

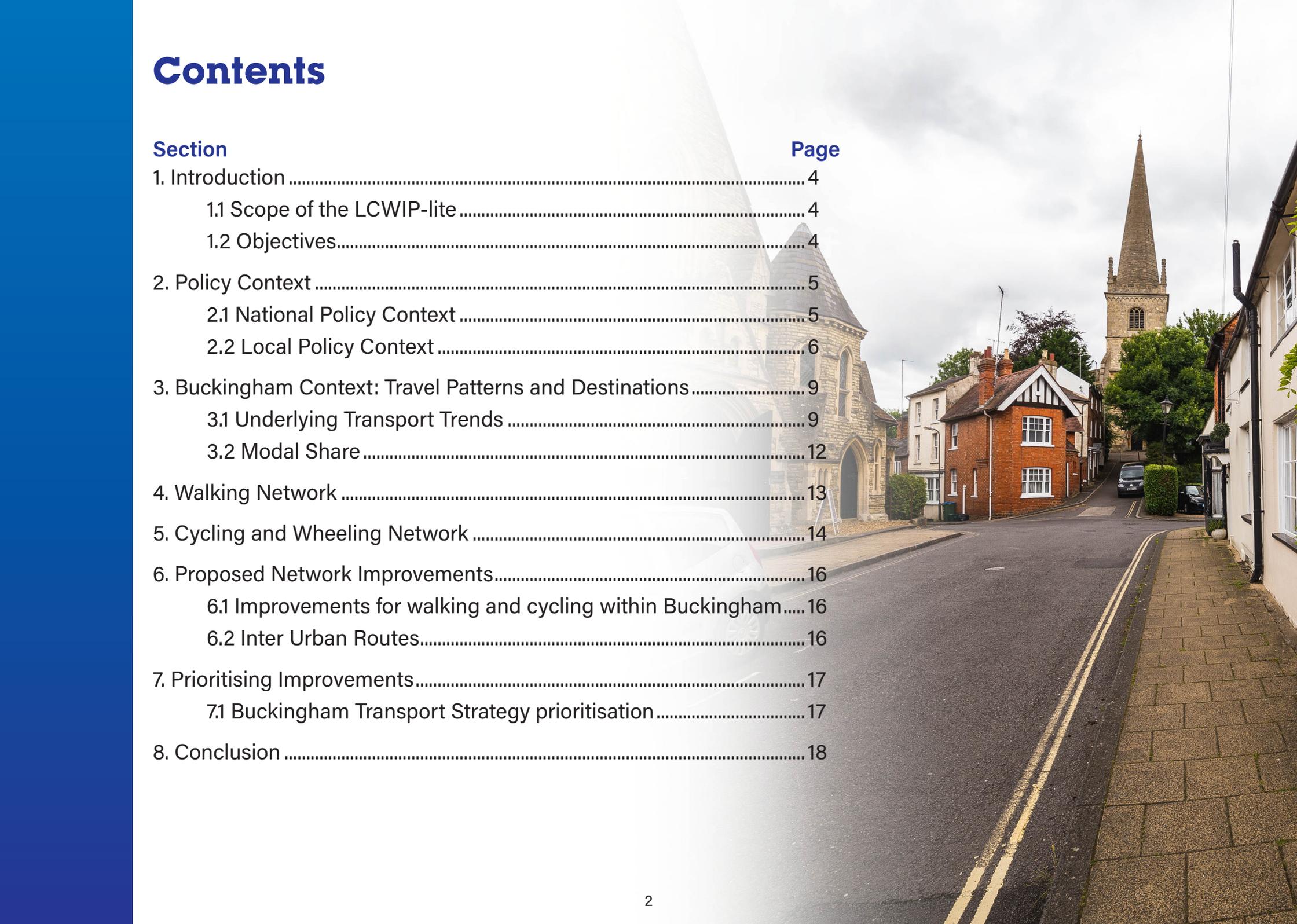


Local Cycling and Walking Infrastructure Plan lite.

Buckingham

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1. Introduction

1.1 Scope of the LCWIP-lite

- 1.1.1 The development of Local Cycling and Walking Infrastructure Plans (LCWIPs) is recommended in national government policy. An LCWIP-lite has been developed for Buckingham to support Buckinghamshire Council to take a strategic, informed approach to improving the cycling and walking networks in Buckingham and its links to surrounding settlements over the short, medium and long term. The LCWIP-lite is to be used by Buckinghamshire Council to guide future investment decisions and support funding for active travel projects in the town.
- 1.1.2 The geographical scope of this LCWIP-lite is focussed on the built-up area of Buckingham for walking journeys and includes nearby settlements within a 5km radius of the town centre for cycle journeys.
- 1.1.3 The content reflects the analysis and recommendations for walking and cycling set out in the Buckingham Transport Strategy which is the principal source document for the LCWIP-lite. The strategy was produced in 2017 and is still current. It was based on a comprehensive review of transport issues and opportunities at the time. This LCWIP-lite therefore extracts and updates the pertinent elements from that strategy, including mapping.
- 1.1.4 Leisure cycling and walking are popular local activities, with sections of the nearby Waddesdon Greenway experiencing a massive increase in use since opening. In common with other areas, the Covid 19 lockdown resulted in many people taking to local paths and lanes to get their regular exercise.
- 1.1.5 The LCWIP-lite therefore also considers some connections into the wider Buckinghamshire cycling and Greenway network, in particular the 'triangle' of cross-border opportunities to link across the administrative borders to Silverstone and Brackley that

have gained some momentum since 2017. This forms the rationale for producing this LCWIP-lite.

1.2 Objectives

- 1.2.1 The objectives of the LCWIP-lite are aligned with those outlined in the Buckingham Transport Strategy, which are:
- To make it easier and more attractive to travel by active travel within Buckingham.
 - To improve transport access and make it easier to move within the town centre.
 - To improve accessibility into Buckingham and other town centres.
 - To improve journey time reliability.
 - To minimise the impact of future growth on traffic levels, air quality and growth.
 - To reduce the risk of death or injury on the transport network.

2. Policy Context

2.1 National Policy Context

Gear Change (2020)

2.1.1 The Cycling and Walking Plan for England, 'Gear Change: a bold vision for cycling and walking', was published on 27 July 2020. The plan sets out the government's shift in transport policy as part of a wider response to climate change and other challenges such as the changing economy in towns and cities as more people choose to access some retail and other services online rather than in the high street.



Figure 2-1: Gear Change and LTN 1/20 were both published in 2020 outlining significant investment and changes in walking and cycling

2.1.2 The plan set the following vision:

"Places will be truly walkable. A travel revolution in our streets, towns and communities will have made cycling a mass form of transit. Cycling and walking will be the natural first choice for many journeys with half of all journeys in towns and cities being cycled or walked by 2030."

2.1.3 The plan recognises the need to take action to tackle the barriers to active travel, providing better quality infrastructure to make sure people feel safe and confident cycling. To receive government funding, new schemes should be designed accordance with national guidance.

LTN 1/20 - Cycle Infrastructure Design (2020)

2.1.4 Cycle Infrastructure Design - Local Transport Note 1/20 establishes high standards for cycling infrastructure including geometric requirements based on good practice gathered from around the world.

Local Cycling and Walking Infrastructure Plans (LCWIP) (2017)

2.1.5 The LCWIP guidance is intended to provide local authorities with a long-term approach for developing walking and cycling networks, ideally over a ten-year period. The key outputs from an LCWIP are:

- Network Plan for Walking and Cycling identifying preferred cycling routes and walking zones for development
- Programme of prioritised infrastructure improvements
- Report summarising the rationale for the LCWIP network development

2.1.6 The Buckingham LCWIP-lite is titled as such to reflect that it does not provide a detailed prioritised programme. Further information is included in Chapter 7: Prioritising Improvements.

2.2 Local Policy Context

2.2.1 This chapter briefly summarises the policy framework for the local area and outlines how this might influence the interim LCWIP.

Buckinghamshire Local Transport Plan

2.2.2 LTP4 was adopted in 2016 and includes elements of sustainable travel. The Buckingham Transport Strategy is a key component of the LTP which also includes a Sustainable Modes of Travel to School Strategy (see 1.2 objectives of the interim LCWIP above). Policies 12 and 13 of the LTP are to promote walking and cycling for shorter journeys through improvements to the infrastructure and supporting encouragement and education measures.

2.2.3 Buckinghamshire Council is currently developing a new Local Transport Plan, LTP5. The three overarching objectives proposed are:

1. Connecting our economy
2. Decarbonising our transport system
3. Building places for people.

Alongside this, the Council is currently preparing a new Local Plan for Buckinghamshire.

Vale of Aylesbury Local Plan (VALP) 2013-2033

2.2.4 The Vale of Aylesbury Local Plan was adopted in September 2021 and covers the period from 2013 to 2033, outlining the growth expectations for the area. Buckingham is expected to accommodate 2,177 new homes up to 2033, supporting the enhancement of the town centre and its function as a market town.

Policy T1 – Delivering the sustainable transport vision

‘The strategy to deliver sustainable transport in Aylesbury Vale is based on encouraging modal shift with greater use of more sustainable forms of transport and improving the safety of all road users, including:

- Ensuring new residential and commercial development identifies in the Local Plan period does not create a severe impact on the local highway network and encourages a modal shift to more sustainable forms of transport.
- The council will assist on delivering pedestrian, cycle, public transport and public realm improvements to deliver the Aylesbury Garden Town initiative as well as any required improvements to the transportation network in Buckingham and other areas of Aylesbury Vale as required to deliver sustainable, healthy and thriving communities.’

Policy T3 – Supporting local transport schemes

‘the council will actively support key transport proposals including those identified in both the Aylesbury Transport Strategy and Buckingham Transport Strategy. Protected and supported transport schemes will be prioritised when considering nearby planning applications.’

Policy T4 – Capacity of the transport network to deliver development

‘new development will be permitted where there is evidence that there is sufficient capacity in the transport network to accommodate the increase in travel demand as a result of the development.’

Policy T5 – Delivering transport in new development

‘Transport and new development will only be permitted if the necessary mitigation is provided against any unacceptable transport impacts which arise directly from that development. This will be achieved, as appropriate, through:

- The submission of a transport statement/assessment and the implementation of measures arising from it;
- Ensuring that the scale of traffic generated by the proposal is appropriate for the function and standard of the roads serving the area;

- The implementation of necessary works to the highway;
- Contributions towards local public transport services and support for community transport initiatives;
- The provision of new, and the improvement of existing, pedestrian and cycle routes; and,
- The provision of a travel plan to promote sustainable travel patterns for work and education related trips.'

Policy T7 – Footpaths and cycle routes

'for development which will have implications for the footpath and cycle route networks all the following criteria will apply:

- The delivery of a strategic cycle network and improvements to the footpaths will be supported in accordance with schemes identified in Policy T3 Supporting Local Transport Schemes and in the IDP Appendix.
- In dealing with planning applications the council will seek new or improved cycle access and facilities where necessary, including cycle storage, and will use planning conditions or legal agreements to secure such arrangement.
- Development proposals must provide for direct, convenient and safe pedestrian movement and routes, connected where appropriate to the existing pedestrian network and alongside strategic routes. In deciding planning applications the council will use planning conditions or legal agreements to secure the provision of new footpaths and the improvement of existing routes.
- The council will ensure that networks of pedestrian and cycle routes are provided to give easy access into and through new developments and to adjacent areas, and also to public transport services.'

Public Rights of Way Improvement Plan (2020)

2.2.5 The Public Rights of Way Improvement Plan sets out the priorities and actions to improve Buckinghamshire's public rights of way between the period of 2020 to 2030.

2.2.6 The plan aims to ensure that the public rights of way network is of a high quality and is well maintained, helping to encourage sustainable travel choices and connections to Buckinghamshire's countryside.

Climate Change and Air Quality Strategy (2021)

2.2.7 Buckinghamshire's Climate Change and Air Quality Strategy aims and objectives are as follows:

- 'achieve net zero carbon emissions for Buckinghamshire as a whole by 2050;
- achieve net zero carbon emissions for the council no later than 2050, potentially as early as 2030;
- to improve air quality across Buckinghamshire.'

2.2.8 Part of the key actions to reduce carbon emissions in Buckinghamshire include improving infrastructure for active travel.

Forthcoming Buckinghamshire LCWIP

2.2.9 Buckinghamshire Council are currently in the process of developing a LCWIP which will 'focus on opportunities for walking, cycling and wheeling links between settlements across Buckinghamshire.'

2.2.10 The main route that will act as the spine of the network will be the Buckinghamshire Greenway (see Figure 2-2 overleaf). The route will form a north to south spine that will connect to the local active travel network between Brackley and the Colne Valley.

Figure 2-2: Buckinghamshire Greenway



2.2.11 The greenway is to be accessible to all users in keeping with Buckinghamshire’s Paralympic Games legacy.

2.2.12 The greenway will be brought forward in phases as follows:

Phase 1 – Waddesdon Greenway

- 4km traffic-free route between Aylesbury Vale Parkway Station and Waddesdon Manor.
- the route was completed in September 2018 and has proven to be hugely successful, with over 160,000 trips recorded in 2021.

Phase 2 Misbourne Greenway

- will provide the southern section of the Buckinghamshire Greenway along the Misbourne Valley, connecting Wendover and Great Missenden Stations.
- planning consent was granted in January 2021 for the route section between Wendover and Great Missenden. Construction is due to start later this year, subject to all other necessary consents being secured.

Phase 3 – Colne Valley

- this section of the route will run from Great Missenden to the Colne Valley via Amersham, Chalfont St Giles and Chalfont St Peter.

3. Buckingham Context: Travel Patterns and Destinations

3.1 Underlying Transport Trends

3.1.1 Much through traffic has been managed in Buckingham by improvements to strategic roads in recent decades, although some routes (such as access to the A422 west of the town, and A413 to the north) still require travel into the central area. Buckingham retains its function as a market town that serves the surrounding villages, pulling in trips from surrounding villages.

3.1.2 **Morphology and Land Use:** Buckingham is a compact town where all of the built-up area is within a 10–15-minute cycle ride of the town centre. New housing has extended the built-up part of the town out towards the A421 and A413 and there is future infill development within the Local Plan. Figure 3-1 shows the development over the wider area.

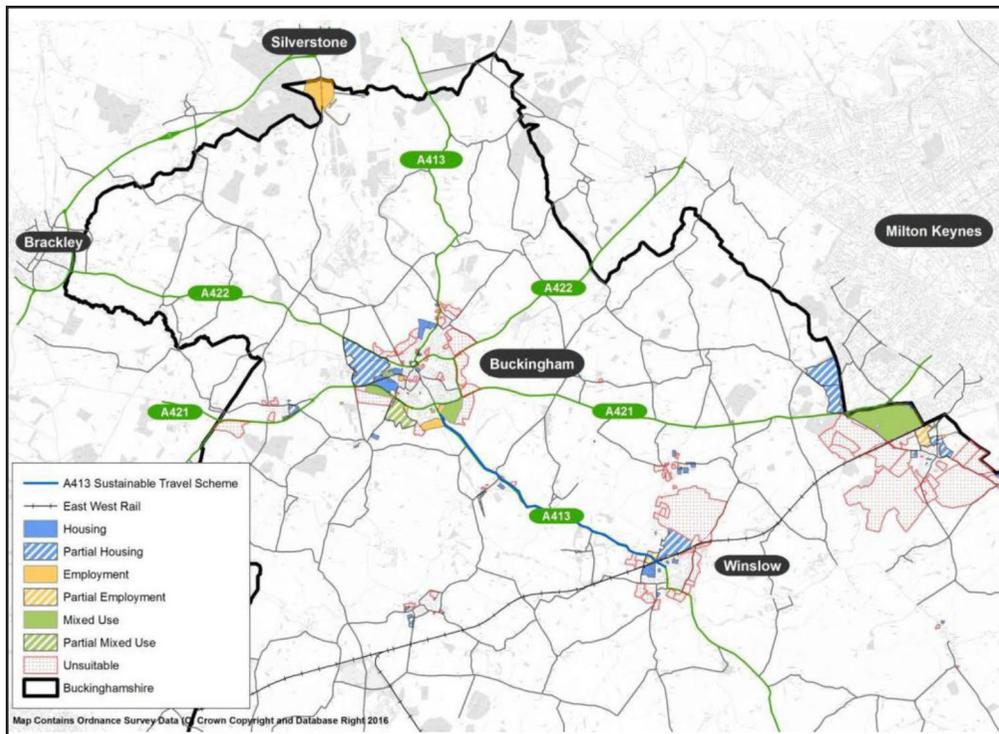
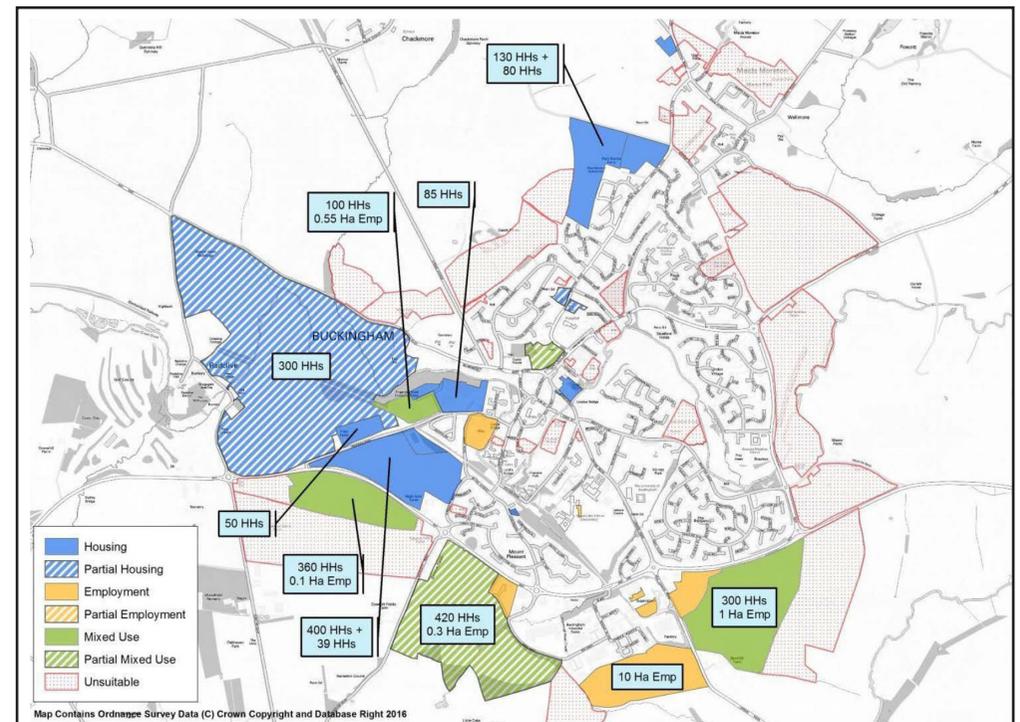


Figure 3-1: Area-wide planned changes to Land Use and Transport (Buckingham Transport Strategy)

3.1.3 According to 2021 census data, car ownership per household in Buckingham is 12% higher than the England. 15% more households in Buckingham own two or more cars, higher than the England average.

3.1.4 The intensification of land-use within the town and immediate neighbouring land will add journeys onto existing roads. Some of these journeys will be short trips within walking and cycling distances. Figure 3-2 shows the development within the town and its immediate surrounding area.

Figure 3-2: Planned development in Buckingham (Buckingham Transport Strategy)



3.1.5 The focus of the LCWIP-lite is mainly on trips within the town and from nearby local villages. It is useful to consider the locations of the trip attractors.

3.1.6 **Travel to Work:** Many people choose to live in the attractive historic town, but need to travel elsewhere for work, notably to Aylesbury, Milton Keynes and Oxford but also to nearby towns such as Silverstone, Brackley and Winslow. It is acknowledged that it is unlikely these inter-urban journeys fall under the influence of the LCWIP-lite although improved connections to Brackley and Silverstone may open up opportunities for e-bike travel. Figure 3-3 shows the main employment areas by land use while Figure 3-4 illustrates some of the more significant employment destinations.

Figure 3-3: Employment in Buckingham and surrounding area (Buckingham Transport Strategy)

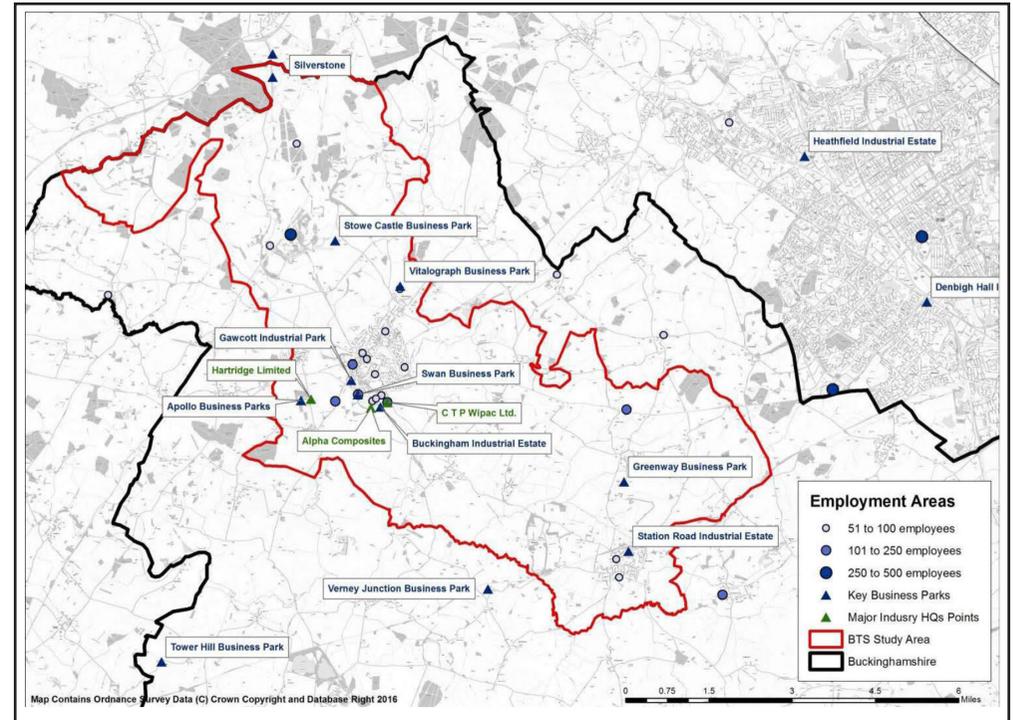
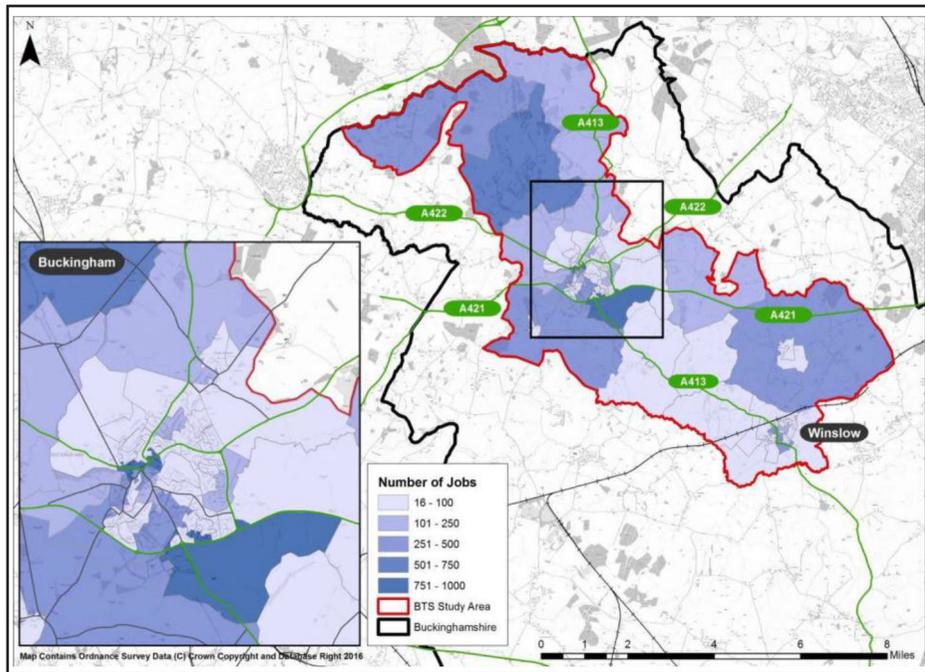


Figure 3-4: Employment destinations

3.1.7 **Travel to Education:** As shown in Figure 3.5, there are several schools within the town, as well as the University of Buckingham. Primary schools are located in each of the main residential areas while the Buckingham secondary schools and sixth form college is off London Road to the south-west of the town centre.

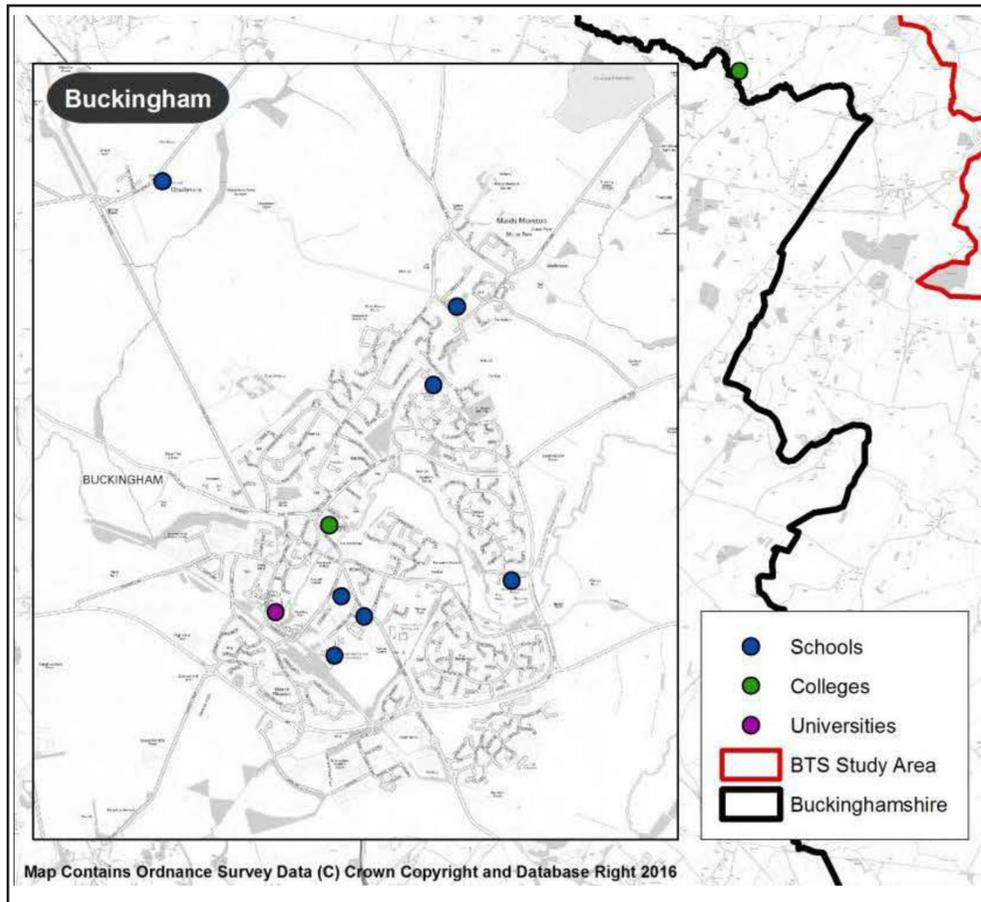


Figure 3-5: Location of Schools and Colleges

3.1.8 **Access to Healthcare:** as shown in Figure 3.6, Community healthcare facilities (GP, practice nurses, dentists etc) are generally located centrally, close to the populations and public transport so as to be accessible to those in need. Routine short local journeys to these centres could potentially be undertaken by active modes. Health centres also play a role in encouraging active lifestyles as a means to improve personal and public health.

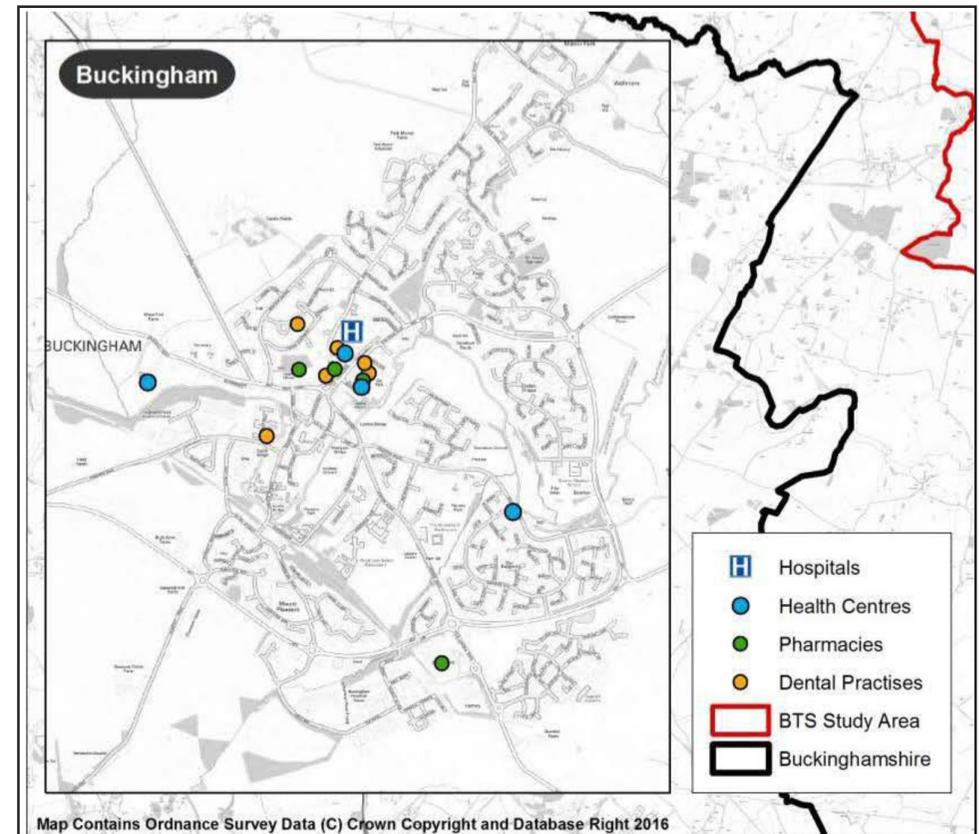


Figure 3-6: Healthcare facilities in Buckingham

3.1.9 Access to Leisure: As shown in Figure 3.7, Buckingham is a compact town with plenty of greenspace within the built-up area and surrounded by attractive countryside. The National Trust attraction of Stowe Gardens is immediately north of the town.

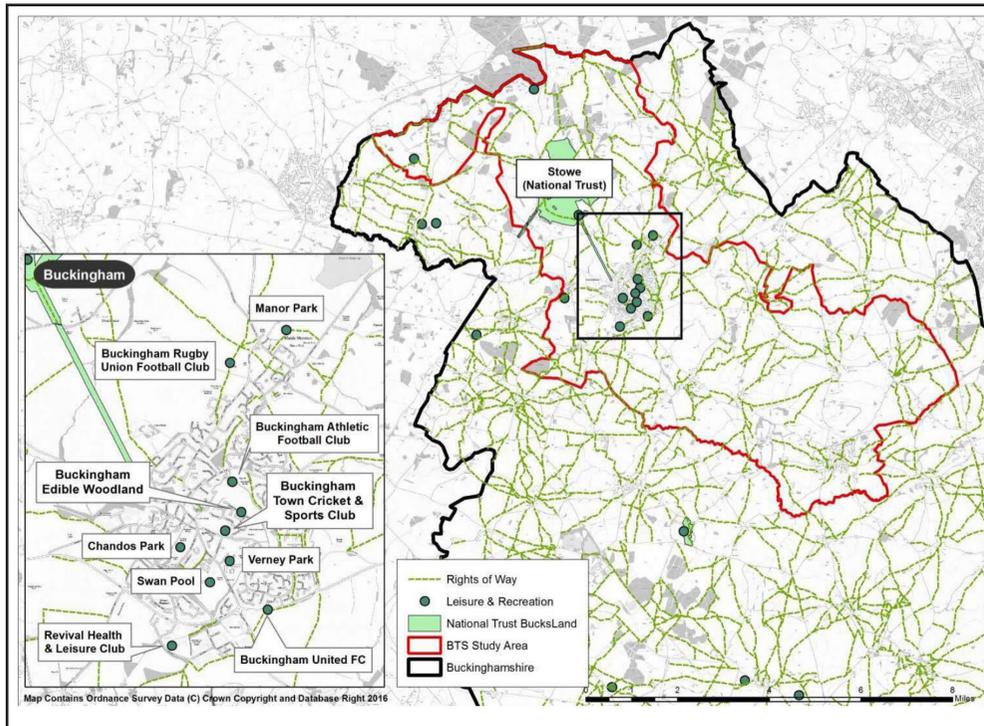


Figure 3-7: Greenspace in Buckingham and surrounding area

3.2 Modal Share

3.2.0 Winslow station is envisaged to be a major trip attractor for Buckingham residents for onward rail travel to Oxford and Milton Keynes.

3.2.1 The data on mode share is taken from the 2011 Census which samples journey to work data. It should be noted that this data is over ten years old and only covers one type of journey. As noted previously some of the other transport data suggests relatively long commute trips to major regional centres.

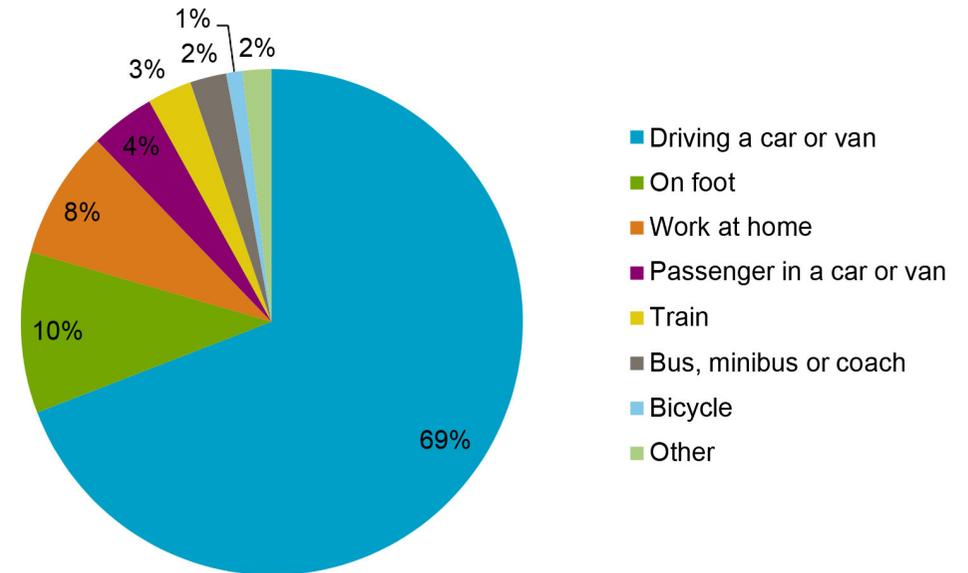


Figure 3-8: Journey to work modal share by residents

3.2.2 The Buckingham Transport Strategy also looked at those who worked within the study area. The modal shares were broadly similar although 18% reported working from home. It is likely that a higher proportion of people now work at home some or all of the time due to Covid19 and improvements in communications technology.

3.2.3 There is no rail service in Buckingham, the nearest stations being at Milton Keynes, Bicester, or Aylesbury. Express bus services run at a half-hourly frequency to connect to these stations and the town centres.

3.2.4 It should be noted however that a new East West Rail Station is scheduled to be opened in December 2024, as part of the East West Rail project which will provide access between Winslow, Oxford, Milton Keynes and Cambridge.

3.2.5 Local bus services include routes to Aylesbury, Milton Keynes Central, and Bicester North. There is a central bus stand located in Buckingham town centre.

4. Walking Network

- 4.1.1 Most roads within the built-up part of the town have footways although the quality and width of provision is inconsistent. This is in part due to the historic nature of the area and in part due to space given over to accommodate car parking and the volume of traffic (including road width needed for larger vehicles).
- 4.1.2 There are also some greenways within the town that make use of historic rail corridors and the riverside area, as well as those that were incorporated into the design of newer housing estates as the town has expanded. Width and surface quality is variable but most are well-used.
- 4.1.3 As shown in Figure 4.1 the surrounding countryside also has a comprehensive network of public rights of way (PROW) although most of these have unbound surfaces and many feature access by stile, so they are only available to fully able-bodied users.
- 4.1.4 Some pedestrian routes in the town centre that cross the river away from other traffic are prone to occasional flooding which means that people walking and cycling may be forced onto busier roads in these conditions.

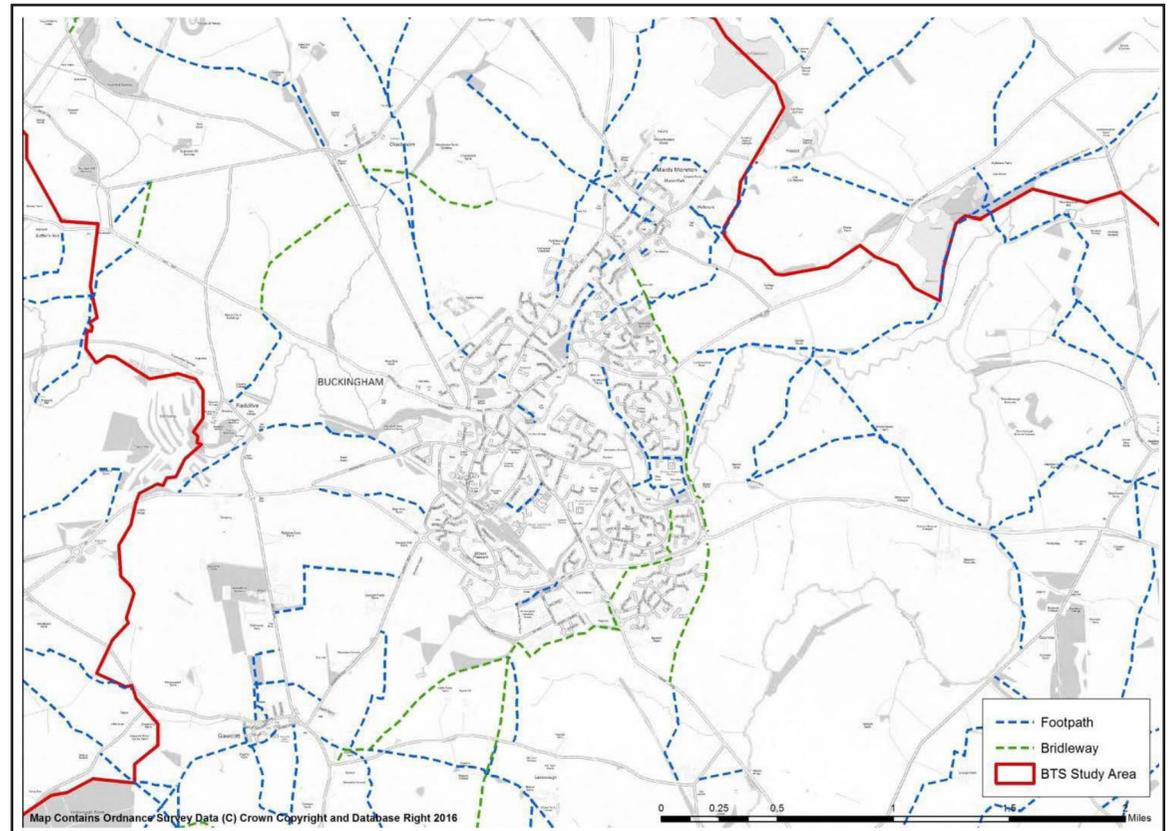


Figure 4-1: Rights of Way network

5. Cycling and Wheeling Network

5.1.1 The existing cycle network is shown in Figure 5.1. Most of the town centre is subject to a 30mph speed limit and the volume of traffic on many streets is low enough for on-carriageway cycling. However, it is difficult to reach some destinations without sharing the main road with high-speed traffic or with HGV traffic. These conditions are unacceptable to some would-be cyclists. HGVs are already prohibited on certain roads in Buckingham due to weight limits on bridges or width restrictions and sharp bends.

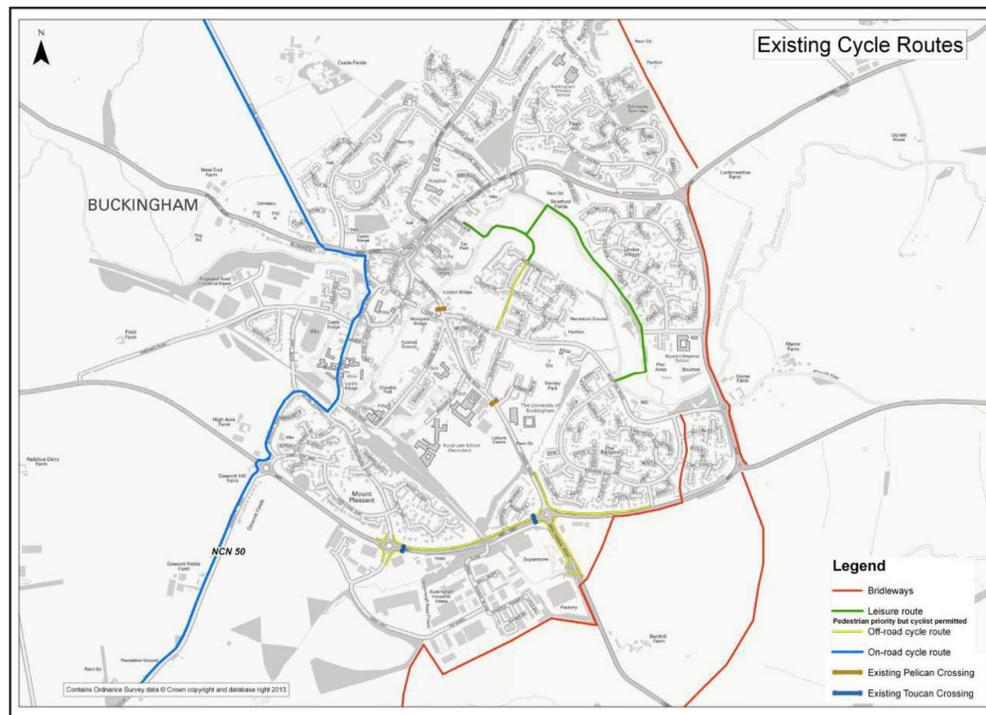


Figure 5-1: Existing Cycle Routes

5.1.2 The Buckingham Transport Strategy includes details of traffic speed limits, peak hour traffic volumes and proportion of HGV traffic which are reproduced below (Figures 5-2 to 5-4). When these are compared with the guidance from LTN 1/20 (figure 5-5) the evidence supports the case for investment in cycle facilities (or to create alternative parallel cycle routes) along some of the busier roads in Buckingham.

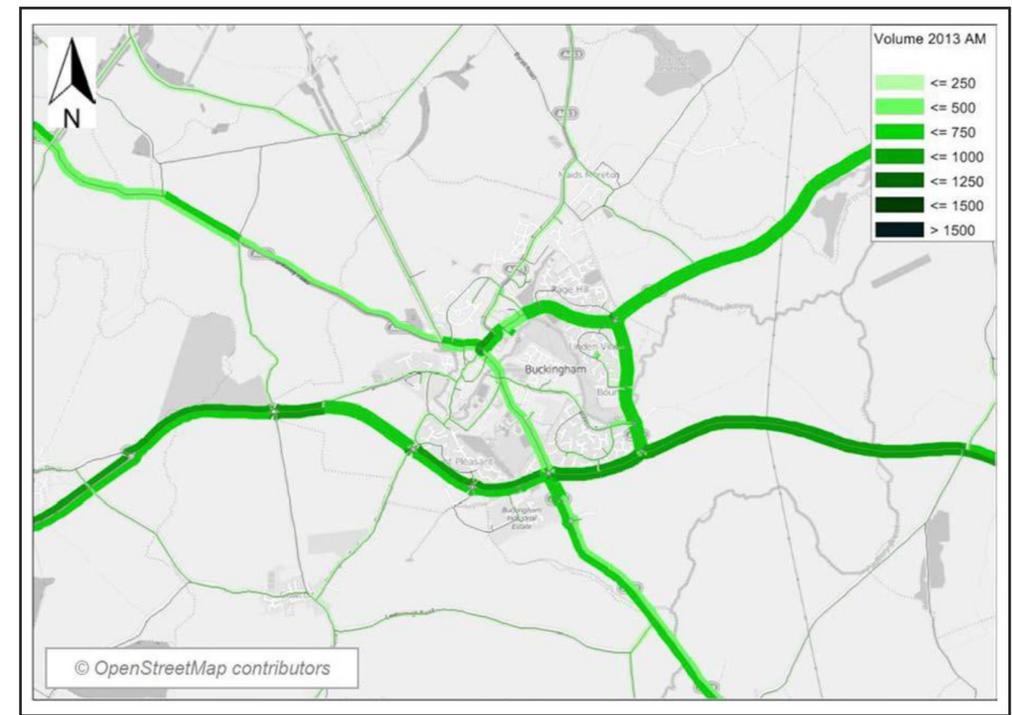


Figure 5-2: AM Peak Hour traffic volume

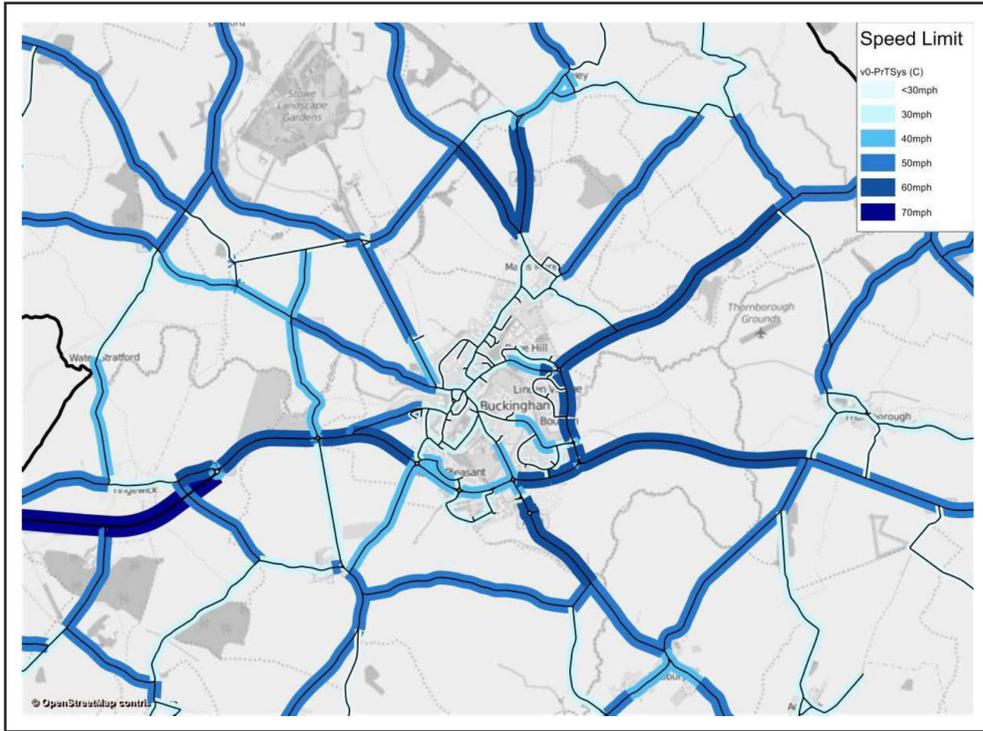


Figure 5-3: Speed limits



Figure 5-4: AM Peak hour HGV traffic

5.1.2 The diagram below is reproduced from LTN 1/20 and illustrates what are acceptable types of infrastructure for different traffic speeds and volumes.

Figure 5-5: Appropriate protection from motor traffic on highways from LTN1/20

5.1.3 Many of these issues are addressed in the 2013 Cycling Strategy and in the Buckingham Transport Strategy both of which identify

Speed Limit ¹	Motor Traffic Flow (pcu/24 hour) ²	Protected Space for Cycling			Cycle Lane (mandatory/ advisory)	Mixed Traffic
		Fully Kerbed Cycle Track	Stepped Cycle Track	Light Segregation		
20 mph ³	0	Green	Green	Green	Green	Green
	2000	Green	Green	Green	Green	Green
	4000	Green	Green	Green	Green	Yellow
	6000+	Green	Green	Green	Green	Yellow/Red
30 mph	0	Green	Green	Green	Yellow	Yellow
	2000	Green	Green	Green	Yellow	Yellow
	4000	Green	Green	Green	Yellow	Yellow
	6000+	Green	Green	Green	Yellow	Yellow
40 mph	Any	Green	Yellow	Yellow	Pink	Pink
	Any	Green	Yellow	Yellow	Pink	Pink
50+ mph	Any	Green	Pink	Pink	Pink	Pink
	Any	Green	Pink	Pink	Pink	Pink

- Provision suitable for most people
- Provision not suitable for all people and will exclude some potential users and/or have safety concerns
- Provision suitable for few people and will exclude most potential users and/or have safety concerns

Notes:

1. If the 85th percentile speed is more than 10% above the speed limit the next highest speed limit should be applied
2. The recommended provision assumes that the peak hour motor traffic flow is no more than 10% of the 24 hour flow
3. In rural areas achieving speeds of 20mph may be difficult, and so shared routes with speeds of up to 30mph will be generally acceptable with motor vehicle flows of up to 1,000 pcu per day

potential improvements that will improve conditions for cycling.

6. Proposed Network Improvements

6.1 Improvements for walking and cycling within Buckingham

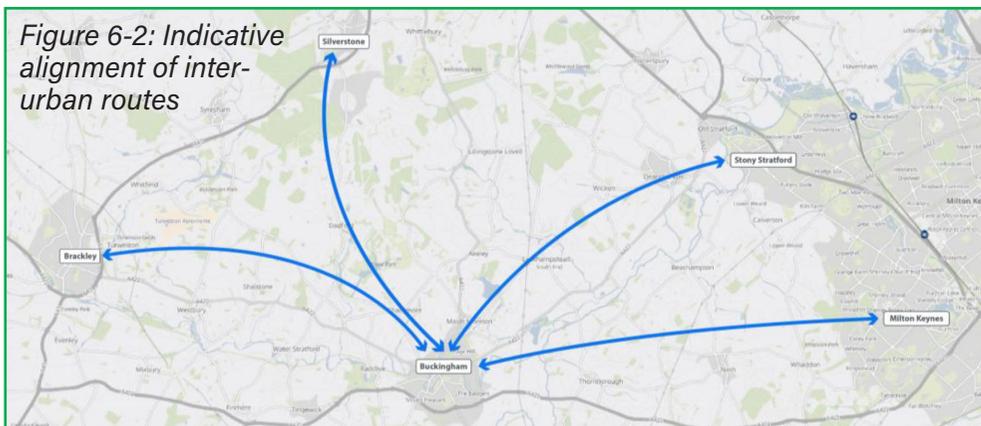
6.1.1 Following consultation and inputs from the Town Council, the Buckingham Transport Strategy suggests the following network for walking and cycling within the town. Figure 6.1 has been reviewed to identify what has been delivered since the Transport Strategy was published in 2016 and to identify where we have developer funding, or where improvements are forthcoming.

6.1.2 The network includes improvements to existing facilities and a combination of off-road routes along busier corridors and on-road cycling in quieter streets and where available width for off-carriageway provision is constrained.

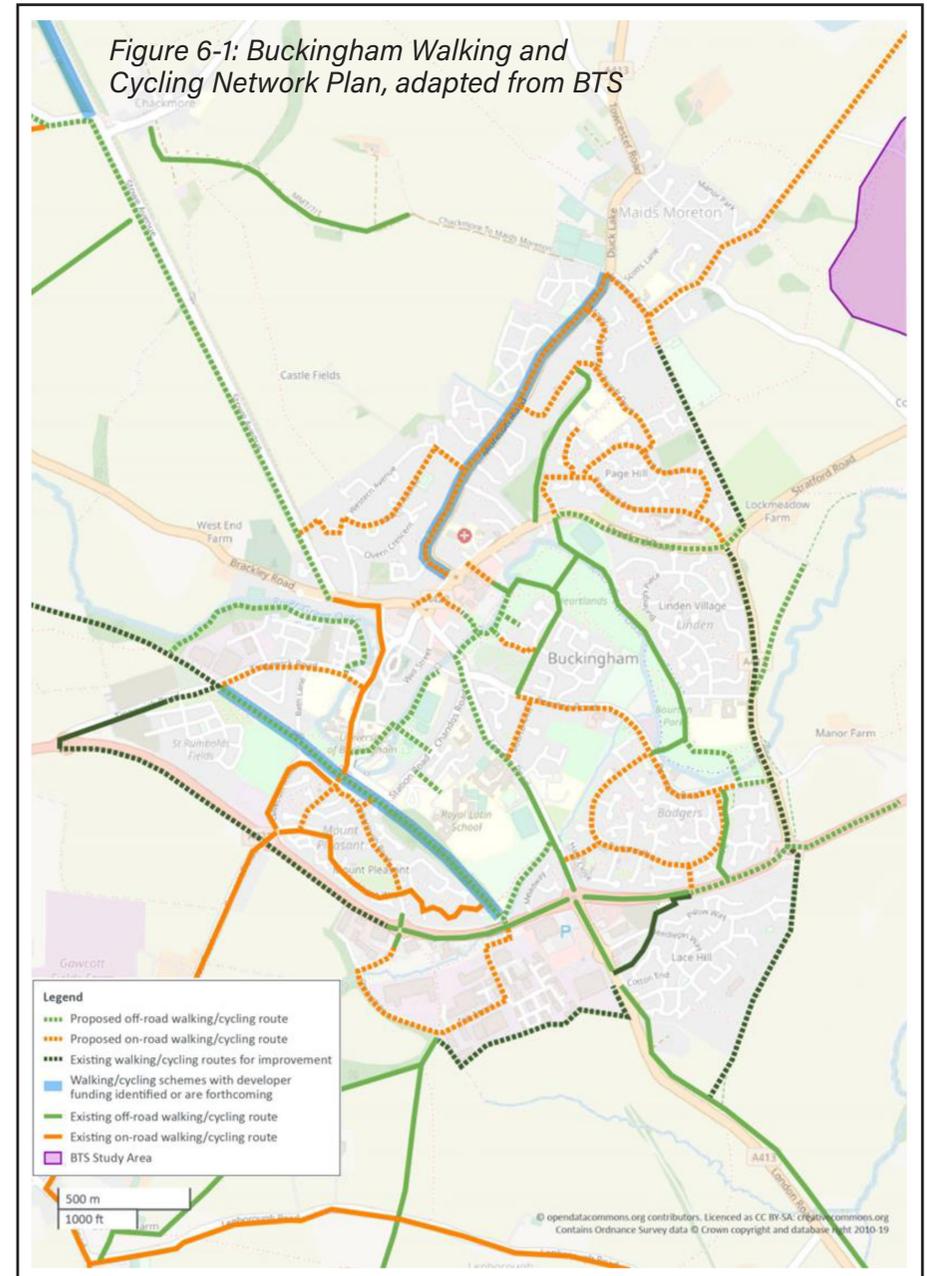
6.2 Inter Urban Routes

Buckingham Transport Strategy

6.2.1 The Town Council identified two potential new on-road routes east of the town. One goes to Stony Stratford via a parallel quieter route along Moreton Road and lanes to the north of the A422 Stratford Road. The second goes to Milton Keynes following the A421 east out of the town and then taking lanes via Thornborough, Nash and Waddon.



6.2.2 Potential new inter-urban routes include to Stony Stratford and to Milton Keynes, as indicated in Figure 6.2.



7. Prioritising Improvements

Stage 5 of the LCWIP process considers the prioritisation of the network improvements identified in stages 3 and 4. The approach to prioritisation is not prescriptive, as it should reflect the local context and strategic priorities, but typically the approach should identify a range of short, medium and long-term priorities for implementation.

Factors that are typically used in the prioritisation of schemes can be broadly categorised under three headings;

- **Effectiveness** – may cover the likely increase in active travel trips as a result of the intervention, the number of people benefitting from the improvement, or how effectively the improvement addresses road safety or air quality issues.
- **Policy** – how well the improvements align to local policies and strategies, potential alignment with funding requirements, and may cover how well the proposals would serve particular groups (e.g., areas with poor health outcomes).
- **Deliverability** – the technical feasibility of delivering the scheme, considering the complexity of the proposals and likely dependencies on other schemes coming forward, also the likely public/political acceptability of the improvements.

7.1 Buckingham Transport Strategy prioritisation

7.1.1 A prioritisation approach for cycle routes within Buckingham, and for inter-urban routes is set out in the Buckingham Transport Strategy section 4.4. This approach considers the fit with the BTS objectives – providing a simple scoring output (ranking 0 – 3) for each route, and the combined town centre routes against the six objectives. The alignment to these objectives comprises the policy element of the prioritisation.

7.1.2 The effectiveness and deliverability of the improvements are assessed quantitatively, looking at categories including the

transport benefits, implementation, and risk. These elements are not assigned a score – but the schemes could be ranked using these combined criteria in the future to provide a more comprehensive ranking.

7.1.3 The potential implementation – including the phasing – of the improvements is considered in the BTS section 4.5. The phasing is based upon:

- Inter-dependencies with developments and other transport improvements
- The scale of the preparatory work
- Available funding sources

7.1.4 The active travel improvements are considered alongside the other BTS modal improvements, with most active travel upgrades considered as short-term priorities. Those improvements with potential dependencies on HS2 are considered medium-term priorities.

8. Conclusion

- 8.1.1 This LCWIP-lite identifies and updates the active travel routes identified in the Buckingham Transport Strategy, with the objective of increasing the mode share for walking and cycling in Buckingham.
- 8.1.2 The routes include local routes within Buckingham itself, which provide a comprehensive network of walking and cycling routes in the urban area – connecting residential areas to employment and retail areas in the town centre, as well as providing orbital routes linking neighbourhoods.
- 8.1.3 A number of longer inter-urban routes connecting Buckingham to key destinations further afield are also identified, including those suggested by the Town Council during the development of the Buckingham Transport Strategy.
- 8.1.4 The routes identified in this LCWIP-lite aim to provide indicative routes to cater for existing and future active travel demand in the study area. The alignments suggested have not yet been assessed in detail, so recommendations for improvement are not provided at this stage.
- 8.1.5 In consultation with stakeholders, the routes will be refined at the next stage of LCWIP development, and high-level recommendations for improvement will be developed and prioritised for implementation.

