c- Review plans for radial corridor improvements from Northwich Cycling Strategy.
- UA11d- Liaise with Hartford campus schools to open pedestrian/ cycling link from Manor Lane along River Weaver.
- UA11e- New pedestrian/cycle bridge to enhance walking route between Barnton and Winnington at Winnington Lane historic bridge (currently no suitable footway along the bridge.
- UA11f- Cycle link utilising former rail alignment from A559 Chester Road to Greenbank Station.
- UA11g- Implementation of a footpath at Marbury Hollows to improve pedestrian access.
- UA11h (new)- Investigate upgrade of cycling route from Sandiway/Cuddington alongside the north side of the A556 to create a safe corridor.

Longer Distance

- LD05a- Work with Cheshire East to implement a Middlewich – Winsford – Northwich – Knutsford cycle connection by delivering new connections within Cheshire West
- LD05b- Work with Cheshire East to explore opportunities for a cycle link that runs broadly parallel to the new HS2 line which would be configured once the route is confirmed.

Issue / Opportunities

- Poor walking and cycling networks in the wider urban area.
- Lack of long distance cycle routes.
- Concerns of local air quality in areas of congestion.

Benefits

- Increased active travel opportunities for leisure and commuting purposes with better connectivity to rail stations for cyclists.
- Increased levels of walking and cycling with associated health benefits.
- Help to reduce number of vehicles on the network improving local air quality.
- Improved safety for pedestrians and cyclists.

Young cyclist at Town Centre Gyratory

PACKAGE L: Walking and Cycling

Consultation

Summary of consultation feedback:

- Walking and cycling routes around schools noted (TC06)
- Lack of cycle parking noted a number of times- generally, at the station and The Bull Ring area- also quality i.e. needs to be secure (TC06
- Cost effective- views that these schemes are more realistic but not a preference for all (50/50) (TC06)
- Support for schemes as can help reduce congestion (UA11)
- Needs to be safe (UA11)
- Good level of agreement with proposals generally not seen as a priority (UA11)
- More of a priority for wider urban area and town centre (LD05)
- Some support to encourage cycling activity to increase sustainable transport leisure opportunities etc (LD05)

Consultation survey comments

"Need safe walking routes to educational establishments in Hartford"

"better cycle security needed"

"We need to improve and expand our cycling routes to ensure that we get maximum use and help to ensure improvements in air quality and fitness."

"Safe and well designed cycle/walking routes from residential areas to schools/shops/industrial areas could well encourage some people to leave the car at home"

"We need to improve and expand our cycling routes to ensure that we get maximum use and help to ensure improvements in air quality and fitness."

"I am concerned about the existing footpaths/rights of way they are generally in a very poor state of maintenance and in some cases the signage is non-existent"

Recommendations / Comments

- Create a network of safe and connected cycle routes to enhance connectivity between the town centre and wider urban area.
- Consider pedestrian and cyclist connectivity to Gadbrook Park and rail stations to support sustainable travel for commuter trips and alleviate parking issues at the Business Park and stations.
- Building upon the Northwich Cycling Strategy report, establish a Local Cycling and Walking Infrastructure Plan (LCWIP) for Northwich to encourage investment.
- Support schemes identified in the Northwich Cycling Strategy published in 2015 (right).
- See the following concept design for UA11e. This suggests that a footway could be provided adjacent to the existing listed Winnington Bridge, as a standalone structure, to avoid modifications to the existing bridge.

Indicative timescales and priority

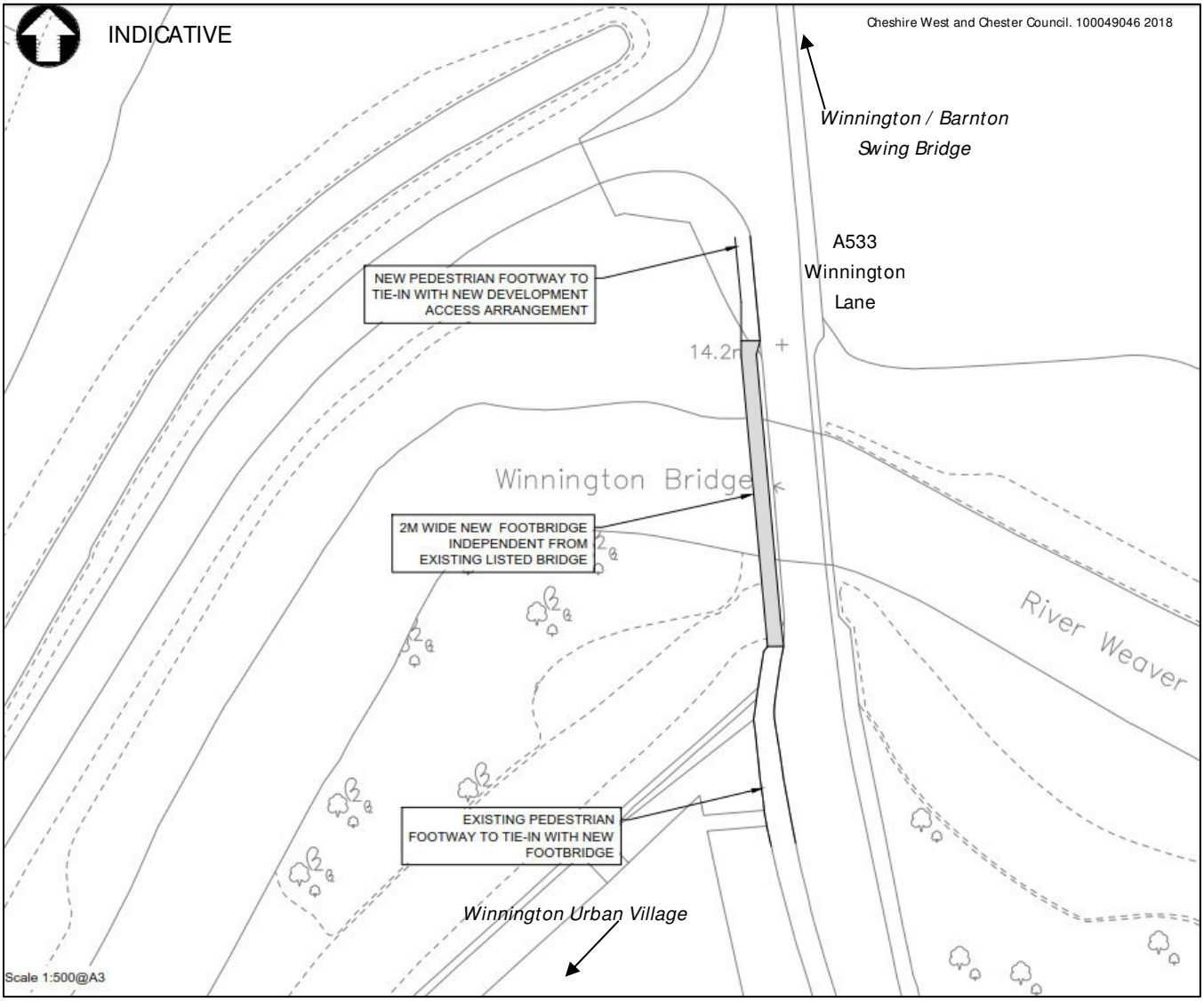
Scheme	Headline description of scheme	Timescale	Priority
TC06	Review of cycle route condition and deliver resurfacing improvements to off-road routes where possible	2021-2025	Medium
UA11	Improved cycling and walking facilities across the town and wider urban area (UA11a – UA11g)	2021-2025	Medium
LD05	Work with Cheshire East to implement cycling schemes between Middlewich – Winsford – Northwich – Knutsford and also explore opportunities for cycle link to runs broadly parallel to HS2 line	On-going	Low

-
- **Indicative package cost**

Cost:	Major >£25M	Very High £10M - £25M	High £5M - £10M	Moderate £500K - £5M	Low <£500K
	☐	☐	✓	☐	☐

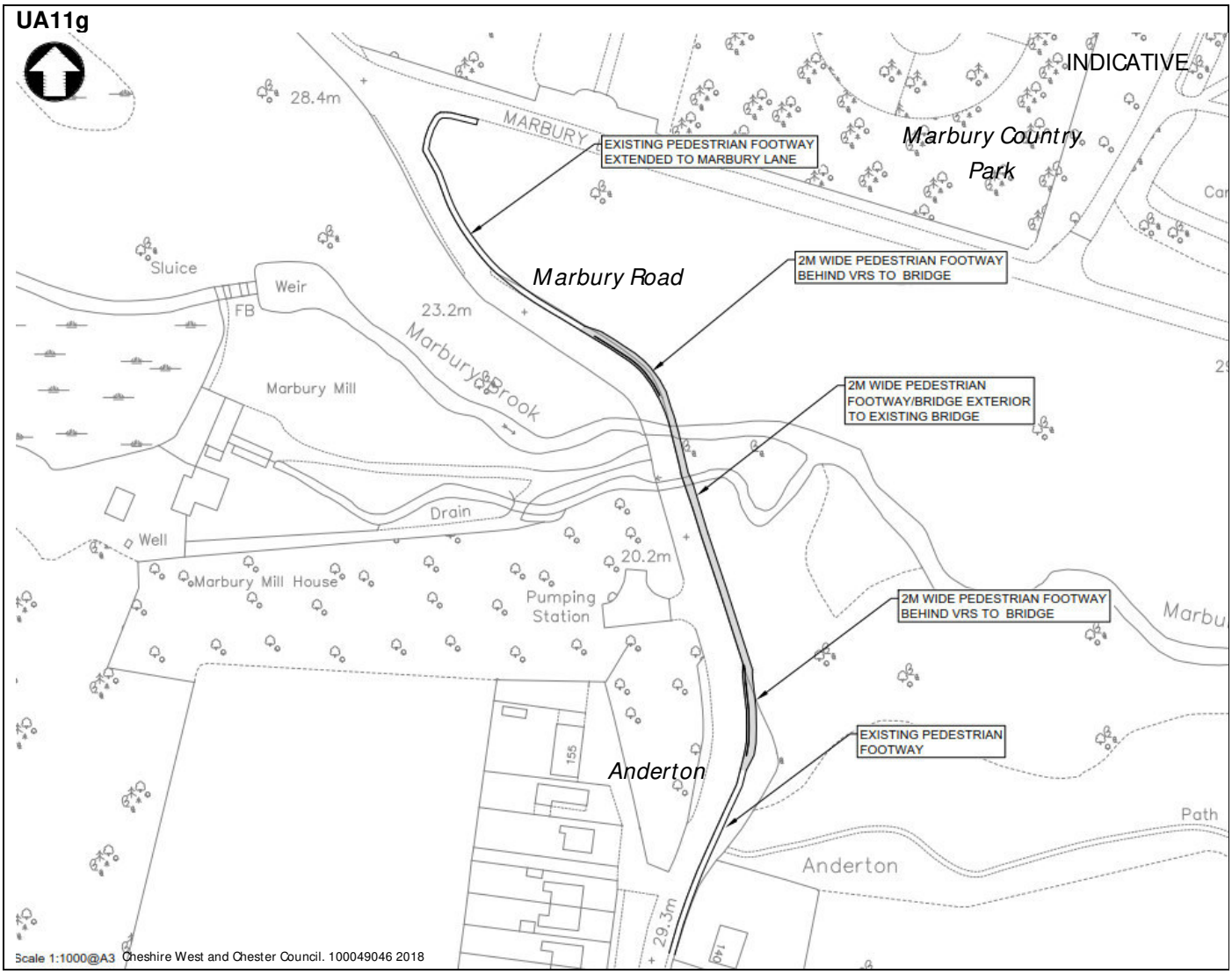
PACKAGE L: Walking and Cycling

UA11e – This concept scheme sees the introduction of a new pedestrain footway adjacent to the existing narrow highway bridge, t othe east of the Winnington/Barnton swing bridge. The footway would be seperate to the bridge, and 2m wide.



PACKAGE L: Walking and Cycling

UA11g - The following concept design for been produced for UA11g. This scheme requires further investigation before any detailed designs can be drawn up to see if it is feasible, however it essentially suggests that a standalone footway and possible footbridge are positioned behind the Armco barriers to tie into existing footway provisions. Ground investigations into the possibility for this are recommended as the next stages of work. This would be required before a cost estimate could be produced for this scheme.



PACKAGE M: Rail Connectivity Improvements

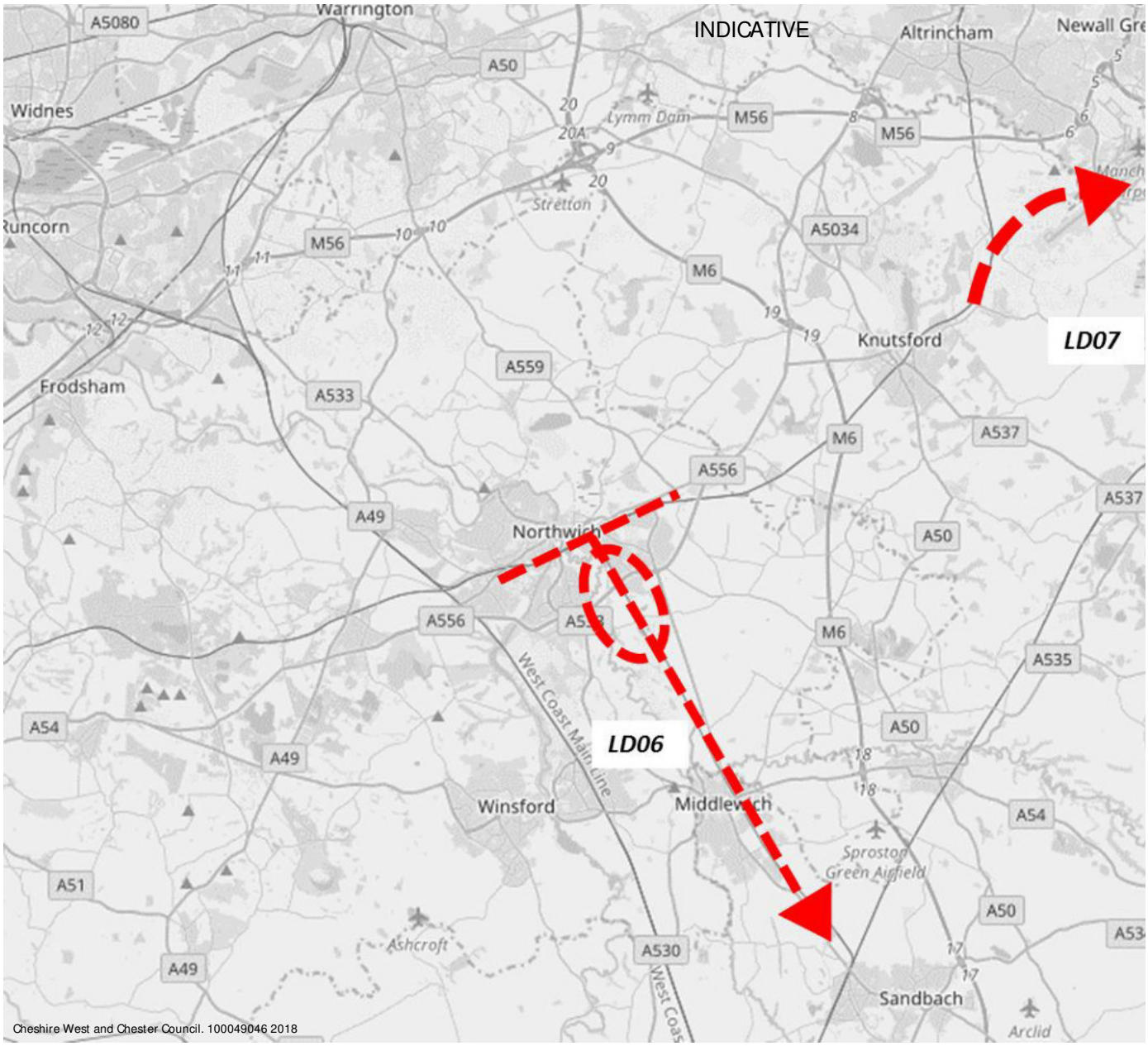
Theme: Improving Longer Distance Connectivity

Scheme ref: *LD06, LD07, LD08a, LD08b (new)*

Location:	Town Centre		Wider Urban Area		Longer Distance	✓

Schemes Outline

This package idenifes a number of schemes to improve rail connectvity and existing services. The location of schemes is summarised in the following image.



- LD06a - Lobby Network Rail and work with Cheshire East Council to ensure that the Middlewich Branch Line is reopened for regular passenger rail services.
- LD06b - Work with Cheshire East and the Cheshire and Warrington Local Enterprise Partnership to support proposals for a new station at Middlewich on the Middlewich Branch line.
- LD06c - Explore options for a new station at Gadbrook Park on the Middlewich Branch Line to serve Gadbrook and south Northwich.
- LD07 - Support proposals for an Airport Western Rail Link to link the Mid Cheshire Line and Manchester Airport.

PACKAGE M: Rail Connectivity Improvements

- LD08 - Lobby Northern to introduce a second train per hour for the entire line between Chester, Northwich, Stockport and Manchester with prioritised skip stopping to better support rail commuting between Northwich and Chester and Northwich and Manchester.

Issue / Opportunities

- Northwich Rail Station is served by an hourly train service which has poor quality trains and an uncompetitive journey time to Manchester in comparison to travel by car.
- High levels of out commuting in Northwich presents a need to create an efficient transport network to remain an attractive area for residents.
- Capacity issues on main roads linking Northwich to other urban areas and the motorway network.

Evidence

- Consultation with CWAC highlighted the committed and proposed service enhancements for the Mid-Cheshire line and the potential for passenger services on the Middlewich Line.
- Consultation with the Mid Cheshire Development Board highlighted how Northwich fails to attract new affluent commuters to Manchester as the Northwich rail link is poor and suggestions for an Airport rail link.
- Car park at Hartford station is over capacity

Benefits

- Increase opportunities for rail as a main mode of travel to work.
- Alleviate pressures on the strategic road network along key routes in and out of Northwich.
- Fast frequent rail connections to key centres increases the attractiveness of the area for businesses and residents.

Consultation

Summary of consultation feedback:

- Strong support for this scheme (LD06)
- Significant number of comments expressing the need for this measure (LD06)
- Support for providing stop at Gadbrook however some suggestions that it may not be economically viable i.e. not enough people use the route (LD06)
- Good support for this scheme as currently no viable public transport options (LD07)
- Chester-Manchester services sometimes more of a priority (LD07)
- Strong support for this scheme (LD08)
- Should be priority for public transport options (LD08)

Consultation survey comments

"LD06 - the railway line is there and needs to be used."

"LD06 to LD09 are extremely important and should be given the highest priority"

"Open the Middlewich branch line!!"

"Fully agree with LD07, but the Chester-Manchester service needs to be improved"

"LD07 is a good idea. Currently it is easier to travel by train to the airport from Yorkshire than it is from Cheshire"

"(LD07) A means of getting to Manchester airport without paying 50 pounds for a taxi would be life changing for many of us"
"(LD08) needs to be top priority, it's ridiculous that it is quicker to commute by car to Manchester"

"LD08 is long overdue"

Recommendations / Comments

- Support Network Rail in delivering to increase rail connectivity to Northwich town centre and wider urban area including timetable changes and parking solutions.
- The Northern rail franchise includes commitments to increase the frequency of the Sunday service on the Mid-Cheshire line to hourly, from the current two hourly frequency, and for one additional train per hour (Monday to Saturday) between Greenbank and Manchester. These improvements are due to be implemented from May 2018, although confirmation of this is awaited, and this date may be postponed.

PACKAGE M: Rail Connectivity Improvements

- The re-opening of Middlewich Branch Line would require an initial demand study to assess introduction of a regular passenger rail service between Sandbach and Northwich and potential stations at Gadbrook Park and Middlewich.

Indicative timescales and priority

Scheme	Headline description of scheme	Timescale	Priority
LD06	Reopening of Middlewich Branch Line, re-opening station at Middlewich and exploring potential for station at Gadbrook Park.	2026-2030	Medium
LD07	Support proposals for an Airport Western Rail Link to link the Mid-Cheshire Line and Manchester Airport.	On-going support; Delivery 2030+	Medium
LD08	Lobby Northern to introduce timetable changes on the Mid-Cheshire Line	On-going	Medium

Indicative package cost

Cost:	Major >£25M	Very High £10M - £25M	High £5M - £10M	Moderate £500K - £5M	Low <£500K
	☐	☐	☐	☐	✓*

*N.B. Cost to CWaCC for lobbying and support is negligible – this package would be commercially led or undertaken by Network Rail / Train Operators or wider bodies such as TfN or the regional LEPs.

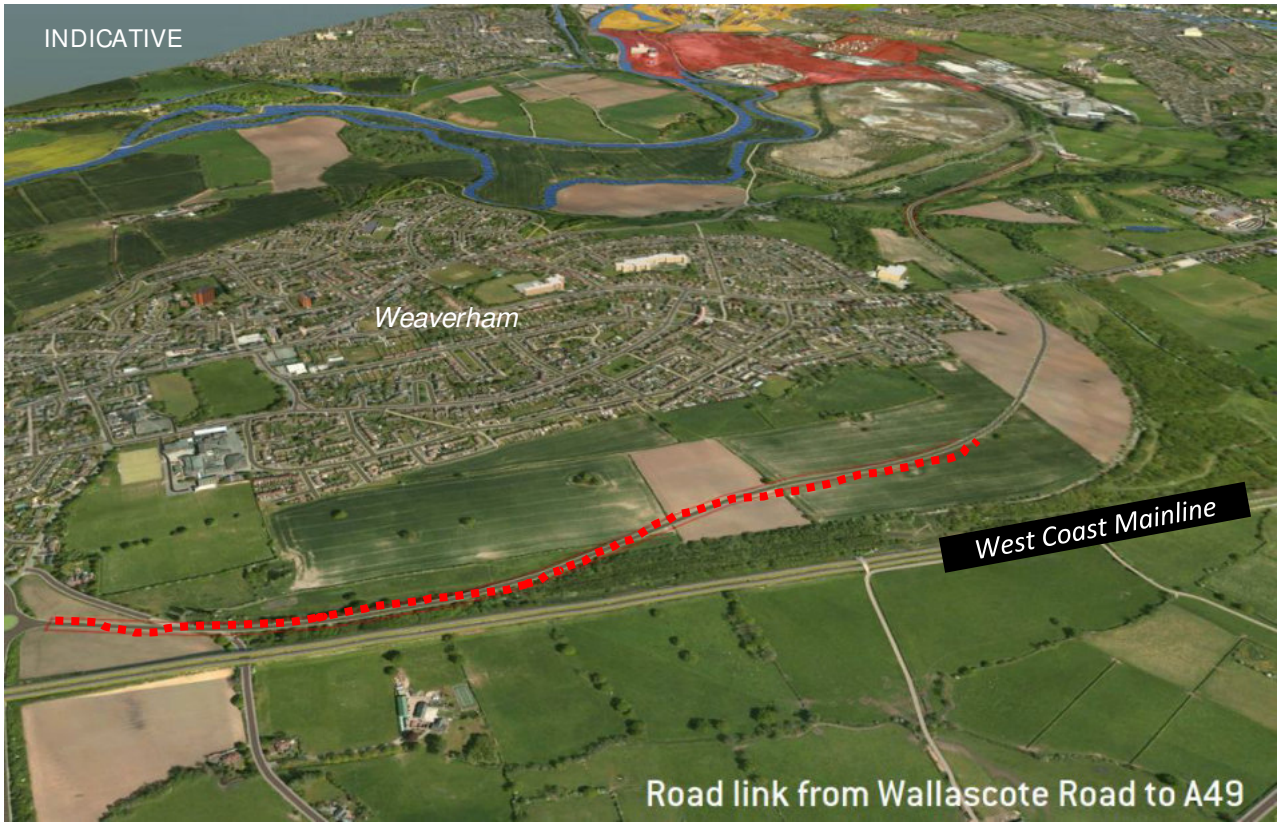
PACKAGE N: Wallascote Road Link

Theme: Long Term Major Scheme
Scheme ref: *UA09*

Location:	Town Centre		Wider Urban Area	✓	Longer Distance	

Schemes Outline

Introduce a new road link from Wallascote Road to the A49 using the former rail alignment to provide an alternative route to strategic locations and the motorway network, and to support continued delivery of the Winnington Urban Village strategic site.



Issue / Opportunities

- The future capacity of the road network needs consideration due to the number of substantial developments planned or currently under construction in the wider area of Northwich, such as Winnington Urban Village.
- Several pinch points exist within the wider area, which cause congestion and delay. These include the Winnington/Barnton Swing Bridge.
- High levels of out commuting in Northwich presents a need to create an efficient transport network to remain an attractive area for residents. Therefore, access to key roads such as the A49 and the motorway network needs to be maintained.
- There is a need to ensure that connectivity is improved so that residents of Northwich and the wider urban area benefit from the Mersey Gateway Bridge.

Evidence

- The need to improve the local road network through the implementation of new routes was highlighted during consultation with Members.
- This scheme could alleviate pressures from the following junctions through providing an alternative route to the A49. The modelling process has identified the following locations as junctions which are over capacity in the AM and PM peaks and will continue to be so in the 2030 assessment year without intervention, which this scheme could provide.
    - A533 Winnington Lane / Winnington Avenue
    - A533 Runcorn Road / A533 Winnington Lane / Soot Hill

PACKAGE N: Wallascote Road Link

Benefits

- Reducing congestion at key pinch points such as the Winnington/Barnton swing bridge.
- Support the on-going delivery of Winnington Urban Village.
- Utilising a former rail alignment reducing the need to disrupt current housing development and green spaces.
- Improving access to the A49 and strategic road network to ensure Northwich remains an attractive area for residents and supports current and future levels of out commuting.
- Improving access to the new Mersey Gateway bridge to increase opportunities for residents.
- Opens up land for new development contributing to local economic growth.

Consultation

Summary of consultation feedback:

- Mixed views relating to this scheme.
- Support from outside Weaverham area as a congestion reduction scheme.
- Support in Weaverham if not linked to encouraging housing and won't affect greenbelt land.
- Will add to congestion on A49 which already causes problems for people in Weaverham
- Opposition due to current land use for leisure and recreation

Consultation survey comments

"The thought of another bypass coming via Gorstage would only clog up the village even more."

"Do not put a new road in Weaverham!"

"A new bypass in Weaverham on the disused railway line will cause major distress and pollution around my home and my village."

"great idea if only road installed and not further housing as a result to fund"

"Linking Winnington village and the A49 at Weaverham would be a disaster"

"UA09 Has got to be the solution" "UA09 Makes the most sense "

Recommendations / Comments

- Utilise former rail alignment to create alternative route to strategic road network.
- Investigate potential constraints in detailed design phase such as any significant structure or crossings required.
- Undertake detailed designs to confirm where the road will link to the exiting road network.
- Consider opportunities to open up new development land to maximise potential benefits of the scheme.

Indicative timescales and priority

Scheme	Headline description of scheme	Timescale	Priority
UA09	Introduce a road link from Wallascote Road to A49	2026-2030 for scheme development; 2030+ for delivery	Medium

Indicative package cost

Cost:	Major >£25M	Very High £10M - £25M	High £5M - £10M	Moderate £500K - £5M	Low <£500K
	☐	✓	☐	☐	☐

7 Costing and Funding

Taking each scheme of the Northwich Transport Strategy in turn, this chapter attempts to assign an indicative cost to the individual components within each package. Available funding streams are also presented to provide an overview of funding options for taking some of the schemes forwards.

7.1 Scheme costings

Schemes have been costed using benchmark schemes of similar nature from elsewhere in the country, professional judgement as well as applying assumptions and industry guidance (e.g. Spon's External Works and Landscape Price Book). We caveat that these costs are not the work of quantity surveyors and that local factors such as land cost, utilities and market competitions can significantly affect such values.

Previous comparable work undertaken for other local authorities has been reviewed to give an indication of the cost needed to realise each scheme. Where additional work needs to be undertaken to develop the nature of the scheme in more detail, scheme cost has not been estimated. Further scoping and feasibility will be required for all schemes, even for those schemes where an indicative cost has been given, and therefore the costings should not be taken as definitive.

For each scheme element of the NTS, **Table 11** provides an overview of indicative cost by package. This table represents the basis of at least a 15 year investment programme though it is envisaged that potential partner organisations - such as Network Rail or TfN as examples - will be primarily responsible for the funding and deliverability of some schemes within a package. As in the case of the indicative scheme costings, funding and delivery details should not be taken as definitive.

The following table provides a summary cost by package.

Table 11: Package cost summary

Package	Name	Indicative Cost*
A	Winnington Hill/Castle Street/Town Bridge junction improvement	£453k
B	Town Centre Junction Improvements	£72k
C	Rail Station Enhancements	Commercially led or Train operator / Network Rail led. Minimal cost for CWaCC to provide support or lobby
D	Parking	Mainly CWaCC officer time for reviews so mnimal cost.
E	Increasing capacity at Winnington/Barnton Swing Bridge	£14m
F	Reducing congestion along Hartford corridor	£375k for UA02a; Further assessment work c.£50k
G	A556 congestion and access to Gadbrook Park	£5m+
H	Longer Term Road Congestion Pinch Point Schemes	£10m-£12m
I	Road Safety & Traffic Calming	20mph zones already funded. Other measures CWaC officer time and support to monitor; UA26 £136k
J	Improved bus connectivity	Some elements are already operating. Additional services likely to be

Package	Name	Indicative Cost*
		commercially led with some subsidy to be determined.
K	Smarter Choices, Behaviour Change and Active Travel	CWaC officer time and support to deliver – minimal cost
L	Walking and Cycling	Expected to be c. £3-5m
M	Rail connectivity improvements	£20,000 initial demand study; other elements TfN led or Train operator / Network Rail led
N	Wallascote Road Link	£14m

* Indicative costs exclude the following: Utilities, Land costs, Abnormal ground conditions. This list is not exhaustive.

7.2 Funding Options

A review of available funding sources for supporting the Northwich Transport Strategy has been undertaken, including both short and long term opportunities. Alongside local and sub-regional funding streams, there is also an opportunity for Cheshire West and Chester Council to obtain funds from 'one-off' national funding streams.

Working in conjunction with private developers and the planning system offers a further opportunity to raise funding for infrastructure that would be beneficial to both the Council and developers. This can include Community Infrastructure Levy and Section 106 and 278 funding as well as other non-Government funding through working with charity groups including Sustrans. It will be critical to get schemes developed to a level of detail to ensure a strong position for requesting funding from public sources.

The following section outlines a variety of options for funding within Cheshire West and Chester that could be available for scheme sin Northwich and the Wider Urban Area.

7.2.1 Local Transport Funding

7.2.1.1 National Productivity Investment Fund

In 2017 the government announced a new National Productivity Investment Fund (NPIF) which CWACC is eligible to apply for over the forthcoming years. NPIF will add £23 billion in high value investment from 2017-2018 to 2021-2022. The fund is targeted at 4 areas which the government feel are critical for productivity:

In addition, £2.6 billion will be available to tackle congestion and ensure the UK's transport networks are fit for the future. Areas within this relevant to the Northwich Transport Strategy packages are;

- **Roads and local transport** - The NPIF will provide an additional £1.1 billion by 2020-21 in new funding to relieve congestion and deliver much needed upgrades on local roads and public transport networks. On strategic roads, an extra £220 million will be invested to tackle key pinch- points £1.9bn of funding will be targeted at roads and local transport between 2017-2021. The government has also recommitted to the National Roads Fund announced at Summer Budget 2015.

- **Rail capacity and smart ticketing** - From 2018-19 to 2020-21, the NPIF will allocate an additional £450 million to trial digital signalling technology, to expand capacity, and improve

reliability. Around £80 million will be allocated to accelerate the roll out of smart ticketing including season tickets for commuters in the UK's major cities.

7.2.1.2 Integrated Transport Block Capital Grant

The Integrated Transport Block (ITB) Capital Grants provides funding support for capital improvement schemes costing less than £5 million. As in the case of the Highways Maintenance funding, the funding is not ring fenced and combines both capital grants and supported borrowing. The funding allocated to each local authority is calculated according to a number of elements including road safety, public transport provisions, congestion, pollution and population size. **Table 12** provides a breakdown of indicative allocations for CWaCC over the course of the next 4 years.

Table 12: ITB Grant Allocations for CWaCC

	Allocations (£)			Indicative allocations (£)		
Year	2015/16	2016/17	2017/2018	2018/2019	2019/2020	2020/2021
CWACC	1,954,000	1,954,000	1,954,000	1,954,000	1,954,000	1,954,000

Source: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/347058/itb-allocations_april_2015.pdf

7.2.1.3 Safer Roads Fund

The Safer Roads Fund will provide £175m of funding between 2017/18 and 2020/21 for eligible local highway authorities to improve the safety of 50 specific sections of local A' roads, as highlighted in this document, where the risk of fatal and serious collisions is highest, based on the analysis by the Road Safety Foundation.

Sub-Regional

7.2.1.4 Cheshire and Warrington Local Enterprise Partnership (LEP)

Whilst they do not fund schemes in their own right, Local Enterprise Partnerships (LEPs) have the main responsibility to work with Government to set out investment priorities for transport infrastructure at the regional and local level. As announced in the October 2010 White Paper Local Growth: Realising Every Place's Potential, LEP's assumed many of the responsibilities of the abolished Regional Development Agencies (RDAs). 24 LEPs were initially approved in the White Paper, including the Cheshire and Warrington Local Enterprise Partnership, with 39 now in operation. LEPs play a key role in facilitating the devolution of transport decision making to local areas and are expected by Government to support sustainable economic growth in their engagement with local authorities and through funding bids.

The LEP aims to make Cheshire and Warrington the best place to do business in the UK and schemes put forward in the Northwich Transport Strategy would support this by improving connectivity for a wide variety of users.

7.2.1.5 Local Growth Fund

All 39 LEPs submitted Strategic Economic Plans (SEPs) to Government in March 2014 to negotiate Growth Deals. In July 2014, details of the first wave of funding to be received by each LEP from the Local Growth Fund were announced for the period 2015 - 2021. These deals were expanded in January 2015, with LEPs awarded a further £1 billion in total between 2016 and 2021. The Local Growth Fund is allocated through a competitive process as well as through formula and the extent to which major schemes meet a number of set requirements.

The Cheshire and Warrington Growth Deal brings together local, national and private funding and seeks to drive growth across the LEP. Alongside supporting the expansion for science and innovation in the North West, the Growth Deal will deliver strategic investments to road infrastructure including public transport and traffic calming improvements. As shown in Table 13, the Cheshire and Warrington LEP had secured £142.7m by July 2014 from the Local Growth Fund to support economic growth in the area, and a further £15.1m and £43.3m in Growth Deal Two and Three alike.

Table 13: Cheshire and Warrington LEP Growth Deal Funding

	Growth Deal One (July 2014)	Growth Deal Two (Jan 2015)	Growth Deal Three (Nov 2016)
Local Growth Fund Award	£142.7m	£15.1m	£43.3m
Total			£201.1m

Source: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/585210/Cheshire_and_Warrington_Factsheet.pdf

7.2.1.6 EU Structural and Investment Funds

As of June 2014, LEP's have responsibility for delivering part of the EU Structural and Investment Funds for 2014-2020. This combines two existing structural funds, the European Regional Development Fund (ERDF) and the European Social Fund (ESF). While the LEPs are responsible for designing and delivering strategies on how best to use the funding, the responsibility for administering funds is through central government in order to ensure compliance with EU rules. Of the €6.9bn funding to be received by England, the Cheshire and Warrington LEP is to be allocated a total of €141.6m.

The ERDF and ESF Operational Programmes for 2014-2020 have a number of Priority Axes and objectives, including promoting sustainable transport for urban and rural areas and removing bottlenecks in key network infrastructures. The ESF in particular will also finance integrated support, particularly access to transport services and ensuring that the transport costs of apprentices and trainees are supported.

7.2.1.7 Cheshire and Warrington Local Transport Body (CWLTB)

In September 2012, the Department for Transport set out its new proposals for the devolution of funding for major local transport schemes through newly established Local Transport Bodies (LTBs). The Cheshire and Warrington LTB has the same geographical boundary as the LEP and was established to assess and prioritise major schemes for the region. The LTB aims to ensure that investments support economic growth and regeneration as well as the strategic transport priorities of the LEP. The body was initially allocated a budget of £21.8m from the DfT for the period between 2015 and 2019 however was subsequently revised down to £14.5 million. The fund is shared by Cheshire West and Chester Council as well as Cheshire East Council and Warrington Borough Council, and is audited on an ongoing basis by the Department for Transport.

As noted within the Cheshire West and Chester Local Plan, a number of major schemes will be funded through the CWLTB and the LEP using devolved DfT major transport scheme funding. The Local Plan also notes that proposed schemes outside of CWaCC that will benefit those who live, work and visit the borough including improvements to the A54-M6 corridor and the re-opening of Middlewich Station will be supported. As of July 2015, the CWLTB produced a Cheshire and Warrington Transport Strategy which is to include schemes that can be achieved in the next 5 years and support schemes in Northwich.

7.2.2 Government Funding

7.2.2.1 Road Investment Strategy

The first Road Investment Strategy (RIS 1) covers investment in England's motorways and major roads (the 'Strategic Road Network) for the period of 2015 to 2020 and is coordinated by Highways England. This programme was announced in December 2014 and saw government commit funding to over 100 major schemes totalling a £15.2 billion investment, including the 20 mile upgrade to a smart motorway between Junction 16 (Crewe) and Junction 19 (Knutsford) of the M6. The second Road Investment Strategy (RIS2) will be delivered between 2020 and 25. The detail of how funding will be allocated will be in the RIS2 document due to be published in 2019. Through the first Road Investment Strategy, £100 million has also been made available between 2015 and 2021 to improve cycling conditions and crossing points on the Strategic Road network.

7.2.2.2 Cycling and Walking to Work Fund

This funding stream is part of a wider £64 million Sustainable Travel Access Fund which will support local walking and cycling projects until 2020. The overall aim is to make walking and cycling a more popular choice for shorter journeys by 2040. The fund has a clear and direct focus on active travel, seeking to develop schemes which will enable individuals to access employment and apprenticeships through more sustainable active modes of travel. Providing more attractive alternatives to car use, this fund will aim to remove barriers to work and help local communities and businesses.

7.2.2.3 Network Rail

In general, improvements to stations and the rail network are considered through Network Rail's Control Periods. The current Control Period 5 began in 2014 and will end in 2019. It was announced in 2017 that around £47.9 billion will be spent on the railways during Period 6. To maximise potential funding through CP6, it is important that CWaCC undertake regular engagement with officers from Network Rail as well as officers from Cheshire East to build support for schemes including the improvements to Northwich Station.

7.2.3 Non-Government Funding

In recent years, the use of non-Government funding for local and major transport schemes has become increasingly important as the DfT has sought to reduce its spending. This section details a number of funding arrangements and agreements that CWaCC could take advantage of to finance packages of the NTS.

Where new developments require enhancements to the local transport network and other infrastructure, planning obligations will be sought by local authorities to fund the necessary works:

- Community Infrastructure Levy (CIL) - Larger scale infrastructure which is identified as being required through the Council's Infrastructure Delivery Plan can be funded through the Community Infrastructure Levy. The levy is paid by land owners and developers to the relevant local council, with charges based on the size and type of new development. Money raised can then be spent in line with council priorities and needs.
- Section 106 and 278 Funding - Section 106 and 278 agreements negotiated with developers allow funds to be raised to mitigate the potentially negative impacts of the new developments. Typically, Section 106 and 278 agreements include requirements to make contributions to new infrastructure or facilities in the vicinity of the development. In some cases, sums of money from a number of arrangements can be put towards larger mitigation measures. Therefore, section 106 and 278 agreements provide an opportunity for CWaCC to use funds raised to build up a pot of money to deliver identified and prioritised schemes.

7.2.3.1 Tax Increment Financing (TIF)

In the 2010 *Local Growth: Realising Every Place's Potential* White Paper, Government confirmed its commitment to introducing tax increment financing schemes. These permit local authorities to borrow money for infrastructure and other capital projects based upon expected tax receipts that result from the infrastructure. If CWaCC is to pursue TIF as a potential funding source for schemes within the NTS, a number of key considerations will need to be taken into account. Most significantly, there needs to be a degree of certainty that development will occur once borrowing has taken place in order to ensure that the new infrastructure has discernible benefit. If no development takes place, there will be no increase in tax revenues and the council will end up in debt.

7.2.3.2 Private Business/Employers

Beyond section 106 and 278 contributions, developers and private investors can contribute to the delivery of the strategy through schemes that enhance the individual development as well providing an upgrade to the general setting of Northwich. This would be particularly relevant to walking and cycling packages shortlisted for this Strategy, involving improvements to public realm, crossing facilities and new cycling parking facilities, which would all provide an upgrade to walking and cycling provisions within the town.

7.2.3.3 Charities and Voluntary Groups

Within the promotion, funding and delivery of schemes, CWaCC could take advantage of the interest and expertise that charities and voluntary groups have in relation to transport. Sustrans, a charity concerned with promoting everyday travel by foot, bike and public transport, could help to promote a number of schemes within the Northwich Transport Strategy including the desire for a new off-road, town centre walking and cycling network. In 2014/15, Sustrans delivered £41.6m of projects and have worked on the design and construction of cycling facilities in a number of locations including Bristol, Edinburgh and Newcastle. Sustrans also have experience in the delivery of traffic-calmed streets, 20mph speed limits and re-designed urban spaces and this knowledge could be invaluable in the delivery of similar schemes in Northwich. CWaCC should also take advantage of knowledge gained through previous and existing partnerships with charities such as the ECT Charity who have delivered community transport services in Chester and Ellesmere Port.

8 Action Plan

8.1 Action Plan Overview

The following table sets out the full proposed implementation timescales for each of the schemes and their level of priority.

Timescales for schemes being considered further are:

- 2018-2020
- 2021-2025
- 2026-2030
- 2030+ - likely to be able to be considered further towards the end of the strategy, but unlikely to be implemented within the timescales of the NTS.
- On-going

Levels of priority are:

- Low
- Medium
- High

Table 14: Proposed Implementation Timescales and Priority

Theme & Package		Scheme	Headline description of scheme	Timescale	Priority
The Town Centre	**A**	TC01	Widening of junction Winnington Hill/Town Bridge/Castle Street	2018 - 2020	High
	B	TC02	Improve the town centre one-way system at the junction of Town Bridge, Dane Street and Watling Street (A533)	2021-2025	Medium
		TC03	Improve junction capacity at the traffic lights at Chester Way / Venables Road	2021-2025	Medium
		N/A	Whilst not a specific measure, general signal UTC enhancement on gyratory	2018-2020	High
	C	TC07	Encourage private sector bike hire scheme at Northwich Rail station and key points across the town centre	On-going	Low
		TC08	Support Network Rail and Northern Rail to deliver a major enhancement of Northwich Station to improve accessibility	On-going	Medium
		UA12	Help the train operating companies to be more proactive at offering solutions to contain demand for car parking space	On-going	Medium
		UA13	Support opportunities to increase parking supply at stations in the Northwich wider area	2021-2025	High
	D	TC09	Following the completion of town centre development, consider appropriate locations for taxi provision	2021-2025	Medium
		TC10	Enhance Electric Vehicle parking offer	2021-2025	Low
		TC11	Review service vehicle time restrictions in Town Centre.	2021-2025	Low
		UA18	Implement recommendations of Gadbrook Parking Study	2018 - 2020	High
Improving Local Capacity	**E**	UA01	Deliver scheme to reduce congestion at the key pinch points at the Winnington/Barnton Swing Bridge	2018-2020 for scheme development ; 2021-2025 for	High

Theme & Package		Scheme	Headline description of scheme	Timescale	Priority
				implementation	
	F	UA02	Reduced congestion along A559 Greenbank/Hartford Corridor	2018 - 2020	High
	G	UA04a	Develop a new junction on the A556 to the west of the existing Gadbrook Park	2030+	Medium
		UA04b	Consider opportunities to introduce a second southern access to Gadbrook Park	2030+	Medium
		UA04c	Implement improvement scheme at Gadbrook Road/A556 junction	2018-2020	High
		UA04d	Junction improvement at roundabout junction with the A556/A530	2021-2025	Low
		UA04e	Junction improvement scheme at A530 King Street/B5082 Middlewich Road	2021-2025	Medium
		UA04f	Junction improvement scheme at A556/B5082 Penny's Lane	2021-2025	Medium
	H	UA03a	A533/A556 at Davenham to support increased use and better accessibility to the A556	2021-2025	Low
		UA05a	Wincham- along signed route from A559: B5075 New Warrington Road/ Chapel Street	2021-2025	Medium
		UA05b	Wincham- along signed route from A559: A559 Marston Lane/Church Street	2021-2025	Medium
		UA06a	Lostock Gralam: A559 Manchester Road/A559 Hall Lane/Station Road	2021-2025	Medium
		UA06b	Lostock Gralam: A559 Manchester Road/Stubbs Lane	2026-2030	Low
		UA06c	Lostock Gralam: A556/A559 roundabout junction	2026-2030	Low
		UA23	Introduce a package of urban traffic control measures to improve linking of junction signal timings along congested corridors in Northwich.	2018-2020	High
		LD01	Implement junction capacity improvements at junction of A533/A49	2021-2025	Medium
		LD03	Implement junction capacity improvements at pinch points on A530	2026-2030	Low
Safe and Sustainable	I	UA22	Introduce traffic calming measures on Hartford Road in Davenham.	2021-2025	Medium
		UA24	Continue to implement the programme of 20mph speed limits across the Northwich wider urban area	On-going	High
		LD10	Implement speed reduction measures on key local routes affected by speeding issues	2018-2020	High
		LD02	Monitor identified incident hotspots and implement safety measures as appropriate	2018-2020	High
		UA26	Pedestrian crossing at Iron Bridge at Moss Road/A559 signalised junction to improve pedestrian safety	2021-2025	Medium
		UA03b	Monitor Jack Lane/A533 incident hotspot and implement safety measures as appropriate	2018-2020	Medium
	J	UA15a	Where appropriate introduce evening bus services	On-going	Medium
		UA15b	Implement measures of Winsford Transport Strategy for better bus services	On-going	Medium
		UA15c	Review and promote opportunities to extend flexible/specialist bus services	2021-2025	Medium
		UA15d	Explore options for enhanced bus travel to hospitals	2021-2025	Medium
		UA17	Review and identify opportunities to enhance bus priority at junctions with traffic signals	2018-2020	High

Theme & Package		Scheme	Headline description of scheme	Timescale	Priority
		UA15e	Consider bus service to Gadbrook Park from wider urban area	2021-2025	Low
	K	UA16	Support TfN in implementing integrated ticketing system	On-going	Medium
		UA20	Encourage schools to stagger school start and finish times to reduce congestion.	2018-2020	Medium
		UA21	Support extensions to the CWaCC Parent Parking Charter	2018-2020	Medium
		UA25	Examine opportunity for Area Travel Plan for schools in Hartford	2018-2020	High
	L	TC06	Review of cycle route condition and deliver resurfacing improvements to off-road routes where possible	2021-2025	Medium
		UA11	Improved cycling and walking facilities across the town and wider urban area (UA11a – UA11g)	2021-2025	Medium
		LD05	Work with Cheshire East to implement cycling schemes between Middlewich – Winsford – Northwich – Knutsford and also explore opportunities for cycle link to runs broadly parallel to HS2 line	On-going	Low
Improving longer distance connectivity	**M**	LD06	Reopening of Middlewich Branch Line, re-opening station at Middlewich and exploring potential for station at Gadbrook Park.	2026-2030	Medium
		LD07	Support proposals for an Airport Western Rail Link to link the Mid-Cheshire Line and Manchester Airport.	On-going support; Delivery 2030+	Medium
		LD08	Lobby Northern to introduce timetable changes on the Mid-Cheshire Line	On-going	Medium
Longer Term Major Schemes	**N**	UA09	Introduce a road link from Wallascote Road to A49	2026-2030 for scheme development ; 2030+ for delivery	Medium

Source: Mott MacDonald

8.2 Phase One of Action Plan

This section provides an overview of key short term actions (2018 - 2020) by package that will help to begin to deliver the strategy in the immediate term.

It should also be remembered that the timescale and delivery of schemes may be affected by wider changes to local policy, funding availability as well as wider development in the Town Centre in and wider urban area. Common themes within the short term strategy include engagement with stakeholders and delivery partners and undertaking further feasibility and detailed design work.

8.2.1 The Town Centre

8.2.1.1 Package A - Winnington Hill/Castle Street/Town Bridge junction improvement

- Progress concept designs through to detailed design and commence discussions with any affected land owners.
- Identify funding opportunities and apply for funding support if required.
- Identify delivery partners and once the above is confirmed, undertake improvement to junction.

8.2.1.2 Package B - Town Centre Junction Improvements

- Review signal timings on the gyratory and seek to optimise.
- Implement signage to advise no left turn from Town Bridge to Weaver Way.
- Undertake detailed design work of TC02 and TC03 to provide a detailed solution.

- Align Town Centre improvements (particularly on the gyratory) with the emerging Weaver Square proposals to reduce and avoid abortive works.

8.2.1.3 Package C - Rail Station Enhancements

- In the short term, lobby Network Rail and train operators to improve access facilities at Northwich Station (TC08), in particular securing step-free access to all platforms to support improved accessibility for those with disabilities or mobility improvements.
- If there is interest from the private sector in relation to providing private bike hire on a commercial basis, provide support.

8.2.1.4 Package D - Parking

- Continue to implement recommendations in the Gadbrook Parking Study as appropriate.
- An action plan for the implementation of the Cheshire West and Chester Council Parking Strategy is expected in the NTS should work in harmony with the schemes being implemented through the wider parking strategy.

8.2.2 Improve Local Capacity

8.2.2.1 Package E - Increasing capacity at Winnington/Barnton Swing Bridge

- Given the on-going delivery at Winnington Urban Village, with Phase II well underway, this package is a priority to ensure that the additional traffic the site will generate can be accommodated on the road network and that the current pinch point at this location is alleviated.
- First steps should be undertaking initial feasibility work into ground conditions and land ownerships. Optioneering of potential crossing opportunities should be undertaken to inform the development of a business case to support funding applications. This should be developed in line with WebTAG guidance.

8.2.2.2 Package F - Reducing congestion along Hartford corridor

- Undertake junction improvement at School Lane to provide additional route choice for vehicles, to dissipate traffic impacts.
- Begin to explore options for other schemes along the Hartford corridor through a dedicated assessment, considering options within the traffic model to determine their effectiveness.
- As new developments are being constructed, addressing constraints on the network in and around Hartford should be a priority.
- This package should be considered in association with Package K, which will support improving and increasing sustainable travel options which will in turn support reductions in traffic congestion.

8.2.2.3 Package G - A556 congestion and access to Gadbrook Park

- Implement improvement at Gadbrook Park access junction, using NPIF funding.
- Investigate further other access opportunities to better improve access to the site and its possible expansion.

8.2.2.4 Package H - Longer Term Road Congestion Pinch Point Schemes

- Undertake review of signal timings and opportunities for UTC across the key signalised corridors within the study area. Implement changes to signal timings to improve traffic flows.
- It is possible that some of these locations (LD03a, UA05a,b, UA06a,b,c) may benefit from amendments to local highways as part of the implementation of HS2. Therefore continue to monitor this potential in the short term.

8.2.3 Safe and Sustainable

8.2.3.1 Package I - Road Safety & Traffic Calming

- Continue to progress with plans to introduce 20mph speed limits across the area.
- There are two on-going speed limit reviews of which the recommendations from the review once completed should be implemented:
  - (i) Investigating the introduction of a 30mph limit on Winnington Avenue and
  - (ii) considering a reduction from 60mph to 50 mph on Gorstage Lane between the A49 and Hartford.
- Maintain a phased programme of speed limit reviews on roads in Northwich and the surrounding area and change speed limits as recommended by the reviews as appropriate.
- Set up monitoring plan to ensure adequate monitoring of known locations with safety concerns such as Smithy Lane/Ash Lane/A533, Little Leigh (LD02a); -Budworth Lane/A559/High Street, Great Budworth(LD02b); and A556/A559 junction through improved road alignment at Cinder Hill, Hartford (LD02c)
- Undertake safety improvements to address issues noted as soon as practicable.
- Produce designs for the implementation of pedestrian crossing facilities at or close to the junction of Moss Road/A559 to support safer crossing opportunities at the junction.

8.2.3.2 Package J - Improved bus connectivity

- Complete Route and Branch review and implement recommendations from this.
- Support the establishment of a commercial services (for example to/from Gadbrook Park) if they arise.

8.2.3.3 Package K - Smarter Choices, Behaviour Change and Active Travel

- Further consultation with local schools and employers to determine travel planning requirements and aspirations.
- Liaise with Transport for the North (TfN) and other authorities within the Cheshire and Warrington LEP as TfN progress with the Smart North ticketing initiative. Once the business case for the scheme is approved, the programme will have government support up until at least 2020.

8.2.3.4 Package L - Walking and Cycling

- This package aligns with the Northwich Cycling Vision, which should continue to be supported and implemented.
- Assess condition of schemes listed to determine extent of works required and to support prioritisation of these over the remainder of the strategy period.

8.2.4 Improving Longer Distance Connectivity

8.2.4.1 Package M - Rail connectivity improvements

- Continuation of support for Middlewich Town Council and Cheshire East Council in their work to re-open Middlewich Station and re-allocate the line to passenger services.
- Lobby Network Rail and Train Operating Companies for timetable changes and improved services from local stations.

8.2.5 Long term Major Schemes

8.2.5.1 Package N - Wallascote Road Link

- No short-term actions suggested.

9 Conclusion and Next Steps

9.1 Conclusions

This process has concluded that there are 14 transportation packages which should be considered as priorities for Northwich and its surrounding area to support local and regional growth aspirations. The associated phasing plan shows that some of these should be of a higher priority than others, with some being longer term aspirations to align with development proposals.

The schemes and packages provided in this Transport Strategy are intended to be treated as guidance as opposed to being restrictive and prescriptive. This is in recognition of the fact that future changes to the area may influence the suitability and appropriateness of some of the schemes and it is likely that some will be modified or superseded as priorities in the area change. It is also possible that as further work is done on feasibility and detailed design that modifications are required to the scheme layouts or formats presented in this strategy document.

The following table provides a summary of the priority of packages within this strategy:

Table 15: Summary of the priority of the measures

Theme	Package	Scheme ref	Priority
The Town Centre	A Winnington Hill/Castle Street/Town Bridge junction improvement	TC01	High
	B Town Centre Junction Improvements	TC02	Medium
		TC03	Medium
	C Rail Station Enhancements	TC07	High
		TC08	Low
		UA12	Medium
		UA13	Medium
	D Parking	TC09	High
		TC10	Medium
		TC11	Low
		UA18	Low
Improving Local Capacity	E Increasing capacity at Winnington/Barnton Swing Bridge	UA01	High
	F A559 Greenbank/Hartford Corridor	UA02	High
	G A556 congestion and access to Gadbrook Park	UA04a	Low
		UA04b	Medium
		UA04c	Medium
		UA04d	High
		UA04e	Low
		UA04f	Medium
	H Longer Term Road Congestion Pinch Point Schemes	UA03(a)	High
		UA05a	Low
		UA05b	Medium
		UA06a	Medium
		UA06b	Medium

Theme	Package	Scheme ref	Priority
		UA06c	Low
		UA23	Low
		LD01	High
		LD03	Medium
Safe and Sustainable	I Road Safety & Traffic Calming	UA22	High
		UA24	Medium
		LD10	High
		LD02	High
		UA26	High
		UA03b	Medium
	J Improved bus connectivity	UA15a	Medium
		UA15b	Medium
		UA15c	Medium
		UA15d	Medium
		UA17	Medium
		UA15e	High
	K Smarter Choices, Behaviour Change and Active Travel	UA16	Low
		UA20	Medium
		UA21	Medium
		UA25	Medium
	L Walking and Cycling	TC06	Medium
		UA11a	Medium
		UA11b	Medium
		UA11c	Low
		UA11d	Medium
		UA11e	Medium
		UA11f	Medium
		UA11g	High
		UA11h	Medium
		LD05	Medium
Improving Longer Distance Connectivity	M Rail connectivity improvements	LD06	High
		LD07	Low
		LD08	Medium
Longer Term Major Schemes	N Wallascote Road Link	UA09	Medium

CWaCC should continue to work with partners such as Northwich Town Council, local Parish Councils, local bus companies, TfN and Cheshire East to deliver the schemes set out in this strategy.

Steps should be taken to ensure that funding opportunities are maximised, and that schemes can be brought forward when required by being at a stage of development to be eligible for funding.

This NTS should be used as a framework to encourage responsible development and as a way of securing developer contributions for schemes as development come forwards.

Those schemes which have been deferred from inclusion in the NTS should not be discounted if the need for them to be re-considered arises, for example development within the localities of them comes forward or network demands change. This includes schemes TC05, UA08, UA10 and UA14.

9.2 Next steps

As development proposals in the area come forward, Northwich and the surrounding area needs to be positioned to ensure that the sites are able to provide positive change and that their impact, particularly in relation to transport, is sufficiently mitigated. This will require having some of the schemes noted in this Transport Strategy and their corresponding funding applications ready for implementation to minimise delay.

The more strategic, longer term schemes, such as the bypass options should be assigned to development opportunities and progressed through feasibility stages when appropriate to gain political and local approvals, together with further testing and designs so that funding can be sought and progress made in advance of the developments coming forwards.

Finally, it is recommended that an evaluation of the Transport Strategy progress is undertaken every 5 years to assess the relevance of the schemes and packages against the development of the local area and growth priorities more regionally, and provide a refresh of the phasing and actions if appropriate.

Appendices

A. Appraisal Scoring

Northwich Transport Strategy
Prioritisation Sheet
02/08/2017

v1

Ref	Area	Type	Timescale	Scheme Title	Scheme	Issue or Opportunity addressed	Source of Measure	Comments
TC1	Town Centre	Junction Improvements	Short Term	Winnington Lane Junction Improvements	-Implement scheme to demolish properties and widen junction. -Remove guard railing at the bottom of Winnington Street.	**Several pinch points exist within wider area experiencing heavy congestion.** *Steep hill and narrow approach to Winnington Lane. Confusion of right of way at entrance to bridge.* **The future capacity of the road network is of concern.** *Larger vehicles often flattening the guard railing at the junction and end up blocking the other side of the carriageway to make the left turn.*	Northwich Vision/Consultation with fire station	
TC2	Town Centre	Junction Improvements	Medium Term	Northwhich one-way system enhancements	Undertake improvements to the Northwich one-way system at: - including the junction of the A559 with Weaver Way/Dane Street	**The future capacity of the road network is of concern.** *Large vehicles (including fire engines) struggle to make turns on the gyratory because of the tight turns on the route*	Consultation with Northwich Fire Station	
TC3		Junction Improvements	Medium Term	A559 Chesterway/Venables Road	Junction capacity improvements at A559 Chester Way/Venables Road	**The future capacity of the road network is of concern.** *Large vehicles (including fire engines) struggle to make turns on the gyratory because of the tight turns on the route*	Consultation with Northwich Fire Station	
TC4	Town Centre	Junction Improvements	Long Term	B5082 Middlewich Road/Manchester Road Improvements	Undertake improvements at the junction of Middlewich Road (B5082) with Manchester Road to enable right turn movements from Rudheath into Tesco and Northwich Station.	**The future capacity of the road network is of concern.** *Reduce levels of traffic that needs to circumnavigate the busy Chester Way roundabout to turn back towards Chester and Tesco and bring about a reduction in queueing traffic on Middlewich Road over the railway bridge*	Consultation with Northwich Fire Station	
TC5	Town Centre	Junction Improvements	Short Term	New town centre ring road development	Develop a new town centre ring road that connects the new roundabout at Aldi within the town centre to the A533 on the west of the River Weaver and to TATA chemical site.	**The future capacity of the road network is of concern/Poor walking and cycling networks.** *Reduce through traffic in Northwich town centre and help to bring about reductions in traffic volumes and speeds and an enhanced environment for pedestrians and cyclists*	Vale Royal Borough Plan old scheme	
TC6	Town Centre	Active Travel	Medium Term	Walking and Cycling Infrastructure Improvements	Walking and Cycling Infrastructure improvements to be identified within Local Cycling and Walking Infrastructure Plan: *Identify review of cycle route condition and deliver resurfacing improvements to off-road routes where possible. *Explore options in cycling strategy to deliver a new off-road town centre walking and cycling network making use of the canal and river systems. *Undertake Town Centre cycle parking review and enhance cycle parking offer to support active	**A lack of cycling infrastructure to, within and around the town centre/Poor walking and cycling networks.** *Improving the feasibility and attractiveness of completing regular, short journeys within Northwich by bicycle. Improving walking and cycling access between the town centre and residential areas as well as schools, colleges and the station*	Northwich Neighbourhood Plan/Consultation with Sally Buttifant/DfT Walking and Cycling Infrastructure investment	
TC7	Town Centre	Active Travel	Medium Term	Encourage town centre wide bike scheme	Encourage private sector bike scheme at Northwich Rail station and key points across the town centre to support visitor connectivity, commuting and cycling opportunity and improved links to Gadbrook Park	**Northwich rail station is remote from the town centre and poorly connected by bus, walking and cycling routes.**	Site Visit / Gadbrook Parking Study	
TC8	Town Centre	Public Transport	Short Term	Northwich Railway Station Enhancements	Lobby Network Rail and Northern to deliver a major enhancement of Northwich Station including new step free access to the Chester platform, improved interchange between bus and rail services and an improved station building to offer more than the current 'do minimum' experience	**Northwich rail station is served by an hourly service which has poor quality rolling stock.** *Improving access to public transport for all users as well as the attractiveness of services Possibility to deliver an upgrade to the station as part of the remodelling when the Middlewich Branch is brought into use.*	Consultation with Gerard Rhodes. Sally Buttifant.	
TC9	Town Centre	Parking	Medium Term	Review location and provision of taxi ranks	Following completion of town centre development consider appropriate locations for taxi provision	***The future capacity of the road network is of concern.*** ****Northwich rail station is remote from the town centre and is poorly connected by bus, walking and cycling routes.*** ****There are few evening bus services between parts of the wider area and Northwich town centre.*** *Eliminate issues with Northern (station operator) caused by taxis parking on the private land at the station. Rationalise town centre lines and signs and make better use of available carriageway. Nearest taxi ranks to Barons Quay are at Market Street but as the development expands, demand for taxis to and from the rea will increase and could lead to informal taxi parking at Barons Quay.*	Consultation with Paul Johnson	No further public consultation required. Measures already agreed within the Cheshire West and Chester Borough Wide Parking Strategy. The NTS will support this strategy.
TC10	Town Centre	Parking	Short Term	Enhance EV parking offer in town centre to meet Council SPD standards	Enhance EV parking offer in town centre to meet Council SPD standards.	**There are concerns about poor air quality for residents in areas of congestion**	Council Parking SPD	
TC11	Town Centre	Demand Management	Medium Term	Review service vehicle time restrictions	Review service vehicle time restrictions similar to Chester (mindful of gyratory peaks) to reduce HGV movement and pedestrian conflict once Barons Quay is fully operational	**Poor walking and cycling network**. *Pedestrian and cyclist priority within Barons Quay access route. Increased servicing requirements through town centre regeneration.*	Consultation with Northwich Fire Station	
UA1	Wider Urban Area	Junction Improvements	Long Term	Deliver schemes to reduce congestion at key pinch points at the Winnington/Barnton Swing Bridge	Reduce congestion at Winnington/Barnton Swing Bridge: -In the short term by increasing junction capacity **(UA1a)** -In the long term by providing a new bridge to reduce congestion at Winnington/Barnton swing bridge between TATA land and Anderton **(UA1b)** -Junction improvemnts at A533 Winnington Lane/Winnington Avenue **(UA1c)**	**The future capacity of the road network is of concern/Several pinch points exist within the wider area of Northwich.** *. The future capacity of the road network is of concern/Several pinch points exist within the wider area of Northwich. TATA redevelopment site in Local Plan Part 2 difficulty bringing forward. Winnington Urban Village mitigation does not support future growth. Northwich Fire Station also have difficulty reaching Barnton and Comberbach in 10 minutes (target time for reaching all call outs in the Northwich area)*	Consultation with CWaC Planning & Regen teams	Test in model

Ref	Supporting economic growth: Supporting local economic growth	Supporting sub-regional economic growth	Directly supports access to employment or key services	Supports leisure and tourism aspirations	TOTAL	Opening up of housing sites: Enables new sites to be facilitated or accessed	Supports sustainable access to existing housing sites	Removal of severance	TOTAL
Sensitivity Test A	2	2	1	1		1	1	1	
Sensitivity Test B	1	1	2	1		2	1	1	
Sensitivity Test C	1	1	1	1		1	1	1	
TC1	2	1	1	1	**5**	2	0	2	**4**
TC2	1	0	1	1	**3**	0	0	1	**1**
TC3	1	0	1	2	**4**	0	0	1	**1**
TC4	0	0	0	1	**1**	0	0	0	**0**
TC5	2	1	1	1	**5**	1	0	0	**1**
TC6	1	0	1	1	**3**	1	2	0	**3**
TC7	0	0	2	1	**3**	0	0	0	**0**
TC8	1	1	1	1	**4**	0	0	0	**0**
TC9	1	0	0	2	**3**	0	0	0	**0**
TC10	1	1	0	1	**3**	0	0	0	**0**
TC11	1	0	0	2	**3**	0	0	0	**0**
UA1	2	1	2	1	**6**	2	1	2	**5**

Ref	Reducing Congestion: Increased or improved access to local transport system	Increased or improved access to the regional transport system	Improved journey time	Improved transport interchange	Supporting access to or use of sustainable transport (walking, cycling, bus, rail)	TOTAL	Safety: Impact upon road safety (highway)	Security - improved user security	Pedestrian/ Cyclist Safety	TOTAL
Sensitivity Test A	1	1	1	1	1		1	1	1	
Sensitivity Test B	1	1	1	1	1		1	1	1	
Sensitivity Test C	2	2	2	2	1		1	1	1	
TC1	2	2	1	0	0	**10**	1	0	1	**2**
TC2	1	0	1	0	0	**4**	1	0	0	**1**
TC3	1	0	1	0	0	**4**	1	0	0	**1**
TC4	1	1	0	0	2	**6**	0	0	0	**0**
TC5	1	0	1	0	0	**4**	0	0	0	**0**
TC6	0	0	0	0	2	**2**	0	0	1	**1**
TC7	1	0	0	0	2	**4**	0	0	0	**0**
TC8	1	2	0	0	2	**8**	0	0	0	**0**
TC9	1	0	0	1	1	**5**	0	1	0	**1**
TC10	0	0	0	0	2	**2**	0	0	0	**0**
TC11	1	0	0	0	0	**2**	1	1	1	**3**
UA1	2	1	2	0	1	**11**	1	1	0	**2**

Ref	Environmental: Noise and Air Quality (local)	Protecting or enhancing landscape	Enhancing townscape	Journey ambience	TOTAL	Policy Alignment: Alignment with regional policy (LTP, Local Plan Pt.1)	Alignment with local policy (Neighbourhood Plans)	TOTAL	Deliverability: Public Approval	Stakeholder Approval	Technical / Operational Viability	TOTAL
Sensitivity Test A	1	1	1	1		1	1		1	1	1	
Sensitivity Test B	1	1	1	1		1	1		1	1	1	
Sensitivity Test C	1	1	1	1		1	1		1	1	1	
TC1	1	0	1	1	**3**	2	1	**3**	1	2	1	**4**
TC2	0	0	1	1	**2**	1	0	**1**	1	1	1	**3**
TC3	0	0	1	1	**2**	1	0	**1**	1	1	1	**3**
TC4	0	0	0	1	**1**	1	0	**1**	1	1	1	**3**
TC5	0	0	0	1	**1**	1	0	**1**	1	0	1	**2**
TC6	1	1	1	0	**3**	1	2	**3**	1	1	1	**3**
TC7	1	1	0	0	**2**	1	2	**3**	0	0	1	**1**
TC8	1	0	0	2	**3**	1	1	**2**	1	2	1	**4**
TC9	0	0	1		**1**	0	0	**0**	1	0	1	**2**
TC10	2	0	0	1	**3**	1	2	**3**	1	2	1	**4**
TC11	0	0	0	1	**1**	0	0	**0**	1	1	1	**3**
UA1	1	0	0	1	**2**	1	2	**3**	2	2	0	**4**

Ref	Cost/Affordability: Capex / Revenue (C/R)	Low <£500K; Moderate £500K - £5M; High £5M - £10M Very High £10M - £25M; Major >£25M	Implementation timescale: Short = 0-5yrs; Medium = 5-10yrs; Long = 10yrs+	TOTAL	TOTAL - UNWEIGHTED	RANK - UNWEIGHTED	TOTAL - Sensitivity Test A	RANK - Sensitivity Test A	TOTAL - Sensitivity Test B	RANK - Sensitivity Test B	TOTAL - Sensitivity Test C	RANK - Sensitivity Test C
Sensitivity Test A			1		27							
Sensitivity Test B			1		27							
Sensitivity Test C			1		29							
TC1				**0**	31	3	29	2	29	2	31	3
TC2			1	**1**	15	31	14	33	14	31	15	31
TC3			1	**1**	16	30	15	28	15	27	16	30
TC4	C		0	**0**	12	42	10	45	10	44	12	42
TC5			2	**2**	14	37	15	28	14	31	14	37
TC6			0	**0**	18	23	19	19	20	12	18	23
TC7			2	**2**	13	38	12	39	14	31	13	38
TC8			0	**0**	21	14	20	15	19	17	21	14
TC9				**0**	12	42	11	44	10	44	12	42
TC10				**0**	15	31	17	24	15	27	15	31
TC11			1	**1**	12	42	12	39	11	42	12	42
UA1			1	**1**	33	1	31	1	32	1	33	1

Northwich Transport Strategy
Prioritisation Sheet
02/08/2017

v1

Ref	Area	Type	Timescale	Scheme Title	Scheme	Issue or Opportunity addressed	Source of Measure	Comments
UA2	Wider Urban Area	Junction Improvements	Medium Term	Reduced congestion along A559 Greenbank / Hartford Corridor	Reduced congestion along A559 Greenbank / Hartford Corridor through: -Junction capacity improvements along Greenbank/ Hartford Corridor to reduce congestion **(UA02a)** -Explore options for facilitating a west bound exit from A556 at Hartford **(UA02b)** - Investigate opportunity to reduce congestion through Hartford through introduction of a right turn movement at A556 School Lane.	**There are a number of corridors experiencing congestion e.g. the A559 Hartford corridor.** *School traffic causing congestion- 10 educational establishments in Hartford only 2 of which have a local catchment*	Hartford Neighbourhood Plan	
UA3	Wider Urban Area	Junction Improvements	Medium Term	A533/A556 junction improvements	A533/A556 junction improvements at Davenham to support increased use and better accessibility to the A556	**Several pinch points exist within the wider area of Northwich experiencing heavy congestion.**	Winsford Transport Strategy	
UA4	Wider Urban Area	Junction Improvements	Long term	Deliver junction improvements to reduce congestion along A556 in the vicinity of Gadbrook Park	o Develop a new junction on the A556 to the west of the existing Gadbrook Park site to open up development land. (UA04a) o Consider opportunities to introduce a second southern access to Gadbrook Park (UA04b) o Implement improvement scheme at Gadbrook Road/ A556 junction to reduce congestion caused by traffic entering and existing Gadbrook Park. (UA04c) o Junction improvement at roundabout junction with the A556/ A530 (UA04d) o Junction improvement scheme at A530 King Street / B5082 Middlewich Road (UA04e) o Junction improvement scheme at A556 / B5082 Pennys Lane (UA04f)	**Several pinch points exist within the wider area of Northwich experiencing heavy congestion.** *Alleviate pressure on the existing Gadbrook Park site access and encourage further expansion of the site to the west*	Consultation with Mid Cheshire Development Board	
UA5	Wider Urban Area	Junction Improvements	Medium Term	Junction improvements in Wincham along signed route into Northwich from A559	o B5075 New Warrington Road/ Chapel Street (UA05a) o A559 Marston Lane/ Church Street (UA05b)	**The future capacity of the road network is of a concern.** *Network pressures in this area will increase due to number of housing and employment sites*	Consultation with CWaC Planning & Regen teams	
UA6	Wider Urban Area	Junction Improvements	Medium term	Junction improvements in Lostock Gralam.	o A559 Manchester Road/ A559 Hall Lane/Station Road(UA06a) o A559 Manchester Road / Stubbs Lane (UA06b) o A556/A559 roundabout junction (UA06c)	**The future capacity of the road network is of a concern.** *Network pressures in this area will increase due to number of housing and employment sites*	Consultation with CWaC Planning & Regen teams	
UA7	Wider Urban Area	Relief Roads	Short term	Support alternative route north through Marbury Country Park	Bring closed private road up to required standard to support alternative route north through Marbury Country Park.	**The future capacity of the road network is of a concern.**	Consultation with CWaC Planning & Regen teams	Test in model
UA8	Wider Urban Area	Relief Roads	Long term	A series of new road links around Winnington/Barnton on to relieve congestion	• Relief Road from a new bridge crossing near Cosgrove Business Park joining the A533 to the north of Barnton (UA08a) • Utilisation of former TATA railway line for use as road scheme to link to Winnington Avenue (UA08b) • Utilisation of former TATA railway to form a relief road and new bridge over River Weaver near Cosgrove Business Park(UA08c) • Utilisation of former TATA railway line as a road through Winnington near to Victoria Infirmary to A559 o new rail link joining the Mid Cheshire Line and Middlewich Branch line with a new Winnington Station (UA08c)	**Several pinch points exist within the wider area of Northwich.**	Members Consultation	Test in model
UA9	Wider Urban Area	Relief Roads	Medium term	New road link to A49	Introduce a road scheme from Wallascote Road to A49 using the former rail alignment	**There are a number of corridors experiencing congestion in Hartford.** *Helps to reduce congestion outside schools and encourages a healthy lifestyle*	Members Consultation	
UA10	Wider Urban Area	Relief Roads	Medium term	Link new road to A49 to A556	Link the above road scheme to the A556 via the introduction of a further link road.	**Several pinch points exist within the wider area of Northwich.**	Members Consultation	Test in model
UA11	Wider Urban Area	Active Travel	Short Term	Walking and Cycling Infrastructure improvements to be identified within Local Cycling and Walking Infrastructure Plan	[illegible] connection between Northwich town centre, Winnington (UA11a) o Walking and cycling route utilising waterway into Northwich Town centre from Winnington and Anderton. (UA11b) o Review plans for radial corridor improvements from Northwich Cycling Strategy. (UA11c) o Liaise with Hartford Campus schools to open walking cycling link from Manor Lane along River Weaver. (UA11d) o New pedestrian/cycle bridge to enhance walking route between Barnton and Winnington at Winnington Lane historic bridge (currently no suitable footway along the bridge). (UA11e) o Cycle link utilising former rail alignment from A559 Chester Road to Greenbank Station. (UA11f) o Implementation of a footpath at Marbury Hollows to improve pedestrian access. (UA181g	**Lack of cycling infrastructure to within and around the town centre/Poor walking and cycling networks**	Northwich Cycling Strategy/S106 Scheme being designed/St Wilfreds School/Hartford Neighbourhood Plan	

Ref	Supporting economic growth: Supporting local economic growth	Supporting sub-regional economic growth	Directly supports access to employment or key services	Supports leisure and tourism aspirations	TOTAL	Opening up of housing sites: Enables new sites to be facilitated or accessed	Supports sustainable access to existing housing sites	Removal of severance	TOTAL	Reducing Congestion: Increased or improved access to local transport system	Increased or improved access to the regional transport system	Improved journey time	Improved transport interchange	Supporting access to or use of sustainable transport (walking, cycling, bus, rail)	TOTAL	Safety: Impact upon road safety (highway)	Security - improved user security	Pedestrian/ Cyclist Safety	TOTAL	Environmental: Noise and Air Quality (local)	Protecting or enhancing landscape	Enhancing townscape	Journey ambience	TOTAL	Policy Alignment: Alignment with regional policy (LTP, Local Plan Pt.1)	Alignment with local policy (Neighbourhood Plans)	TOTAL	Deliverability: Public Approval	Stakeholder Approval	Technical / Operational Viability	TOTAL	Cost/Affordability: Capex / Revenue (C/R)	Low <£500K; Moderate £500K - £5M; High £5M - £10M; Very High £10M - £25M; Major >£25M	Implementation timescale: Short = 0-5yrs; Medium = 5-10yrs; Long = 10yrs+	TOTAL	TOTAL - UNWEIGHTED	RANK - UNWEIGHTED	TOTAL - Sensitivity Test A	RANK - Sensitivity Test A	TOTAL - Sensitivity Test B	RANK - Sensitivity Test B	TOTAL - Sensitivity Test C	RANK - Sensitivity Test C
Sensitivity Test A	2	2	1	1		1	1	1		1	1	1	1	1		1	1	1		1	1	1	1		1	1		1	1	1				1		27							
Sensitivity Test B	1	1	2	1		2	1	1		1	1	1	1	1		1	1	1		1	1	1	1		1	1		1	1	1				1		27							
Sensitivity Test C	1	1	1	1		1	1	1		2	2	2	2	1		1	1	1		1	1	1	1		1	1		1	1	1				1		29							
UA2	1	0	0	1	**2**	2	0	1	**3**	1	0	2	0	0	**6**	1	0	1	**2**	1	0	1	2	**4**	2	1	**3**	2	1	0	**3**			0	**0**	23	9	21	11	22	8	23	9
UA3	1	2	1	1	**5**	1	0	1	**2**	1	1	1	0	0	**6**	2	1	0	**3**	0	0	0	1	**1**	1	1	**2**	2	1	1	**4**			0	**0**	23	9	23	9	22	8	23	9
UA4	2	2	2	1	**7**	1	0	0	**1**	1	1	1	0	0	**6**	2	1	1	**4**	1	0	0	2	**3**	1	1	**2**	2	2	1	**5**			0	**0**	28	4	29	2	28	3	28	4
UA5	2	1	2	0	**5**	2	0	1	**3**	2	1	1	0	0	**8**	1	0	1	**2**	1	0	0	1	**2**	2	1	**3**	1	1	1	**3**			2	**2**	26	6	25	5	26	5	26	6
UA6	2	1	2	0	**5**	2	0	1	**3**	2	1	1	0	0	**8**	1	0	1	**2**	1	0	0	1	**2**	2	1	**3**	1	1	1	**3**			1	**1**	26	6	25	5	26	5	26	6
UA7	1	1	1	1	**4**	1	0	0	**1**	1	0	1	0	0	**4**	1	0	0	**1**	0	0	0	1	**1**	1	0	**1**	1	1	1	**3**			2	**2**	15	31	15	28	15	27	15	31
UA8	1	1	0	1	**3**	2	0	1	**3**	1	0	2	0	0	**6**	1	0	0	**1**	0	0	0	1	**1**	1	1	**2**	2	2	1	**5**			0	**0**	21	14	20	15	20	12	21	14
UA9	1	0	1	1	**3**	2	0	1	**3**	1	1	0	0	0	**4**	1	0	0	**1**	0	0	0	1	**1**	1	2	**3**	1	1	0	**2**			1	**1**	17	25	16	25	18	21	17	25
UA10	1	2	1	1	**5**	2	0	1	**3**	1	2	1	0	0	**8**	0	0	0	**0**	1	0	0	1	**2**	1	1	**2**	1	1	1	**3**			1	**1**	23	9	22	10	22	8	23	9
UA11	0	0	0	1	**1**	1	2	1	**4**	1	0	1	0	2	**6**	0	1	1	**2**	1	0	1	1	**3**	1	1	**2**	1	1	1	**3**			0	**0**	21	14	19	19	20	12	21	14

Northwich Transport Strategy
Prioritisation Sheet
02/08/2017

v1

Weighting	Supporting local economic growth	Supporting sub-regional economic growth	Directly supports access to employment or key services	Supports leisure and tourism aspirations	Enables new sites to be facilitated or accessed	Supports sustainable access to existing housing sites	Removal of severance	Increased or improved access to local transport system	Increased or improved access to the regional transport system	Improved journey time	Improved transport interchange	Supporting access to or use of sustainable transport (walking, cycling, bus, rail)	Impact upon road safety (highway)	Security - improved user security	Pedestrian/ Cyclist Safety	Noise and Air Quality (local)	Protecting or enhancing landscape	Enhancing townscape	Journey ambience	Alignment with regional policy (LTP, Local Plan Pt.1)	Alignment with local policy (Neighbourhood Plans)	Public Approval	Stakeholder Approval	Technical / Operational Viability	Implementation timescale	
Sensitivity Test A	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	27
Sensitivity Test B	1	1	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	27
Sensitivity Test C	1	1	1	1	1	1	1	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	29

Ref	Area	Type	Timescale	Scheme Title	Scheme	Issue or Opportunity addressed	Source of Measure	Comments
UA12	Wider Urban Area	Public Transport	Short term	Manage car parking demand at rail station	Help the train operating companies to be more proactive at offering solutions to contain demand for car parking space through measures such as car sharing incentives, taxi sharing, cost effective incentives to encourage travel to / from the station by bus.	**Insufficient car parking at rail stations. Lack of interchange between MCL and WCML** *Improving local rail connectivity and supporting modal shift from travel by car. Support access to HS2 at Crewe.*	Consultation with Mid Cheshire Development Board	
UA13	Wider Urban Area	Public Transport	Short term	Increase car parking provision at rail stations within and around Northwich	Support opportunities to increase parking supply at Stations in Northwich wider area to meet forecast demand in rail patronage and increase attractiveness of rail based park and ride	**Insufficient car parking at rail stations. Lack of interchange between MCL and WCML** *Improving local rail connectivity and supporting modal shift from travel by car. Support access to HS2 at Crewe.*	Consultation with Mid Cheshire Development Board	
UA14	Wider Urban Area	Public Transport	Long term	Create interchange where Mid-Cheshire and West Coast Mainline railway lines connect	Investigate long term possibility of connecting Mid-Cheshire and West Coast Mainline railway lines at their intersection north of Hartford to enable interchange	**Lack of interchange between the MCL and WCML reduces rail connectivity to strategic locations. There is a need to ensure that connectivity is improved so that residents of the area benefit from HS2 proposals.** *Improving access towards HS2 services at Crewe and encouraging sustainable travel to and from Gadbrook Park. Improving access to wider areas by sustainable modes. Improving access to Northwich by sustainable modes and supporting the evening economy at Barons Quay*	Winsford Transport Strategy/Consultation with Gerard Rhodes, Cheshire East Council and Mid Cheshire Development Board.	
UA15	Wider Urban Area	Public Transport	Long term	Consider the borough wide Route and Branch Bus Service Review	As part of borough wide Route and Branch Bus Service Review consider the following: o Where appropriate introduce evening bus services to residential areas e.g. Rudheath, Comberbach to access town centre and leisure facilities. o Implement measures of Winsford Transport Strategy for better bus services between Winsford, Middlewich and Northwich. o Review and promote opportunities to extend flexible/specialist bus services. o Explore options for enhanced bus travel to hospitals, possibly a new shuttle service similar to the Leighton Link Service that has been successfully introduced for Leighton Hospital in Crewe.	**There are few evening bus services between parts of the wider area and Northwich town centre.**	Members Consultation/ Winsford Transport Strategy	
UA16	Wider Urban Area	Public Transport	Medium Term	Support smart integrated ticket system	Support smart, integrated ticketing system for all users of bus and rail services in the Northwich area and introduce a new system of subsidised travel cards for students across Northwich and the wider area	**The future capacity of the road network is of concern.** *Improving attractiveness of travel by sustainable modes in the area*	Consultation with Gerard Rhodes/Consultation with Sir John Deanes College	
UA17	Wider Urban Area	Public Transport	Short term	Enhance bus priority at junctions	Review and identify opportunities to enhance bus priority at traffic signal junctions	Review and identify opportunities to enhance bus priority at traffic signal junctions	**The future capacity of the road network is of concern.** *Improving attractiveness of travel by sustainable modes in the area*	
UA18	Wider Urban Area	Parking	Medium term	Implement recommendations of Gadbrook Parking Study	Implement recommendations of Gadbrook Parking Study to increase car parking, implement TROs in Rudheath and implement travel planning measures to reduce demand and introduce multi storey car park options to cater for future demand	**Support proposals for the reopening of the Middlewich branch line to passengers including a station at Gadbrook park.** *Parking demand in excess of supply at Gadbrook Park causing overspill into local residential area.*	Gadbrook Park Parking Study	
UA19	Wider Urban Area	Parking	Short term	Implement TROs on residential streets around Hartford Rail station	Implementation of waiting restrictions on residential roads impacted by on street parking near Hartford Rail Station.	**Insufficient car parking at Hartford and Northwich rail stations.** *Parking observed on Chester Road, Fullerton Road, The Crescent as well as other areas of the village.*	Issue raised in Hartford Neighbourhood Plan.	
UA20	Wider Urban Area	Demand Management	Medium term	Encourage other schools to investigating staggering school start and finish times	Encourage other schools to follow St Wilfred's Greenbank in investigating staggering school start and finish times to reduce congestion.	**There are a number of corridors experiencing congestion e.g. the A559 Hartford corridor**. *Helps to reduce congestion outside schools at drop-off and pick-up times and encourages a healthy lifestyle for school children*	Consultation with Mark Simmons	
UA21	Wider Urban Area	Demand Management	Short term	Support extensions to the CWaC Parent Parking Charter	Support extensions to the CWaC Parent Parking Charter to encourage parents to leave cars further from schools and complete their journeys on foot	**There are a number of corridors experiencing congestion e.g. the A559 Hartford corridor**. *Helps to reduce congestion outside schools at drop-off and pick-up times and encourages a healthy lifestyle for school children*	Consultation with Mark Simmons	
UA22	Wider Urban Area	Demand Management	Short term	Introduce traffic calming measures on Hartford Road in Davenham.	Introduce traffic calming measures on Hartford Road in Davenham.	**There are a number of corridors experiencing congestion e.g. the A559 Hartford corridor**. *Traffic lights installed at the junction of Hartford Road with the A556 have enabled a right turn to be made into Davenham, increasing volumes of traffic on Hartford Road - many of these vehicles travelling at speeds in excess of 30mph*	Northwich Fire Station	
UA23	Wider Urban Area	Demand Management	Short term	Introduce a package of urban traffic control measures	Introduce a package of urban traffic control measures to improve linking of junction signal timings along congested corridors Northwich	**There are a number of corridors experiencing congestion e.g. the A559 Hartford corridor**. *Improving the performnce of junctions to reduce congestion*	Consultation with Mark Simmons	

Ref	Supporting economic growth: Supporting local economic growth	Supporting sub-regional economic growth	Directly supports access to employment or key services	Supports leisure and tourism aspirations	TOTAL	Opening up of housing sites: Enables new sites to be facilitated or accessed	Supports sustainable access to existing housing sites	Removal of severance	TOTAL	Reducing Congestion: Increased or improved access to local transport system	Increased or improved access to the regional transport system	Improved journey time	Improved transport interchange	Supporting access to or use of sustainable transport (walking, cycling, bus, rail)	TOTAL
UA12	1	1	1	1	**4**	0	1	0	**1**	1	2	0	1	2	**10**
UA13	1	2	1		**4**	0	1	0	**1**	1	2	0	0	1	**7**
UA14	1	2	1	2	**6**	1	2	0	**3**	1	2	2	2	1	**15**
UA15	1	1	1	2	**5**	0	2	0	**2**	2	1	1	1	2	**12**
UA16	0	0	0	1	**1**	0	1	0	**1**	1	0	1	1	1	**7**
UA17	1	0	0	1	**2**	0	1	0	**1**	1	0	1	1	1	**7**
UA18	2	1	2	0	**5**	0	0	0	**0**	1	0	0	0	0	**2**
UA19	0	0	1	0	**1**	0	0	0	**0**	1	2	0	0	1	**7**
UA20	0	0	0	0	**0**	0	0	0	**0**	2	1	2	0	0	**10**
UA21	0	0	0	0	**0**	0	1	0	**1**	1	0	0	0	1	**3**
UA22	1	1	0	0	**2**	1	0	0	**1**	1	1	1	0	0	**6**
UA23	1	0	0	0	**1**	1	0	0	**1**	1	0	2	0	0	**6**

Ref	Safety: Impact upon road safety (highway)	Security - improved user security	Pedestrian/ Cyclist Safety	TOTAL	Environmental: Noise and Air Quality (local)	Protecting or enhancing landscape	Enhancing townscape	Journey ambience	TOTAL	Policy Alignment: Alignment with regional policy (LTP, Local Plan Pt.1)	Alignment with local policy (Neighbourhood Plans)	TOTAL	Deliverability: Public Approval	Stakeholder Approval	Technical / Operational Viability	TOTAL
UA12	0	0	0	**0**	1	0	0	1	**2**	1	2	**3**	1	1	1	**3**
UA13	0	0	0	**0**	1	0	0	1	**2**	1	1	**2**	2	1	1	**4**
UA14	0	0	0	**0**	1	0	0	1	**2**	1	1	**2**	2	1	1	**4**
UA15	0	0	0	**0**	1	0	0	1	**2**	1	2	**3**	1	2	1	**4**
UA16	0	0	0	**0**	0	0	0	1	**1**	1	2	**3**	1	2	1	**4**
UA17	0	0	0	**0**	1	0	0	0	**1**	1	1	**2**	2	1	1	**4**
UA18	1	1	1	**3**	0	0	1	1	**2**	1	0	**1**	2	1	1	**4**
UA19	1	0	1	**2**	0	0	0	0	**0**	1	0	**1**	1	2	1	**4**
UA20	1	1	1	**3**	1	0	0	1	**2**	1	0	**1**	2	1	1	**4**
UA21	1	1	2	**4**	0	0	0	1	**1**	1	0	**1**	0	2	1	**3**
UA22	2	2	2	**6**	0	0	0	1	**1**	1	0	**1**	2	1	1	**4**
UA23	1	0	0	**1**	0	0	0	1	**1**	1	1	**2**	1	1	1	**3**

Ref	Cost/Affordability: Capex / Revenue (C/R)	Low <£500K; Moderate £500K - £5M; High £5M - £10M; Very High £10M - £25M; Major >£25M	Implementation timescale: Short = 0-5yrs; Medium = 5-10yrs; Long = 10yrs+	TOTAL	TOTAL - UNWEIGHTED	RANK - UNWEIGHTED	TOTAL - Sensitivity Test A	RANK - Sensitivity Test A	TOTAL - Sensitivity Test B	RANK - Sensitivity Test B	TOTAL - Sensitivity Test C	RANK - Sensitivity Test C
UA12			2	**2**	23	9	21	11	20	12	23	9
UA13			2	**2**	20	20	20	15	18	21	20	20
UA14			2	**2**	32	2	28	4	27	4	32	2
UA15			0	**0**	28	4	25	5	24	7	28	4
UA16			2	**2**	17	25	14	33	14	31	17	25
UA17			2	**2**	17	25	15	28	14	31	17	25
UA18			1	**1**	17	25	19	19	18	21	17	25
UA19			2	**2**	15	31	12	39	13	37	15	31
UA20			1	**1**	20	20	15	28	15	27	20	20
UA21			2	**2**	13	38	12	39	12	40	13	38
UA22			2	**2**	21	14	20	15	19	17	21	14
UA23				**0**	15	31	13	37	13	37	15	31

Northwich Transport Strategy
Prioritisation Sheet
02/08/2017

v1

	Supporting local economic growth	Supporting sub-regional economic growth	Directly supports access to employment or key services	Supports leisure and tourism aspirations	Enables new sites to be facilitated or accessed	Supports sustainable access to existing housing sites	Removal of severance	Increased or improved access to local transport system	Increased or improved access to the regional transport system	Improved journey time	Improved transport interchange	Supporting access to or use of sustainable transport (walking, cycling, bus, rail)	Impact upon road safety (highway)	Security - improved user security	Pedestrian/ Cyclist Safety	Noise and Air Quality (local)	Protecting or enhancing landscape	Enhancing townscape	Journey ambience	Alignment with regional policy (LTP, Local Plan Pt.1)	Alignment with local policy (Neighbourhood Plans)	Public Approval	Stakeholder Approval	Technical / Operational Viability	Implementation timescale	
Sensitivity Test A	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	27
Sensitivity Test B	1	1	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	27
Sensitivity Test C	1	1	1	1	1	1	1	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	29

Ref	Area	Type	Timescale	Scheme Title	Scheme	Issue or Opportunity addressed	Source of Measure	Comments
UA24	Wider Urban Area	Highways	Short term	Implement a programme of 20mph zones across the Northwich wider urban area	Implement a programme of 20mph zones across the Northwich wider urban area.	**Poor walking and cycling network**	Members Consultation	
LD1	Longer Distance	Junction Improvements	Medium term	Implement junction capacity improvements at junction of A533/A49	Implement junction capacity improvements at junction of A533/A49	**Several pinch points exist within the wider area of Northwich experiencing heavy congestion**	Consultation with Cheshire East Council	
LD2	Longer Distance	Junction Improvements	Short term	Improved safety measures for identified incident hotspots	Improved safety measures for incident hotspots, identified as: o Smithy Lane / Ash Lane / A533, Little Leigh (LD02a); o Budworth Lane / A559 / High Street, Great Budworth(LD02b); o A556/A559 junction through improved road alignment at Cinder Hill, Hartford (LD02c).	**Install and upgrade walking and cycling infrastructure**	Accident data review (Crashmap) / Local knowledge	
LD3	Longer Distance	Junction Improvements	Medium Term	Implement junction capacity improvements at pinch points on A530	Implement junction capacity improvements at pinch points on A530: o A530 / Davenham Road/ Crowder's Lane **(LD03a)** o A530/ B5309 King Street **(LD03b)**	**Several pinch points exist within the wider area of Northwich experiencing heavy congestion**	Consultation with Cheshire East Council	
LD4	Longer Distance	Junction Improvements	Long term	Support junction capacity improvements to support access to M6 j19	Support junction capacity improvements to support access to M6 j19: o A556/A5033 junction**(LD04b)**	**Several pinch points exist within the wider area of Northwich experiencing heavy congestion**	Consultation with Cheshire East Council	
LD5	Longer Distance	Active Travel	Medium Term	Walking and Cycling Infrastructure improvements to be identified within Local Cycling and Walking Infrastructure Plan	o Support Cheshire East to implement schemes identified within their March 2017 Cycling Strategy including a Middlewich – Winsford – Northwich – Knutsford cycle connection by delivering new connections within Cheshire West. o In partnership with Cheshire East Council, explore opportunities for a cycle link that runs broadly parallel to the new HS2 line.	**Poor walking and cycling networks.** *Improving the attractiveness of travel by bicycle for longer trips; promoting a happier, healthier population*	Consultation with Cheshire East Council	
LD6	Longer Distance	Public Transport	Long term	Reopening of Middlewich Branch Line	o Lobby Network Rail and work with Cheshire East to ensure that the Middlewich Branch line is reopened for regular passenger rail services. o Work with Cheshire East to support proposals for a new station at Middlewich on the Middlewich Branch line. o Explore options for a new station at Gadbrook Park on the Middlewich Branch line to serve Gadbrook and south Northwich.	**Lack of interchange between the MCL and WCML reduces rail connectivity to strategic locations. There is a need to ensure that connectivity is improved so that residents of the area benefit from HS2 proposals.** *Improving access towards HS2 services at Crewe and encouraging sustainable travel to and from Gadbrook Park. Improving access to wider areas by sustainable modes. Improving access to Northwich by sustainable modes and supporting the evening economy at Barons Quay*	Winsford Transport Strategy/Consultation with Gerard Rhodes, Cheshire East Council and Mid Cheshire Development Board.	
LD7	Longer Distance	Public Transport	Short term	Support proposals for an Airport Western Rail Link	Support proposals for an Airport Western Rail Link to link the Mid Cheshire Line and Manchester Airport.	**Northwich rail station is served by an hourly service which has poor quality rolling stock.** *Delivers 30 minute journey times between Northwich and the Airport and make commuting by rail between Northwich and Manchester city centre much more viable. Also provides an additional link between Manchester and Crewe if there are issues with the link via Wilmslow*	Consultation with Mid Cheshire Development Board. Sally Buttifant.	
LD8	Longer Distance	Public Transport	Short term	Lobby Northern to introduce timetable changes on the Mid Cheshire Line to better support rail commuting	Lobby Northern to introduce timetable changes on the Mid Cheshire Line to better support rail commuting between Northwich and Chester and Northwich and Manchester.	**Northwich rail station is served by an hourly service which has poor quality rolling stock.** *Current AM arrival times at Chester Station from Northwich are 07.44 and 08.48 - former is too early for most commuters and the latter is too late*	Consultation with Mid Cheshire Development Board	
LD9	Longer Distance	Public Transport	Short term	Consider the borough wide Route and Branch Bus Service Review	As part of borough wide Route and Branch Bus Service Review work with bus operators to explore possibilities of introducing an evening bus service to Warrington.	**There are few evening bus services between parts of the wider urban area and Northwich town centre.**	Consultation with Mid Cheshire Development Board	
LD10	Longer Distance	Demand Management	Long term	Implement speed reduction measures on key local routes affected by speeding	Implement speed reduction measures on key local routes affected by speeding issues including the A556 Cuddington-Davenham-Allostock and the A559 up to the A56	**Poor walking and cycling networks.** *Improving local road safety and reducing accident risks, making radial routes (e.g. to Gadbrook Park) more attractive to pedestrians and cyclists.*	Consultation with Mark Simmons	

Ref	Supporting economic growth: Supporting local economic growth	Supporting sub-regional economic growth	Directly supports access to employment or key services	Supports leisure and tourism aspirations	TOTAL	Opening up of housing sites: Enables new sites to be facilitated or accessed	Supports sustainable access to existing housing sites	Removal of severance	TOTAL	Reducing Congestion: Increased or improved access to local transport system	Increased or improved access to the regional transport system	Improved journey time	Improved transport interchange	Supporting access to or use of sustainable transport (walking, cycling, bus, rail)	TOTAL
UA24	0	0	0	0	**0**	0	0	0	**0**	0	0	0	0	2	**2**
LD1	1	1	0	0	**2**	2	0	1	**3**	2	1	1	0	0	**8**
LD2	0	0	0	0	**0**	0	1	0	**1**	1	0	0	0	0	**2**
LD3	1	1	1	0	**3**	1	0	0	**1**	1	2	1	0	0	**8**
LD4	1	2	1	1	**5**	1	0	0	**1**	1	2	1	0	0	**8**
LD5	0	0	0	1	**1**	0	1	0	**1**	1	0	0	0	2	**4**
LD6	1	2	1	0	**4**	0	1	0	**1**	1	2	0	0	1	**7**
LD7	1	2	0	1	**4**	0	0	0	**0**	0	2	0	0	1	**5**
LD8	2	2	1	0	**5**	0	1	0	**1**	1	2	2	0	2	**12**
LD9	1	0	0	1	**2**	1	1	0	**2**	1	1	1	0	2	**8**
LD10	0	0	0	0	**0**	0	0	0	**0**	0	0	0	0	0	**0**

Ref	Safety: Impact upon road safety (highway)	Security - improved user security	Pedestrian/ Cyclist Safety	TOTAL	Environmental: Noise and Air Quality (local)	Protecting or enhancing landscape	Enhancing townscape	Journey ambience	TOTAL	Policy Alignment: Alignment with regional policy (LTP, Local Plan Pt.1)	Alignment with local policy (Neighbourhood Plans)	TOTAL	Deliverability: Public Approval	Stakeholder Approval	Technical / Operational Viability	TOTAL
UA24	2	1	2	**5**	0	0	0	1	**1**	1	2	**3**	0	1	1	**2**
LD1	1	0	0	**1**	1	0	0	0	**1**	1	1	**2**	1	1	1	**3**
LD2	2	2	2	**6**	0	0	0	2	**2**	1	1	**2**	2	1	1	**4**
LD3	0	0	0	**0**	0	0	0	1	**1**	1	1	**2**	1	1	1	**3**
LD4	1	0	0	**1**	0	0	0	1	**1**	1	1	**2**	2	1	1	**4**
LD5	0	0	1	**1**	1	0	0	1	**2**	1	2	**3**	1	1	1	**3**
LD6	0	0	0	**0**	1	0	0	1	**2**	1	2	**3**	2	1	1	**4**
LD7	0	0	0	**0**	0	0	0	0	**0**	0	1	**1**	1	1	1	**3**
LD8	0	0	0	**0**	1	0	0	0	**1**	1	2	**3**	2	1	1	**4**
LD9	0	0	0	**0**	1	0	0		**1**	2	2	**4**	2	1	1	**4**
LD10	2	2	2	**6**	0	0	0	1	**1**	1	1	**2**	1	1	1	**3**

Ref	Cost/Affordability: Capex / Revenue (C/R)	Low <£500K; Moderate £500K - £5M; High £5M - £10M; Very High £10M - £25M; Major >£25M	Implementation timescale: Short = 0-5yrs; Medium = 5-10yrs; Long = 10yrs+	TOTAL	TOTAL - UNWEIGHTED	RANK - UNWEIGHTED	TOTAL - Sensitivity Test A	RANK - Sensitivity Test A	TOTAL - Sensitivity Test B	RANK - Sensitivity Test B	TOTAL - Sensitivity Test C	RANK - Sensitivity Test C
UA24			2	**2**	13	38	13	37	13	37	13	38
LD1			1	**1**	20	20	18	23	18	21	20	20
LD2			2	**2**	17	25	16	25	16	25	17	25
LD3			2	**2**	18	23	16	25	16	25	18	23
LD4			0	**0**	22	13	21	11	20	12	22	13
LD5			0	**0**	15	31	14	33	14	31	15	31
LD6			2	**2**	21	14	21	11	19	17	21	14
LD7			2	**2**	13	38	14	33	11	42	13	38
LD8			2	**2**	26	6	25	5	22	8	26	6
LD9			1	**1**	21	14	19	19	19	17	21	14
LD10			0	**0**	12	42	12	39	12	40	12	42

B. Modelling Results and Plans

Table 16: Junction Volume Over Capacity

		Base Year		Do Minimum Future Year		All Schemes Future Year		UA07 Future Year		UA09 Future Year		UA08c + TC05 (excluding the southern link) Future Year		UA08a + UA08b + TC05 (excluding the southern link) Future Year		UA09 + UA010 Future Year		Winnington Swing Bridge increased to 1 lane in each direction Future Year	
ID	Location	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
1	A556 Chester Road / A49 Forest Road	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100
2	A49 Forest Road / Norlwy Road	Y >100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	N	Y-85 to 100	Y-85 to 100	Y-85 to 100
3	A559 Manchester Road / Stubbs Lane	N	Y-85 to 100	N	Y >100	Y >100	Y >100	N	Y >100	N	Y >100	N	Y >100	N	Y >100	N	Y >100	N	Y >100
4	A556 / A559 Manchester Road Gyratory	Y-85 to 100	N	N-80 to 85	Y-85 to 100	Y-85 to 100	Y-85 to 100	N-80 to 85	Y-85 to 100	N-80 to 85	Y-85 to 100	N-80 to 85	Y-85 to 100	N-80 to 85	Y-85 to 100	N-80 to 85	Y-85 to 100	N-80 to 85	Y-85 to 100
5	A559 Manchester Road / A559 Hall Lane / Station Road	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y >100	Y-85 to 100	Y-85 to 100	N-80 to 85	Y-85 to 100	Y-85 to 100	Y >100	Y-85 to 100	Y >100	N-80 to 85	Y-85 to 100	Y-85 to 100	Y >100	N	Y >100
6	A530 King Street / B5082 Middlewich Road	Y-85 to 100	Y >100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100
7	A533 Kingsmead / London Road (nr A556)	Y >100	Y-85 to 100	Y >100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y >100	Y-85 to 100	Y >100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y >100	Y-85 to 100	Y >100	Y-85 to 100
8	St Wilfrids Roundabout - A533 Kingsmead	Y-85 to 100	N	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100
9	A533 Kingsmead / Moor Parkway Roundabout	Y >100	N-80 to 85	Y-85 to 100	Y >100	Y >100	Y >100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y >100	Y-85 to 100	Y >100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100
10	A559 Chester Road / School Lane	Y >100	Y-85 to 100	Y >100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y >100	Y-85 to 100	Y >100	Y-85 to 100	Y >100	Y-85 to 100	Y >100	Y-85 to 100	Y >100	Y-85 to 100	Y >100	Y-85 to 100
11	A533 Runcorn Road / A533 Winnington Lane / Soot Hill	Y-85 to 100	Y-85 to 100	Y >100	Y >100	N	N	Y-85 to 100	Y-85 to 100	Y >100	Y >100	Y >100	Y >100	Y-85 to 100	Y-85 to 100	Y >100	Y >100	Y >100	N-80 to 85
12	A533 Winnington Lane / Winnington Avenue	Y-85 to 100	Y-85 to 100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y-85 to 100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100
13	A556 / Hartford Road	Y >100	N	Y >100	N-80 to 85	N	N	Y >100	N	Y >100	N	Y >100	N	Y >100	N	Y >100	N	Y >100	N
14	A556 / B5082 Penny's Lane	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100
15	A556 / School Lane	N	Y >100	N-80 to 85	Y >100	Y >100	Y >100	N-80 to 85	Y >100	N-80 to 85	Y >100	N	Y >100	N-80 to 85	Y >100	N	Y >100	N-80 to 85	Y >100
16	A556 Chester Road / Norley Road	Y >100	N	Y >100	N	N	N	Y >100	N	Y >100	N	Y >100	N	Y >100	N	Y >100	N	Y >100	N
17	A556 / Gadbrook Road	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100
18	A559 Chester Way / Kingsway	N	Y-85 to 100	N	Y-85 to 100	Y-85 to 100	Y-85 to 100	N	Y-85 to 100	N	Y-85 to 100	N	Y-85 to 100	N	Y-85 to 100	N	Y-85 to 100	N	Y-85 to 100

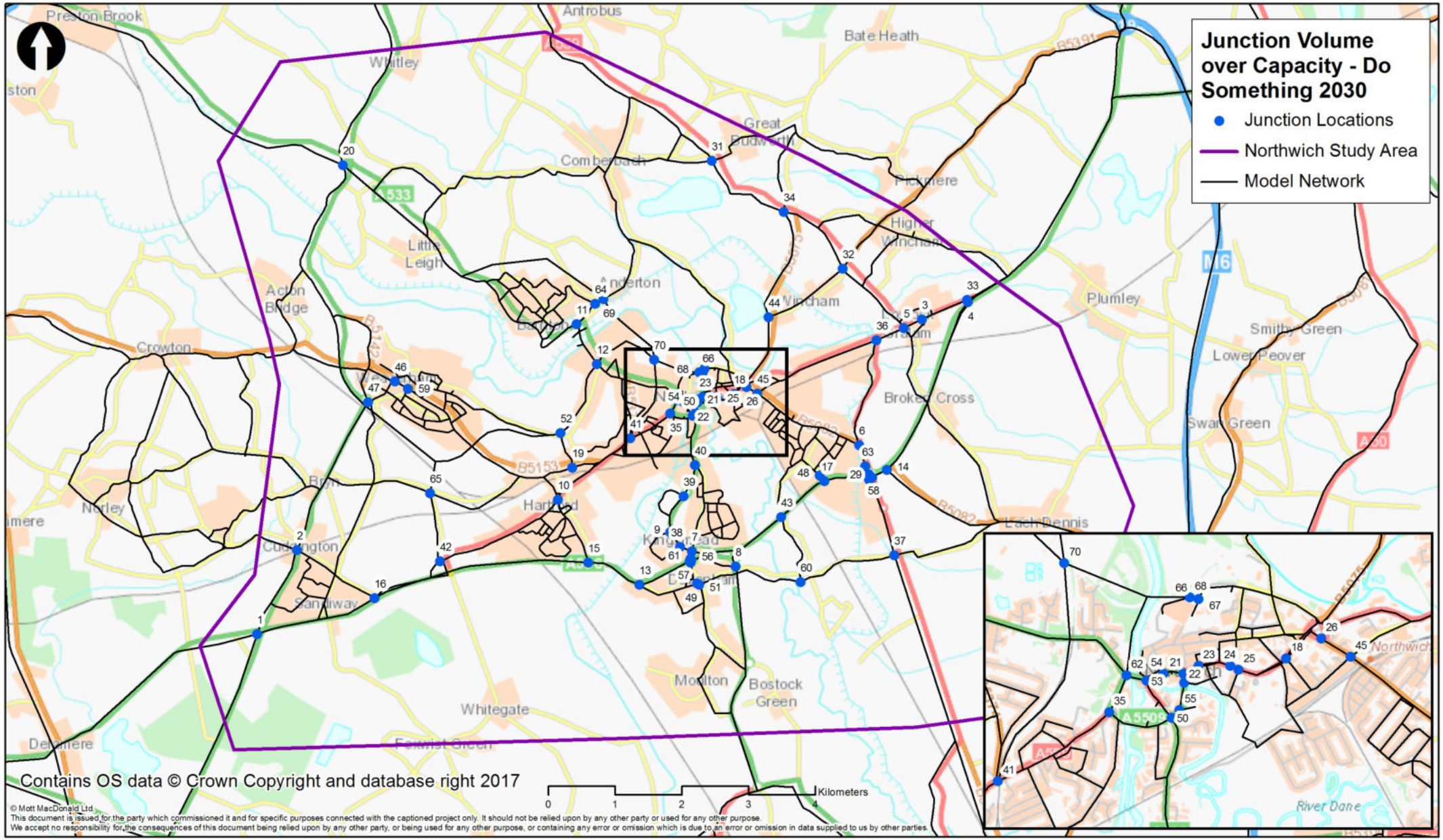
		Base Year		Do Minimum Future Year		All Schemes Future Year		UA07 Future Year		UA09 Future Year		UA08c + TC05 (excluding the southern link) Future Year		UA08a + UA08b + TC05 (excluding the southern link) Future Year		UA09 + UA010 Future Year		Winnington Swing Bridge increased to 1 lane in each direction Future Year	
ID	Location	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
19	B5153 Beach Road / Burrows Hill	Y-85 to 100	N	N	N-80 to 85	N	N	N	N	N	N-80 to 85	N	N-80 to 85	N	N	N	N	N	N-80 to 85
20	A533 Northwich Road / A49 Warrington Road	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100
21	A559 Watling Street / A559 Chester Way / A5509 Chester Way	N	Y-85 to 100	N-80 to 85	Y >100	Y-85 to 100	Y-85 to 100	N-80 to 85	Y-85 to 100	N	Y >100	N	Y >100	N	Y-85 to 100	N	Y >100	N-80 to 85	Y >100
22	A5509 / Brockhurst Street	N	Y >100	N	Y >100	Y-85 to 100	Y-85 to 100	N	Y >100	N	Y >100	N	Y >100	N	Y >100	N	Y >100	N	Y >100
23	A559 Chester Way / Crum Hill	Y-85 to 100	N	Y-85 to 100	N-80 to 85	N	N	Y-85 to 100	N-80 to 85	Y-85 to 100	N-80 to 85	N	N	Y-85 to 100	N-80 to 85	Y-85 to 100	N-80 to 85	Y-85 to 100	N-80 to 85
24	A559 Chester Way / Venables Road	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	N	N	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	N-80 to 85	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100
25	A559 Chester Way / Percy Street	N	Y >100	N	Y >100	N	N	N	Y >100	N	Y >100	N	Y >100	N	Y >100	N	Y >100	N	Y >100
26	Leicester Street Roundabout	N	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y >100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y >100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100
27	A556 / A533	Y >100	N	Y >100	N-80 to 85	N-80 to 85	N-80 to 85	Y >100	N-80 to 85	Y >100	N-80 to 85	Y >100	N-80 to 85	Y >100	N-80 to 85	Y >100	N-80 to 85	Y >100	N-80 to 85
28	A556 / A530	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100
29	A556 / A530	N	Y-85 to 100	Y-85 to 100	Y >100	Y >100	Y >100	Y-85 to 100	Y >100	Y-85 to 100	Y >100	Y-85 to 100	Y >100	Y-85 to 100	Y >100	Y-85 to 100	Y >100	Y-85 to 100	Y >100
30	A556 / A530	Y-85 to 100	N	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100	Y >100
31	A559 Warrington Road / Budworth Lane	N-80 to 85	N	Y-85 to 100	N	N	N	N	N	Y-85 to 100	N	Y-85 to 100	N	N	N	Y-85 to 100	N	Y-85 to 100	N
32	A559 Marston Lane/ Church Street	N	N	N	Y >100	Y >100	Y >100	N	Y >100	N	Y >100	N	Y >100	N	Y >100	N	Y >100	N	Y >100
33	A556 / A559 Manchester Road Gyratory	Y >100	N-80 to 85	Y >100	Y >100	Y-85 to 100	Y-85 to 100	Y >100	Y-85 to 100	Y >100	Y-85 to 100	Y >100	Y >100	Y >100	Y-85 to 100	Y >100	Y-85 to 100	Y >100	Y-85 to 100
34	A559 Marston Lane/ Ollershaw Lane	N	N	Y >100	Y >100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y-85 to 100	Y >100	Y-85 to 100	Y >100	Y-85 to 100	Y-85 to 100	Y >100	Y >100	Y-85 to 100	Y >100
35	A559 Castle Street / A5509 Chester Way	N	N-80 to 85	N	Y-85 to 100	N	N	N	Y-85 to 100	N	Y-85 to 100	N	Y-85 to 100	N-80 to 85	Y-85 to 100	N	Y-85 to 100	N	Y-85 to 100
36	A559 Manchester Road/ A530 Griffith Road	N	N	N	Y-85 to 100	Y-85 to 100	Y-85 to 100	N	Y-85 to 100	N	Y-85 to 100	N	Y-85 to 100	N	Y >100	N	Y-85 to 100	N	Y-85 to 100
37	A530 Roman Road/ Davenham Road	N	N	N	Y >100	Y >100	Y >100	N	Y >100	N	Y >100	N	Y >100	N	Y >100	N	Y >100	N	Y >100

		Base Year		Do Minimum Future Year		All Schemes Future Year		UA07 Future Year		UA09 Future Year		UA08c + TC05 (excluding the southern link) Future Year		UA08a + UA08b + TC05 (excluding the southern link) Future Year		UA09 + UA010 Future Year		Winnington Swing Bridge increased to 1 lane in each direction Future Year	
ID	Location	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
38	A533 Kingsmead/ Regency Way	N	Y >100	N	Y - 85 to 100	Y - 85 to 100	Y - 85 to 100	N	N - 80 to 85	N	Y - 85 to 100	N	Y - 85 to 100	N	N - 80 to 85	N	Y - 85 to 100	N	Y - 85 to 100
39	A533 Kingsmead/ St Georges way Gyratory	N	N	Y - 85 to 100	N	N	N	Y - 85 to 100	N	Y - 85 to 100	N	Y - 85 to 100	N	N	N	Y - 85 to 100	N	Y - 85 to 100	N
40	A533 Kingsmead / London Road	N - 80 to 85	N	Y - 85 to 100	N	N	N	Y - 85 to 100	N	Y - 85 to 100	N	Y - 85 to 100	N	N	N	Y - 85 to 100	N	Y - 85 to 100	N
41	A559 Chester Road / B5374 Moss Road	N	N - 80 to 85	N	Y - 85 to 100	Y >100	Y >100	N	Y - 85 to 100	N	Y - 85 to 100	N	Y - 85 to 100	N	Y - 85 to 100	N	Y - 85 to 100	N	Y - 85 to 100
42	A559 Chester Road/ Littledales Lane	N	N	N	Y - 85 to 100	Y >100	Y >100	N	Y - 85 to 100	N	Y - 85 to 100	N	Y - 85 to 100	N	Y - 85 to 100	N	Y >100	N	Y - 85 to 100
43	A556 / Shipbrook Road	N	N	Y - 85 to 100	Y >100	Y >100	Y >100	Y - 85 to 100	Y >100	Y - 85 to 100	Y >100	Y - 85 to 100	Y >100	Y - 85 to 100	Y >100	Y - 85 to 100	Y >100	Y - 85 to 100	Y >100
44	B5075 New Warrington Road/ Chapel Street	N	N	Y - 85 to 100	Y >100	Y >100	Y >100	N - 80 to 85	Y >100	Y - 85 to 100	Y >100	Y - 85 to 100	Y >100	N - 80 to 85	Y >100	Y - 85 to 100	Y >100	N - 80 to 85	Y >100
45	B5082 Station Road / Manchester Road / Middlewich Road / Victoria Road	N	N	Y - 85 to 100	N	Y - 85 to 100	Y - 85 to 100	Y - 85 to 100	N	Y - 85 to 100	N	Y - 85 to 100	N	Y - 85 to 100	N	Y - 85 to 100	N	Y - 85 to 100	N
46	B5153 High Street/ Church Street	N	N	N	Y - 85 to 100	N	N	N	Y - 85 to 100	N	N	N	Y - 85 to 100	N	Y - 85 to 100	N	N	N	Y - 85 to 100
47	B5144 West Road/ Forest Street	N	N	Y - 85 to 100	N	N	N	Y - 85 to 100	N	N	N	Y - 85 to 100	N	Y - 85 to 100	N	N	N	Y - 85 to 100	N
48	Gadbrook Road/ East Avenue	N	N	Y >100	N	N	N	Y >100	N	Y >100	N	Y >100	N	Y >100	N	N	N	Y >100	N
49	London Road/ Hartford Road	N	N	Y - 85 to 100	Y - 85 to 100	Y - 85 to 100	Y - 85 to 100	Y - 85 to 100	Y - 85 to 100	Y - 85 to 100	Y - 85 to 100	Y - 85 to 100	Y - 85 to 100	Y - 85 to 100	Y - 85 to 100	Y - 85 to 100	Y - 85 to 100	Y - 85 to 100	Y - 85 to 100
50	A5509 Chester Way / A533 London Road	N	N - 80 to 85	Y - 85 to 100	Y - 85 to 100	Y - 85 to 100	Y - 85 to 100	N - 80 to 85	Y - 85 to 100	N - 80 to 85	Y - 85 to 100	N - 80 to 85	Y - 85 to 100	N - 80 to 85	Y - 85 to 100	Y - 85 to 100	Y - 85 to 100	N	Y - 85 to 100
51	Church Street / London road	N	N	N	Y >100	Y >100	Y >100	N	Y >100	N	Y >100	N	Y >100	N	Y >100	N	Y >100	N	Y >100
52	Winnington Avenue/ Burrows Hill	N	N	N	Y - 85 to 100	N	N	N	Y - 85 to 100	N - 80 to 85	Y >100	N	N	N	Y - 85 to 100	Y - 85 to 100	Y >100	N	Y >100
53	A559 Town Bridge / A533 London Road	N	N	Y - 85 to 100	Y - 85 to 100	N	N	Y - 85 to 100	Y - 85 to 100	Y - 85 to 100	Y - 85 to 100	Y - 85 to 100	N	Y - 85 to 100	Y - 85 to 100	Y - 85 to 100	Y - 85 to 100	Y - 85 to 100	Y - 85 to 100
54	A533 Watling Street/ Apple Market Street	N	N - 80 to 85	Y >100	Y >100	N	N	Y - 85 to 100	Y >100	Y >100	Y >100	N	N	Y - 85 to 100	Y >100	Y >100	Y >100	Y >100	Y >100
55	A5509 Chester Way/ A533 London Road	N	N	Y - 85 to	Y >100	N	N	Y - 85 to	Y >100	Y - 85 to	Y >100	N	Y >100	Y - 85 to	Y >100	Y - 85 to	Y >100	N - 80	Y >100

		Base Year		Do Minimum Future Year		All Schemes Future Year		UA07 Future Year		UA09 Future Year		UA08c + TC05 (excluding the southern link) Future Year		UA08a + UA08b + TC05 (excluding the southern link) Future Year		UA09 + UA010 Future Year		Winnington Swing Bridge increased to 1 lane in each direction Future Year	
ID	Location	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
				100				100		100				100		100		to 85	
56	A556/ A533 Kingsmead Gyratory	N	N	Y >100	N	N	N	Y >100	N	Y >100	N	Y >100	N	Y >100	N	Y >100	N	Y >100	N
57	A556/ A533 Kingsmead Gyratory	N	N	Y >100	N - 80 to 85	N - 80 to 85	N - 80 to 85	Y >100	N - 80 to 85	Y >100	N - 80 to 85	Y - 85 to 100	N - 80 to 85	Y >100	N - 80 to 85	Y >100	N - 80 to 85	Y >100	N - 80 to 85
58	A556/ A530 King Street Gyratory	N - 80 to 85	N - 80 to 85	Y >100	Y - 85 to 100	Y - 85 to 100	Y - 85 to 100	Y >100	Y - 85 to 100	Y >100	Y - 85 to 100	Y >100	Y - 85 to 100	Y >100	Y - 85 to 100	Y - 85 to 100	Y - 85 to 100	Y - 85 to 100	Y - 85 to 100
59	B5153 High Street/ Withen's Lane	N	N	Y - 85 to 100	N	N	N	Y - 85 to 100	N	N	N	Y - 85 to 100	N	Y - 85 to 100	N	N	N	Y - 85 to 100	N
60	Shipbrook Road / Davenham Road / Manor Lane	N	N	Y - 85 to 100	Y - 85 to 100	Y - 85 to 100	Y - 85 to 100	Y - 85 to 100	Y - 85 to 100	Y - 85 to 100	Y - 85 to 100	Y - 85 to 100	Y - 85 to 100	Y - 85 to 100	Y - 85 to 100	Y - 85 to 100	Y - 85 to 100	Y - 85 to 100	Y - 85 to 100
61	A556 / A533	N	N	Y >100	N	N	N	N	N	Y >100	N	Y >100	N	Y >100	N	N	N	Y >100	N
62	A559 Castle Street / A533 Winnington Street	N	N	N	N	Y - 85 to 100	Y - 85 to 100	N	N	N	N	N	N	N	N	N	N	N	N
63	A5330 Kings Street/ Cookes Lane	N	N	N	N - 80 to 85	Y - 85 to 100	Y - 85 to 100	N	Y - 85 to 100	N	N - 80 to 85	N	N - 80 to 85	N	Y - 85 to 100	N	N - 80 to 85	N	N
64	Soot Hill / Hough Lane	N	N	N	N	Y - 85 to 100	Y - 85 to 100	N	N	N	N	N	N	N	Y - 85 to 100	N	N	N	N
65	Hodge Lane / Little Dales Lane	N	N	N	N	Y - 85 to 100	Y - 85 to 100	N	N	N	N	N	N	N	N	N	Y - 85 to 100	N	N
66	Leicester Street	N	N	N	N	Y >100	Y >100	N	N	N	N	N	N	N	N	N	N	N	N
67	Leicester Street	N	N	N	N	Y >100	Y >100	N	N	N	N	N	N	N	N	N	N	N	N
68	Leicester Street	N	N	N	N	N - 80 to 85	N - 80 to 85	N	N	N	N	N	N	N	N	N	N	N	N
69	Scheme UA08a	-	-	-	-	Y >100	Y >100	N	N	N	N	N	N	N	Y - 85 to 100	N	N	N	N
70	Scheme UA08	-	-	-	-	-	-	-	-	-	-	N	N	N	N	-	-	-	-

* Key

- Light Green Background – v/c <80%
- Dark Green Background – 80% < v/c < 85%
- Yellow Background – 85% < v/c < 100%
- Red Background – v/c > 100%



MOTT MACDONALD
Mott MacDonald
Ground Floor
Royal Liver Building
Pier Head
L3 1JH
United Kingdom
T +44 (0)151 482 9910
W mottmac.com

Client
Cheshire West and Chester

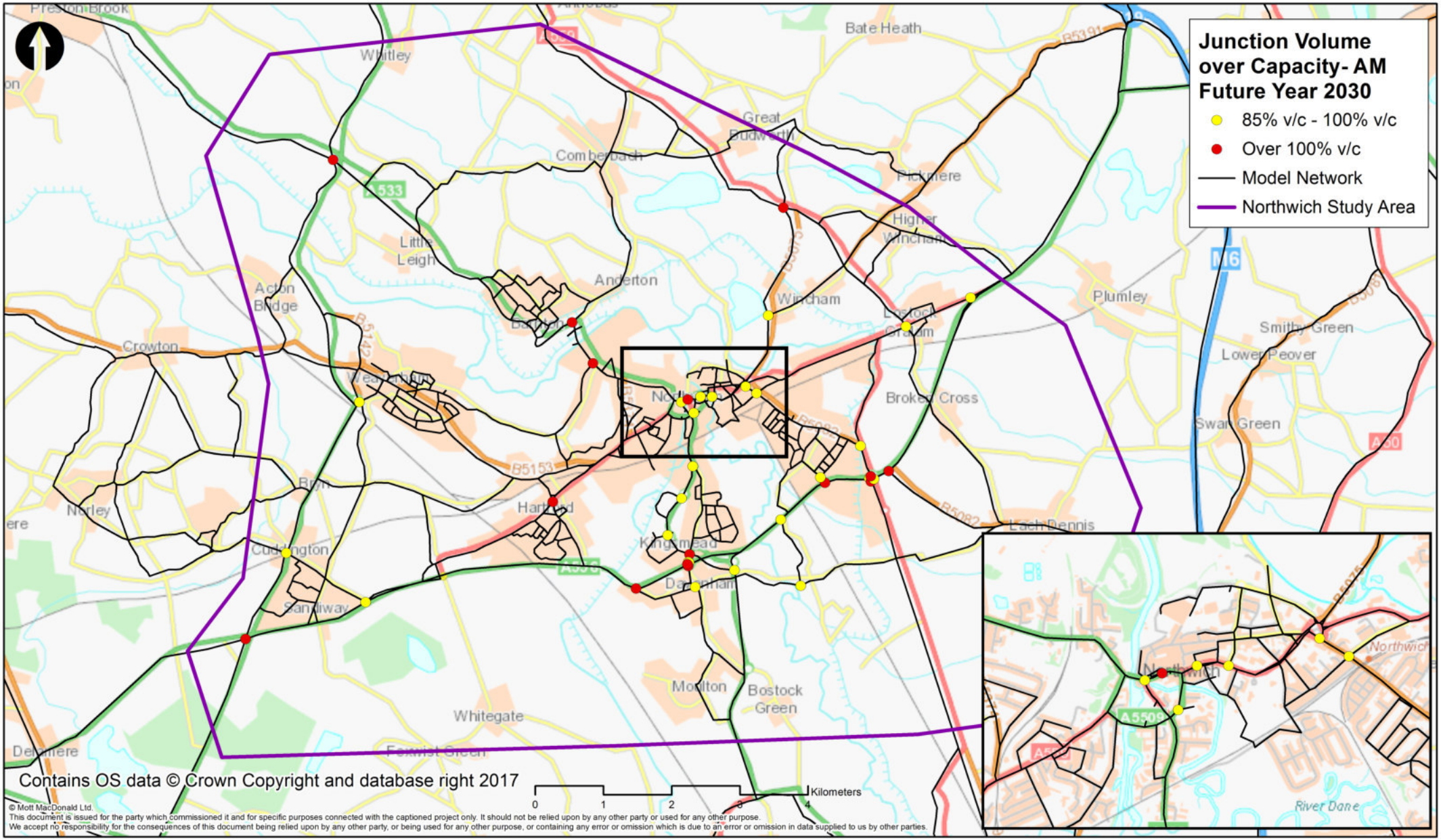
Title
Junction Locations

Drawn	P Ryall	
Checked	S Pierce	
Approved	T Millward	

Project Number
383472

Scale at A4
1:76,607

P:\Liverpool\TD\MISData\Modelling\CWaC\01 NorthwichModel\03 ModelApplication\01 NorthwichTransportStrategy_383472\3 Project\2. Calculations\99 GIS\03 Workspaces\Do Something GIS\NWDSB002\06 JunctionLocations.mxd



MOTT MACDONALD

Mott MacDonald
Ground Floor
Royal Liver Building
Pier Head
L3 1JH
United Kingdom

T +44 (0)151 482 9910
W mottmac.com

Client
Cheshire West and Chester

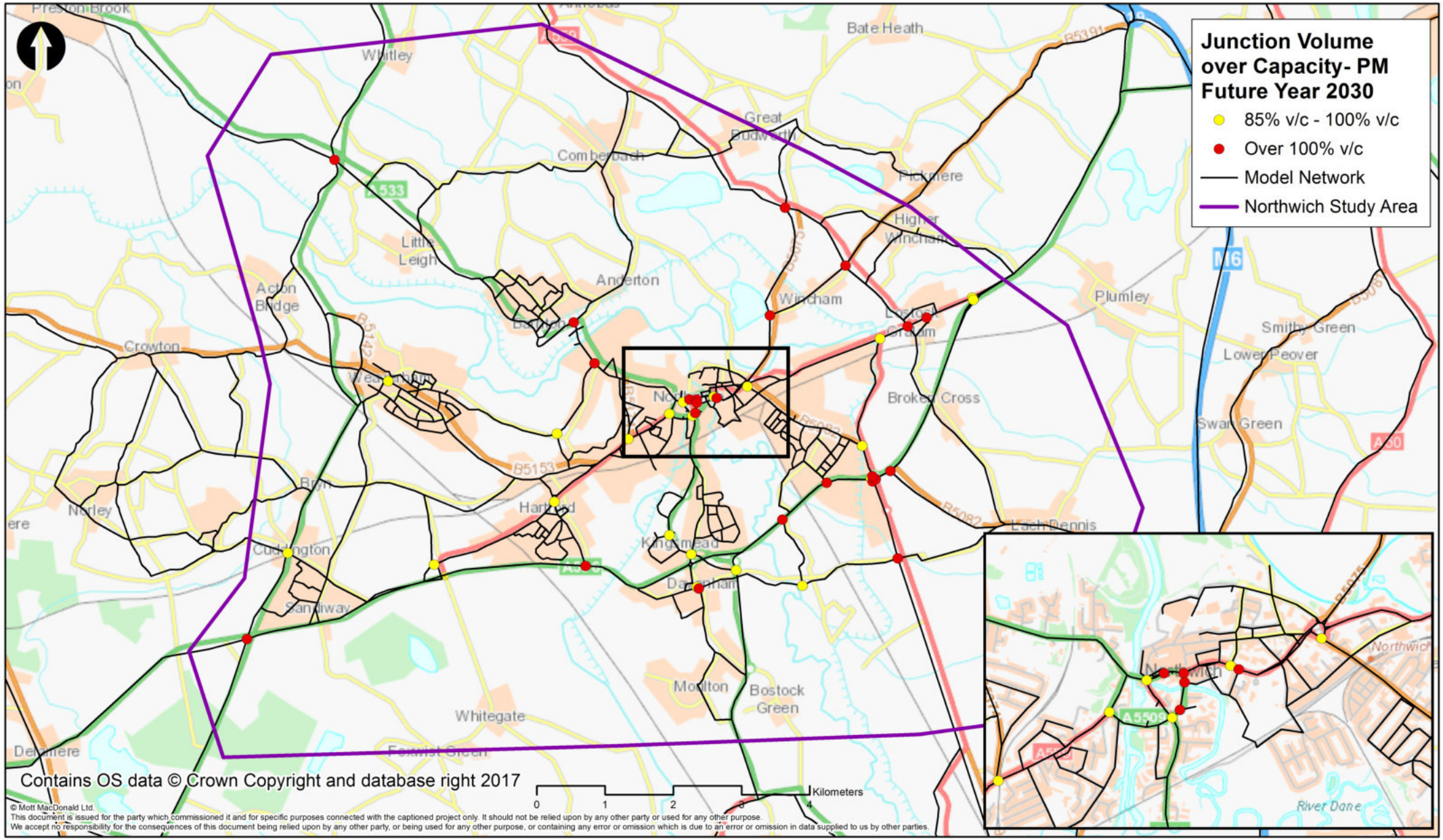
Title
Junction Volume Over Capactiy based on maximum turn Volume over Capacity

Drawn	M Potter	
Checked	S Pierce	
Approved	T Millward	

Project Number
383472

Scale at A4
1:75,000

P:\Liverpool\TD\MISData\Modelling\CWaC\01 NorthwichModel\03 ModelApplication\01 NorthwichTransportStrategy_383472\3 Project\2. Calculations\99 GIS\03 Workspaces\06 Junction Capactiy Over85%_Future_B009_v2.mxd



MOTT MACDONALD

Mott MacDonald
Ground Floor
Royal Liver Building
Pier Head
L3 1JH
United Kingdom

T +44 (0)151 482 9910
W mottmac.com

Client
Cheshire West and Chester

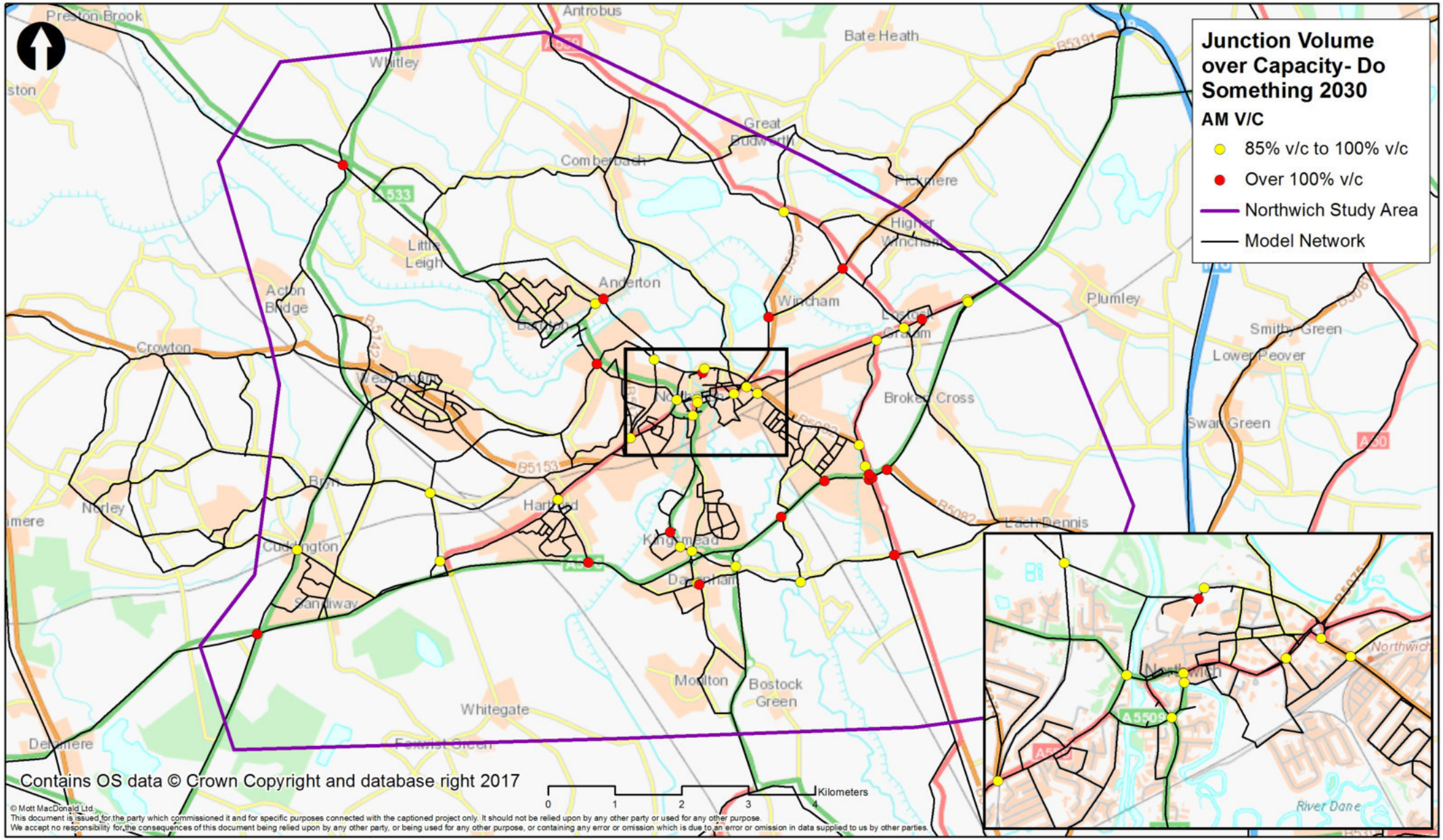
Title
Junction Volume Over Capactiy based on maximum turn Volume over Capacity

Drawn	M Potter	
Checked	S Pierce	
Approved	T Millward	

Project Number
383472

Scale at A4
1:75,000

P:\Liverpool\TD\MISData\Modelling\CWaC\01 NorthwichModel\03 ModelApplication\01 NorthwichTransportStrategy_383472\3 Project\2. Calculations\99 GIS\03 Workspaces\06 Junction Capactiy Over85%_Future_B009_v2.mxd



MOTT MACDONALD

Mott MacDonald
Ground Floor
Royal Liver Building
Pier Head
L3 1JH
United Kingdom

T +44 (0)151 482 9910
W mottmac.com

Client
Cheshire West and Chester

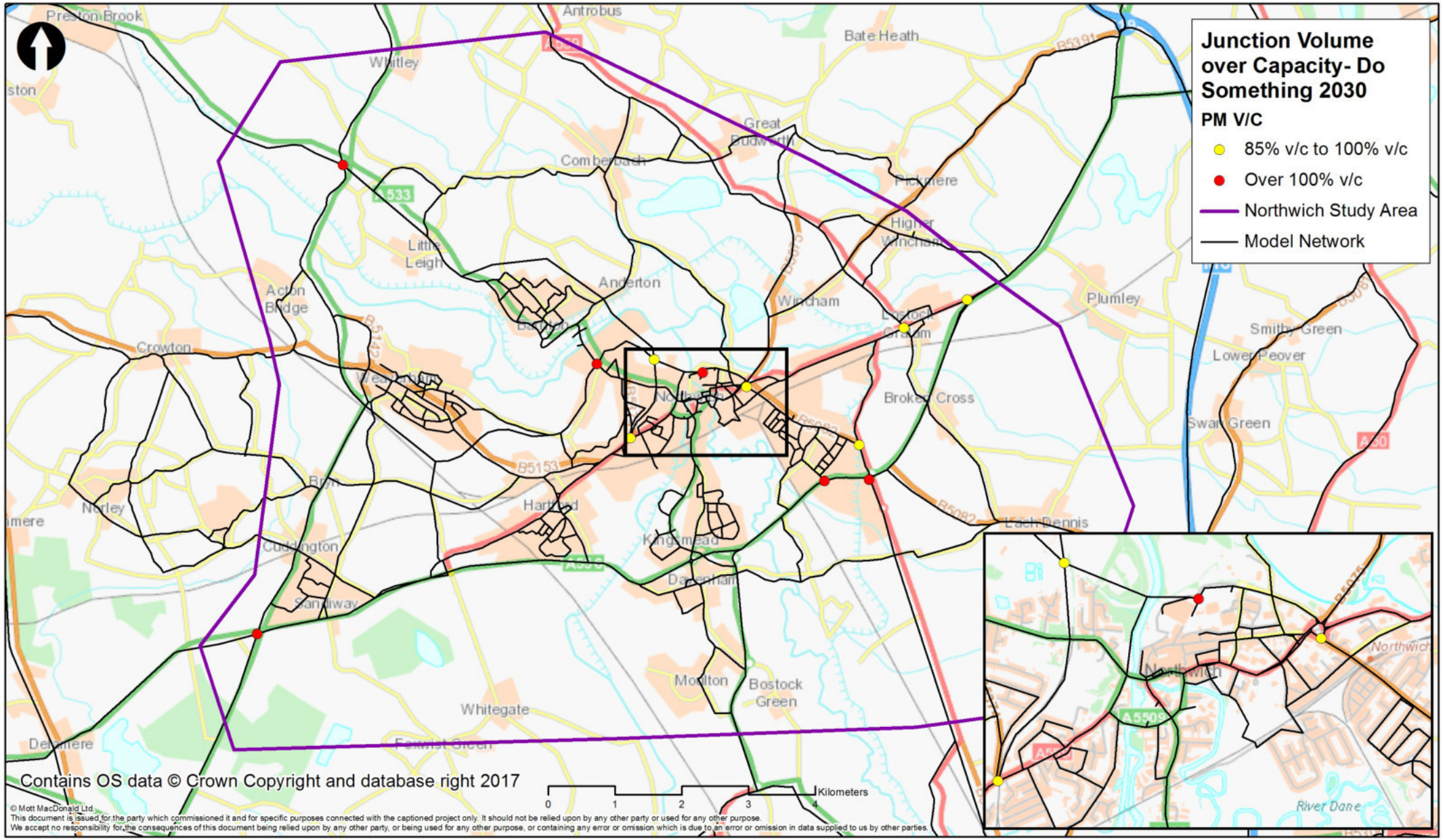
Title
Junction Volume Over Capactiy based on maximum turn Volume over Capacity

Drawn	P Ryall	
Checked	S Pierce	
Approved	T Millward	

Project Number
383472

Scale at A4
1:76,607

P:\Liverpool\TD\MISData\Modelling\CWaC\01 NorthwichModel\03 ModelApplication\01 NorthwichTransportStrategy_383472\3 Project\2. Calculations\99 GIS\03 Workspaces\Do Something GIS\NWDSB002\06 Junction Capactity Over85%_DoSomething_DSB001_



MOTT MACDONALD

Mott MacDonald
Ground Floor
Royal Liver Building
Pier Head
L3 1JH
United Kingdom

T +44 (0)151 482 9910
W mottmac.com

Client
Cheshire West and Chester

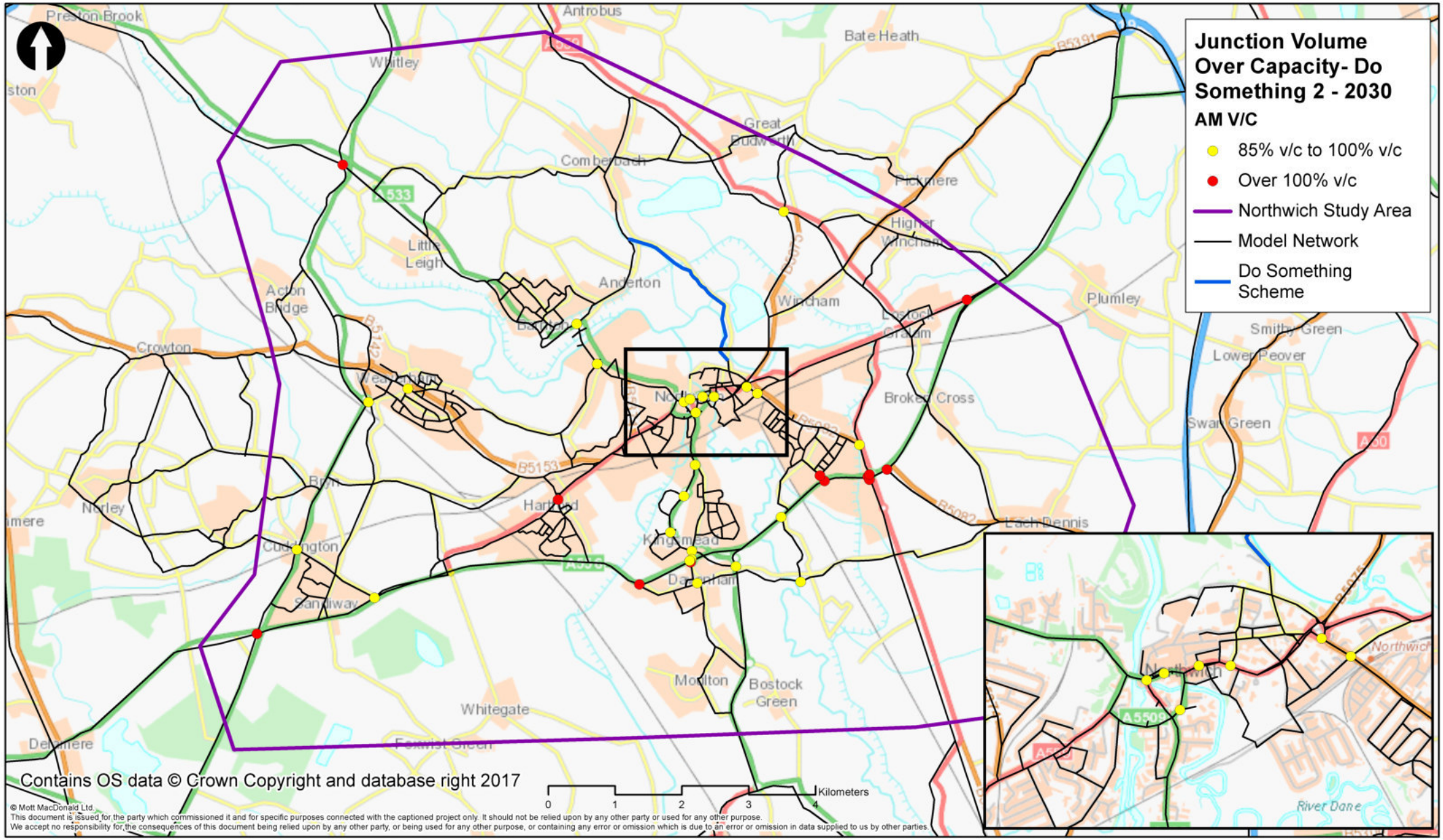
Title
Junction Volume Over Capactiy based on maximum turn Volume over Capacity

Drawn	P Ryall	
Checked	S Pierce	
Approved	T Millward	

Project Number
383472

Scale at A4
1:76,607

P:\Liverpool\TD\MISData\Modelling\CWaC\01 NorthwichModel\03 ModelApplication\01 NorthwichTransportStrategy_383472\3 Project\2. Calculations\99 GIS\03 Workspaces\Do Something GIS\NWDSB002\06 Junction Capactity Over85%_DoSomething_DSB001_



MOTT MACDONALD
Mott MacDonald
Ground Floor
Royal Liver Building
Pier Head
L3 1JH
United Kingdom
T +44 (0)151 482 9910
W mottmac.com

Client
Cheshire West and Chester

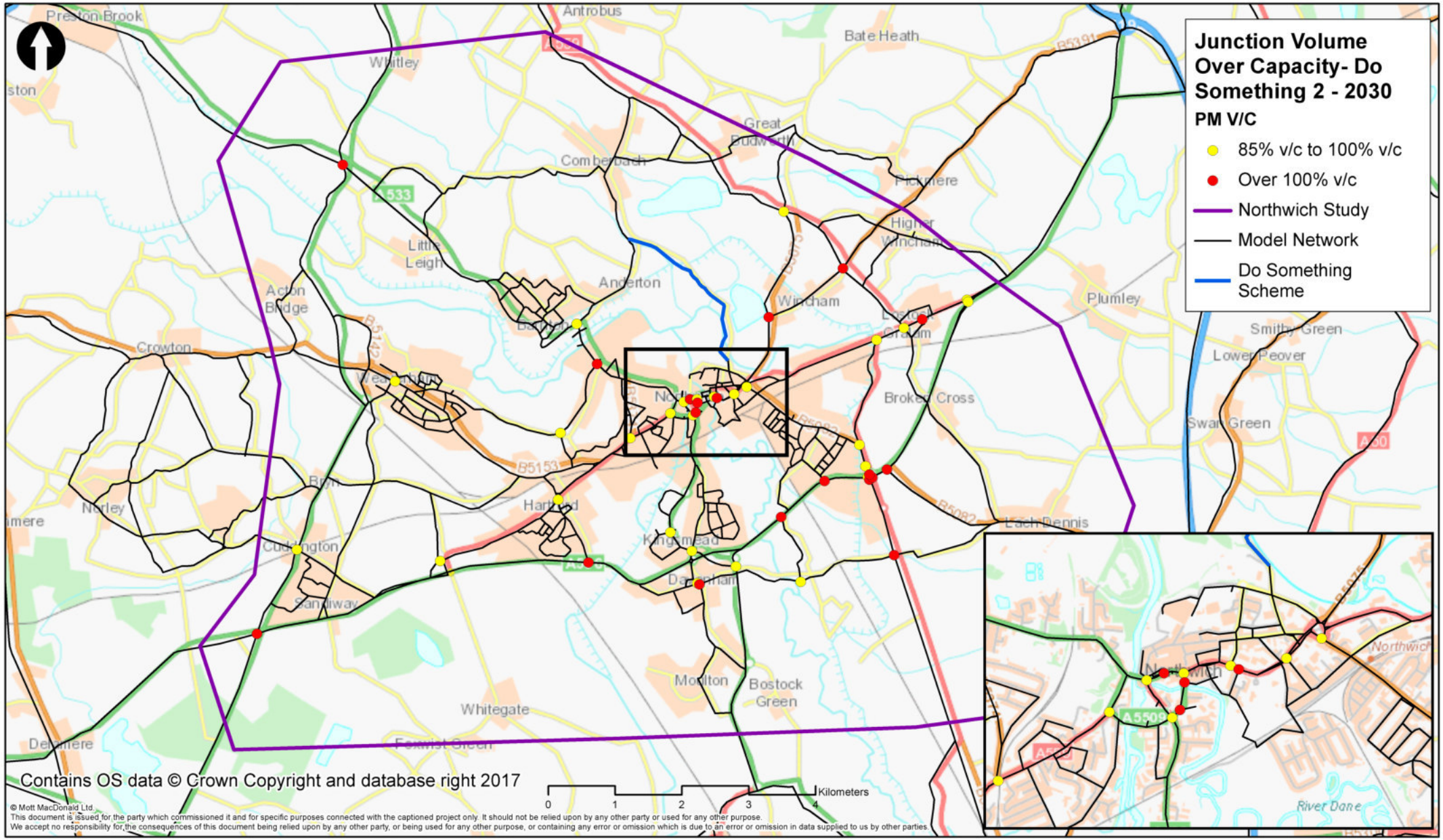
Title
Junction Volume Over Capacity Based On Maximum Turn Volume Over Capacity

Drawn	P Ryall	
Checked	S Pierce	
Approved	T Millward	

Project Number
383472

Scale at A4
1:76,607

P:\Liverpool\ITD\MISData\Modelling\CWaC\01 NorthwichModel\03 ModelApplication\01 NorthwichTransportStrategy_383472\3 Project\2. Calculations\99 GIS\03 Workspaces\Do Something GIS\NWDS2B003\06 Junction Capactity Over85%_DoSomething_DS2B00



MOTT MACDONALD
Mott MacDonald
Ground Floor
Royal Liver Building
Pier Head
L3 1JH
United Kingdom
T +44 (0)151 482 9910
W mottmac.com

Client
Cheshire West and Chester

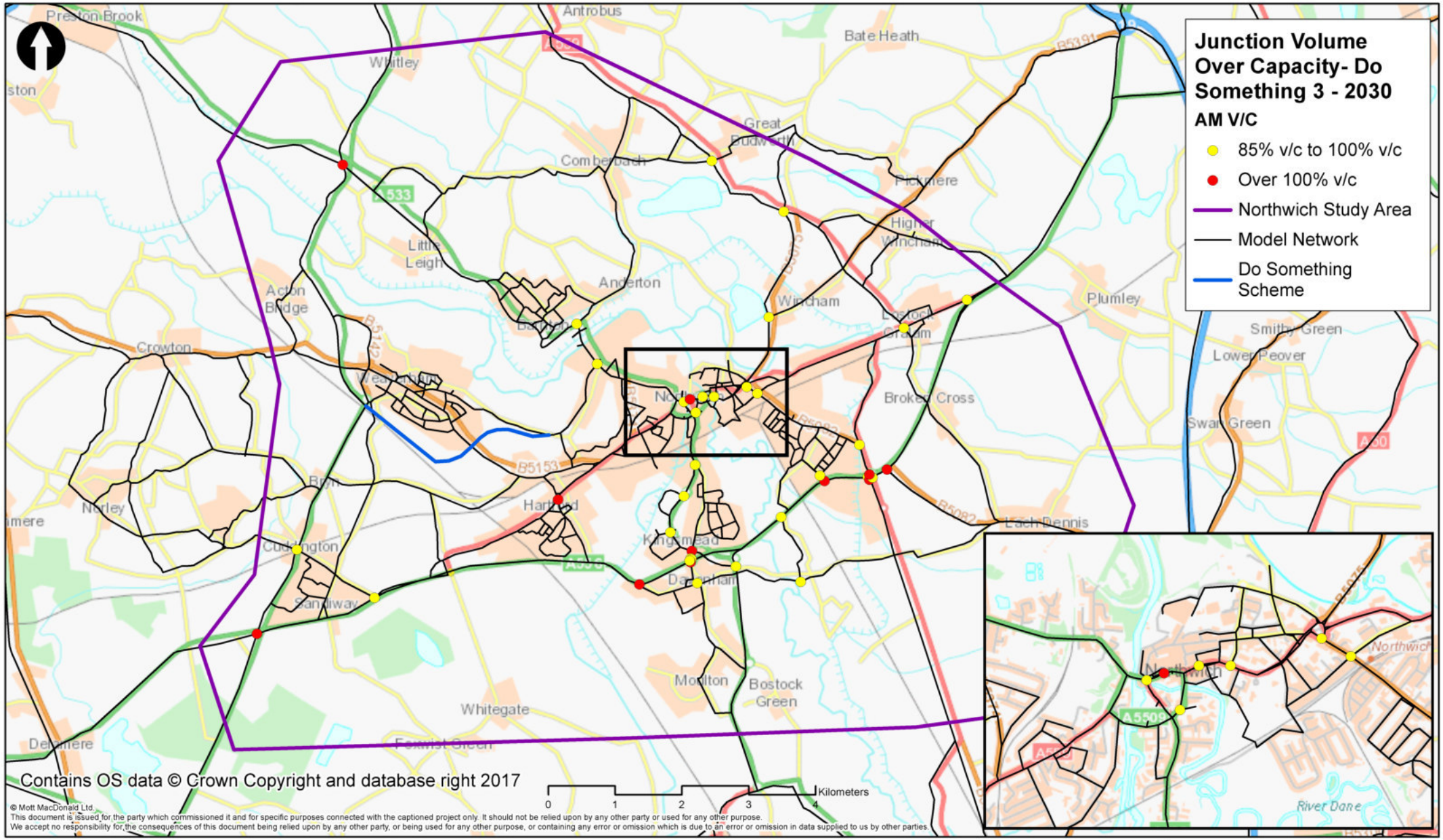
Title
Junction Volume Over Capacity Based On Maximum Turn Volume Over Capacity

Drawn	P Ryall	
Checked	S Pierce	
Approved	T Millward	

Project Number
383472

Scale at A4
1:76,607

P:\Liverpool\ITD\MISData\Modelling\CWaC\01 NorthwichModel\03 ModelApplication\01 NorthwichTransportStrategy_383472\3 Project\2. Calculations\99 GIS\03 Workspaces\Do Something GIS\NWDS2B003\06 Junction Capactity Over85%_DoSomething_DS2B00



MOTT MACDONALD

Mott MacDonald
Ground Floor
Royal Liver Building
Pier Head
L3 1JH
United Kingdom

T +44 (0)151 482 9910
W mottmac.com

Client
Cheshire West and Chester

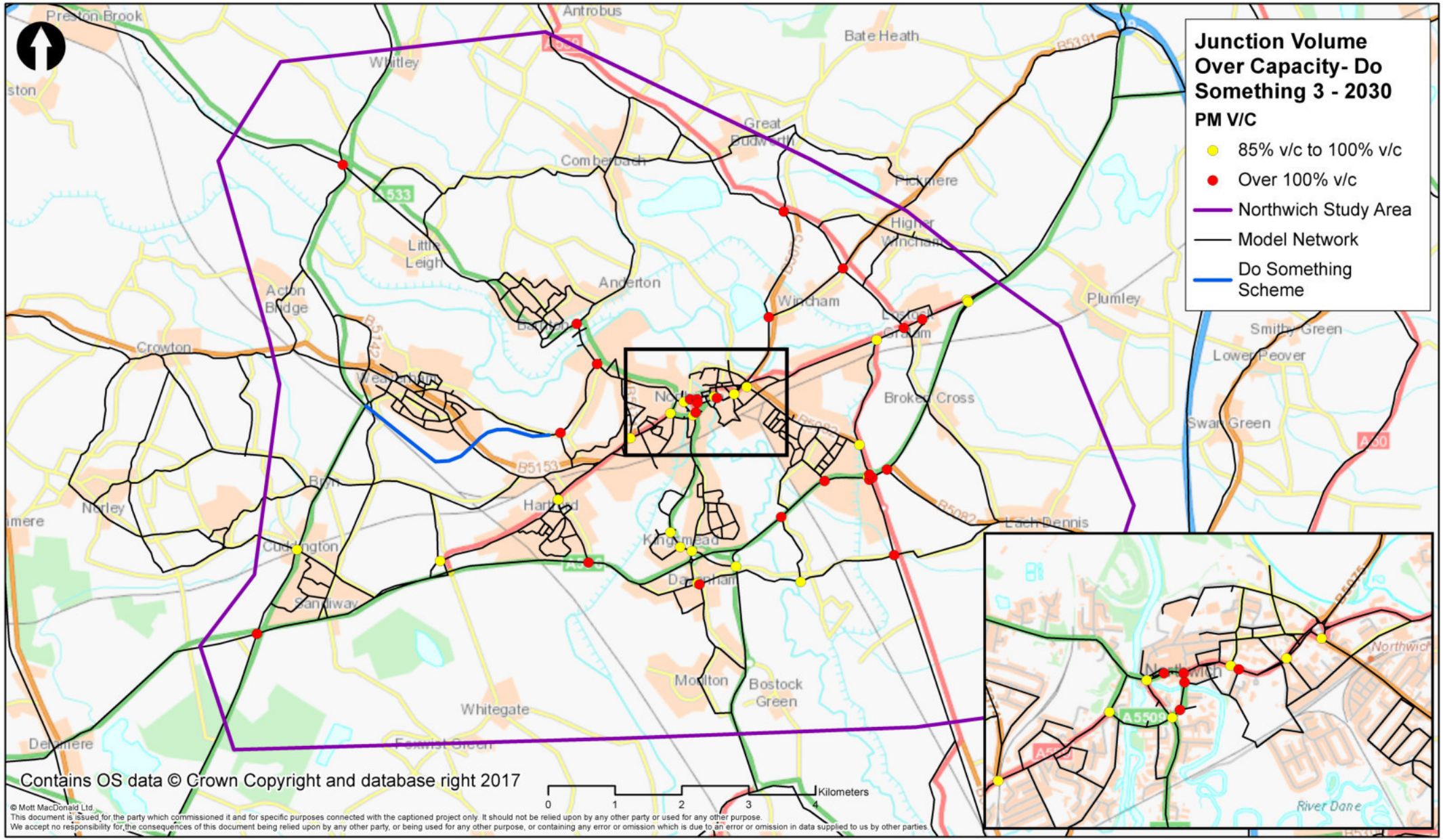
Title
Junction Volume Over Capacity Based On Maximum Turn Volume Over Capacity

Drawn	P Ryall	
Checked	S Pierce	
Approved	T Millward	

Project Number
383472

Scale at A4
1:76,607

P:\Liverpool\ITD\MISData\Modelling\CWaC\01 NorthwichModel\03 ModelApplication\01 NorthwichTransportStrategy_383472\3 Project\2. Calculations\99 GIS\03 Workspaces\Do Something GIS\NWDS3B004\06 Junction Capactity Over85%_DoSomething_DS3B004



MOTT MACDONALD

Mott MacDonald
Ground Floor
Royal Liver Building
Pier Head
L3 1JH
United Kingdom

T +44 (0)151 482 9910
W mottmac.com

Client
Cheshire West and Chester

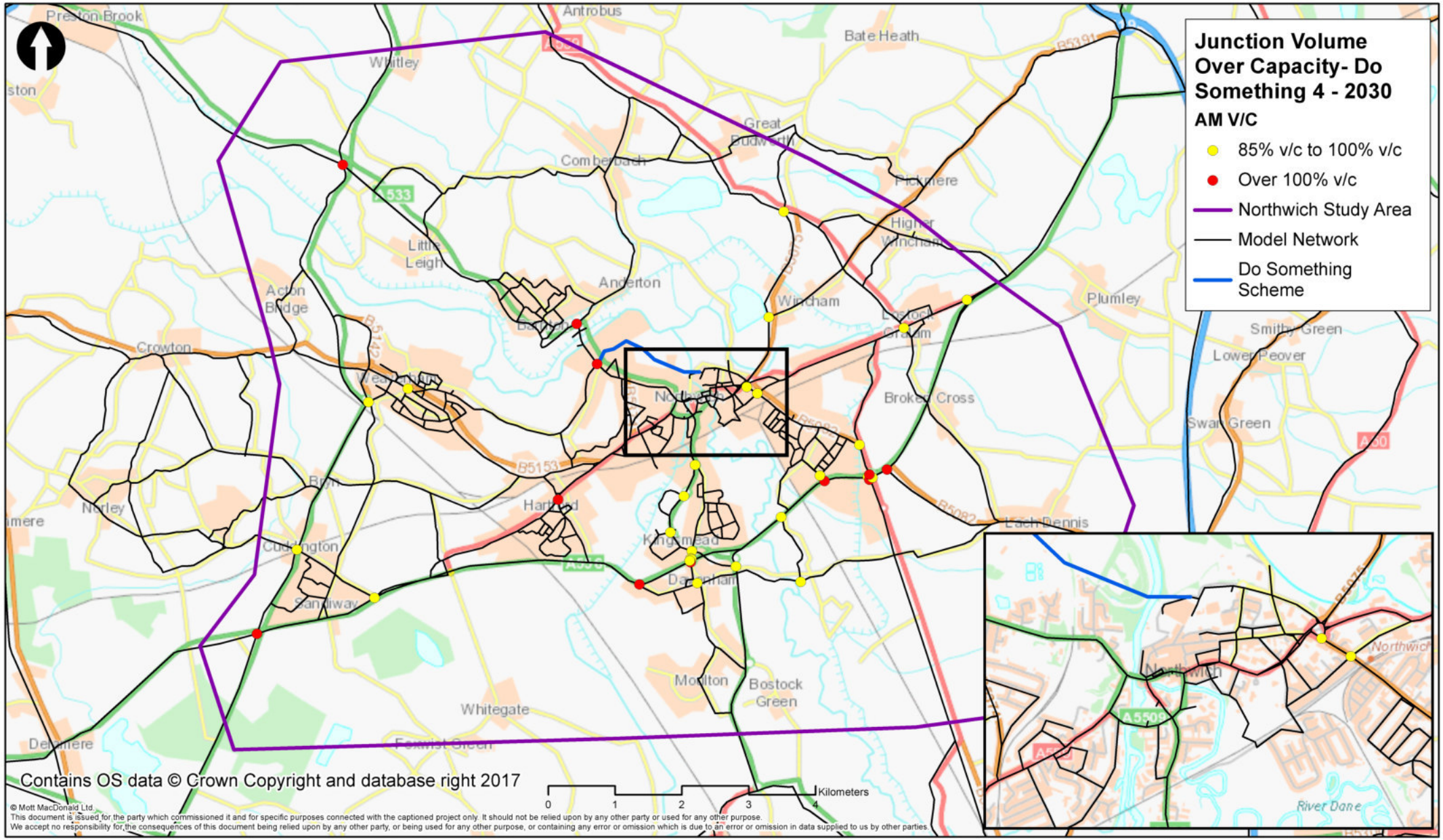
Title
Junction Volume Over Capacity Based On Maximum Turn Volume Over Capacity

Drawn	P Ryall	
Checked	S Pierce	
Approved	T Millward	

Project Number
383472

Scale at A4
1:76,607

P:\Liverpool\ITD\MISData\Modelling\CWaC\01 NorthwichModel\03 ModelApplication\01 NorthwichTransportStrategy_383472\3 Project\2. Calculations\99 GIS\03 Workspaces\Do Something GIS\NWDS3B004\06 Junction Capactity Over85%_DoSomething_DS3B004



MOTT MACDONALD
Mott MacDonald
Ground Floor
Royal Liver Building
Pier Head
L3 1JH
United Kingdom
T +44 (0)151 482 9910
W mottmac.com

Client
Cheshire West and Chester

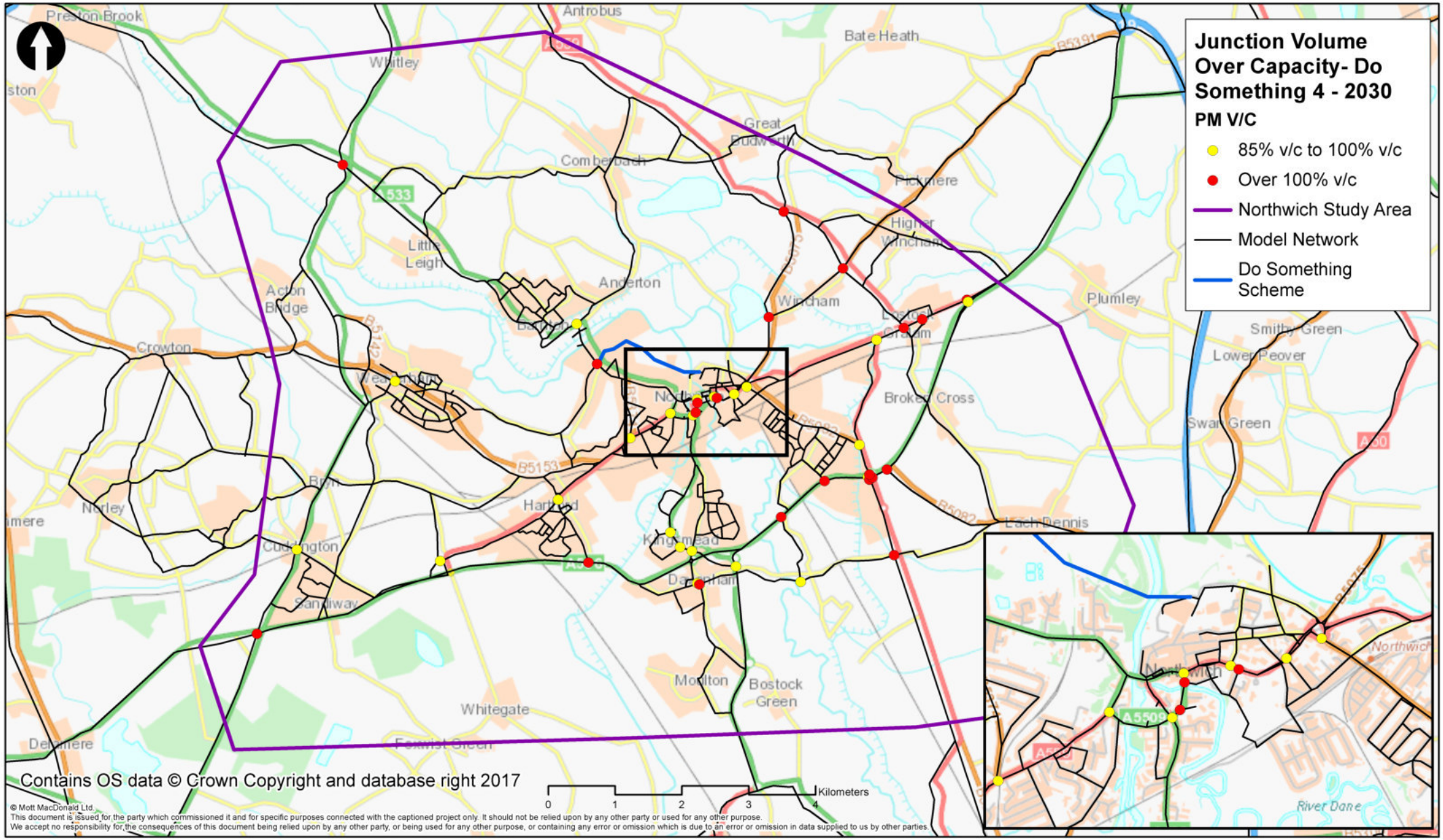
Title
Junction Volume Over Capacity Based On Maximum Turn Volume Over Capacity

Drawn	P Ryall	
Checked	S Pierce	
Approved	T Millward	

Project Number
383472

Scale at A4
1:76,607

P:\Liverpool\ITD\MISData\Modelling\CWaC\01 NorthwichModel\03 ModelApplication\01 NorthwichTransportStrategy_383472\3 Project\2. Calculations\99 GIS\03 Workspaces\Do Something GIS\NWDS4B005\06 Junction Capactity Over85%_DoSomething_DS4B00



MOTT MACDONALD
Mott MacDonald
Ground Floor
Royal Liver Building
Pier Head
L3 1JH
United Kingdom
T +44 (0)151 482 9910
W mottmac.com

Client
Cheshire West and Chester

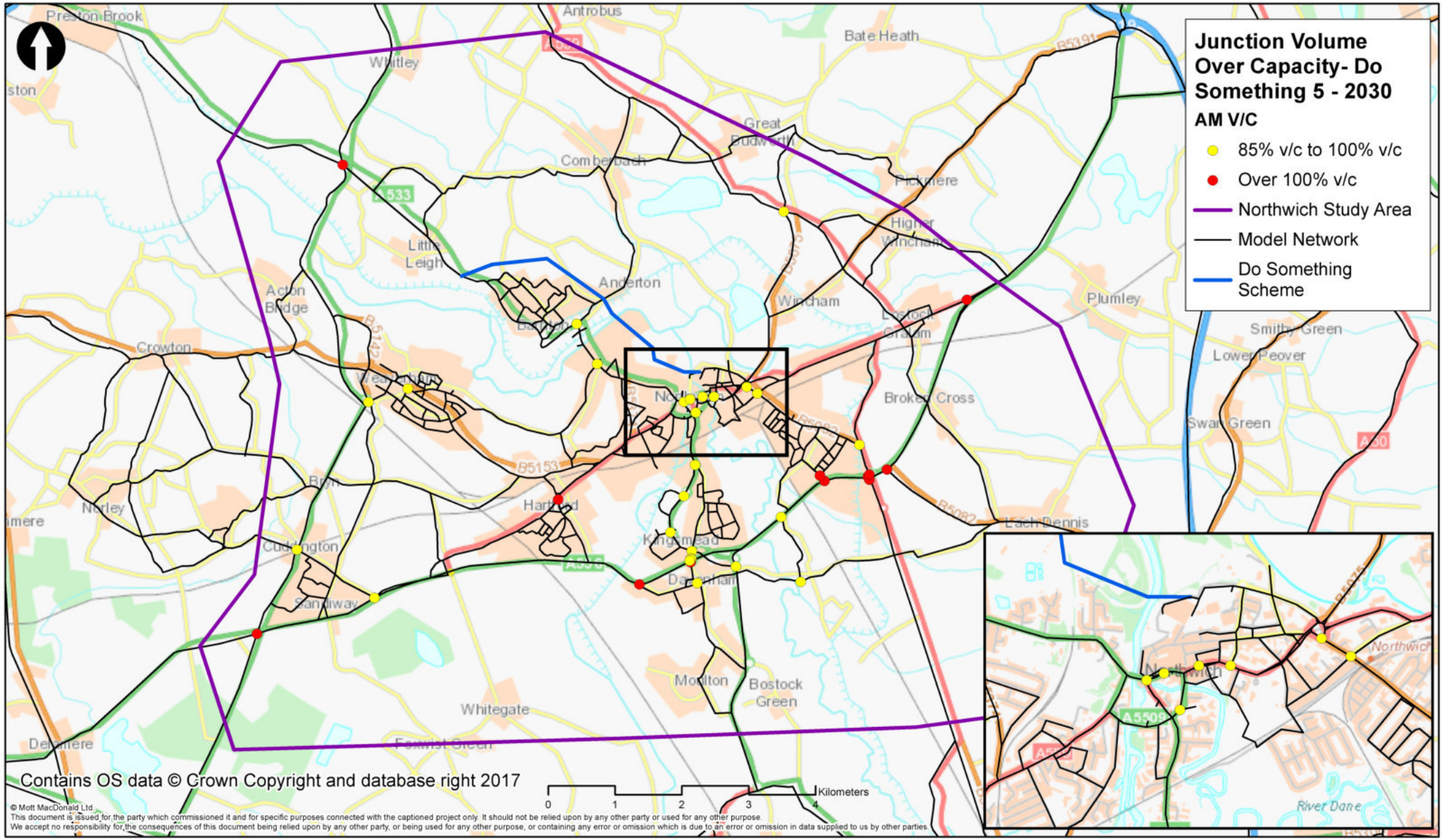
Title
Junction Volume Over Capacity Based On Maximum Turn Volume Over Capacity

Drawn	P Ryall	
Checked	S Pierce	
Approved	T Millward	

Project Number
383472

Scale at A4
1:76,607

P:\Liverpool\ITD\MISData\Modelling\CWaC\01 NorthwichModel\03 ModelApplication\01 NorthwichTransportStrategy_383472\3 Project\2. Calculations\99 GIS\03 Workspaces\Do Something GIS\NWDS4B005\06 Junction Capactity Over85%_DoSomething_DS4B00



MOTT MACDONALD

Mott MacDonald
Ground Floor
Royal Liver Building
Pier Head
L3 1JH
United Kingdom

T +44 (0)151 482 9910
W mottmac.com

Client
Cheshire West and Chester

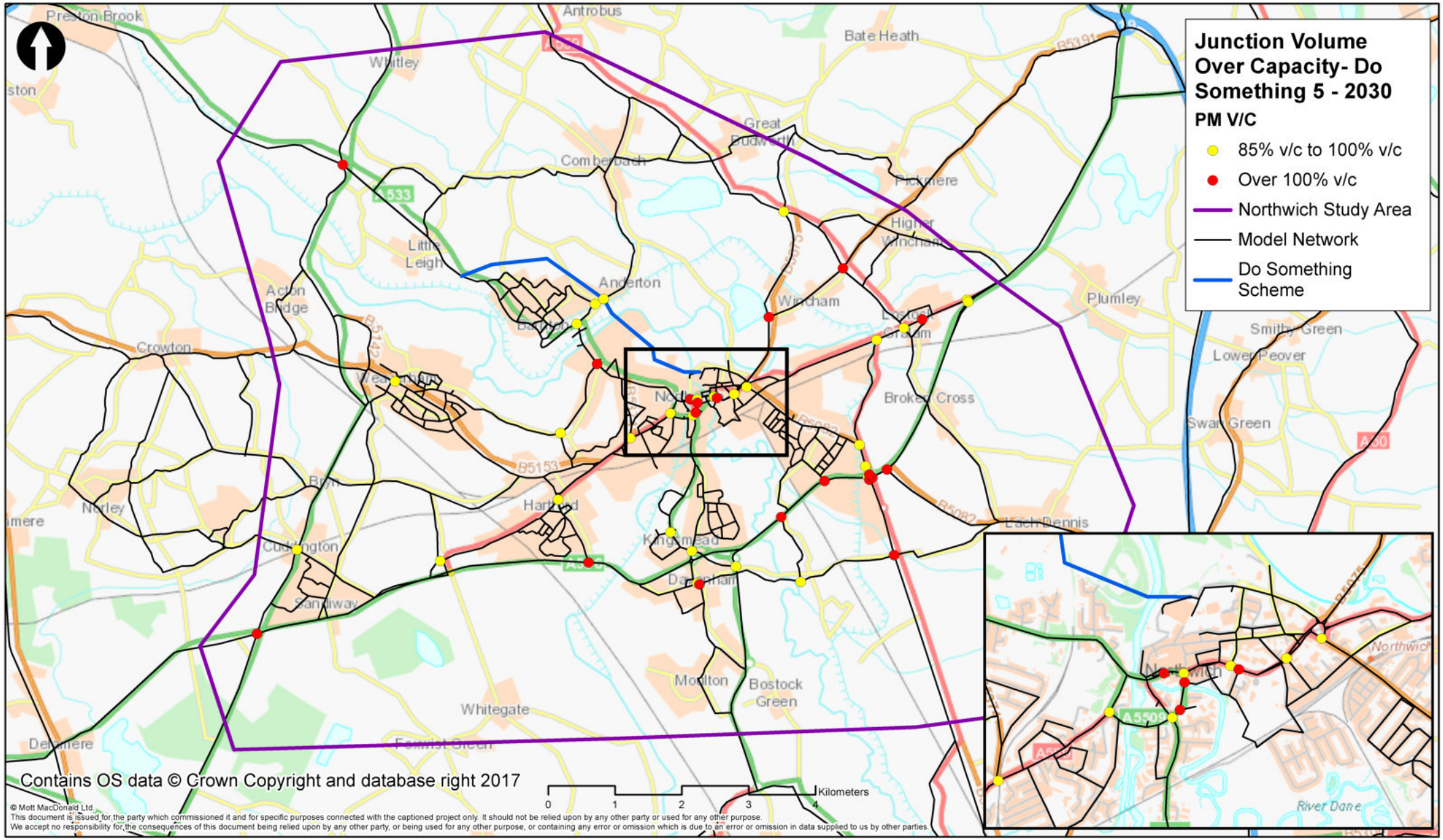
Title
Junction Volume Over Capacity Based On Maximum Turn Volume Over Capacity

Drawn	P Ryall	
Checked	S Pierce	
Approved	T Millward	

Project Number
383472

Scale at A4
1:76,607

P:\Liverpool\ITD\MISData\Modelling\CWaC\01 NorthwichModel\03 ModelApplication\01 NorthwichTransportStrategy_383472\3 Project\2. Calculations\99 GIS\03 Workspaces\Do Something GIS\NWDS5B006\06 Junction Capactity Over85%_DoSomething_DS5B00



MOTT MACDONALD
Mott MacDonald
Ground Floor
Royal Liver Building
Pier Head
L3 1JH
United Kingdom
T +44 (0)151 482 9910
W mottmac.com

Client
Cheshire West and Chester

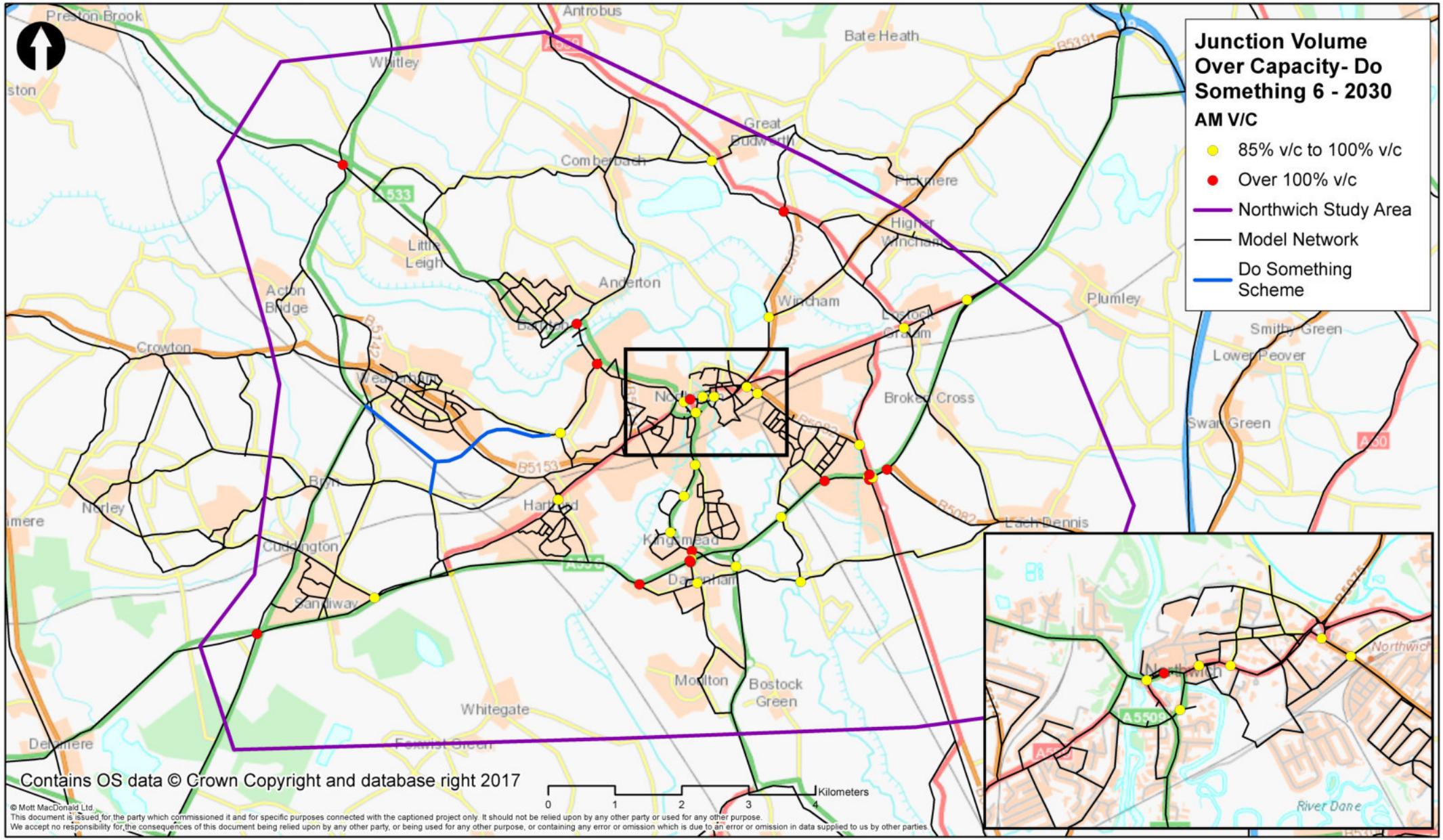
Title
Junction Volume Over Capacity Based On Maximum Turn Volume Over Capacity

Drawn	P Ryall	
Checked	S Pierce	
Approved	T Millward	

Project Number
383472

Scale at A4
1:76,607

P:\Liverpool\ITD\MISData\Modelling\CWaC\01 NorthwichModel\03 ModelApplication\01 NorthwichTransportStrategy_383472\3 Project\2. Calculations\99 GIS\03 Workspaces\Do Something GIS\NWDS5B006\06 Junction Capactity Over85%_DoSomething_DS5B00



MOTT MACDONALD
Mott MacDonald
Ground Floor
Royal Liver Building
Pier Head
L3 1JH
United Kingdom
T +44 (0)151 482 9910
W mottmac.com

Client
Cheshire West and Chester

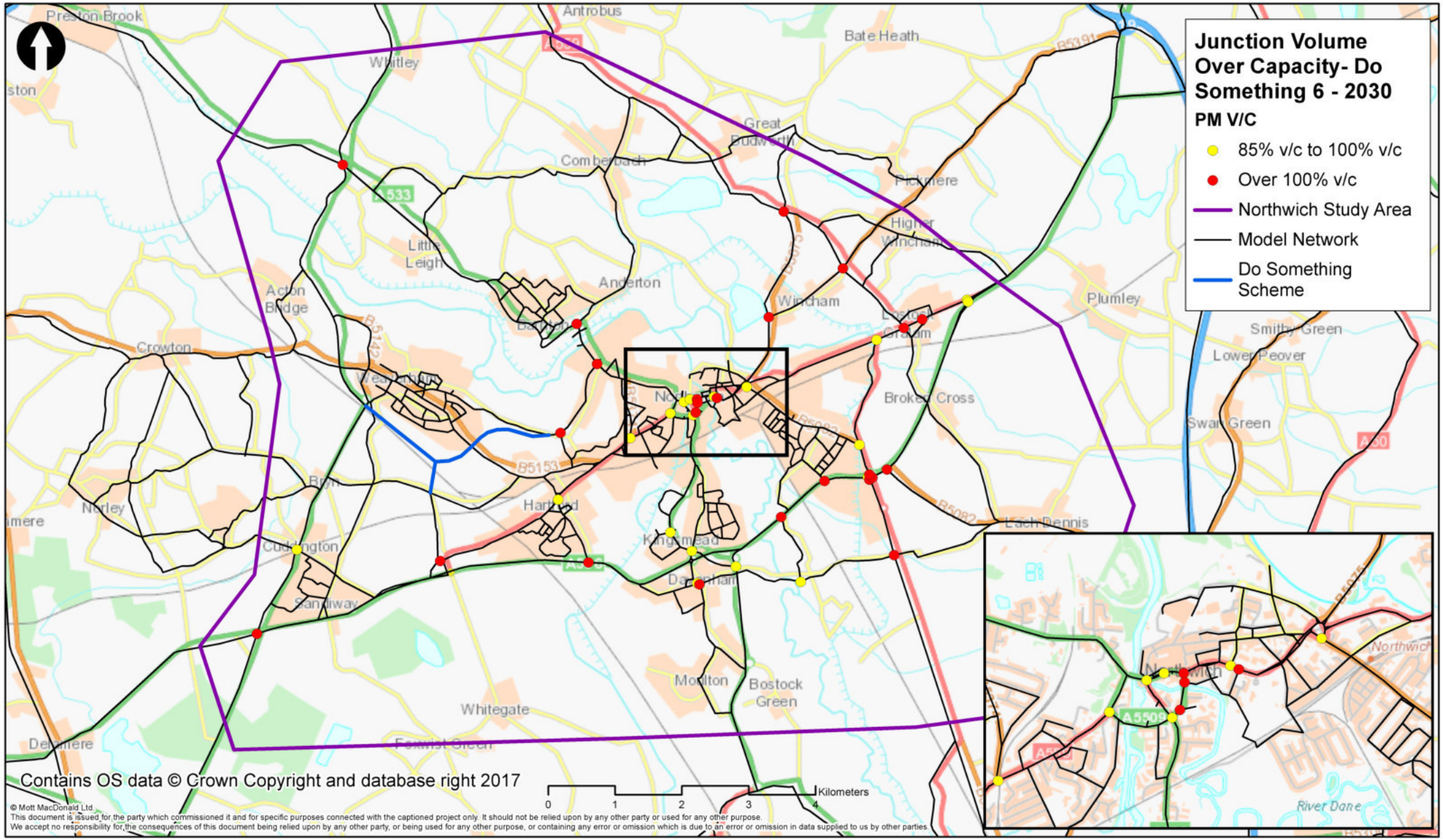
Title
Junction Volume Over Capacity Based On Maximum Turn Volume Over Capacity

Drawn	P Ryall	
Checked	S Pierce	
Approved	T Millward	

Project Number
383472

Scale at A4
1:76,607

P:\Liverpool\ITD\MISData\Modelling\CWaC\01 NorthwichModel\03 ModelApplication\01 NorthwichTransportStrategy_383472\3 Project\2. Calculations\99 GIS\03 Workspaces\Do Something GIS\NWDS6B007\06 Junction Capactity Over85%_DoSomething_DS6B00



MOTT MACDONALD
Mott MacDonald
Ground Floor
Royal Liver Building
Pier Head
L3 1JH
United Kingdom
T +44 (0)151 482 9910
W mottmac.com

Client
Cheshire West and Chester

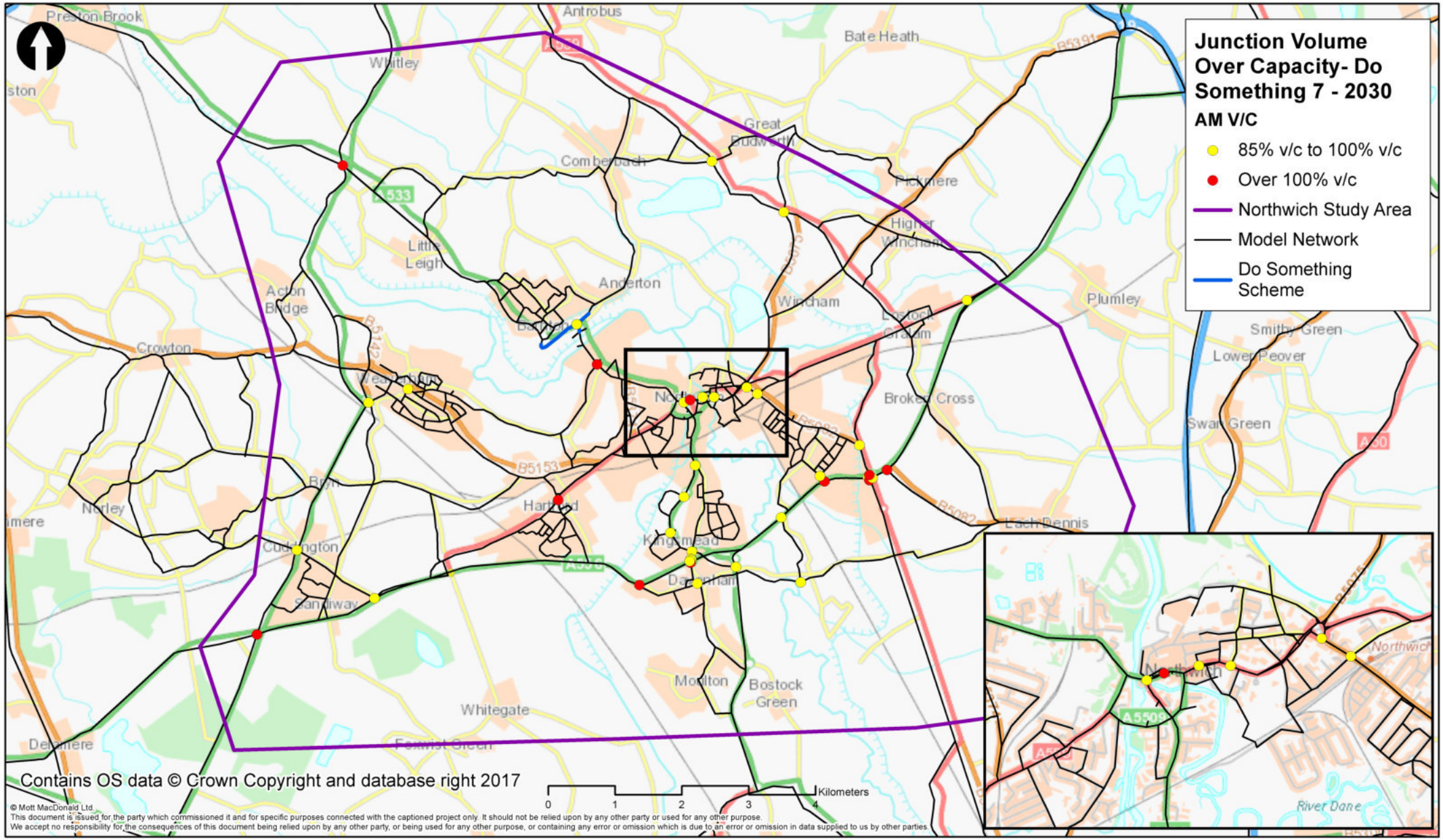
Title
Junction Volume Over Capacity Based On Maximum Turn Volume Over Capacity

Drawn	P Ryall	
Checked	S Pierce	
Approved	T Millward	

Project Number
383472

Scale at A4
1:76,607

P:\Liverpool\ITD\MISData\Modelling\CWaC\01 NorthwichModel\03 ModelApplication\01 NorthwichTransportStrategy_383472\3 Project\2. Calculations\99 GIS\03 Workspaces\Do Something GIS\NWDS6B007\06 Junction Capactity Over85%_DoSomething_DS6B00



MOTT MACDONALD
Mott MacDonald
Ground Floor
Royal Liver Building
Pier Head
L3 1JH
United Kingdom
T +44 (0)151 482 9910
W mottmac.com

Client
Cheshire West and Chester

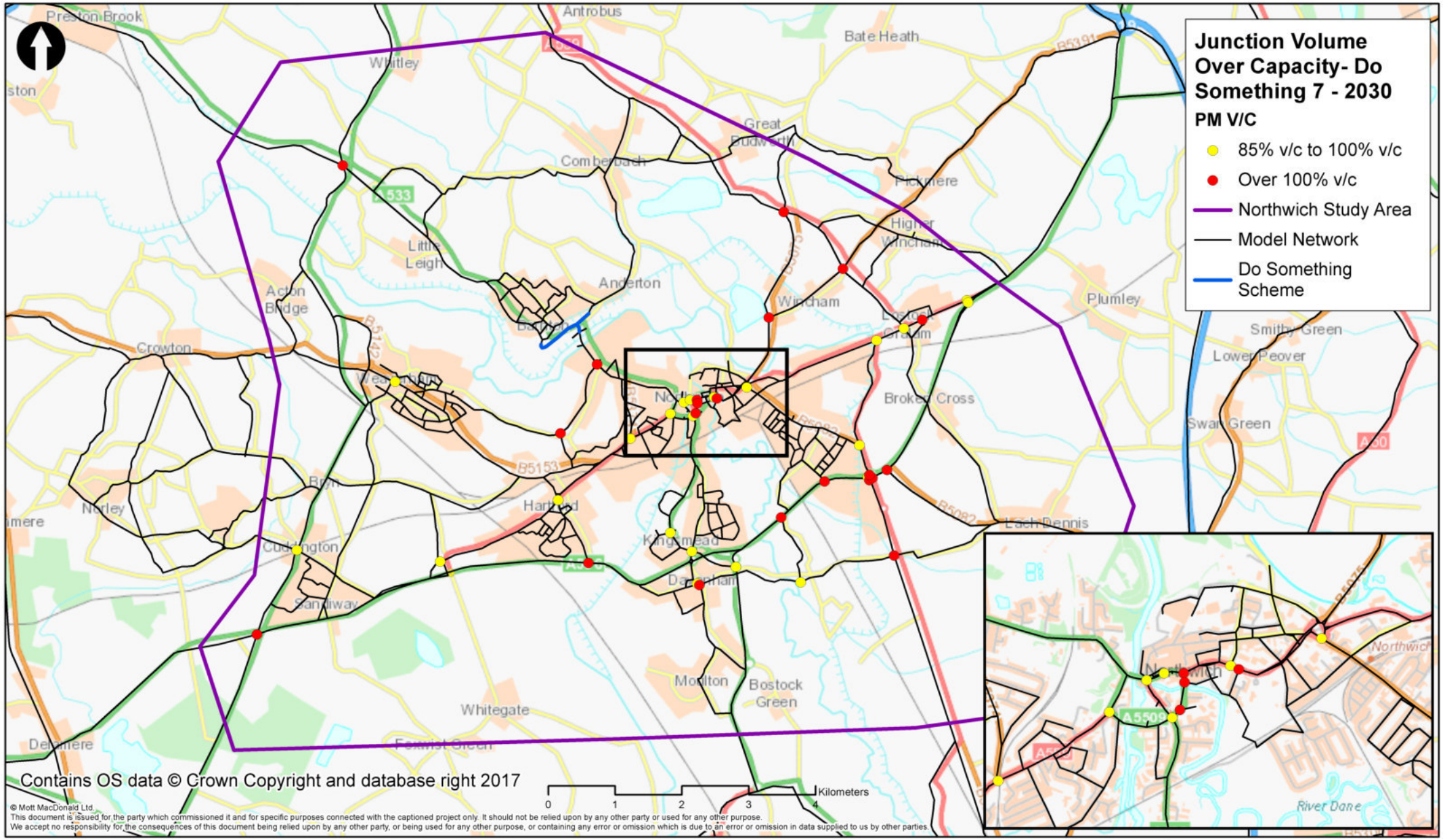
Title
Junction Volume Over Capacity Based On Maximum Turn Volume Over Capacity

Drawn	P Ryall	
Checked	S Pierce	
Approved	T Millward	

Project Number
383472

Scale at A4
1:76,607

P:\Liverpool\ITD\MISData\Modelling\CWaC\01 NorthwichModel\03 ModelApplication\01 NorthwichTransportStrategy_383472\3 Project\2. Calculations\99 GIS\03 Workspaces\Do Something GIS\NWDS7B008\06 Junction Capactity Over85%_DoSomething_DS7B00



MOTT MACDONALD
Mott MacDonald
Ground Floor
Royal Liver Building
Pier Head
L3 1JH
United Kingdom
T +44 (0)151 482 9910
W mottmac.com

Client
Cheshire West and Chester

Title
Junction Volume Over Capacity Based On Maximum Turn Volume Over Capacity

Drawn	P Ryall	
Checked	S Pierce	
Approved	T Millward	

Project Number
383472

Scale at A4
1:76,607

P:\Liverpool\ITD\MISData\Modelling\CWaC\01 NorthwichModel\03 ModelApplication\01 NorthwichTransportStrategy_383472\3 Project\2. Calculations\99 GIS\03 Workspaces\Do Something GIS\NWDS7B008\06 Junction Capactity Over85%_DoSomething_DS7B00

mottmac.com