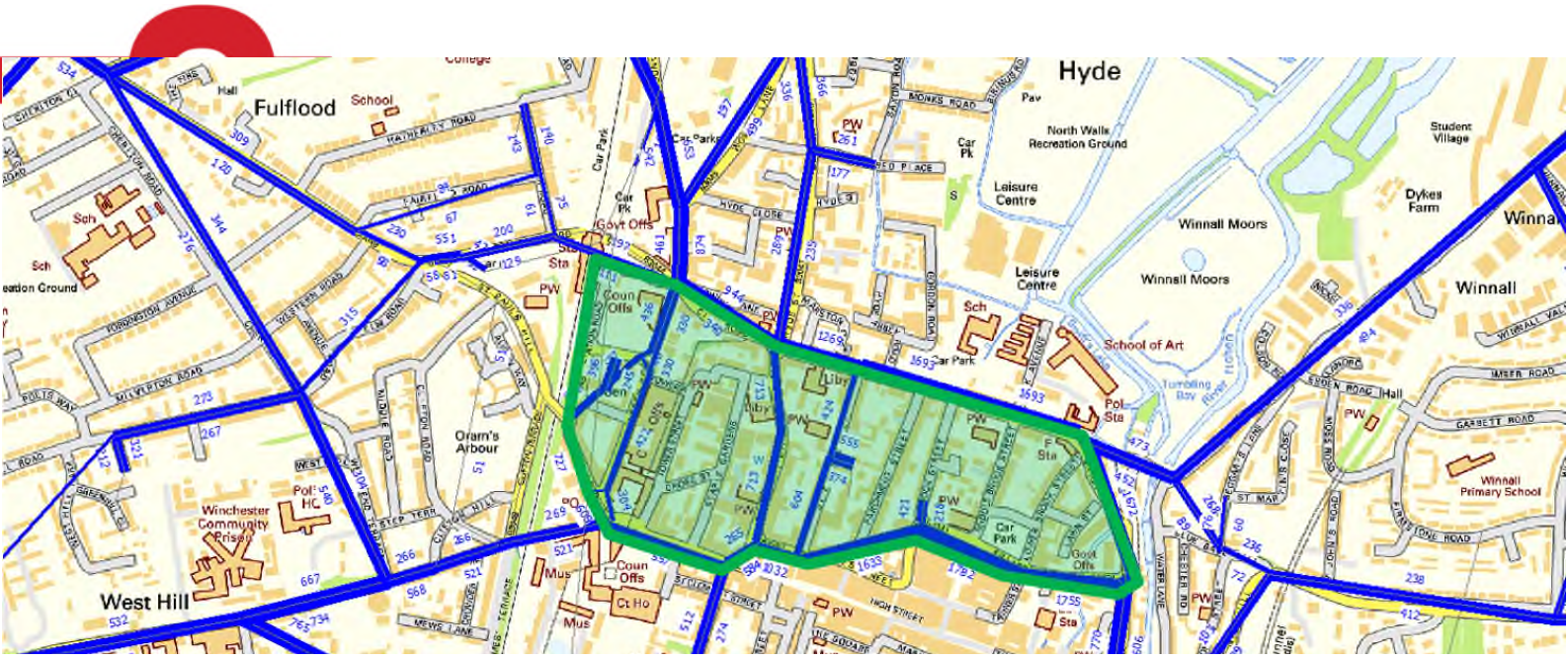
LOCAL PLAN 2038 TRANSPORT ASSESSMENT

STAGE 1 REPORT



Winchester City Council

SYSTRA

LOCAL PLAN 2038 TRANSPORT ASSESSMENT

STAGE 1 REPORT

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1. INTRODUCTION

1.1 Background and Report Purpose

1.1.1 SYSTRA Ltd (SYSTRA) has been commissioned by Winchester City Council (WCC) to provide transport consultancy support in relation to the Winchester District Local Plan 2038 Transport Assessment (Stage 1).

1.1.2 This report was commissioned prior to the outbreak of COVID-19 and in this respect, the baseline information and travel patterns that have been presented in this report is data that has been gathered prior to the outbreak of the pandemic. Clearly people's behaviour, transport patterns and the way that we all access urban and rural areas have seriously altered during the pandemic. Moving forward, there is a real opportunity in the Local Plan to assist WCC with creating a greener, cleaner and healthier City and towns as part of the Council's post COVID-19 plans and WCC's climate emergency declaration which will need to be addressed in subsequent stages of the transport work.

1.1.3 WCC's adopted Local Plan covers the period between 2016 and 2031. Local Plan Part 1 (LPP1) was adopted in March 2013, which identified the key sites which the council would allocate for development to meet housing and employment land targets. Local Plan Part 2 (LPP2) was adopted in April 2017, and provided an update to LPP1 by identifying the additional development sites necessary to meet the remainder of the growth requirements. WCC now intends to prepare an update to the current Local Plan to extend its coverage up to 2038, with a targeted timescale for submission in 2022.

1.1.4 It is important that decisions regarding future land allocation are made using up-to-date information, taking the current transport networks into account. Given the time that has passed since the modelling of the previous base scenario, it is likely that there has been changes to the transport networks within the district and the level of development expected to come forward.

1.1.5 This report therefore sets out the updated transport evidence base which will allow the selection of the most appropriate sites for development within the plan period during Stage 2 of the Transport Assessment process. Subsequent reports will provide the testing of future development scenarios in Stage 2, and a final submission document will be developed in Stage 3.

1.1.6 While the end date of the new Local Plan will be 2038, consideration has also been made in the preparation of this report to potential longer-term issues or opportunities which may come forward in the subsequent period to 2041.. This is considered appropriate to ensure that the conclusions which are drawn are able to demonstrate a sufficient horizon by the time that work on the Local Plan update is completed.

1.1.7 The scope of this report covers the three spatial planning areas of the district used in the current Local Plan, known as Winchester Town Area, South Hampshire Urban Areas and Market Towns and Rural Areas.

1.1.8 The report has been developed taking into consideration the following documents:

- Local Plan Transport Assessment (2009) - WCC;
- Local Plan Part 2 – Transport Evidence Base (2015) - WCC;

- New Alresford Land Alternative Land Allocations Study;
- B2177 / B3354 / A334 Corridor Cumulative Traffic Impacts;

- City of Winchester Movement Strategy (2019) - WCC / HCC;
- Hampshire Local Transport Plan 3 2011-2031 (2013) – Hampshire County Council (it is noted that LTP4 is currently in development and expected to be published in 2021);
- WCC Transport Statement – WCC (2013)
- 'Better planning, better transport, better places' (2019) – Chartered Institution of Highways and Transportation (CIHT);
- 'Transport evidence bases in plan making and decision taking' (2015) – Ministry of Housing, Communities and Local Government;
- 'Strategic road network and the delivery of sustainable development' (2013) - The Highways Agency and The Department for Transport; and
- SRTM Model Reference Case Update (2019) - SYSTRA.

1.1.9 WCC has declared a Climate Emergency within the district, and pledged that the Council will be carbon neutral by 2024 and the wider district by 2030. The update of the Council's Local Plan has a key role to play in supporting this declaration, and this Stage 1 Transport Assessment ensures transport is considered at the earliest opportunity to enable understanding of how future development can come forward in a truly sustainable manner.

1.1.10 As described in this report, there are a number of areas in the district where the current provision for sustainable, non-motorised travel is limited. Recent transport planning policy and guidance confirms that sustainable development in areas like Winchester cannot be achieved without significant changes to how transport and accessibility is considered, and this report seeks to provide a solid foundation for assessing the suitability of site allocations in Stage 2 of the Local Plan Transport Assessment process.

1.1.11 The geographical make-up of Winchester District presents challenges in how people can access jobs, shopping, leisure facilities and services, and while some measures such as the Town area's Park and Ride scheme have been successful in controlling traffic demand, these services have now reached capacity and much of the district still has little other choice but to travel using private cars, damaging our health, harming our towns and contributing to climate change. It will therefore be necessary to think differently in how we undertake spatial planning, ensuring sustainability (and accessibility) are at the heart of the decisions we make, while still striving to provide the homes and jobs that the district needs.

1.1.12 This report therefore seeks to clarify both the relative and absolute provision which is currently made for sustainable transport modes within the district, and to provide context as to how this will influence the available options for influencing both future development locations and the wider improvement of transport networks, to support change in existing movement patterns where feasible. It is intended that this information will provide a solid foundation for consideration of approaches to public transport service provision, further investment into walking and cycling infrastructure, and car parking standards for both public facilities and private developments.

1.1.13 It is recognised that, in order to achieve the stated aim of carbon neutrality in the timescales required, substantial reductions in emissions from transport compared to current levels will be required, and that this will represent a new challenge from a development perspective as new developments will not only be required to minimise their own carbon footprints, but also contribute to supporting real reductions elsewhere. For this reason, a truly district-wide

approach will be needed to ensure that the desired outcomes are achieved in a balanced manner which pays heed to the differences between different areas in terms of both travel demand and mode choice, and the difference in the population make-up of these areas.

2. EXECUTIVE SUMMARY

2.1 Overview

2.1.1 This report comprises Stage 1 of the Transport Assessment associated with Winchester District's 2038 Local Plan, which will provide an update to the existing Local Plan which covers the period between 2016 and 2031.

2.1.2 The report sets out the updated transport evidence base which will be used to select the most appropriate sites for development within the plan period, during Stage 2 of the Transport Assessment process. Subsequent reports will provide testing of future development scenarios in Stage 2, and a final submission document will be developed in Stage 3. The scope of this report covers the three spatial planning areas of the district used in the current Local Plan, referred to as Winchester Town Area, South Hampshire Urban Areas and Market Towns and Rural Areas.

2.1.3 It is acknowledged there are substantial areas in the district where current provision for sustainable travel is limited. Recent transport policy and guidance confirms that sustainable development cannot be achieved without significant changes in how transport and accessibility is considered, and this report seeks to provide a solid foundation for assessing the suitability of site allocations in Stage 2 of the Transport Assessment process. It is therefore necessary to adopt a different approach to spatial planning, ensuring sustainability is at the heart of planning decisions, whilst still providing the homes and jobs required.

2.2 Evidence Base

2.2.1 The analysis of the three spatial areas of the district has found that while sustainable and active travel is possible for trips made within and between large parts of the district, the current development patterns and associated transport networks remain conducive to the majority of trips outside the central town area being made by private motorised vehicles. This travel behaviour, and the current transport infrastructure present, contribute directly to issues which impact on large parts of the district's population, including road safety, peak time traffic congestion and parking stress, areas of poor air quality, and health issues associated with sedentary lifestyles. The type and location of new development to be promoted through the update of the Council's Local Plan will need to be considered in relation to these issues in order to ensure the Council's key targets relating to the Climate Emergency declaration can be achieved.

2.2.2 The analysis for each spatial area is summarised below:

Winchester Urban Area

2.2.3 The Winchester Town Area was found to provide the highest levels of service and supporting infrastructure for public transport, walking and cycling in the district. The area's roads comprise a dense street network with a one-way system, necessary for managing high levels of traffic movement within and around the centre.

2.2.4 Travel by sustainable modes continues to be negatively impacted by private car use predominantly associated with vehicles accessing the town from outer areas, despite the popular Park and Ride scheme specifically targeting these trips. Traffic volumes within the centre mean that local bus services can be irregular and unreliable, making them less

attractive as an alternative to the car. Overall, the area experiences issues as a result of the dominant highway network including congestion, poor air quality and some areas of poor highway safety, although improvements have been made in recent years.

2.2.5 Numerous junctions were identified as approaching design capacity at the busiest times during the Base Year, both around the centre of town and on the main routes heading into town from outer areas, including at the three M3 motorway junctions. Several additional junctions to the north and south of the centre are expected to operate close to their design capacity by 2036.

South Hampshire Urban Areas

2.2.6 The South Hampshire Urban Areas (SHUAs) cover two areas on the southern edge of the District where major development is proposed, located in urban areas that fringe the District, at West of Waterlooville (strategic housing allocation for approximately 3,000 of which 2,500 dwellings are in Winchester district) and North Whiteley (approximately 3,500 dwellings).

2.2.7 Most existing housing developments within the SHUAs provide good quality footpaths which are attractive enough for people to consider short trips by foot, however the distances to destinations reduces the attractiveness of trips being made by this mode. Public transport options currently consist of limited and infrequent bus services between settlements.

2.2.8 The SHUAs highway network comprises a mix of minor country roads connecting villages and towns, smaller roads within the settlements and good links to the strategic M27 and A3 (M) routes. Parts of the highway network have been identified as approaching design capacity in the 2019 Base Year peak periods, with the number increasing steadily by 2036.

2.2.9 The SHUAs have very high proportions of car or van ownership by households, as well as higher proportions of residents who are in older age categories than Winchester Town Area. This, combined with the lower levels of service for public transport and active travel modes means that the existing population is likely to have a relatively high dependency on private car travel which could result in issues relating to air quality (currently within objective levels) as well as worsened highway congestion and parking demands as development increases if alternative options are not sufficiently provided.

Market Towns & Rural Areas

2.2.10 This area includes approximately 50 smaller settlements ranging from market towns, with a population of several thousand, to small hamlets of a few dwellings. As with the SHUAs, relatively limited and infrequent bus services link market towns with smaller villages. Access to the rail network is also limited.

2.2.11 Several junctions are approaching design capacity in the 2019 Base Year, which tend to be in the vicinity of the larger market towns and rural areas, with the number increasing by 2036 at a similar level to the other spatial areas.

2.2.12 The MRTAs have similar population demographics, vehicle ownership and air quality levels to the SHUAs, although existing and proposed levels of publicly accessible electric vehicle charging infrastructure are understood to be higher than other parts of the district. Based on the current situation, the relatively high distance from the settlements within this spatial area to the strategic road network may mean that increased development could result in higher

congestion on the local road networks as well as other transport-related impacts such as vehicle collisions and reduced air quality.

2.3 Stage 2-3 Methodology

2.3.1 For Stages 2 and 3 of the Transport Assessment to commence, the level of additional housing and employment land required for the district will need to be agreed. A review of development needs identified in various evidence reports should be undertaken to understand whether the housing needs will require significantly different scales of development to come forward compared to those considered in this Stage 1 report. Should this be the case, it will be necessary to commence Stage 2 with a revised review of the baseline in relation to the transport networks contained within the three spatial areas of the district.

2.3.2 Stage 2 of the Transport Assessment will comprise a full technical assessment of cumulative impact of the proposed additional allocation sites to be developed up to 2038 and subsequently to 2041, building on the transport evidence base provided in this Stage 1 report. The purpose of the Stage 2 work will be to provide an in-depth comparative analysis of the sites' performance against the agreed criteria, to assist the council in developing one or more preferred allocation scenarios for testing as part of Stage 3.

2.3.3 Stage 3 of the TA will involve modelling and assessment of the preferred option(s) for development using the SRTM, with corresponding work undertaken to develop and refine the transport measures which will be required to support the delivery of these sites. These measures will include both "site specific" and wider interventions which will provide benefits to both new and existing areas of the district.

3. POLICY CONSIDERATION

3.1 Introduction

3.1.1 This section of the report sets out the policy context in which the Transport Assessment is undertaken before providing the information which has been gathered as part of the update of the transport evidence base, thereby demonstrating that the subsequent network assessment (Section 3) has been undertaken in accordance with appropriate guidance using up-to-date and accurate data.

3.2 Policy Review

3.2.1 This report has been produced in accordance with the following policies and guidance documents:

'Transport evidence bases in plan making and decision taking' (2015) – Ministry of Housing, Communities and Local Government.

3.2.2 This Guidance Note was published in March 2015 and sets out how strategic Transport Assessments should be undertaken to support Local Plans. The Note states that the key issues the transport evidence bases should seek to consider are:

- The existing situation and likely generation of trips over time by all modes and the impact on the locality in economic, social and environmental terms;
- The opportunities to support a pattern of development that, where reasonable to do so, facilitates the use of sustainable modes of transport;
- The promotion of opportunities to reduce the need for travel where appropriate;
- Identification of opportunities to prioritise the use of alternative modes in both existing and new development locations if appropriate;
- Consideration of the cumulative impacts of existing and proposed development on transport networks;
- Assessment of the quality and capacity of transport infrastructure and its ability to meet forecast demands; and
- Identification of the short, medium and long-term transport proposals across all modes.

3.2.3 The baseline information required to inform the Transport Assessment includes:

- All current transport issues as they affect all modes and freight covering, for example, accessibility, congestion, mobility, safety, pollution, affordability, carbon reduction across the whole Plan area and, within relevant areas of the Plan, including existing settlements and proposed land allocations;

- The potential options to address the issues identified and any gaps in the networks in the short, medium and longer term covering, for example, accessibility, congestion, mobility, safety, pollution, carbon reduction;
- The locations of proposed land allocations and areas/corridors of development and potential options for the provision of sustainable transport and transport networks to serve them;
- The scope and options for maximising travel planning and behavioural change; and
- Accessibility of transport nodes such as rail/bus stations to facilitate integrated solutions.

3.2.4 It is recommended that the Transport Assessment should identify any significant highway safety issues and provide an analysis of the recent accident history of the affected/impacted areas. The extent of the safety issue considerations and accident analysis will depend on the scale and type of developments in the context of the character of the affected Strategic Road Network. The need to minimise conflicts between vehicles and other road user groups should be adequately addressed.

3.2.5 Critical locations on the road network with poor accident records should be identified. This is to determine if the proposed land allocations will exacerbate existing problems and whether highway mitigation works or traffic management measures will be required to alleviate such problems. The accident records should be compared with accident rates on similar local roads. Where the Strategic Road Network is involved, it is recommended that appropriate national statistics are also used as a comparison.

3.2.6 Clearly, many of the above requirements will affect the later stages of the Transport Assessment process, however this Stage 1 report seeks to establish a suitably comprehensive baseline which will allow full analysis to take place in accordance with all assessment elements.

Strategic road network and the delivery of sustainable development (2013) - The Highways Agency and The Department for Transport

3.2.7 This circular explains how the Highways Agency (Highways England) engage with the planning system.

3.2.8 With regards to plan making, Highways England will engage in the Local Plan process to reduce the potential for creating congestion on the strategic road network, in order to make most efficient use of the limited available capacity on the strategic road network, and because additional physical capacity is difficult, costly and takes time to provide.

3.2.9 In framing its contribution to the development of Local Plans, the aim of Highways England will be to influence the scale and patterns of development so that it is planned in a manner which will not compromise the fulfilment of the primary purpose of the strategic road network.

3.2.10 In order to develop a robust transport evidence base, the Agency will work with the local authority to understand the transport implications of development options. This will include assessing the cumulative and individual impacts of the Local Plan proposals upon the ability of the road links and junctions affected to accommodate the forecast traffic flows in terms of

capacity and safety. Such assessments should be carried out in line with current Department for Transport guidance or on a basis otherwise agreed with the Highways Agency.

3.2.11 Capacity enhancements and infrastructure required to deliver strategic growth should be identified at the Local Plan stage, which provides the best opportunity to consider development aspirations alongside the associated strategic infrastructure needs. Enhancements should not normally be considered as fresh proposals at the planning application stage.

'Better planning, better transport, better places' (2019) – CIHT;

3.2.12 This document was produced by a working group led by the Chartered Institution of Highways and Transportation (CIHT) and is intended to provide practical advice for everyone involved in planning on how the transport planning process can support the delivery and scale of economic and housing growth required by government, whilst delivering more sustainable transport and planning outcomes for people and places.

3.2.13 The report was produced based on the industry opinion that the current practice and interpretation of policies leads to more car-based development, contrary to the aims of national planning policy and contributing to unhealthy lifestyles and climate change.

3.2.14 On plan making, the document suggests ways to integrate planning and transport to achieve better outcomes, including setting place-based objectives for developments. The key objective should be to delivery maximum sustainable transport accessibility while delivering new and affordable homes (and employment land). All new developments should put people rather than vehicles at their heart, facilitate easy access to day-to-day services and be designed to prioritise walking, cycling and the use of public transport to provide real choices for everyone.

3.2.15 With regards to evidence bases, plan makers should prepare a high-quality and proportionate evidence base that is fit for purpose when assessing the needs and issues for communities and places, in order to ensure the Plan is deliverable. The transport evidence base must offer credible and robust evidence to identify transport-related opportunities and constraints to the development strategy within the Plan. It should challenge the traditional 'predict and provide' methodology that leads to car-dominated environments by utilising methodologies which are forward facing.

3.2.16 The first step in preparing the transport evidence base is to establish the current level of performance of all modes of transport infrastructure and services across the Plan area and then consider the wider issues. This includes:

- Key links and connections
- Major gaps in connectivity
- Levels of capacity
- Resilience of key road, rail and other networks
- Levels of safety; and
- Air quality issues

City of Winchester Movement Strategy (2019) – WCC and HCC;

3.2.17 The City of Winchester Movement Strategy is a joint policy document which was endorsed by WCC and approved by HCC, and sets out an agreed vision and long-term priorities for travel

and transport improvements in Winchester over the next 20-30 years. It also covers, at a high level, plans for how these priorities might be met, including indicative timescales and costings.

3.2.18 The overarching vision of the strategy is to support strong and sustainable economic growth for the city of Winchester whilst at the same time enhancing it as a place and community where people can have an excellent quality of life. The vision is supported by three key strategic priorities for movement across Winchester:

1) Reduce city centre traffic;

2) Support healthier lifestyle choices

3) Invest in Infrastructure to support sustainable growth

3.2.19 Potential workstreams for meeting these priorities have been assessed against risk, acceptability, affordability and complexity in order to support these visions, with all but two of the workstreams recommended to be pursued further at this time. The workstreams to be carried forward are summarised below:

- **Park and Ride** - Substantial increase in the number of Park and Ride spaces on the periphery of Winchester (up to 3000 additional parking spaces – a 66% increase on the existing 1800 spaces available).
- **Bus priority -** Introducing bus priority measures on key radial routes into the city centre
- **Bus operator partnership** - New bus partnership with bus operators across the city to improve service and associated infrastructure
- **Traffic demand management** - Measures to reduce car-travel demand or redistribute the demand to other locations, modes or different times.
- **Walking and cycling** – Re-allocation of road space to improve pedestrian and cycle provision, and the development of a Local Cycling and Walking Infrastructure Plan (LCWIP).
- **Enhancing public realm in the city centre** - Creation of high-quality, people focussed places and spaces that people will enjoy and be encouraged to spend time in, as well as move through on foot / cycle.
- **Deliveries** - Better management of deliveries of goods to the city centre
- **Integrated planning** - An integrated approach to transport planning and land-use planning to inform preparation of the Local Plan 2038
- **Enhancing strategic road network capacity** – Improving motorways (principally the M3) in order to sustain future growth of the national, regional and local economy, improve the resilience of the strategic network to unplanned events and reduce the risk of possible through traffic in the city

3.2.20 It is understood that many of these schemes are now being taken forward and implemented since the production of the Movement Strategy.

3.2.21 While the Movement Strategy primarily concerns movement within and through the city of Winchester, it provides up-to-date information regarding the status of transport schemes and priorities which can be used to gauge measures for other areas around the district.

3.3 Section Conclusion

3.3.1 This section has demonstrated that the Local Plan Transport Assessment has been undertaken in line with relevant guidance, with the transport evidence base using the most up-to-date land use and infrastructure data available. The next section provides the resultant transport evidence base which will guide the development of transport-related policies in the Local Plan and future allocation of additional development sites.

4. TRANSPORT EVIDENCE BASE

4.1 Introduction

4.1.1 This section provides an assessment of the current highway and transport networks across the Winchester district based on a desktop review of the networks, analysis of Council documents and strategies, and outputs from the strategic transport model for the district.

4.1.2 This section has been broken down into the three spatial areas of the district in the existing Local Plan; Winchester Town Area (WTA), South Hampshire Urban Areas (SHUA), and Market Towns and Rural Areas (MTRA). It is noted that while the South Downs National Park makes up a large part of the district, it does not form part of this evidence base as that falls under the responsibility of the South Downs National Park Authority.

4.1.3 The spatial areas of the district are shown in **Figure 1** below.

Figure 1. Winchester District Spatial Areas

Source: WCC Local Plan Part 1

4.2 Winchester Town Area

4.2.1 The Winchester Town area consists of the Winchester wards plus the adjoining built up areas of Badger Farm, Oliver's Battery, Littleton, Harestock and Barton Farm. As the largest settlement in the District, Winchester accommodates around 36% of the District's population and provides about 50% of the total district employment provision[1]. However, there is a mis-match between the skills of the workforce and local residents which results in significant patterns of in and out commuting.

Principal Transport Considerations

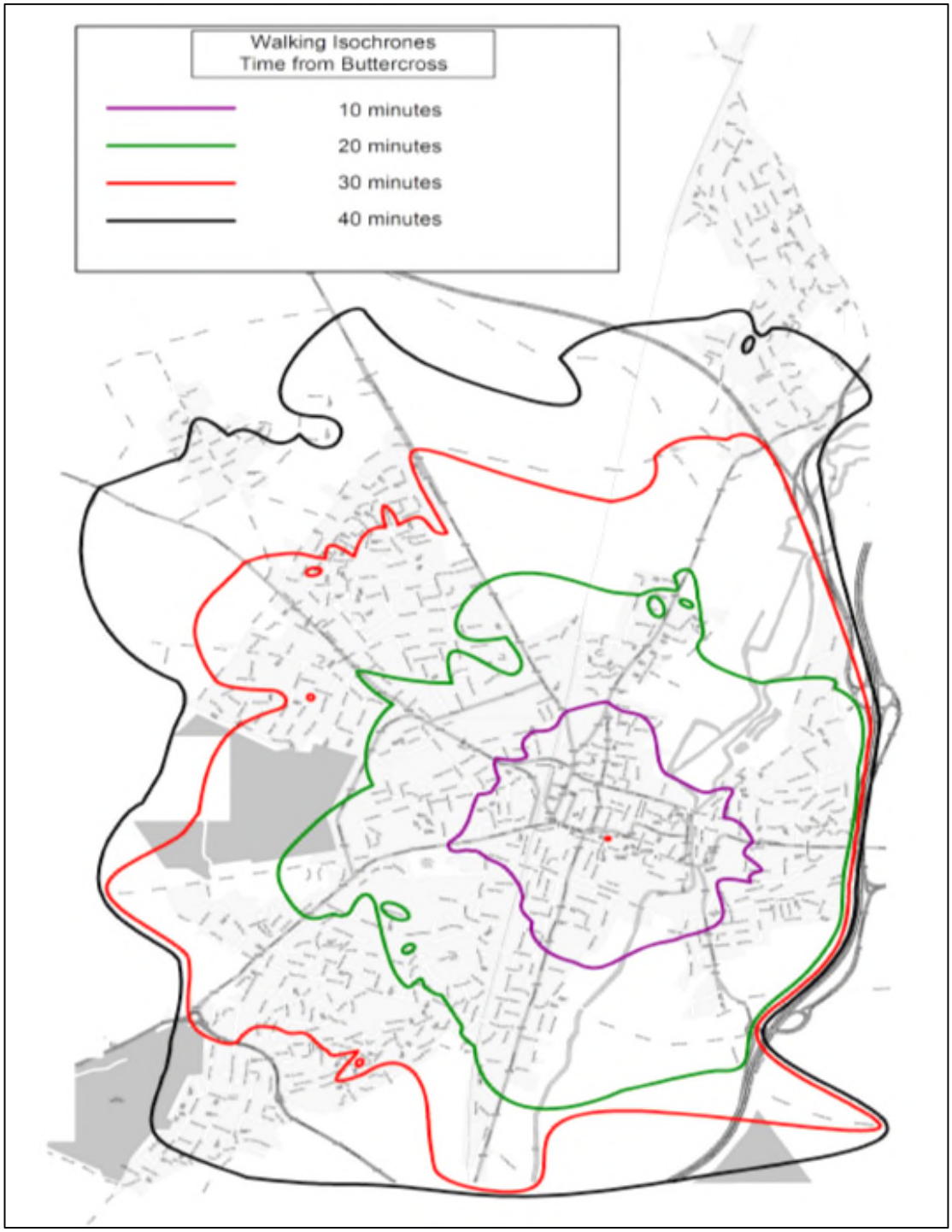
Walking and Cycling

4.2.2 The Winchester Town Area is relatively small, compact and is attractive, meaning it is potentially conducive for the majority of people choosing to walk for part, if not all of many regular journeys. In fact, most of the people who live and work in the city currently walk or cycle to work (60%)[1].

4.2.3 Distances, and the time required to walk from one place to another in Winchester are not great, as can be seen from **Figure 2** below. In Winchester town centre however, where many of the streets are historic, narrow and full of services, there are particular problems in balancing the needs of different modes of transport. Most roads and streets in Winchester are designed primarily for cars, giving the message that the normal way to travel is by car. While these issues were identified in the Winchester Walking Strategy (2014), feedback from the consultations undertaken for the City of Winchester Movement Strategy (2019) suggest that these issues are yet to be resolved. Half of respondents spoke of concerns regarding motorised traffic, with many finding the proximity and speed of vehicle movement threatening, particularly around the one-way system.

[1] Winchester Local Plan Part 2 (LPP2)

Figure 2. Walking times from the Buttercross



Source: Chris Gilham (Friends of the Earth), published in Walking Strategy for Winchester 2014.

4.2.4 Despite the suitability of Winchester town area for walking, the level of trips made by cycling is particularly low for a city of Winchester's size and form. Recent data suggests that across all trips made within the town area, levels of walking and cycling are low, with cycling to school being only 1% of all trips[2].

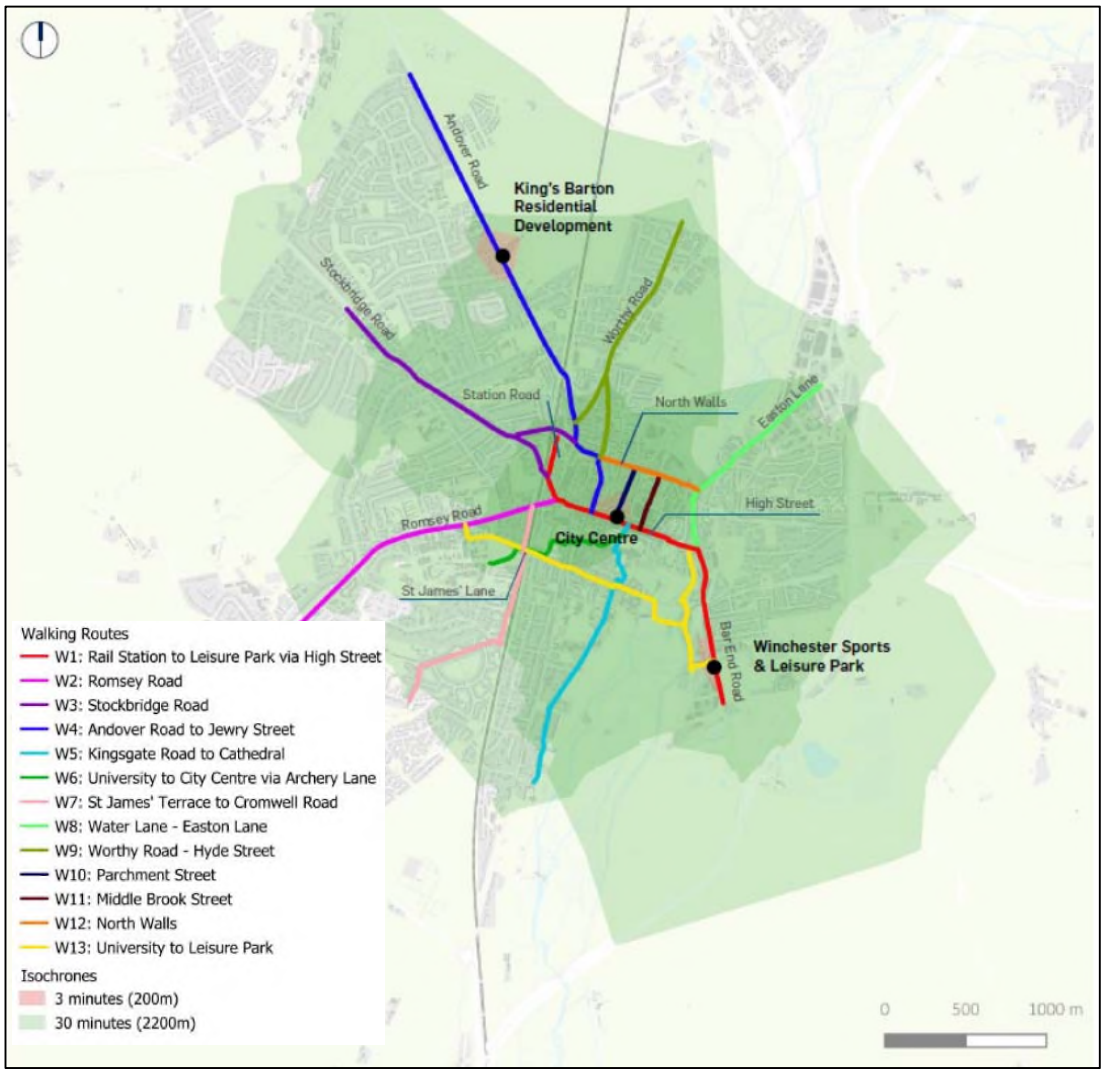
[2] WCC's Movement Strategy

4.2.5 Cycle infrastructure within the Winchester town area is currently limited, with cyclists generally required to cycle on-street with regular traffic. Some signage exists to encourage use of quieter on-road routes into the city centre from the north and south, but while many of the roads and pedestrianised areas within the city centre may be attractive for cycling, the narrow road widths on the one-way system combined with the gradient of some roads means that cycling is unattractive for many residents.

4.2.6 The design of Winchester city centre's road network presents some barriers to walking and cycling in that the opportunity to reduce road widths to increase space for pedestrians and cyclists when implementing the one-way systems was not seized upon, meaning some roads are now considered to be unattractive for active travel. It is however noted that solutions are being considered through the Winchester Movement Strategy Local Cycling and Walking Infrastructure Plan (LCWIP) and review of the one-way system.

4.2.7 As part of the development of the LCWIP for the City of Winchester, WCC and HCC have 13 priority walking routes and 9 priority cycling routes with provisional design interventions being developed. Potential interventions include side road entry treatments and cycle contraflows. The initial proposals for these routes are shown in **Figure 3** below. The next stage for the LCWIP will be to advance design proposals to feasibility design.

Figure 3. Key Walking Routes (Proposed) – Winchester Town Area



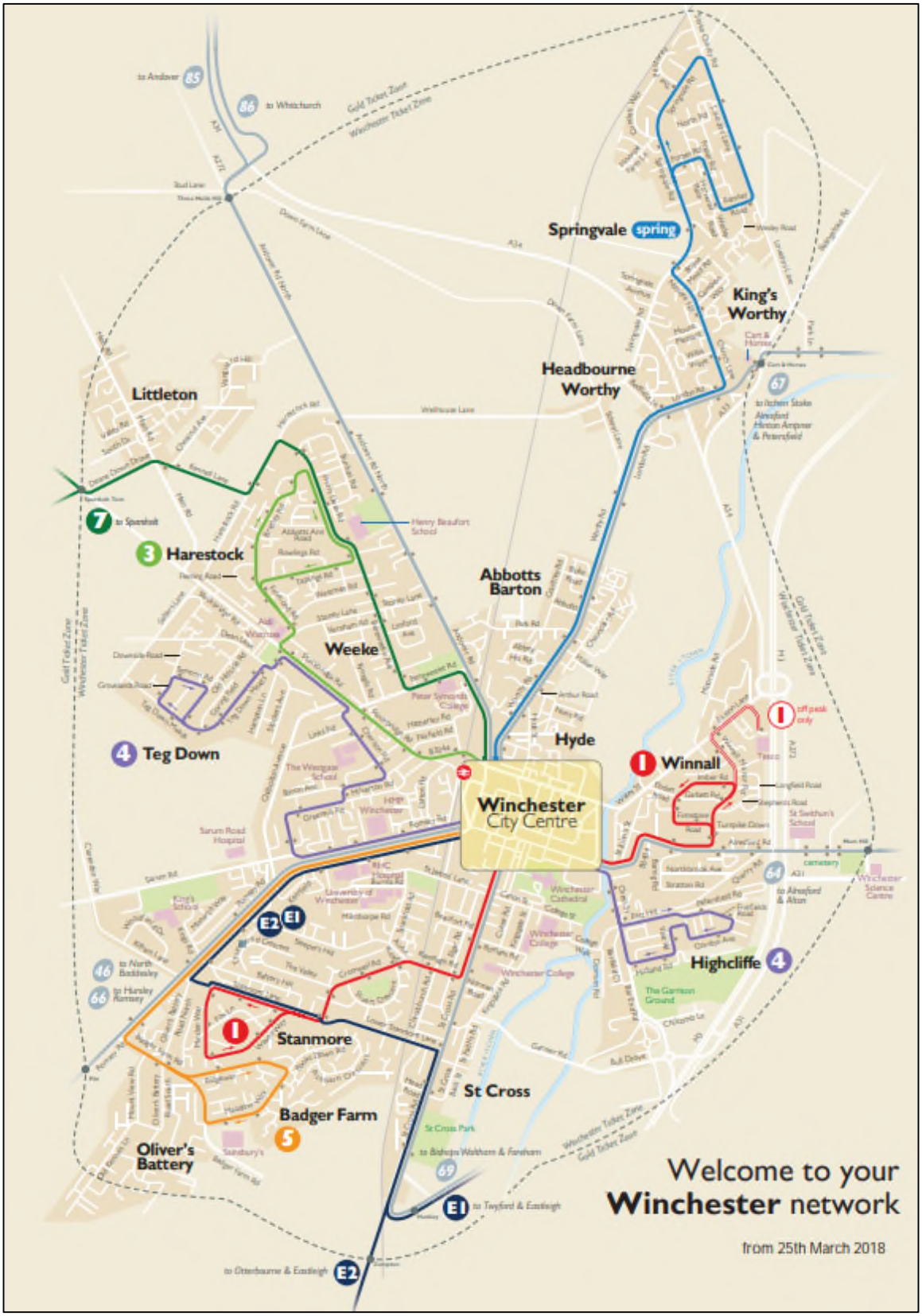
Public Transport

4.2.8 Journeys by public transport can be feasible and attractive, providing that journey times are comparable to trips made by car and journey costs kept cheaper. Winchester Town Area's public transport options comprise buses, operated by Stagecoach and Bluestar, and national rail services from Winchester station. Buses associated with Winchester's park and ride system provide an additional service between Monday and Saturday.

Bus

4.2.9 Winchester Town Area offers a wide variety of route options by bus, most of which provide access to the city centre using the main arterial routes. The majority of services are provided by Stagecoach, and a map showing the route options is displayed below in **Figure 4**.

Figure 4. Stagecoach Routes Bus Map – Winchester Town Area



Source: Stagecoachbus.com

4.2.10 An indication of the level of service provided by the buses is provided in **Table 1** below.

Table 1. Details of Bus Services – Winchester Town Area

Service	Route	Frequency			
		Weekday		Weekend	
		AM Peak (08:00-09:00)	PM Peak (17:00-18:00)	Saturday (13:00-14:00)	Sunday (13:00-14:00)
1 (Bluestar)	Southampton – Winchester Bus Station	5	3	4	2
1	Winnall - Stanmore	4	4	2	1
3	Harestock- Winchester Bus Station	5	6	5	2
4	Highcliffe – Teg Down	1	1	1	1
5	Badger Farm – Winchester Bus Station	5	6	5	3
6A	Abbotts Barton – Winchester Bus Station	0	0	0	0
7	Salisbury – Winchester Bus Station	3	1	1	0
16	Stockbridge – Winchester	0	0	1	0
46/ 461	North Baddesley – Winchester Bus Station	1	0	0	0
63	Owlesbury – Winchester Bus	0	0	0	0
64	Alton- Winchester Broadway	3	2	2	1
66	Romsey – Winchester Bus Station	3	3	2	1
67	Petersfield – Winchester Bus	1	1	0	0
68	Salisbury – Winchester Bus Station	1	0	0	0
69	Fareham – Winchester Bus Station	2	1	1	1
85	Andover – Winchester Bus Station	2	0	1	0
86	Whitchurch – Winchester Bus	1	0	0	0
95/96	East Stratton – Winchester Bus Station	0	0	0	0
661	Romsey – Winchester Bus Station	1	0	0	0
663	Lords Hill- Winchester Bus Station	0	0	0	0
E1/ E2	Eastleigh – Winchester Bus Station	0	1	1	0
The Spring	Springvale – Winchester Bus Station	4	1	3	1

**Note – frequency presented denotes the average number of buses within the peak hour serving the central bus stops.*

4.2.11 As shown above, the buses run at a frequency of between 0 and 5 services in the peak periods, with most also providing service on the weekends.

4.2.12 Traffic volumes within the city centre mean that local bus services can be irregular and unreliable, making them less attractive as an alternative to the car. As part of the Movement Strategy, The City of Winchester are investigating the potential use of bus priority measures on key radial routes into the city centre, although further detailed investigation is needed to mitigate the impact of necessary traffic re-routing around the network.

4.2.13 The Park & Ride car parks are available for use seven days per week, but the bus service currently operates Monday to Saturday only. There are no currently no buses on Sundays or public/bank holidays when parking is free in town, although there is an intention to provide

later evening and Sunday Park and Ride buses when parking charges are introduced. This is described in the Parking and Access Strategy. One Park and Ride ticket covers one car and its occupants for parking and travel for the whole day at a maximum cost of £3, although this is earmarked to be increased in future.

4.2.14 The routes taken by the Park and Ride bus services are depicted in **Figure 5** below.

Figure 5. Park and Ride Bus Routes

Source: https://www.winchester.gov.uk/parking/park-and-ride/

4.2.15 The Park and Ride bus services generally operate on a 6-15 minute frequency throughout the day between 06:25 and 19:23. The full Park and Ride bus timetable is provided in **Appendix A.**

4.2.16 The Park and Ride car parks (and the associated bus services) are well used, operating close to capacity in peak times. Buses generally have to use the same road space as regular vehicles, meaning high traffic volumes within the city centre impact on the journey times and reliability of the park and ride bus services. This makes it less attractive as an alternative to travel by private car, even if it is cheaper than town centre car parks.

Rail

4.2.17 The Winchester Town Area has access to the National rail network via Winchester Rail Station. The station is on the South Western Main Line and provides services around the country, with journey times to central London being approximately 1 hour. The frequency of services in the peak periods is shown in **Table 2** below.

Table 2. Rail Services serving Winchester Town Area

Destination	Route Via	Frequency			
		AM Peak (08:00-09:00)	PM Peak (17:00-18:00)	Saturday Peak (13:00-14:00)	Sunday Peak (13:00-14:00)
Southampton Central	Southampton Airport Parkway	5	5	4	3
Weymouth	Southampton Airport Parkway, Bournemouth, Poole, Dorchester South	2	3	2	1
London Waterloo	Basingstoke, Fleet, Farnborough Clapham	5	4	4	2
Portsmouth Harbour	Eastleigh, Portsmouth & Southsea	1	2	2	2
York	Waterloo, Kings Cross, Birmingham New Street, York	4	3	3	2
Manchester Piccadilly	London Euston, Birmingham New Street	4	1	1	3
Bournemouth	Southampton Airport Parkway	2	3	3	3

4.2.18 The central location of the station facilitates multi-modal journeys, acting as an interchange for a range of travel modes. Winchester station features a car park with 411 parking spaces, 286 cycle parking spaces, passenger lifts and footbridges between the platforms[3].

Highway Network

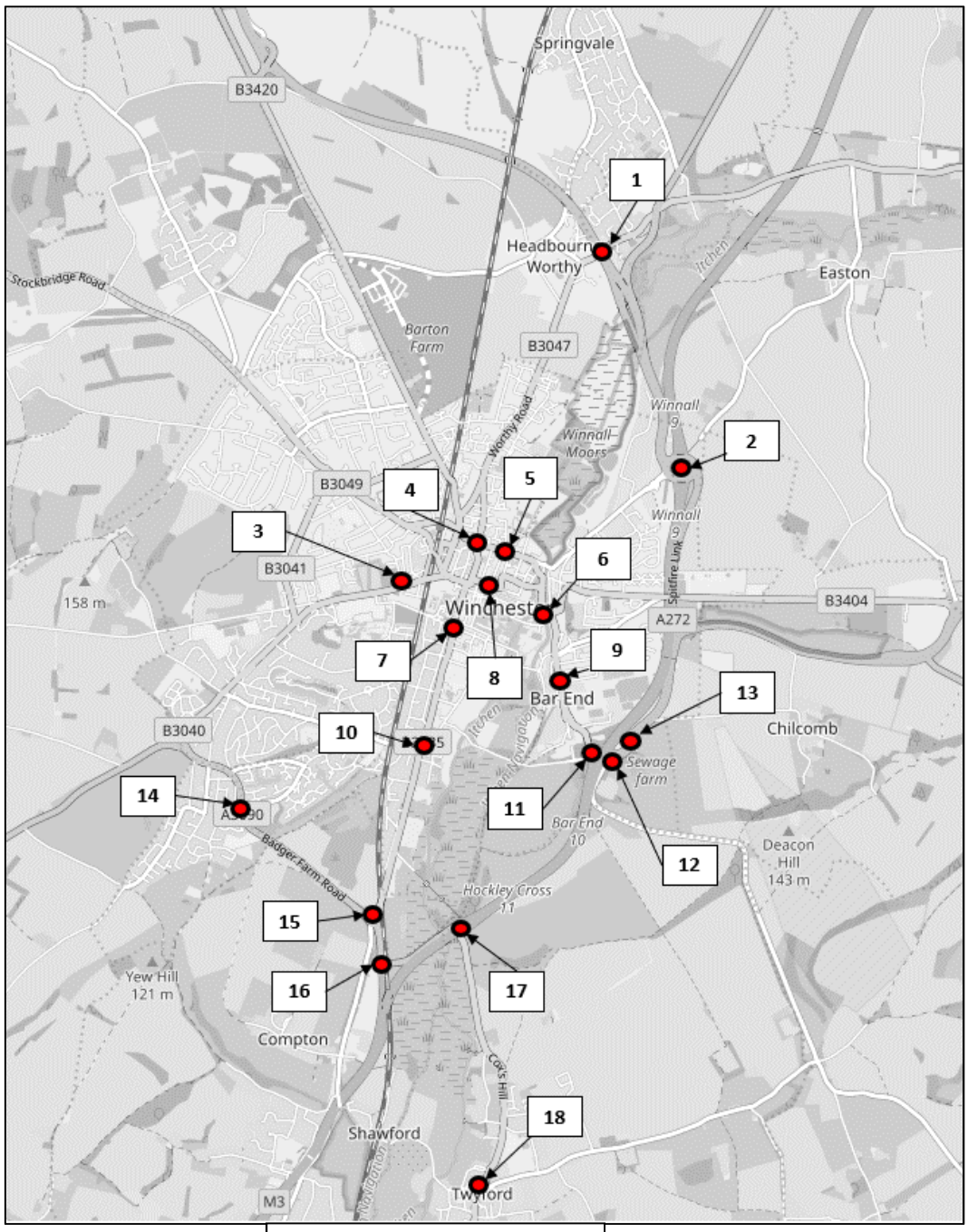
4.2.19 Winchester Town Area's roads comprises a dense street network with a one-way system which is necessary for managing the high levels of traffic movement within and around the city centre. A number of major roads encircle the town, including the M3 motorway to the north, east and south.

4.2.20 The high traffic levels results in a range of negative impacts including traffic congestion, slow peak hour traffic speeds, poor journey time reliability, and air pollution. Many options for increasing road capacity and improving traffic flow have already been implemented, with options being constrained by the city's medieval street layout and historic buildings. Recent surveys suggest that the vast majority of trips that begin outside the Winchester urban area and end in the city are car trips, despite the implementation of the Park and Ride scheme targeting these types of trips in particular.

4.2.21 The current parts of the network which are approaching their design capacity in either the morning or afternoon peak hours have been identified by reviewing the results of the Solent Regional Transport Model (SRTM) for the most recent Reference Case year scenario (2019). Junctions in which at least one approach arm operates at 95% of their capacity or higher in either of the peak periods have been identified. This has found 18 junctions within the Winchester Town Area, which are shown below in **Figure 6**. **Figure 7** shows the junctions within the central part of the Town Area.

[3] Nationalrail.co.uk

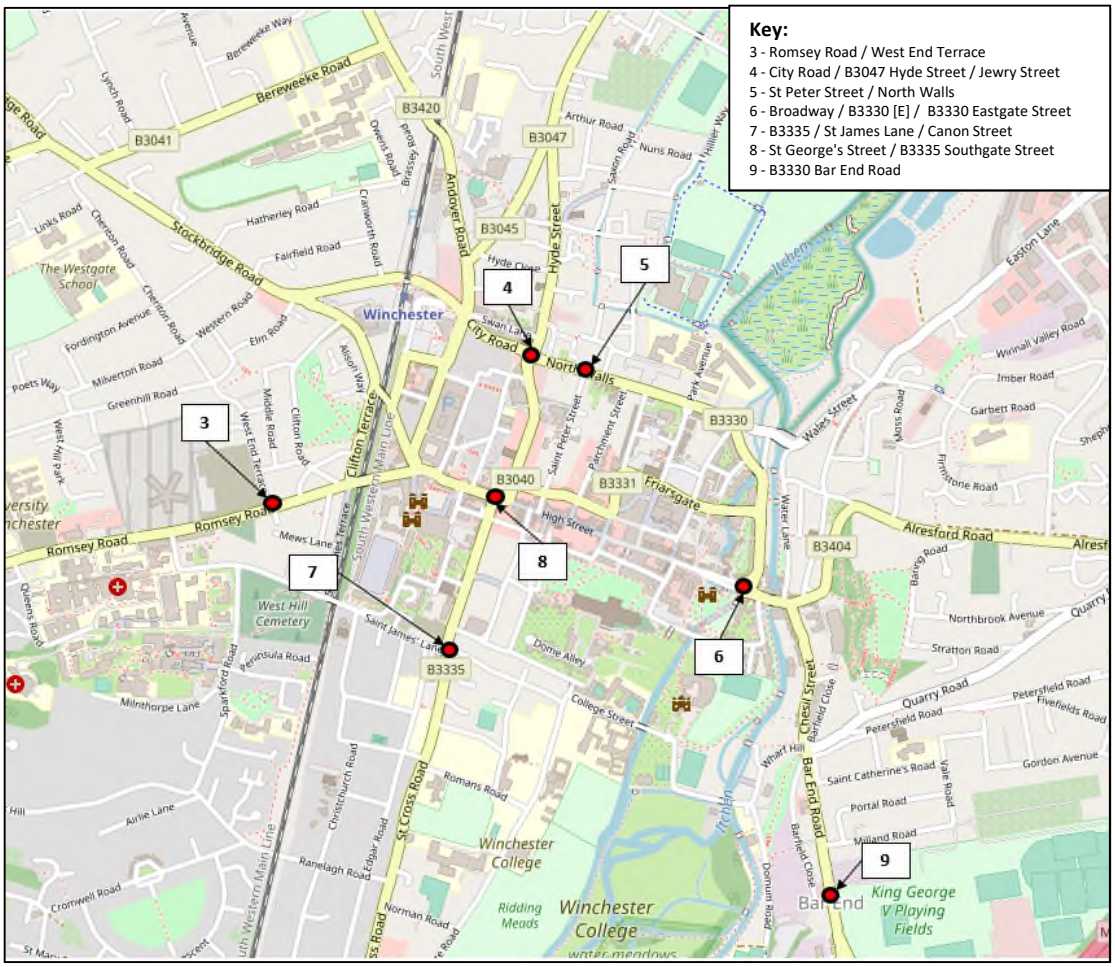
Figure 6. Congestion Hotspots Map – Winchester Town Area (2019)



Key:

1 - Winchester By-Pass / London Road
2 – M3 Junction 9
3 – Romsey Road / West End Terrace
4 – City Road / B3047 Hyde Street / Jewry Street
5 – St Peter Street / North Walls
6 – Broadway / B3330 [E] / B3330 Eastgate Street
7 – B3335 / St James Lane / Canon Street
8 – St George's Street / B3335 Southgate Street
9 – B3330 Bar End Road
10 – B3335 / Lower Stanmore Lane
11 – A31 Roundabout (West Of M3 J10)
12 – A31 / Morestead Road
13 – A31 Roundabout (East Of M3 J10)
14 – A3090 Badger Farm Road / Meadow Way
15 – Bushfield Roundabout
16 – M3 J11
17 – M3 J11 Sb Off-Slip
18 – B3335 / Hazeley Road / Finches Lane

Figure 7. Congestion Hotspots Map – Winchester Town Area Central (2019)



4.2.22 As can be seen above, there are numerous junctions which have been identified as approaching their design capacity at the busiest times, both around the centre of town and on the main routes heading into town from outer areas. This also includes parts of the strategic road network at M3 Junction 9, the slip roads to Junction 10 and Junction 11.

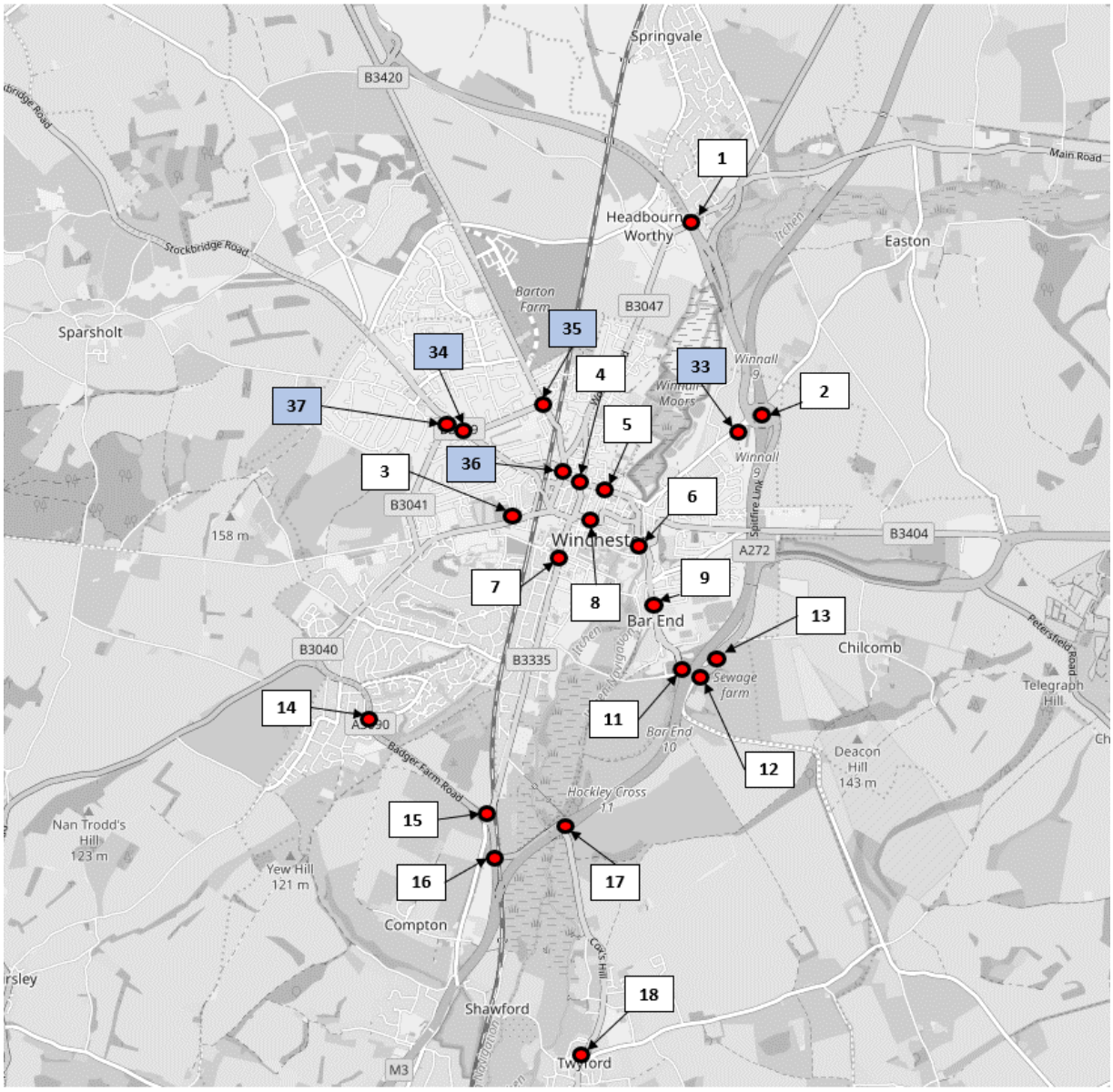
4.2.23 Other locations where drivers report to experience delays are on the city centre one-way system, Romsey Road and the mini-roundabouts at Stockbridge Road/Chilbolton Avenue/Bereweeke Road[4].

4.2.24 Future year modelling scenarios have also been observed to identify the junctions which are expected to be at or approaching capacity with the current level of planned development and traffic growth (i.e. without any additional site allocations which this Local Plan update may propose). **Figure 8** and **Figure 10** below show the identified junctions for the 2031 reference case scenario.

4.2.25 Junctions which were not identified in the 2019 scenario as congestion hotspots have been highlighted in blue text boxes. Any junctions which were hotspots in 2019 but are not expected to be in future scenarios have been excluded, with their junction names being struck through in the key.

[4] WCC's Movement Strategy

Figure 8. Congestion Hotspots Map – Winchester Town Area (2031)



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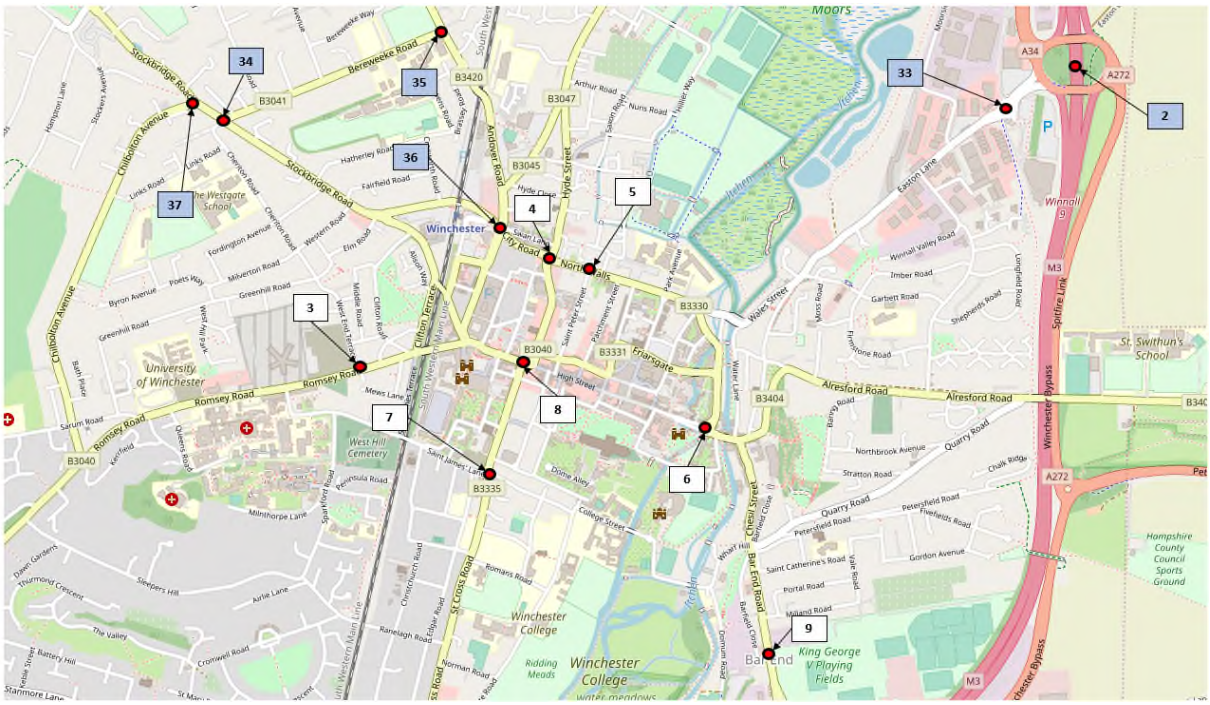
15 – Bushfield Roundabout
16 – M3 J11
17 – M3 J11 Sb Off-Slip
18 – B3335 / Hazeley Road / Finches Lane
33 – Easton Lane Roundabout
34 – Bereweeke Road / Stockbridge Road / Cheriton Road
35 – Andover Road / Bereweeke Road
36 – Andover Road / Stockbridge Road / City Road / Sussex Road
37 – Stockbridge Road / Chilbolton Avenue

Figure 9. Congestion Hotspots Map – Winchester Town Area Central (2031)



Key:
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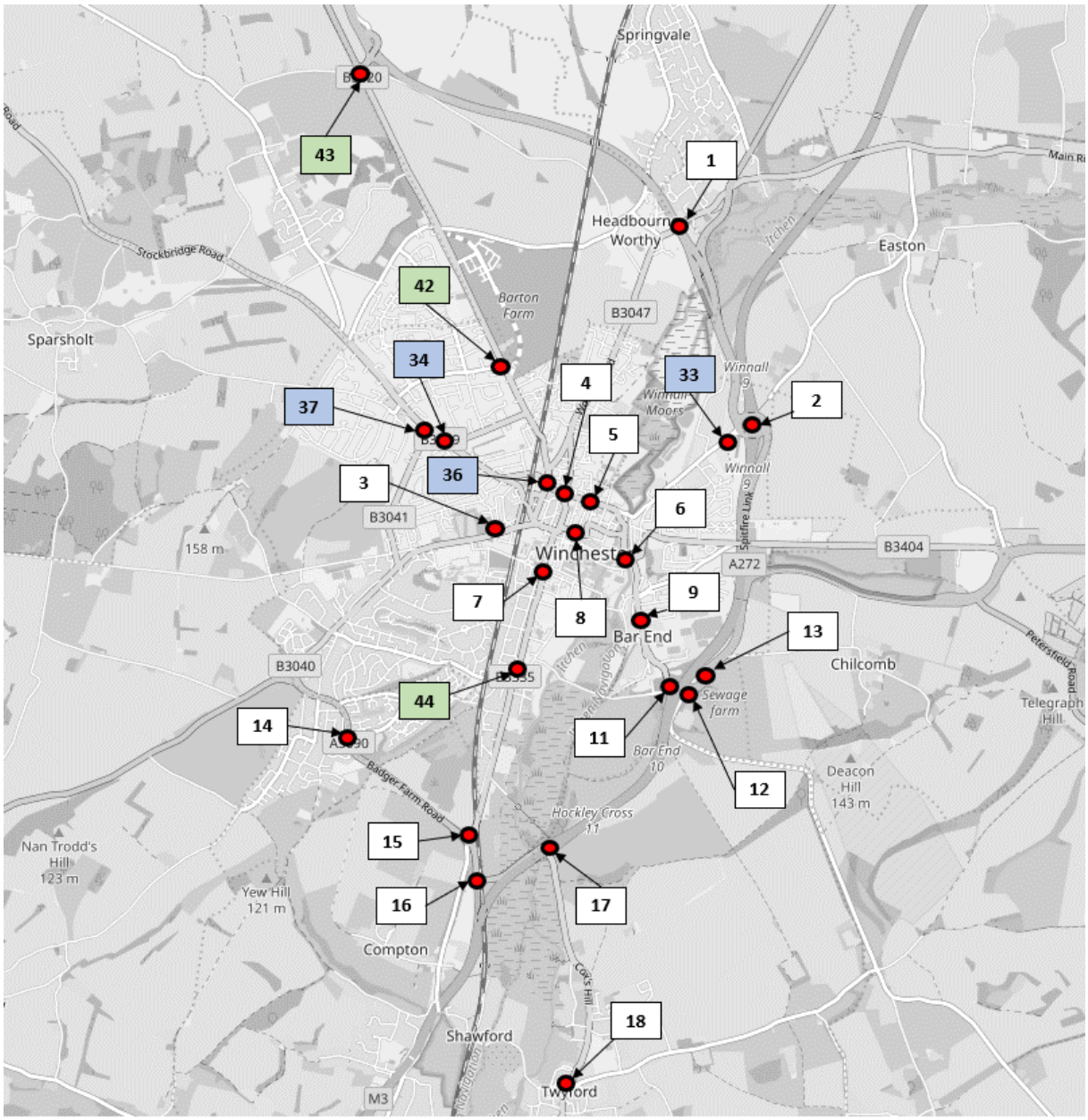
4 - City Road / B3047 Hyde Street / Jewry Street
5 - St Peter Street / North Walls
6 - Broadway / B3330 [E] / B3330 Eastgate Street
7 - B3335 / St James Lane / Canon Street
8 - St George's Street / B3335 Southgate Street
9 - B3330 Bar End Road
33 – Easton Lane Roundabout
34 – Bereweeke Road / Stockbridge Road / Cheriton Road
35 – Andover Road / Bereweeke Road
36 – Andover Road / Stockbridge Road / City Road / Sussex Road

4.2.26 The figures above indicate that several other junctions around Winchester town centre will be approaching capacity in 2031, particularly along Stockbridge Road and Andover Road. One junction (10 – B3335 / Lower Stanmore Lane) is no longer identified as having arms above 95% capacity, which is to be caused by traffic rerouting in the model to minimise journey times.

4.2.27 **Figure 10** and **Figure 11** show the data for the 2036 scenario. Any junctions that are not present in earlier scenarios are highlighted in green text boxes.

Figure 10. Congestion Hotspots Map – Winchester Town Area (2036)



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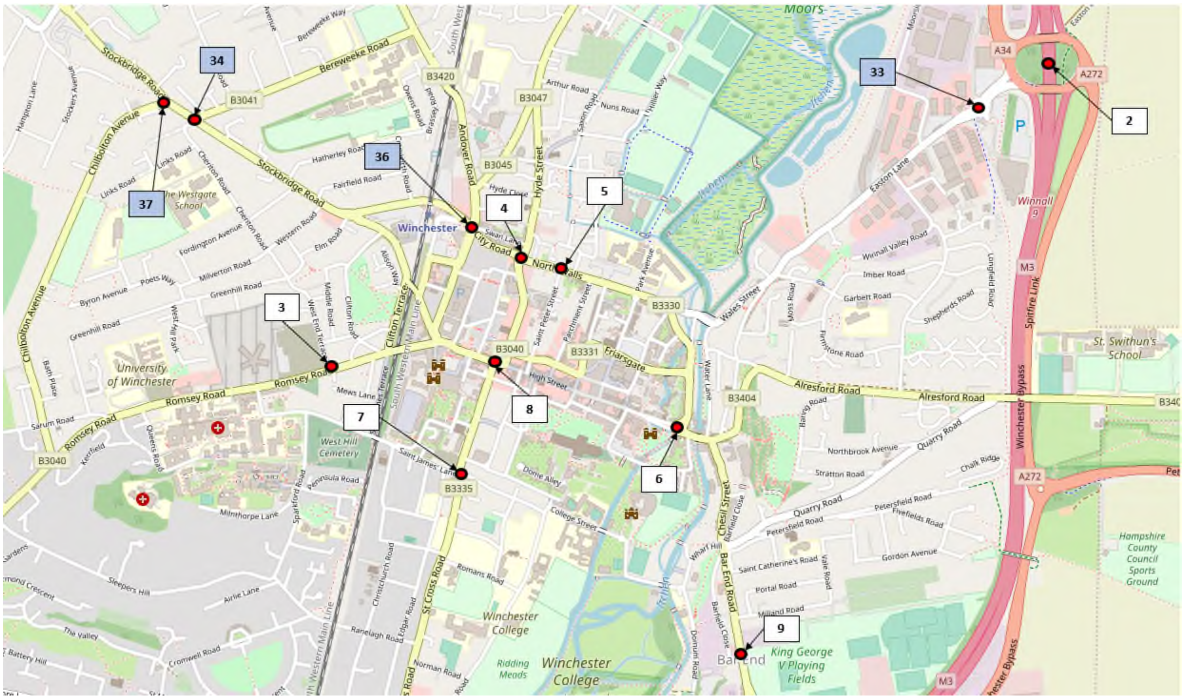
17 – M3 J11 Sb Off-Slip
18 – B3335 / Hazeley Road / Finches Lane
33 – Easton Lane Roundabout
34 – Bereweeke Road / Stockbridge Road / Cheriton Road
~~35 – Andover Road / Bereweeke Road~~
36 – Andover Road / Stockbridge Road / City Road / Sussex Road
37 – Stockbridge Road / Chilbolton Avenue

42 – Andover Road / Stoney Lane
43 – A272 Andover Road / B3420 Andover Road north / Stud Lane
44 – St Cross Road / Kingsgate Road

Figure 11. Congestion Hotspots Map – Winchester Town Area Central (2036)



Key:
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3 - Romsey Road / West End Terrace
4 - City Road / B3047 Hyde Street / Jewry Street
5 - St Peter Street / North Walls
6 - Broadway / B3330 [E] / B3330 Eastgate Street
7 - B3335 / St James Lane / Canon Street
8 - St George's Street / B3335 Southgate Street
9 - B3330 Bar End Road
33 – Easton Lane Roundabout
34 – Bereweeke Road / Stockbridge Road / Cheriton Road
~~35 – Andover Road / Bereweeke Road~~
36 – Andover Road / Stockbridge Road / City Road / Sussex Road

4.2.28 The figures above show that several more junctions within to the north and south of the central town area will become close to capacity in 2036, with one junction (35 - Andover Road / Bereweeke Road) no longer being achieving the 95% capacity criteria. This is also likely to be caused by traffic rerouting in the model to minimise journey times, as well as being affected by changes to traffic associated with committed developments.

Strategic Road Network

4.2.29 The City of Winchester Movement Strategy proposes to support Highways England in increasing the Strategic Road Network capacity, particularly the M3 motorway, in order to sustain future growth of the national, regional and local economy, improve the resilience of the strategic network to unplanned events and reduce the risk of possible through traffic in the city. Measures may include:

- Supporting Highways England in making planned changes to M3, Junction 9; and
- Supporting Highways England in delivering the M3 Smart Motorway upgrade between Junction 9 and Junction 14.

4.2.30 It is noted that while both schemes were committed to be delivered by 2023, the Department for Transport’s revised strategy for the Smart Motorway programme may affect these

proposals. WCC will nevertheless provide support for the additional strategic road network capacity.

Parking

4.2.31 Parking within the Winchester Town Area mainly consists of on and off-street parking in the city centre and Park and Ride facilities elsewhere.

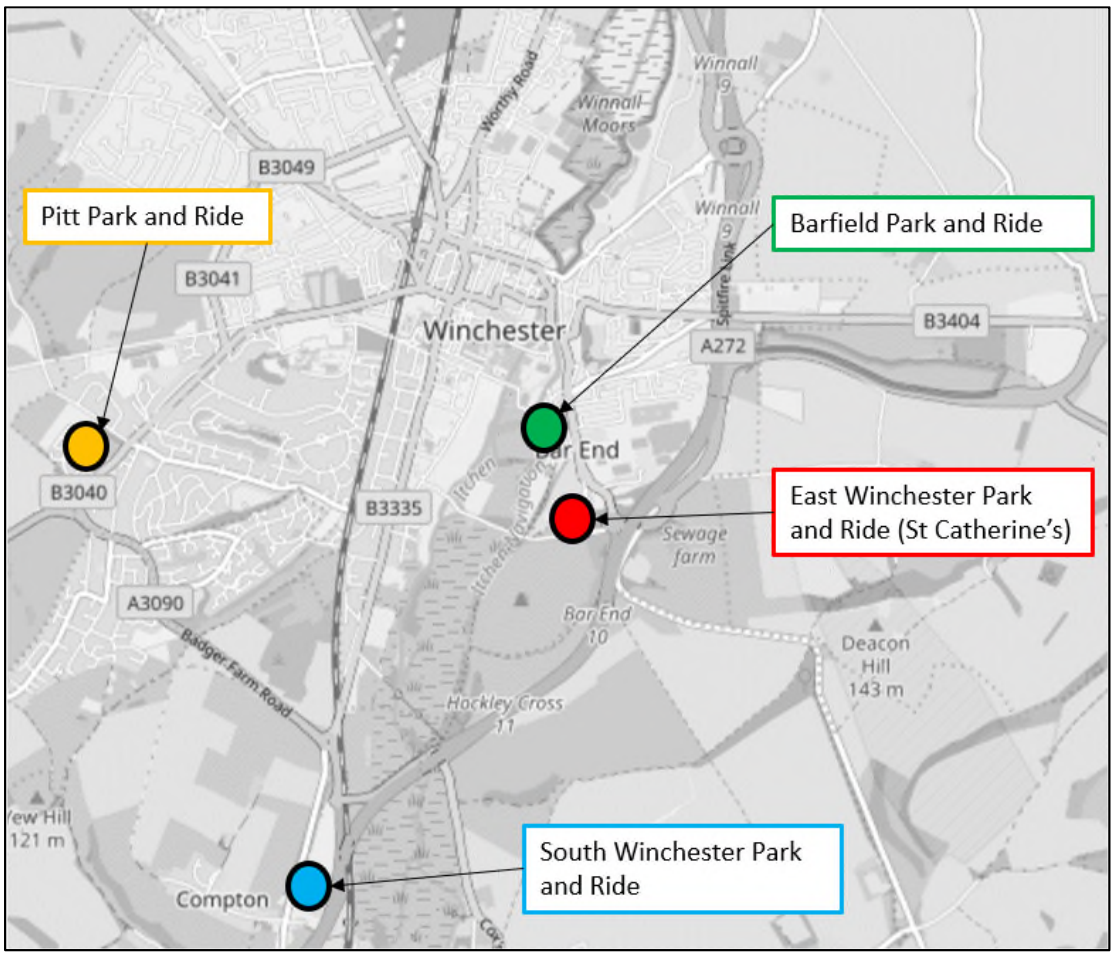
4.2.32 The City Council recognises that some level of on-site parking is necessary for many businesses to operate successfully, usually for the convenience of their customers, for visitors or for staff. WCC maintain dialogues with major employers and service providers in the town to understand parking requirements and work towards viable and effective options for them to reduce city centre car parking without unreasonable impact on their business needs[5], as described in the Parking and Access Strategy 2014-2018.

4.2.33 Park and Ride facilities have sought to move parking from the city centre to the outskirts of the city through provision of additional parking and dedicated public transport services, however the existing facilities are understood to be approaching capacity during peak times[6]. Parking is free within Winchester town centre on Sundays and public holidays, and so the Park and Ride buses also do not run on these days.

4.2.34 There are four Park and Ride car parks at South Winchester, Pitt, and two East Winchester car parks; Barfield and St Catherine's. The location of these car parks is shown in **Figure 12** below. There are currently no Park and Ride car parks to the north of the City and the need for additional Park and Ride facilities will need to be considered as part of the emerging Local Plan.

[5] Winchester Parking Strategy 2014-2018
[6] WCC's Movement Strategy

Figure 12. Winchester Park and Ride Car Parks



4.2.35 The Park and Ride car parks have a total capacity of approximately 1,800 spaces. The Movement Strategy proposes up to 3,000 additional park and ride parking spaces – a 66% increase on the existing 1,800 spaces, which will be achieved through extension of existing sites and consideration of a new site to the north or east of the city centre. A further circa. 100 spaces are also being provided adjacent to the Barfield Park and Ride site, with a long term plan to provide 300 spaces. Proposals are also understood to be in development for an additional Park and Ride site at Kings Barton.

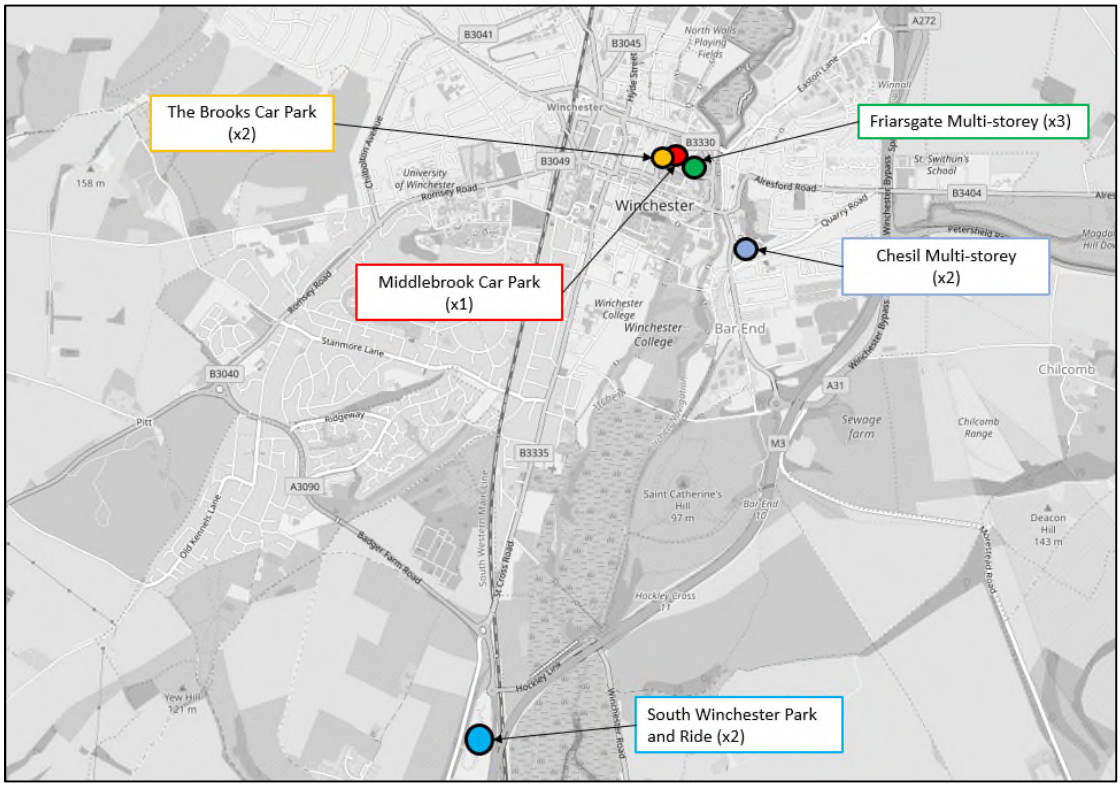
4.2.36 Whether this proposal conforms with the Council's Climate Emergency declaration requires consideration. Additional Park and Ride spaces previously provided have reached capacity over time, suggesting that increasing parking capacity only without effective measures to encourage modal shift will not solve the issue of parking stress, while increasing traffic congestion and increased air pollution. It is note however that as the Park and Ride scheme reduces the amounts of traffic and congestion in the central town area, this improves the air quality locally.

4.2.37 Most of the Council's public car parks have disabled parking bays and blue badge holders can park in any pay and display car park free of charge. Blue Badge Holders must not however exceed the short stay limits which are indicted by signs in the car parks and on street. In pay on foot (barrier controlled) car parks blue badge holders are required to pay for parking. Blue badge holders can park free of charge on street in designated disabled bays, in resident permit holder bays, and in pay and display bays.

Electric Vehicle Charging Infrastructure

4.2.38 Winchester Town Area currently has relatively low levels of Electric Vehicle Charging Infrastructure (ECVI) provision, which is also apparent across the Winchester district and many other districts in England and Wales. The most recent survey of EVCI for the Winchester Town Area was undertaken in 2018 and found a total of 10 charging points within Winchester Town Area's car parks at the locations shown in **Figure 13**.

Figure 13. Existing EVCI – Winchester Town Area



Source: Electric Vehicle Charging Infrastructure Study for Winchester City Centre and District (2018), Horizon Power and Energy

4.2.39 Winchester City Council adopted an Electric Vehicle Charging Strategy in January 2019 to provide additional infrastructure in selected locations to meet forecast demand. A shortlist of 36 publicly accessible electric vehicle charging point (EVCP) locations were selected, of which 18 are in Winchester Town Area. The locations are shown below in **Figure 14** and **Table 3**.

Figure 14. Proposed Additional EVCI Locations – Winchester Town Area

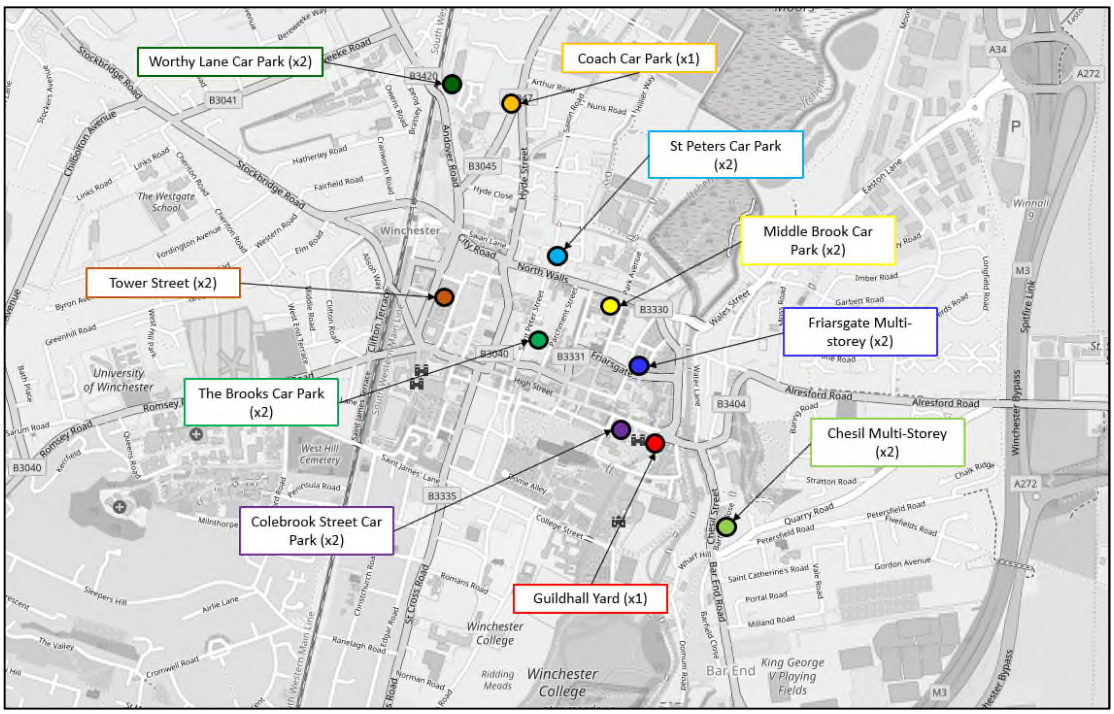


Table 3. Proposed EVCI – Winchester Town Area

Car Park Site	Charger Rating	No. EVCPs
Coach Park	50kWh	1
Guildhall Area	50kWh	1
St Peters	22kWh	2
Chesil	22kWh	2
Colebrook Street	22kWh	2
Tower Street	22kWh	2
Middle Brook	22kWh	2
The Brooks	22kWh	2
Friarsgate	22kWh	2
Worthy Lane	22kWh	2
	Total	**18**

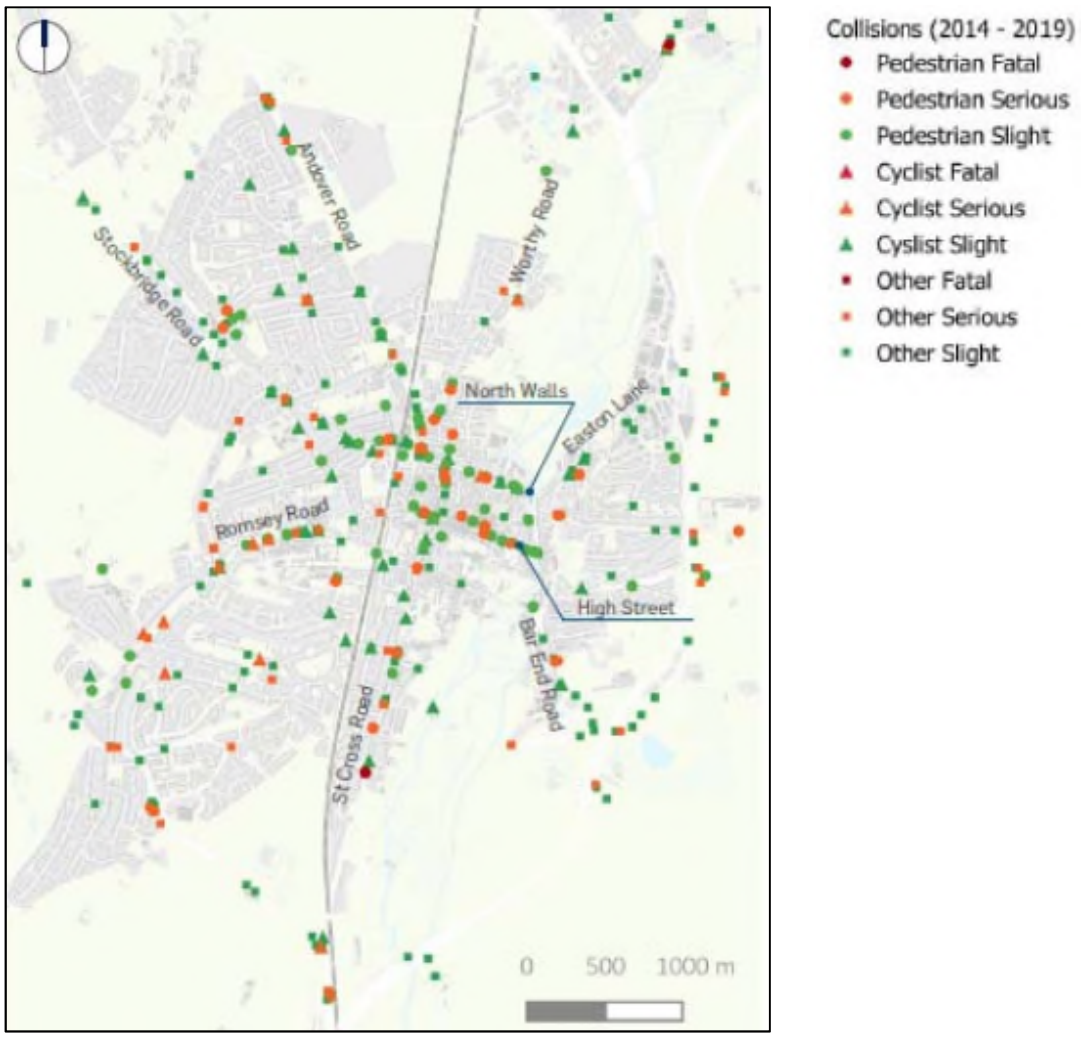
Road Safety

4.2.40 Collision and casualty data for the Winchester Town Area has been assessed for the most recent five year period, from May 2014 to April 2019. This has identified a total of 537 collisions, as shown in **Figure 15** below, equating to an average of 107 collisions per year. 10 out of the 537 collisions resulted in fatalities (2%) , 118 caused serious injuries (22%) and 409 caused slight injuries (76%).

4.2.41 95 collisions which involved pedestrians were recorded (18%), the majority of which took place in the city centre: at the High Street (unpedestrianised section), Jewry Street, North Walls (at the junctions) and Stockbridge Road. Outside the city centre, the locations where the highest number of collisions took place were St Cross to Southgate Street, Worthy Lane to Worthy Road, Romsey Road, Andover Road and the Weeke commercial area including Stockbridge Road and Stoney Lane.

4.2.42 60 collisions involved cyclists (11%), of which none resulted in fatalities, 13 resulted in serious injuries and 47 resulted in slight injuries. Just under half of the incidents (45%) took place in the city main corridors, including Romsey Road, North Walls, Southgate Street, Stockbridge Road and Andover Road. 20% of the collisions were reported on the existing national cycle network, which is understood to be comparable with national patterns (although specific data on this is limited).

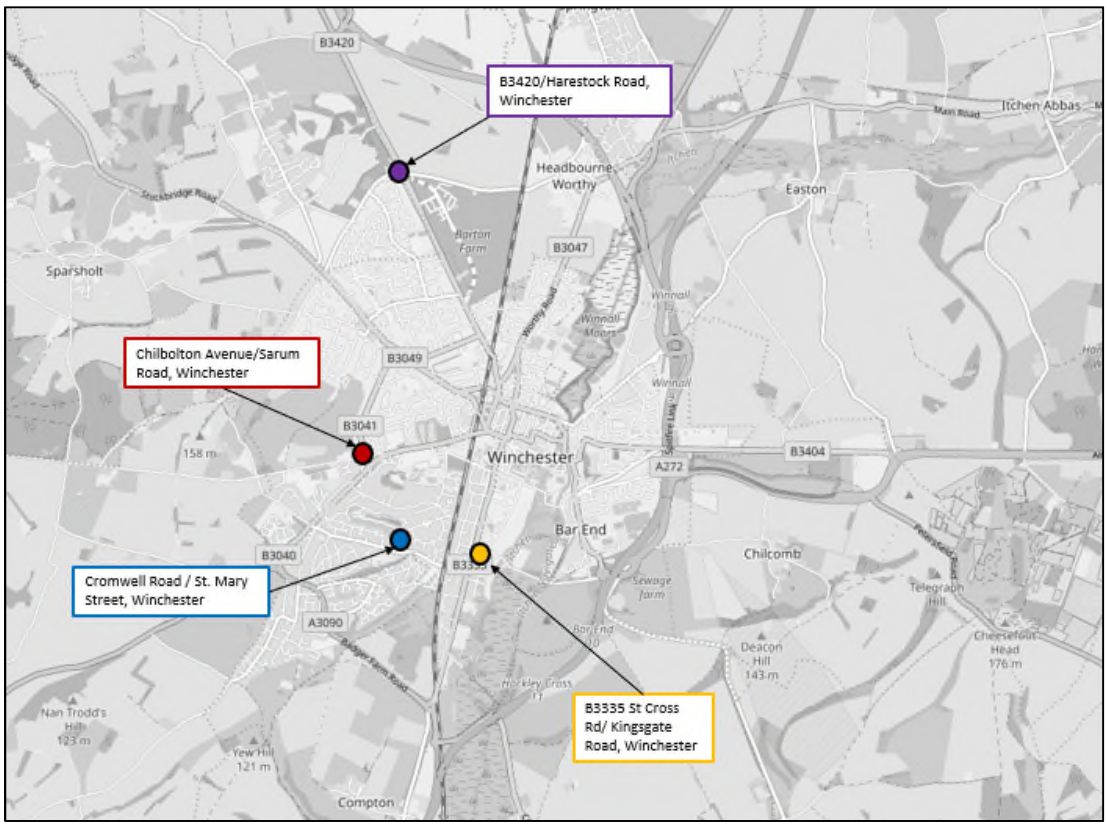
Figure 15. Collision Locations 2014-2019 – Winchester Town Area



Source: Winchester Movement Strategy

4.2.43 Locations within Winchester Town Area which are being prioritised for investigation in 2019/20 and 2020/21 due to the instances of vehicle collision are shown in **Figure 16** below.

Figure 16. Collision Hotspots / Areas of Investigation – Winchester Town Area



Wider Transport Considerations

Freight

4.2.44 Winchester Town Area is a commercial hub and as such, businesses rely on deliveries and servicing by both heavy and light goods vehicles (HGVs and LGVs) using the one-way system for part of the journey in most cases. The volume of goods vehicles alongside limited space for safe, timely and efficient deliveries in the city centre has been highlighted as an issue and reported in the Central Winchester Regeneration Transport Study (Winchester City Council, July 2017). Public consultation carried out by WCC identified concerns for delivery vehicles and HGV's adding to disruption by blocking already narrow spaces and creating an unattractive environment for pedestrians and cyclists. Those attending stakeholder workshops generally felt that the current peak hour enforcement activity was ineffective, leading to traffic build-up behind stationary delivery vehicles.

4.2.45 The City of Winchester Movement Strategy proposes initiatives to improve management of deliveries of goods to the city centre, including:

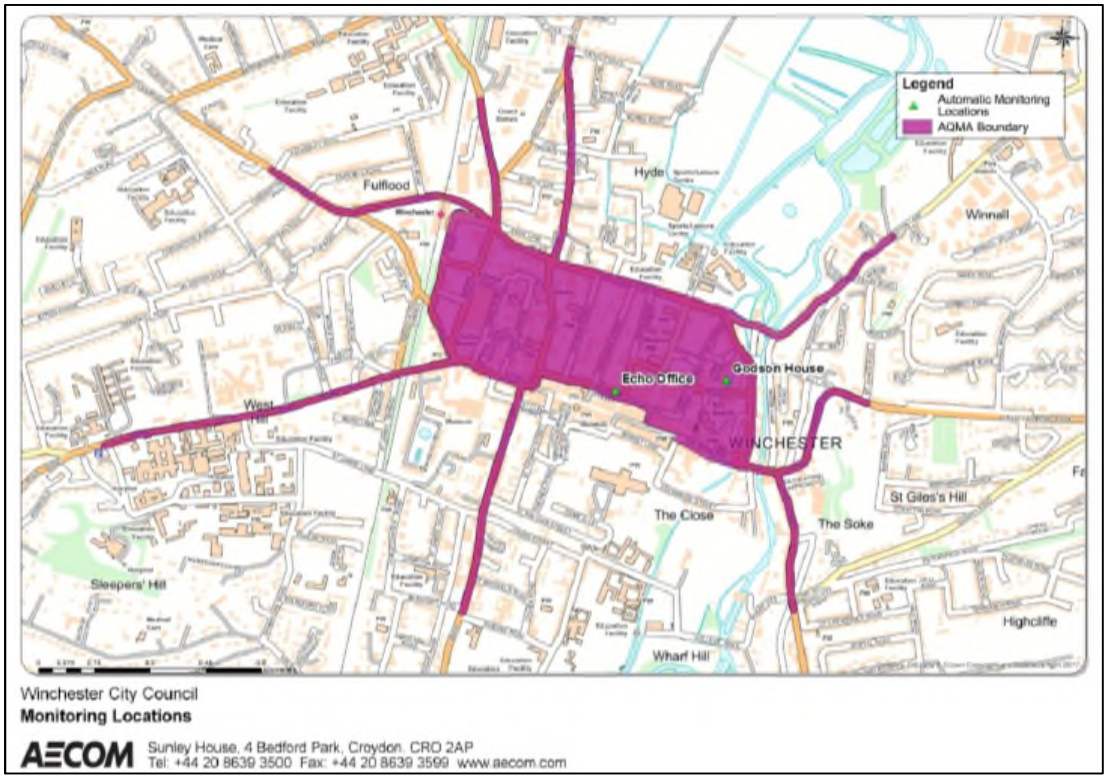
- a review of loading controls and enforcement operations;
- ensuring adequate space for loading is provided as part of any works to public realm/street layout; and
- engaging with local businesses to review freight management practices including consolidation schemes.

Pollution, Air Quality and Carbon Reduction

4.2.46 The levels of harmful emissions in parts of central Winchester currently exceed national standards and legislation requires that the City Council and Hampshire County Council work together to develop strategies to improve conditions. In 2017, the Council adopted an Air Quality Action Plan to address air quality issues in and around the centre of Winchester which resulted in the designation of an Air Quality Management Area (AQMA) within the city centre.

4.2.47 An AQMA was originally declared in 2003 due to exceedances of the annual mean nitrogen dioxide (NO_2) objective and 24 hourly mean PM_{10} objective[7], however the Council achieved compliance with legal standards for PM_{10} in 2012 and successfully applied to the Government to 'undeclare' on its duty to monitor PM_{10}. The boundary of the AQMA is shown in **Figure 17** below.

Figure 17. Map of AQMA boundary in Winchester City Centre



Source: WCC Air Quality Action Plan (2017)

4.2.48 Good progress is being made in relation to delivering the Air Quality Action Plan objective, which focuses on achieving compliance with statutory Nitrogen Dioxide standards[8]. Air quality in the city is steadily improving in the central area with the exception of a few locations, and WCC has proposed that a review of the data be undertaken and an application made to DEFRA to reduce the size of the AQMA. Should this application be successful, it is expected that the AQMA will be retained along Romsey Road, High Street and the B3331 St Georges Street as shown below in **Figure 18**.

[7] Winchester Air Action Plan 2017
[8] CAB3217 Air Quality Action Plan Update (22nd January 2020)

Figure 18. Expected AQMA in 2021 – Winchester Town Area

Source: CAB3217 Air Quality Action Plan Update (22nd January 2020)

Health

4.2.49 Transport can play a key role in managing the health of the population, with active lifestyles being recognised as beneficial for tackling rising obesity, reducing the risk of major illnesses and improving mental health and wellbeing[9]. Spatial planning can affect how easily and frequently people incorporate physical activity to their daily lives. While urban environments such as Winchester Town Area may have lower levels of open green space than other areas of the district, the compact, higher density and mixed-use patterns of development present can enable people to incorporate active travel into their daily journeys and commutes. For this to be encouraged however, the public realm needs to be attractive to non-motorised users, with wide, level pavements and crossings, clear cycle routes and environments able to cater for all levels of accessibility.

4.2.50 The percentage of adults that achieve at least 150 minutes physical activity per week for Winchester district is 63.4%, compared to 56% nationally[10]. Data specific to the Winchester Town Area is not available, however it is likely that the resident population have similarly high levels of physical activity to the average for the district, and this accords with the WTA having much high proportions of households who do not have a car or van, as described in the next section.

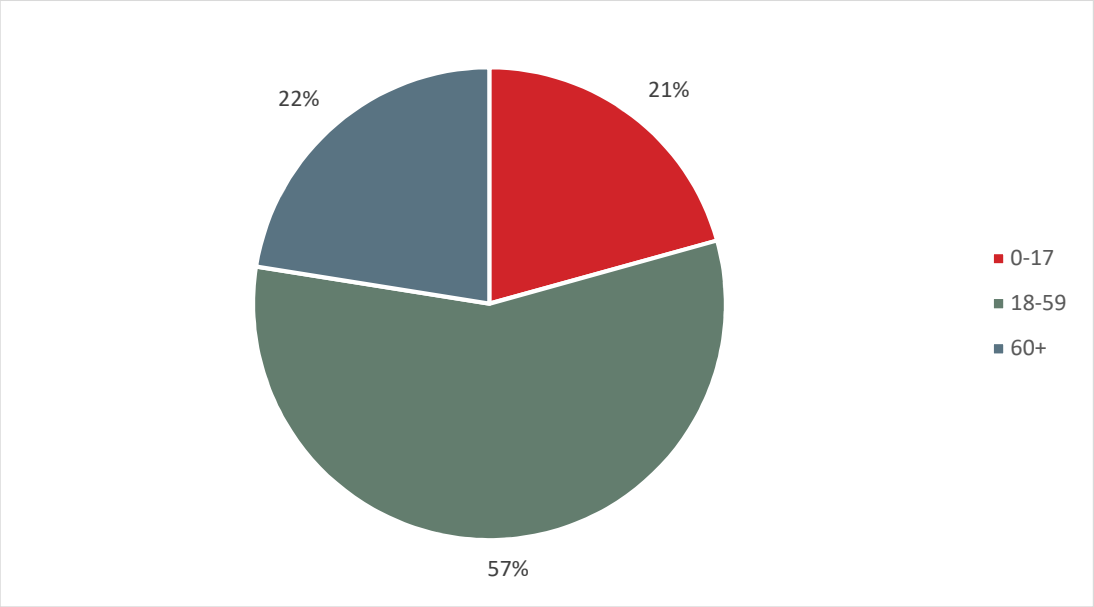
[9] nhs.uk/live-well
[10] Winchester District Health and Wellbeing Partnership Board - Action Plan 2016/18

Demographics

4.2.51 Winchester Town Area is the most populous spatial area of the district, comprising around 44,000 residents based on the 2011 Census[11] (~38%). Of these, around 21% of the population were under the age of 18, which is the same proportion as the district as a whole, and 22% were aged 60 or over, which is slightly lower than district as a whole (25%). This breakdown is shown in **Figure 19**.

4.2.52 Future development allocations will need to ensure that housing and supporting transport infrastructure are able to accommodate the changing demographics of the area. This means ensuring sufficient provision of accessible parking, safe and attractive walking and cycling routes to schools and appropriate locations for elderly care homes which aren't overly reliant on car travel for access by residents, visitors and staff.

Figure 19. Population Age Breakdown - Winchester Town Area



Source: Table KS102E, Nomisweb.co.uk,

4.2.53 The amount of cars and vans owned per household is a useful indicator of the travel needs of the current population. While statistics on vehicle ownership do not indicate how frequently they are used, the proportion of the population who do not own a vehicle can indicate whether people's travel needs are being met by non-car modes, although it is noted the figures are also affected by economic factors.

4.2.54 As shown in **Table 4** below, Winchester Town Area has a higher proportion of the population who do not own cars or vans at 24%, but a relatively high proportion who own 1 car or van, at almost half of households.

[11] Table KS101EW, Nomisweb.co.uk - *Note that the area to the north of the Winchester Town Area including Barton Farm was excluded due to the size of the census output area being likely to skew the data.

Table 4. Car or Van Ownership Comparison – Winchester Town Area

	Winchester Town Area	Winchester District	South East England	England and Wales
No cars or vans in household	24%	14.3%	18.6%	25.6%
1 car or van in household	46%	39.1%	41.7%	42.3%
2 cars or vans in household	24%	34.4%	29.8%	24.7%
3 cars or vans in household	5%	8.7%	7.1%	5.5%
4 or more car or vans in household	1%	3.5%	2.8%	1.9%
	100%	**100%**	**100%**	**100%**

Source: Table KS404EW, Nomisweb.co.uk

4.2.55 The latest data regarding the modes by which residents of the Winchester Town Area travel to work have also been observed from the 2011 Census. This is set out in **Table 5** below.

Table 5. Method of Travel to Work Data – Winchester Town Area

Mode	Population Percentage (%)
Underground, metro, light rail, tram	0%
Train	10%
Bus, minibus or coach	5%
Taxi	0%
Motorcycle, scooter or moped	1%
Driving a car or van	49%
Passenger in a car or van	4%
Bicycle	3%
On foot	26%
Other method of travel to work	1%
Total	**100%**

4.2.56 As shown above, around half of residents (49%) of the Winchester Town Area who travel to work do so by car. Travelling on foot was the second highest popular mode at 26%, while public transport was used by 15% of the population who travel to work.

4.2.57 It was also identified that 8% of employed residents work mainly from home, and 36% of the population of this spatial area were not in employment (either due to unemployment or retirement).

Scope and options for maximising travel planning and behavioural change

4.2.58 The opportunity for increasing levels of sustainable travel by residents in this spatial area is likely to be higher than the rest of the district due to the existing services available and the concentration of development (particularly workplaces) in this spatial area being higher, meaning the amount of people for which taking the bus is viable is also higher. This is demonstrated in the success of the city's park and ride scheme.

4.2.59 The ability to encourage active travel (e.g. walking and cycling) is also potentially high due to residents of the area being likely to also work within a relatively short distance, meaning journey times may be viable, although this is less likely to be the case for villages further from the centre due to the current lack of infrastructure reducing the attractiveness of active travel. This could be maximised by providing improved routes into the central area for cyclists and pedestrians.

4.2.60 It is also noted that additional consideration of "last mile" interventions, to support ease of access to public transport and key cycling infrastructure for longer journeys, has great potential to improve the uptake of these modes. The Winchester Access and Movement Strategy includes a section addressing these types of intervention and it is intended that this will also form part of the supporting work and analysis for Stage 2 of these assessments.

4.2.61 The approach to shorter, local journeys has also taken on greater significance as a result of the impacts of Covid-19; it is anticipated that this pattern will endure to some extent regardless of how wider travel patterns may alter in response to progress (or lack thereof) in developing treatments or vaccinations for Covid-19 itself. These effects may in turn place a greater emphasis and weight on a volume of packages of local-level, relatively modest interventions in place of certain larger projects; this will need to be considered carefully at the planning of Stage 2.

Conclusion – Winchester Town Area

4.2.62 Winchester Town Area has the highest level of service for public transport, walking and cycling in the district, although travel by these mode continues to be affected by private car use which is predominantly associated with people accessing the town area from outside, despite the popular Park and Ride scheme targeting these trips. The area experiences some issues as a result of the dominant highway network including congestion, poor air quality and some areas of poor highway safety, although improvements have been made in recent years.

4.3 South Hampshire Urban Areas (SHUA)

4.3.1 The South Hampshire Urban Areas covers two areas on the southern edge of the District where major development is proposed. The spatial vision for the SHUAs is to develop a series of sustainable new neighbourhoods / communities to contribute towards meeting the Partnership for Urban South Hampshire (PfSH) strategy of improving economic performance. This will provide sustainable opportunities for large-scale, high quality housing, economic development and associated uses, in the form of new urban extensions, rather than dispersing similar numbers amongst the smaller settlements which also lie within the PfSH area.

4.3.2 The major greenfield developments required within the PfSH part of the District are focused on the urban areas that fringe the District, at West of Waterlooville and North Whiteley. West of Waterlooville has a strategic housing allocation for around 3,000 dwellings of which about 2500 dwellings are in the Winchester District, while the North Whiteley development area is expected to deliver about 3,500 dwellings.

Principal Transport Considerations

Walking and Cycling

4.3.3 Most existing housing developments within the SHUA provide good quality footpaths connecting to adjacent areas, albeit with some roads having footpaths on one side of the road only and many crossings being uncontrolled. Pedestrian facilities within the main urban areas are typically attractive enough for people to consider making short trips on foot, however the distances to destinations are likely to make travelling by this mode unattractive for some trips.

4.3.4 Some cycle route signage and facilities exist, particularly on the main roads through the settlements. While many of the residential roads experience traffic levels low enough for confident riders to be comfortable cycling on the carriageway, encouraging potential riders to cycle regularly is likely to require additional signage, road markings and facilities at crossings in order to raise the visibility of cyclists on the road and thus improve perceptions of safety. These will need to be tailored to their specific intended locations, however the over-arching principles of good design will be similar at both the scale of the SHUA and in the wider PfSH area.

4.3.5 WCC is looking to commission a Local Cycle Walking Implementation Plan (LCWIP) in 2020 which will provide a greater understanding of current provision and actions for increasing use of these modes.

Public Transport

4.3.6 Public transport options within the SHUA currently comprise a limited number of bus services which operate infrequently. Access to the national rail network is only possible via a multi-modal journey due to there being no rail stations within this spatial area. Swanwick rail station (Fareham district) is approximately a 25 minute walk from Whiteley however, providing some potential route options.

Bus

4.3.7 Bus services, provided mainly by Stagecoach and First Group, provide connections between the larger towns within the central and southern parts of the district. Some rural areas require

convoluted and indirect journeys using multiple services however, which is likely to discourage some users.

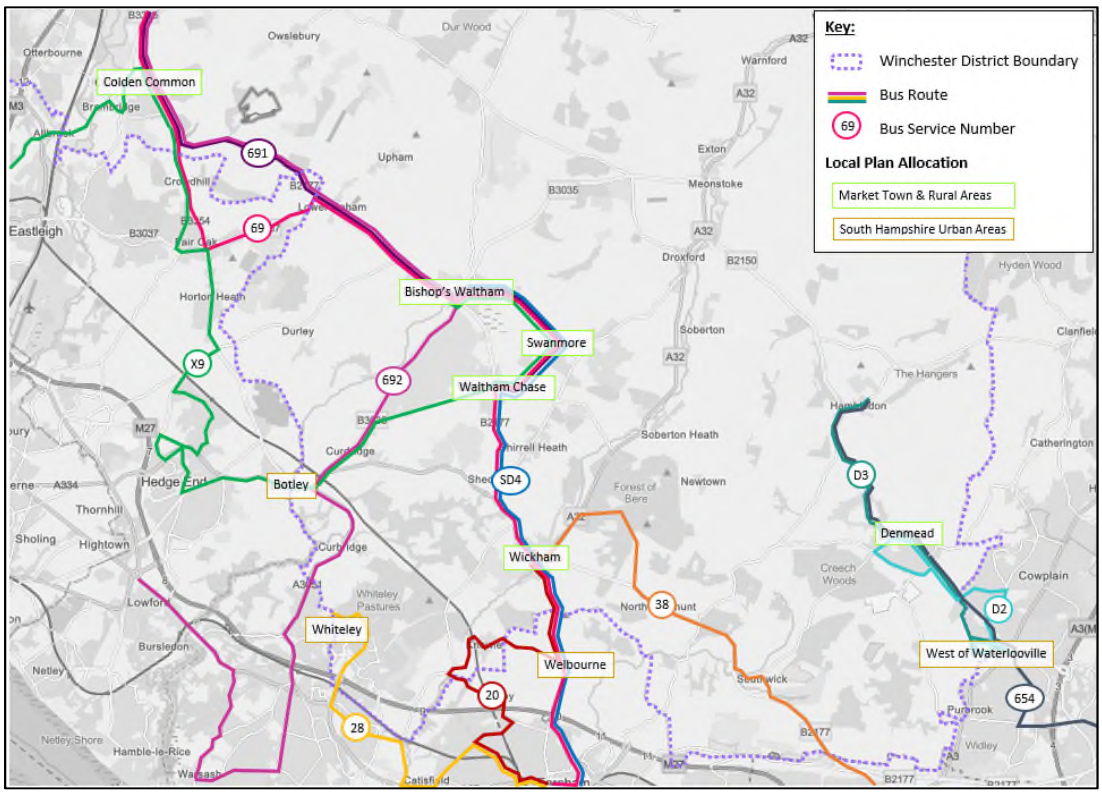
4.3.8 The frequency of buses serving the main settlements within the SHUA spatial area are shown in **Table 6** below.

Table 6. Details of Bus Services - SHUA

Service	Route	Frequency			
		Weekday		Weekend	
		AM Peak (08:00-09:00)	PM Peak (17:00-18:00)	Saturday Peak (13:00-14:00)	Sunday Peak (13:00-14:00)
20	Fareham – Knowle – Wickham	1	1	1	0
28	Fareham – Park Gate – Whiteley	1	1	1	0
69	Fareham – Wickham – Waltham Chase – Swamore – Colden Common – Winchester	2	1	1	1
654	Hambledon – Denmead – Waterlooville – Havant Campus	1	1	0	0
692	Warsash – Botley – Bishop's Waltham – Colden Common – Peter Symonds College	1	1	0	0
D2/D3	Waterlooville – Denmead – Hambledon	1	1	1	0
X9	Bishops Waltham – Swanmore – Hedge End – Eastleigh	1	1	1	0
SD4	Bishops Waltham – Waltham Chase – Wickham – Fareham – Havant College	1	1	0	0

4.3.9 These routes are shown in **Figure 20** below.

Figure 20. Bus Routes Map – SHUA



4.3.10 As shown above, there are a limited number of buses serving the SHUAs, which provide access to other small settlements and enable interchanges with other bus services. The frequency of the bus services is relatively low however, at up to two services per hour in the peak periods, and few services on Sundays.

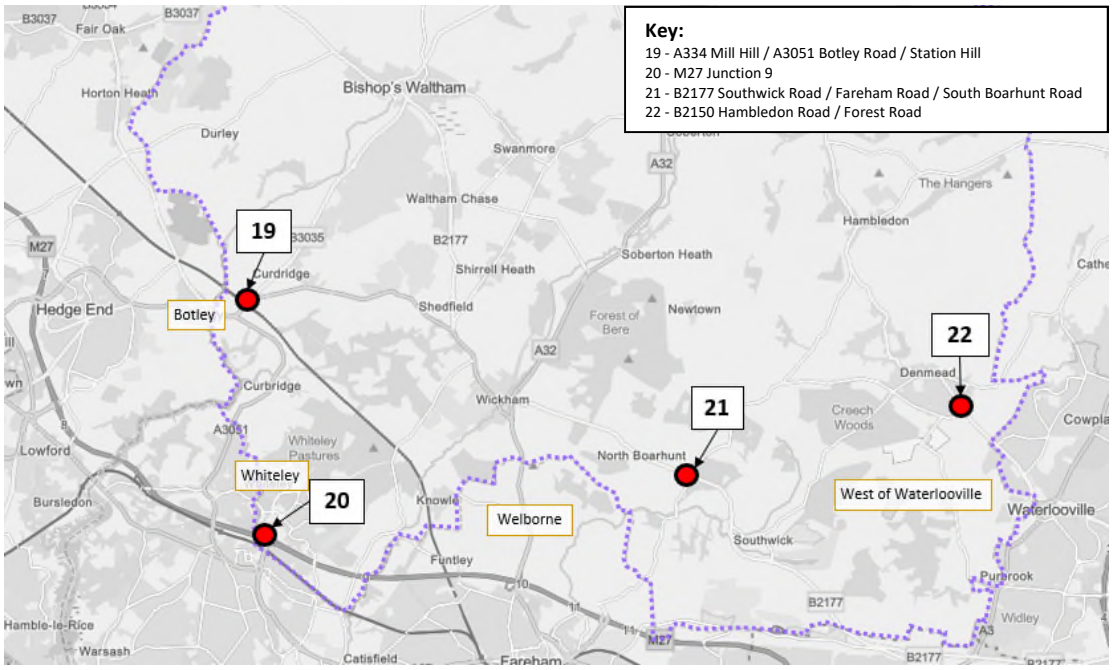
4.3.11 There are currently gaps in the bus network between the West of Waterlooville site and South West parts of district, resulting in convoluted multi-modal trips unless trips are made via car. While major employment opportunities and destinations on this route may be few, it would be beneficial to secure more frequent, reliable bus services to support the extensive numbers of new houses planned for the SHUA to avoid future residents being reliant on private car ownership, or having the perception that it is essential for daily needs.

Highway Network

4.3.12 The highway network within the SHUAs comprises a mix of small residential roads, several minor country roads connecting villages and towns, and links to the strategic road network in the form of the M27 and A3 (M). This proximity to the strategic road network, combined with the lower levels of amenities and employment opportunities within each urban area, encourages commuting trips to other towns being made by car, compounded by available public transport options being infrequent and limited in terms of accessible destinations and journey time.

4.3.13 Parts of the highway network which have been identified using the strategic transport model for the area (SRTM) as approaching design capacity in peak periods, are shown in **Figure 21** below.

Figure 21. Congestion Hotspots Map – SHUA (2019)



4.3.14 As shown above, the parts of the network understood to be most congested are generally located close to residential settlements, and occur on both A and B class roads. Junction 9 of the M27 has also been identified as an area of congestion.

4.3.15 Future year modelling scenarios have also been observed to identify the junctions which are expected to be at or approaching capacity with the current level of planned development and traffic growth (i.e. without any additional site allocations which this Local Plan update may propose). **Figure 22** and **Figure 23** and below show these junctions for the 2031 and 2036 reference case scenarios.

Figure 22. Congestion Hotspots Map – SHUA (2031)

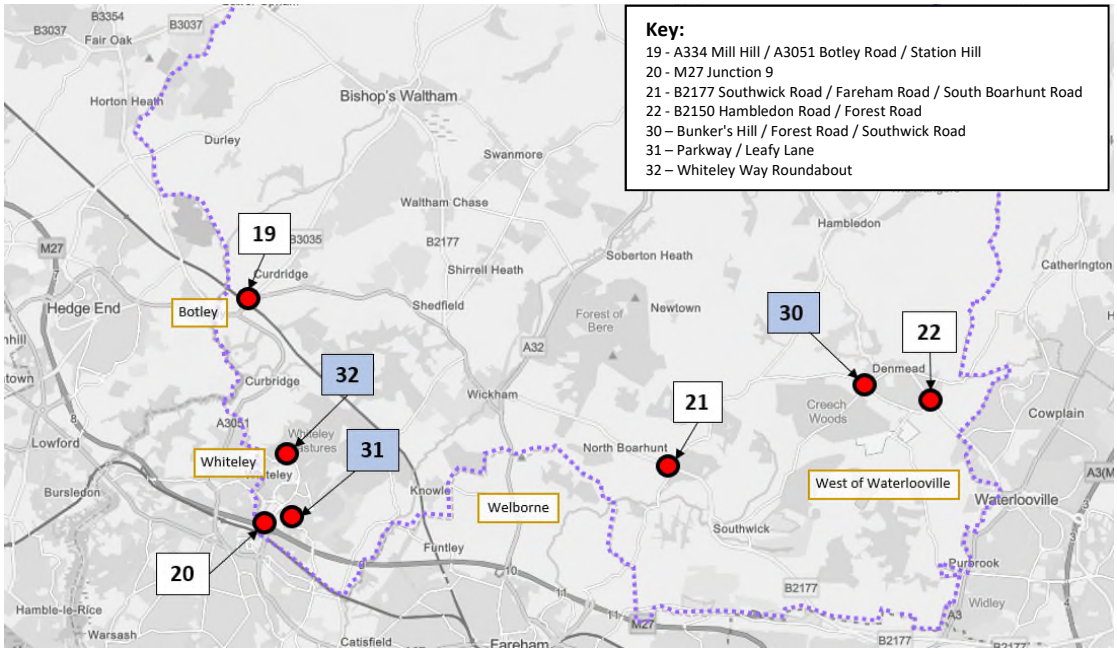
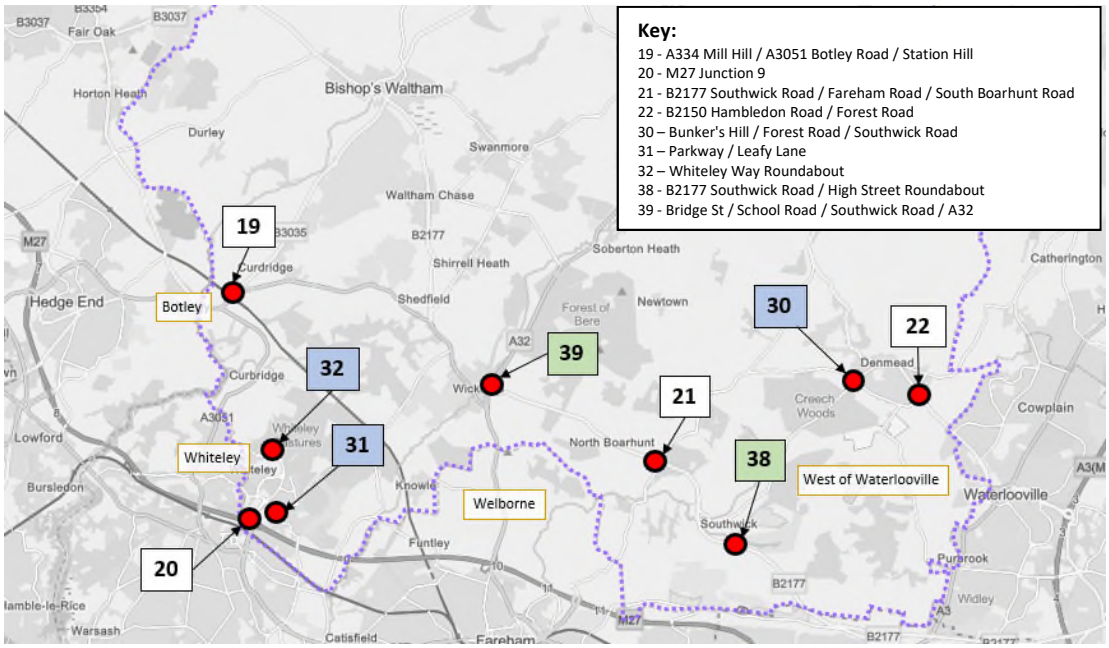


Figure 23. Congestion Hotspots Map – SHUA (2036)



Parking

4.3.16 Parking in the South Hampshire Urban Areas generally consists of public and private pay and display / pay on foot car parks in the central areas, on-street parking and residential driveways. Some shopping areas offer free parking for selected periods, such as Whiteley Shopping Centre, which offers 510 parking spaces which are free for four hours or £2 for six hours[12]. The general approach and policy stance in relation to parking is addressed in the borough's Parking and Access Strategy.

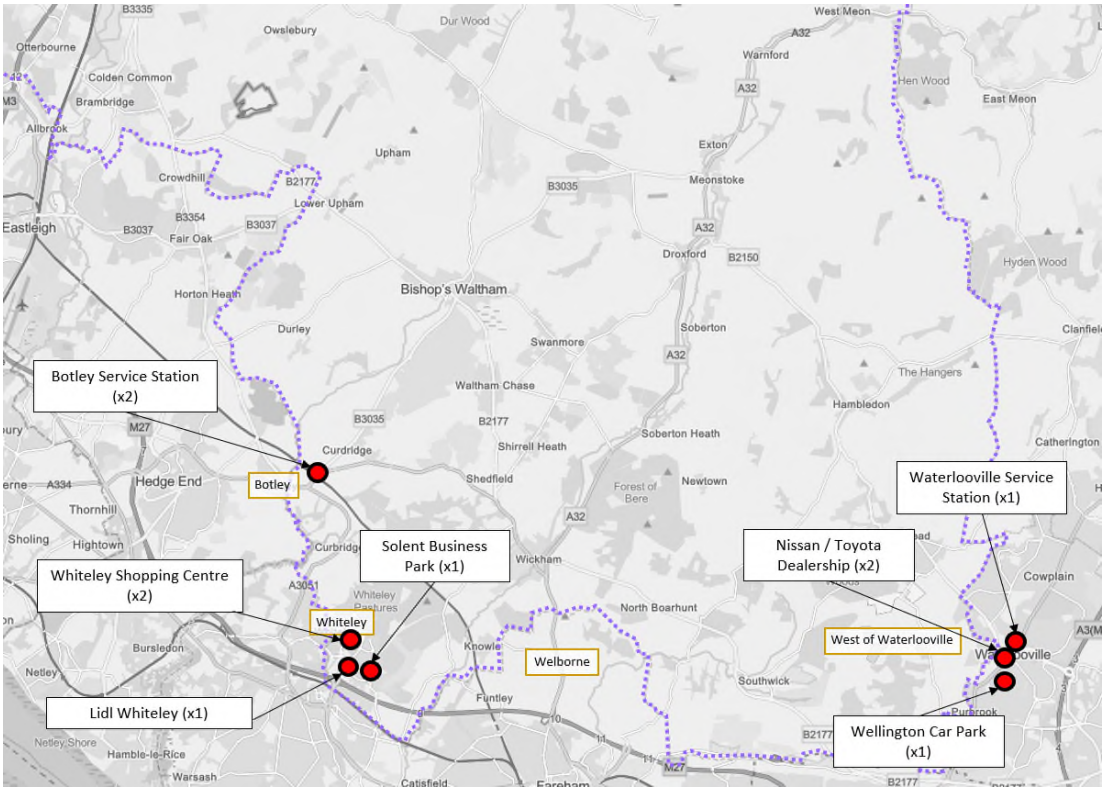
4.3.17 The overall number of parking spaces within this spatial area is not known, however there have been historic issues with insufficient off-street parking for businesses resulting in parking demand spilling over into nearby residential roads, causing conflicts[13]. This has been mitigated in some places via additional double-yellow line parking restrictions, although it is unlikely that this issue has been fully solved.

Electric Vehicle Charging Infrastructure

4.3.18 The most recent survey of EVCI within car parks operated by WCC was undertaken in 2018, and this identified no charging points within the South Hampshire Urban Areas. The short term strategy which was included in WCC's Electric Vehicle Charging Strategy (2019) for increasing EVCI within Winchester district also proposed no locations within the SHUA car parks. A review of online EVCI mapping has identified that there are now several publicly accessible charging locations but the overall provision in the SHUAs remains low. The location of the ten existing charging points identified within or close to the SHUAs is shown in **Figure 24** below.

[12] Parkopedia.co.uk / Whiteleyshopping.co.uk
[13] Meeting of Cabinet (Traffic and Parking) Committee, Monday 17th December 2018, Item 3

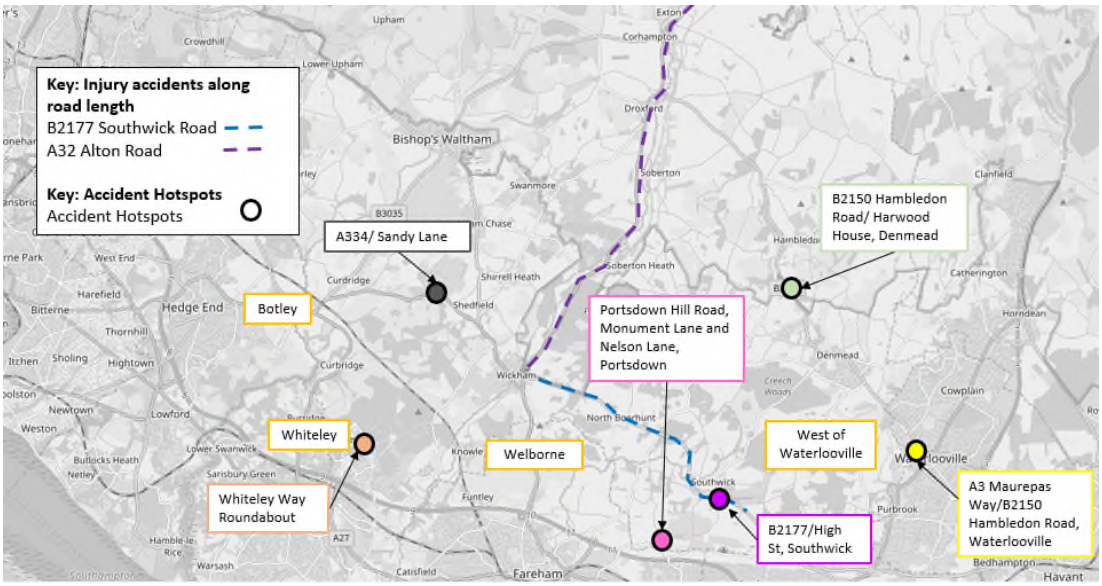
Figure 24. EVCI Locations - SHUA



Road Safety

4.3.19 Locations within the South Hampshire Urban Areas which are being prioritised for investigation in 2019/20 and 2020/21 due to the frequency of vehicle collisions are shown in **Figure 25** below.

Figure 25. Collision Hotspots / Areas of Investigation – SHUA



Wider Transport Considerations

Freight

4.3.20 The SHUAs have generally good access for freight due to their proximity to the M27 and A3(M) motorways, although freight will be subject to any congestion issues on these roads and the minor roads identified as being congested in the section above. It will be necessary to ensure that freight traffic is able to service the existing allocation sites using major roads as much as possible rather than narrower rural roads, and this also applies to any additional sites which will come forward between 2031 and 2036.

Pollution, Air Quality and Carbon Reduction

4.3.21 The higher population density and traffic volumes in the Winchester Town Area are likely to be key factors in regards to the poor air quality levels observed, and so WCC has a lesser focus in monitoring the rest of the district. Nevertheless, many of the district's 40 Nitrogen Dioxide (NO_2) diffusion tubes are located outside the city centre area. These are generally positioned on roadside sites and near domestic building facades.

4.3.22 WCC's most recently published Air Quality Management Report (2016) found that all of the NO_2 sites outside the city centre remained in compliance with the annual mean objective. This is consistent with there being no AQMAs declared outside Winchester town centre.

4.3.23 It is understood that Particulate Matter (PM_{10}) is only monitored in Winchester town centre and Carbon Monoxide is no longer monitored in the district.

4.3.24 Enabling greater levels of sustainable and active travel is likely to result in improved traffic flow which in turn, reduces road emissions and noise pollution.

Health

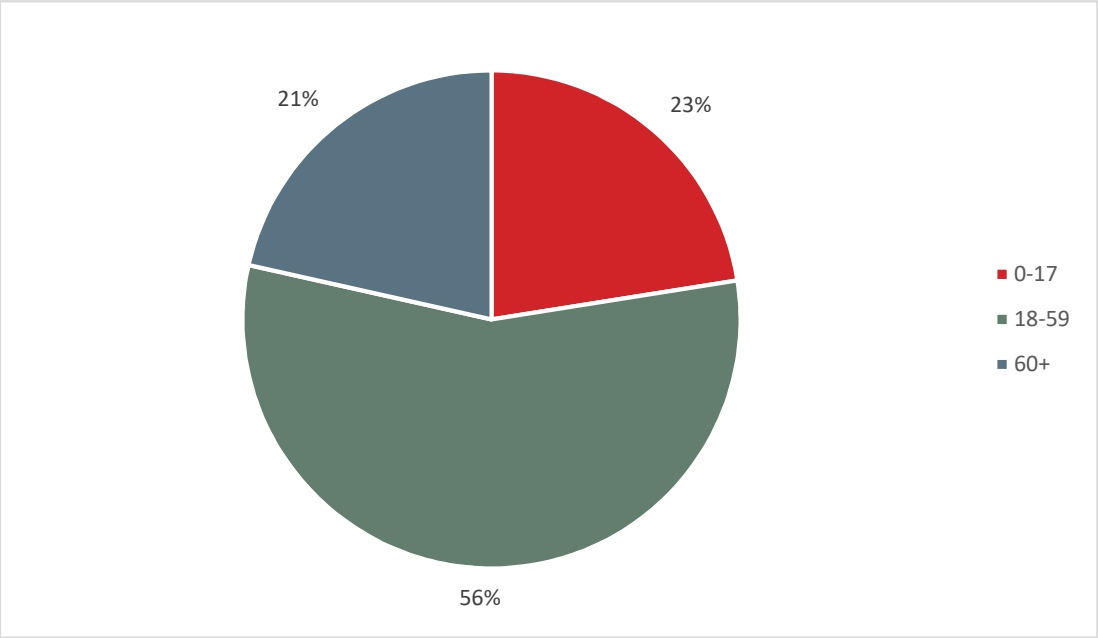
4.3.25 The current patterns of development and transport networks within the SHUAs are unlikely to encourage high levels of active travel behaviour which can contribute to healthy lifestyles. That said, the district's higher than average levels of the population who receive more than the recommended 150 minutes physical exercise per week suggests people living in the SHUAs are able to find places and methods for regular exercise.

Demographics

4.3.26 Analysis of the population currently living in the SHUA presents issues due to large parts of the allocated development sites not yet being built. Nevertheless, 2011 Census data for residents living within these areas has been examined for completeness. It should be noted that Fareham 004A and 004E Lower Super Output areas have been included in this analysis to ensure the characteristics of the proposed Welborne development area are represented in the figures.

4.3.27 A total of 11,617 residents have been identified, of which 23% are below the age of 18, while 21% are aged 60 or over. This is shown in **Figure 26** below. The population is of a very similar age profile to the Winchester Town Area, with a slightly higher proportion of younger people.

Figure 26. Population Age Breakdown - SHUA



4.3.28 The age profile of the SHUAs suggests that there is a likely to be a particularly high demand for travel to educational establishments, which are typically amenable to being made by sustainable or active modes. The lower population density of these areas can mean that distances to schools are greater however, encouraging trips being made by car or where possible, bus.

4.3.29 An understanding of car or van ownership for the SHUAs is provided in **Table 7** below.

Table 7. Car or Van Ownership Comparison – SHUA

	South Hampshire Urban Areas	Winchester District	South East England	England and Wales
No cars or vans in household	5%	14.3%	18.6%	25.6%
1 car or van in household	34%	39.1%	41.7%	42.3%
2 cars or vans in household	43%	34.4%	29.8%	24.7%
3 cars or vans in household	12%	8.7%	7.1%	5.5%
4 or more car or vans in household	5%	3.5%	2.8%	1.9%
	100%	**100%**	**100%**	**100%**

Source: Table KS404EW, Nomisweb.co.uk

4.3.30 As can be seen from **Table 7**, currently very few households have no cars or vans, and 77% have one or two cars or vans, suggesting that most people in these areas perceive car or van travel to be essential for mobility.

4.3.31 The latest data regarding the modes by which residents of the SHUAs travel to work have also been observed from the 2011 Census. This is set out in **Table 8** below.

Table 8. Method of Travel to Work Data – SHUA

Mode	Population Percentage (%)
Underground, metro, light rail, tram	0%
Train	3%
Bus, minibus or coach	1%
Taxi	0%
Motorcycle, scooter or moped	1%
Driving a car or van	77%
Passenger in a car or van	4%
Bicycle	2%
On foot	10%
Other method of travel to work	1%
Total	**100%**

4.3.32 As shown above, over three quarters of residents of the SHUAs who travel to work do so by car or van, with the travelling on foot being the second highest popular mode at 10%. Public transport usage was low at only 4% of the population who travel to work.

4.3.33 It was also identified that 8% of employed residents work mainly from home, and 26% of the population of this spatial area were not in employment (either due to unemployment or retirement).

Scope and options for maximising travel planning and behavioural change

4.3.34 The analysis of the current transport networks, car ownership and parking data for the existing developed parts of the SHUAs indicate that driving is ingrained in the travel behaviour of most residents and the employment base working in this spatial area. In Whiteley, high levels of parking around employment sites has been mitigated by providing additional (on-street) places to park. As well as the negative implications of on-street parking, providing increased capacity is unlikely to be a long-term solution to parking stress. Fundamental shifts to how and where people work, and the method of travels taken to access workplaces, is therefore likely to be necessary.

4.3.35 Key developments of the SHUAs are yet to be built, and so these present strong opportunities for communities to develop which are more self-sufficient, as well as incorporating measures for encouraging sustainable and active travel behaviour into site masterplans. Existing areas will require different approaches, such as maximising and improving the options for people to travel by alternative modes to common destinations such as workplaces, encouraging car sharing and hire cars, and forming safe active travel networks to key destinations.

Conclusion – South Hampshire Urban Areas

4.3.36 The SHUAs have high proportions of car or van ownership by households, as well as higher proportions of residents who are in older age categories than Winchester Town Area. This, combined with the lower levels of service for public transport and active travel modes, means that the existing population is likely to have a relatively high dependency on private car travel which could result in issues relating to air quality (currently within objective levels) as well as worsened highway congestion and parking demands as development increases if alternative options are not sufficiently provided.

4.4 Market Towns and Rural Areas (MTRA)

4.4.1 This spatial area includes the 50 or so smaller settlements ranging from market towns, with a population of several thousand, to small hamlets of a few dwellings. Most of these settlements consist of a major or minor through road which distributes traffic to the other settlements and has a distinctly higher level of traffic flow than the rest of the roads within the settlement.

Principal Transport Considerations

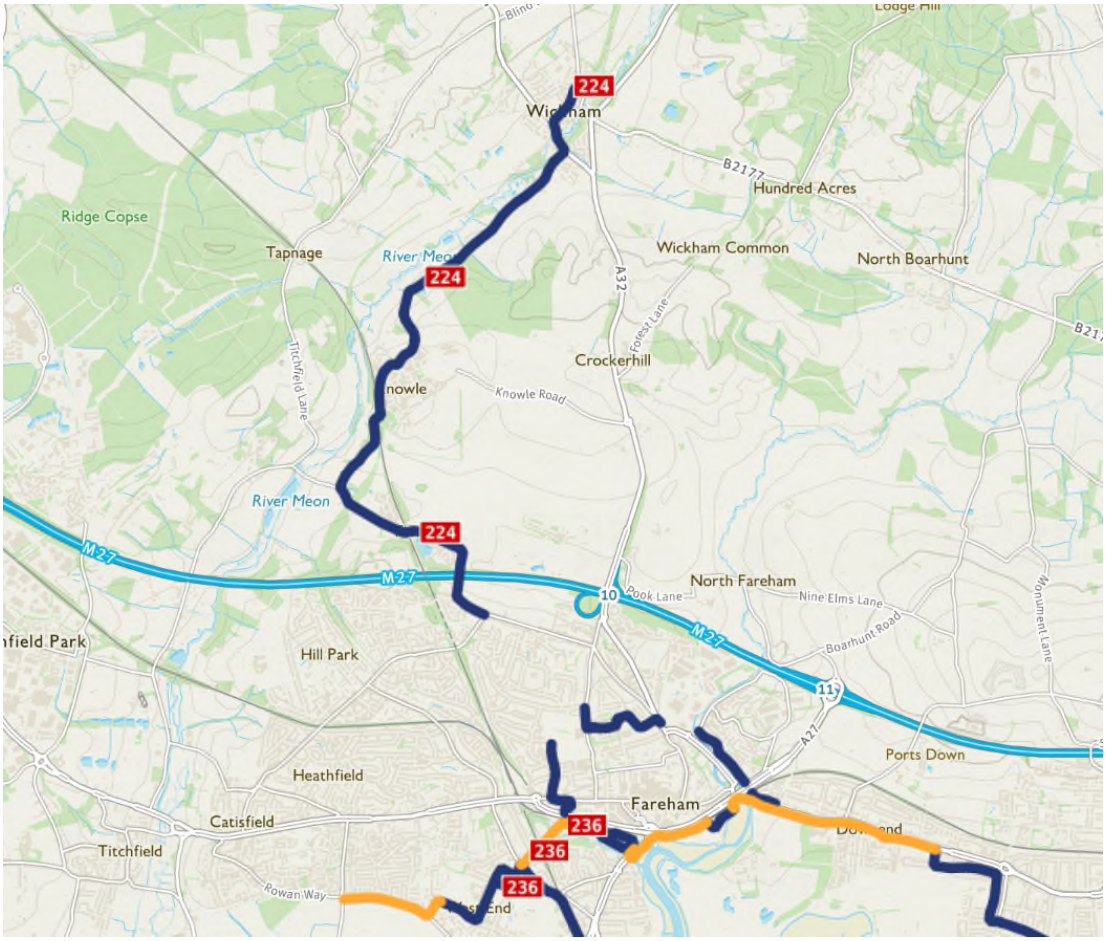
Walking and Cycling

4.4.2 The provision of infrastructure for walking and cycling in the MTRAs is varied, with main roads and areas surrounding newer residential developments having relatively good footway networks, and lightly populated areas and older settlements often having limited continuous infrastructure. The presence of obstacles, such on-street parking reducing footway width and side roads which lack dropped kerbs, may present difficulties to people with reduced mobility or people pushing prams, though the provision is likely to be sufficient for most people to traverse the areas safely. Should these areas be extended by additional housing however, the current provision will need to assessed to ensure key local destinations are able to accessed on foot, using routes which are attractive to residents.

4.4.3 The forthcoming Local Cycle Walking Implementation Plan (LCWIP) to be undertaken by WCC will include this spatial area and thus provide a greater understanding of current provision and actions for increasing use of these modes.

4.4.4 National Cycle Route 224 routes between Wickham and Gosport and from Farnham to Medstead. While the only national cycle route within Winchester district it nevertheless demonstrates a suitable, active travel route option for some short and medium-length journeys. The route within the Winchester district generally uses quieter roads with occasional off-road sections. The route is shown in **Figure 27** below.

Figure 27. Excerpt of the National Cycle Network Map - Wickham



Source: Sustrans.co.uk / OSmaps.ordnancesurvey.co.uk

Public Transport

4.4.5 As with the SHUAs, the main public transport option accessible from the MTRAs is the bus services which link market towns with some of the smaller villages. Direct access to the rail network is available at Micheldever, Shawford and Botley, although distances to stations outside the Winchester District (such as Swanwick, Fareham and Eastleigh) are small enough to allow rail to be included in some regular multi-modal journeys.

Bus

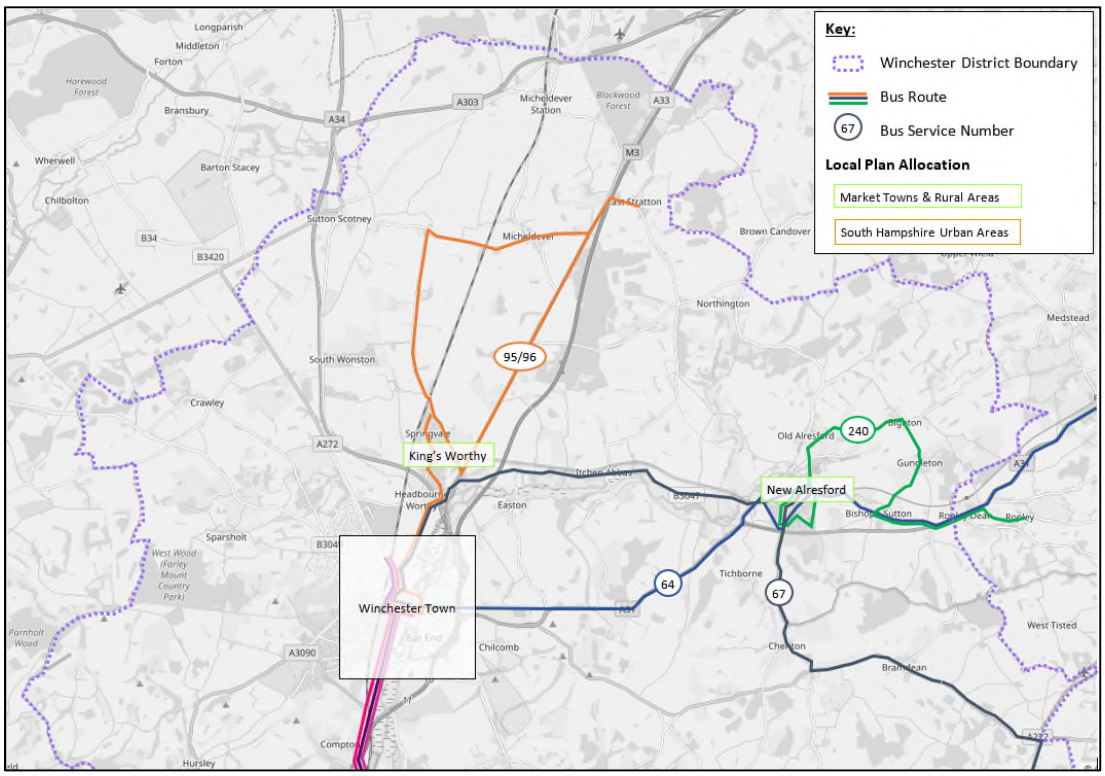
4.4.6 The frequency of buses serving the main settlements within the MTRA spatial area are shown in **Table 9** below.

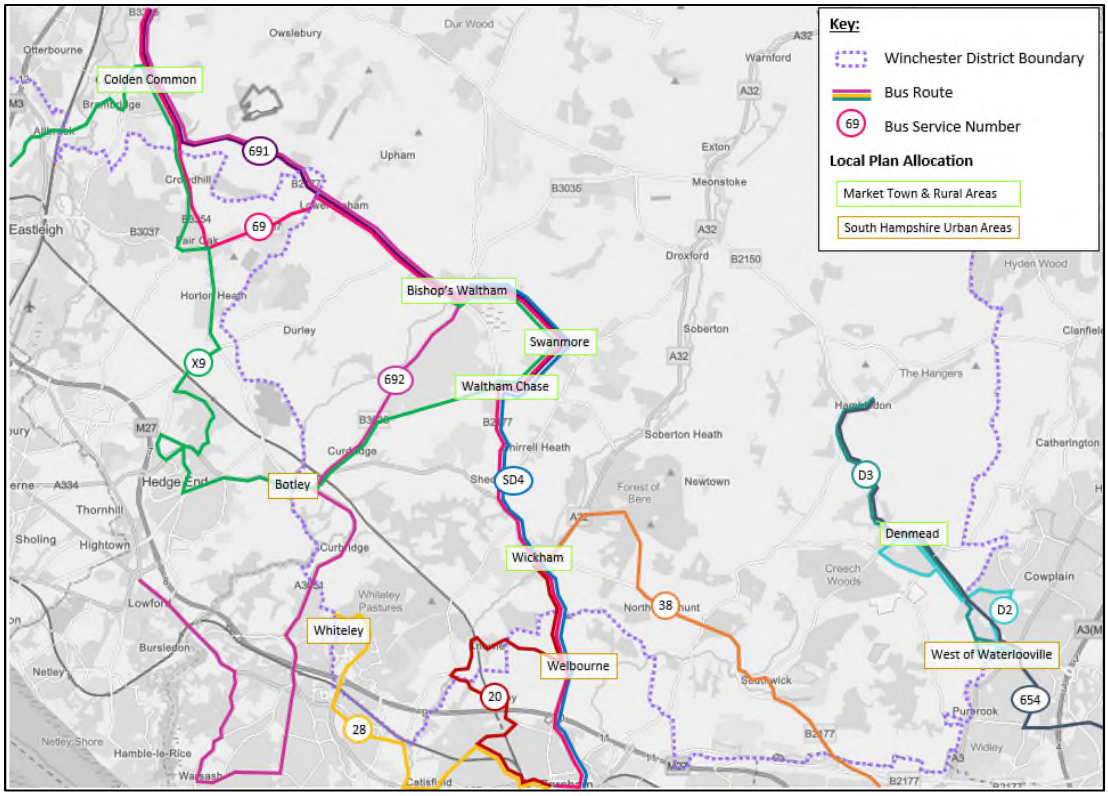
Table 9. Details of Bus Frequencies - MTRA

Service	Route	Frequency			
		Weekday		Weekend	
		AM Peak (08:00-09:00)	PM Peak (17:00-18:00)	Saturday (13:00-14:00)	Sunday Peak (13:00-14:00)
38	Wickham – Hundred Acres – Southwick – Cosham	1	1	0	0
64	Winchester – Alresford – Ropley - Alton	3	2	2	1
67	Petersfield – Meon – Bramdean – Cheriton – Alresford – Kings Worth – Winchester	1	1	1	0
69	Fareham – Wickham – Waltham Chase – Swanmore – Colden Common – Winchester	2	1	1	1
95/96	Winchester – Springvale – East Stratton – Micheldever	0	0	0	0
240	New Alresford – Ropley – Gundleton - Bighton – Old Alresford	0	0	0	0
654	Hambledon – Denmead – Waterlooville – Havant Campus	1	1	0	0
691	Knowle – Wickham – Bishop's Waltham – Peter Symonds College	1	1	0	0
692	Warsash – Botley – Bishop's Waltham – Colden Common – Peter Symonds College	1	1	0	0
D1/D2	Waterlooville – Denmead – Hambledon	1	1	1	0
X9	Bishops Waltham – Swanmore – Hedge End – Eastleigh	1	1	1	0
SD4	Bishops Waltham – Waltham Chase – Wickham – Fareham – Havant College	1	1	0	0

4.4.7 These routes are shown in **Figure 28** below.

Figure 28. Bus Service Routes - MTRA





**Source: Traveline. It is noted that there are several other additional bus routes provided by other bus companies, however they offer infrequent or irregular services only and have not been included on in these plans.*

4.4.8 As shown above, several bus services provide sustainable access options to the larger towns and areas, with most offering at least one peak hour service.

Rail

4.4.9 Access to the national rail network from the MTRA is possible at Micheldever station in the north of the district, Shawford close to Winchester Town Area and Botley Station in the south. The station provides services to London Waterloo, Southampton and Portsmouth Harbour, as shown in **Table 10**.

Table 10. Details of Rail Services - MTRA

Destination	Route Via	Frequency			
		Weekday		Weekend	
		AM Peak (08:00-09:00)	PM Peak (17:00-18:00)	Saturday (13:00-14:00)	Sunday Peak (13:00-14:00)
London Waterloo	Botley - Eastleigh – Shawford – Winchester – Micheldever - Basingstoke – Farnborough –	1	1	1	1
Portsmouth Harbour	Basingstoke – Micheldever - Winchester – Shawford - Eastleigh – Botley - Fareham –	1	1	1	1

Source: National Rail Enquires (direct services shown only; services to Southampton require a change at Winchester.)

Highway Network

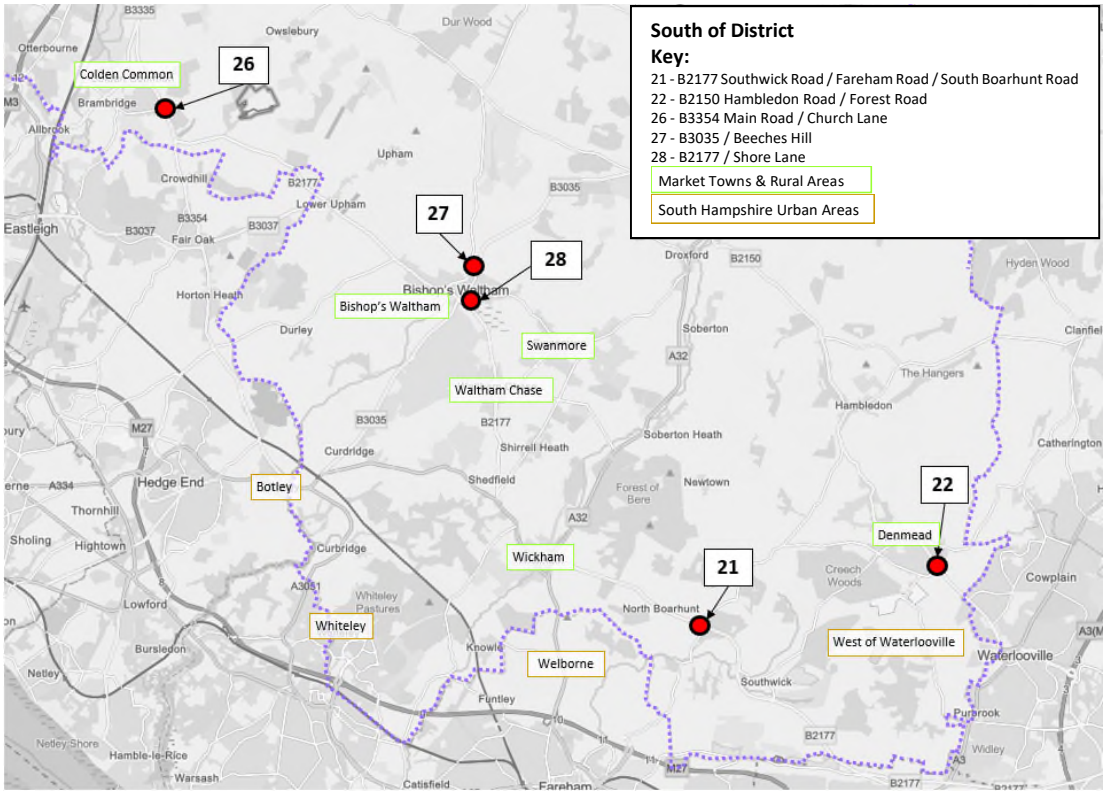
4.4.10 Most of these settlements consist of a major or minor through road which provides links to the other settlements and has a distinctly higher level of traffic flow, and a network of minor roads.

4.4.11 The parts of the network which are at or approaching their design capacity have been identified using the SRTM 2019 Reference Case model results. Junctions in which at least one approach arm operates at 95% of their capacity or higher in either of the morning and afternoon peak periods have been identified, and are shown for the MTRAs in **Figure 29** and **Figure 30** below.

4.4.12 It is noted that the 95% threshold has been selected for use within the reference case scenarios as this allows the assessment to focus in on those junctions which are most likely to exceed capacity in the future year scenario tests.

Figure 29. Congestion Hotspots Map – MTRA (North of District) (2019)

Figure 30. Congestion Hotspots Map – MTRA (South of District) (2019)



4.4.13 As shown above, there are several junctions approaching design capacity which tend to be in the vicinity of the larger market towns and rural areas. Other areas such as Waltham Chase, Wickham and Swanmore appear to have no junctions operating within the operational threshold set (95% capacity or more), although it should be noted that queuing may still occur at busy times in these areas.

4.4.14 Future year modelling scenarios have also been observed to identify the junctions which are expected to be at or approaching capacity with the current level of planned development and traffic growth (i.e. without any additional site allocations which this Local Plan update may propose). **Figure 31** and **Figure 32** below show these junctions for the 2031 and 2036 reference case scenarios. It is noted that no changes to the northern parts of the district (as shown in **Figure 29**) were identified for the 2031 nor 2036 scenarios, and so only the southern parts of the district have been shown below.

Figure 31. Congestion Hotspots Map – MRTA (2031) (South of District)

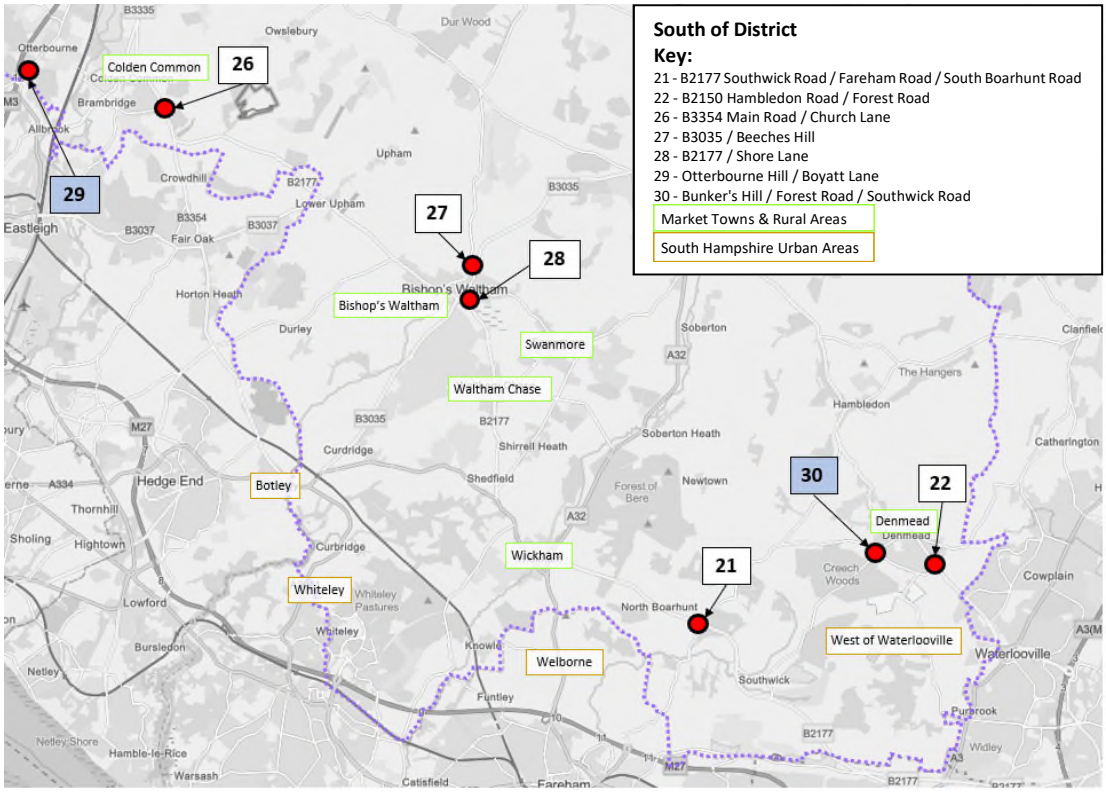
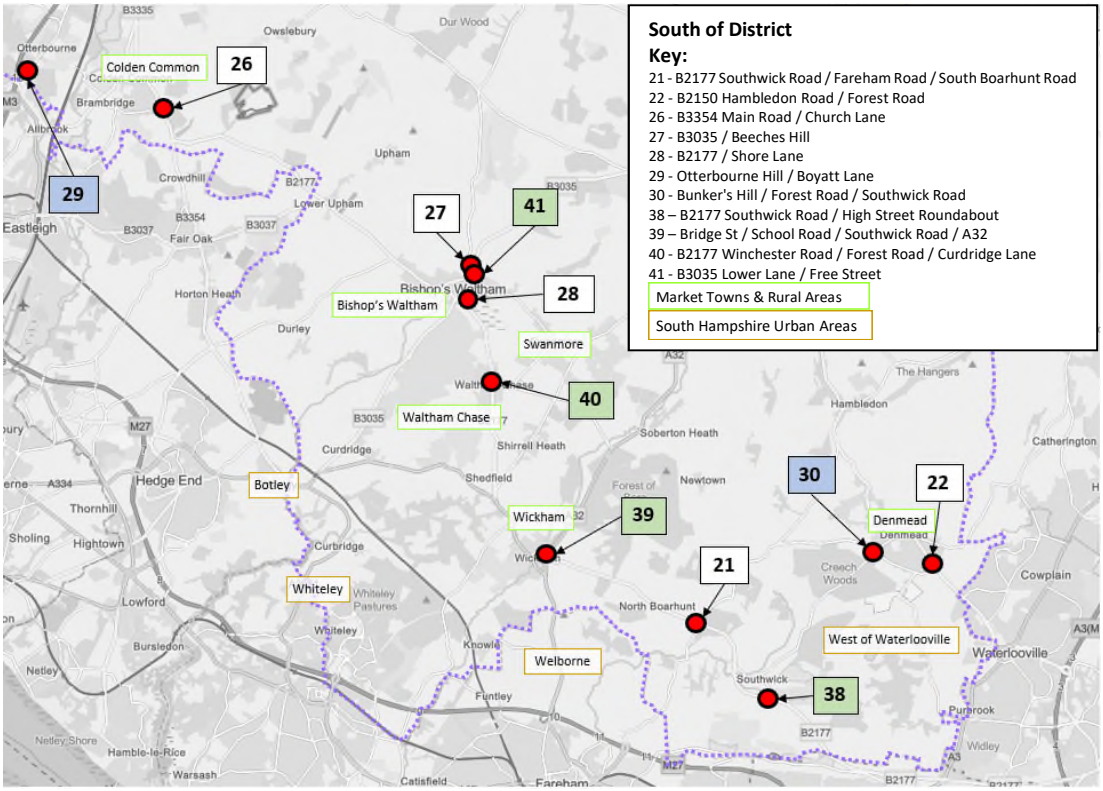


Figure 32. Congestion Hotspots Map – MRTA (2036)



Parking

4.4.15 WCC's most recent Parking Strategy (2014-2018) proposed to increase capacity of car parking in New Alresford, Wickham and Bishop's Waltham, however it is not known whether these proposals were carried out. Survey data of publicly operated off-street car parks in the Parking Strategy is shown in **Table 11** below for reference.

Table 11. Occupancy Rates at Publicly Owned Car Parks – MRTA (2014 Data)

Town	Car Park Location	Spaces	Occupancy Rate
New Alresford	Perins School	47 Spaces	91% occupied
	Alresford Station	124 spaces	99% occupied
	Alrebury Park	84 spaces	26% occupied
Wickham	Wickham Square	148 spaces	84% occupied
	Wickham Station	29 spaces	100% occupied
Bishops Waltham	Basingwell Street	98 spaces	100% occupied
	Lower Lane Car Park	77 spaces	97% occupied
Denmead	Kidmore Lane	75 spaces	47% occupied

Source: WCC Parking Strategy (2014-2018)

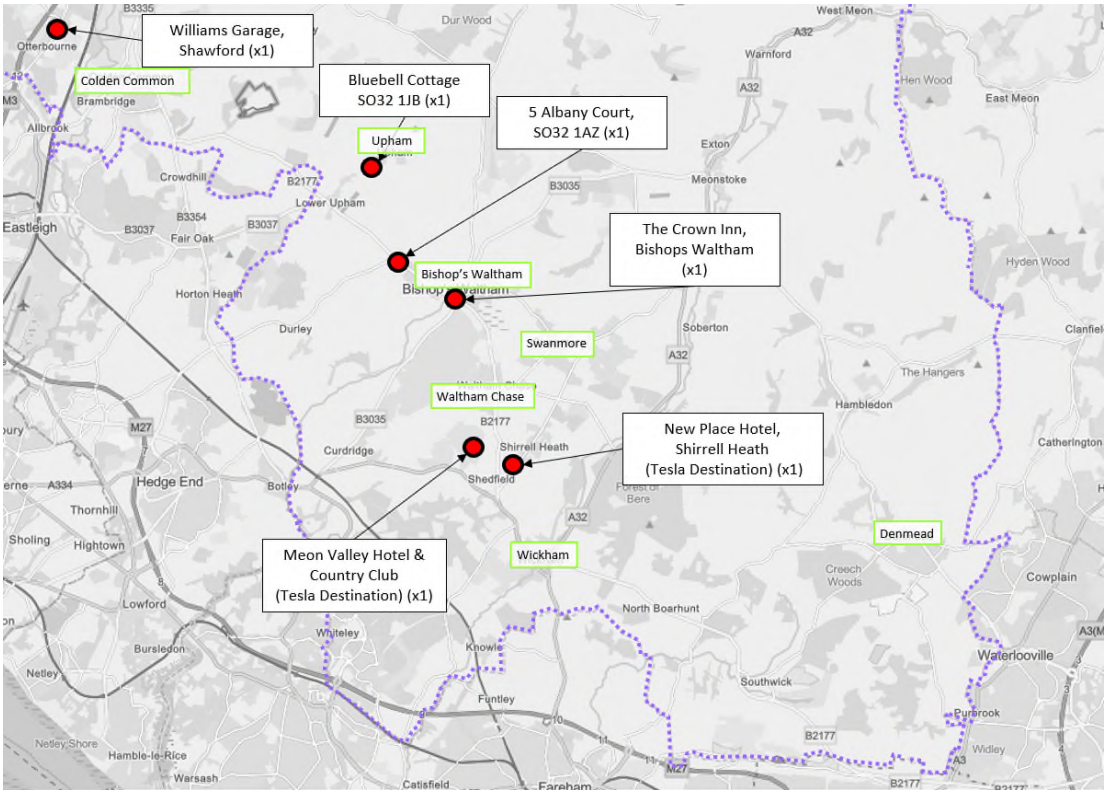
4.4.16 It is noted that the above data is from 2014. Given the continued increase in demand observed at other car parks in the district, it can be expected that the occupancy rate at the above car parks is now higher than was observed in 2014.

4.4.17 Residents' parking schemes were introduced to parts of Stanmore and Abbots Barton, with their primary purpose being to manage commuter and other long term parking within residential areas[14]. Periodic reviews of the schemes are taken place by WCC, with new areas considered as necessary.

Electric Vehicle Charging Infrastructure

4.4.18 The most recent survey of EVCI within car parks operated by WCC was undertaken in 2018, and this identified no charging points in the MRTAs. A review of online EVCI mapping has identified that there are now several publicly accessible charging locations but the overall provision in the MTRAs remains low. The location of the six existing charging points identified within or close to the MTRAs is shown in **Figure 24** below.

Figure 33. Existing EVCI Locations Map – MTRA



4.4.19 WCC's approved short-term EVCI strategy targets the provision of 12 charging points within Winchester district's rural car parks by 2023. Details are provided in **Table 12** below.

[14] Winchester Parking Strategy 2014-2018

Table 12. Existing EVCI - MTRA

Location	Car Park Name	Charger Rating	Tethered / untethered	No of Charging Bays	No of Chargers
Bishop's Waltham	Basingwell Street	7kw / 11 kw Type 2	Untethered	2	2
	Lower Lane	7kw / 11 kw Type 2	Untethered	1	1
Denmead	Kidmore Lane	7kw / 11 kw Type 2	Untethered	1	1
Wickham	Wickham Square	7kw / 11 kw Type 2	Untethered	2	1
	Wickham Station	7kw / 11 kw Type 2	Untethered	1	1
Alresford	Arlebury Park	7kw / 11 kw Type 2	Untethered	1	1
	Alresford Station	7kw Type 2	Untethered	2	2
	Perins	7kw / 11 kw Type 2	Untethered	1	1
Harestock	Priors Dean Road	7kw / 11 kw Type 2	Untethered	1	1
				12	**11**

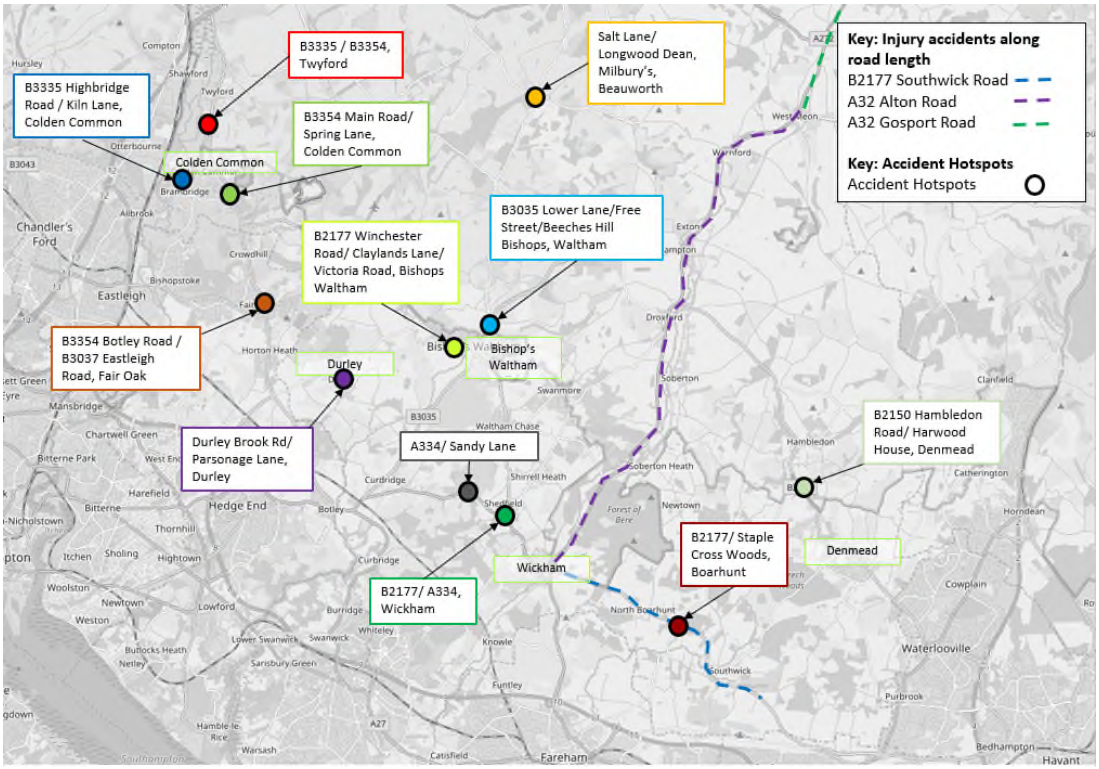
Source: WCC Electric Vehicle Charging Strategy (2019)

Road Safety

4.4.20 Locations within the Market Towns and Rural Areas which are being prioritised for investigation in 2019/20 and 2020/21 due to the instances of vehicle collision are shown in **Figure 34** below.

Figure 34. Collision Hotspots / Areas of Investigation – MRTA (Northern Area)

Figure 35. Collision Hotspots / Areas of Investigation – MRTA (Southern Area)



4.4.21 It can be seen from the figures above that collision hotspots are spread relatively evenly around the district (although very few locations are identified in the north), and are generally on major or minor road linking settlements. The A32 Alton Road, B2177 Southwick Road and A32 Gosport Road have also been identified as having notable levels of collisions along their lengths.

Wider Transport Considerations

Freight

4.4.22 Freight serving the MTRAs generally takes places via road, which comprises of the strategic road network in some locations. Large parts of this spatial area are accessed only via rural roads which can be indirect and narrow in parts. Key 'through-routes' connect these smaller towns for both freight and regular traffic, therefore there may be some delays to freight movement in congested areas in peak times.

4.4.23 Considerable amounts of freight movement also takes place via rail, with Winchester being on a key Network Rail route from Southampton to the West Cost Main Line near Nuneaton.

4.4.24 While there is only limited access to the national rail network within the MTRAs, there may be opportunities to increase the share of freight being moved by rail due to the proximity of the existing rail network to these areas.

Pollution, Air Quality and Carbon Reduction

4.4.25 As with the SHUAs, the monitoring of air quality within the MRTAs is considerably less comprehensive than for the Winchester Town Area. There are no AQMAs declared within this spatial area and WCC's most recently published Air Quality Management Report (2016) found that all of the NO_2 sites outside the city centre remained in compliance with the annual mean objective.

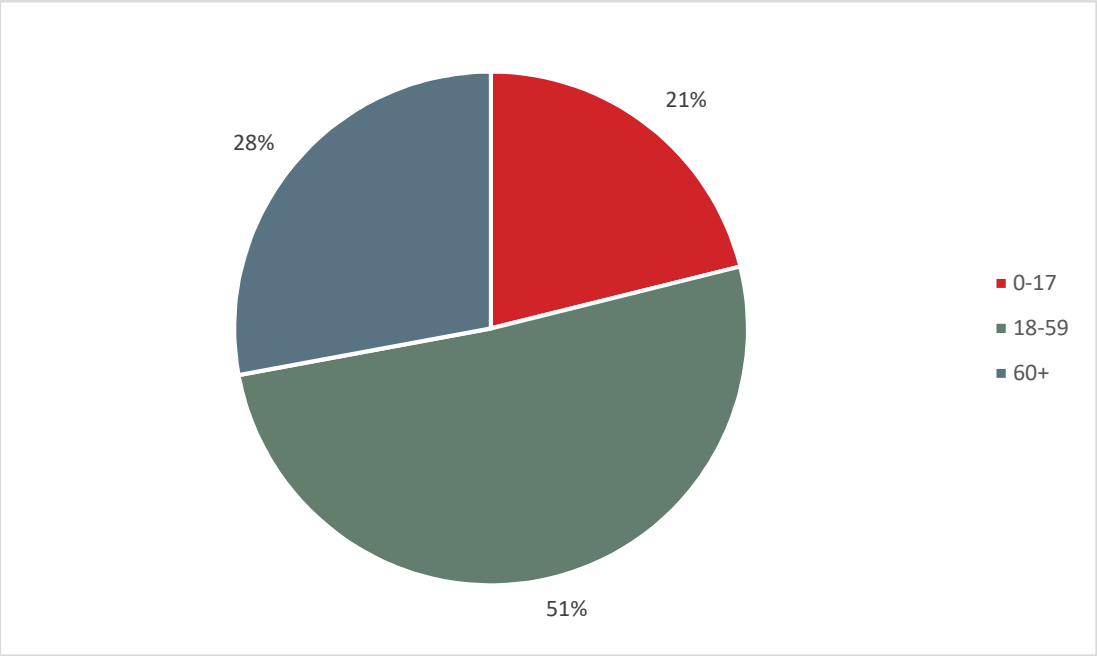
Health

4.4.26 The development patterns present within the MRTAs (and the distances between towns) are generally unconducive to the majority of trips residents make being possible by active modes of transport. This issue is reinforced by footpath networks within rural areas commonly being unattractive and cyclists having to ride amongst fast-moving traffic. Conversely, people living in rural areas typically experience lower levels of air pollution than urban areas. The health of people living and working within the MRTAs is of course affected by a range of different factors, however the potential for transport to improve health in these areas will be dependent on the level of facilities and infrastructure present within acceptable distances to residential areas. This is a key characteristic of sustainable development which will need to be considered in detail in the choosing of new development sites for the district.

Demographics

4.4.27 The MTRAs have the highest proportion of residents over the age of 60 out of the three spatial areas of the district, at nearly one third, as shown in **Figure 36** below. This demonstrates the importance of ensuring that basic accessibility to services and support for independent living is maintained in future planning. This may come through existing services such as Community Transport (e.g. Dial-A-Ride, Neighbourcare Schemes) or newer forms such as car clubs or shared taxi services.

Figure 36. Population Age Breakdown - MTRA



4.4.28 Car or van ownership levels for the MTRAs are shown in **Table 13** below. As with other areas of the District, most households have at least one car or van (91%), however this figure is slightly lower than for the South Hampshire Urban Areas. This may be explained by the much larger sample size affecting the data, but otherwise may suggest the residents are less dependent on private vehicles for their travel needs.

Table 13. Car or Van Ownership Comparison – MTRA

	Market Towns and Rural Areas	Winchester District	South East England	England and Wales
No cars or vans in	9%	14.3%	18.6%	25.6%
1 car or van in household	35%	39.1%	41.7%	42.3%
2 cars or vans in household	40%	34.4%	29.8%	24.7%
3 cars or vans in household	11%	8.7%	7.1%	5.5%
4 or more car or vans in	5%	3.5%	2.8%	1.9%
	100%	**100%**	**100%**	**100%**

Source: Table KS404EW, Nomisweb.co.uk

4.4.29 The latest data regarding the modes by which residents of the MTRAs travel to work have also been observed from the 2011 Census. This is set out in **Table 14** below.

Table 14. Method of Travel to Work Data – MRTA

Mode	Percentage (%)
Underground, metro, light rail, tram	0%
Train	4%
Bus, minibus or coach	2%
Taxi	0%
Motorcycle, scooter or moped	1%
Driving a car or van	79%
Passenger in a car or van	4%
Bicycle	2%
On foot	7%
Other method of travel to work	1%
Total	**100%**

4.4.30 As shown above, 79% of residents of the MTRAs who travel to work do so by car or van, which is the highest figure out of the three spatial areas of the district. Travelling to work on foot is the second most popular mode at 7%, while 6% take public transport.

4.4.31 It was also identified that 10% of employed residents work mainly from home, which is the highest proportion for the district, and 30% of the population of this spatial area were not in employment (either due to unemployment or retirement).

Scope and options for maximising travel planning and behavioural change

4.4.32 The potential for developments in these areas to facilitate sustainable travel is limited in parts due to the lack of direct access to the rail network, however buses can provide an attractive alternative option for many journeys. Some frequent bus services currently exist (i.e. at least 1 bus every hour) which connect these market towns and provide access to Winchester city centre. These tend to follow major highway corridors meaning access between adjacent settlements is not always possible by bus unless market towns fall on the same inter-urban corridor.

Conclusion – Market Towns and Rural Areas

4.4.33 As with the SHUAs, relatively limited and infrequent bus services link market towns with smaller villages. Direct access to the rail network is only available at Micheldever. Several junctions are approaching design capacity in the 2019 Base Year, which tend to be in the vicinity of the larger market towns and rural areas, with the number increasing by 2036 at a similar level to the other spatial areas.

4.4.34 The MRTAs have similar population demographics, vehicle ownership and air quality levels to the SHUAs, although existing and proposed levels of publicly accessible electric vehicle charging infrastructure are understood to be higher than other parts of the district.

4.5 Section Conclusion

4.5.1 This section has provided an overview of the current transport networks in the three spatial areas of the district in order to provide an updated baseline for which future development can be planned in Stage 2 of the Transport Assessment. While sustainable and active travel is possible for trips made within and between large parts of the district, the current development patterns and associated transport networks remain conducive to the majority of trips outside the central town area being made by private motorised vehicles. This travel behaviour, and the current transport infrastructure present, contribute directly to issues which impact on large parts of the district's population, including road safety, peak time traffic congestion and parking stress, areas of poor air quality, and health issues associated with sedentary lifestyles. The type and location of new development to be promoted through the update of the Council's Local Plan will need to be considered in relation to these issues in order to ensure the Council's key targets relating to the Climate Emergency declaration can be achieved.

5. METHODOLOGY FOR TA STAGES 2 AND 3

5.1 Introduction

5.1.1 This chapter sets out a proposed methodology for the subsequent stages of the Transport Assessment, using information from the baseline assessment and identification of relevant issues.

5.2 Tasks prior to TA Stages 2 and 3

5.2.1 Before Stages 2 and 3 commence, it will be necessary to have agreed the level of additional housing and employment land required for the district. ICENI has produced a report setting out the district's expected housing requirement from 2021 onwards, which is based on the Government's 'Standard Methodology' for determining local housing needs. When a development strategy is agreed, it will then be possible to determine more precisely how many of the 2019 SHELAA sites referenced in earlier sections of this report will be needed for development. A review of the development needs identified in the various evidence reports should be undertaken to understand whether the housing needs will require significantly different scales of development to come forward compared to those considered in this Stage 1 report. Should this be the case, it will be necessary to commence Stage 2 with a revised review of the baseline in relation to the transport networks contained within the three spatial areas of the district (for example, identification of any "hotspot" locations for either congestion or road safety where the expected future impacts will be larger as a result of the revised development quantums). The change in requirements for employment land, retail, leisure, etc. are likely to be less significant, however these land uses are also being assessed for completeness and so enable cumulative impacts to be considered.

5.2.2 It is envisaged that a sifting process will also be undertaken in relation to the initial list of sites, to identify those which have weak or seriously flawed cases for future development on transport grounds, so that the number of sites to be assessed in detail as part of Stage 2 is kept to a suitable number.

5.2.3 Thorough scoping with relevant parties will also be critically important in order to agree a brief for the Stage 2 and 3 assessments and ensure all work is undertaken satisfactorily and the outputs from this work can be used in a way that will feed into and support the Council's Infrastructure Delivery Plan (IDP) that will prepared alongside the Local Plan and will be subject to scrutiny at the Local Plan examination. HCC will be keen to ensure that areas for development are considered in the same manner across all of parts of Hampshire, and that any cross-boundary issues and opportunities are identified.

5.3 TA Stage 2 Methodology

5.3.1 Stage 2 of the Transport Assessment will comprise a full technical assessment of cumulative impacts of the proposed additional allocation sites to be developed up to 2038 and subsequently to 2041, as well as any sites in the current plan to be taken forward, building on the transport evidence base provided in this Stage 1 report. The purpose of the Stage 2 work will be to provide an in-depth comparative analysis of the sites' performance against the agreed criteria, to assist the Council in developing one or more preferred allocation scenarios for testing as part of Stage 3.

5.3.2 This will require testing of at least one future year scenario which will be developed and run using the SRTM. This will allow the impact of each development site (and groups of selected sites) to be quantified in comparison with the Reference Case and adopted Local Plan modelling results. The relative costs and benefits of the sites can then be qualified using an appropriate scoring system to be agreed during scoping, with the impact of the additional traffic being identified on link flows, queuing at junctions and network performance. Other factors will also need to be considered, such as each site's impact on air quality, compliance with policy and the extent of the supporting infrastructure which would be required. A sifting exercise should also be undertaken at an early stage to minimise the number of sites to be considered and the time taken to determine the sites which are suitable.

5.3.3 It will be necessary to ensure that the future scenarios use the most up-to-date information regarding the expected completions across the sites allocated in the adopted Local Plan, as well as the associated highway infrastructure. Similarly, the risk of large developments failing to come forward by 2031 should also be considered in the site selection process to avoid under provision of housing and employment land and ensure that the modelling is as realistic as possible.

5.3.4 The transport implications of the sites will be of particular interest for areas close to the strategic road network, which must accommodate planned traffic growth associated with other districts. The outcome of the current investigation into Highways England's Smart Motorways programme may also affect future infrastructure capacity within Winchester.

5.3.5 Given the recent changes in travel behaviour relating to Covid-19 and general policy movement to place additional emphasis on sustainable modes of travel, it is proposed that the Stage 2 methodology should include a more detailed site-specific consideration of potential walking and cycling improvements. This would take the form of identifying key existing and future routes to join sites to local services and wider infrastructure, with a baseline costing exercise to be undertaken alongside and a methodology agreed for testing potential "modal shifts". The purpose of these exercises at Stage 2 would be to allow an initial comparison of benefits between these types of local improvements vs. investment into larger-scale infrastructure, and thus create a way of examining where both developer and public funding can be most effectively targeted to enhance actual uptake and use of these modes.

5.4 TA Stage 3 Methodology

5.4.1 The third stage of the TA will involve the modelling and assessment of the preferred option(s) for development using the SRTM, with corresponding work undertaken to develop and refine the transport measures which will be required to support the delivery of these sites. These measures will need to include both "site specific" interventions (such as access arrangements and/or modification of key local network junctions, and provision of new public transport services) and wider interventions which will provide benefits to both new and existing areas of the district, such as expansion of existing walking and cycling networks, new Park and Ride provision, and expansions to the existing Public Transport network. This information can then be included in the Council's IDP.

5.4.2 These two types of intervention will differ in that the site-specific measures would largely be expected to be delivered either directly or through agreement with the developers of each site, whereas the wider measures would be brought forward by the district and County utilising a combination of developer contributions, CIL, and other sources of funding (such as LEP bids and DfT / Central Government schemes). A key outcome of the Stage 3 modelling

work will be to identify to what extent potential allocations are able to be "self-sufficient" from a transport perspective, and what specific "gaps" in future provision would need to be addressed through more direct actions from the District and County Councils in order to deliver the total amount of development which is needed during the Local Plan period. The Stage 3 work will use inputs from the Stage 2 exercises and seek to refine these, including further analysis of the balance between "local" and "strategic" interventions.

5.4.3 The overarching purpose of the Stage 3 assessments will be to demonstrate that the preferred spatial option(s) can be delivered in a manner which is compatible with wider transport policy (including climate emergency policies) and which is broadly acceptable from an HCC Highways Development Control perspective.

Climate Emergency Consideration

5.4.4 The TA Stage 2 and 3 tasks will need to be undertaken in the context of the Council's recent declaration of a Climate Emergency within the district, which pledges that the Council will be carbon neutral by 2024 and the wider district by 2030.

5.4.5 Meeting this target will require significant step changes in planning and transport policy, with the Local Plan update playing a key role. HCC and WCC have adopted the Winchester Movement Strategy which will deliver transport objectives in response to the climate emergency, and WCC has published a Carbon Neutrality Action Plan setting out its broad proposed strategy to 2030. In light of this, it is considered that the Stage 2 and 3 work of the Local Plan update will need to be compatible with the Council's policy proposals. In particular, it will be necessary to examine the potential of the sites for users to travel sustainably in line with any changes to standards or new infrastructure schemes proposed. It may also be beneficial to test additional future SRTM scenarios with varying modal split ambitions for trip ends.

6. SUMMARY AND CONCLUSION

6.1.1 SYSTRA Ltd (SYSTRA) has been commissioned by Winchester City Council (WCC) to provide transport consultancy support in relation to the Winchester District Local Plan 2038 Transport Assessment (Stage 1).

6.1.2 This report sets out the updated transport evidence base which will contribute towards the selection of the most appropriate sites for development within Stage 2 of the Transport Assessment process. Subsequent reports will provide the findings of modelling of additional future development scenarios in Stage 2, and a final submission document is developed in Stage 3.

6.1.3 The Stage 1 Transport Assessment has been undertaken in line with relevant guidance, with the transport evidence base using the most up-to-date land use and infrastructure data available. The scope of this report covers the three spatial areas of the district, known as Winchester Town, South Hampshire Urban Areas and Market Towns and Rural Area.

6.1.4 While sustainable and active travel is possible for trips made within and between large parts of the district, the current development patterns and associated transport networks remain conducive to the majority of trips outside the central town area being made by private motorised vehicles. This travel behaviour, and the current transport infrastructure present, contribute directly to issues which impact on large parts of the district's population, including road safety, peak time traffic congestion and parking stress, areas of poor air quality, and health issues associated with sedentary lifestyles. The type and location of new development to be promoted through the update of the Council's Local Plan will need to be considered in relation to these issues in order to ensure the Council's key targets relating to the Climate Emergency declaration can be achieved.

6.1.5 A methodology for Stages 2 and 3 of the Local Plan Transport Assessment has also been suggested in order to ensure future work takes all known local issues and opportunities into account.

Appendix A – Park and Ride Bus Timetables

park&ride for Winchester

Service runs from 4th March 2018

St Catherine's Park & Ride site | **Winchester City Centre** | South Park & Ride site

Mondays to Fridays except public holidays

St Catherine's Park & Ride Amenities block	0625	0640	0655	0705	0715	0723	0730	0738	0745	0752	0759	0806	0813	0820	0827	0834	0841	0848
Barfield Park & Ride	0629	0644	0659	0709	0719	0727	0734	0742	0749	0756	0803	0810	0817	0824	0831	0838	0845	0852
Chesil Car Park	0631	0646	0701	0711	0721	0729	0736	0744	0751	0758	0805	0812	0819	0826	0833	0840	0847	0854
Broadway Abbey House	0633	0648	0703	0713	0723	0731	0738	0746	0753	0800	0807	0814	0821	0828	0835	0842	0849	0856
St Georges Street M&S	0634	0649	0704	0714	0724	0733	0740	0748	0755	0802	0809	0816	0823	0830	0837	0844	0851	0858
Jewry Street stop U	0636	0651	0706	0716	0726	0735	0742	0750	0757	0804	0811	0818	0825	0832	0839	0846	0853	0900
City Road stop Ra	0638	0653	0708	0718	0728	0737	0744	0752	0759	0806	0813	0820	0827	0834	0841	0848	0855	0902
Winchester Rail Station stop Qc	0639	0654	0709	0719	0729	0738	0745	0753	0800	0807	0814	0821	0828	0835	0842	0849	0856	0903
Westgate stop Pa	0640	0655	0710	0720	0730	0739	0746	0754	0801	0808	0815	0822	0829	0836	0843	0850	0857	0904
Royal Hampshire County Hospital	0642	0657	0712	0722	0732	0742	0749	0757	0804	0811	0818	0825	0832	0839	0846	0853	0900	0907
Pitt Park & Ride opposite	0645	0700	0715	0725	0735	0745	0752	0800	0807	0814	0821	0828	0835	0842	0849	0856	0903	0910
South Park & Ride Amenities block	0650	0705	0720	0730	0740	0751	0758	0806	0813	0820	0827	0834	0841	0848	0855	0900	0907	0914

St Catherine's Park & Ride Amenities block	0855	0903	0912	then every 12 mins at	24	36	48	00	12	until	1424	1436	1448	1500	1512	1524	1535	1545
Barfield Park & Ride	0859	0907	0916		28	40	52	04	16		1428	1440	1452	1504	1516	1528	1539	1549
Chesil Car Park	0901	0909	0918		30	42	54	06	18		1430	1442	1454	1506	1518	1530	1541	1551
Broadway Abbey House	0903	0911	0920		32	44	56	08	20		1432	1444	1456	1508	1520	1532	1543	1553
St Georges Street M&S	0905	0913	0922		34	46	58	10	22		1434	1446	1458	1510	1522	1534	1545	1555
Jewry Street stop U	0907	0915	0924		36	48	00	12	24		1436	1448	1500	1512	1524	1536	1547	1557
City Road stop Ra	0909	0917	0926		38	50	02	14	26		1438	1450	1502	1514	1526	1538	1549	1559
Winchester Rail Station stop Qc	0910	0918	0927		41	51	03	15	27		1439	1451	1503	1515	1527	1539	1550	1600
Westgate stop Pa	0911	0919	0928		40	52	04	16	28		1440	1452	1504	1516	1528	1540	1551	1601
Royal Hampshire County Hospital	0914	0922	0931		43	55	07	19	31		1443	1455	1507	1519	1531	1543	1554	1604
Pitt Park & Ride opposite	0917	0925	0934		46	58	10	22	34		1446	1458	1512	1524	1536	1548	1559	1609
South Park & Ride Amenities block	0921	0929	0938		50	02	14	26	38		1450	1502	1518	1530	1542	1554	1605	1615

St Catherine's Park & Ride Amenities block	1553	1600	1607	1614	1621	1628	1635	1642	1649	1656	1703	1710	1717	1724	1731	1738	1745	1755
Barfield Park & Ride	1557	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼
Chesil Car Park	1559	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼
Broadway Abbey House	1601	1605	1612	1619	1626	1633	1640	1647	1654	1701	1708	1715	1722	1729	1736	1743	1750	1800
St Georges Street M&S	1603	1607	1614	1621	1628	1635	1642	1649	1656	1703	1710	1717	1724	1731	1738	1745	1752	1802
Jewry Street stop U	1605	1609	1616	1623	1630	1637	1644	1651	1658	1705	1712	1719	1726	1733	1740	1747	1754	1804
City Road stop Ra	1607	1612	1619	1626	1633	1640	1647	1654	1701	1708	1715	1722	1729	1736	1743	1750	1757	1807
Winchester Rail Station stop Qc	1608	1613	1620	1627	1634	1641	1648	1655	1702	1709	1716	1723	1730	1737	1744	1751	1758	1808
Westgate stop Pa	1609	1614	1621	1628	1635	1642	1649	1656	1703	1710	1717	1724	1731	1738	1745	1752	1759	1809
Royal Hampshire County Hospital	1612	1618	1625	1632	1639	1646	1653	1700	1707	1714	1721	1728	1735	1742	1749	1756	1803	1813
Pitt Park & Ride opposite	1617	1623	1630	1637	1644	1651	1658	1705	1712	1719	1726	1733	1740	1747	1754	1801	1808	1818
South Park & Ride Amenities block	1623	1629	1636	1643	1650	1657	1704	1711	1718	1725	1732	1739	1746	1753	1800	1807	1814	1824

St Catherine's Park & Ride Amenities block	1808	1823	1843	1903	1923
Broadway Abbey House	1812	1827	1847	1907	1927
St Georges Street M&S	1814	1829	1849	1909	1929
Jewry Street stop U	1816	1831	1851	1911	1931
City Road stop Ra	1819	1833	1853	1913	1933
Winchester Rail Station stop Qc	1820	1834	1854	1914	1934
Westgate stop Pa	1821	1835	1855	1915	1935
Royal Hampshire County Hospital	1825	1838	1858	1918	1938
Pitt Park & Ride opposite	1829	1842	1902	1922	1942
South Park & Ride Amenities block	1834	1847	1907	1927	1947

park&ride for Winchester

Service runs from 4th March 2018

St Catherine's Park & Ride site | **Winchester City Centre** | South Park & Ride site

Saturdays

St Catherine's Park & Ride Amenities block	0700	0715	0730	0745	0800	0815	0830	0845	0900	0912	0924	0936	0948	1000	1012	then every 12 mins at	24	36
Barfield Park & Ride	0704	0719	0734	0749	0804	0819	0834	0849	0904	0916	0928	0940	0952	1004	1016		28	40
Chesil Car Park	0705	0720	0735	0750	0805	0820	0835	0850	0905	0917	0929	0942	0954	1006	1018		30	42
Broadway Abbey House	0707	0722	0737	0752	0807	0822	0837	0852	0907	0919	0931	0944	0956	1008	1020		32	44
St Georges Street M&S	0708	0723	0738	0753	0808	0823	0838	0853	0908	0920	0932	0945	0957	1009	1021		33	45
Jewry Street stop U	0710	0725	0740	0755	0810	0825	0840	0855	0910	0922	0934	0947	0959	1011	1023		35	47
City Road stop Ra	0711	0726	0741	0756	0811	0826	0841	0856	0911	0923	0935	0949	1001	1013	1025		37	49
Winchester Rail Station stop Qc	0712	0727	0742	0757	0812	0827	0842	0857	0912	0924	0936	0950	1002	1014	1026		38	50
Westgate stop Pa	0713	0728	0743	0758	0813	0828	0843	0858	0913	0925	0937	0951	1003	1015	1027		39	51
Royal Hampshire County Hospital	0715	0730	0745	0800	0815	0830	0845	0900	0915	0927	0939	0954	1006	1018	1030		42	54
Pitt Park & Ride opposite	0718	0733	0748	0803	0818	0833	0848	0903	0918	0930	0942	0958	1010	1022	1034		46	58
South Park & Ride Amenities block	0722	0737	0752	0807	0822	0837	0852	0907	0922	0934	0946	1002	1014	1026	1038		50	02

St Catherine's Park & Ride Amenities block	48	00	12	until	1524	1536	1548	1600	1612	1624	1636	1648	1700	1712	1724	1736	1748	1800
Barfield Park & Ride	52	04	16		1528	1540	1552	1604	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼
Chesil Car Park	54	06	18		1530	1542	1554	1606	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼
Broadway Abbey House	56	08	20		1532	1544	1556	1608	1617	1629	1641	1653	1705	1717	1729	1741	1753	1805
St Georges Street M&S	57	09	21		1533	1545	1557	1609	1618	1630	1642	1654	1706	1718	1730	1742	1754	1806
Jewry Street stop U	59	11	23		1535	1547	1559	1611	1620	1632	1644	1656	1708	1720	1732	1744	1756	1808
City Road stop Ra	01	13	25		1537	1549	1601	1613	1621	1633	1645	1657	1709	1721	1733	1745	1757	1809
Winchester Rail Station stop Qc	02	14	26		1538	1550	1602	1614	1622	1634	1646	1658	1710	1722	1734	1746	1758	1810
Westgate stop Pa	03	15	27		1539	1551	1603	1615	1623	1635	1647	1659	1711	1723	1735	1747	1759	1811
Royal Hampshire County Hospital	06	18	30		1542	1554	1606	1618	1625	1637	1649	1701	1713	1725	1737	1749	1801	1813
Pitt Park & Ride opposite	10	22	34		1546	1558	1610	1622	1629	1641	1653	1705	1717	1729	1741	1753	1805	1817
South Park & Ride Amenities block	14	26	38		1550	1602	1614	1626	1633	1645	1657	1709	1721	1733	1745	1757	1809	1821

St Catherine's Park & Ride Amenities block	1815	1830
Broadway Abbey House	1820	1835
St Georges Street M&S	1821	1836
Jewry Street stop U	1823	1838
City Road stop Ra	1824	1839
Winchester Rail Station stop Qc	1825	1840
Westgate stop Pa	1826	1841
Royal Hampshire County Hospital	1828	1843
Pitt Park & Ride opposite	1832	1847
South Park & Ride Amenities block	1836	1851

park&ride for Winchester

Service runs from 4th March 2018

South Park & Ride site | **Winchester City Centre** | St Catherine's Park & Ride site

Mondays to Fridays except public holidays

South Park & Ride Amenities block	0630	0645	0700	0710	0720	0728	0735	0742	0749	0756	0803	0810	0817	0824	0831	0838	0845	0852
Pitt Park & Ride	0634	0649	0704	0714	0724	0734	0741	0748	0755	0802	0809	0816	0823	0830	0837	0844	0850	0857
Royal Hampshire County Hospital opposite	0638	0653	0708	0718	0729	0740	0747	0754	0801	0808	0815	0822	0829	0836	0843	0850	0856	0903
Westgate stop Pb	0640	0655	0710	0720	0731	0743	0750	0757	0804	0811	0818	0825	0832	0839	0846	0853	0859	0906
Winchester Rail Station stop Qb	0641	0656	0711	0721	0732	0745	0752	0759	0806	0813	0820	0827	0834	0841	0848	0855	0901	0908
City Road stop Rd	0641	0656	0711	0721	0732	0745	0752	0759	0806	0813	0820	0827	0834	0841	0848	0855	0901	0908
North Walls St Peters	0643	0658	0713	0723	0734	0747	0754	0801	0808	0815	0822	0829	0836	0843	0850	0857	0902	0909
Broadway St Johns House	0646	0701	0716	0726	0737	0750	0757	0804	0811	0818	0825	0832	0839	0846	0853	0900	0905	0912
St Catherine's Park & Ride Amenities block	0652	0707	0722	0732	0743	0756	0803	0810	0817	0824	0831	0838	0845	0852	0859	0906	0911	0918
South Park & Ride Amenities block	0859	0906	0913	0920	0930	0942	then every 12 mins at	54	06	18	30	42	until	1454	1506	1518	1530	1537
Pitt Park & Ride	0904	0911	0918	0925	0935	0946		58	10	22	34	46		1458	1510	1522	1534	1541
Royal Hampshire County Hospital opposite	0910	0917	0924	0931	0941	0950		02	14	26	38	50		1502	1515	1527	1539	1546
Westgate stop Pb	0913	0920	0927	0934	0944	0952		04	16	28	40	52		1504	1518	1530	1542	1549
Winchester Rail Station stop Qb	0915	0922	0929	0936	0946	0954		06	18	30	42	54		1506	1520	1532	1544	1551
City Road stop Rd	0915	0922	0929	0936	0946	0954		06	18	30	42	54		1506	1521	1533	1545	1552
North Walls St Peters	0916	0923	0930	0937	0947	0956		08	20	32	44	54		1508	1522	1534	1546	1553
Broadway St Johns House	0919	0926	0933	0940	0950	1000		12	24	36	48	00		1512	1527	1539	1551	1558
Chesil Car Park	▼	▼	▼	▼	▼	1001		13	25	37	49	01		1513	1528	1540	1552	1559
Barfield Park & Ride	▼	▼	▼	▼	▼	1004		16	28	40	52	04		1516	1531	1543	1555	1602
St Catherine's Park & Ride Amenities block	0925	0932	0939	0946	0956	1008		20	32	44	56	08		1520	1535	1547	1559	1606
South Park & Ride Amenities block	1544	1551	1558	1605	1612	1619	1626	1633	1640	1647	1654	1701	1708	1715	1722	1729	1736	1743
Pitt Park & Ride	1548	1555	1602	1609	1616	1623	1630	1637	1644	1651	1658	1705	1712	1719	1726	1733	1740	1747
Royal Hampshire County Hospital opposite	1553	1600	1607	1614	1621	1628	1635	1642	1649	1656	1703	1710	1717	1724	1731	1738	1745	1751
Westgate stop Pb	1556	1603	1610	1617	1624	1631	1638	1645	1652	1659	1706	1713	1720	1727	1734	1741	1748	1753
Winchester Rail Station stop Qb	1558	1605	1612	1619	1626	1633	1640	1647	1654	1701	1708	1715	1722	1729	1736	1743	1750	1755
City Road stop Rd	1559	1606	1613	1620	1627	1634	1641	1648	1655	1702	1709	1716	1723	1730	1737	1744	1751	1755
North Walls St Peters	1600	1607	1614	1621	1628	1635	1642	1649	1656	1703	1710	1717	1724	1731	1738	1745	1752	1757
Broadway St Johns House	1605	1612	1619	1626	1633	1640	1647	1654	1701	1708	1715	1722	1729	1736	1743	1750	1757	1801
Chesil Car Park	1606	1613	1620	1627	1634	1641	1648	1655	1702	1709	1716	1723	1730	1737	1744	1751	1758	1802
Barfield Park & Ride	1609	1616	1623	1630	1637	1644	1651	1658	1705	1712	1719	1726	1733	1740	1747	1754	1801	1804
St Catherine's Park & Ride Amenities block	1613	1620	1627	1634	1641	1648	1655	1702	1709	1716	1723	1730	1737	1744	1751	1758	1805	1808
South Park & Ride Amenities block	1750	1800	1815	1830	1850	1910	1930											
Pitt Park & Ride	1754	1804	1819	1834	1854	1914	1934											
Royal Hampshire County Hospital opposite	1758	1808	1823	1838	1858	1918	1938											
Westgate stop Pb	1800	1810	1825	1840	1900	1920	1940											
Winchester Rail Station stop Qb	1802	1812	1826	1841	1901	1921	1941											
City Road stop Rd	1802	1812	1826	1841	1901	1921	1941											
North Walls St Peters	1804	1814	1827	1842	1902	1922	1942											
Broadway St Johns House	1808	1818	1830	1845	1905	1925	1945											
Chesil Car Park	1809	1819	1831	1846	1906	1926	1946											
Barfield Park & Ride	1811	1821	1833	1848	1908	1928	1948											
St Catherine's Park & Ride Amenities block	1815	1825	1837	1852	1912	1932	1952											

park&ride for Winchester

Service runs from 4th March 2018

South Park & Ride site | **Winchester City Centre** | St Catherine's Park & Ride site

Saturdays

South Park & Ride Amenities block	0655	0710	0725	0740	0755	0810	0825	0840	0855	0910	0924	0938	0952	1006	1018	1030	1042
Pitt Park & Ride	0659	0714	0729	0744	0759	0814	0829	0844	0900	0915	0929	0943	0957	1011	1023	1035	1047
Royal Hampshire County Hospital opposite	0702	0717	0732	0747	0802	0817	0832	0847	0903	0918	0932	0946	1000	1014	1026	1038	1050
Westgate stop Pb	0704	0719	0734	0749	0804	0819	0834	0849	0905	0920	0934	0948	1002	1016	1028	1040	1052
Winchester Rail Station stop Qb	0705	0720	0735	0750	0805	0820	0835	0850	0907	0922	0936	0950	1004	1018	1030	1042	1054
City Road stop Rd	0705	0720	0735	0750	0805	0820	0835	0850	0907	0922	0936	0950	1004	1018	1030	1042	1054
North Walls St Peters	0707	0722	0737	0752	0807	0822	0837	0852	0909	0924	0938	0952	1006	1020	1032	1044	1056
Broadway St Johns House	0710	0725	0740	0755	0810	0825	0840	0855	0913	0928	0942	0956	1010	1024	1036	1048	1100
Chesil Car Park	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	0957	1011	1025	1037	1049	1101
Barfield Park & Ride	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	0959	1013	1027	1039	1051	1103
St Catherine's Park & Ride Amenities block	0714	0729	0744	0759	0814	0829	0844	0859	0917	0932	0946	1003	1017	1031	1043	1055	1107

South Park & Ride Amenities block	then every 12 mins at	54	06	18	30	42	until	1754	1806	1818
Pitt Park & Ride		59	11	23	35	47		1758	1810	1822
Royal Hampshire County Hospital opposite		02	14	26	38	50		1801	1813	1825
Westgate stop Pb		04	16	28	40	52		1803	1815	1827
Winchester Rail Station stop Qb		06	18	30	42	54		1804	1816	1828
City Road stop Rd		06	18	30	42	54		1804	1816	1828
North Walls St Peters		08	20	32	44	54		1806	1818	1830
Broadway St Johns House		12	24	36	48	00		1810	1822	1834
Chesil Car Park		13	25	37	49	01		1811	1823	1835
Barfield Park & Ride		15	27	39	51	03		1813	1825	1837
St Catherine's Park & Ride Amenities block		19	31	43	55	07		1816	1828	1840

Appendix B Drawings and Plans

Figure 6. Congestion Hotspots Map – Winchester Town Area (2019)

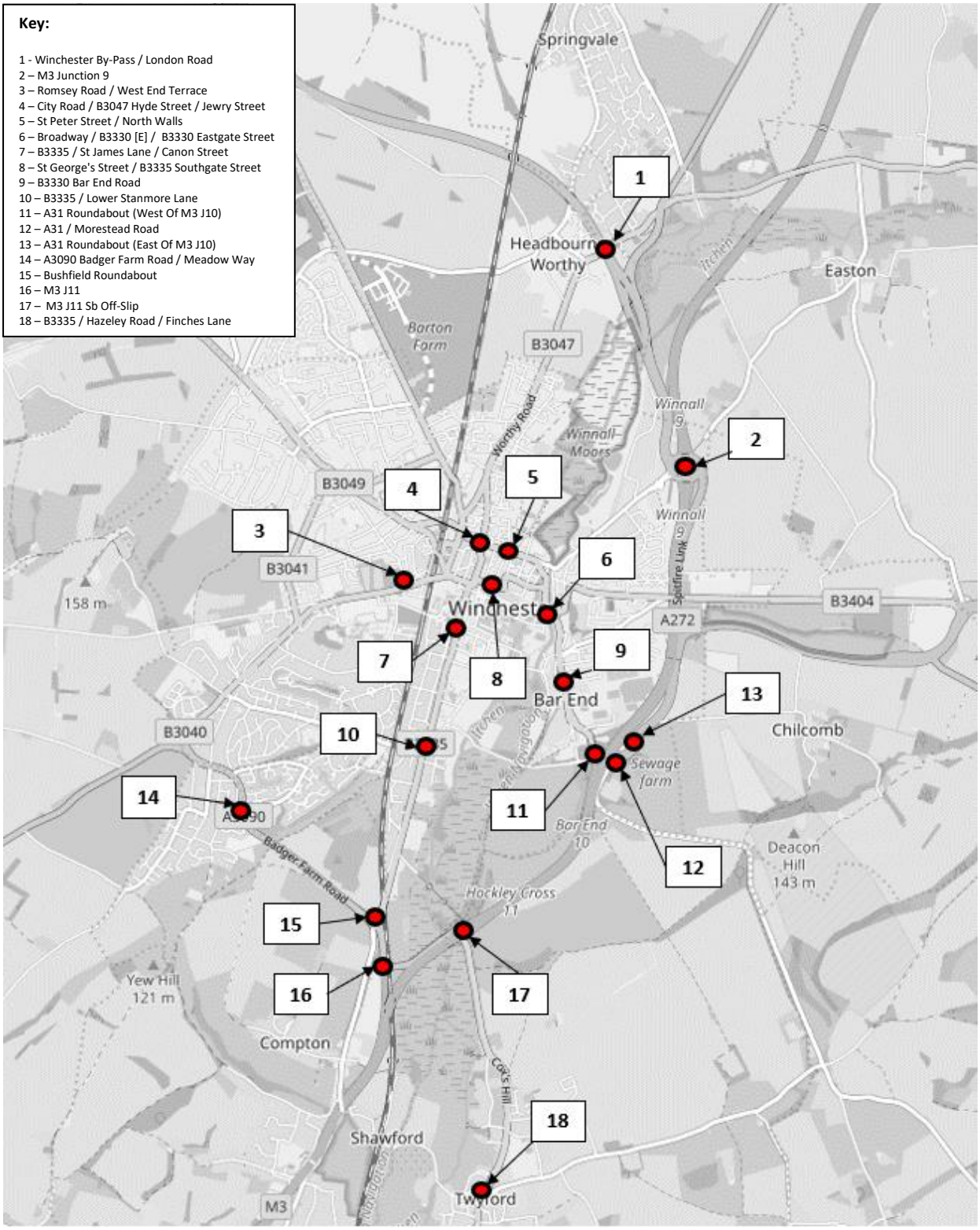


Figure 7. Congestion Hotspots Map – Winchester Town Area Central (2019)

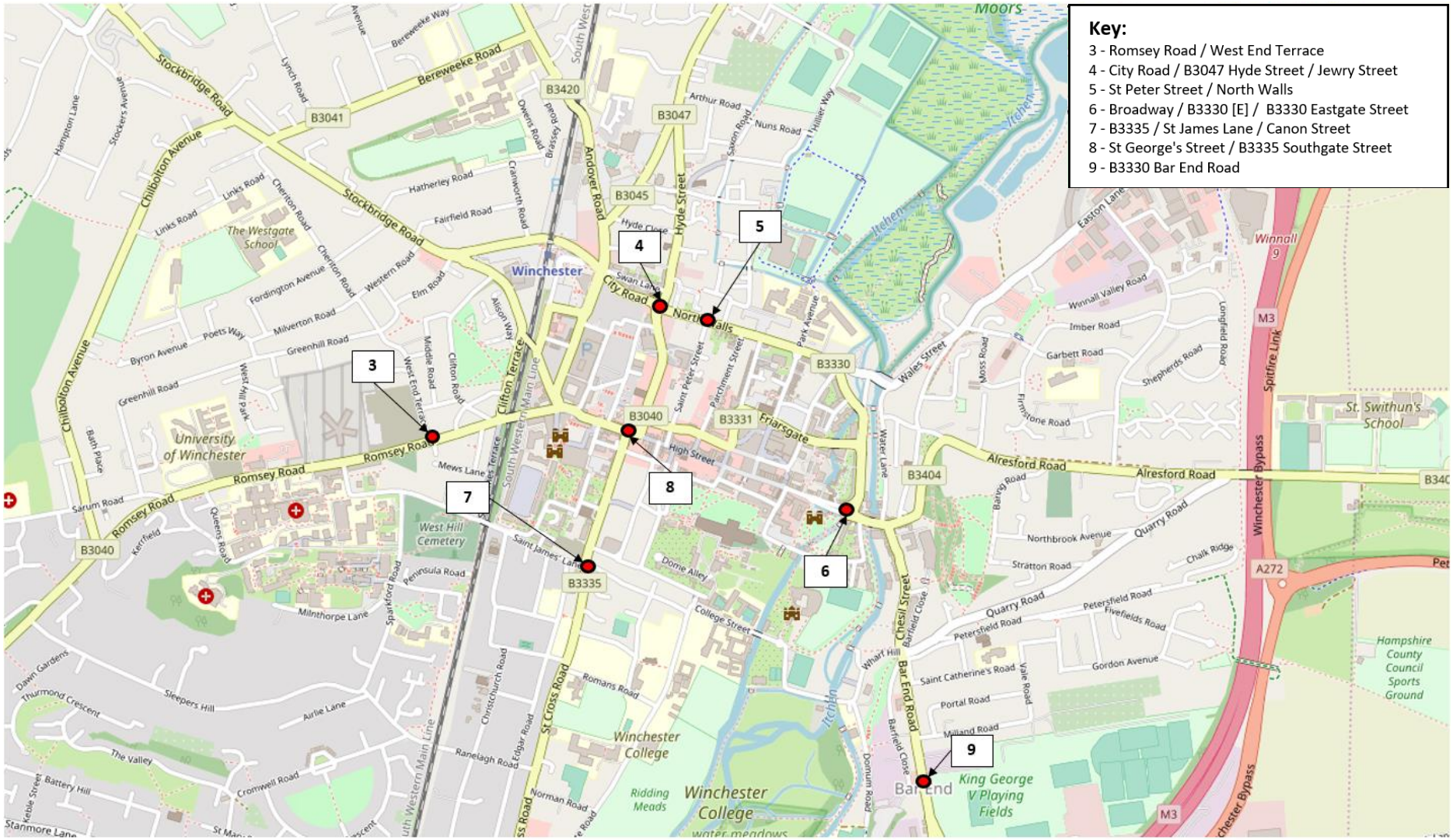


Figure 8. Congestion Hotspots Map – Winchester Town Area (2031)

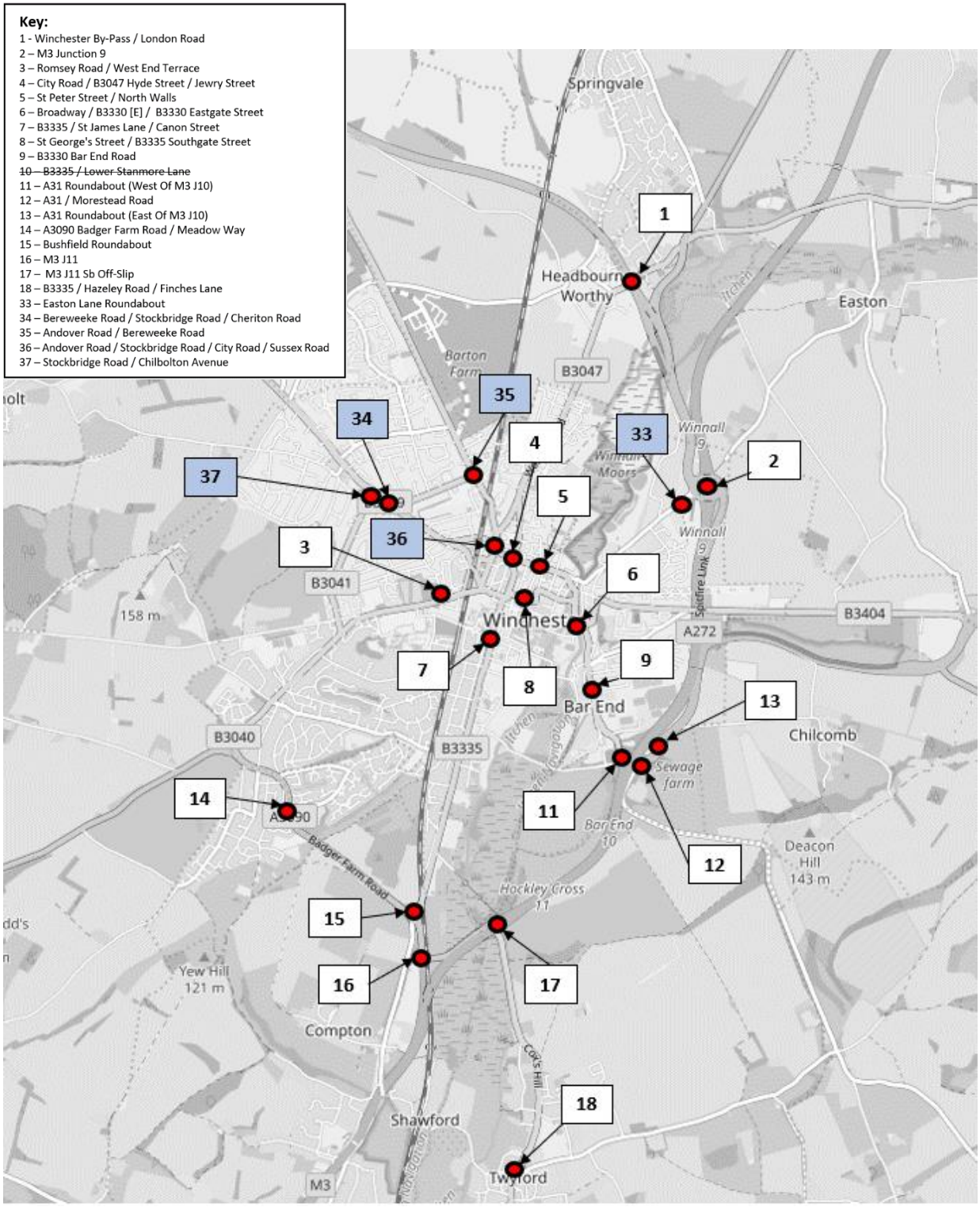


Figure 9. Congestion Hotspots Map – Winchester Town Area Central (2031)

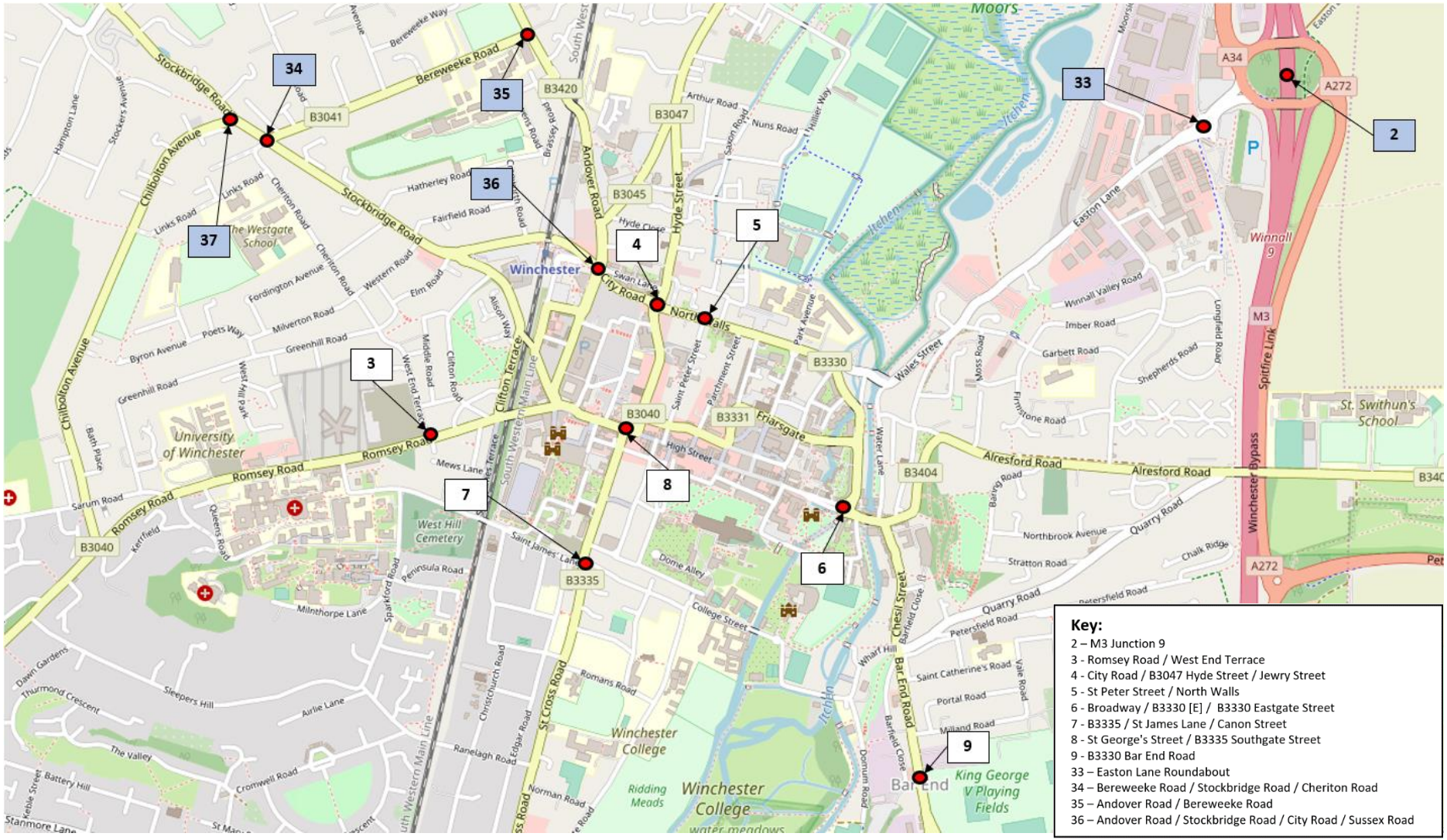
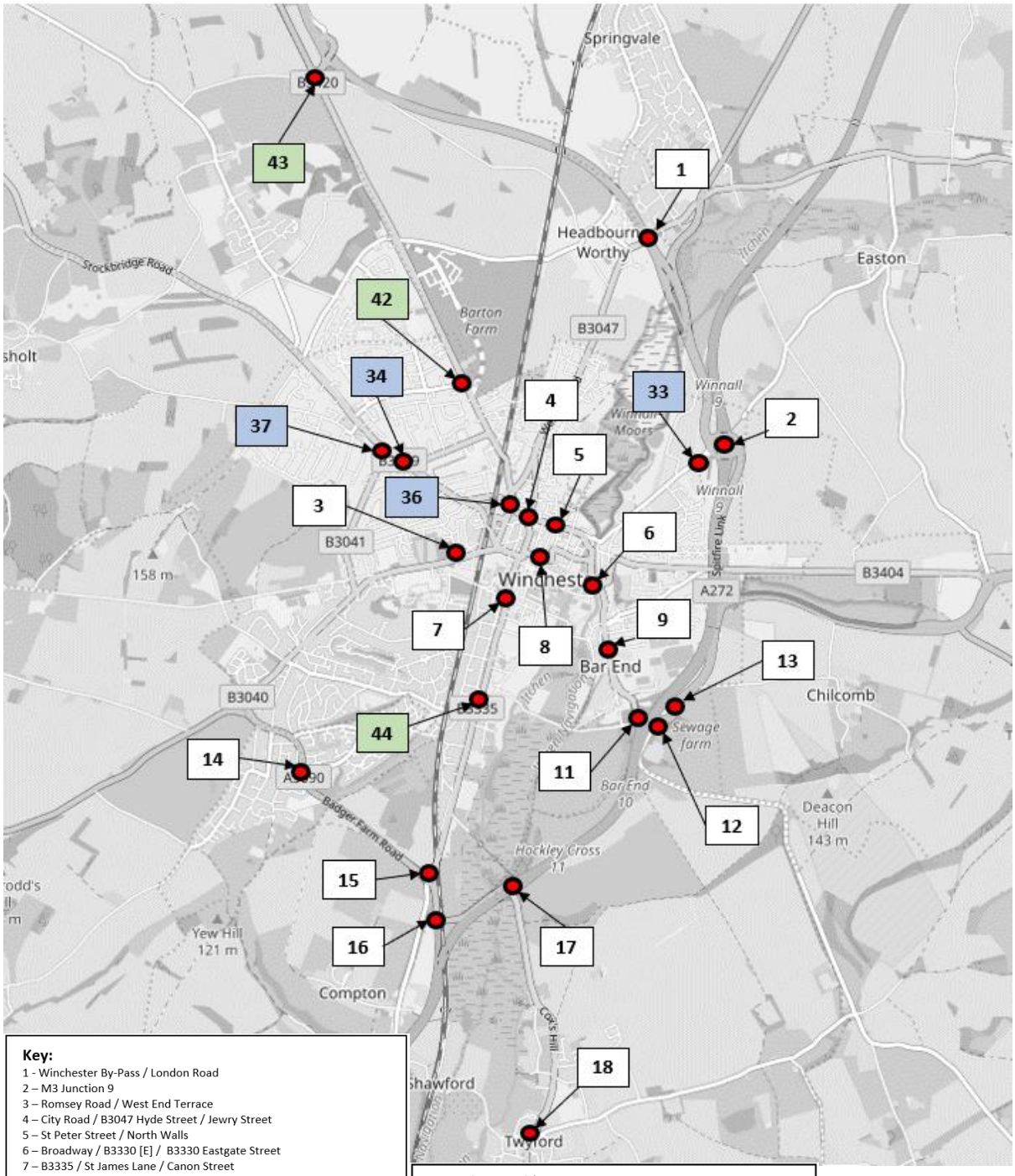


Figure 10. Congestion Hotspots Map – Winchester Town Area (2036)



Key:

1 - Winchester By-Pass / London Road
2 – M3 Junction 9
3 – Romsey Road / West End Terrace
4 – City Road / B3047 Hyde Street / Jewry Street
5 – St Peter Street / North Walls
6 – Broadway / B3330 [E] / B3330 Eastgate Street
7 – B3335 / St James Lane / Canon Street
8 – St George's Street / B3335 Southgate Street
9 – B3330 Bar End Road
~~10 – B3335 / Lower Stanmore Lane~~
11 – A31 Roundabout (West Of M3 J10)
12 – A31 / Morestead Road
13 – A31 Roundabout (East Of M3 J10)
14 – A3090 Badger Farm Road / Meadow Way
15 – Bushfield Roundabout
16 – M3 J11
17 – M3 J11 Sb Off-Slip
18 – B3335 / Hazeley Road / Finches Lane
33 – Easton Lane Roundabout
34 – Bereweeke Road / Stockbridge Road / Cheriton Road
~~35 – Andover Road / Bereweeke Road~~
36 – Andover Road / Stockbridge Road / City Road / Sussex Road
37 – Stockbridge Road / Chilbolton Avenue

42 – Andover Road / Stoney Lane
43 – A272 Andover Road / B3420 Andover Road north / Stud Lane
44 – St Cross Road / Kingsgate Road

Figure 11. Congestion Hotspots Map – Winchester Town Area Central (2036)

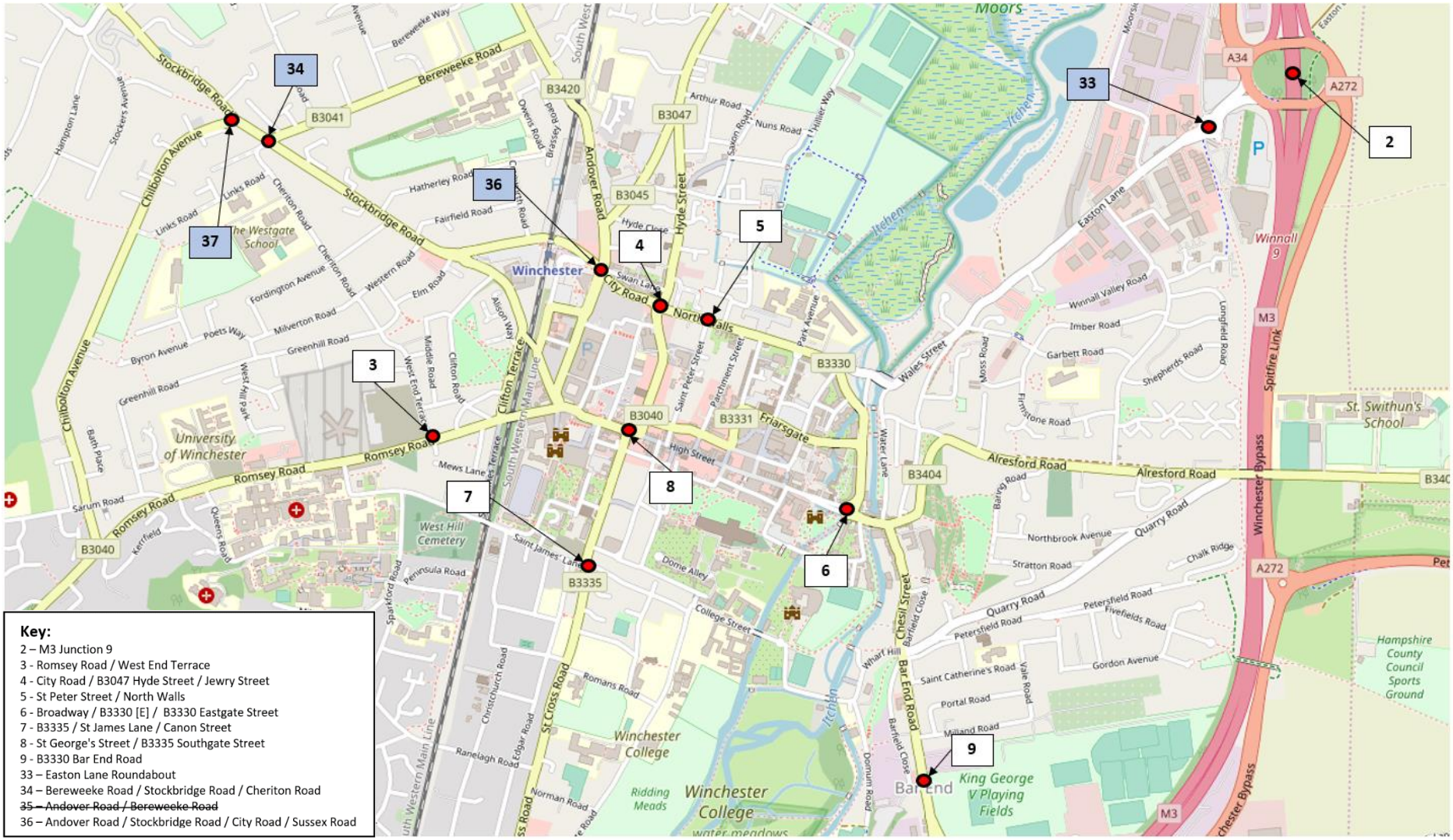


Figure 12. Winchester Park and Ride Car Parks

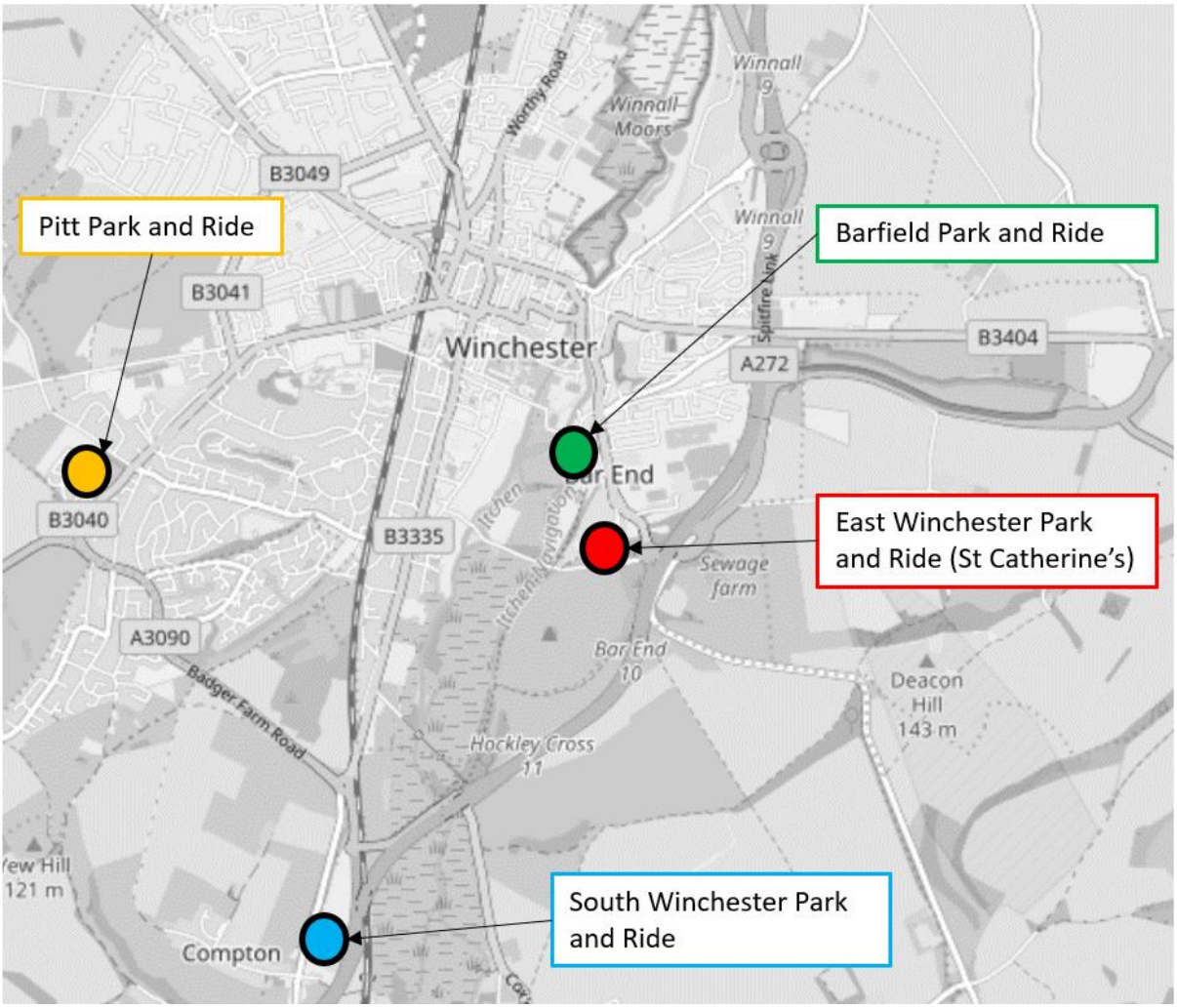


Figure 13. Existing EVCI – Winchester Town Area

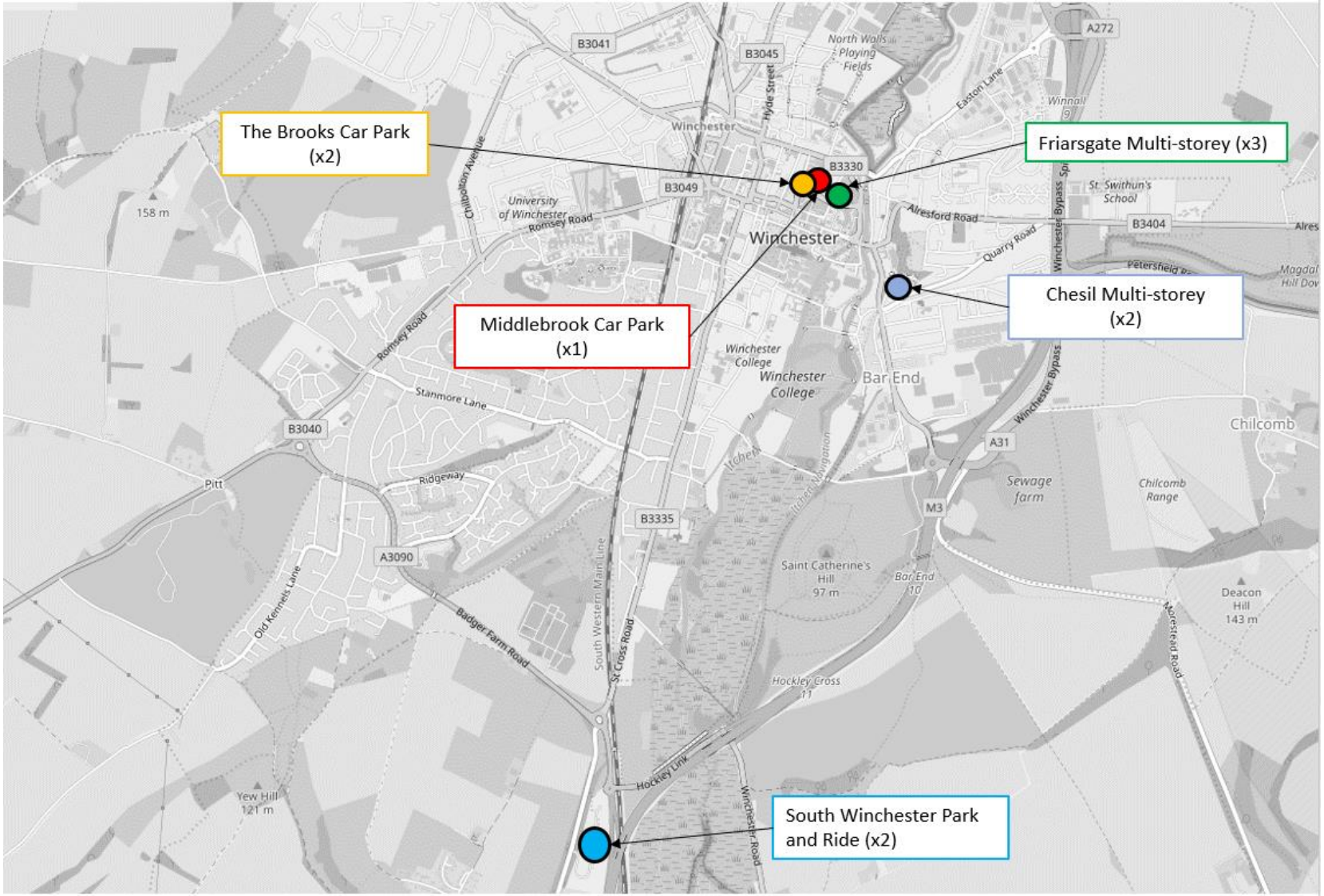


Figure 14. Proposed Additional EVCI Locations – Winchester Town Area

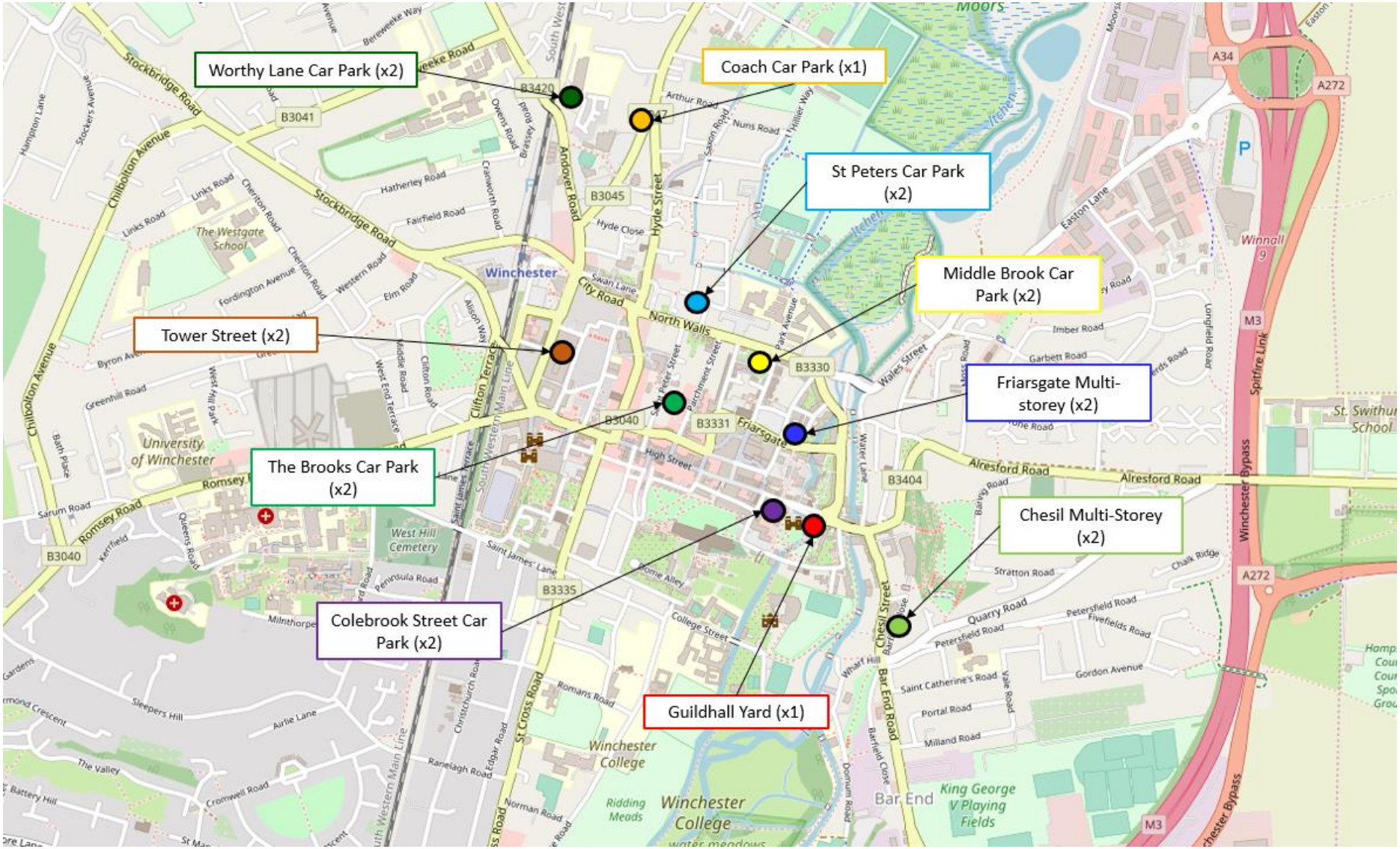


Figure 16. Collision Hotspots / Areas of Investigation – Winchester Town Area

Figure 20. Bus Routes Map – SHUA

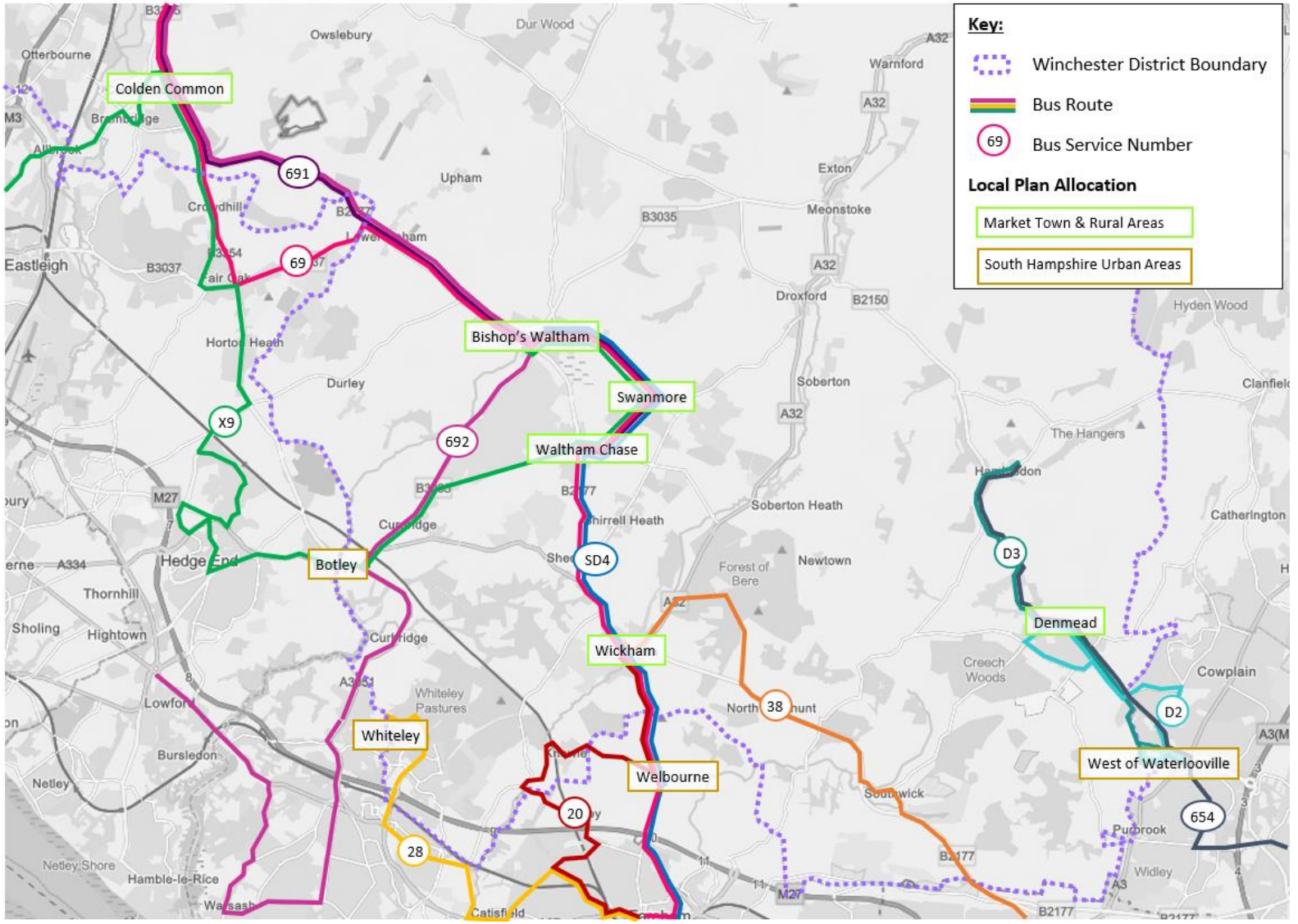


Figure 21. Congestion Hotspots Map – SHUA (2019)

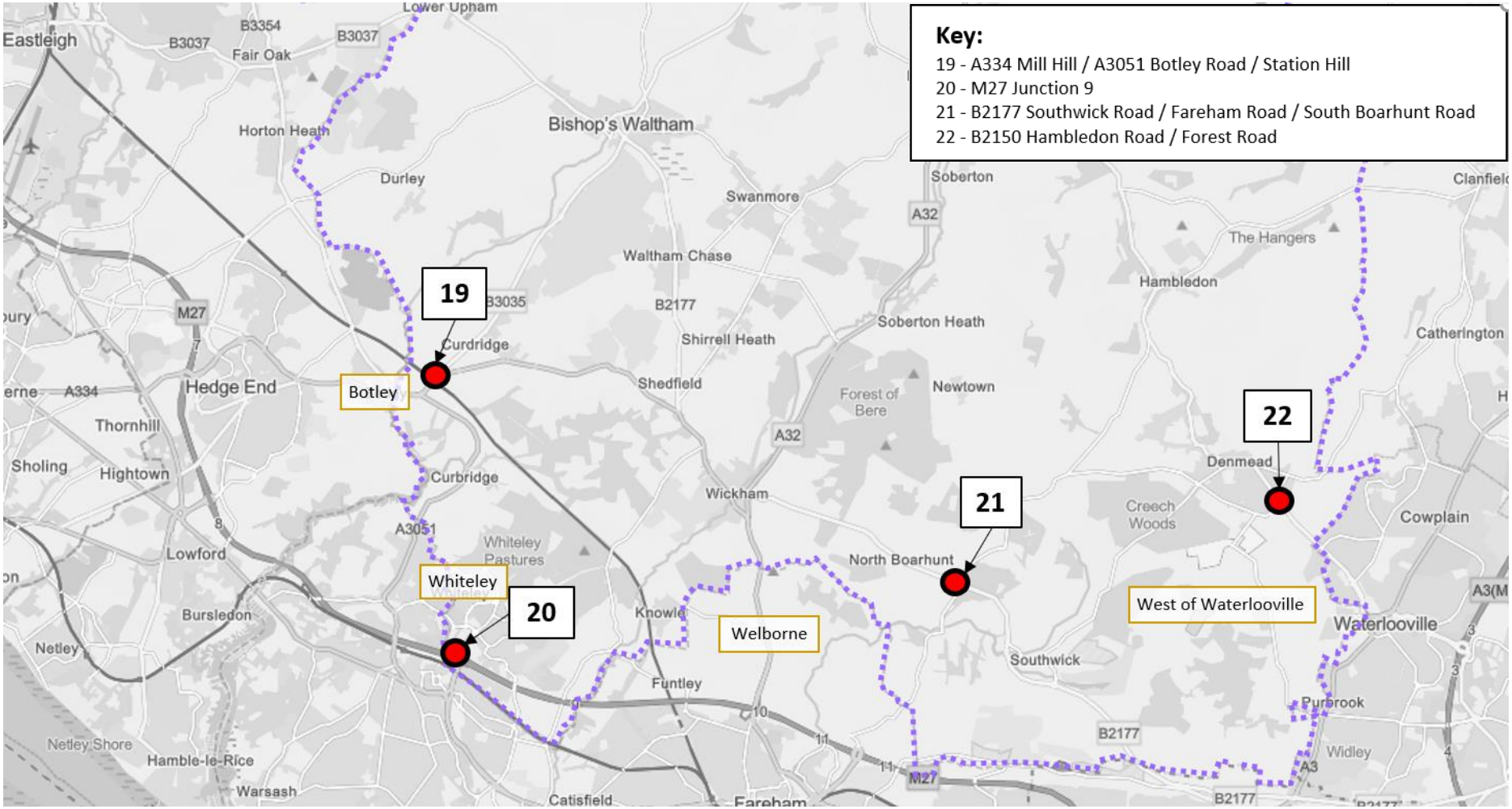


Figure 22. Congestion Hotspots Map – SHUA (2031)

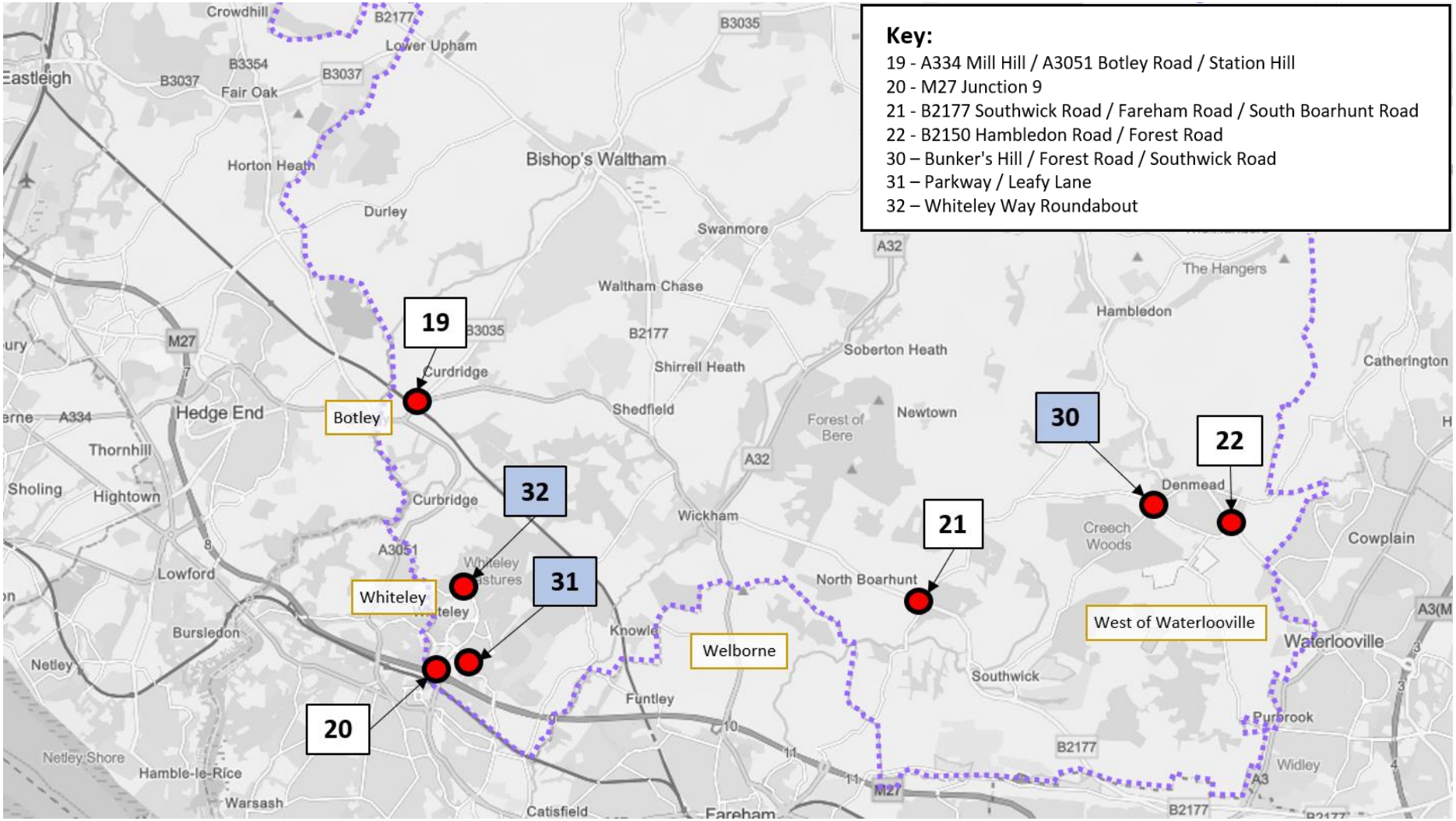


Figure 23. Congestion Hotspots Map – SHUA (2036)

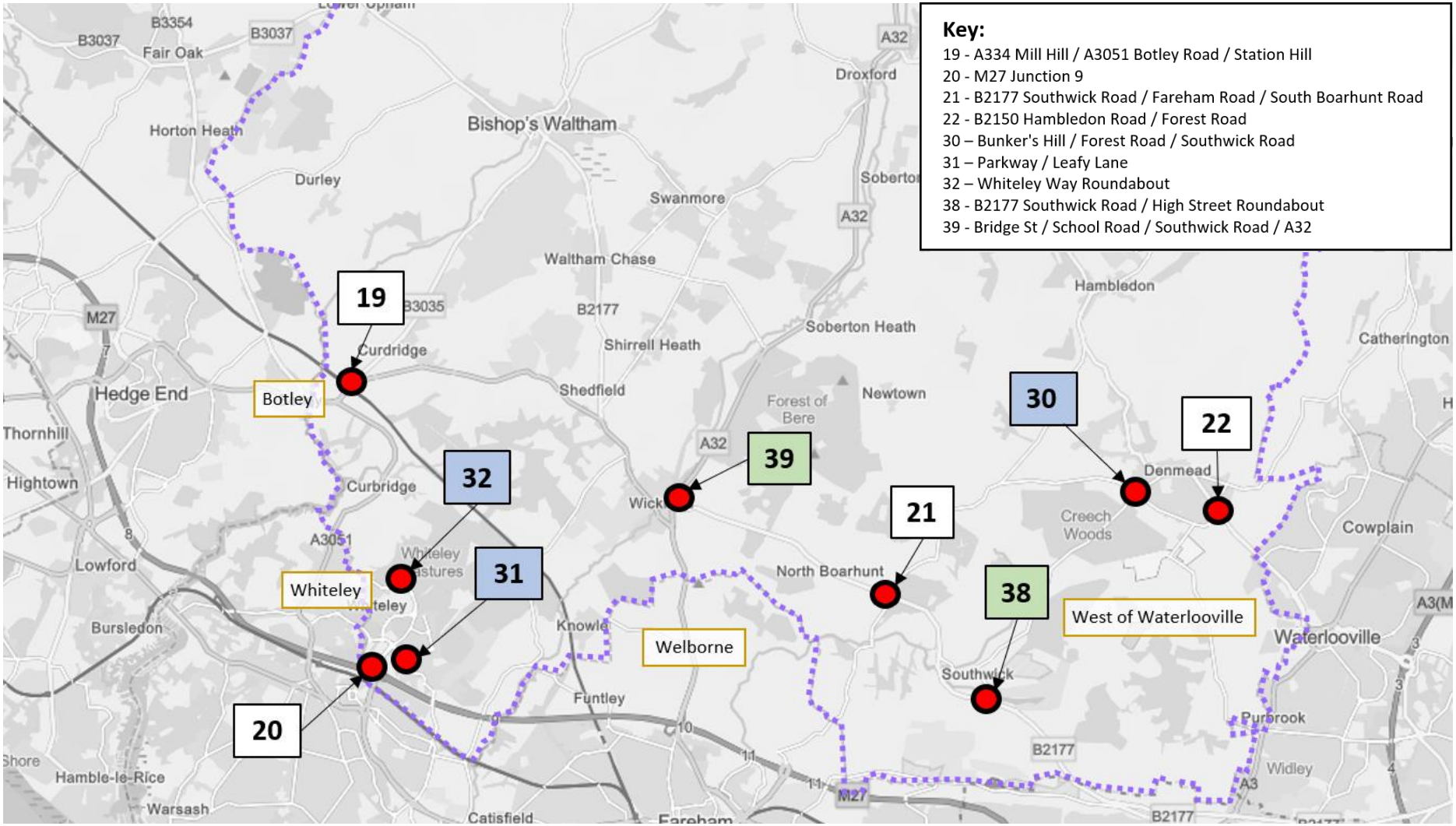


Figure 24. EVCI Locations – SHUA

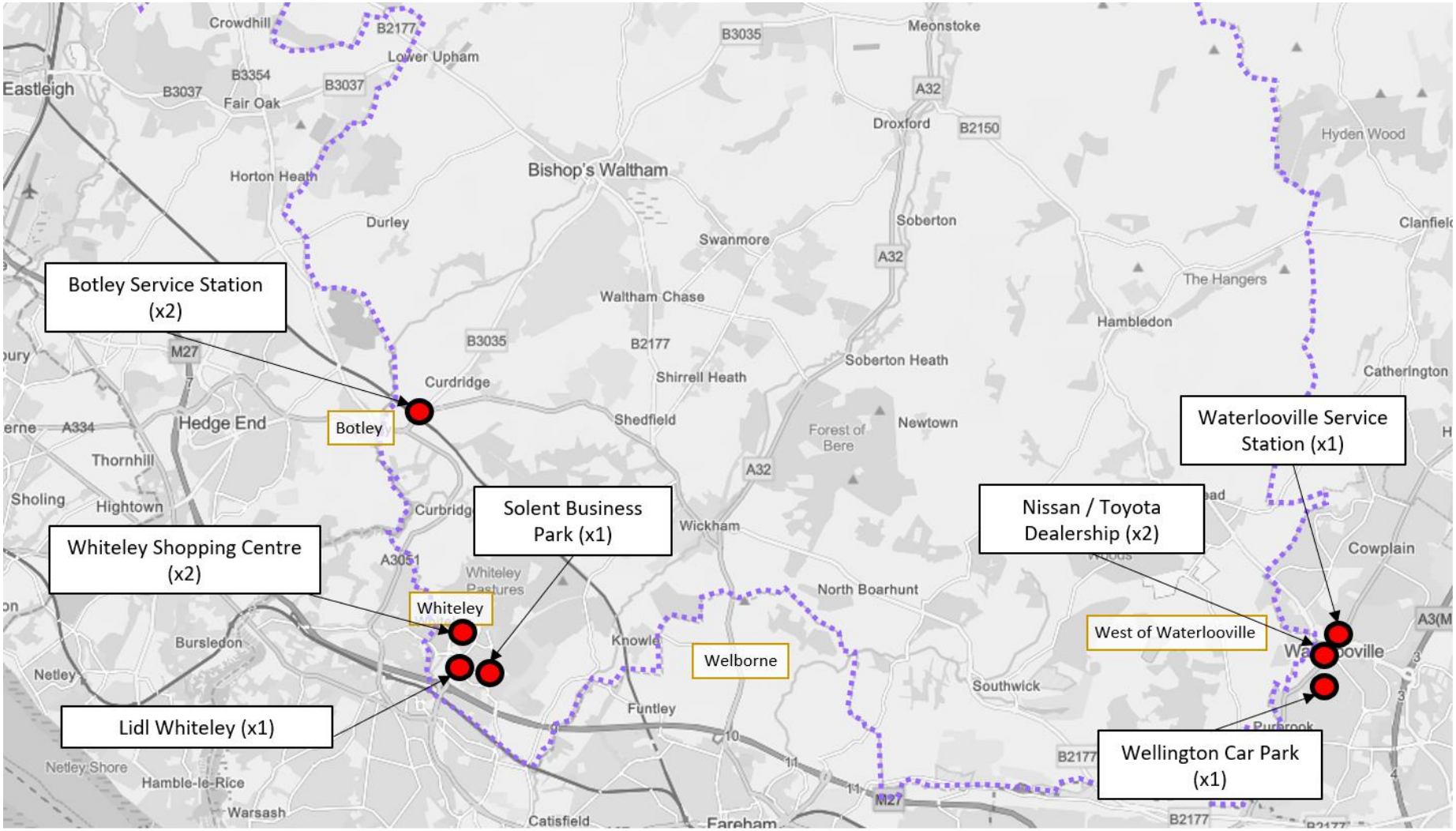


Figure 25. Collision Hotspots / Areas of Investigation – SHUA

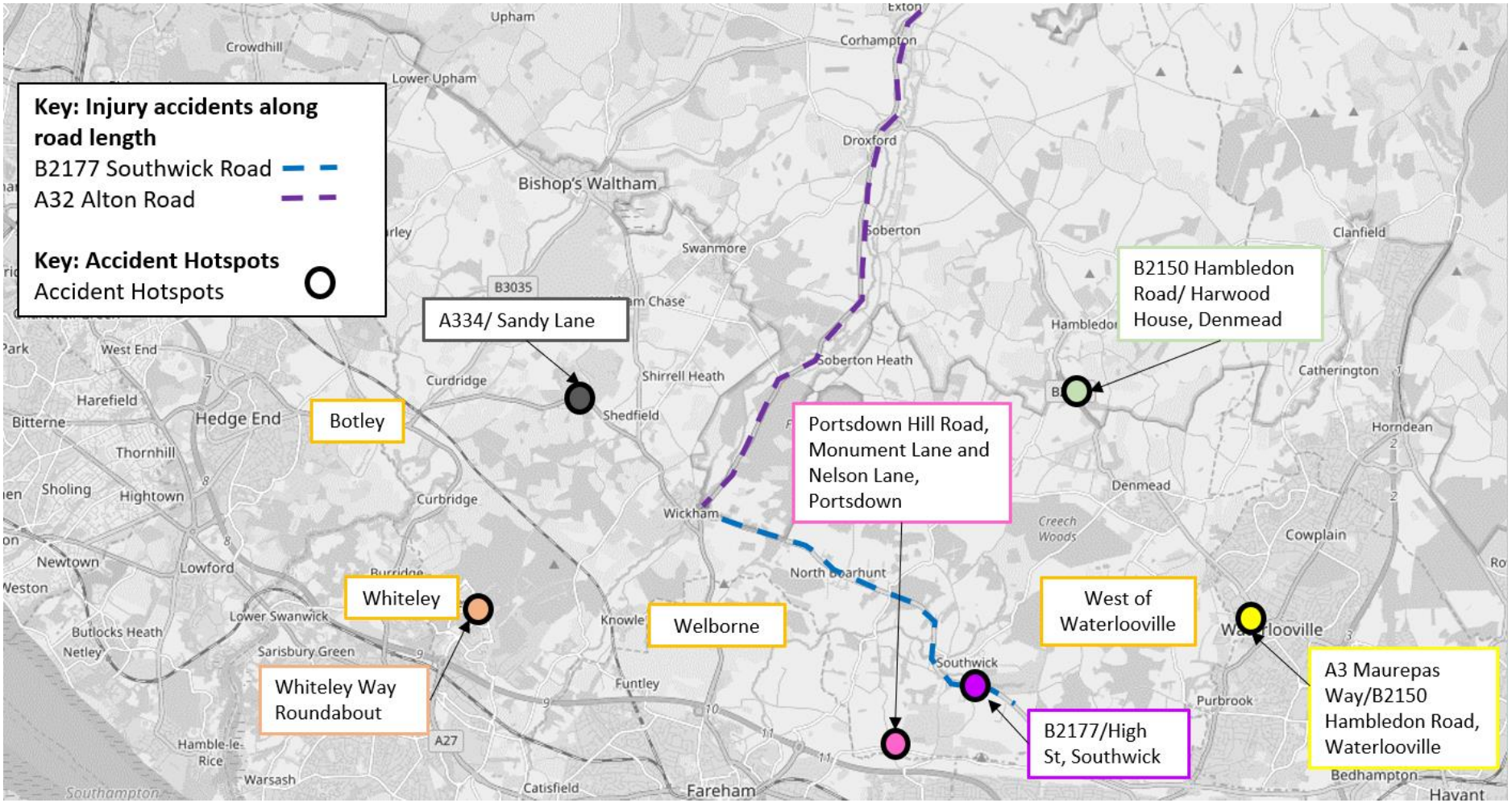


Figure 28. Bus Service Routes – MTRA (1/2)

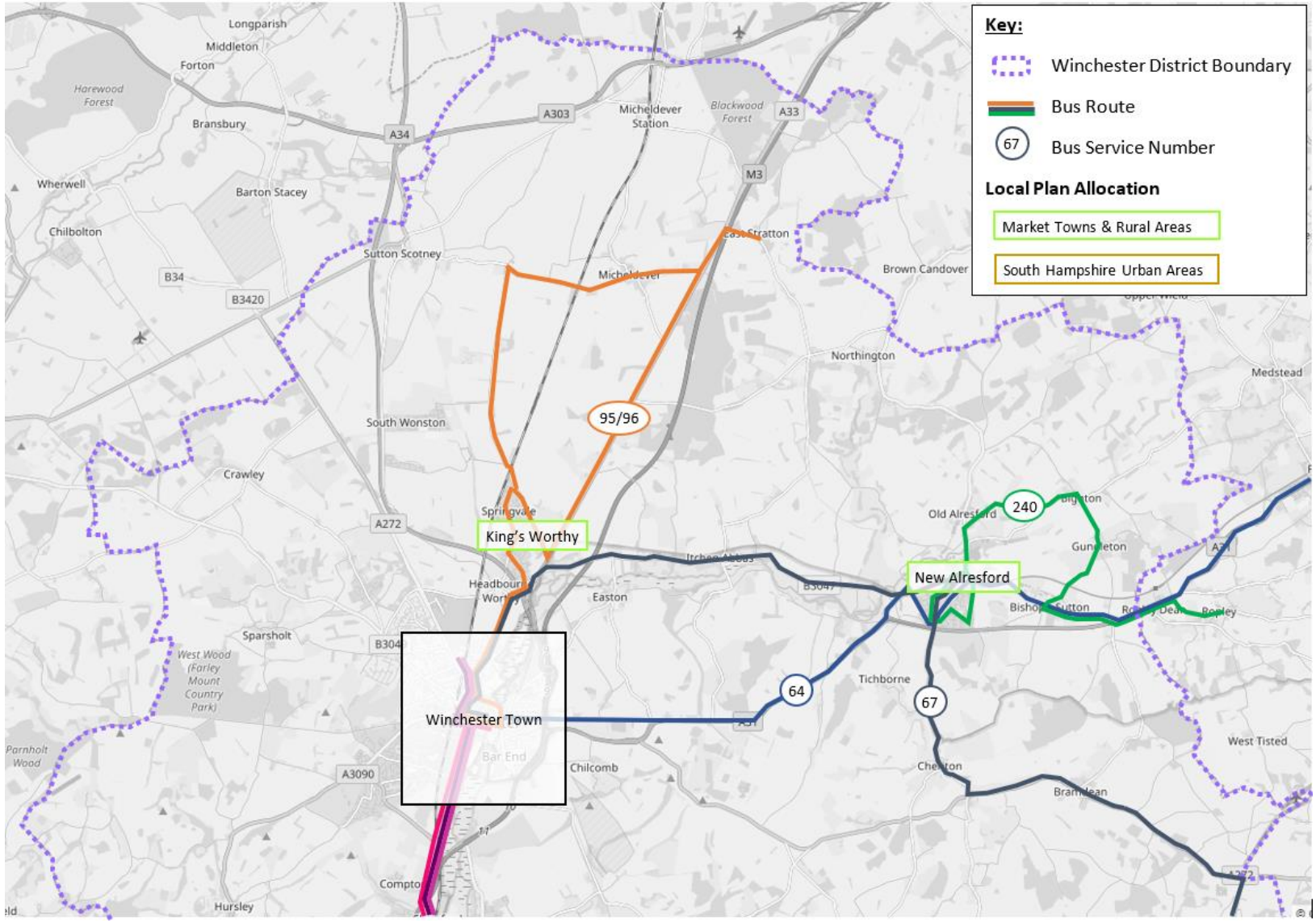


Figure 28. Bus Service Routes – MTRA (2/2)

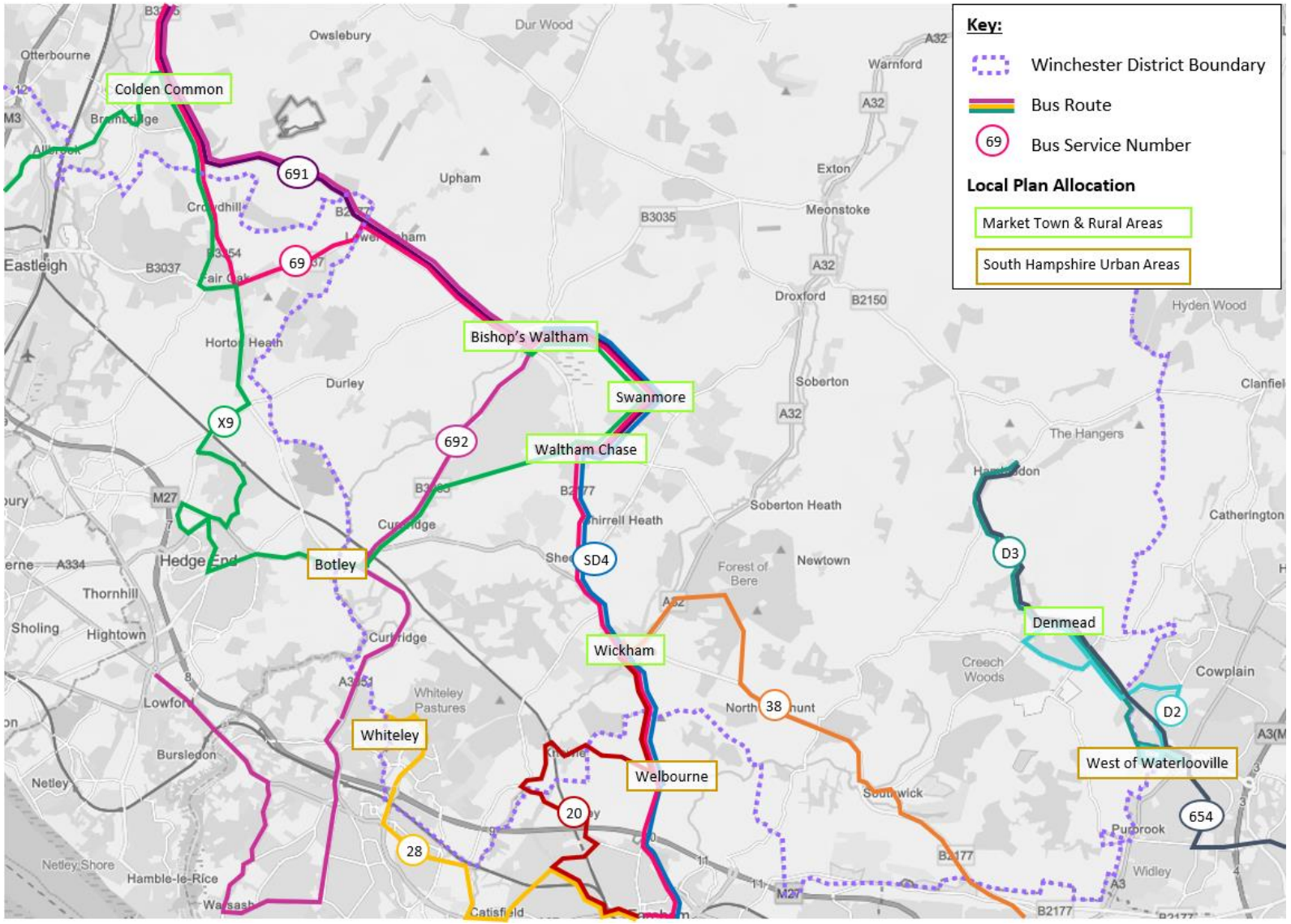


Figure 29. Congestion Hotspots Map – MTRA (North of District) (2019)

Figure 30. Congestion Hotspots Map – MTRA (South of District) (2019)

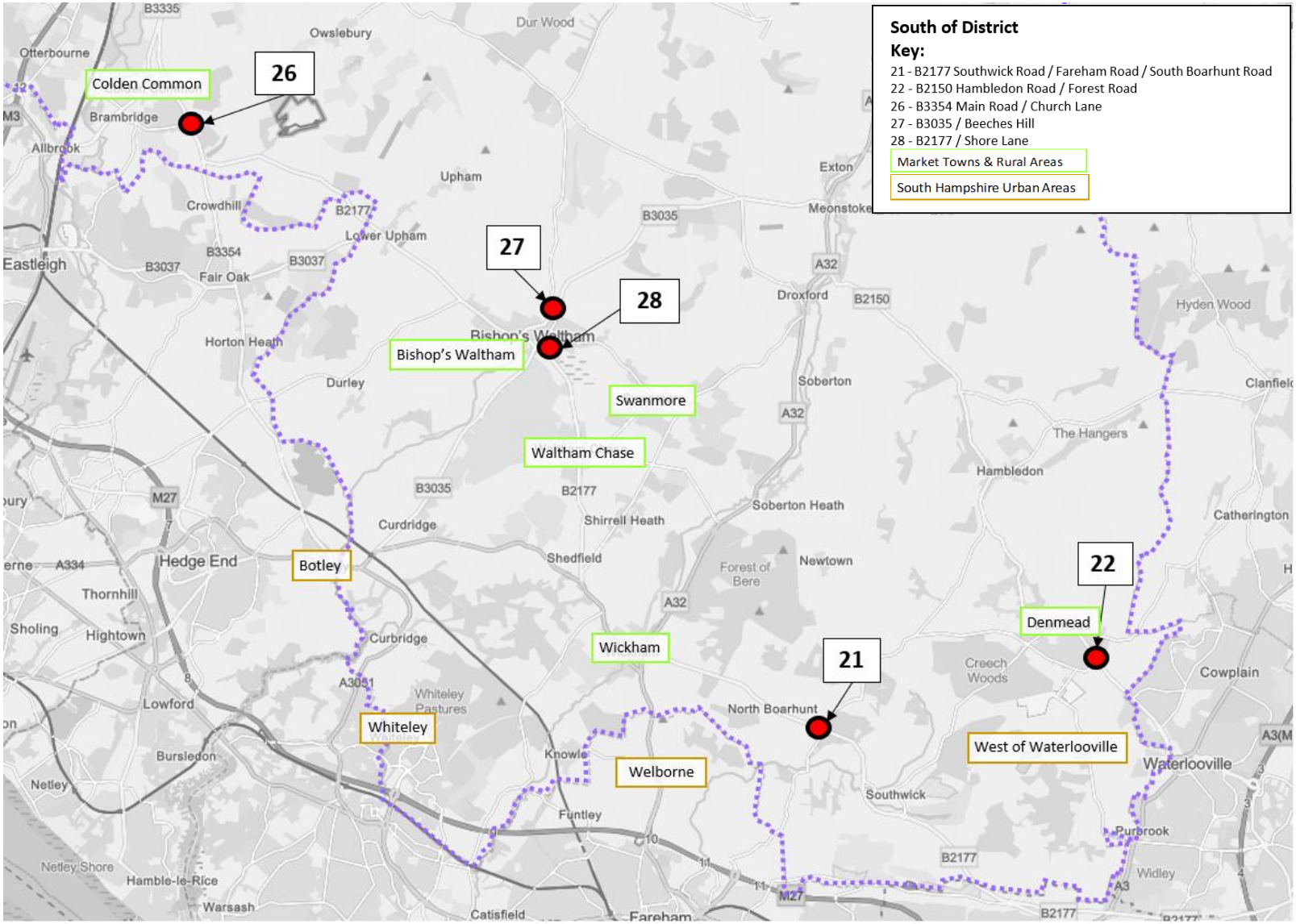


Figure 31. Congestion Hotspots Map – MRTA (2031) (South of District)

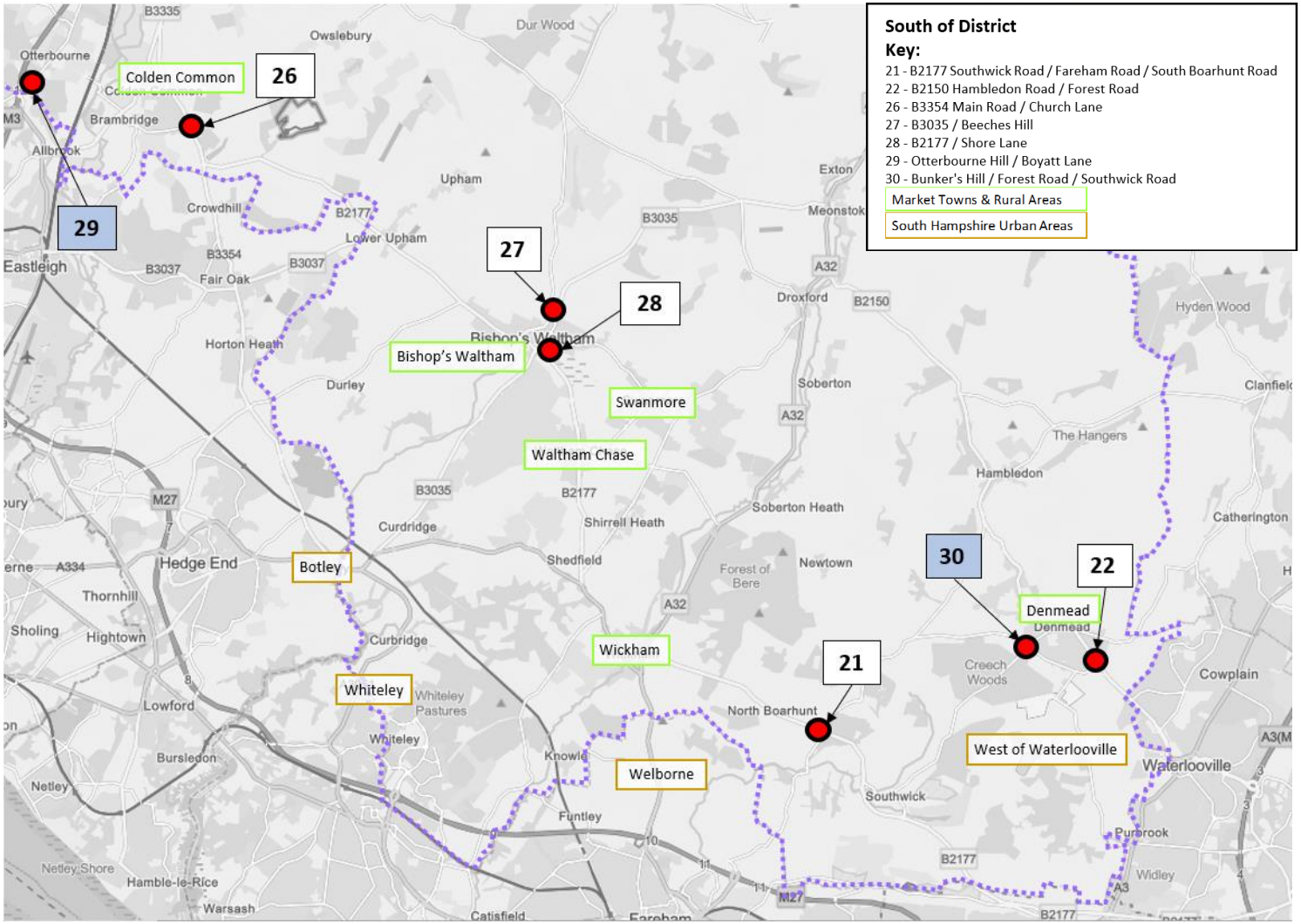


Figure 32. Congestion Hotspots Map – MRTA (2036)

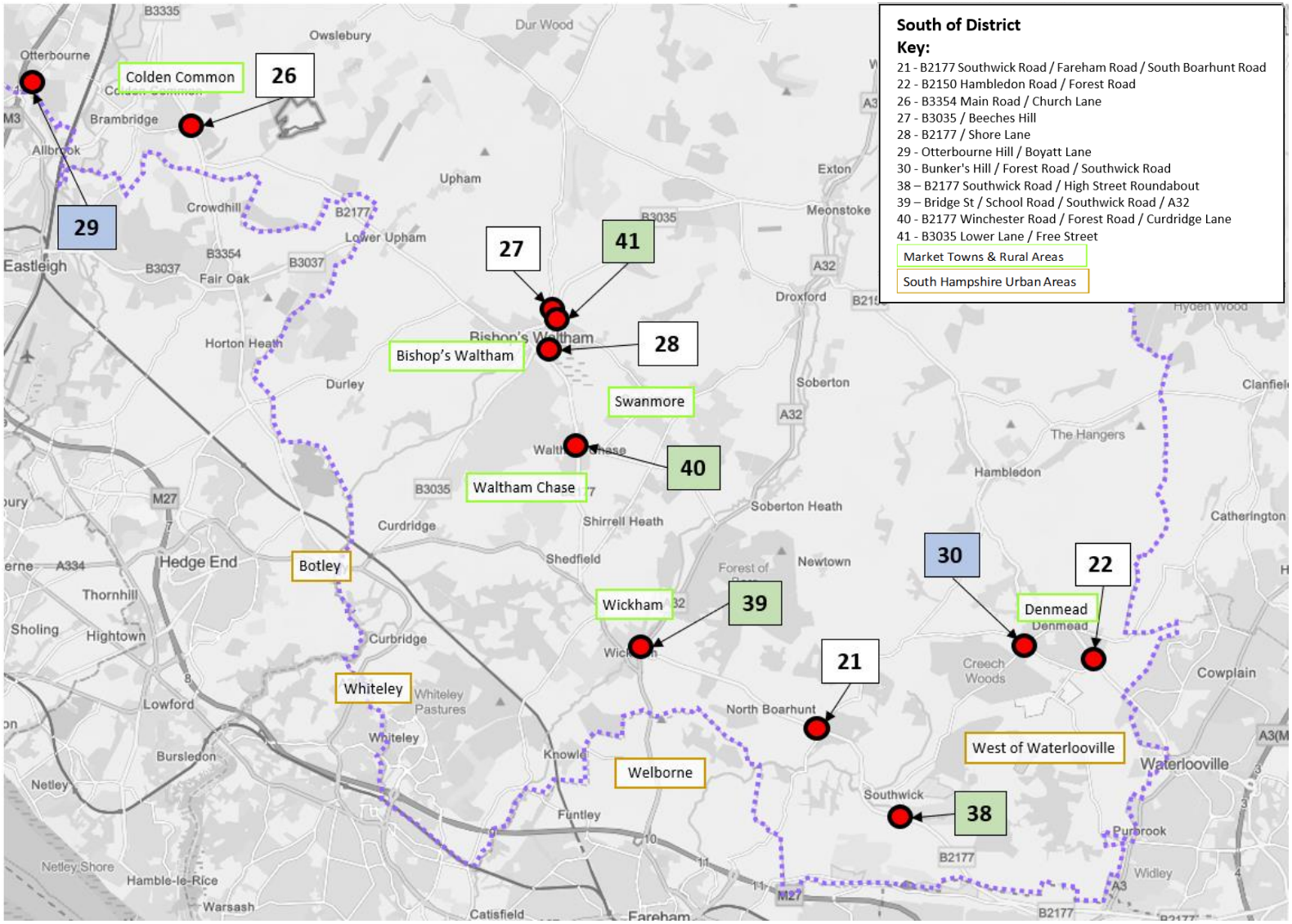


Figure 33. Existing EVCI Locations Map – MTRA

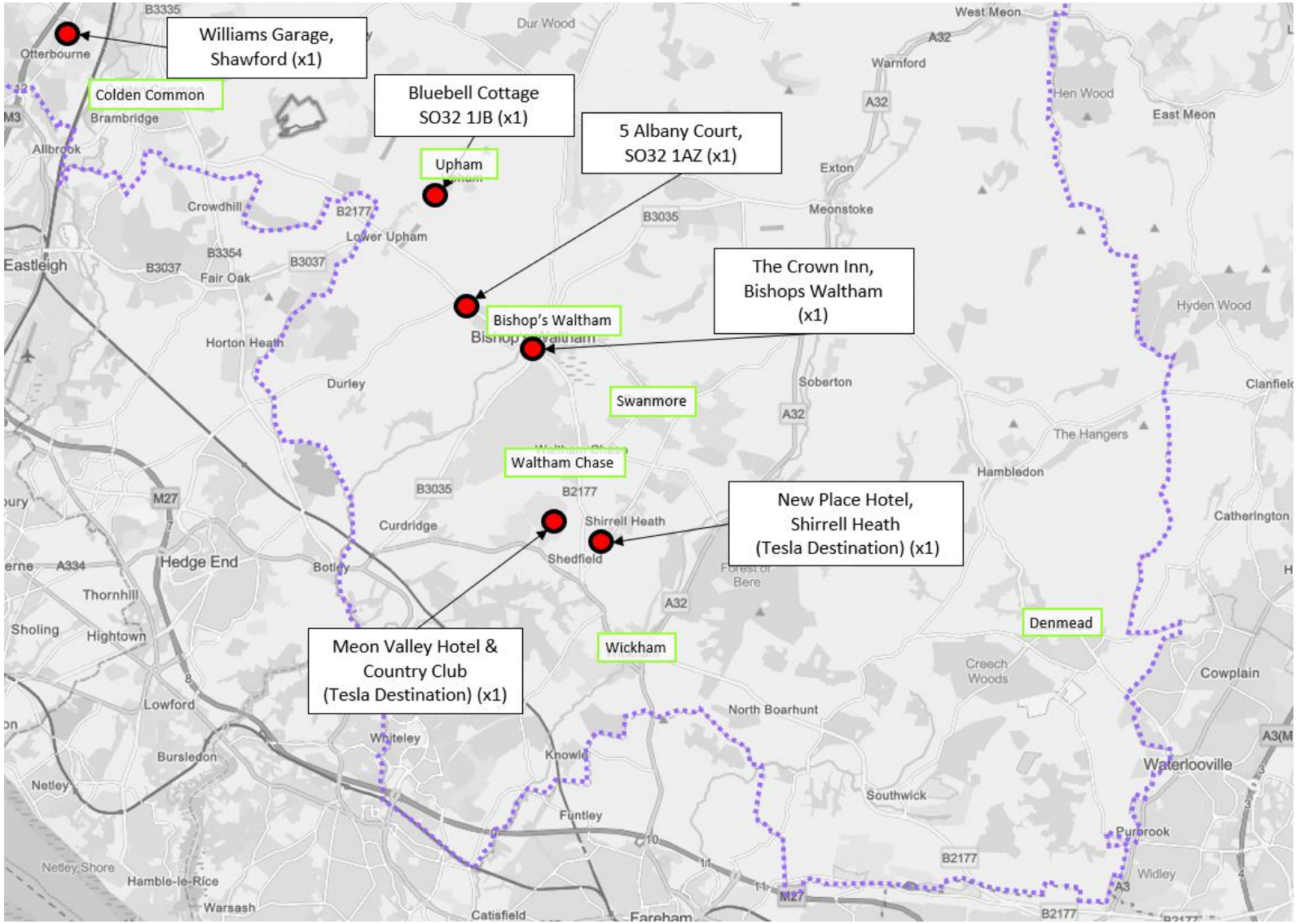


Figure 34. Collision Hotspots / Areas of Investigation – MTRA (Northern Area)

Figure 35. Collision Hotspots / Areas of Investigation – MTRA (Southern Area)