

Banbury Local Cycling and Walking Infrastructure Plan (LCWIP)

July 2023

Contact: activetravelcherwellandwest@oxfordshire.gov.uk



**OXFORDSHIRE
COUNTY COUNCIL**

Contents

Banbury Local Cycling and Walking Infrastructure Plan (LCWIP).....	1
Figures.....	4
Tables.....	5
Executive summary	6
1. Introduction	8
1.1 Banbury LCWIP development: The process	8
1.1.1 Stakeholder engagement and governance	10
1.1.2 Public consultation	10
1.2 Context and geographical scope of this LCWIP	11
1.3 Relationship between cycling and walking.....	18
1.4 The importance of cycling and walking	18
2. Policy Context	20
2.1 LCWIP integration with wider policies.....	20
2.2 Key policies, strategies and guidance.....	21
3. Population and demographics.....	25
3.1 Census 2011: An overview	25
3.2 Census 2011: Travel to work data	25
3.3 Census 2021: Car ownership and distance travelled to work data	28
3.4 National Travel Survey & Active Lives Survey: Cycling and walking for other trip purposes.....	28
3.4.1 Cycling	28
3.4.2 Walking	30
3.4.3 Walking to school.....	30
3.5 Core Accessibility Indicators (2015).....	31
3.6 Index of Multiple Deprivation (IMD).....	31
3.7 Health and wellbeing	33
4. Cycling & walking: demand and challenges	36
4.1. Where are people travelling to and from ('trip generators')?	36
4.1.1. Existing trip generators	36
4.1.2. Future trip generators.....	38
4.2. Preferred routes for cycling journeys	39
4.2.1. Propensity to Cycle Tool (PCT).....	39
4.2.2. Strava Global Heatmap	46

4.3.	Accident data	48
4.3.1.	Accidents involving people cycling	48
4.3.2.	Accidents involving people walking	48
4.4.	Other informants to this LCWIP	51
4.4.1.	CycleStreets low traffic neighbourhoods	51
4.4.2.	Rapid Cycleway Prioritisation Tool	53
5.	Network Plan for cycling	55
5.1.	Methodology	55
5.1.1.	Identifying trip generators	55
5.1.2.	Identifying existing and predicted routes and desire lines	55
5.1.3.	Identifying cycling network improvements	56
5.1.4.	Types of improvements	57
5.2.	Proposed cycling improvements	59
5.3.	Complementary measures and schemes	108
6.	Network Plan for walking	110
6.1.	Methodology	110
6.1.1.	Identifying trip generators	110
6.1.2.	Identifying a Core Walking Zone (CWZ)	110
6.1.3.	Identifying walking network improvements	110
6.1.4.	Types of improvements	111
6.2.	Proposed walking improvements	112
6.3.	Complementary measures and schemes	121
7.	Emerging prioritisation of active travel improvements	122
8.	Integration and application	125
8.1.	Embedding the Banbury LCWIP	125
8.2.	Reviewing the Banbury LCWIP	126
8.3.	Developing the cycle network further	126
9.	Glossary	131

Figures

Figure 1: Banbury LCWIP: Process summary	9
Figure 2: Movement in Banbury - Challenges.....	13
Figure 3: Banbury LCWIP Geographic scope	16
Figure 4: Banbury Core Walking Zone.....	17
Figure 5: Local commutes ‘entirely within settlement’ and travel mode for travel to work trips (both within individual settlements and to other settlements) (Census 2011).....	26
Figure 6: Overview of cycling to work proportions in Banbury (2011)	27
Figure 7: Cycle trips by trip purpose 2019 to 2021 (percentages)	29
Figure 8: Walk trips by trip purpose 2019 to 2021 (percentages)	30
Figure 9: Average travel time (mins) by walking or public transport to the nearest key service	31
Figure 10: Indices of Multiple Deprivation (Banbury, 2019)	33
Figure 11: Banbury local trip generators	37
Figure 12: Propensity to Cycle Tool commuting data (Census 2011 scenario).....	40
Figure 13: Propensity to Cycle Tool commuting cycle route network (E-bikes Scenario flows)	42
Figure 14: Cycling demand network (based on PCT e-bikes scenario with demand flows ‘grouped’).....	44
Figure 15: Propensity to Cycle Tool school cycle route network (School Census 2011 scenario flows)	45
Figure 16: Propensity to Cycle Tool school cycling route network (Go Dutch scenario flows)	46
Figure 17: Strava Global Heatmap: Cycling (accessed 3rd January 2023).....	47
Figure 18: Strava Global Heatmap: Running (accessed 3rd January 2023)	48
Figure 19: Accidents involving people cycling (January 2017 to June 2022)	49
Figure 20: Accidents involving people walking (January 2017 to June 2022)	50
Figure 21: CycleStreets map tool for showing streets that have low traffic flows.....	52

Figure 22: Rapid Cycleway Prioritisation Tool results for Banbury	53
Figure 23: The Banbury Cycling Network	106
Figure 24: Other routes required to complete a comprehensive network	128
Figure 25: The LCWIP network compared with clusters of destinations	130

Tables

Table 1: Villages included in the Banbury LCWIP.....	14
Table 2: National and local policy, strategy, guidance relevant to the LCWIP	21
Table 3: Proportions cycling and driving to work in Banbury (Census 2011)	27
Table 4: Car ownership in Banbury and distance travelled to work (2021 census).....	28
Table 5: Percentage of adults that cycle, 2018-2019.....	29
Table 6: Index of Multiple Deprivation: Most deprived LSOAs	32
Table 7: Banbury primary and secondary cycle routes	59
Table 8: Proposed cycle network by primary or secondary priority.....	107
Table 9: Table of Prioritisation	123

Executive summary

The climate emergency and health inequalities are among the key challenges that we face. National and local policy and guidance have been set to address these and create healthier and more sustainable communities. This includes Oxfordshire County Council's (OCC) Local Transport & Connectivity Plan (LTCP) (2022), which has a vision for an inclusive, safe and net-zero carbon transport system in Oxfordshire¹. Enabling cycling and walking to be the natural choices for short journeys or as part of longer journeys is vital to achieving this.

Local Cycling and Walking Infrastructure Plans (LCWIPs) provide a prioritised list of improvements to the cycling and walking experience of a place, which will encourage more people to cycle and walk. LCWIPs are a policy requirement in Oxfordshire's LTCP and the supporting Active Travel Strategy. LCWIPs are also an important component of the Area Travel Plans, which apply policies in LTCP locally.

The Banbury LCWIP is a ten-year plan encompassing the urban area of Banbury and its links to the surrounding villages of Adderbury, Bloxham, Broughton, Great Bourton, Little Bourton, North Newington, Middleton Cheney and Wroxton. The ambition of the Banbury LCWIP is to create a cycling and walking network within and around Banbury that is accessible for all and where everyone feels safe when they are cycling and walking. This will ultimately make cycling and walking the preferred travel option for many journeys within the area.

The Banbury LCWIP identifies the key routes and destinations where improvements for cycling are needed. The suggested improvements include:

- segregated cycle routes wherever possible
- traffic free routes
- speed reductions to 20mph
- protected space for cycling
- additional road crossings and
- reviewed and improved junctions.

Similarly, improvements for walking are identified that focus on key walking zones, most notably in Banbury town centre. The suggested improvements include:

- wider footways
- improved road crossings and
- removal of physical barriers.

A prioritised list of cycle routes has been produced based on several factors, including safety implications and the degree to which connectivity is enhanced by improvements. Routes prioritised include the Overthorpe Road to Bridge Street, the 'western corridor', and Bloxham

¹ Oxfordshire County Council Local Transport and Connectivity Plan, 2022, <https://www.oxfordshire.gov.uk/sites/default/files/file/roads-and-transport-connecting-oxfordshire/LocalTransportandConnectivityPlan.pdf>

Road. A package of measures to improve walking access into the town centre is proposed as the first phase of enhancements for pedestrians and those requiring wheeled access.

The improvements will be delivered through funding bids, for example to central government, and developer funding. The prioritised list of improvements will guide the funding that is sought by OCC.

The LCWIP will inform the Banbury Area Travel Plan where some of the issues raised will be considered further. The LCWIP will then be reviewed every two years to track progress and ensure the plans remain relevant and up to date.

1. Introduction

The Banbury Local Cycling and Walking Infrastructure Plan (LCWIP) is one of a set of LCWIPs being developed across Oxfordshire. The LCWIPs will ensure that a strategic and evidence-based approach is taken to improving conditions in Oxfordshire for cycling (by all bike types), walking and wheeling², supporting the County, District and City Councils in:

- identifying cycling and walking infrastructure improvements for future investment
- ensuring that appropriate consideration is given to cycling and walking within both local planning and Oxfordshire transport policies and strategies
- making the case for future funding for cycling and walking infrastructure and ensuring that new development is connected and integrated with the wider cycling and walking network.

The Banbury LCWIP focuses on the urban area of Banbury as well as connections to the surrounding villages of Adderbury, Bloxham, Broughton, Great Bourton, Little Bourton, North Newington, Middleton Cheney and Wroxton.

This LCWIP is an evolving Plan, providing an initial prioritised programme of improvements to be further developed over the coming years through detailed consultation and stakeholder engagement.

1.1 Banbury LCWIP development: The process

The Department for Transport's (DfT) technical guidance for developing LCWIPs³ has been followed in producing this LCWIP. This ensures it aligns with national and local ambitions and policies, including those set out in DfT's Gear Change⁴ document and Oxfordshire's Local Transport and Connectivity Plan (LTCP)⁵. The delivery of these visionary plans aims to address the climate emergency by providing the infrastructure that will enable cycling and walking to become the natural choices for short journeys, as well as for discrete sections of longer journeys e.g., cycling to a local railway station.

A summary of the approach taken for development of the Banbury LCWIP is provided below:

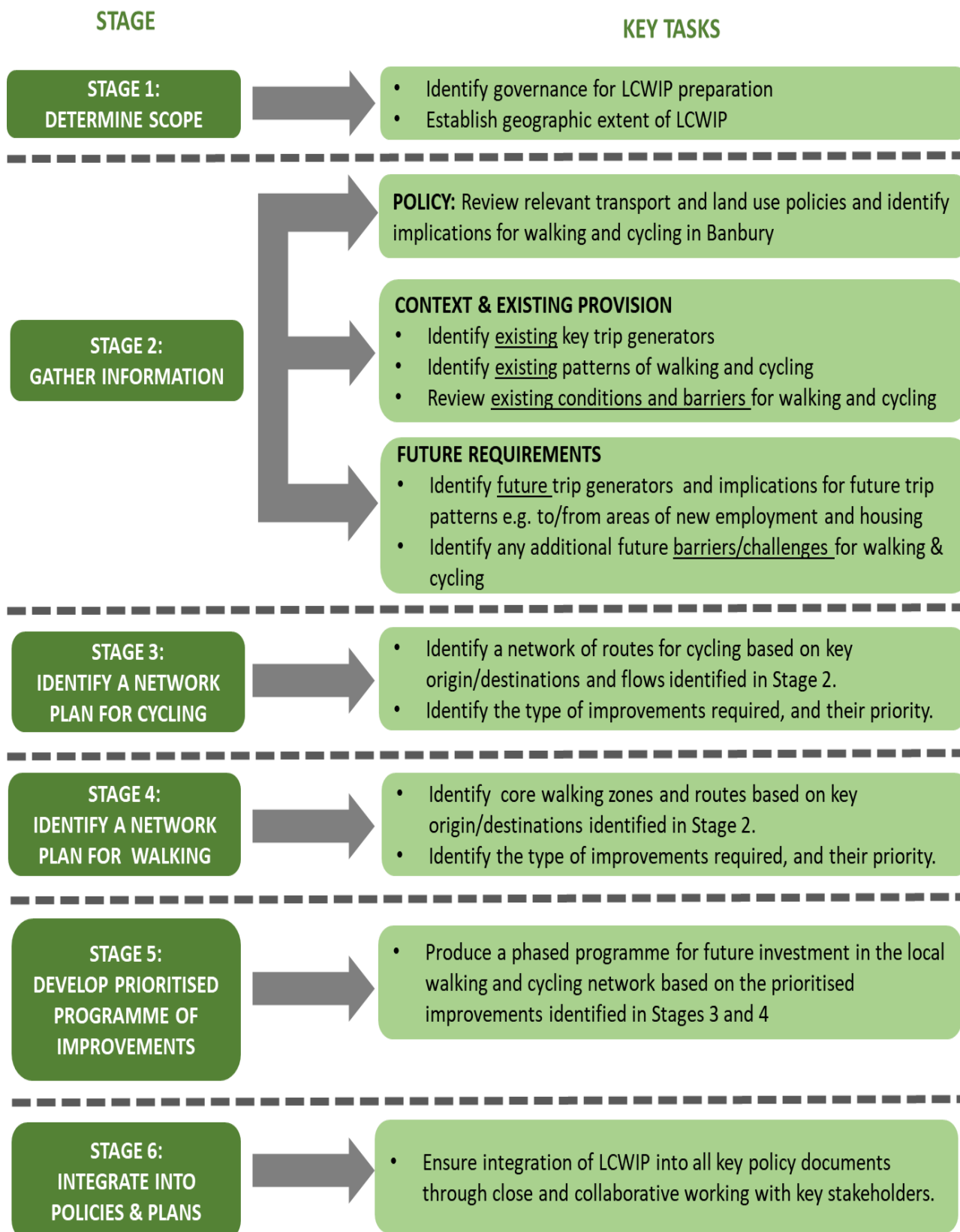
² Wheeling includes people who use wheelchairs and mobility scooters who may not identify with walking.

³ Department for Transport, Local Cycling and Walking Infrastructure Plans Technical Guidance for Local Authorities, 2017, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/908535/cycling-walking-infrastructure-technical-guidance-document.pdf

⁴ Department for Transport, Gear Change, A bold vision for cycling and walking, 2020, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/904146/gear-change-a-bold-vision-for-cycling-and-walking.pdf

⁵ Oxfordshire County Council Local Transport and Connectivity Plan 2022–2050, 2022, <https://www.oxfordshire.gov.uk/sites/default/files/file/roads-and-transport-connecting-oxfordshire/LocalTransportandConnectivityPlan.pdf>

Figure 1: Banbury LCWIP: Process summary



1.1.1 Stakeholder engagement and governance

This Plan has been developed with input from:

- **Cherwell District Council (CDC) and Oxfordshire County Council (OCC)** members and officers – this included meetings at which initial preferred routes were presented to members to gain feedback and additional suggestions prior to initial public consultation in May/June 2022.
- **Banbury Active Travel Supporters-Community Action Group (BATS-CAG⁶)** and **Banbury Star Cycling Club** – representatives provided input and suggestions including route testing.
- **EAS consultancy** – provided support in engaging with local cycle groups and auditing existing cycle routes.

1.1.2 Public consultation

Following identification of an initial network of cycling and walking routes, refined following consultation with local members and council officers, an online public consultation was undertaken for four weeks during May/June 2022. This provided an opportunity for residents, businesses and other interest groups to input into the LCWIP. The public consultation presented a potential network of routes to respondents who were then able to submit their comments and suggestions on the proposals using a map-based tool. Their feedback was used to further inform the cycling and walking network improvements and a first draft of the LCWIP.

There were 47 respondents to the 2022 consultation including:

- Bodicote Parish Council
- Bloxham Parish Council
- Banbury Town Council
- Stagecoach
- Local Councillors

Suggestions from this first consultation led to some of the routes being revised and presented along with the first draft LCWIP document for further consultation in early 2023. The Draft Banbury Local Cycling and Walking Infrastructure Plan consultation ran from 23 January to 26 February 2023. During the consultation Officers held a 'drop in day' at Banbury Town Hall on 1 February 2023 for Members and the public to speak face-to-face with Officers.

A total of 95 people completed the online questionnaire and a further 14 responded in writing (by email) these were mainly from organisations. Of those who completed the questionnaire 47% thought the proposed cycling improvements were 'ambitious' or 'adequate' and 47% said if the proposed walking improvements were implemented this would encourage them to walk more.

⁶ BATS is a local group set up to promote cycling, walking, and clean air in Banbury.

Whilst there is support for the production of a Banbury LCWIP, particularly from Cherwell District Council and Banbury Active Travel Supporters, many respondents had detailed comments on the content and proposals which led to significant alterations to the final document presented here from the consultation draft.

The responses to the consultation have been very constructive and helpful in informing the final version of the Banbury Local Cycling and Walking Infrastructure Plan. The changes include an update to the clarity over a number of proposals, and changes to the route maps to reflect feedback.

The comments received regarding proposals for specific routes, shows us how important these routes are to all modes of transport, and how much more detailed engagement will be conducted with local people as these routes are developed through concept, preliminary and detailed design. The LCWIP is a tool to help identify and prioritise routes for investment, as the first phase of any route scheme, however, the specifics of each route scheme need a lot of further work.

1.2 Context and geographical scope of this LCWIP

Banbury is Cherwell District's largest town and Oxfordshire's second largest settlement, with a population of over 47,600 (ONS estimated population in mid-2018⁷). Over 7,000 additional houses and over 3,500 jobs are included in the Cherwell Local Plan 2011- 2031⁸. Banbury is, however, relatively compact with no part of the town more than 3km from the town centre, and with the maximum distance from north to south approximately 6km – distances that are well suited to cycling and walking. Despite this, the topography of Banbury can make cycling and walking challenging due to its hilliness; Banbury has an elevation ranging from approximately 80 metres above sea level in the east to 170 metres in the west⁹.

Banbury provides a focus for major retail, housing, cultural, leisure and community activities. The town has strong road connections – there is access to the M40 via Junction 11 and several strategic roads serving the town, including the A422 and A4260 (busy roads that create barriers and challenges for a coherent cycle network). Banbury is also served by the Chiltern Railway Line, which provides frequent train services including south to Oxford and London and north to Birmingham and Manchester.

Movement to, from, and within Banbury has historically been influenced by a range of physical and environmental constraints. In addition to the strategic roads, the railway line and the Oxford Canal and River Cherwell all bisect the town from north to south and cause a level of severance for people moving around. The historic areas of Banbury also influence

⁷ <https://insight.oxfordshire.gov.uk/cms/system/files/documents/BanburyJSNAprofileNov19.pdf>

⁸ Cherwell Local Plan 2011-2031 <https://www.cherwell.gov.uk/info/83/local-plans/376/adopted-cherwell-local-plan-2011-2031-part-1>

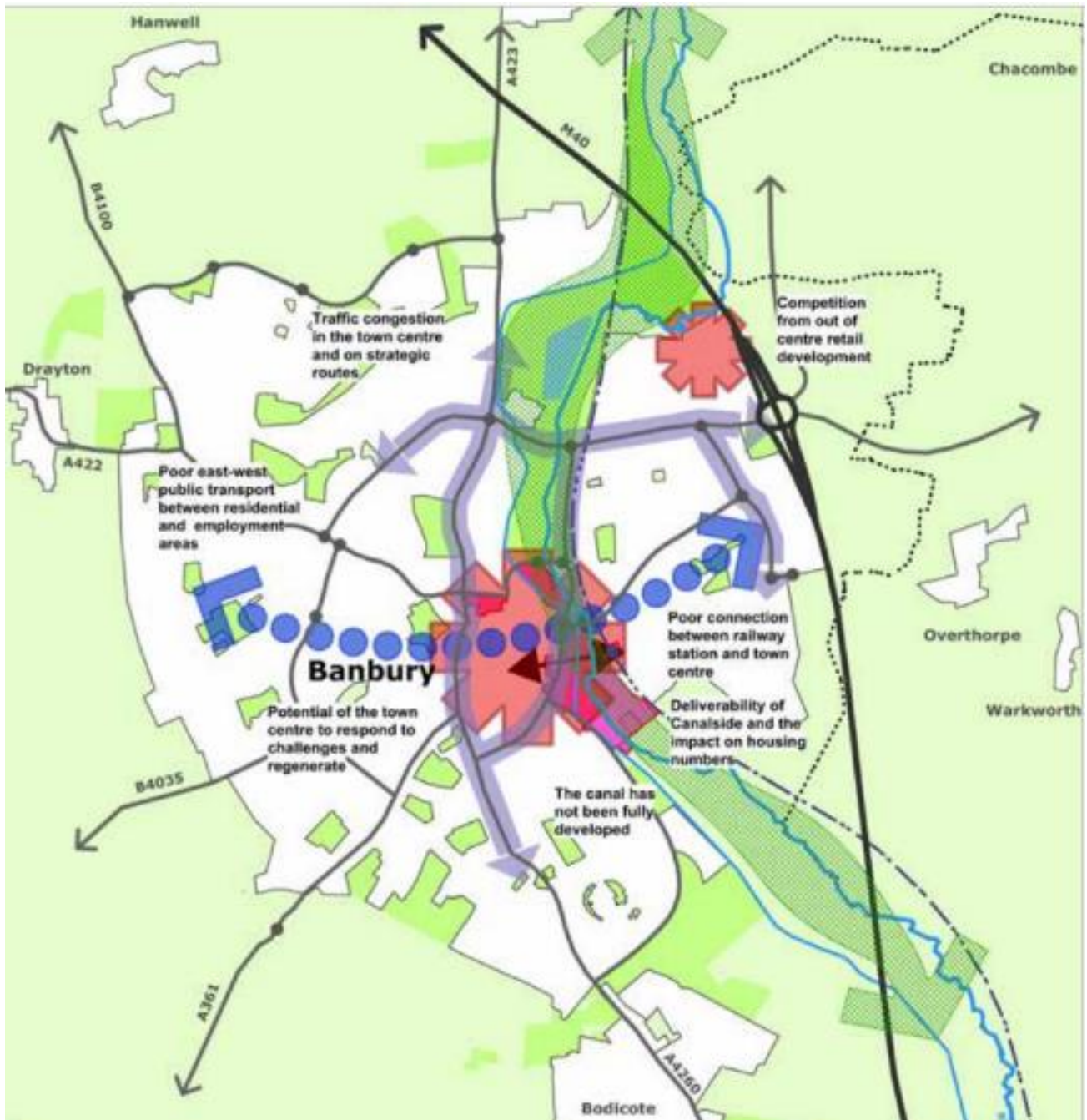
⁹ Topographic map - <https://en-ie.topographic-map.com/map-cd5b3/Banbury/?center=52.05939%2C-1.32708&zoom=13&popup=52.06008%2C-1.3403>

traffic movements, particularly around the town centre where there are a number of one-way, narrow and pedestrianised areas. A summary of key challenges to movement in and around Banbury are indicated in the Banbury Masterplan (2016), which is provided in **Figure 2**.

Banbury's position as a major service centre resulting in many cross-town movements and high flows of people to the town, the road network, and challenges outlined, have all contributed to poor air quality in the town. There are two designated Air Quality Management Areas in Banbury – one on Hennef Way between the junctions of Ermont Way and Concord Avenue, and one incorporating sections of Oxford Road, Bloxham Road, South Bar Street, High Street, Horsefair, North Bar Street, Warwick Road and Southam Road¹⁰. This emphasises the transport issues in Banbury, which have a negative impact on the population's health, reinforcing a need for change.

¹⁰ Air Quality Management Areas Banbury, https://uk-air.defra.gov.uk/aqma/local-authorities?la_id=55

Figure 2: Movement in Banbury - Challenges



SOURCE: Banbury Masterplan Supplementary Planning Document, 2016

In order to determine the geographical scope of the Banbury LCWIP, the following factors were considered:

- Likely distances that could be travelled by walking (typically up to 2km) and cycling (typically up to 10km).
- Location of significant trip generators – including Local Plan allocated commercial and residential sites.
- Key severance features including the M40, River Cherwell, Oxford Canal and Chiltern Railway Line.

The geographic area covered by the LCWIP is shown in **Figure 3** and comprises:

- **Banbury town** – including the existing built-up area as well as proposed residential and employment areas allocated in Cherwell Local Plan (2011-2031). Banbury Railway and Bus Stations are also within scope of the area covered, thereby capturing the first/last journey legs of trips associated with travel further afield by public transport.
- **Key cycle connections beyond Banbury to villages in the immediate vicinity of the town** (see **Table 1**) – the villages are all within approximately 6km of Banbury town centre. This presents an opportunity for journeys to be made by cycling between the villages and Banbury. It should be noted, however, that only the connections between Banbury and the villages are within scope of this LCWIP; cycle infrastructure within the villages themselves is not considered.

Table 1: Villages included in the Banbury LCWIP

Village	Population	Distance to edge of Banbury (km)	Distance to Banbury town centre (km)	Facilities in village
Adderbury	Between 2,000 and 3,000	Less than 3km	Less than 6km	Business park, church, pub, shops, bed & breakfast, nursery, tennis club, bowls club, library
Bloxham	More than 3,000	Less than 4km	Less than 6km	Jubilee Park Hall, church, pub, shops, bed & breakfast, playgrounds, museum, nursery, primary school, secondary school
Broughton	Less than 1,000	Less than 3km	Less than 4km	Castle, church, pub, gardens, park
Great Bourton	Less than 1,000	Less than 3km	Less than 6km	Village hall, church, pub, caravan park
Little Bourton	Less than 1,000	Less than 2km	Less than 5km	Bed & breakfast, pub
Middleton Cheney	Between 3,000 and 4,000	Less than 4km	Less than 6km	Village hall, church, sports & social club, pub, shops, nursery, primary school, secondary school
North Newington	Less than 1,000	Less than 3km	Less than 4km	Cricket club, bed & breakfast, pub, pre-school, primary school
Wroxton	Less than 1,000	Less than 3km	Less than 5km	Church, hotel, bed & breakfast, sports club, primary school, university campus

To assist in the development of walking improvements, a Core Walking Zone (CWZ) has also been identified (see **Figure 4**). The Core Walking Zone extends for 2km from the town centre with an inner key zone which is 400m from several trip generators located close together such as the Market Square, Castle Quay shopping centre, The Light cinema and entertainment complex and the bus and rail station. Improvements within this zone could include surfacing, crossings, benches, de-cluttering and wayfinding signs.

It is acknowledged that within the context of '20-minute neighbourhoods', walking routes in the outer residential areas of Banbury will also be important. LTCP Policy 13 supports this concept with the aim to create walkable, vibrant neighbourhoods with all the essentials (shops, healthcare, parks) within a 20-minute walk of the home of every resident. Addressing walking routes in the outer areas will be considered in later iterations of the LCWIP, but these areas will nonetheless benefit from cycling improvements included in this LCWIP given the synergies between cycling and walking.

Figure 3: Banbury LCWIP Geographic scope

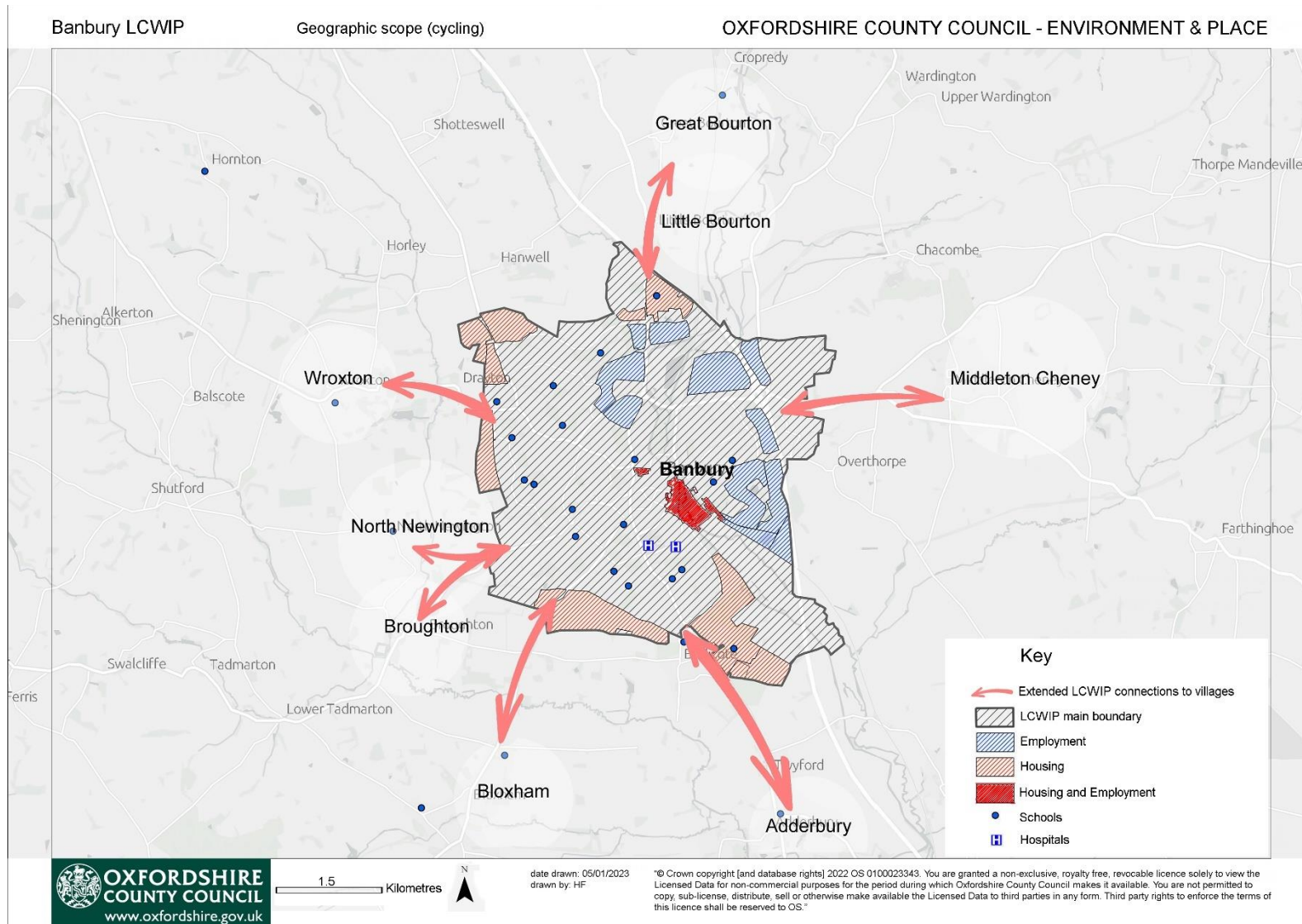
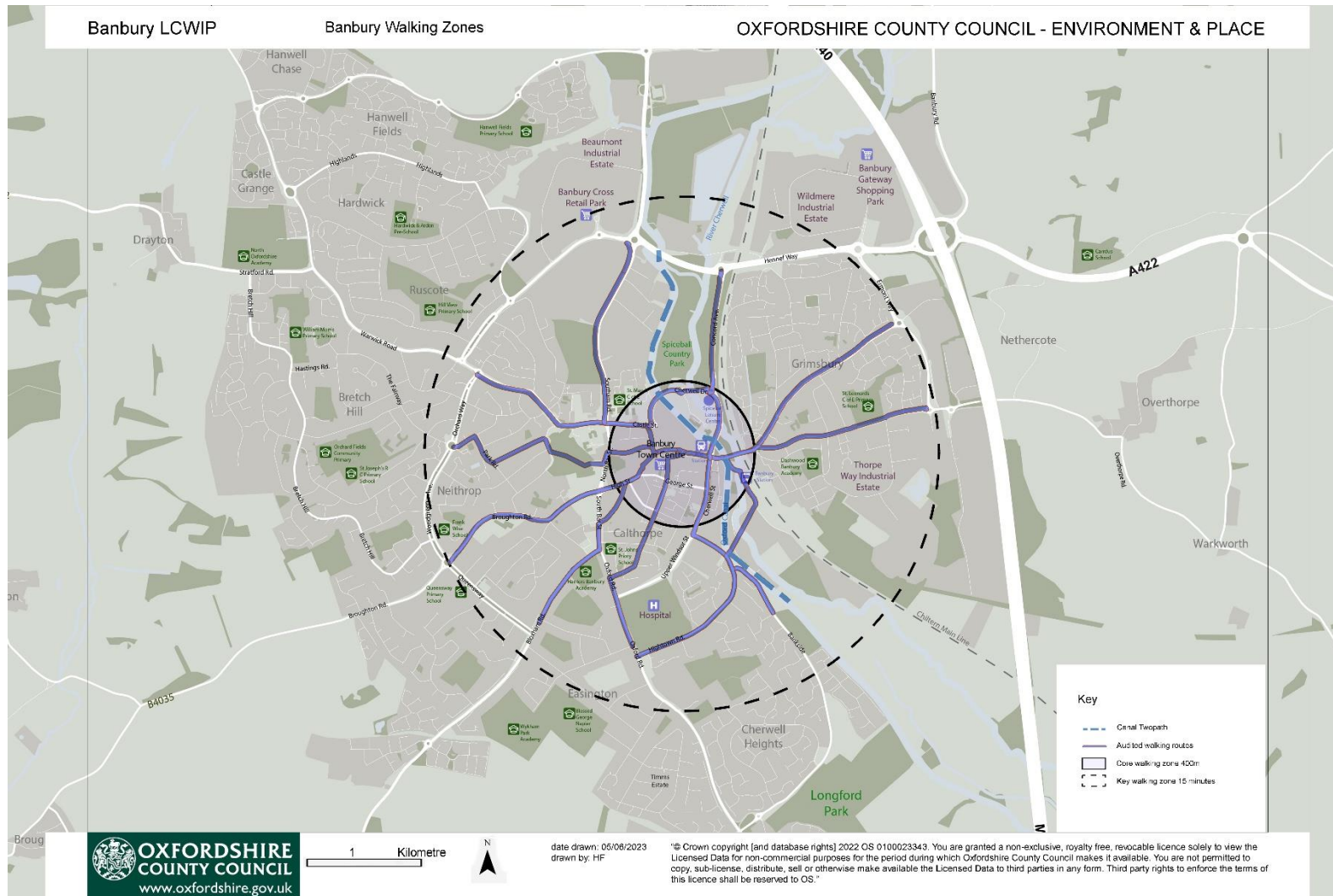


Figure 4: Banbury Core Walking Zone



1.3 Relationship between cycling and walking

Whilst this LCWIP uses separate approaches to consider and identify improvements for cycling and walking, measures that improve conditions for one user group will often benefit the other. Likewise, without a holistic approach to planning, design and implementation of networks, infrastructure for one mode can negatively impact on the other.

Infrastructure that caters for cycling and walking may include:

- **Reductions in speed that will improve safety, convenience and journey ambience** – for example, through junction narrowing, raised tables, side road entry treatments and continuous footways and cycle tracks across junctions.
- **New or improved crossing designs** that both user groups can use safely with minimal potential for conflict.
- **Access to green routes away from roads** that can easily be negotiated by all types of cycle, wheelchair, mobility scooter and people with pushchairs.
- **Paths of sufficient width or separation** to enable people cycling and walking to travel side by side and to pass without conflict.
- **Attractive public realm schemes and vehicle restricted areas** that meet the needs of people walking and using cycles.

1.4 The importance of cycling and walking

The benefits of increasing levels of cycling and walking are already well-established and evidenced through research, policy and practice. Benefits include:

- **Health:** Cycling and walking can improve physical and mental health and reduce the likelihood of many illnesses and disabilities. Physical inactivity results in 1 in 6 deaths in the UK for example (DfT, 2020)
- **Environment:** Cycling and walking can improve air quality by emitting no air pollutants during use. Improved air quality can prevent 8,300 premature deaths per year (DfT, 2020).
- **Place shaping:** Cycling and walking can reduce noise, air pollution and severance caused by busy roads and create more pleasant community spaces. Better connected places also help to address inequalities and encourage healthier lifestyles. Cycling and walking are also space-efficient modes that enable reliable movement and predictable journey times.
- **Economy:** Cycling and walking incur lower personal costs. Physical inactivity costs the NHS over £8 billion per year¹¹, whilst cycling contributes over £5 billion to the

¹¹ Department for Transport, "The economic benefits of walking and cycling," 2014: <https://www.gov.uk/government/publications/economic-case-for-active-travel-the-health-benefits> .

economy every year (DfT, 2020). Cycling and walking can also increase footfall and turnover for local businesses.

Facilitating a switch to active travel is therefore a cost-effective way of achieving many policy outcomes, with a well-established national and local policy commitment to increase cycling and walking. A summary of relevant policies is provided in **Section 2**.

2. Policy Context

This section provides an overview of the key national, regional, and local policies, strategies and guidance for LCWIPs, and for cycling and walking more generally.

2.1 LCWIP integration with wider policies

National Government and Oxfordshire County Council's Local Transport & Connectivity Plan (LTCP) supports the development of LCWIPs in order to facilitate the delivery of improved cycling and walking infrastructure, but it is also essential that LCWIPs link into wider transport and land use policies.

In the case of the Banbury LCWIP, a clear link to the overarching LTCP will be created through the preparation of a Banbury Area Travel Plan¹². This will set out the wider transport strategy for Banbury and encompass all modes of transport. The Banbury LCWIP, which is promoted in LTCP Policy 3, will feed into, and become a key part of the Banbury Area Travel Plan, in turn becoming a component part of the LTCP.

The Banbury Area Travel Plan will also take account of Cherwell District Council's adopted and emerging Local Plans and the adopted Banbury Vision & Masterplan Supplementary Planning Document. Integration of the LCWIP with local planning and transport policy is important to:

- Ensure appropriate consideration is given to cycling and walking in all local planning decisions
- Identify any potential policy conflicts
- Enable appropriate contributions to be secured towards the provision of cycling and walking infrastructure
- Understand where new strategic cycling or walking routes can be delivered by a new development and ensure the protection of alignments for future planned cycling and walking routes.

It should be noted that work is also underway to develop an Oxfordshire-wide Strategic Active Travel Network (SATN) which is promoted in LTCP Policy 4. It is anticipated that some links in the Banbury LCWIP network may become links in the SATN. This may influence the prioritisation of improvements to these links relative to other parts of the LCWIP network.

In the DfT's technical guidance on LCWIP development, the importance of ensuring that LCWIPs are compatible with other local transport priorities that tackle congestion and unlock growth is highlighted. To this end, particular consideration will be given to ensuring that measures to promote cycling and walking do not undermine delivery of an effective and efficient Bus Strategy for Banbury. This includes ensuring that any reallocation of road space

¹² The Banbury Area Travel Plan will be developed during 2023/24 and will supersede the Banbury Area Strategy currently included in LTP4 (Local Transport Plan 4), itself now superseded by Oxfordshire's LTCP.

does not negatively impact bus service running. This was an important point raised during the May/June public consultation in 2022 and again during the 2023 consultation.

2.2 Key policies, strategies and guidance

Table 2: National and local policy, strategy, guidance relevant to the LCWIP

National Policy, Strategy, Guidance	Key points relevant to the LCWIP
<u>Cycling and Walking Investment Strategy</u> , Department for Transport (CWIS1, 2017)	<p>Sets out the Government’s ambition to make cycling and walking the natural choices for shorter journeys, or as part of a longer journey, and to deliver better safety, better mobility and better streets by 2040. Highlighted the need to support more school children to cycle.</p>
<u>The second Cycling and Walking Investment Strategy</u> , Department for Transport (CWIS2, 2022)	<p>Builds on ‘CWIS1’ and ‘Gear Change’ and includes a revised set of objectives (to 2025) to those identified in CWIS1, to:</p> <ul style="list-style-type: none"> • Increase the percentage of short journeys in towns and cities that are walked or cycled from 41% in 2018 to 2019 to 46% in 2025. • Increase walking activity, where walking activity is measured as the total number of walking stages per person per year, to 365 stages per person per year in 2025. • Double cycling, where cycling activity is measured as the estimated total number of cycling stages made each year, from 0.8 billion stages in 2013 to 1.6 billion stages in 2025. • Increase the percentage of children aged 5 to 10 who usually walk to school from 49% in 2014 to 55% in 2025. <p>Beyond 2025, the following objectives to 2040 reflect those set out in Gear Change:</p> <ul style="list-style-type: none"> • Increase the percentage of short journeys in towns and cities that are walked or cycled to 50% in 2030 and to 55% in 2035. • Deliver a world-class cycling and walking network in England by 2040.
<u>Gear Change: A bold vision for cycling and walking</u> , Department for Transport (2020)	<p>Sets out a vision to make England a great cycling and walking nation with places ‘truly walkable’ ... and for ‘a travel revolution’ in our streets, towns and communities to make cycling a mass form of transit, creating safe streets where people feel confident to cycle. Ambitious targets for cycling and walking in England included: ‘cycling and walking to become the natural choice for short journeys, with half of all journeys in towns and cities cycled or walked by 2030.’</p> <p>Actions and design principles to realise this ambition include:</p> <ul style="list-style-type: none"> • Cycle infrastructure should be accessible for everyone. • Cycle tracks that are physically separated from all other modes of travel on roads and at junctions.

	<ul style="list-style-type: none"> • Cyclists must be treated as vehicles, not pedestrians. • Cycling, walking and bus corridors to be created through low traffic neighbourhoods. • Implement school streets. • Create zero-emission zones. • Remove barriers on existing cycle routes. • Infrastructure should cater for a high number of people cycling. • Connecting routes to deliver a continuous, direct, logical and coherent network. • Increase cycle parking and locate it where it is needed. • Include wayfinding to assist navigation of routes.
<u>Cycle Infrastructure Design, Local Transport Note 1/20</u> , Department for Transport (2020)	<p>Provides guidance to local authorities on delivering high quality, cycle infrastructure including:</p> <ul style="list-style-type: none"> • Planning for cycling. • Space for cycling within highways. • Transitions between carriageways, cycle lanes and cycle tracks. • Junctions and crossings. • Cycle parking and other equipment. • Planning and designing for commercial cycling. • Traffic signs and road markings. • Construction and maintenance.
<u>Local Cycling and Walking Infrastructure Plans – Technical Guidance for Local Authorities</u> , Department for Transport (2017)	<p>Technical guidance for producing LCWIPs.</p>
<u>Inclusive mobility: A Guide to Best Practice on Access to Pedestrian and Transport Infrastructure</u> , Department for Transport (2021)	<p>Guidance on inclusive design of infrastructure to ensure good access for people with disabilities - but which will also bring benefits for others e.g., people travelling with small children or carrying luggage or heavy shopping.</p>
<u>Decarbonising transport: a better, greener Britain</u> , Department for Transport (2021)	<p>Sets out how the government will decarbonise the transport system and the role of different players, including local authorities, in achieving this. Active travel is a key component of the government's strategy for establishing a net zero transport system. Emphasis is also placed on reallocating road space for sustainable modes, the opportunities Low Traffic Neighbourhoods provide for cycling and walking and the importance of soft measures to support infrastructure.</p>
Local Policy/ Strategy/ Guidance	Key points relevant to the LCWIP

<p><u>Local Transport and Connectivity Plan 5 (LTCP) 2022 –2050</u>, Oxfordshire County Council (2022)</p>	<p>Sets the long-term ambition for transport in Oxfordshire. This includes creating a safe, net-zero carbon Oxfordshire transport system by reducing the need to travel and reducing private car use by making walking, cycling, public and shared transport the natural first choice by 2050. The LTCP includes:</p> <ul style="list-style-type: none"> • Policy 1: Promote a transport user hierarchy that prioritises walking, followed by cycling and riding, public transport, motorcycles, shared vehicles and finally mortised modes in transport schemes, development proposals and policies. • Policy 2: Develop comprehensive cycling and walking networks. • Policy 3: Develop LCWIPs ... according to national guidance and best practice with the aim of increasing cycling and walking activity. <p>The LTCP reflects this national government ambition, with policies aimed at increasing the proportion of journeys that are made on foot (Policies 17, 19, 34), by cycle and public transport. These include policies to improve the safety of cycling and walking for school journeys (Policy 20).</p> <p>By 2030 the LTCP sets targets to:</p> <ul style="list-style-type: none"> • Replace or remove one out of every four current car trips in Oxfordshire. • Increase the number of cycle trips in Oxfordshire from 600,000 to 1,000,000 per week. • Reduce road fatalities or life changing injuries by 50%. <p>By 2040 it aims to:</p> <ul style="list-style-type: none"> • Deliver a “net-zero carbon” transport network. • Replace or remove an additional one out of three car trips in Oxfordshire. <p>And by 2050:</p> <ul style="list-style-type: none"> • Deliver a transport network that contributes to a climate positive future. • Have zero, or as close as possible, road fatalities or life-changing injuries. <p>The LTCP is supported by Area Travel Plans and an Active Travel Strategy. The <u>Active Travel Strategy</u> sets a vision for ‘Oxfordshire towns and villages to be places where most residents choose active and healthy travel (walking and cycling) as the natural first choice for making most of their local journeys and many of their longer journeys’. The aim is to increase the number of cycle trips in Oxfordshire from 600,000 to 1 million cycle trips per week by 2031. As part of this Cherwell (excluding Bicester) has a current target to increase cycle trips from 55,000 to 100,000 cycle trips per week by 2031.</p> <p>The Strategy sets out how an increase in cycling and walking will be achieved through street and infrastructure design and includes a commitment to identify and then improve an</p>
--------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

	Oxfordshire-wide Strategic Active Travel Network (SATN). This will primarily be for utility cycle journeys, linking villages to towns, other centres of employment and public transport connections whilst also providing recreational opportunities.
<u>Oxfordshire Walking Design Standards</u> , Oxfordshire County Council (2017)	Guidance on the design of inclusive walking infrastructure.
<u>Oxfordshire Cycling Design Standards</u> , Oxfordshire County Council (2017)	Guidance on the design of inclusive cycling infrastructure.
<u>Cherwell Local Plan (2011- 2031)</u> (December 2016), Cherwell District Council and <u>The Cherwell Local Plan 2011 - 2031 (Part1) Partial Review - Oxford's Unmet Housing Need</u> (2020), Cherwell District Council	Cherwell Local Plan (2011-2031) sets out the long term strategic 'spatial vision' for Cherwell. This includes policies to ensure employment and residential development areas are well connected by sustainable modes (Policies SLE 1 and 4). There is also a commitment to improving the Oxford Canal towpath for cycling and walking (Policy ESD16).
<u>Banbury Vision & Masterplan Supplementary Planning Document</u> Cherwell District Council (2016)	The Banbury Vision & Masterplan Supplementary Planning Document provides additional detailed advice and guidance on policies in the Cherwell Local Plan in relation to Banbury. It specifically references: 'Increase pedestrian and cycle activity by auditing existing routes and preparing an improvement strategy, which should be included as part of the Local Plan part 2'. The Banbury Masterplan SPD is currently being updated.
<u>Climate Action Framework</u> , Oxfordshire County Council (2020)	Objectives for Oxfordshire are identified in response to the climate crisis, these include: <ul style="list-style-type: none"> • normalising active travel and making this accessible to all; • reducing emissions by 50% by 2030; and • achieving net zero by 2050.
<u>Oxfordshire Joint Health and Wellbeing Strategy</u> (2018-2023) (2019)	Sets out how residents' health and wellbeing can be improved and includes objectives/ aims relevant to transport including promoting physical activity including active travel; and promoting healthy place making.

3. Population and demographics

This section considers the opportunity for increasing cycling and walking in Banbury based on the local population profile and demographics, including a comparison with county and national data. It also presents evidence to support the case for prioritising the delivery of cycling and walking infrastructure in the town.

3.1 Census 2011: An overview

The census is undertaken by the Office for National Statistics (ONS) every 10 years. Whilst the 2011 census data is somewhat dated, the 2021 census travel to work data was impacted by the national lockdown, travel guidance associated with the pandemic and furlough measures. The ONS are researching the potential of using alternative data sources and modelling methods to produce travel to work statistics on a more frequent basis¹³. This future data will inform further iterations of the LCWIP, but the 2011 census data has been used as a primary input for this LCWIP and is the base information used for some of the online analysis tools referenced in **Section 4** of this document.

Data presented in this section is reported at the Lower Super Output Area and Middle Super Output Area level, defined as:

- **Lower Super Output Areas (LSOAs)** are usually made up of four or five OAs¹⁴, with a resident population of between 1,000 and 3,000 persons. In Banbury, there is a total of 31 LSOAs. LSOAs are used as the geographical basis for publishing the national Indices of Deprivation (IMD).
- **Middle Super Output Areas (MSOAs)** are used by ONS to publish census travel to work data and an increasing range of other social and demographic statistics. MSOAs are usually made up of four or five LSOAs, with a resident population between 5,000 and 15,000 persons. There are six MSOAs covering Banbury parish:
 - Banbury Hardwick (Cherwell 002)
 - Banbury Neithrop (Cherwell 003)
 - Banbury Grimsbury (Cherwell 004)
 - Banbury Ruscote (Cherwell 005)
 - Banbury Easington (Cherwell 006)
 - Banbury Calthorpe (Cherwell 007)

Bodicote, Adderbury and Bloxham (Cherwell 008) is a separate MSOA.

3.2 Census 2011: Travel to work data

From a transport planning perspective, the Census 2011 data is useful but limited by its focus on travel to work, which accounts for only 15% of all trips and with trips for other

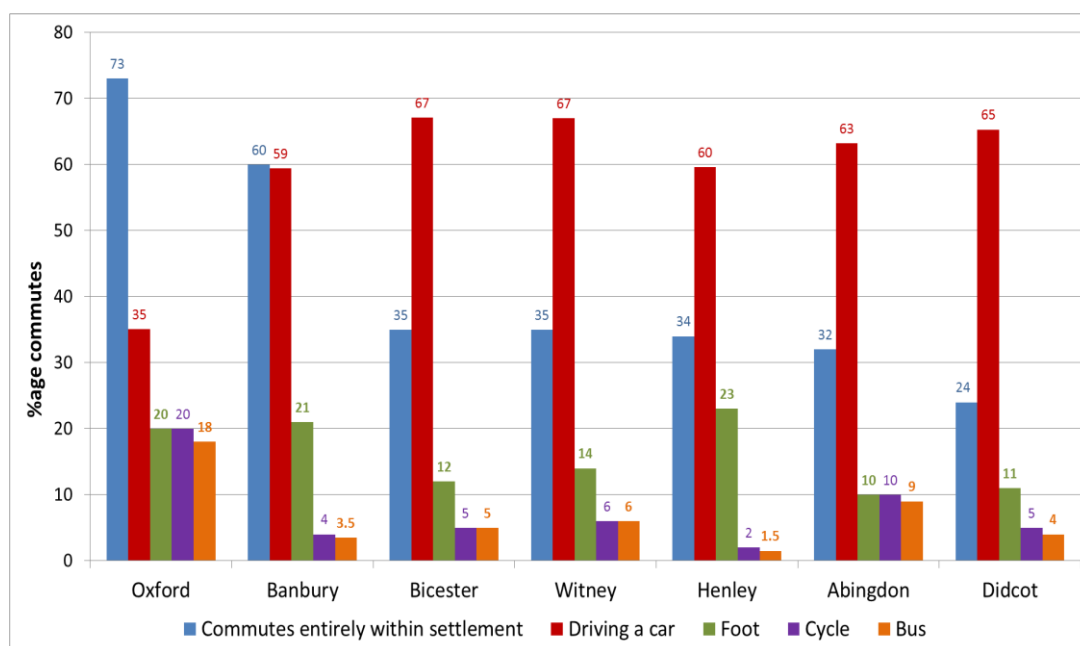
¹³ [Travel to work quality information for Census 2021 - Office for National Statistics \(ons.gov.uk\)](https://ons.gov.uk)

¹⁴ Output Areas (OA) are the lowest level of geographic area for census statistics.

purposes excluded. Key points from the 2011 census related to cycling and walking commuter trips amongst Banbury residents are provided below:

- There were 20,600 people ‘in employment’ living in Banbury.
- For those employed, 60% of travel to work trips were undertaken within the town i.e., with a home origin and a work destination in Banbury¹⁵. Given this localised pattern of trip-making and the compactness of Banbury, this presents an excellent opportunity for encouraging cycling and walking for travel to work trips – provided the infrastructure is in place to support these journeys.
- As shown in **Figure 5**, despite the local pattern of travel to work, the mode split proportions (including trips within Banbury and further afield) do not reflect these shorter trips:
 - 59% of travel to work trips were undertaken by car as a driver
 - 66% were undertaken by car as a driver or passenger – compared to 54% nationally and 35% in Oxford
 - 21% of trips were undertaken on foot
 - only 4% were cycling trips¹⁶.

Figure 5: Local commutes ‘entirely within settlement’ and travel mode for travel to work trips (both within individual settlements and to other settlements) (Census 2011)



¹⁵ 2011 Census presented on Oxfordshire Insight

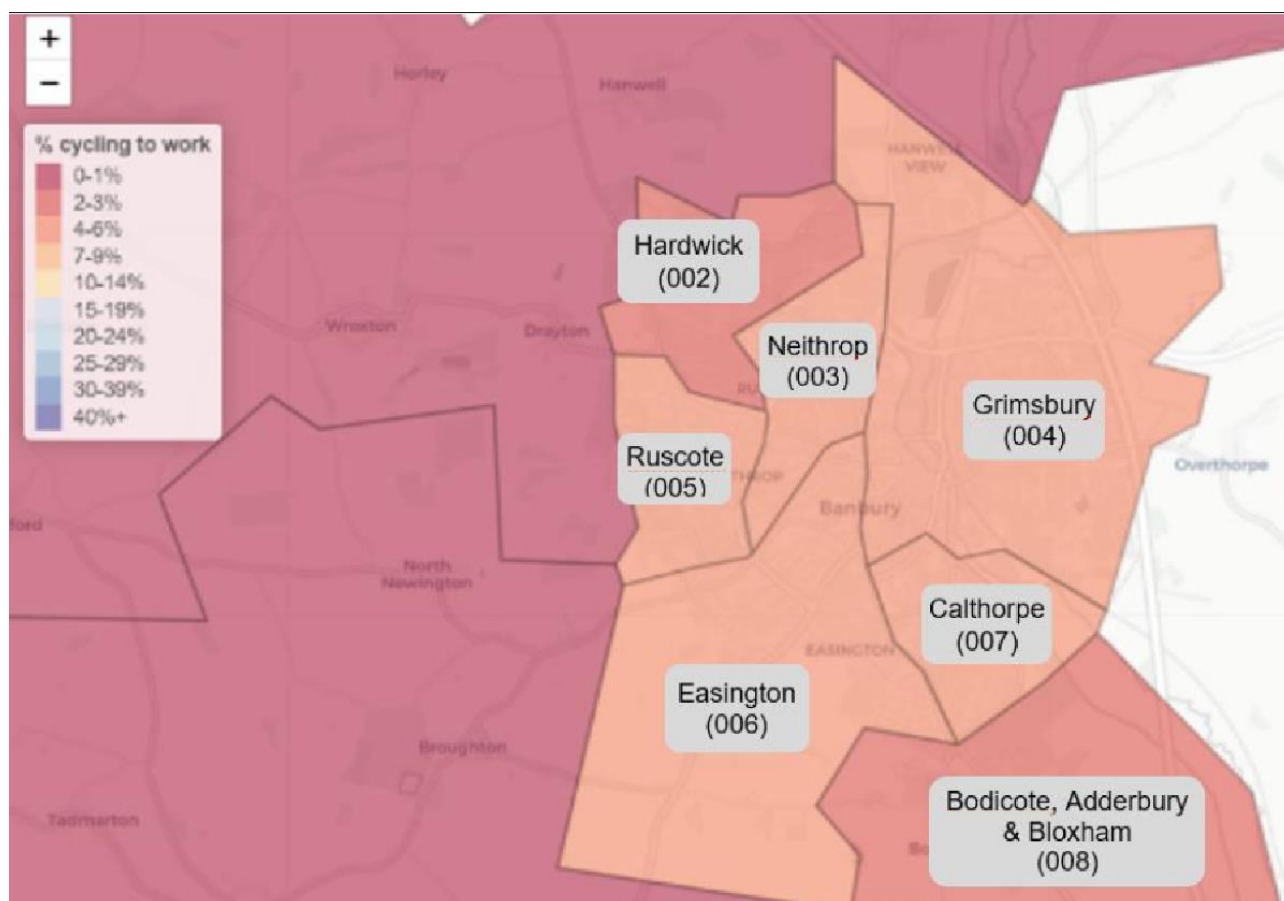
<https://public.tableau.com/views/2011CensusTTWOriginSettlementLB/LAleveljourneyorigins?:embed=y&:showVizHome=no>

¹⁶ 2011 Census presented on Oxfordshire Insight

<https://public.tableau.com/views/2011CensusTTWDestinationSettlementGL/LAleveljourneyorigins?:embed=y&:showVizHome=no>

The proportions of employed residents cycling to work in each MSOA is shown in **Figure 6**. It can be seen that of the MSOAs within Banbury, Hardwick had the lowest levels of cycling. **Table 3** provides further detail.

Figure 6: Overview of cycling to work proportions in Banbury (2011)



Source: *Propensity to Cycle Tool, Census 2011 - Middle Super Output Areas*

Table 3: Proportions cycling and driving to work in Banbury (Census 2011)

MSOA area	Total Commuters	Cyclists	Drivers
Banbury Hardwick (002)	4507	139 (3%)	3243 (72%)
Banbury Neithrop (003)	2666	123 (5%)	1424 (53%)
Banbury Grimsbury (004)	5481	225 (4%)	2867 (52%)
Banbury Ruscote (005)	3507	130 (4%)	2081 (59%)
Banbury Easington (006)	3371	121 (4%)	2138 (63%)
Banbury Calthorpe (007)	2751	107 (4%)	1735 (63%)
Bodicote, Adderbury & Bloxham (008)	3133	72 (2%)	2475 (79%)

Source: *Propensity to Cycle Tool, Census 2011 data (Middle Super Output Area)*

The issue for Banbury is clear – in common with many other Oxfordshire towns the number of people cycling to work in the town is very low. The LCWIP aims to promote measures that could make a change through an ambitious, but realistic, phased approach.

3.3 Census 2021: Car ownership and distance travelled to work data

Compared to Cherwell District overall, there is a greater number of households in Banbury that do not own cars (**Table 4**). Typically, households where people travel less than 10km to work are less likely to own a car. This indicates a greater reliance for many residents in Banbury (including in Neithrop, Grimsbury and Ruscote) on cycling, walking and public transport.

Table 4: Car ownership in Banbury and distance travelled to work (2021 census)

MSOA area	No Car household ¹⁷	Travel less than 10km to work ¹⁸	Works mainly from home ¹⁹
Banbury Hardwick (002)	13%	41%	26%
Banbury Neithrop (003)	24%	50%	18%
Banbury Grimsbury (004)	29%	47%	21%
Banbury Ruscote (005)	25%	51%	14%
Banbury Easington (006)	19%	38%	31%
Banbury Calthorpe (007)	17%	41%	28%
Bodicote, Adderbury & Bloxham (008)	8%	28%	39%
Cherwell District	15%	32%	32%

3.4 National Travel Survey & Active Lives Survey: Cycling and walking for other trip purposes

3.4.1 Cycling

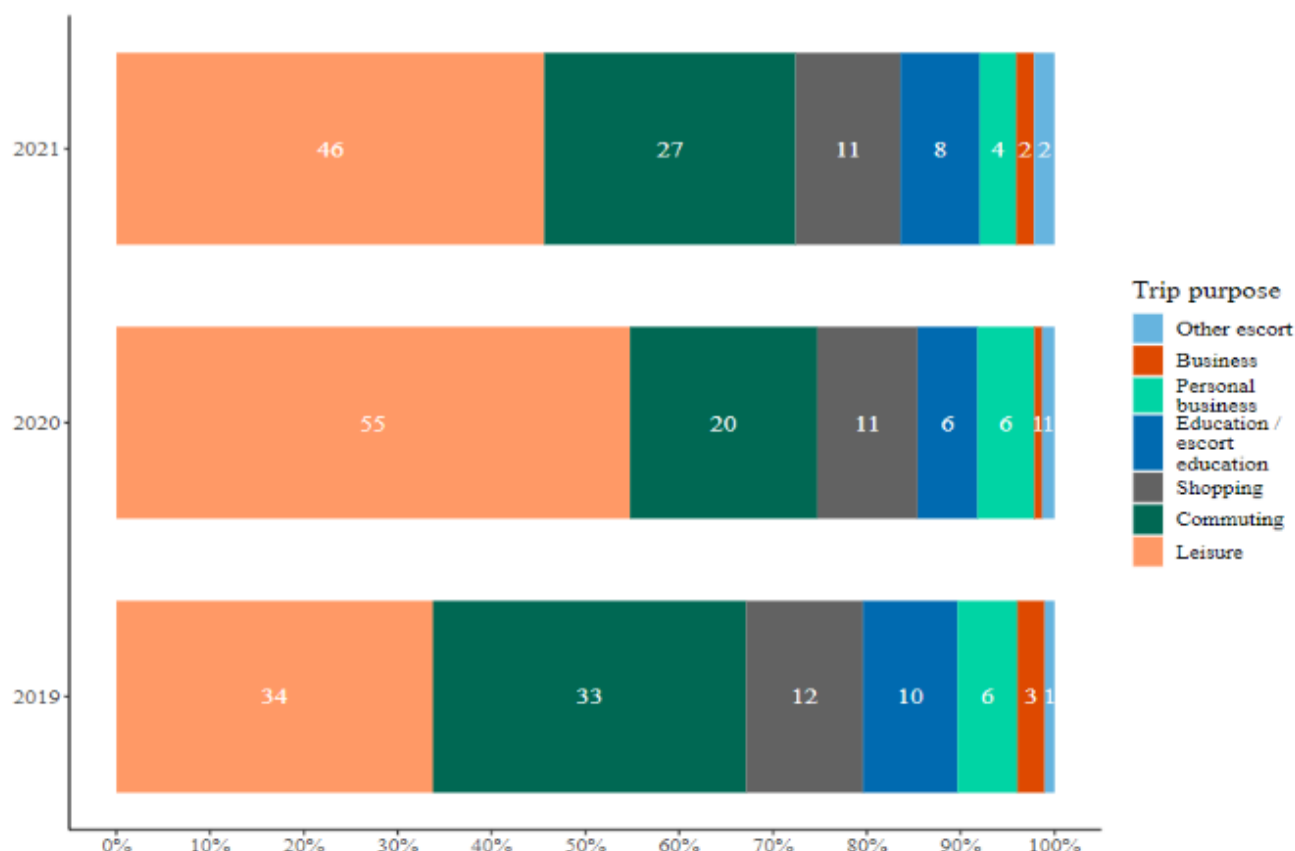
The National Travel Survey²⁰ compares the frequency of cycling for leisure with that for other purposes (see **Figure 7**). Nationally, 34% of cycle trips in 2019 were for leisure purposes, while 33% were for commuting.

¹⁷ [Car or van availability - Office for National Statistics \(ons.gov.uk\)](https://www.ons.gov.uk/datasets/TS061/editions/2021/versions/1)

¹⁸ [Distance travelled to work - Office for National Statistics \(ons.gov.uk\)](https://www.ons.gov.uk/datasets/TS061/editions/2021/versions/1)

¹⁹ <https://www.ons.gov.uk/datasets/TS061/editions/2021/versions/1>

²⁰ <https://www.gov.uk/government/statistics/national-travel-survey-2021>

Figure 7: Cycle trips by trip purpose 2019 to 2021 (percentages)

Source: National Travel Survey 2019-2021

The proportion of adults who regularly cycle in Oxfordshire is higher than the England average for both leisure and other travel purposes (**Table 5**). However, within Cherwell District this falls below the national average particularly amongst those cycling more regularly, again highlighting the need for interventions to increase the take-up of cycling in Banbury and the wider Cherwell area.

Table 5: Percentage of adults that cycle, 2018-2019

	Cycling for leisure				Cycling for other purposes			
	Once per month	Once per week	Three times per week	Five times per week	Once per month	Once per week	Three times per week	Five times per week
England	13.1	7.6	2.1	1.0	7.6	5.9	3.1	1.9
Oxfordshire	19.1	11.3	2.9	1.4	16.9	14.4	8.5	5.9
Cherwell District	15.3	8.5	1.2	0.6	7.8	6.1	3.5	1.8

Source: Department for Transport 2020²¹

²¹ DfT, 2020, <https://www.gov.uk/government/statistics/walking-and-cycling-statistics-england-2020>

3.4.2 Walking

Figure 8 shows walk trips by purpose for 2019, 2020 and 2021. Commuting makes up only a very small percentage of all walking trips nationally, with only 7% of people walking to work in the 2019 dataset. Leisure purposes (visiting friends, entertainment, sport, holiday, and day trip) and ‘just going for a walk’ comprise 40% of all walking trips in 2019.

The importance of walking as a leisure activity highlights the need to consider the amenity value of cycling and walking routes, access to existing green routes such as the canal towpath and the important role of active travel in helping to provide indirect opportunities for regular exercise.

Figure 8: Walk trips by trip purpose 2019 to 2021 (percentages)



Source: National Travel Survey 2019-2021

3.4.3 Walking to school

Typically, children make more trips on foot than any other age group, largely accounted for by the journey to and from school. On average, 46% of children aged 5 to 10 years and 39% of children aged 11 to 16 years travel to school on foot; for journeys to school that are a mile or less, this increases to 80% and 95% respectively (National Travel Survey, 2019)²². This LCWIP has considered the location of schools as ‘trip generators’ when determining and prioritising the cycling and walking network improvements.

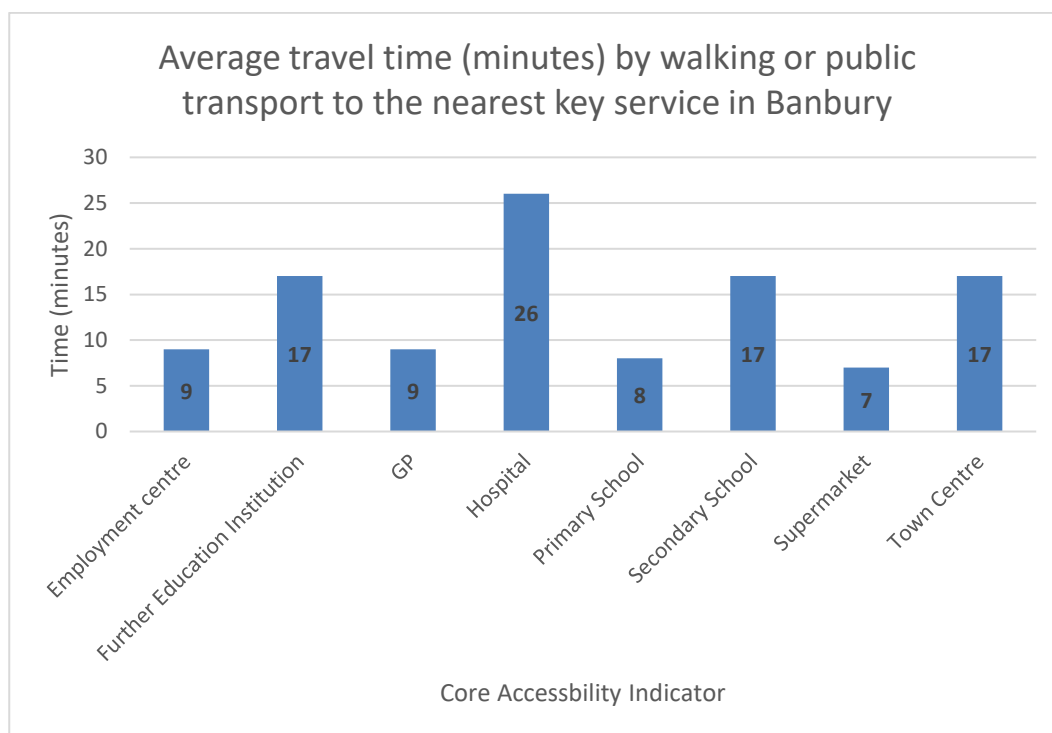
²² National Travel Survey, 2019, [National Travel Survey: 2019 - GOV.UK \(www.gov.uk\)](https://www.gov.uk/national-travel-survey)

3.5 Core Accessibility Indicators (2015)

To encourage people to travel by cycling and walking for daily journeys, there needs to be suitable connections to destinations, thereby creating accessible destinations. Accessibility for this purpose refers to the extent to which individuals can access the services (including employment centres, food shops and schools) they need daily using the current transport network. A set of Core Accessibility Indicators²³ is used to measure this.

The Core Accessibility Indicators for Banbury show that there is typically a short journey time for people to access daily services by walking or public transport. Thus, there is excellent opportunity for encouraging cycling and walking for leisure, shopping, and other types of journeys, as shown in **Figure 9**.

Figure 9: Average travel time (mins) by walking or public transport to the nearest key service



Source: DfT: Core Accessibility Indicators (2015)

3.6 Index of Multiple Deprivation (IMD)

The Index of Multiple Deprivation (IMD) is a measure of relative deprivation for small areas (LSOAs). It is a combined measure of deprivation based on a total of 37 separate indicators which are grouped under seven headings reflecting different aspects of deprivation experienced by individuals living in an area. These are Income (people who are either out of work or on a low income), Employment (people who are unable to work or suffering from

²³ Core Accessibility Indicators Guidance, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/372139/accessibility-statistics-guidance.pdf

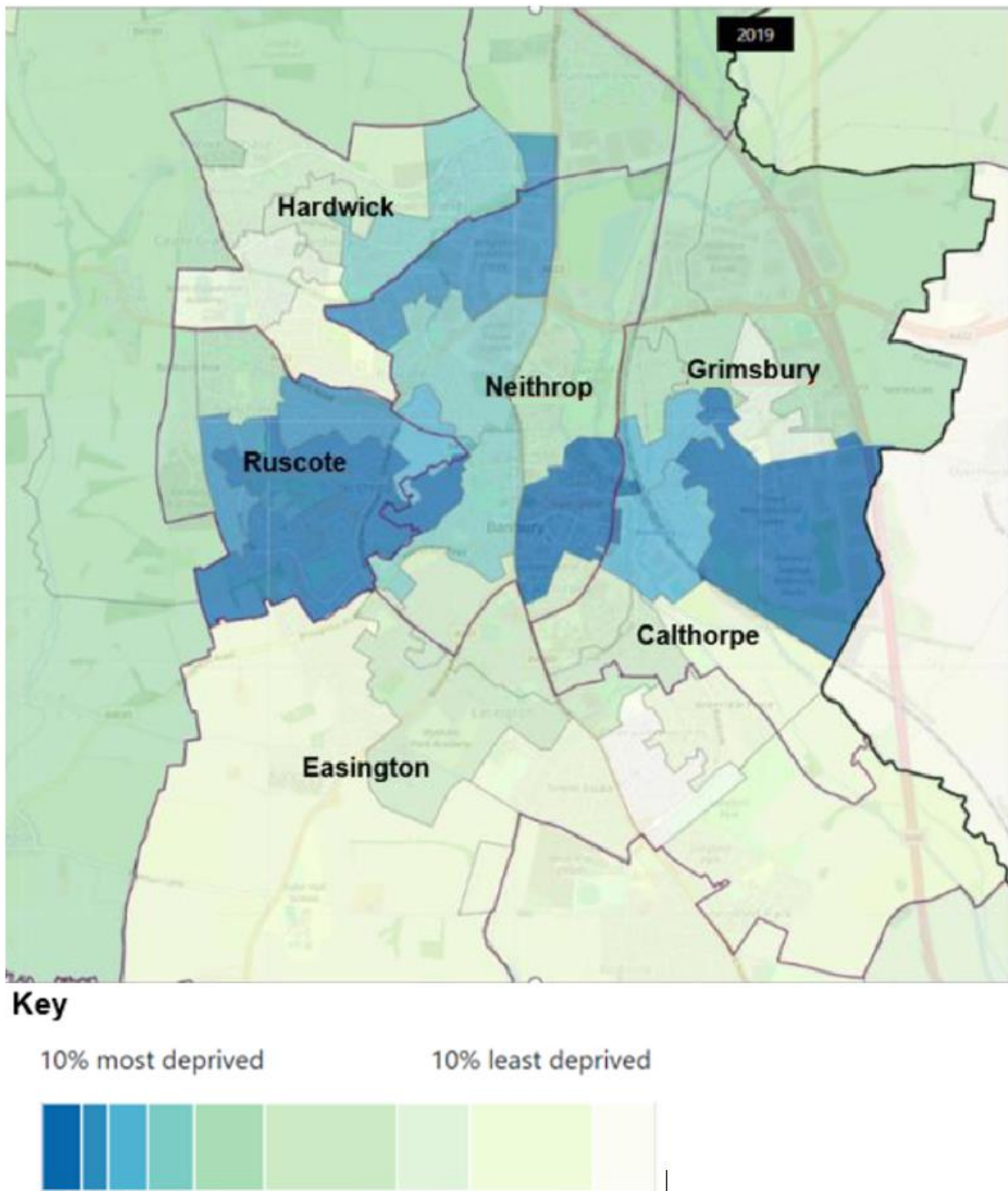
sickness or disability or have caring responsibilities), Education, Skills & Training (people with a lack of attainment or skills), Health & Disability (people who suffer from poor physical or mental health), Crime (the risk of becoming a victim of personal or material crime), Barriers to Housing & Services (whether physical or financial) and the Living Environment (reflecting the quality of housing, air quality and road accidents). This data can be used to aid prioritisation of infrastructure improvements for walking and cycling. In general, higher priority should be given to improvements which serve more deprived communities although this factor will need to be balanced with other prioritisation criteria.

Figure 10 shows Index of Multiple Deprivation by LSOA for areas in and around Banbury based on data from 2019. Deprivation and poverty data highlights significant inequalities in Banbury with the town having some of the most deprived areas in Oxfordshire. As shown in **Table 6**, Banbury has six areas that were ranked within the 20% most deprived areas in the country. This has increased from four in 2015. The areas that moved into the 20% more deprived group in 2019 (i.e. becoming relatively more deprived) were part of Banbury Ruscote ward and part of Banbury Cross & Neithrop ward. Note that this change can be as a result of an area becoming more deprived and/or other areas improving.

Table 6: Index of Multiple Deprivation: Most deprived LSOAs

Ward	LSOA (neighbourhood) reference	Ranking out of 32,844 LSOAs in England	National comparison
Banbury Ruscote	Cherwell 005B	3,328	Amongst the 20% most deprived areas
Banbury Ruscote	Cherwell 005F	3,860	Amongst the 20% most deprived areas
Banbury Cross & Neithrop	Cherwell 004A	4,563	Amongst the 20% most deprived areas
Banbury Grimsbury and Hightown	Cherwell 004G	4,883	Amongst the 20% most deprived areas
Banbury Ruscote	Cherwell 005A	5,586	Amongst the 20% most deprived areas
Banbury Cross & Neithrop	Cherwell 003D	6,527	Amongst the 20% most deprived areas

Figure 10: Indices of Multiple Deprivation (Banbury, 2019)



3.7 Health and wellbeing

Health and wellbeing and cycling and walking are closely linked – cycling and walking can improve population health, and good health can lead to a greater uptake of cycling and walking. The health data in Banbury gives an indication of the propensity to cycle and walk

currently and the benefits that an increase in cycling and walking would provide to the population.

Public Health England local profiles show that, when considering all wards in Banbury, Banbury Ruscote has the most health indicators (27 out of 419) that are statistically worse than the England average, including life expectancy of males and females, deaths from all causes and coronary heart disease²⁴.

Physical activity: According to Sport England's small area estimates, the proportion of people aged 16+ in Banbury who were physically active for at least 150 minutes a week was below the Oxfordshire average²⁵. Two MSOAs covering Banbury Cross and Banbury Ruscote were below the national average for this level of exercise²⁶.

Child obesity: The latest data on child obesity from the National Child Measurement Programme (NCMP, three years combined 2015/16 to 2017/18) shows:

- For Reception children (aged 4-5 years) – Banbury wards were similar to Oxfordshire and Cherwell averages and typically below the England average in terms of levels of child obesity²⁷.
- Year 6 children (aged 10 to 11 years) – Banbury Ruscote, Banbury Cross and Neithrop and Banbury Grimsbury and Hightown are above the England, Oxfordshire and Cherwell averages for prevalence of obesity in children. Banbury Calthorpe, Easington and Banbury Hardwick are approximately equal to the Cherwell average, but over the Oxfordshire average²⁸.

Encouraging cycling in Banbury through provision of improved infrastructure will bring health and wellbeing benefits across all age groups and help to reduce some of the inequalities that currently exist in the town.

SECTION SUMMARY:

Demographic data suggests that with the right infrastructure in place there is a significant opportunity to increase levels of cycling and walking in Banbury which would address environmental and health challenges:

²⁴ Oxfordshire Insight 2019, Banbury Health and Wellbeing Profile, [Banbury Health and Wellbeing Profile \(oxfordshire.gov.uk\)](https://www.oxfordshire.gov.uk/banbury-health-and-wellbeing-profile)

²⁵ Sports England, <https://www.sportengland.org/our-work/partnering-local-government/small-area-estimates/>

²⁶ Sports England, <https://www.sportengland.org/our-work/partnering-local-government/small-area-estimates/>

²⁷ Oxfordshire Insight 2019, Banbury Health and Wellbeing Profile, [Banbury Health and Wellbeing Profile \(oxfordshire.gov.uk\)](https://www.oxfordshire.gov.uk/banbury-health-and-wellbeing-profile)

²⁸ Oxfordshire Insight 2019, Banbury Health and Wellbeing Profile, [Banbury Health and Wellbeing Profile \(oxfordshire.gov.uk\)](https://www.oxfordshire.gov.uk/banbury-health-and-wellbeing-profile)

- 60% of travel to work trips start and end in Banbury, and 60% of travel to work trips to all places are made by car. Due to the short distance of journeys, there is significant potential for facilitating more cycling and walking for these trips and others.
- Between 38% and 51% of residents in employment in Banbury's six MSOAs travelled less than 10km for work, this provides an opportunity to convert more trips to cycling and walking.
- Proportions of households without a car are higher in Banbury than other parts of Oxfordshire, resulting in reliance on other modes and an opportunity to create a culture of cycling and walking in Banbury.
- The level of walking in Banbury compares favourably with other towns in Oxfordshire but could still be improved; cycling is only lower in the much smaller town of Henley.
- Core accessibility indicators for Banbury suggest excellent opportunities for encouraging cycling and walking as Banbury has shorter journey times by cycling, walking and public transport to a wide array of services. Utilising this will ensure sustainable travel is a more convenient choice.
- Topography can be an issue in the town but good quality infrastructure would help to make cycling in the town more attractive and electric bikes will start to address the hilliness.
- Banbury has six areas that were ranked within the 20% most deprived areas nationally. Cycling and walking provide an opportunity to connect these residents to the rest of Banbury and ensure an inclusive and accessible town.
- The proportion of people aged 16+ in Banbury who are physically active for at least 150 minutes a week is below the Oxfordshire average. Improving cycling and walking infrastructure presents an opportunity to address this by creating an environment in which it is easier for people to cycle and walk, thus increasing physical activity levels and improving population health in the process.

4. Cycling & walking: demand and challenges

To identify prioritised networks of improvements for cycling and walking it is important to understand:

- Where people want to travel to and from – both currently and in the future.
- The preferred routes for making those journeys.

This section addresses those considerations.

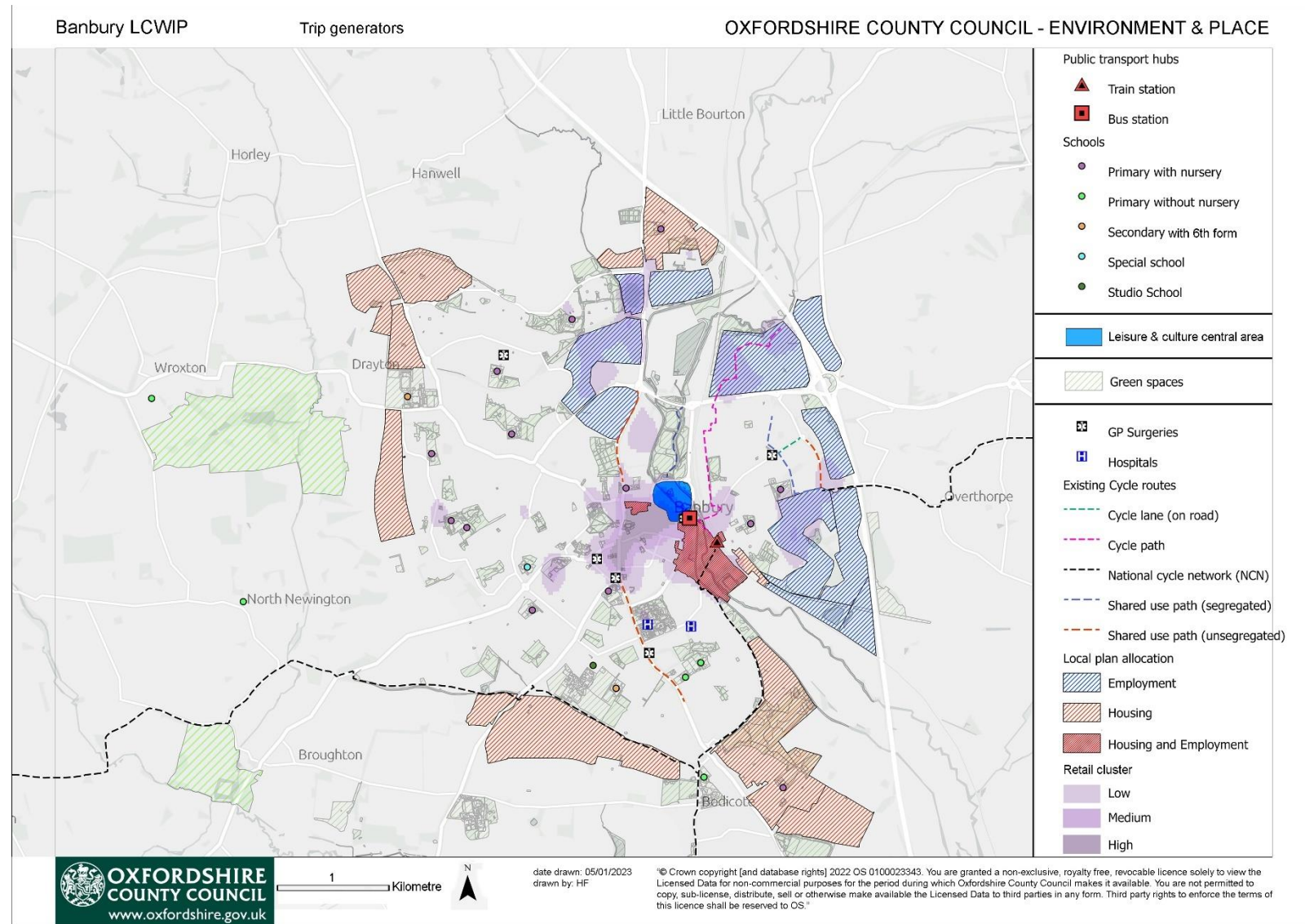
4.1. Where are people travelling to and from ('trip generators')?

4.1.1. Existing trip generators

The locations of existing key local trip generators relevant to Banbury LCWIP and to people cycling and walking have been mapped (see **Figure 11**). These include:

- Employment sites
- Retail areas (shopping, restaurants)
- Leisure sites including cinema, theatre and sports' centres
- Schools – nursery, primary and secondary
- Medical and health facilities – GPs, health centres and hospitals
- Public transport hubs – railway stations, bus station
- Green spaces and parks, including blue spaces such as the canal and river.

Figure 11: Banbury local trip generators



An analysis of the locations of the key trip generators shows that:

- There is a concentration of employment on the east side of Banbury (both existing and in the Local Plan allocated sites), which creates demand for travel to and from the residential areas in the west and south of the town and from the wider area.
- There is a lack of safe routes catering for the above demand with the canal, river and railway all creating significant barriers for the west-east movements, and a lack of suitable south-to-east routes that do not involve routing through the town centre. Given the proportion of Banbury residents who work in the town, it is essential that there are safe and convenient connections available if sustainable travel is to be encouraged.
- The Banbury Gateway Shopping Park to the north of Banbury generates demand from across the town. However, the A422 Hennef Way and the industrial areas to the south of Hennef Way create a barrier for cycling, particularly from the south.
- Castle Quay Shopping Centre, the leisure and cultural facilities focussed to the north of Castle Quay (including Spiceball Leisure Centre) and the wider town centre area are also key trip generators.
- There is a cluster of primary and secondary schools along the 'western corridor' of the town. For the purpose of this LCWIP the 'western corridor' is defined as Ruscote Avenue, from west of the junction with Hennef Way/Southam Road; continuing via the Parklands/Warwick Road junction to Woodgreen Avenue, Queensway and Springfield Avenue and onward connections to the schools in Easington including Blessed George Napier School, Banbury Academy and Wykham Park Academy.
- The Core Walking Zone includes the central core of Banbury and associated facilities, the western corridor and the majority of schools in Banbury.

4.1.2. Future trip generators

The locations of Local Plan allocated development sites (residential, employment, retail, leisure and education) are important considerations for the LCWIP as they represent potential changes to future demand for cycling and walking.

New cycling infrastructure and facilities have already been secured from development sites as part of the planning process. These include:

- Improvements to the tunnel under the M40 and an off-carriageway cycle path along Old Daventry Road (Wildmere Road) linking the retail park to Hennef Way
- Off-road cycle lanes at the northern end of Warwick Road
- Contributions towards upgrading the canal towpath for pedestrians and cyclists in the south and centre of the town.

Whilst many of the sites allocated in the adopted Cherwell Local Plan have already been built out, there is still a significant number yet to be completed that needed to be considered in the future demand assessments, including 'Banbury 17' South of Salt Way, 'Banbury 4' Bankside and 'Banbury 1' Canalside.

4.2. Preferred routes for cycling journeys

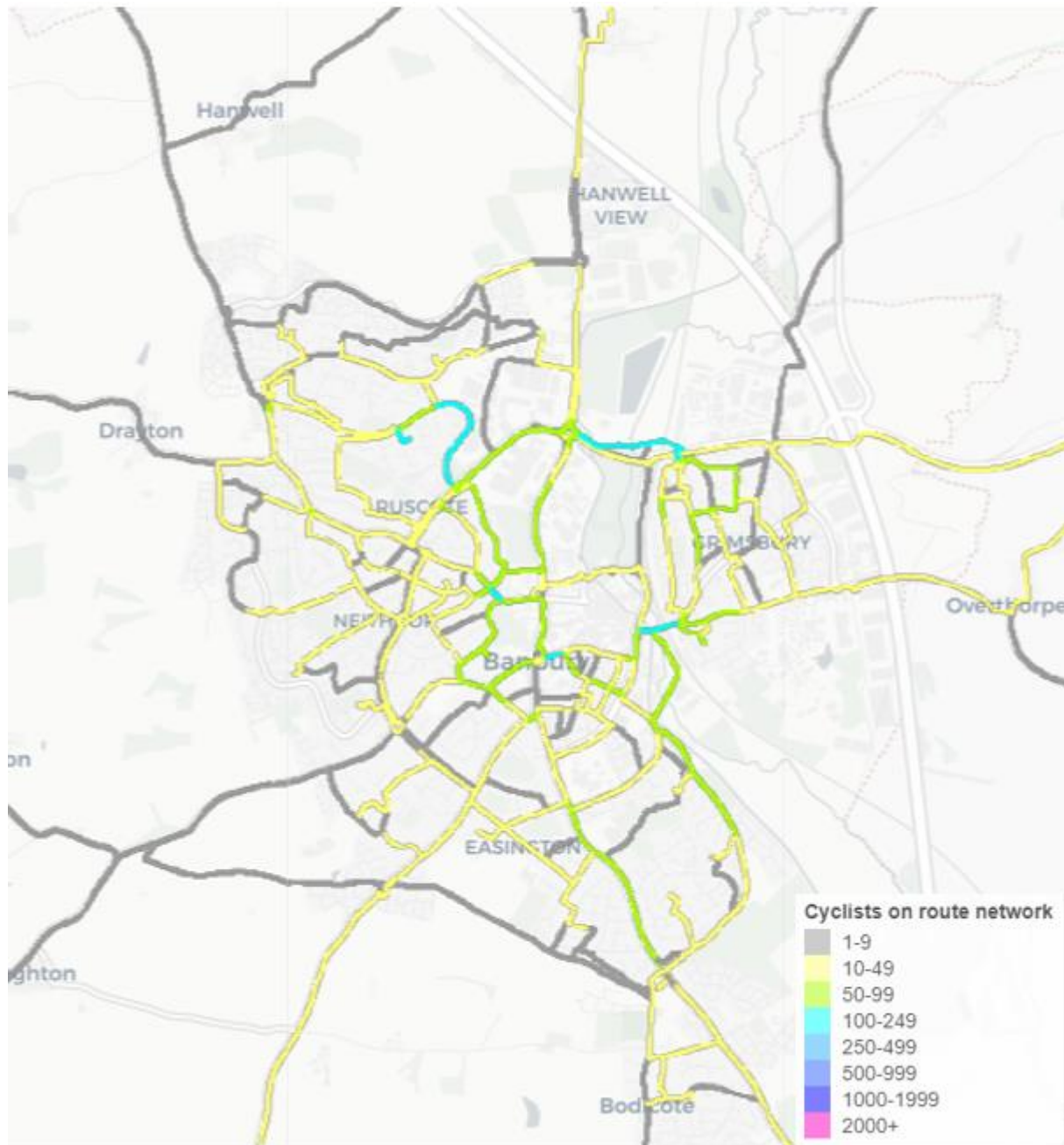
4.2.1. Propensity to Cycle Tool (PCT)

The PCT is a nationwide (England and Wales) web-based tool for estimating cycling potential and corresponding health and CO2 benefits, down to the street level. It measures population levels at the start and end of potential cycle trips and calculates where there is an opportunity to increase the number of trips if the right measures are put in place. In all the PCT scenarios cycling potential is calculated based on trip distance (people are more likely to cycle a shorter trip than a longer trip) and hilliness (people are less likely to cycle a trip involving hills).

PCT commuting data (Census 2011 cycling scenario)

The baseline cycling flows from the 2011 census (as shown in **Figure 12**) are useful in identifying several routes which make up the existing cycling network in Banbury based on 'existing' (2011) demand. **Figure 12** shows the 2011 cycle (commuting) demand in Banbury based on the PCT tool; the green and blue lines represent routes of higher demand including Southam Road, the northern section of Ruscote Avenue, routes through Grimsbury, the northern section of Bankside and A4260 Oxford Road. Several of these are on the more difficult sections of the transport network to achieve fully segregated cycle routes.

Figure 12: Propensity to Cycle Tool commuting data (Census 2011 scenario)



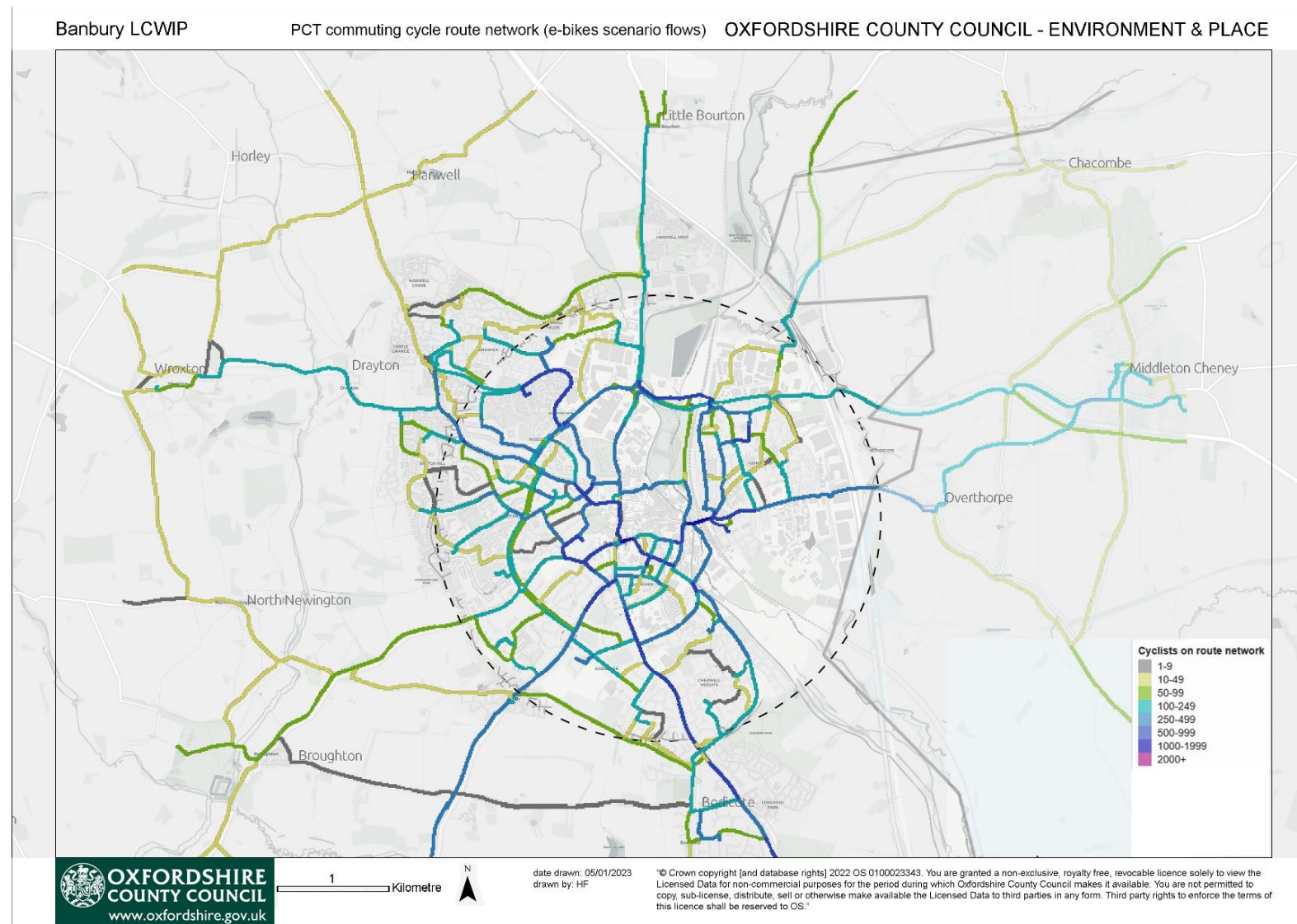
Source: <https://www.pct.bike/>

PCT commuting data (E-bikes scenario)

The PCT's E-bikes scenario, shown in **Figure 13**, makes use of the same route network as the Census 2011 cycling scenario, but estimates the numbers of users of each route (for commuting trips) assuming Dutch propensities to cycle. The Netherlands has a much more mature cycling culture and this scenario assumes a significant shift to cycling across age groups and genders once the infrastructure is in place to enable this. There is also the additional assumption that people use electric bikes for some longer and hillier trips.

This scenario is effectively a best-case estimate of the potential for modal shift to cycling in Banbury. It helps to provide an ambitious estimate of future cycling flows and to highlight where the largest numbers of potential cyclists would benefit from improved infrastructure, although it does not factor in the impact that new developments will have on these flows. This information, alongside other inputs, helps to prioritise future investment in cycle infrastructure by focusing investment on routes that are likely to be used by the largest numbers of people, and to make the case for funding infrastructure improvements on specific routes.

Figure 13: Propensity to Cycle Tool commuting cycle route network (E-bikes Scenario flows)



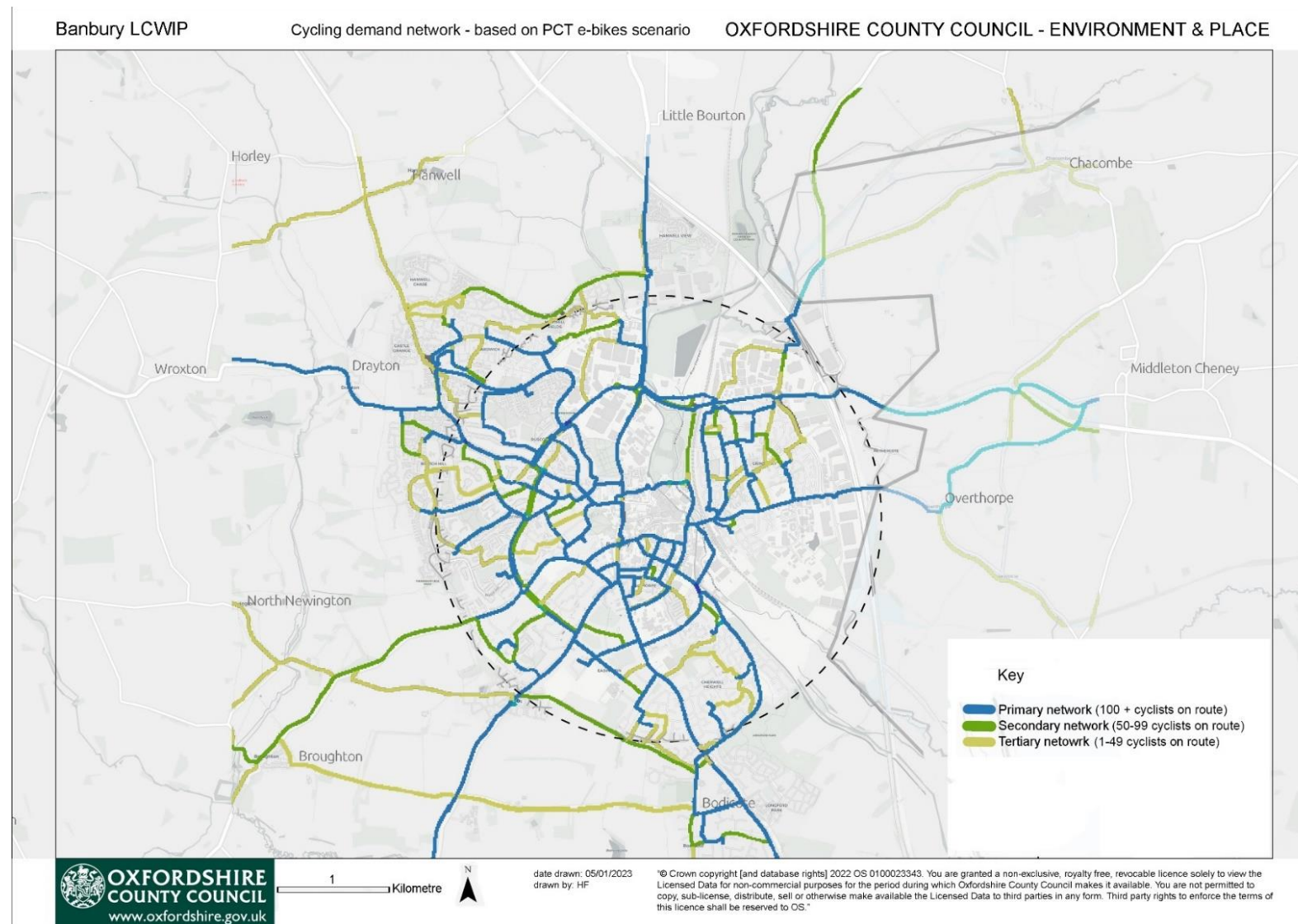
Source: <https://www.pct.bike/>

To make interpretation of the coding of the network clearer, **Error! Not a valid bookmark self-reference.** groups the demand flows in to three categories:

- Primary demand (100+ cyclists on route)
- Secondary demand (50 to 99 cyclists on route)
- Tertiary demand (1 to 49 cyclists on route)

This map has formed the base map on which to further develop the cycle network prioritisation map in **Section 7**.

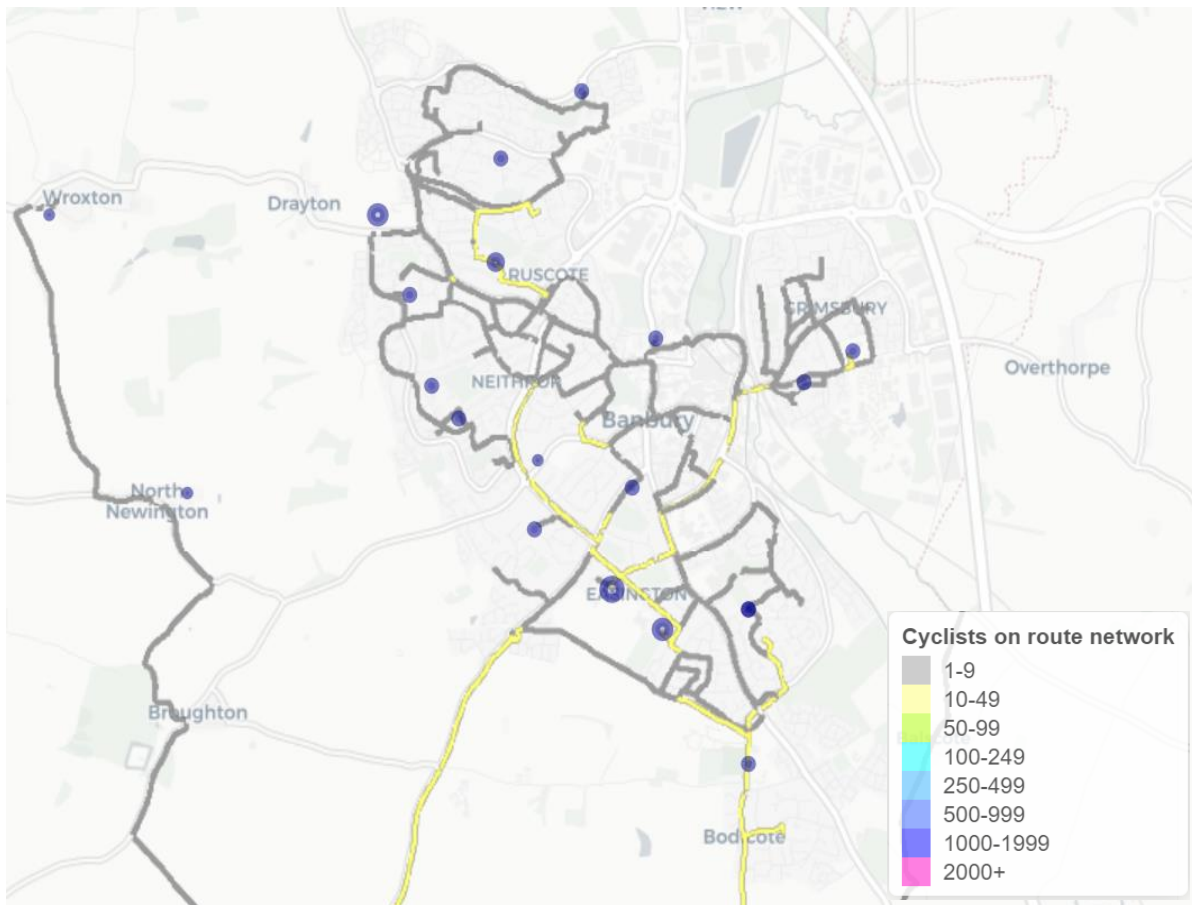
.Figure 14: Cycling demand network (based on PCT e-bikes scenario with demand flows ‘grouped’)



PCT school travel data (School Census 2011 scenario)

The PCT also provides data on travel to school with **Figure 15** showing the cycling flows for travel to school based on the School Census 2011 scenario. This data is helpful in identifying parts of the cycling and walking network where demand, especially peak hour demand, will be higher than the commuting data from the PCT suggests, due to the additional school traffic. In addition, it can help to identify where there may be further demand for segregation from motor traffic in order to facilitate safe opportunities for children, who may be less able to mix safely with general traffic, to travel to and from school by active modes.

Figure 15: Propensity to Cycle Tool school cycle route network (School Census 2011 scenario flows)



Source: <https://www.pctbike/>

PCT school travel data (Go Dutch scenario)

The PCT's Go Dutch scenario for school travel, highlights potential cycling flows for school travel assuming Dutch propensities to cycle (an e-bikes scenario is not currently available for the PCT's school travel data). This provides an aspirational estimate of future cycling levels for trips to school in Banbury and is helpful to inform prioritisation of improvements to cycle infrastructure, by identifying routes where trips to school by cycle can be unlocked.

Figure 16 indicates a clear focus of potential demand along: the western corridor (particularly Springfield Avenue, Queensway and Woodgreen Avenue) where the schools are concentrated, which was not picked up by the commuting data in **Figure 12**, **Figure 13** and To make interpretation of the coding of the

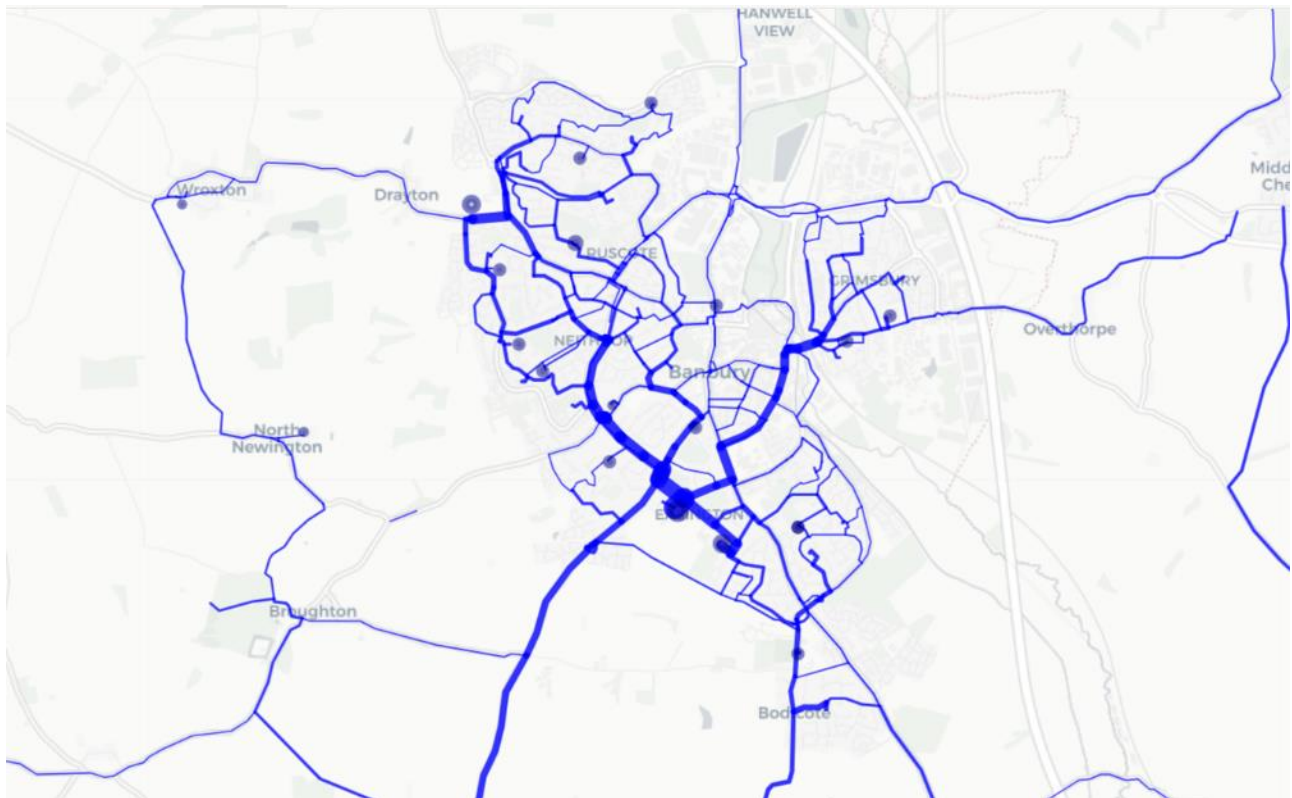
network clearer, **Error! Not a valid bookmark self-reference.** groups the demand flows in to three categories:

- Primary demand (100+ cyclists on route)
- Secondary demand (50 to 99 cyclists on route)
- Tertiary demand (1 to 49 cyclists on route)

This map has formed the base map on which to further develop the cycle network prioritisation map in **Section 7**.

- **Figure 14.**
- Horton View, Oxford Road, Upper Windsor Street, Cherwell Street, Bridge Street, Middleton Road and into Grimsbury.
- Banbury Road and Bloxham Grove Road to the Warriner School at Bloxham
- Warwick Road and Stratford Road serving the North Oxfordshire Academy.

Figure 16: Propensity to Cycle Tool school cycling route network (Go Dutch scenario flows)



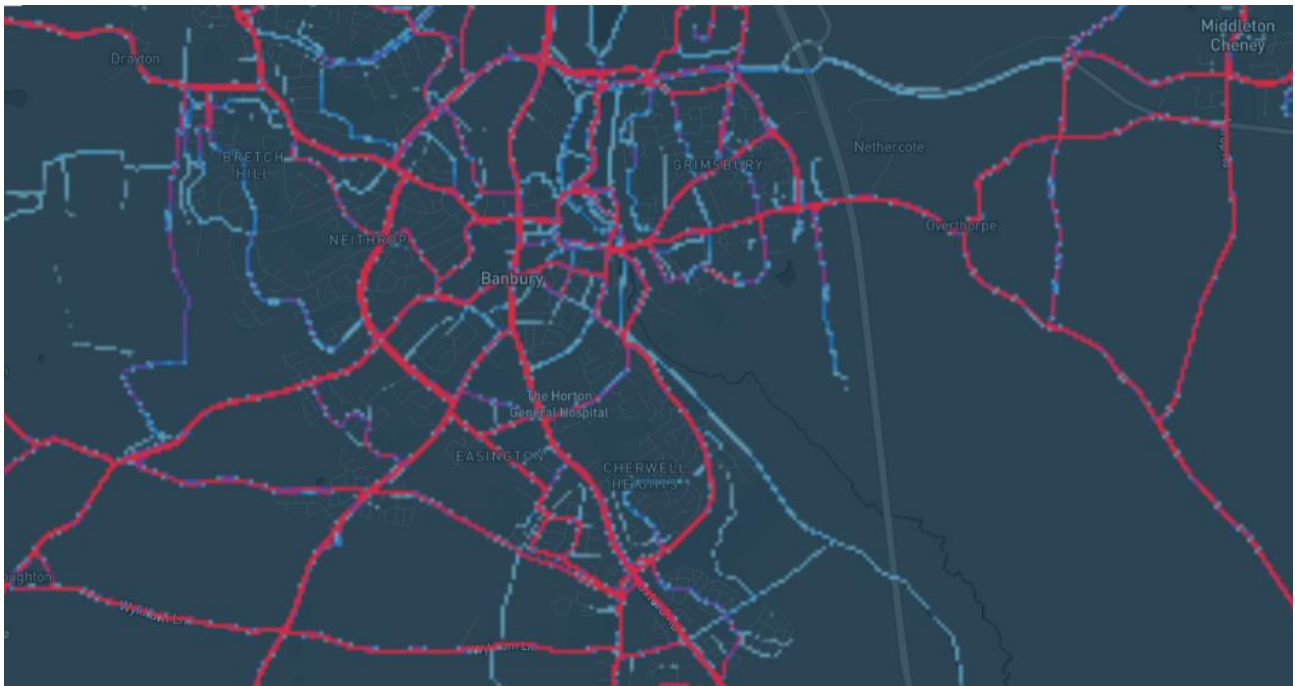
Source: <https://www.pct.bike/>

4.2.2. Strava Global Heatmap

Strava is an online resource/application that enables users to track and record the route they have taken whilst cycling and running. Although the trips recorded tend to be for sport or leisure purposes and may not accurately reflect patterns of cycling and walking trips for utility purposes, Strava's Global Heatmap provides an additional data source which helps to corroborate and validate the conclusions being drawn from the PCT for the purpose of this LCWIP. The data provides a visualisation of the frequency of cycling, walking and running on different routes in Banbury, based on aggregated public activities recorded on Strava over the past year.

Figure 17 shows the Strava Global Heatmap for cycling activities in the Banbury area. The routes shown in a bold red colour are those most cycled by Strava users. **Figure 18** shows a similar map for walking and running activities recorded in the Banbury area. Although most of the frequently cycled routes overlap well with the estimates in the PCT (see **Error! Reference source not found.**), there are additional routes from the Strava Global Heatmap that are highlighted as important including: Middleton Road, Daventry Road and Wildmere Road.

Figure 17: Strava Global Heatmap: Cycling (accessed 3rd January 2023)



The Strava map for running shows how running permeates Banbury. The number of runners is highest on the core roads of Banbury, including Warwick Road, the western corridor (Queensway, Woodgreen Avenue and Orchard Way), the central corridor (Oxford Road, North Bar, South Bar, Southam Road), and Broughton Road. These roads have streetlights and include segregation from motor vehicles, which creates a safer and more inclusive environment for people to run. Spiceball County Park is also an important running location, including being the location of Banbury's Park Run. It has been shown that partaking in cycling and walking for leisure can lead to an increase in cycling and walking for other journey purposes²⁹. The importance of providing suitable and high-quality routes for cycling and walking for leisure purposes must not be overlooked.

²⁹ Transport for London, Exploring the relationship between leisure and commuter cycling, 2011, <https://content.tfl.gov.uk/exploring-the-relationship-between-cycling-leisure-and-utility-trips.pdf>

Figure 18: Strava Global Heatmap: Running (accessed 3rd January 2023)



4.3. Accident data

There has been a high-level analysis of cycling and walking accident data to understand accident locations and clusters. Detailed accident analysis will take place during the design stage of route improvements and will be used to inform those improvements.

4.3.1. Accidents involving people cycling

The location and severity of reported accidents involving people cycling (January 2017 to June 2022) is shown in **Figure 19**. During that period there were 14 serious accidents and 47 slight accidents.

There are particular clusters of accidents on Southam Road, north of the junction with the A361 and on the western corridor.

4.3.2. Accidents involving people walking

The location and severity of reported accidents involving pedestrians (January 2017 to June 2022) is shown in **Figure 20**. When compared to accidents involving cyclists, there is more of a cluster of accidents in the town centre.

Figure 19: Accidents involving people cycling (January 2017 to June 2022)

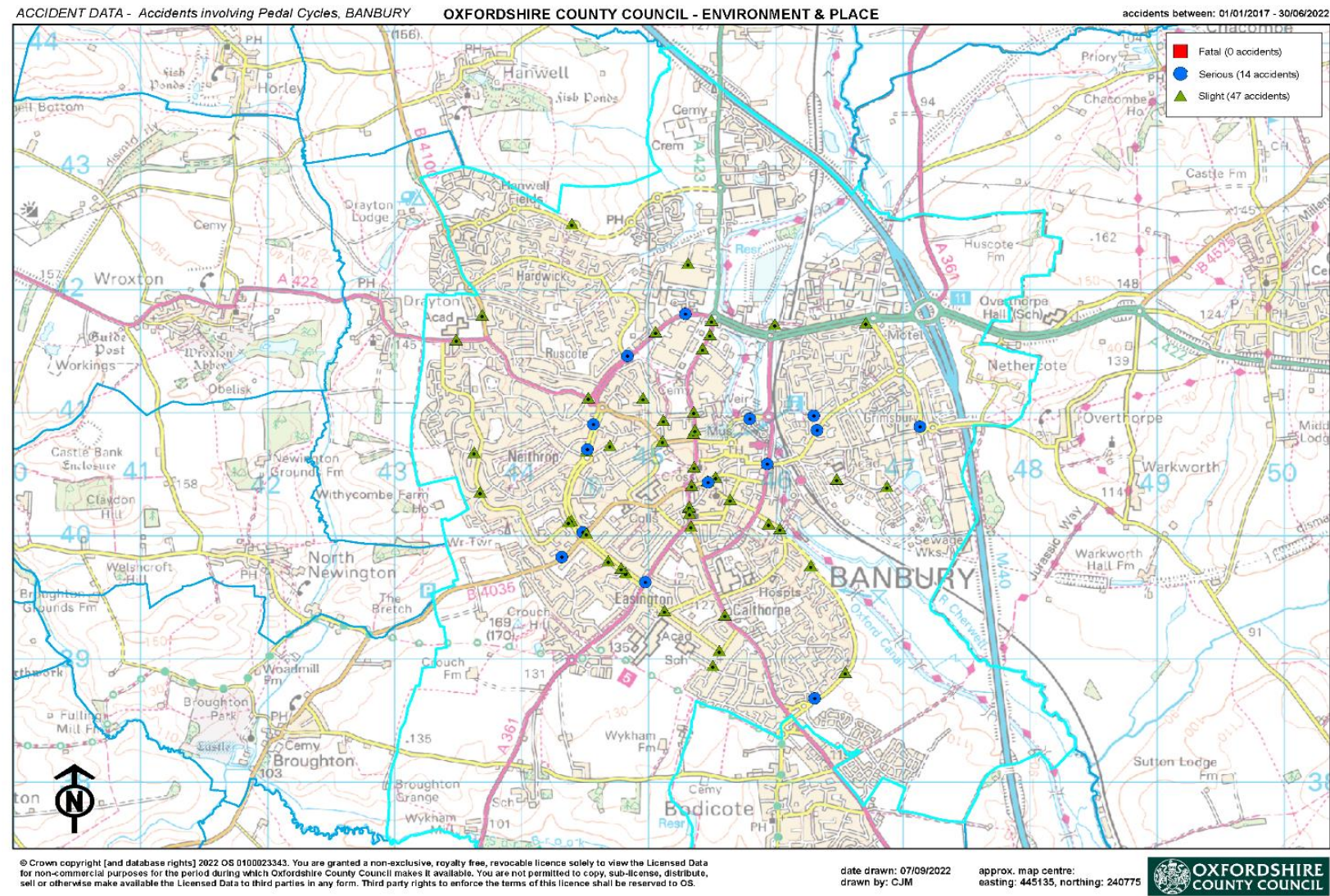
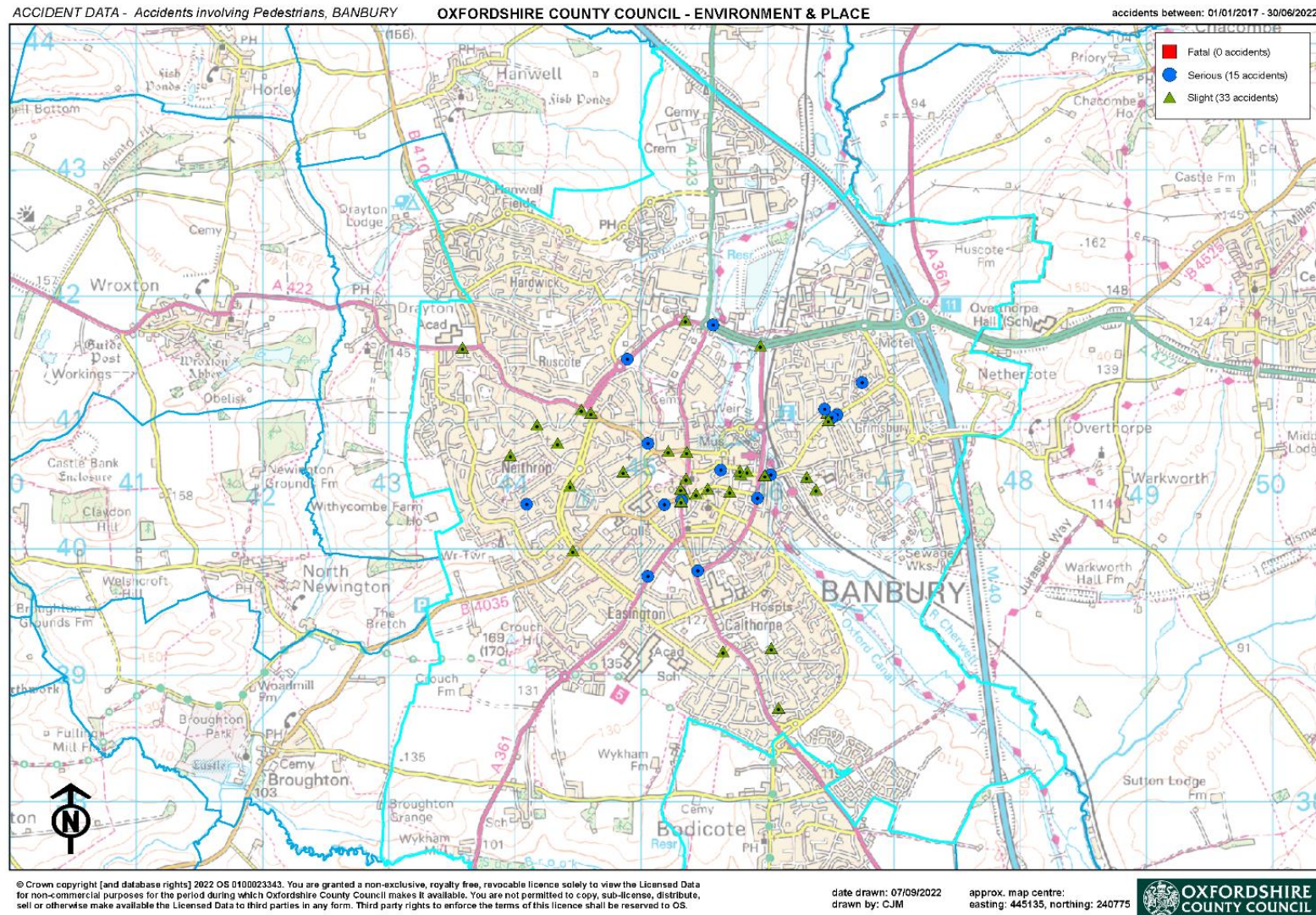


Figure 20: Accidents involving people walking (January 2017 to June 2022)



4.4. Other informants to this LCWIP

4.4.1. CycleStreets³⁰ low traffic neighbourhoods

The map shown in **Figure 21** is an extract from a tool developed by CycleStreets, the developers behind the routing algorithm used in the PCT. This tool uses automated analysis of OpenStreetMap data to highlight streets which may be inappropriately carrying through-traffic.

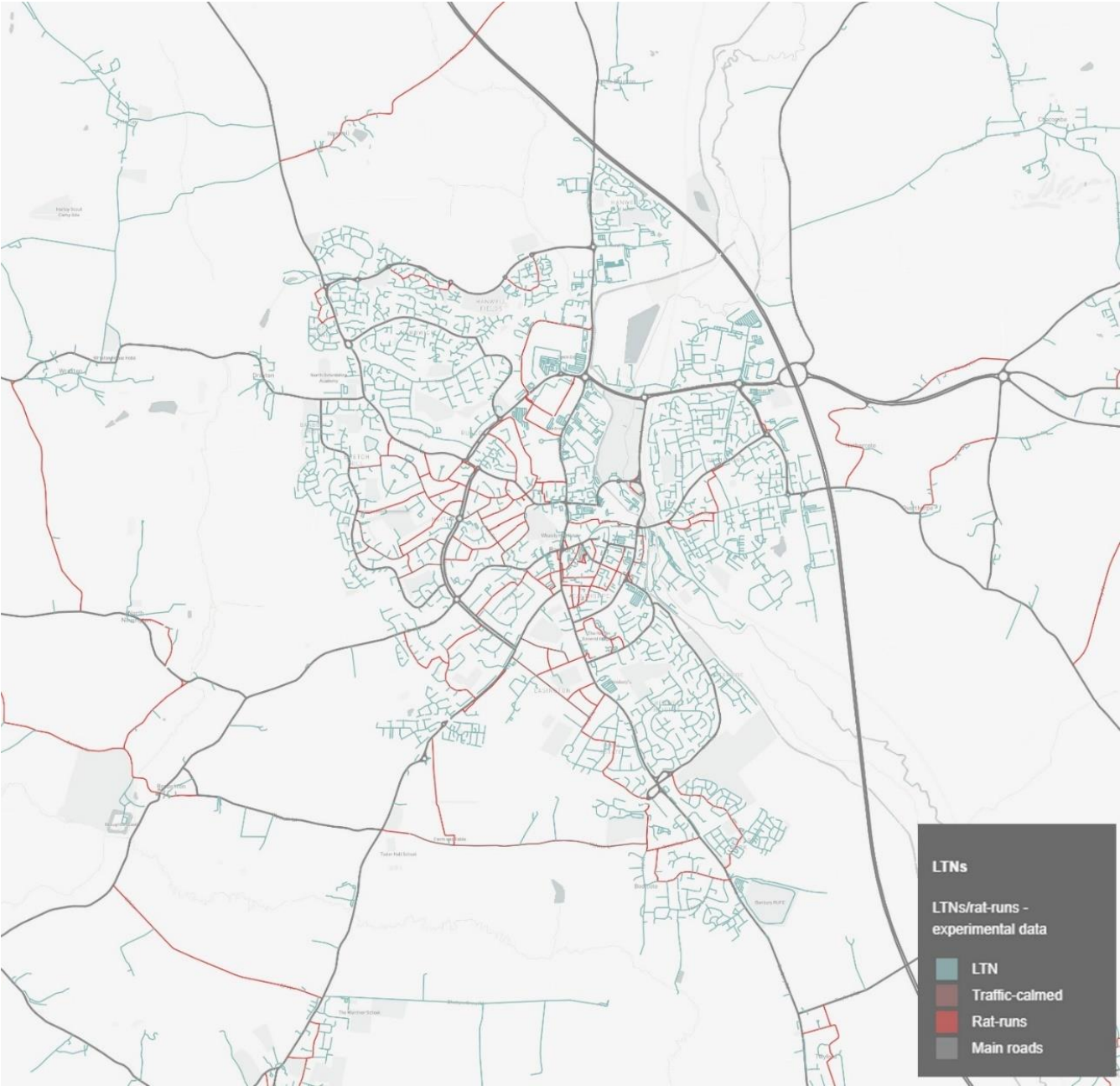
The analysis for Banbury indicates that many of the town's residential streets are already designed such that they do not permit through traffic.

- It is expected that these streets (shown in blue on the map) have relatively low traffic flows and speeds and are therefore less likely to require major additional infrastructure to permit safe walking and cycling.
- Despite these low speeds and flows, it may still be appropriate to make improvements to some of these routes. Many small-scale improvements are possible (for example provision of dropped kerbs and tactile paving where they are currently missing), and major changes may be appropriate where one of these streets forms part of a strategic or locally significant cycling and walking route.

The key on the map uses the term LTN. This denotes a low traffic neighbourhood as the data shows existing neighbourhoods with low traffic flows; we are **not** proposing Low Traffic Neighbourhoods in the sense of introducing new traffic filters or restrictions.

³⁰ <https://www.lowtrafficneighbourhoods.org/>

Figure 21: CycleStreets map tool for showing streets that have low traffic flows

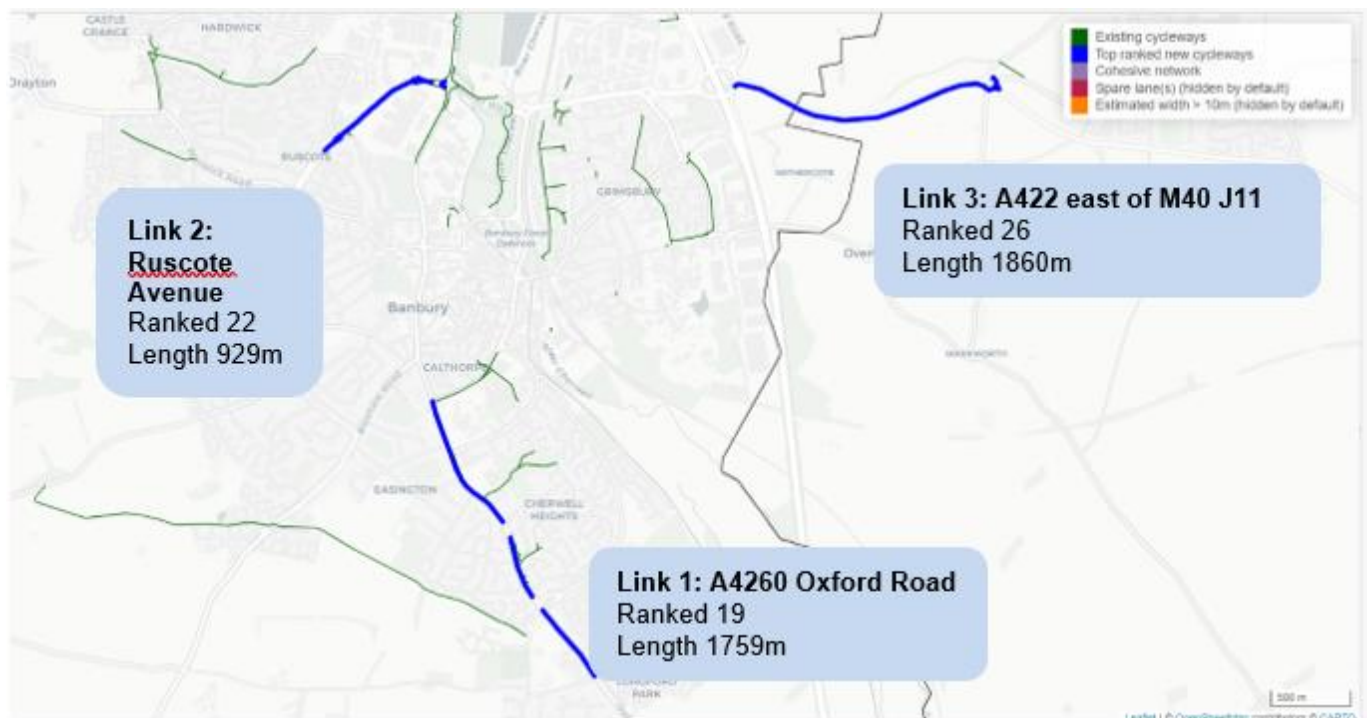


4.4.2. Rapid Cycleway Prioritisation Tool

The Rapid Cycleway Prioritisation Tool³¹ was commissioned by Sustrans and the DfT to help identify promising locations for new cycleways in England. This highlights three links in Banbury (A4260 Oxford Road, A422 Ruscote Avenue; and A422 east of M40 Junction 11) as ‘top ranked new cycleway’ based on projected cycling flows from the PCT and estimates of the road space available for reallocation to improve cycling infrastructure along the route³². The results for Banbury from this tool are shown in **Figure 22**.

However, whilst it is agreed that there is a need for cycle route improvements east of the M40, the A422 is not considered the optimal route for this due to excessive traffic volumes and speeds. Instead, the network proposed in this LCWIP includes a Middleton Cheney link, to the south of the A422.

Figure 22: Rapid Cycleway Prioritisation Tool results for Banbury



³¹ Lovelace, R. and Talbot, J., “Rapid Cycleway Prioritisation Tool,” 2020. [Online]. Available: [Oxfordshire \(cryptobike\)](https://oxfordshire.cryptobike.com/).

³² Lovelace, R. and Talbot, J., “Rapid Cycleway Prioritisation Tool,” 2020. [Online]. Available: [Oxfordshire \(cryptobike\)](https://oxfordshire.cryptobike.com/).

SECTION SUMMARY:

The current and future cycling and walking level of demand show the potential in Banbury to increase cycling and walking despite challenges, provided suitable infrastructure and supporting measures are implemented.

- Many trip generators are located within a short distance of one another, providing trip containment within Banbury and a short journey time between destinations. This is suitable for cycling and walking and the convenience needs to be demonstrated.
- There is a concentration of employment areas in the east of Banbury and residential areas in the west where there is a demand for cycling and walking despite inadequate infrastructure. Infrastructure improvements can support and increase this demand.
- There is a cluster of primary and secondary schools along the western corridor (Springfield Avenue, Queensway, Woodgreen Avenue). There is an opportunity to create a culture of cycling and walking to school in Banbury by fostering the potential in this location, which can have long-term impacts.
- The PCT e-bike scenario shows a potential increase in demand in cycling in Banbury.
- Many of Banbury's residential streets are designed so that they do not permit through traffic. This presents an opportunity to create a network of quieter cycle and walking streets that make cycling and walking accessible to all no matter their ability or confidence level.

5. Network Plan for cycling

This section provides an overview of the process followed to develop the proposed network for cycling and includes details of this network and the potential improvements.

The development of the Banbury cycle network has been an iterative process, combining the analysis of data collected, site audits and stakeholder engagement.

Key to developing the network has been understanding where people want to travel (trip generators) and identifying existing and future cycling demand. Routes that were deemed important were audited and a network of routes then developed. Each route requires a series of improvements to ensure it is LTN 1/20³³ compliant where possible and thus enable more people to cycle in Banbury and the surrounding area.

5.1. Methodology

5.1.1. Identifying trip generators

Trip generators have been identified to understand where people want to cycle to and from. These include schools, employment sites, retail and leisure destinations. There are noticeable clusters of trip generators in Banbury, for example employment areas in the east and schools along the western corridor. Future proposed developments have also been considered. Identifying trip generators ensures the developed cycle network connects people with where they want to go, thereby making cycling a realistic option for travel.

5.1.2. Identifying existing and predicted routes and desire lines

Several tools were used to identify routes with existing cycle demand and where future demand is predicted. Tools used include the Propensity to Cycle Tool (PCT) (which uses 2011 Census journey to work data), Strava Global Heatmap and Rapid Cycleway Prioritisation Tool. The output from these tools was considered against potential desire lines between trip generators (routes people want to cycle regardless of whether they are currently suitable for cycling), to ensure a comprehensive network that connects all trip generators was developed.

Some of the key routes in the proposed LCWIP map came from this work:

- Oxford Road, South Bar Street, North Bar Street, Southam Road
- Queensway, Woodgreen Avenue, Orchard Way, Ruscote Avenue
- Broughton Road
- Warwick Road
- Bankside

³³ LTN 1/20, 2020, [Cycle Infrastructure Design \(publishing.service.gov.uk\)](https://www.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/86481/ltn120.pdf)

There are other roads that this work suggests could be good demand routes, but the solutions were not clear at this stage. They will need to be considered further through subsequent editions of the LCWIP – these include Upper Windsor Street/Cherwell Street and Middleton Road. The LCWIP shows them as dotted lines.

The tools used also identified several severance points within Banbury, which need to be addressed in order to create a continuous cycle network. These include:

- Oxford Canal
- River Cherwell
- Railway line

5.1.3. Identifying cycling network improvements

The improvements to cycling routes and infrastructure in Banbury and the surrounding area should be designed to achieve the core design outcomes – directness, gradient, safety, connectivity and comfort as outlined in LTN 1/20.

- **Directness** – compares the length of the cycle route against the shortest motor vehicle route length
- **Gradient** – identifies the maximum gradient and maximum slope of the cycle route with the length at which it is climbed
- **Safety** – assesses the vehicle speed and volume and the degree of separation between people and general traffic. Safety will not only pertain to people cycling but to all users of a space. For example, when a cycle route passes a bus stop the safety of bus passengers alighting and boarding a bus must also be considered.
- **Connectivity** – identifies the number of side roads or accesses to the section of route which are barrier free and suitable for cycling
- **Comfort** – the available space for cycling and the quality of the surface material

The improvements have been identified through the analysis of the data gathered from consultation feedback from *'Let's Talk Oxfordshire'* and stakeholder engagement and subsequent route auditing.

All potential routes were assessed to understand existing conditions and identify the improvements required. Route assessment was conducted by EAS consultancy and Banbury Active Travel Supporters.

The improvements identified are high-level proposals and options, which will require further feasibility and design work, along with public consultation before being implemented. They will also need to be considered in the wider context as part of the emerging Banbury Area Travel Plan and Banbury Masterplan.

5.1.4. Types of improvements

Some of the measures that could be considered to provide an effective cycle network.



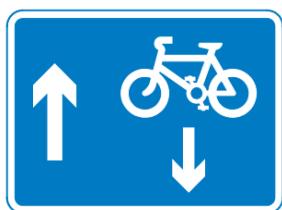
Shared use footway/cycleway – shared use paths allow people cycling and walking to share the space, although people walking have priority. These paths are identified by a blue circle with a white symbol of people walking and a bike³⁴.



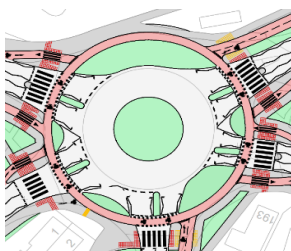
Segregated shared footway/cycleway – a footway that legally allows cycling, with separate spaces for people cycling and walking. Segregation is usually light and consists of signage and markings.



Segregated cycle track (one or two way) – a cycle facility physically segregated from vehicles and people walking.



Contraflow cycle lane – a cycle lane which allows people cycling to travel in the opposite direction to other traffic. Often used on one-way roads to allow people cycling a direct passage along the road³⁵.



Roundabouts with protected space for cycling (also known as a Dutch-style roundabout) – inspired by the Dutch, this type of roundabout has a priority lane around the outside for people cycling and controlled crossings on each arm of the junction for people walking. Vehicles are expected to give way to people cycling, walking and crossing the entry/exit arms of the roundabout.



Toucan crossing – a signal-controlled crossing that allows people cycling and walking to cross together. Toucan crossings are usually wider than standard pedestrian crossings to accommodate people cycling safely.

³⁴ Photo credit: TSRGD 2016, Diagram 956

³⁵ Photo credit: TSRGD 2016, Diagram 960.2



Tiger crossing (Parallel crossing) – a tiger crossing consists of a zebra crossing with a parallel priority space for people cycling to cross.



Sparrow crossing – a sparrow crossing is the same as a tiger crossing; however, it is at a signal-controlled junction³⁶.



Cycle parking – there are many different types of cycle parking. The most common is a 'Sheffield' stand, which is an inverted 'U' shape and supports the whole bike. Other types of cycle parking include two-tier cycle racks, cycle-hubs and wall racks.



Wayfinding – signage to support people cycling and walking to navigate their way around a place.

³⁶ Photo credit: <https://www.stockport.gov.uk/news/stockports-first-bee-network-scheme-which-will-be-part-of-greater>

5.2. Proposed cycling improvements

Based on all the data and evidence set out above, eighteen primary or secondary routes were assessed to set out the measures required to deliver a key cycle network for Banbury. Initial assessment was also undertaken on seven key village routes which it was felt should form part of the overall LCWIP network. Following the consultation some elements have been amended to address concerns raised.

Table 7: Banbury primary and secondary cycle routes

Route	Location	From	To
Route 1	A361 North Bar Street/ Oxford Road	Castle Street	Bloxham Road
Route 2	A361 Bloxham Road	Parsons Piece	South Bar Street
Route 3	A422 Ruscote Avenue/ Orchard Way/ Wood Green/ Queensway ('Western Corridor')	Hennef Way/ Southam Road	Queensway/ Bloxham Road
Route 4	A422/ B4100 Warwick Road	Highlands	Castle Street
Route 5	A361/ A423 Southam Road	M40 Crossing	Warwick Road
Route 6	B4035 Broughton Road	Queensway	High Street/ North Bar Street
Route 7	Former railway path through Hardwick	Warwick Road	Southam Road
Route 8	Dukes Meadow Drive	Warwick Road	Southam Road
Route 9	Grimsbury	Daventry Road	West Street
Route 10	Overthorpe Road via Causeway and Bridge Street	Nethercote	Town Centre
Route 11	St John's Road/ Lamb's Crescent	Oxford Road	Hightown Road
Route 12	Salt Way	Bloxham Road	White Post Road
Route 13	Bankside/ White Post Road	Railway Station	Bodicote
Route 14	Wildmere to Bridge Street via Spiceball Park	Wildmere Industrial Estate	Bridge Street
Route 15	Easington	Springfield Avenue	Laburnum Grove
Route 16	Off-road route via St Louis Meadow Park	Bankside	Salt Way
Route 17	Longelandes Way	Longelandes Way	Warwick Road

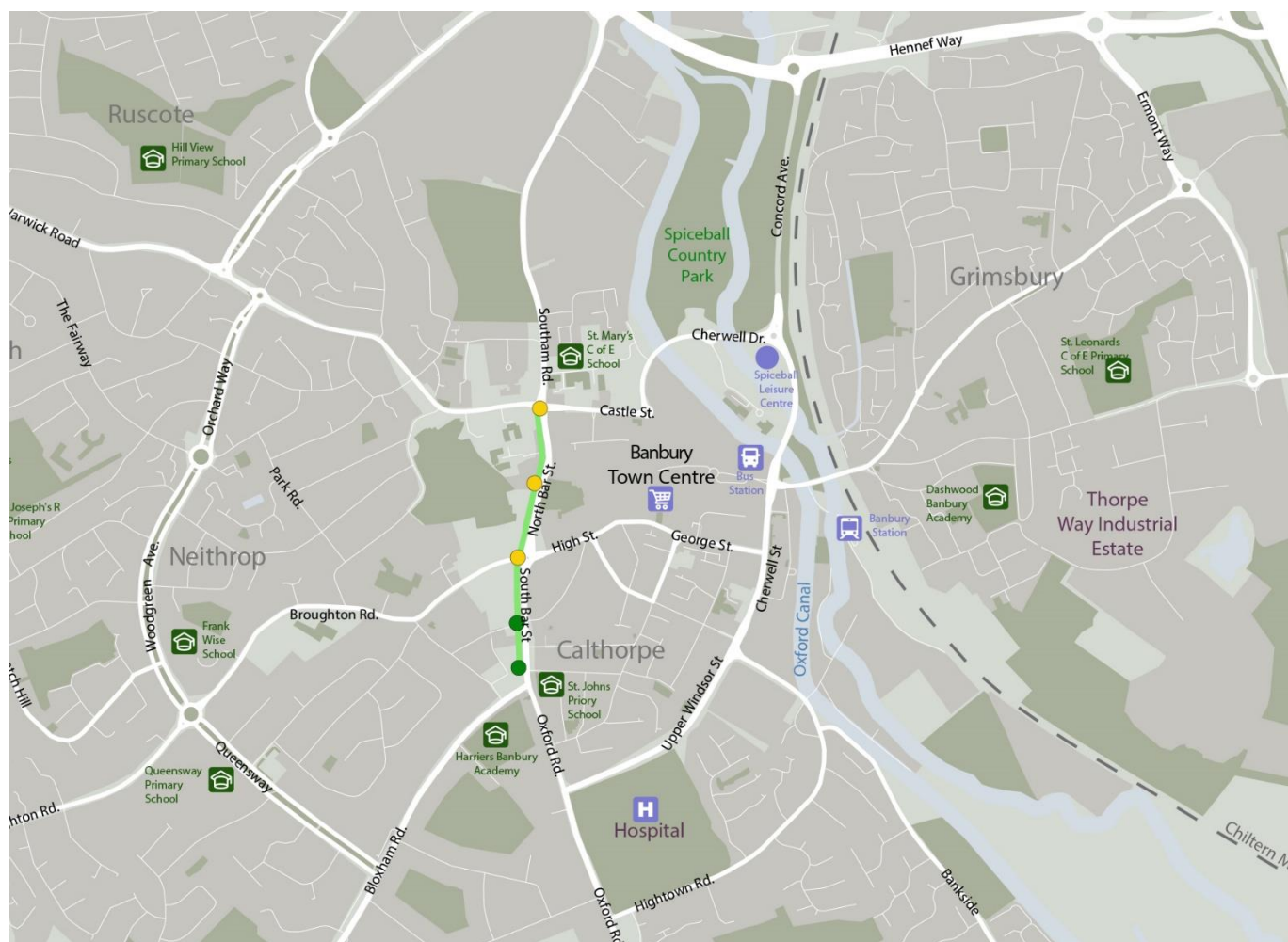
Route 18	Canal Towpath	M40 north of Wildmere Industrial Estate	M40 east of Longford Park
Village Route 1	Wroxton	Wroxton	Woodgreen Avenue
Village Route 2	Great Bourton and Little Bourton	Great Bourton	Hanwell View
Village Route 3	North Newington	North Newington	Neithrop
Village Route 4	Broughton	Broughton	Parsons Piece
Village Route 5	Adderbury	Twyford	Bankside/ Bodicote junction
Village Route 6	Middleton Cheney	Middleton Cheney	Banbury Lane/ A422
Village Route 7	Bloxham	Bloxham	Bodicote


A description of the location and nature of each of the routes together with a summary of potential improvements is set out in the following section³⁷.

Some of the Village Routes are shown as indicative arrows, rather than at individual road-level. This indicates that further negotiations with the appropriate landowners will need to take place before a precise route can be agreed.

³⁷ The Map data is from OpenStreetMapping available under the Open Database License. Please refer to <https://www.openstreetmap.org/copyright/>

ROUTE 1	A361 North Bar Street/South Bar From Castle Street to St John's Road <p>This is a key north-south route on the western edge of the town centre. There is enough highway and public realm space to enable high quality provision for cyclists and pedestrians without any impact on parking.</p>
Key 'trip generators'	Schools (St John's Priory School, Nursery/ Pre School), shops, restaurants, leisure, health centre, businesses
Bus considerations: Few bus services currently run along this corridor.	
Route length: 705 metres	



Route location:		Junction Reference and description	
	1a	North Bar / Southam Road/ Castle Street/ Warwick Road junction	Redesign crossroads e.g. with advanced stop lines and priority traffic light phasing for cyclists, footway widening and amendment of single-phase crossing for pedestrians
		North Bar Street	Create space for cycleway along North Bar Street e.g. by narrowing eastern footway and/or narrowing a vehicle lane. Options to be explored further in design phase. Options to address pinch-point at Church House Pub to be considered e.g. 2-way cycle flow in some traffic signal phases.
	1b	Banbury Cross Roundabout:	Reconfigure to promote pedestrian and cyclist priority/ safety.
	1c	Traffic light pedestrian crossing south of Crouch Street	Provide zebra crossing or single-phase traffic light pedestrian crossing
	1d	South Bar/ St John's Road	Traffic lights at Bloxham Road could be adjusted to support turning into/out of St John's Road. During design stage, explore how safety of the right turn lane from St John's Road could be improved
Junction 1a/ Link 1a to 1b	1.9	As a short-term measure: Explore improvements to signal timings and pedestrian phasing at all junctions along this corridor and particularly at Junction 1a and by the Church House (between 1a and 1b).	

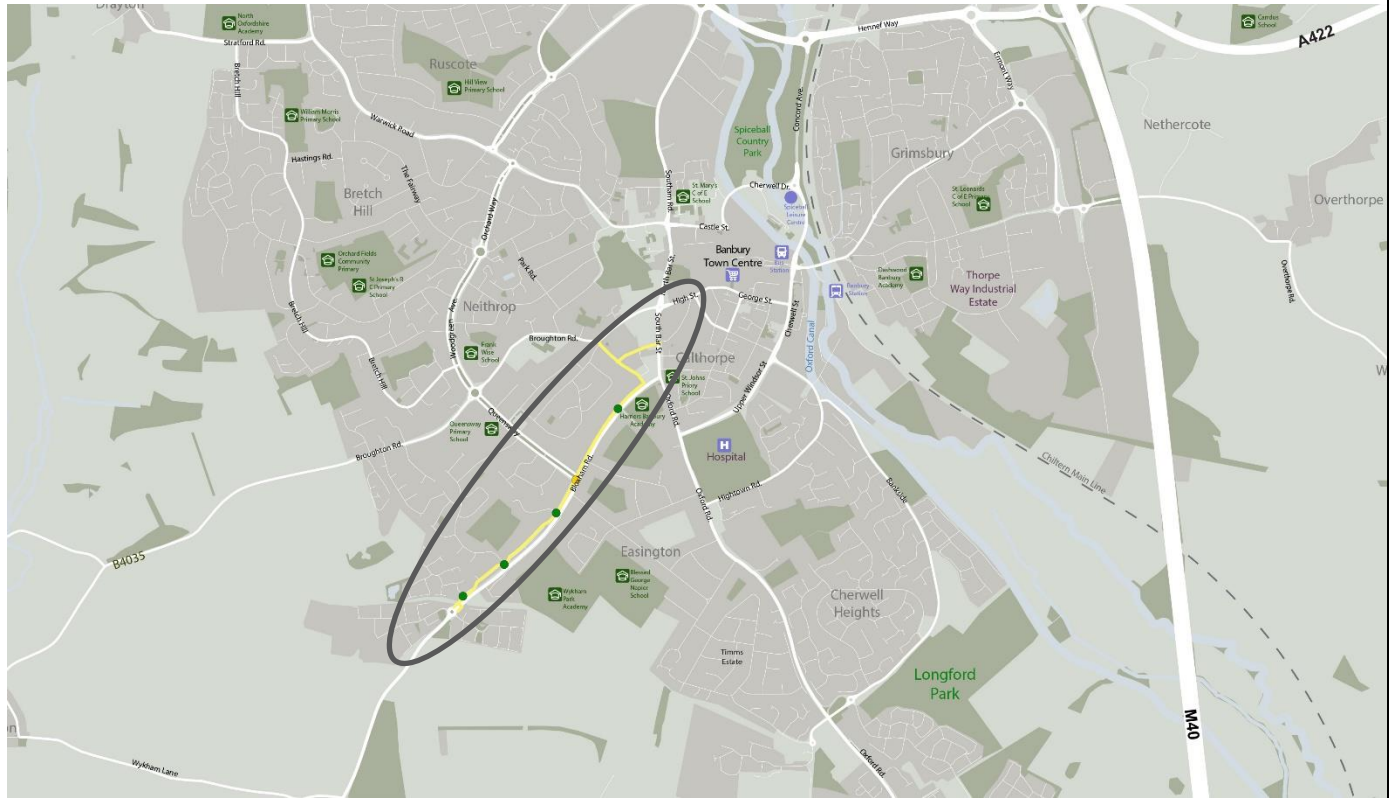
ROUTE 2

A361 Bloxham Road

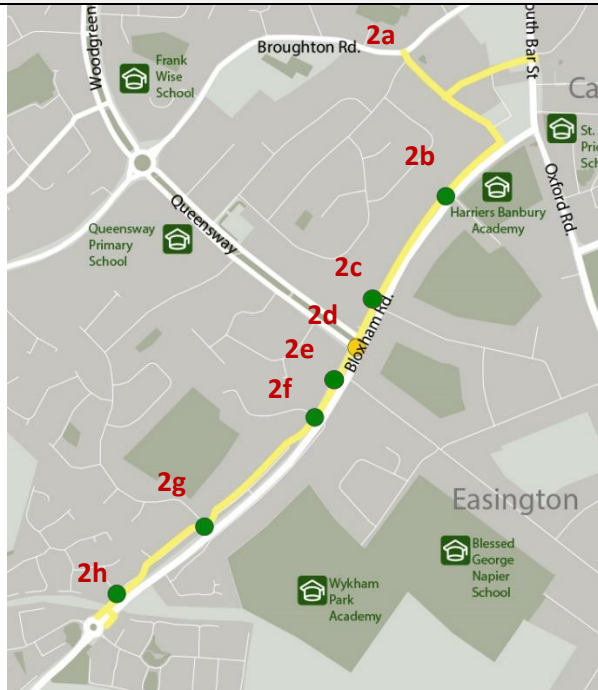
From Parsons Piece to South Bar Street

This is an important route for people cycling into the town from the south and for children accessing schools in the area. It is also a route used by inter-urban bus services and therefore the impacts of cycling and walking improvements on bus services will need careful consideration. The route has been modified to make use of Beargarden Road / Crouch Street, with an extension through to Broughton Road. This will also link people to the health centre.

Route location:



Route detail:



Junction Reference and description

2a	Beargarden Road / Crouch Street
2b	Bloxham Road/Harriers View
2c	Bloxham Road/ Easington Road
2d	Bloxham Road/ Queensway
2e	Bloxham Road/ Springfield Avenue
2f	Bloxham Road/ Wykeham Gardens
2g	Bloxham Road/ Browning Road
2h	Bloxham Road/ Tyrrell Road/ Parsons Piece

Key ‘trip generators’ on Route	Schools (Harriers Banbury Academy, Blessed George Napier, Wykham Park Academy), leisure facilities, health centre
Bus considerations	Bloxham Road is used by inter-urban buses with the number of buses using this route likely to increase. Congestion impacts on bus services.

ROUTE 2 A361 Bloxham Road

Route length:	1.5km
Other	<ul style="list-style-type: none"> Improvements to this route will link well to the cycle route improvements along the A361 that link with the Warriner School.

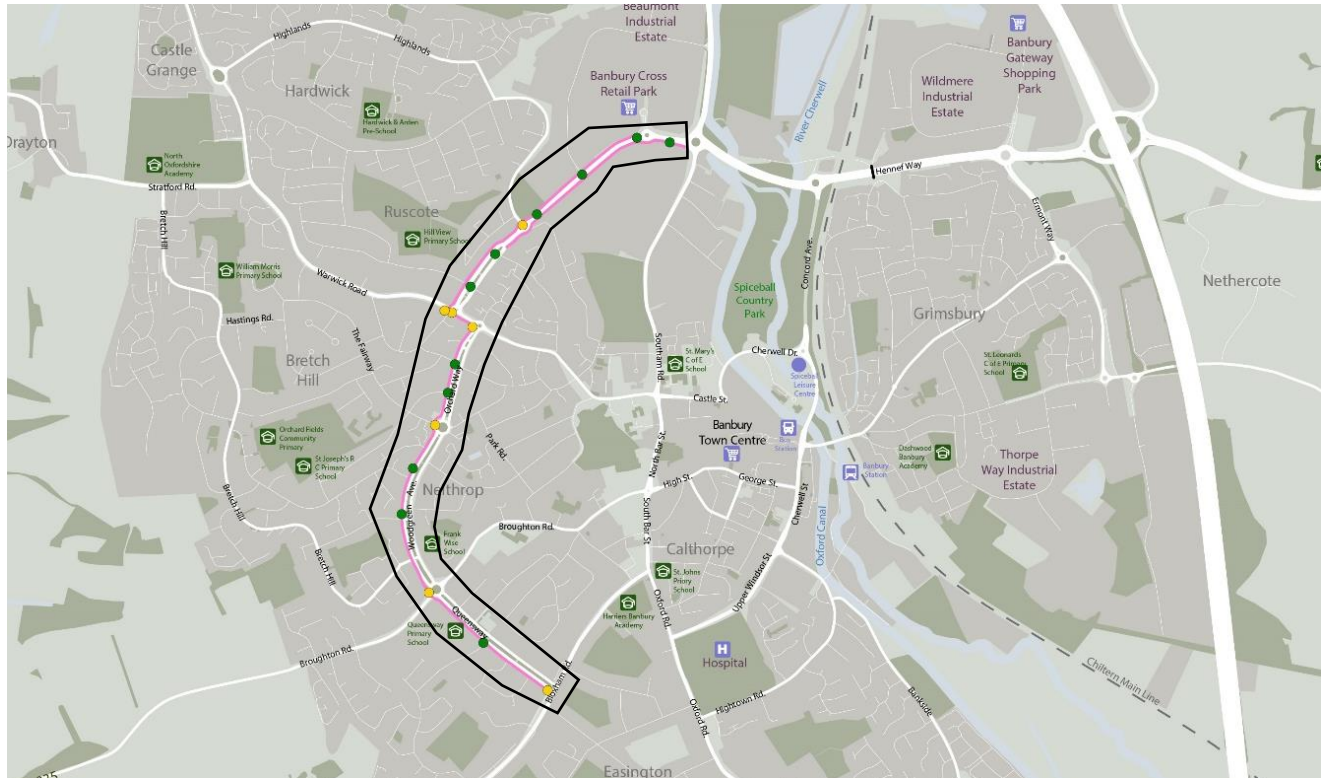
Map Reference	Improvement Reference	Improvement
2a	2.1	Routing via Beargarden Rd - New Road - Crouch Street.
Link 2b to 2a	2.2	Bloxham Road: Create space for cycleway (which would link with cycleway on Route 1). This will be explored during the design stage with options to include narrowing vehicle lanes and removal of on-street parking. Implications for adjacent properties with no driveways (including loss of disabled spaces) will be considered through the design stage.
Link 2c to 2b	2.3	Bloxham Road: Narrow the road lanes and western footway and use verge space to continue two-way cycleway on western side of Bloxham Road.
2b	2.4	Bloxham Road/Harriers View junction: Increase footway width on eastern side by school.
2f to 2c	2.5	Bloxham Road: Use parallel access roads and verge to continue two-way cycleway on western side of Bloxham Road (south of Browning Rd (2g) to north of Easington Road (2c), creating cycle priority across the junction with Queensway.
Link 2f to 2e	2.6	Bloxham Road: Create a pedestrian and cyclists crossing between cycleway (south of 2f) and Springfield Avenue (2e)
2h	2.7	Bloxham Road: Continue the cycleway into Parsons Piece and Tyrell Road by using verge space and/or narrow carriageway

ROUTE 3 Ruscote Avenue A422/Orchard Way/Woodgreen /Queensway

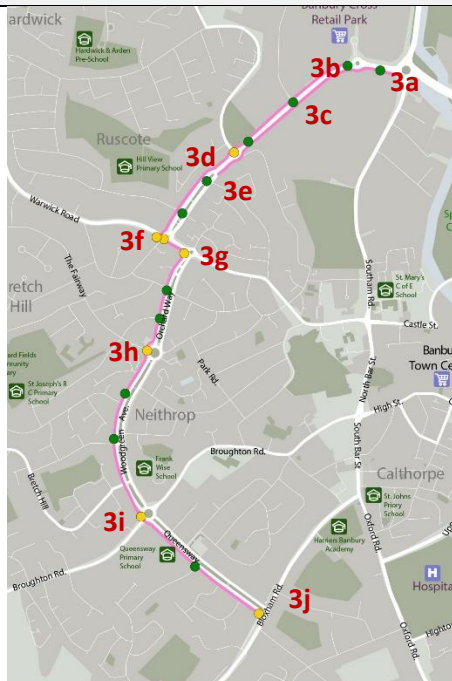
From junction with A422 Hennef Way/ A361 Southam Road to Queensway/ Bloxham Road junction

The western corridor would provide cycle accessibility to schools, employment, retail, leisure and several residential areas. There is good potential in terms of highway space but decisions will need to be made around parking, green spaces and difficult junctions that need to be made safe for those wishing to walk and cycle. The accident analysis showed clusters of accidents involving cyclists, including school children, particularly along the southern section of the corridor.

Route location:



Route detail:



Junction Reference and description

3a	Ruscote Avenue/ A422 Hennef Way/ A361 Southam Road
3b	Ruscote Avenue/ Lockheed Close (entrance to Banbury Cross Retail Park)
3c	Ruscote Avenue/ Beaumont Road
3d	Ruscote Avenue/ Longelandes Way
3e	Ruscote Avenue/ Neithrop Avenue
3f	Ruscote Avenue/ Warwick Road
3g	Orchard Way/ Warwick Road/ Parklands
3h	Orchard Way/ The Fairway/ Woodgreen Avenue/ Hilton Road
3i	Woodgreen Avenue/ Broughton Road (east)/ Queensway/ Broughton Road (west)
3j	Queensway/ A361 Bloxham Road

Key ‘trip generators’ on Route	Retail (Banbury Cross Retail Park), Woodgreen Library, Sports facilities (Woodgreen Leisure Centre, Horton View Sports Ground), Schools (Hill View Primary School, Frank Wise School, Queensway Primary School, Wykham Park Academy, Banbury Academy, Blessed George Napier School)
ROUTE 3	Woodgreen Avenue/ Orchard Way/ A422 Ruscote Avenue
Bus considerations	The orbital links are not directly in conflict with bus routes for much of the length of the corridor. However, frequent bus services use the south end of Ruscote Avenue, and Woodgreen Avenue for a short distance.
Route length	3km

Map Reference	Improvement Reference	Improvement
Link 3a to 3b	3.1	Ruscote Avenue: Upgrade cycleway between Southam Road and Tesco roundabout utilising verge space (south side challenging as little space at Tesco roundabout).
Link 3b to 3d	3.2	Ruscote Avenue: Upgrade cycleways, utilising verge space (both sides).
Link 3d to 3e	3.3	Ruscote Avenue: Cycleway continues along parallel side roads on both sides of Ruscote Avenue.
Link 3e to 3f	3.4	Ruscote Avenue: Cycleway continues in central reservation – expected to be feasible without needing to remove any trees.
3f/ 3g	3.7	Improvements to three roundabouts to prioritise cyclists and pedestrian movements including advanced stop lines for cyclists and cycle-only traffic light phases (subject to further assessment) <ul style="list-style-type: none"> • A422 Warwick Road/ Cromwell Road (3e) • A422 Ruscote Avenue/ A422 Warwick Road (3e) • A422 Warwick Road/ Orchard Way/ Parklands (3f) Junction reconfiguration will be explored during the design stages.
Link 3g to 3i	3.5	Orchard Way: Provide additional toucan crossings to enable pedestrians and cyclists to cross more easily. A crossing by Mewburn Road and in other locations will be further explored during the design stages.
3h	3.6	Orchard Way/ The Fairway/ Woodgreen Avenue/ Hilton Road junction: Provide a safe cycle link and crossings to the leisure centre
3j	3.9	Queensway/ Bloxham Road: Redesign junction to connect to cycleway along Bloxham Road (see Route 2) and provide safe connection across to Springfield Avenue.

ROUTE 4 A422/ B4100 Warwick Road

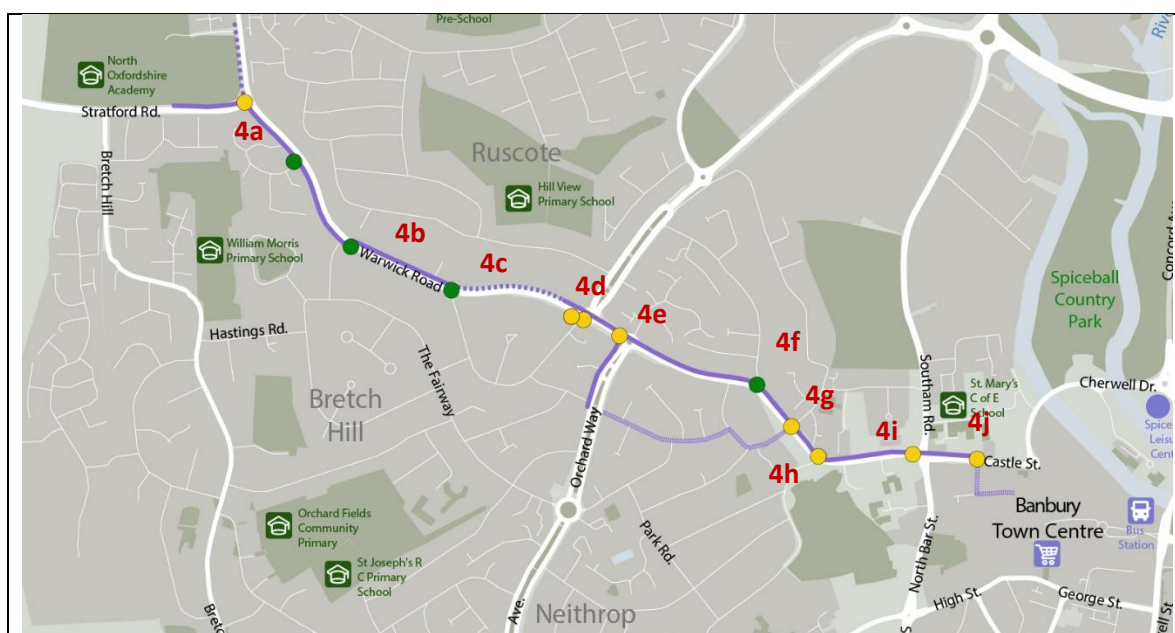
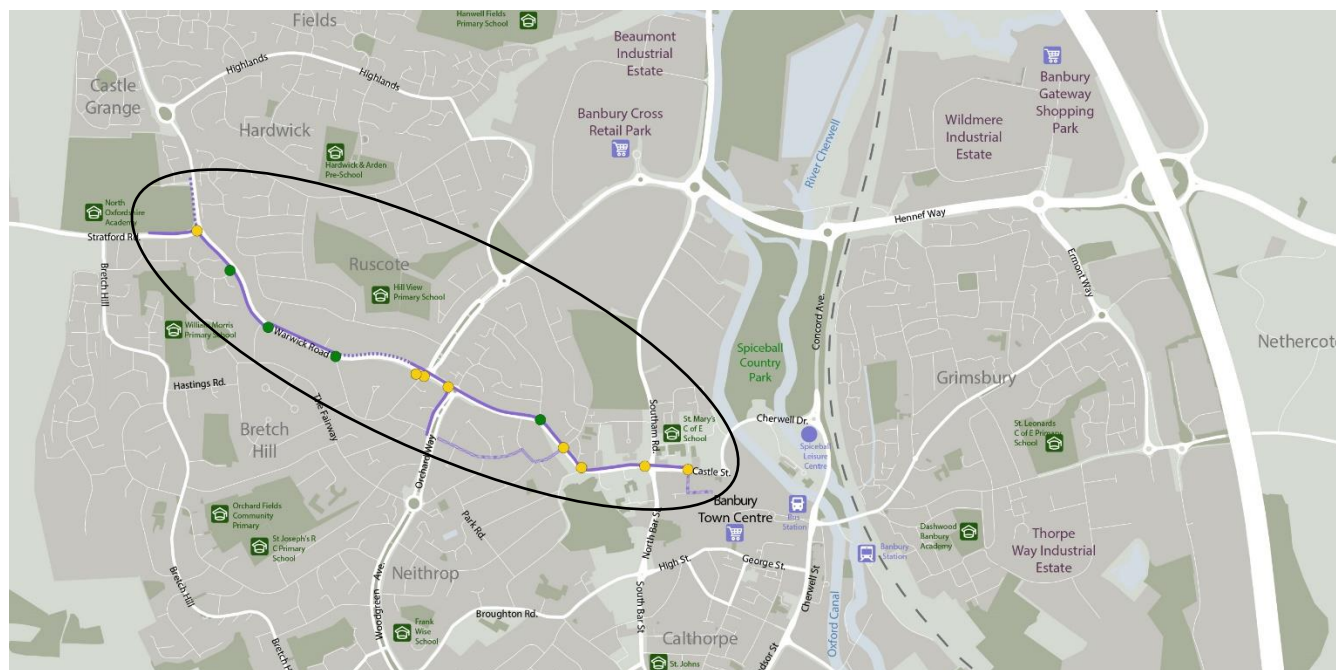
From its junction with Highlands to Castle Street

This busy radial route is a key corridor for walking and cycling as it connects schools, shops, businesses and a number of residential areas. Full segregation will not be possible at the eastern end as space is limited. During the 2022 consultation, there were suggestions of Warwick Road being one-way at its eastern end but that would have considerable knock-on impacts. This corridor will require further consideration of measures at the design stage.

Quiet routes may be a short term solution until the highway can be redesigned to provide a safe, shared space with vehicles or traffic levels reduced – a quiet route is proposed via Belgrave Crescent, Wimborne Avenue, Beesley Road and Cromwell Road.

The existing cycle path on Warwick Road connects to Route 7, ensuring continuity of cycleways.

Route location:



ROUTE 4 A422/ B4100 Warwick Road

Junction Reference and description

4a	Warwick Road/ Stratford Road
4b	Warwick Road/ Ferndale Road
4c	Warwick Road/ Cromwell Road (west)
4d	Warwick Road/ Cromwell Road (east) – Roundabout and Warwick Road/ Ruscote Avenue - Roundabout
4e	Warwick Road/ Orchard Way/ Parklands
4f	Warwick Road/ Nursery Lane
4g	Warwick Road/ Belgrave Crescent/ Foundry Street
4h	Warwick Road/ Bath Road
4i	Warwick Road/ Southam Road/ Castle Street/ North Bar Street
4j	Castle Street/ Bolton Road

Key ‘trip generators’ on Route	Schools (North Oxfordshire Academy, William Morris Primary School, Hill View Primary School, St Mary’s C of E School), Leisure (People’s Park, restaurants/ take aways), Retail
Bus considerations	Buses run along the length of this corridor linking Hardwick and residential areas in the west of the town to Banbury Gateway Retail Park via the town centre.
Route length	2.5km
Other	Banbury Area Travel Plan considerations: The future role of this route will be considered through the strategy work which will help confirm the design criteria.

Map Reference	Improvement Reference	Improvement
Link 4a to east of 4b	4.1	Warwick Road: Cycleway using verge and/ or carriageway narrowing.
Link East of 4b to 4c	4.2	Warwick Road: <ul style="list-style-type: none"> Cycleway on northern side of Warwick Road using verge space Reposition zebra crossing to enable cycleway provision.
Link West of 4c to 4d	4.3	Warwick Road: Cycleway on northern side of Warwick Road using parallel access road. In design stage, explore two-way provision on Warwick Road for longer term. Use verge space to continue cycleway from service road to roundabout.
4g	4.4	Warwick Road: Belgrave Crescent is narrow where it meets Warwick Road with poor visibility due to delivery lorries parked on the pavement at the garage. This whole area needs detailed attention and will be prioritised.
N/A	N/A	Improvements to roundabouts (4d and 4e) will be picked up as part of Route 3. Route 3 and Route 4 tie-in to this route to ensure network continuity.
Link 4d to 4h	4.5	Warwick Road: Continue cycleway along Warwick Road to Castle Street/Bolton Road junction. The design stage will explore and model how this is best achieved but will consider using verge or existing carriageway with supporting measures. The Three Pigeons Inn signalised junction (Warwick Road/ Southam Road/ Castle Street) will be picked up as part of Route 1.
Link – quiet route	4.6	Quiet route (Warwick Road alternative): Quiet routes may be a short term solution until Warwick Road can be redesigned to provide a safe, shared space with vehicles or traffic levels reduced. A quiet route is proposed via Belgrave Crescent, Wimborne Avenue, Beesley Road and Cromwell Road.
Link 4i to 4j	4.7	Castle Street: Continue cycleway onto Castle Street: Narrowing will be required to achieve this and/or parallel on-street parking will need to be amended.
4j	4.10	Castle Street: Provide new crossing on Castle Street to give access to Bolton Road.
Link from 4j	4.11	Bolton Road: Provide route on Bolton Road leading to a new cycle parking facility adjacent to the town centre.

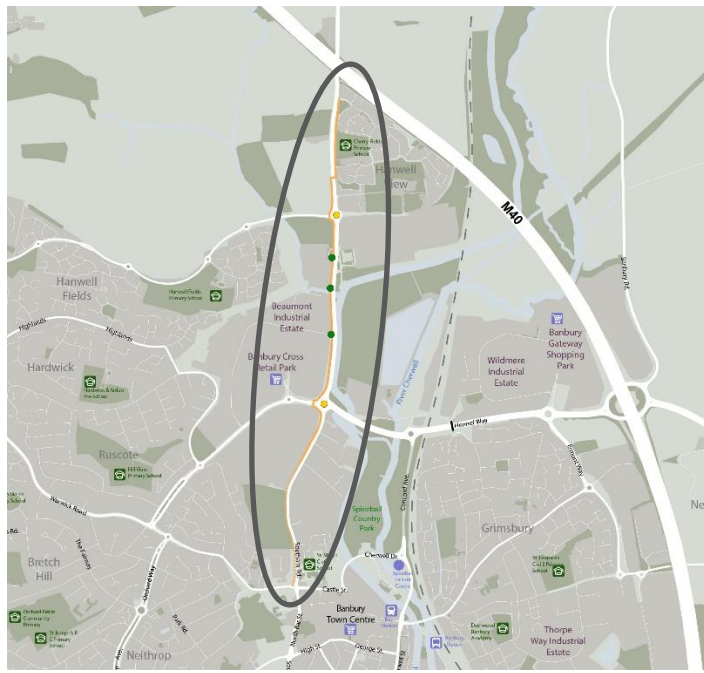
ROUTE 5

A361/ A423 Southam Road

From the M40 crossing to its junction with Warwick Road

Southam Road provides the north-south radial route into Banbury and will be a key connecting route for walking and cycling as it connects residential areas, schools, retail, businesses and community facilities. At the southern end there is not enough space to segregate cyclists from motor vehicles and pedestrians. These roads need to be considered through the Area Travel Plan work in terms of their role, and redesigned to provide a safe, segregated and inviting environment for people walking and cycling.

Route Location:



Key 'trip generators'

Employment (Beaumont Road Industrial Estate), **Schools** (Cherry Fields Primary School), **Leisure** (Grimsbury Nature Reserve, Spiceball Country Park), **Retail/ Town Centre**

Bus considerations

Buses run along corridor serving Hanwell Fields and employment areas.

Route length

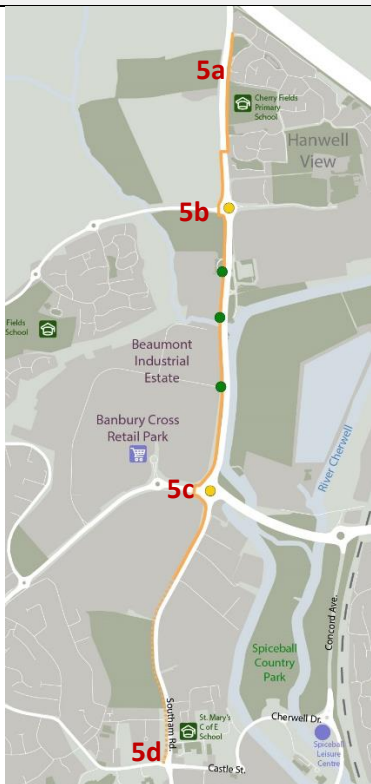
3km

Other

Banbury Area Travel Plan considerations: Consider the future role and design criteria for this route

Junction Reference and description

5a	A423 Southam Road/ Bourton Road
5b	Southam Road/ Noral Way/ Dukes Meadow Drive
5c	Southam Road/ Ruscote Avenue/ Hennef Way
5d	Southam Road/ Warwick Road/ Castle Street



ROUTE 5		A361/ A423 Southam Road
Map Reference	Improvement Reference	Improvement
Link 5a to 5b	5.1	Southam Road: Create separate cycleway or widen existing shared footway-cycleway – use verge space and/or narrow the carriageway. Reduce speed limit to 30mph and install with gateway features representing change to residential area. Raised pedestrian / cycle priority crossing to cross Bourton Road and Hardwick Hill turnings – continuous cycleways across side roads to be delivered wherever safe.
	5.2	
Junction 5b	5.3	Southam Road/ Noral Way/ Dukes Meadow Drive Junction: Redesign roundabout to promote pedestrian and cyclist safety and priority – to be considered at the design stage.
Link 5b to 5c	5.4	Southam Road (south of Dukes Meadow Drive): Provide high quality segregated cycle facility.
Junction 5c	5.5	Southam Road/ Ruscote Avenue/ Hennef Way: This junction is critical for all modes and needs redesigning. Some initial options work has been undertaken but needs further assessment. Cycleway continues to link with cycleway on the southern side of Ruscote Avenue and proposed parallel zebra crossing over Ruscote Avenue west of Hennef Way roundabout (see Route 3 part a). This will be considered at the design stage.
Link 5c to 5d	5.6	Southam Road: An options appraisal will be undertaken to establish what is possible, but an off-road cycle path shared with pedestrians should be achievable on the majority of the corridor.

ROUTE 6

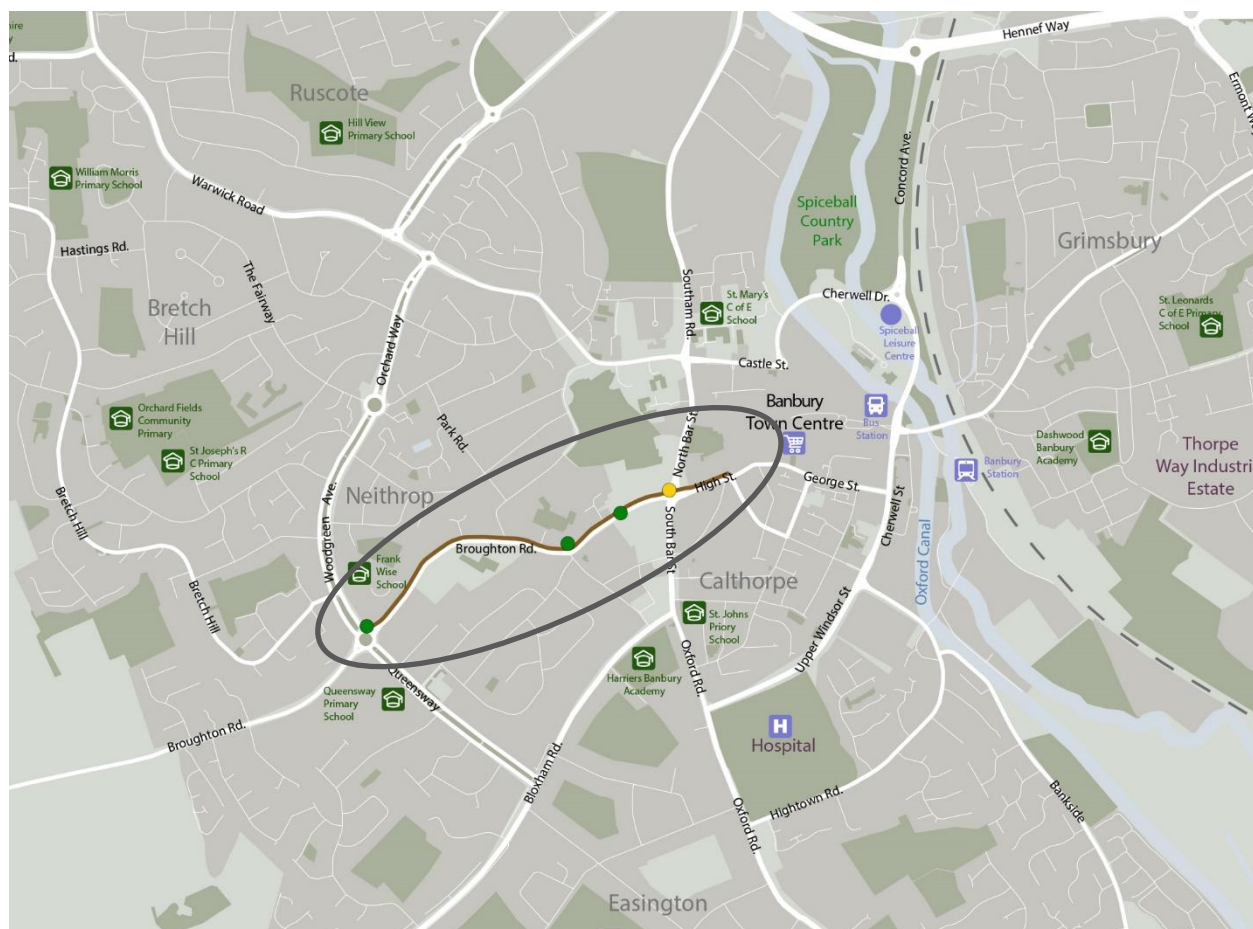
B4035 Broughton Road

From Queensway to High Street/ A361 North Bar Street/ South Bar Street

Broughton Road is another radial route into Banbury, with lower traffic volumes than other routes. This route would provide connection between the college, residential areas, leisure facilities, schools and businesses. Both the pavement and road along much of the corridor are narrow, with on-street parking. The corridor is also a local bus route. Designing for cyclists is therefore challenging. A reduction in speed limit would help and in the short term there is a quiet way through Kingsway.

The High Street at the eastern end of this route will need careful consideration – the High Street is a key link through the town centre for cyclists, pedestrians and bus users. The use of this road needs detailed consideration through the Area Travel Plan and Banbury Masterplan.

Route location:



Junction Reference and description

	6a	B4035 Broughton Road/ Woodgreen Avenue/ Queensway
	6b	Broughton Road/ Bath Road
	6c	Broughton Road/ Beargarden Road
	6d	West Bar Street/ High Street/ A361 North Bar Street/ South Bar Street

Key 'trip generators' on Route

Schools (Frank Wise School, Banbury & Bicester College, Meadowbrook College), **Leisure** (People's Park), **Retail/ leisure/ town centre**

Bus considerations	Woodgreen to Bath Road is a bus route and impacts on buses will be a consideration.
Route length	1.1km
Other	Banbury Area Travel Plan considerations: The future role of this route will be considered through the strategy work which will help confirm the design criteria

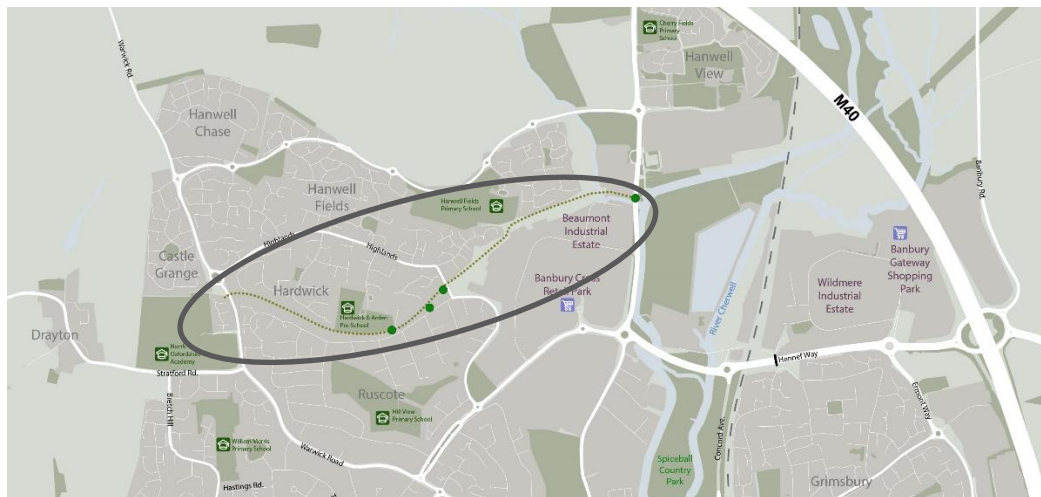
ROUTE 6		B4035 Broughton Road
Map Reference	Improvement Reference	Improvement
Link 6a to 6d	6.1	Broughton Road: Install protected cycleway along Broughton Road from Queensway to South Bar Street. There is limited space for this, so an options assessment for providing a safe cycle route will be required. This will require connection to an improved Banbury Cross Roundabout (as part of Route 1). A general review of access into the town centre will be undertaken as part of the Area Travel Plan work.
Junction 6a		Woodgreen Avenue/ Broughton Road Roundabout: To be considered as part of Route 3.
Junction 6d		Banbury Cross Roundabout: To be considered as part of Route 1.
Link East of 6d	6.2	High Street: Continue safe cycle route along High Street which could be facilitated by traffic restrictions/ traffic management. Between Calthorpe Street and Broad Street, delivery of a safe cycle route could be delivered by narrowing the carriageway, and preventing parking with bollards etc. In the short term, allowing cyclists to use the 'Pedestrian Zone' will be explored as a priority and potential 'quick win'.

ROUTE 7 Former railway path through Hardwick

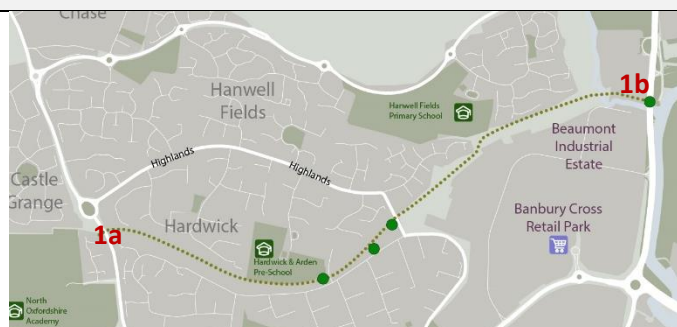
Between Warwick Road and Southam Road

This new off-road route follows the old mineral railway path between Warwick Road and Southam Road and would connect residential areas, retail and employment, as well as being an excellent leisure route. Improvements may be required to the existing accesses on Highlands and Southam Road, as well as vegetation clearance and possible resurfacing along the route. The route also provides access to the Beaumont Industrial Estate.

Route location:



Junction Reference and description



1a	Warwick Road
1b	Southam Road
●	New/amended pedestrian/cycle crossing

Key 'trip generators' on Route

This is a leisure route but links residential, employment (e.g. Beaumont Industrial Estate) and retail areas (e.g. Banbury Cross Retail Park).

Bus considerations

No impact as completely segregated from vehicular traffic.

Route length

2.2km

Improvement Reference	Improvement
7.1	Widen existing tarmac surface / tarmac over soft surface for length of route and re-level where necessary.
7.2	Widen adjoining paths
7.3	Potential access into Beaumont Industrial Estate and connections to Ruscott Shops and Route 3 to be assessed at design stage.
	Pedestrian/cycle crossing over Southam Road (Route 5)

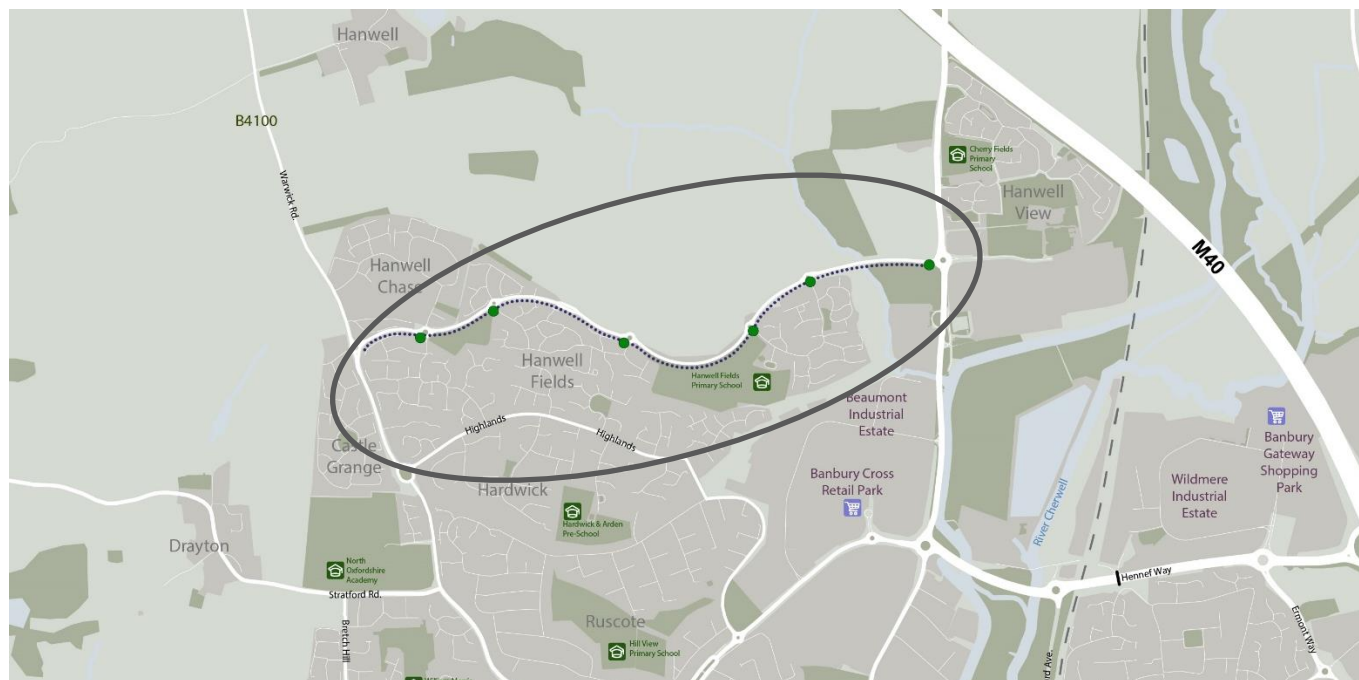
ROUTE 8

Dukes Meadow Drive

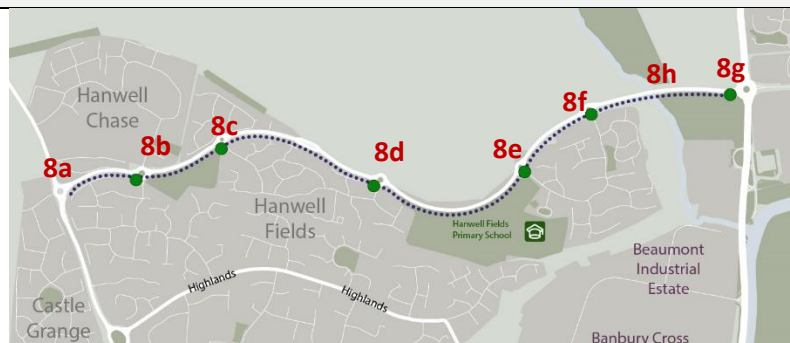
Between Warwick Road and Southam Road

The existing facilities to the south of Dukes Meadow Drive are segregated and of a high quality. Improved signage and surface treatments on the southern entries to the roundabouts giving priority to cyclists will increase safety. As further development takes place to the north of Dukes Meadow Drive equally good access and crossing points will need to be provided.

Route location:



Junction Reference and description



8a	Dukes Meadow Drive/ B4100 Warwick Road
8a	Dukes Meadow Drive/ Nickling Road/ Usher Drive
8b	Dukes Meadow Drive/ Watts Road/ Winter Gardens Way
8c	Dukes Meadow Drive/ Rosemary Drive
8d	Dukes Meadow Drive/ Lapsley Drive (west)
8e	Dukes Meadow Drive/ Lapsley Drive (east)
8f	Dukes Meadow Drive/ A423 Southam Road

Key 'trip generators' on Route

Schools (Hanwell Fields Primary School)

Route length

2.3km

Map Reference	Improvement Reference	Improvement
Link 8a to 8g	8.1	Dukes Meadow Drive: Widen existing surface using verge space and designate footway and cycleway via different surface colour or grass verge between footway and cycleway.
8b, 8c, 8d, 8e, 8f	8.2	Raised pedestrian/cyclist priority crossing at all junctions along route.

8h	8.2	Remove footway on north side over the bridge and shift carriageway north to continue footway and cycle track on southern side.
8g	8.3	Connect footway and cycle track to those on Southam Road and to the redesigned roundabout (see Route 5).

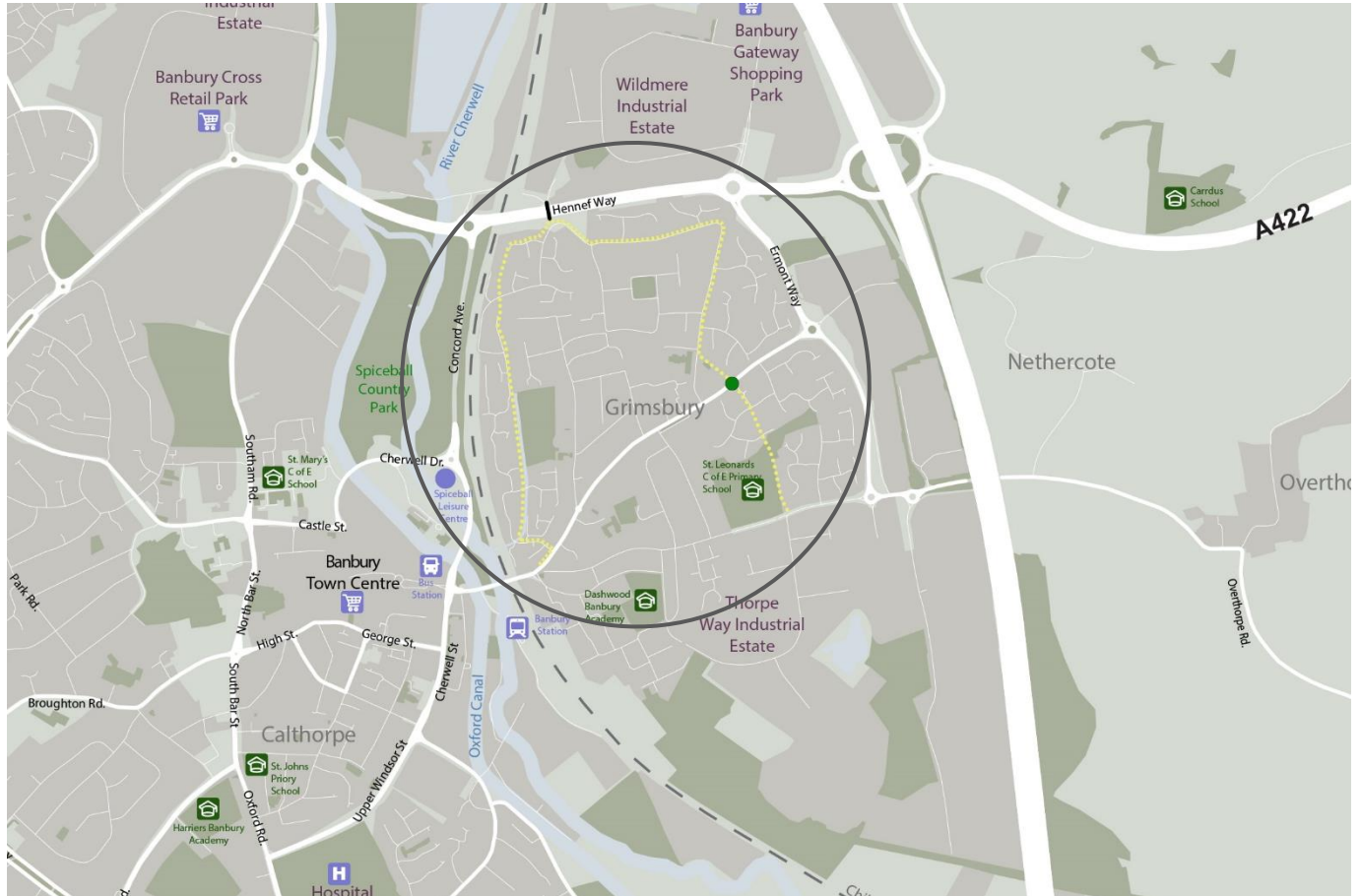
ROUTE 9

Grimsbury

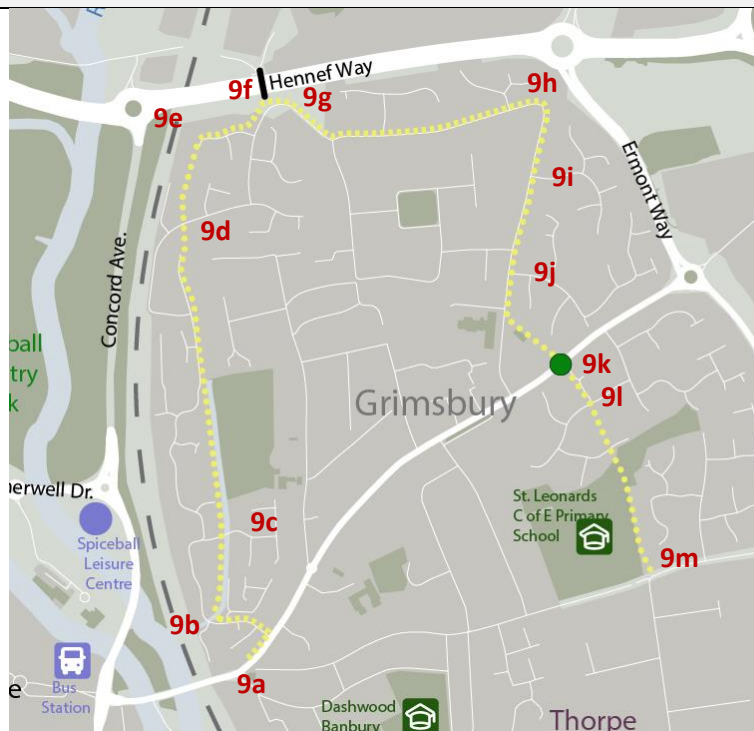
A circular route via Daventry Road, Grimsbury Green and West Street

A predominantly off-road route around Grimsbury which will connect the community to the primary school, shops and businesses. The route also connects with existing routes to Banbury Cross and Banbury Gateway retail parks via the underpass under Hennef Way.

Route location:



Junction Reference and description



9a	Merton Street/ Causeway/ Bridge Street/ Middleton Road
9b	Waterloo Drive/ Victoria Place
9c	Brunswick Place
9d	Fowler Road/ Iwatt Walk
9e	Ivatt Walk/ Dean Close
9f	Underpass at Hennef Way and connections from Dean Close
9g	Underpass at Hennef Way and connections from Grimsbury Green
9h	Daventry Road/ Manor Road
9i	Brinkburn Grove
9j	Delapre Drive
9k	Middleton Road
9l	Winchester Close
9m	Overthorpe Road

Key 'trip generators' on Route	Schools (St Leonards C of E Primary School), Retail (Banbury Gateway Retail Park), Employment (Wildmere Industrial Estate), Public Transport (Bus and Rail Station) and onward connectivity to town centre.
Bus considerations	Does not directly affect bus operations.
Route length	2.6km

ROUTE 9 Grimsbury

Map Reference	Improvement Reference	Improvement
9a	9.1	Merton Street/ Causeway/ Bridge Street Junction: Traffic lights with advanced stop line for cycle integrated with amended traffic lights at this junction – to be integrated with Route 10 proposals.
9b	9.2	Victoria Place: Widen drop kerb onto carriageway
Link 9b to 9e	9.3	Off-road path: Widen existing path where possible
9c	9.4	Brunswick Place: Raised pedestrian and cyclist priority crossings.
9d	9.5	Fowler Road: Raised pedestrian and cyclist priority crossings.
9f	9.6	From underpass: Raised pedestrian and cyclist priority crossing from underpass to opposite shared path
9g	9.7	From underpass: Kerb build-out onto carriageway from shared path with adjacent road hump to reduce vehicular speeds. Widen access and replace barriers with bollards
9h	9.8	Daventry Road/ Manor Road junction: Raised pedestrian and cyclist priority crossing onto shared path with supporting road humps to slow vehicular speeds
9i	9.9	Crossing of Brinkburn Grove: Raised pedestrian and cyclist priority crossings.
9j	9.10	Crossing of Delapre Drive: Raised pedestrian and cyclist priority crossings.
9l	9.11	Crossing of Winchester Close: Raised pedestrian and cyclist priority crossings.
Link 9h to 9m	9.12	Widen and resurface with surface dressing
9m	9.13	Build kerb out towards existing modal filter to increase pedestrian and cyclist visibility

Provisions are needed for both cyclists and pedestrians to cross the junction of Hennef Way/Ermont Way/Wildmere Road – This will be picked up in the next version of the LCWIP (see Banbury Cycling Network Map).

ROUTE 10

Overthorpe Road to Town Centre (from Nethercote)

Via Causeway and Bridge Street

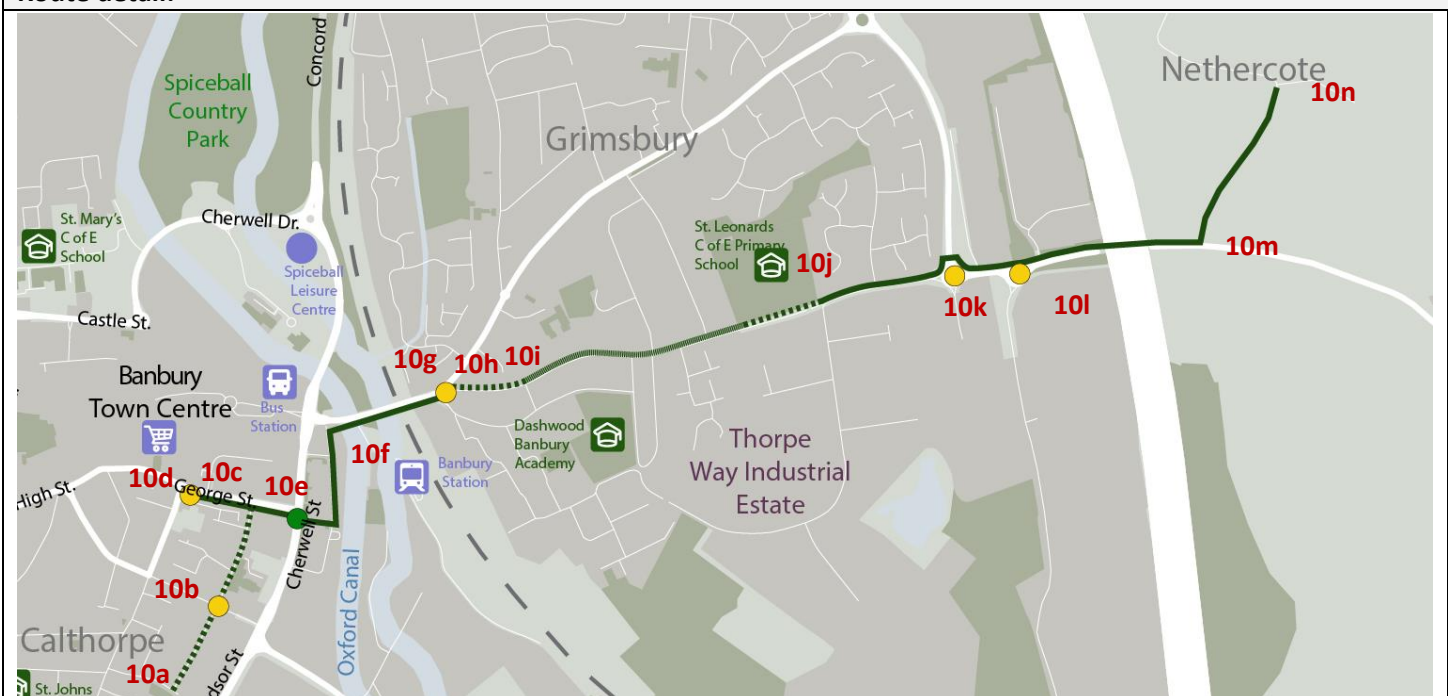
This radial route into the town centre will provide an important connection between the industrial and retail/ shopping areas and housing areas in Grimsbury and beyond. The Merton Street junction and sections along Bridge Street and George Street are challenging and will require careful design. This will require assessment through the Area Travel Plan and Banbury Masterplan – considering cycling, walking, bus and rail users.

Route location:



10a	Prospect Road
10b	Britannia Road/ Gatteridge Street
10c	George Street/ Gatteridge Street
10d	George Street/ Broad Street
10e	George Street/ Cherwell Street
10f	Lower Cherwell Street/ Bridge Street
10g	Bridge Street/ Merton Street/ Middleton Road
10h	Middleton Road/ Causeway
10i	Causeway/ Junction Road
10j	Overthorpe Road/ Thorpe Way
10k	Overthorpe Road/ Ermont Way/ Dorcas Road
10l	Overthorpe Road/ Chalker Way
10m	Overthorpe Road / Banbury Lane
10n	Nethercote (via Banbury Lane)

Route detail:



Key 'trip generators' on Route	Employment, town centre, public transport hubs (train and bus stations), Schools (St Leonards Cof E Primary, Dashwood Banbury Academy).
Bus considerations	George Street provides priority for buses and any proposals for this area must be considered in the wider context of the Area Travel Plan.
Route length	2.6km
Other	Banbury Area Travel Plan considerations: the future role and design of the roads along this route need assessing through the strategy work.

ROUTE 10		Overthorpe Road to Town Centre (from Nethercote)
Map Reference	Improvement Reference	Improvement
10a 10m	N/A	Joins with Route 11 Joins with Village Route 6 Could join with the canal towpath and station if bridge provided
10b	10.1	Amend priority from Gatteridge Street to Britannia Road. Add modal filter or introduce one-way operation to reduce traffic crossing Britannia Road.
Link 10b to 10c	10.2	Improve conditions for cycling – e.g. modal filter to reduce traffic levels, or make road one-way, expanding from existing nearby one-way roads.
10c	10.3	Consider provision of a pedestrian/cycle crossing west of Britannia Road to make town centre access easier for cyclists.
10d	10.4	Create space for cycleway on George Street (without hindering buses) – redesign junction with Broad Street.
Link 10d to 10e	10.5	Create space to continue cycleway – e.g. remove central hatching and right-turn lanes
Link 10e to 10f	10.6	Route through future redesigned Cherwell Street/Lower Cherwell Street corridor. Improve east/west pedestrian/ cycle crossing at the George Street/ Cherwell Street junction.
Link Bus station to 10g	10.7	This section through Bridge Street requires careful consideration and significant redesign. Consider construction of a cycle bridge alongside existing road/ pedestrian bridge over railway line and river. Possible extension of bridge over Bridge Street/Cherwell Street crossroads, subject to broader redesign of this area. A direct town centre cycling/ walking link is needed. This will need further consideration through an options' appraisal.
Bridge St/ Cherwell St	10.8	Consider short term improvements e.g. advanced stop lines for cyclists and pedestrian-friendly signal timings, to be considered as part of the wider Area Travel Plan.
10g	10.9	Redesign junction and integrate cycle phase into traffic lights. Modify parking restrictions to prevent vehicles blocking access for pedestrians and cyclists.
10h	10.10	Middleton Road/ Causeway: Amend existing modal filter to allow pedestrians and cyclists to pass through more easily
10j	10.11	Overthorpe Road/ Thorpe Way: Amend existing modal filter to allow pedestrians and cyclists to pass through more easily and review the design of this carriageway to give pedestrians and cyclists priority; prevent parked vehicles obstructing cycling and walking routes, and stop long vehicles overhanging the path when turning.
Link 10i to 10j	10.12	The options for this link need assessing to ensure safe travel for those walking and cycling while also enabling suitable access to the industrial estate. Consider narrowing the carriageway to widen footways; deal with illegal parking; consider westbound traffic only between Thorpe Way and Junction Road (with an eastbound contraflow cycle lane), with eastbound motorists using Merton Street (already one-way).

Link 10j to 10k	10.13	Widen shared footway/cycleway – e.g. use verge space. At Overthorpe Road/ Westminster Way junction: Modify to give pedestrians priority over turning vehicles.
Link From west of 10j to 10l	10.14	Overthorpe Road: Prevent parking on north side by HGVs to increase visibility for cyclists.
Link 10k to east of 10m	10.15	Amend highway design to continue cycle route and provide segregated off-road cycle route ensuring that the shared use path on the north side can be easily accessed by westbound cyclists. If cyclists are required to cross east-bound traffic, suitable refuges and dropped cars will be required.
10k	10.16	Overthorpe Road/ Ermont Way/ Dorcas Road: Redesign roundabout to promote pedestrian and cyclist safety and priority, and enable cyclists from the south to easily access the shared use path on the north side. Introduce signalised pedestrian/ cycle crossing on Ermont Way.
10l	10.17	Overthorpe Road/ Chalker Way: Redesign roundabout to promote pedestrian and cyclist safety/priority and enable cyclists from the south to easily access the shared use path on the north side. Introduce signalised pedestrian/ cycle crossing on Overthorpe Road to allow safe access to Chalker Way.
Link 10l to 10m	10.18	Eastbound cyclists need to be segregated - a new pedestrian and cycle bridge alongside existing vehicle bridge over the M40 is required. Other options could be considered, including narrowing the carriageway but this requires assessment.
Link 10m to 10n	10.19	Provide a connection from Nethercote – potential for a circular route could be considered

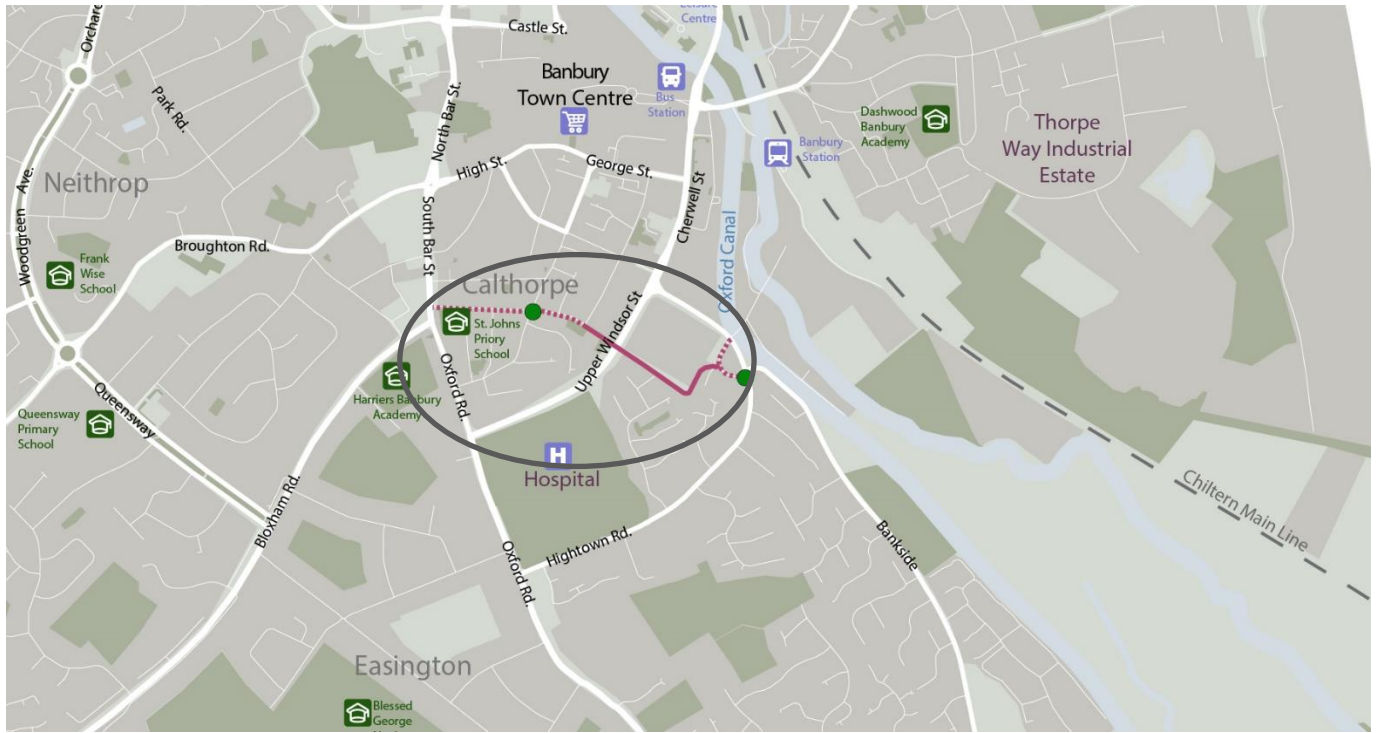
ROUTE 11

St John's Road to Lambs Crescent

Via Prospect Road and the overbridge

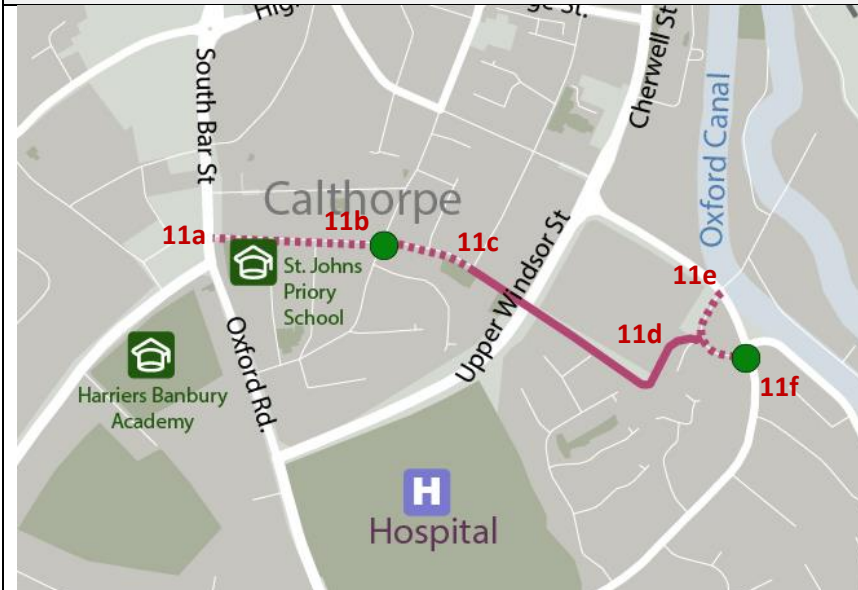
This route between Oxford Road and Hightown Road will link residents with schools, retail, community facilities and the station. The detailed design at each end of the route will need to be discussed with residents and the section along Green Lane will need to consider the ecology along that corridor. On-street car parking creates narrow pinch-points on this route and will need to be designed in consultation with the local community.

Route location:



Junction Reference and description

11a	Oxford Road/ St John's Road
11b	Newland Road/ Old Parr Road
11c	St Johns Road/ Britannia Road/ Prospect Road
11d	Lambs Crescent
11e	Lambs Crescent/Tramway Road/ Hightown Road
11f	Lambs Crescent/ Hightown Road



Key 'trip generators' on Route

Hospital, Schools (St Johns Priory School, Harriers Banbury Academy), **Leisure** (Oxford Canal), **Retail/ town centre, Rail station**

Bus considerations

Does not impact bus services directly. The short distance at the eastern end, and the treatment of the Swan Close Road/Horton View/Bankside junction

	area will need careful consideration. The route will cross a north-south bus corridor, that is intended to see considerable increase in bus movements.
Route length	875 metres

ROUTE 11 St John's Road to Lambs Crescent

Map Reference	Improvement Reference	Improvement
Link 11a to 11b	11.1	St Johns Road: Improve conditions for cyclists by removing or reducing parking and/or make road one-way westbound for vehicles linking with existing surrounding one-way roads e.g. the parking problems at the junction of Britannia and Prospect Roads impact cycles.
11b	11.2	St Johns Road/ Old Parr Road junction: Pedestrian and cyclist priority crossing.
11c	11.3	St Johns Road/ Britannia Road junction: Bollards to prevent parking at end of path and maintain accessibility for pedestrians and cyclists.
Link 11c to 11d	11.4	St John's Road: Widen path where possible.
Link 11e to 11f	11.5	Lambs Crescent: Is usually congested by too many parked cars and requires parking restrictions - a general parking review will be required to progress this route but consider making Lambs Crescent one-way for vehicles to improve conditions for pedestrians and cyclists.
Link 11d to 11e	11.6	Link onto Tramway Road and Bankside: Swan Close Road/ Bankside/ Tramway will need to be carefully assessed. Signalised junctions are proposed but zebra crossings could also be considered, particularly across Bankside.

ROUTE 12

Salt Way

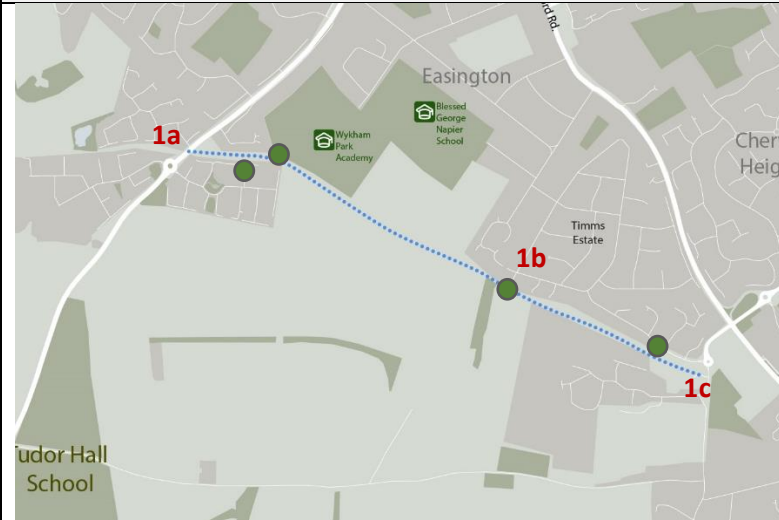
From Bloxham Road to White Post Road

This popular green route will connect residential areas and link to schools, local shops and businesses, as well as leisure facilities. The ecology in the area will be a key consideration and the route will need to retain its rural nature.

Route location:



Junction Reference and description



1a	A361 Bloxham Road
1b	Elmscote Road
1c	White Post Road
●	Widen accesses on to path

Key 'trip generators' on Route	This is an off-road route that links residential areas with schools (Tudor Hall School, Banbury Academy, Blessed George Napier, Bishop Loveday CofE Primary School), local amenities/ facilities (Bodicote Village Hall) and sports facilities (Banbury Cricket Ground)
Bus considerations	No impact as completely segregated from vehicular traffic.
Route length	1.8km

Map Reference	Improvement Reference	Improvement
Link 1a to 1c	12.1	Change PRow status to Public Bridleway. Add hard surface and add low-level lighting to improve safety and comfort for users.
1a, 1b, 1c	12.2	Install bollards or similar to prevent access by motorised vehicles.
	12.3	Widen accesses onto path: Langsdown Close, Parsons Piece, Elmscote Road and Sycamore Drive.

ROUTE 13

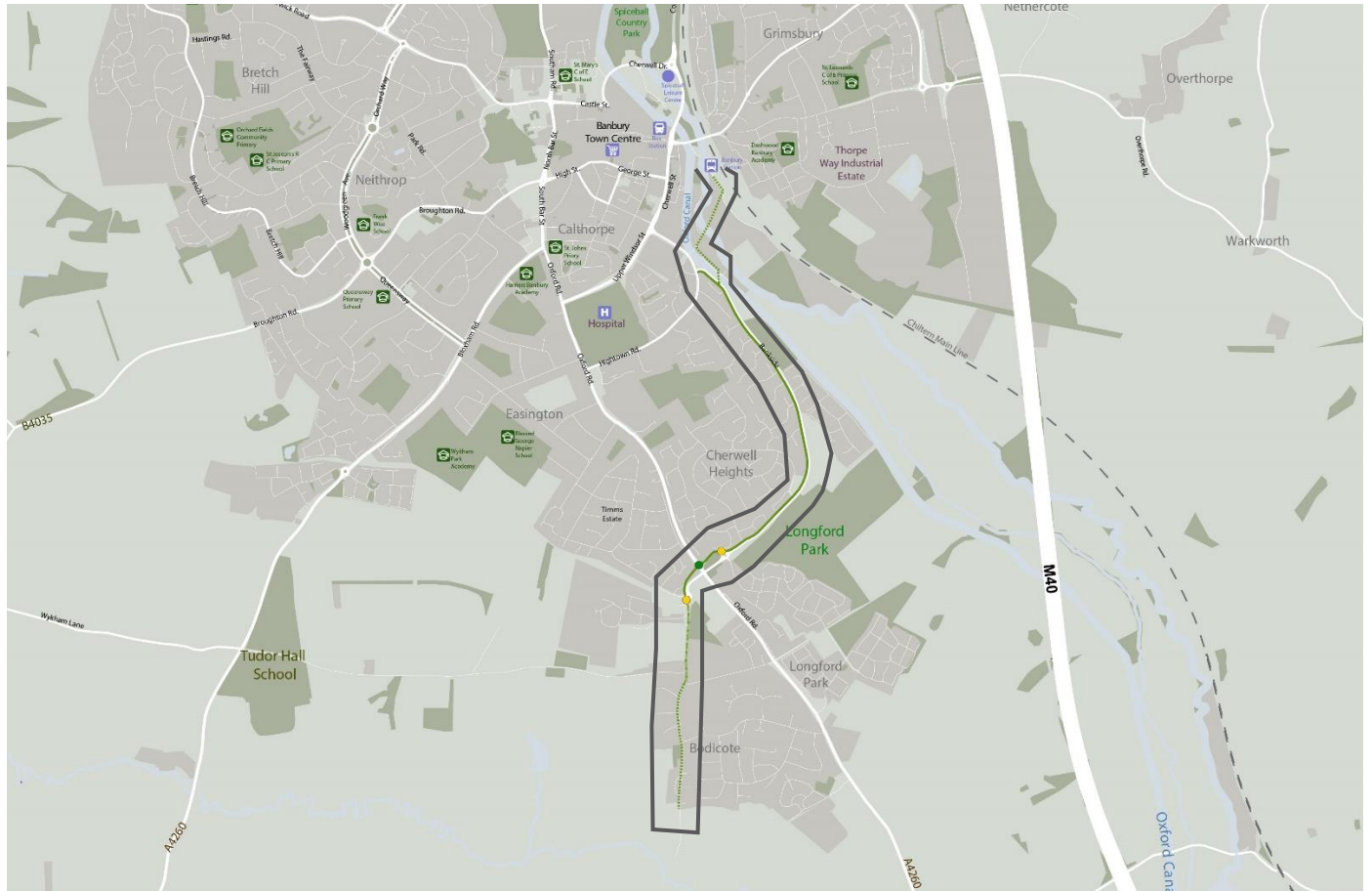
Railway Station to Bodicote

Via Bankside and White Post Road

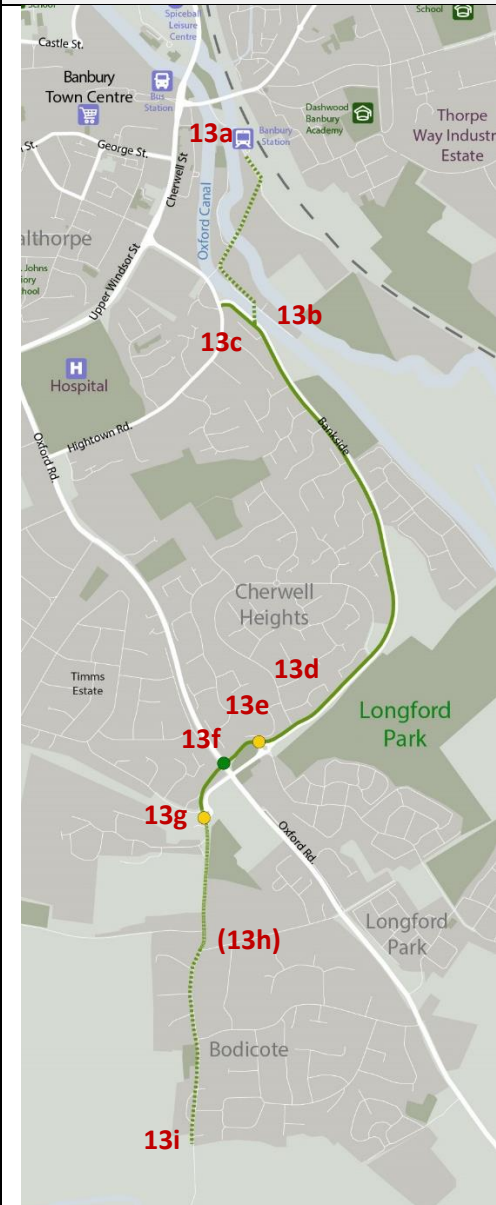
This north-south route would connect residential areas with schools, businesses, community facilities and leisure locations, as well as the station. The proposals for this route need to be considered holistically through the Area Travel Plan and Masterplan work in terms of potential impacts on all network users, in particular bus services.

Cars parked in existing cycle lanes impede cyclists on Bankside.

Route location:



Key 'trip generators' on Route	Railway station, Retail, Schools (Bishop Loveday C of E Primary School), Services/ Community (Cherwell District Council offices, Bodicote Village Hall), Sports/Leisure (Banbury Cricket Club)
Bus considerations	Bankside is a busy bus route, and footways are generally on the western side of Bankside only, making walking routes to bus stops difficult.
Route length	3.5km
Other	Banbury Area Travel Plan considerations: The future role and therefore design of this route needs further consideration for all modes in comparison with other routes such as Oxford Road and the canal towpath.

Junction Reference and description		
	13a	Railway Station
	13b	Canal
	13c	Bankside/ Hightown Road
	13d	Bankside/ Chatsworth Drive
	13e	Bankside/ Longford Park Road
	13f	Oxford Road
	13g	White Post Road
	(13h)	Broad Gap/ Canal Lane
	13i	Deer's Farm

Map Reference	Improvement Reference	Improvement
Link 13a to 13b	13.1	Tramway: Segregated cycle provision required along Tramway Road and Station Approach. The Tramway Road scheme (currently in detailed design) had to provide facilities within the space available but opportunities should be sought to improve this provision through development.
13b	13.2	New pedestrian/cycle bridge over canal. A toucan crossing would be necessary on Bankside to access the new bridge.
13c	13.3	Hightown Road: Crossing over Hightown Road (as part of separate proposed improvement scheme) to connect with Route 12.
Link 13c to 13e	13.4	Bankside: Improve comfort and safety of cycle route e.g. through protected cycleway within verge. In the interim the existing cycle lane should be enforced to prevent cars parking in it.
13d	13.5	Bankside: Amend gates from paths to the south to improve ease of access by all users
Link 13e to 13f	13.6	Bankside: Cycleway to roundabout and raised priority crossing across roundabout
13f	13.7	Bankside: The proposals suggest new crossings to continue route over Oxford Road. However, work on this route will need to consider both grade-separated (bridge) options and at-grade (ground level) solutions. The options appraisal

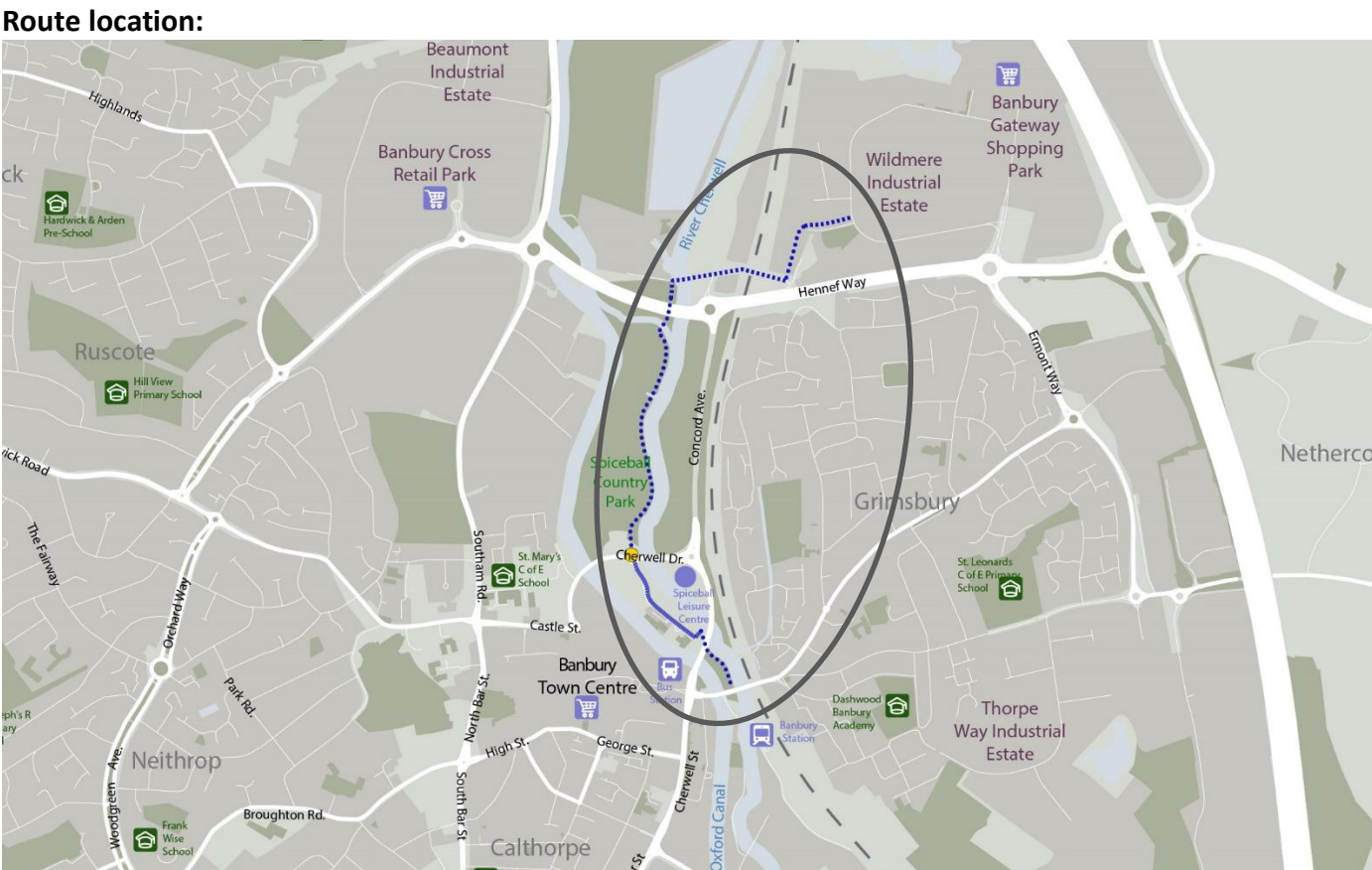
		needs to consider all road users, and the options should include an assessment of improvements to Broad Gap/ Canal Lane.
Link 13f to 13g	13.8	Bankside: Widen path.
Link 13 g to 13i	13.9	High Street/ Church Street: Continue cycle route onto new path on White Post Road.

ROUTE 14

Wildmere Industrial Estate to Bridge Street

Via Spiceball Park

This route connects the town centre, leisure facilities, green space and the Wildmere Industrial Estate, and links with the existing routes on the northern side of Hennef Way which provide access to the Banbury Cross and Banbury Gateway Retail Parks. The route includes the new cycle path along the River Cherwell between Spiceball Park and the car park by The Mill.



Junction Reference and description		
	14a	Jugglers Close Wildmere Road
	14b	Jugglers Close/ Mead Farm Lane
	14c	Mead Farm Lane/ Grimsbury Green
	14d	Grimsbury Green (Spiceball Park)
	14e	Spiceball Park
	14f	Cherwell Drive

Key ‘trip generators’ on Route	Employment (Wildmere Industrial Estate), Retail (Banbury Gateway Shopping Centre), Leisure/ Sport (Spiceball Park, Leisure Centre), Town Centre (retail, leisure, culture), Public transport (bus and train stations)
Bus considerations	No impacts.
Route length	1.9km

ROUTE 14 Wildmere Industrial Estate to Bridge Street		
Map Reference	Improvement Reference	Improvement
14b	14.1	Raised crossing warning of pedestrian and cycle path
Link 14c to 14d	14.2	Traffic calming/ separate cycleway and footpath.
14e	14.3	Amend gate to allow cyclists to pass through easily.
Link 14e to 14f	14.4	Improve the segregation of pedestrians and cyclists.
14f	14.5	New path into riverside car park.
14f	14.6	Redesign junction to improve ease and safety for pedestrians and cyclists.
14g	14.7	Widen path down from Bridge Street.

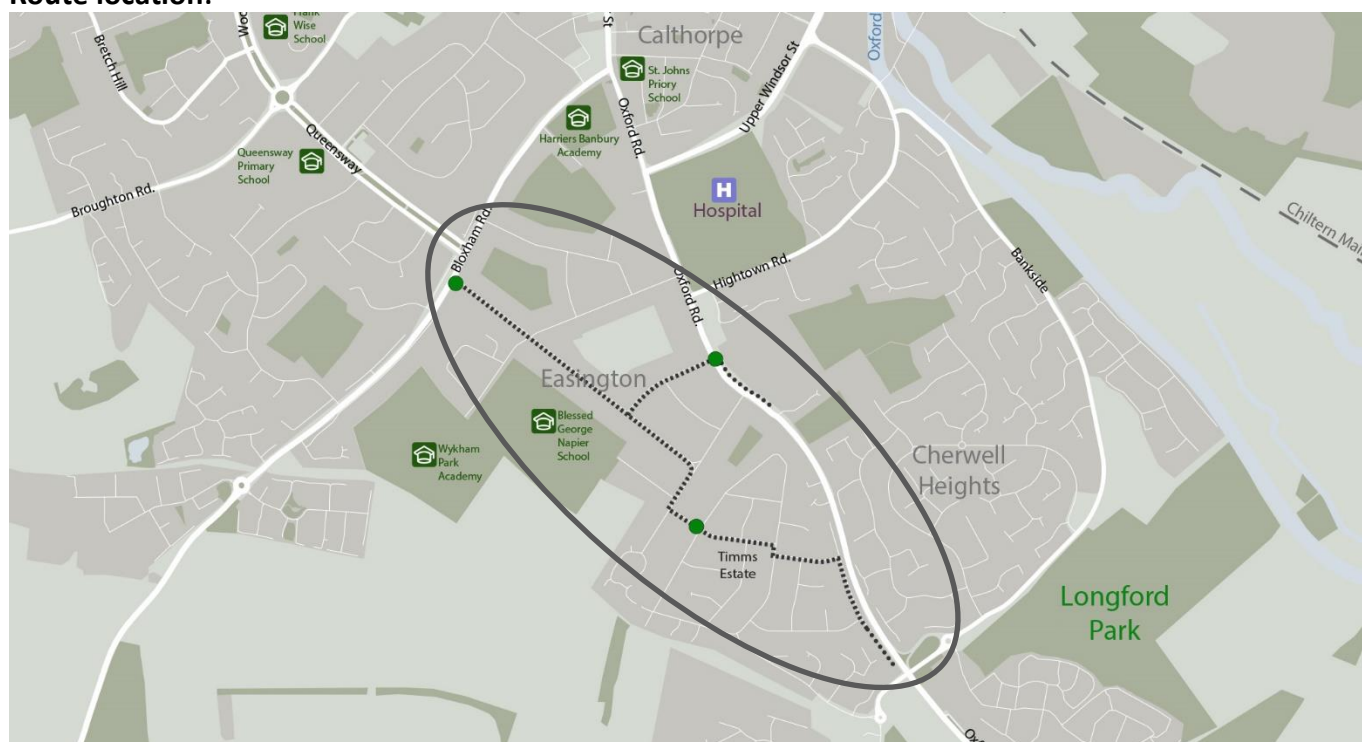
ROUTE 15

Easington

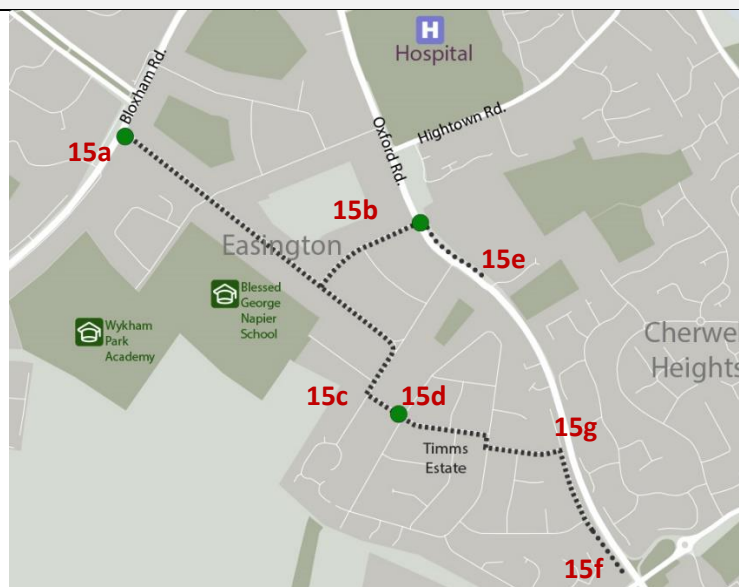
Springfield Avenue, Farmfield Road and Timms Road

This largely residential area includes two secondary schools, a care home, shops and leisure facilities. There are significant movements of pupils between Cherwell Heights and Blessed George Napier/ Wykham Park Academy. The redesign of this area needs consultation with local people, the schools and wider consideration around bus routes, rat running and overall impact. Horton View and Grange Road will also be considered in this wider review. There is a need to reduce traffic in this area by addressing rat running. Modal filters were proposed but the consultation highlighted the need for consideration of impacts for all modes.

Route location:



Junction Reference and description



15a	Springfield Avenue/Bloxham Road
15b	Farmfield Road/ A4260 Oxford Road
15c	Grange Road/ Timms Road
15d	Timms Road/ St Annes Road
15e	Grange Road/ Oxford Road
15f	Laburnam Grove (south of Oakland Road)
15g	Laburnam Grove/ Mayfield Road

Key 'trip generators' on Route

Schools (Blessed George Napier, Banbury Academy and Wykham Park Academy)

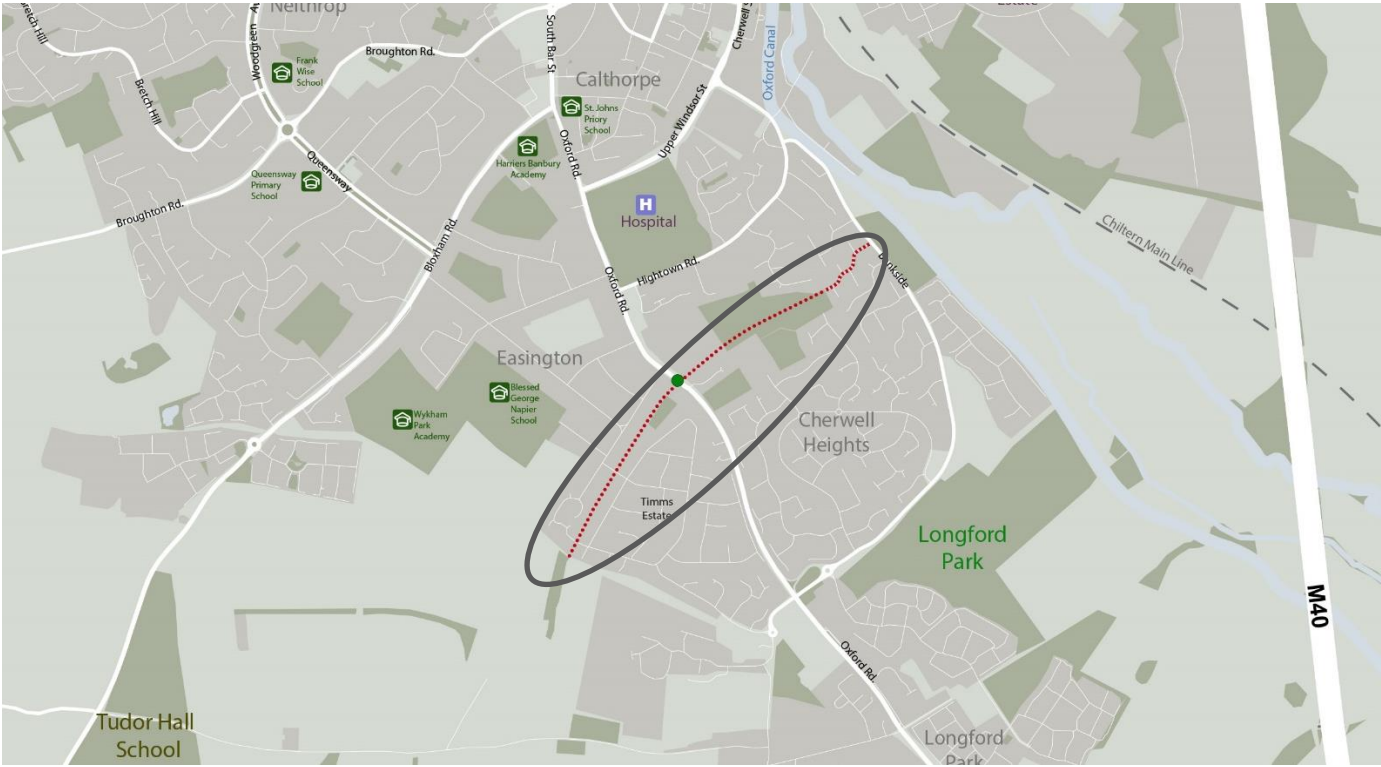
Bus considerations		Consider a bus gate on Horton View when considering impact as part of Area Travel Plan.
Route length		2.2km
ROUTE 15 Easington		
Map Reference	Improvement Reference	Improvement
15a	15.1	Springfield Avenue/ Bloxham Road junction: Pedestrian and cyclist priority crossing.
Link 15b to south of 15e	15.2	Oxford Road: Widen shared footway/cycleway (e.g. remove central hatching and/or narrow vehicle lanes) and controlled crossing point to link to Route 16.
Link 15g to 15f	15.3	Laburnam Grove: Widen surface of existing path and improve access onto Laburnum Road.
	15.4	This route provides a safe option but is not on the natural desire line for cyclists from the south of Banbury or from Adderbury who wish to access the town centre. The next iteration of the LCWIP will consider improvements to Oxford Road and into the town centre.

ROUTE 16

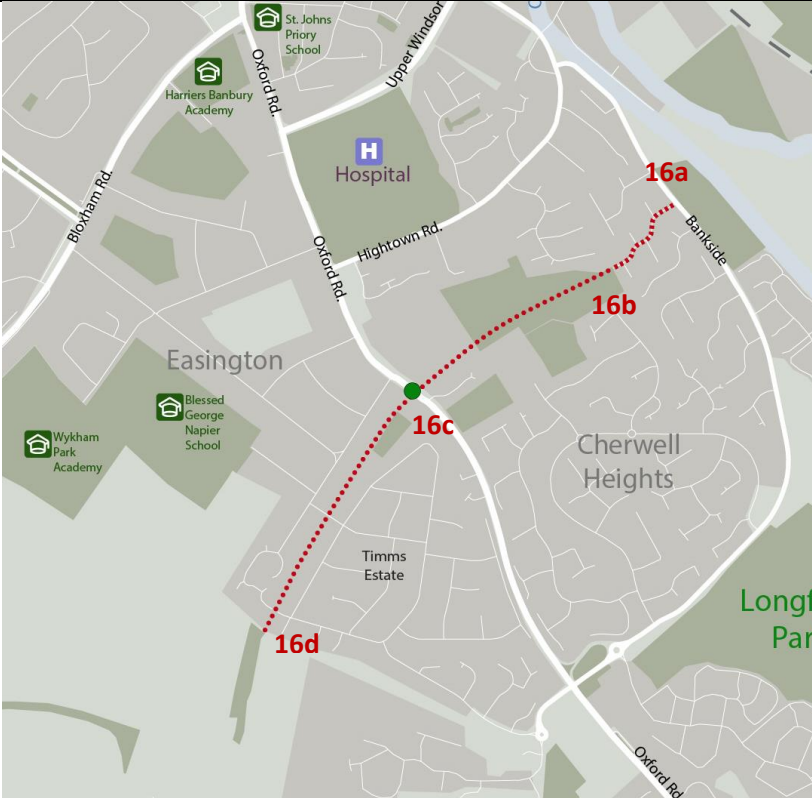
Bankside to Salt Way
Via St Louis Meadow Park

An off-road route that connects residential areas with schools, retail and local businesses.

Route location:



Junction Reference and description



16a	Bankside, Coppice Close
16b	Coppice Close
16c	Oxford Road
16d	Timms Road

Key 'trip generators' on Route

Schools (Blessed George Napier, Wykham Park Academy, St Johns Primary, The Grange Primary), Sainsburys, Easington Sports Clubs

Bus considerations	Oxford Road is a principal bus route linking Banbury with Adderbury, Kidlington and Oxford
Route length	1.5km
Other	Will need to agree this route with Banbury Town Council to allow cycling through public parks. The proposal for another physical crossing on Oxford Road will need to be assessed as part of a review of that corridor.

ROUTE 16		Bankside to Salt Way
Map Reference	Improvement Reference	Improvement
16b	16.1	Coppice Close: Widen access onto Coppice Close and add drop kerb
Link 16b to 16e	16.2	Coppice Close to Saltway: Improve and widen surface, add lighting
16c	16.3	Oxford Road: Pedestrian and cyclist priority crossing – between Grange Road and The Hawthorns.
	16.4	Consideration will need to be given to the effects of wet weather on the usability of the paths

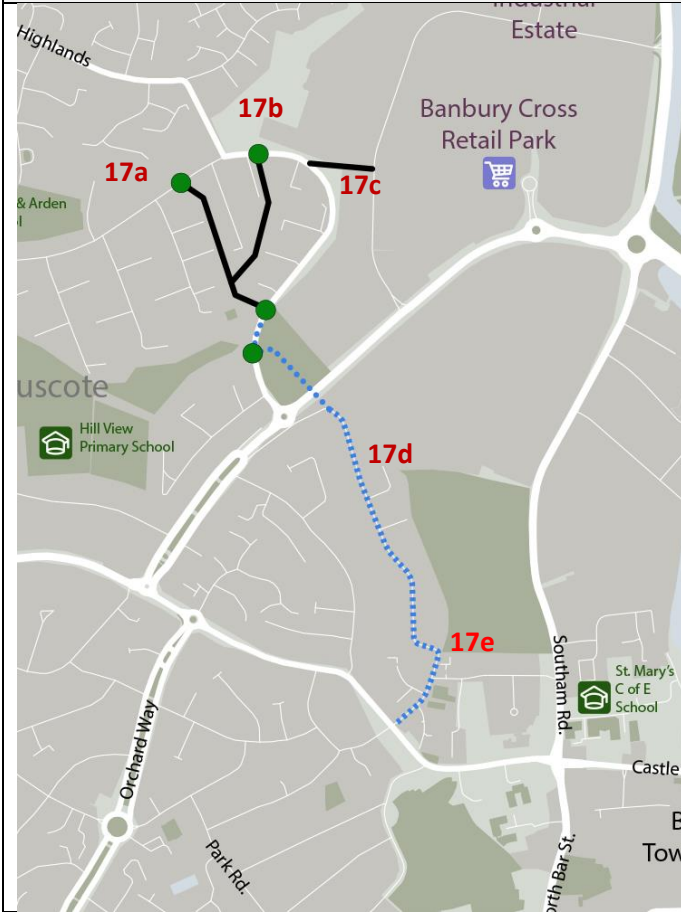
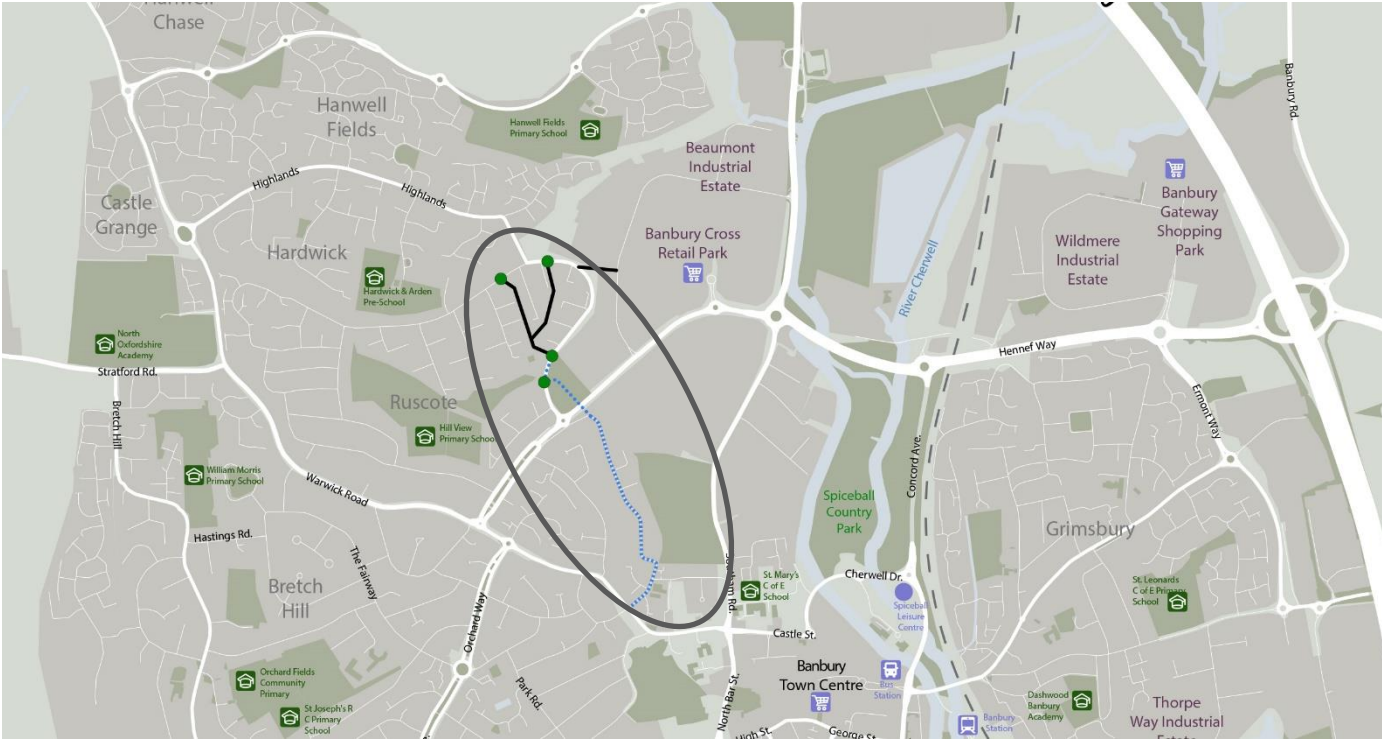
ROUTE 17

Longelandes Way to Warwick Road

Via Nursery Drive and Foundry Street

A north-south connecting route to link residential areas with schools and local businesses. Nursery Lane, a restricted byway, offers an alternative route to Nursery Drive.

Route location:



Junction Reference and description	
17a	Longelandes Way
17b	Longelandes Way
17c	Longelandes Way to Beaumont Road
17d	Ruscot Avenue to Nursery Lane
17e	Nursery Lane/ Cope Road/ Foundry Street

Key ‘trip generators’ on Route	Hill View Primary School, retail and businesses, community facility (cemetery), Orchard Health Centre
Bus considerations	Impact on bus services of priority crossings for pedestrians and cyclists on Longelandes Way and Ruscote Avenue to be assessed in design stage as these are key routes for buses.
Route length	1.8km

ROUTE 17		Longelandes Way to Warwick Road
Map Reference	Improvement Reference	Improvement
17a, 17b	17.1	Priority pedestrian/cyclist crossings over Longelandes Way
17c	17.2	Upgrade existing footpath between Longelandes Way and Beaumont Road to shared cycle path
17d	17.3	Identify measures to reduce traffic levels on Nursery Drive and Foundry Street so that cyclists use quiet streets. Alternatively, review feasibility of routing via Nursery Lane. Would require widening of existing hard surface.
17e	17.5	To reduce traffic levels traffic management measures will be considered, being mindful of the access needs of emergency services.

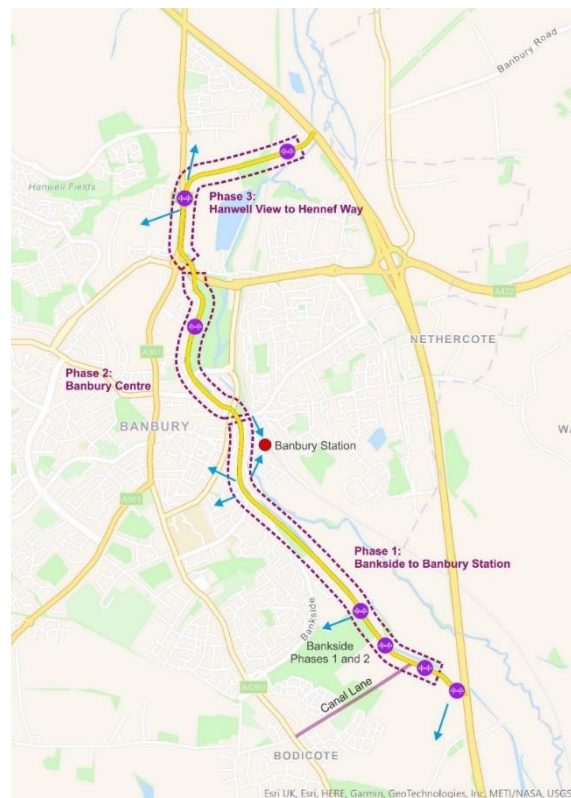
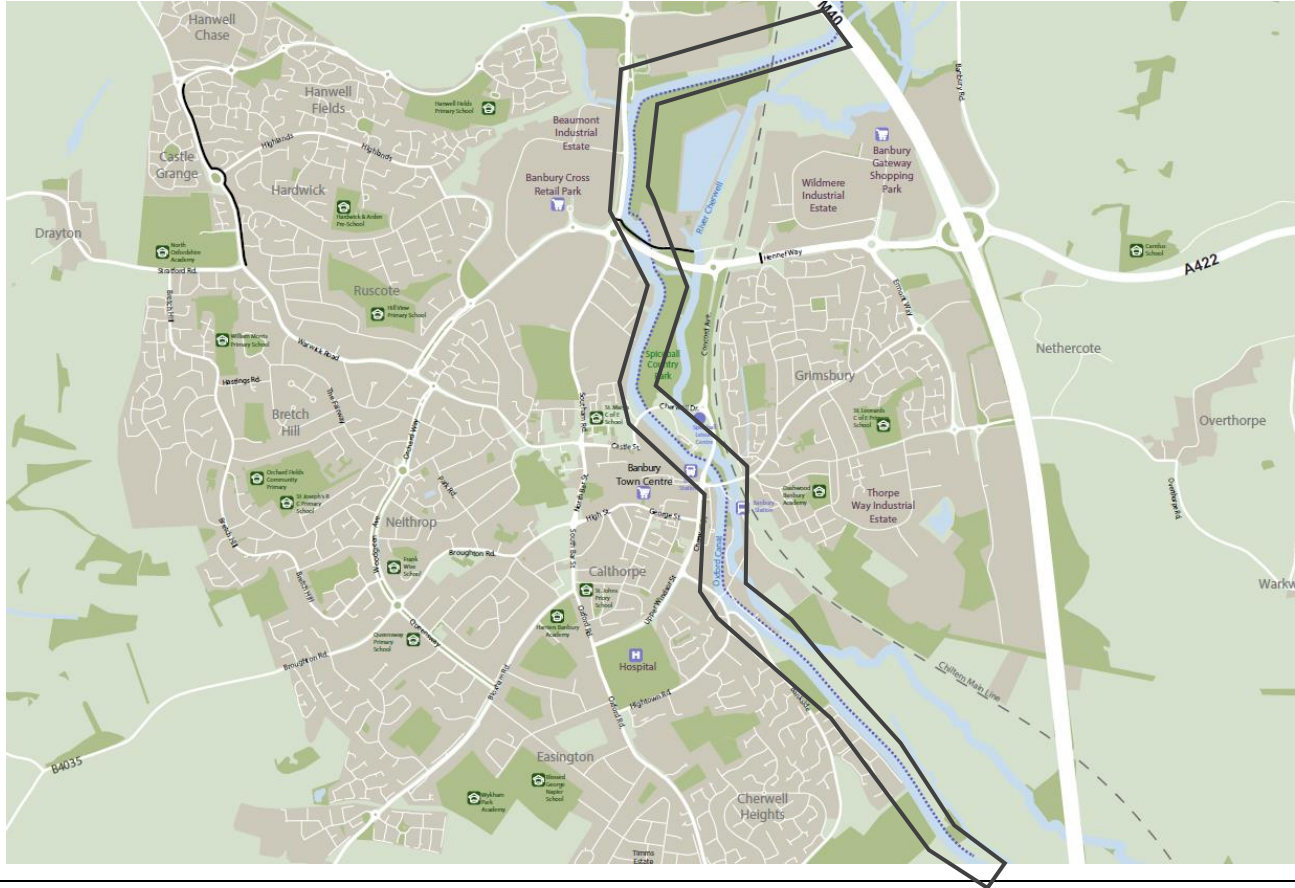
ROUTE 18

Canal Towpath

From M40 north of Wildmere Industrial Estate to M40 east of Longford Park

Oxford Canal runs north-south through the town and links residential areas including those at Bankside/Longford Park with the business and retail parks on Southam Road, the station and the town centre. The canal also provides a key route for leisure travel.

Route location:



Oxfordshire County Council has been working with the Canal & River Trust and Cherwell District Council to improve the towpath and its bridges to increase its use for cycling and walking. This has included exploring options to improve access to the towpath from the railway station to provide direct access from the station to the town centre without the need to cross any roads. Potential improvements for the towpath include surface material upgrades, towpath improvements and pedestrian/ cycle bridges:

Phase 1 - Bankside to Banbury Station: Creating a new cycle route from the new residential area at Bankside to Banbury Station, avoiding the busy roads around Banbury. Options for increasing the number of accessible crossing points will be explored.

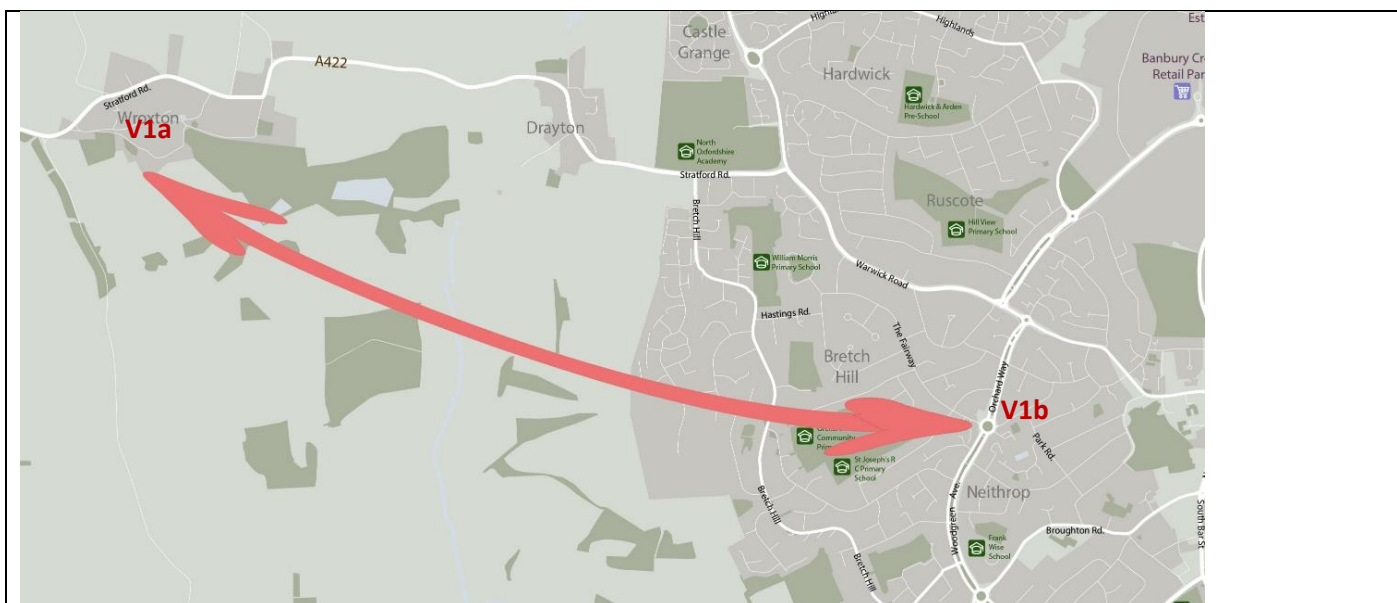
Phase 2 - Banbury Centre: To include good links from the canal to Banbury Rail Station and the town centre. Provide a bridge to connect with Lower Cherwell Street and Route 10. Consider public realm enhancements to the area around Tooleys Boatyard. There are large iron gates and a panel currently blocking access for walking along the western side of the canal.

Phase 3: Hanwell View to Hennef Way: As with Phase 1, this would provide excellent connections to residential areas in North Banbury as well as to green spaces, parks and the Southam Road businesses.

VILLAGE ROUTE 1 Wroxton to Woodgreen Avenue

NOTE: If there is a need for off-highway routes, these would be discussed with landowners

Approximate route location:

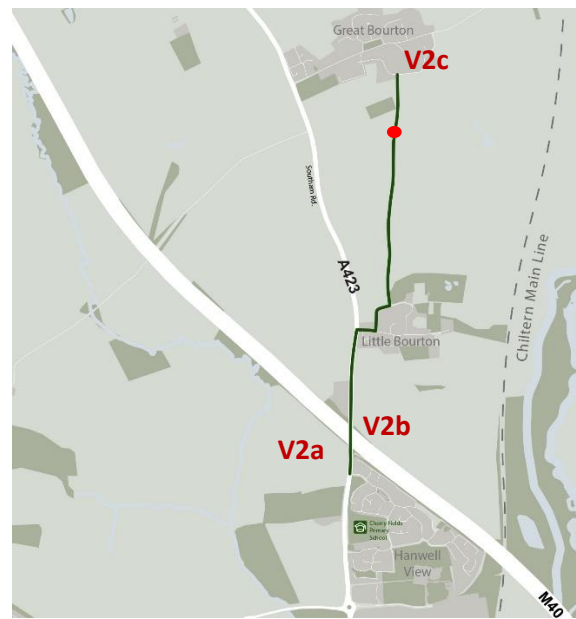
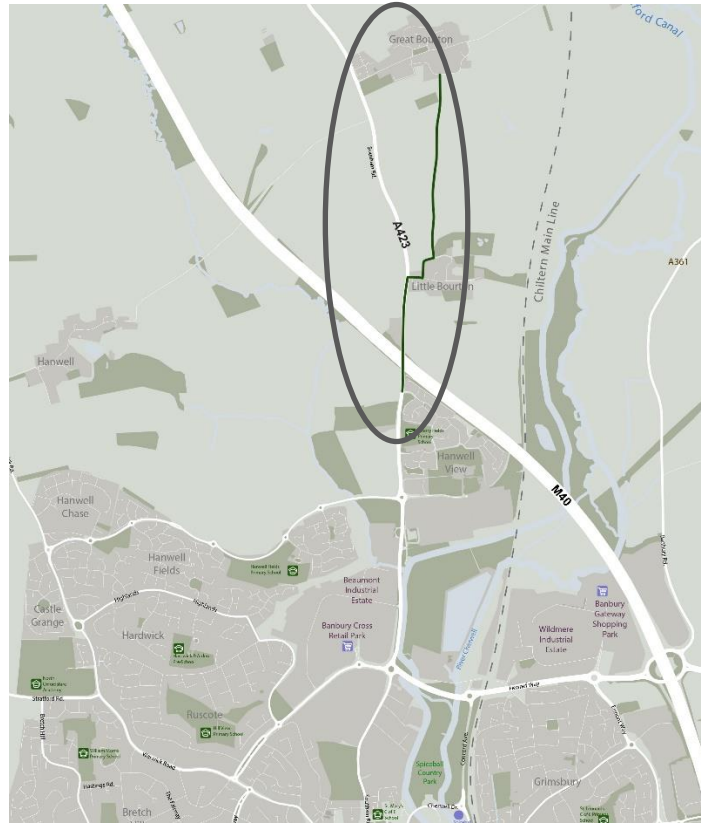


Map Reference	Improvement Reference	Improvement
Link V1a t V1b	V1.1	Identify a route from Wroxton to Woodgreen Avenue utilising public footpaths and bridleways as much as possible in discussion with landowners. Aim to provide all weather hard surfacing, with consideration for equestrian also.

VILLAGE ROUTE 2 Great Bourton and Little Bourton To Hanwell View

NOTE: Routes across private farmland are indicative and the preferred routes would be discussed with landowners.

Route location:

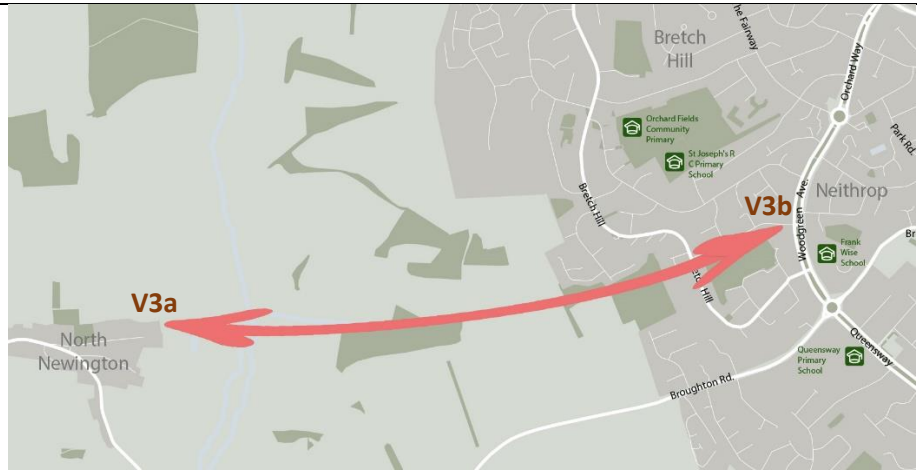
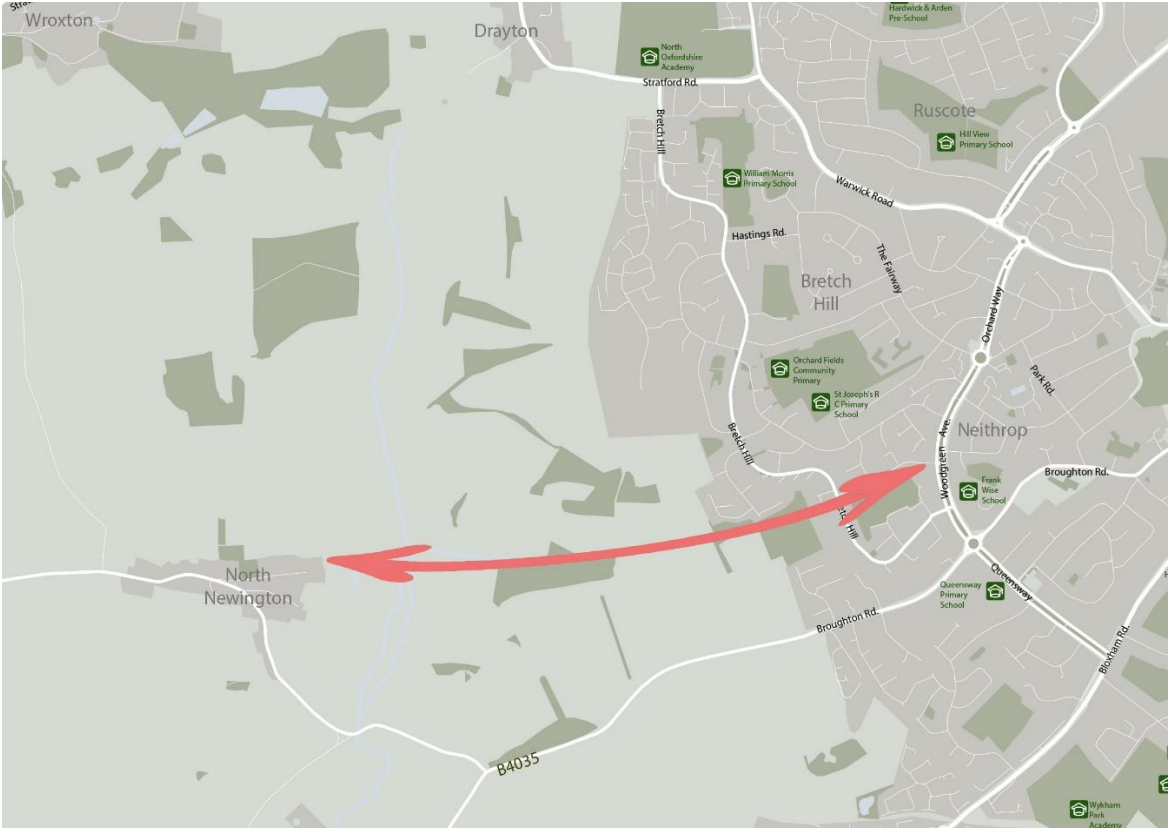


Map Reference	Improvement Reference	Improvement
Link V2a to V2c	V2.1	Two-way cycle track to Little Bourton, removing northbound right-turn lane at Chapel Lane to allow floating bus stop, reduce speed limit to at least 40mph (consider 30mph)
V2a	V2.2	Narrow lanes and use verge space to continue two-way cycle track along Southam Road. Reduce speed limit to 30mph with gateway features representing change to residential area
V2b	V2.3	Remove western footway along bridge and narrow lanes to provide space to continue cycle track. The bridge barrier would need increased height.
V2c	V2.4	Connect into Little Bourton. In future consider a further connection to Chacombe.

VILLAGE ROUTE 3 North Newington
To Neithrop

NOTE: Routes across private farmland are indicative and the preferred routes would be discussed with landowners.

Route location:



Map Reference	Improvement Reference	Improvement
Link V3a to V3b	V3.1	Identify a route from North Newington to Neithrop utilising public footpaths and bridleways as much as possible in discussion with landowners. Aim to provide all weather hard surfacing, with consideration for equestrian also.

VILLAGE ROUTE 4 Broughton to Parsons Piece

NOTE: Routes across private farmland are indicative and the preferred routes would be discussed with landowners

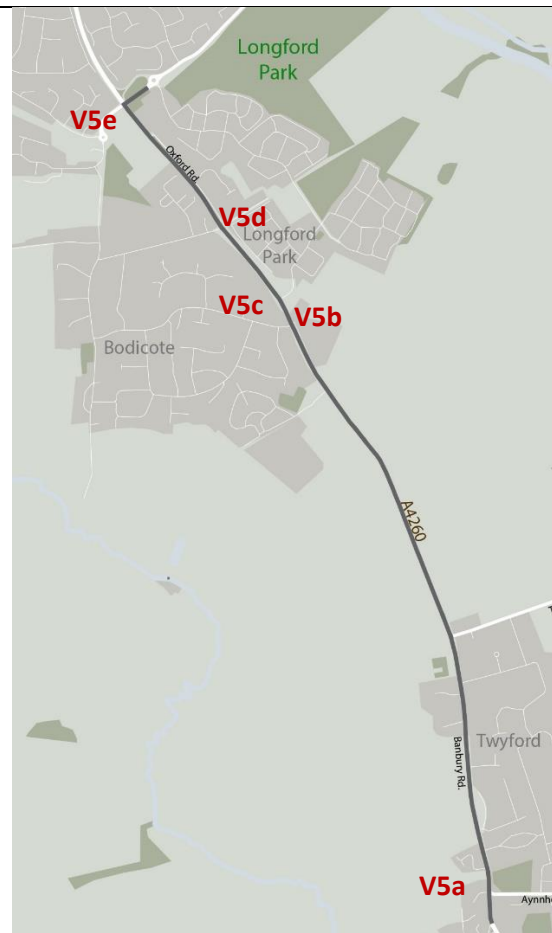
Route location:



Map Reference	Improvement Reference	Improvement
Link V4a to V4b	V4.1	Identify a route from Broughton to Parsons Piece utilising public footpaths and bridleways as much as possible in discussion with landowners. Aim to provide all weather hard surfacing, with consideration for equestrian also.

VILLAGE ROUTE 5 Adderbury

Route location:

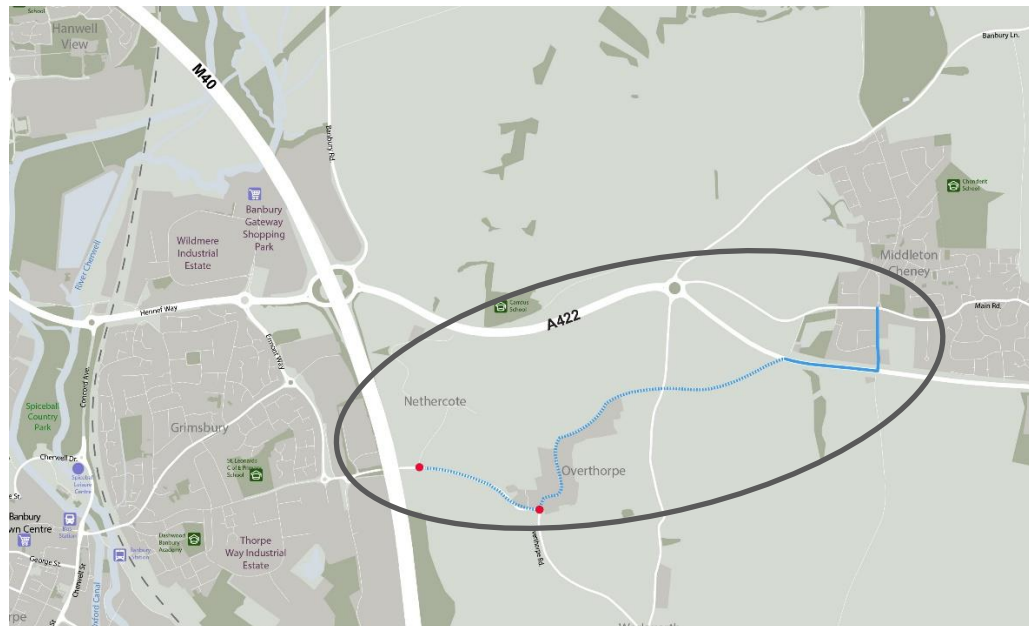


Map Reference	Description
V5a	A4260 Banbury Road/ High Street (Twyford)
V5b	A4260/ Weeping Cross
V5c	A4260/ Longford Park Road
V5d	A4260/ Canal Lane
V5e	A4260/ Bankside junction

Map Reference	Improvement Reference	Improvement
Link V5a to V5b	V5.1	Use verge space and narrow vehicle lanes to provide cycle path
Link V5b to 5c	V5.2	Add cycle phase into traffic signals and/or narrow vehicle lanes to continue cycle route
Link V5c to V5d	V5.3	Route on existing path, widen where possible
Link V5d to V5e	V5.4	Route on parallel access roads/ use verge space.

VILLAGE ROUTE 6 Middleton Cheney

Route location:



Commentary

This route from Middleton Cheney to Banbury is critical for safe access to Banbury. This route links in with cross-boundary greenways being discussed with South Northants and Buckinghamshire. **See Route 10 for the link with Nethercote and onwards along A422 from Banbury Lane into Banbury.**

Map Reference	Improvement Reference	Improvement
Link V6a to V6b	V6.1	Lighting
V6b	V6.2	Widen drop kerb
Link V6b to V6c	V6.3	Remove chicanes, add lighting, widen surface where possible – ensure accessibility maintained for mobility scooters and cargo bicycles/tricycles.
V6c	V6.4	Improve access from bridleway; would require safe crossing considerations. Improve crossing of the A422 – lighting, a central refuge, and other measures to be considered.
Link V6c to V6d	V6.5	Resurface, lighting
V6d	V6.6	Traffic calming to reduce speeds of vehicles approaching from north and south, lighting, consider adding a central pedestrian refuge to make crossing safer.
V6d to V6e	V6.7	Reduce to 30mph, traffic calming, lighting – may require a segregated lane, at least for the uphill section.

VILLAGE ROUTE 7 Bloxham to Bodicote

NOTE: Routes across private farmland are indicative and the preferred routes would be discussed with landowners

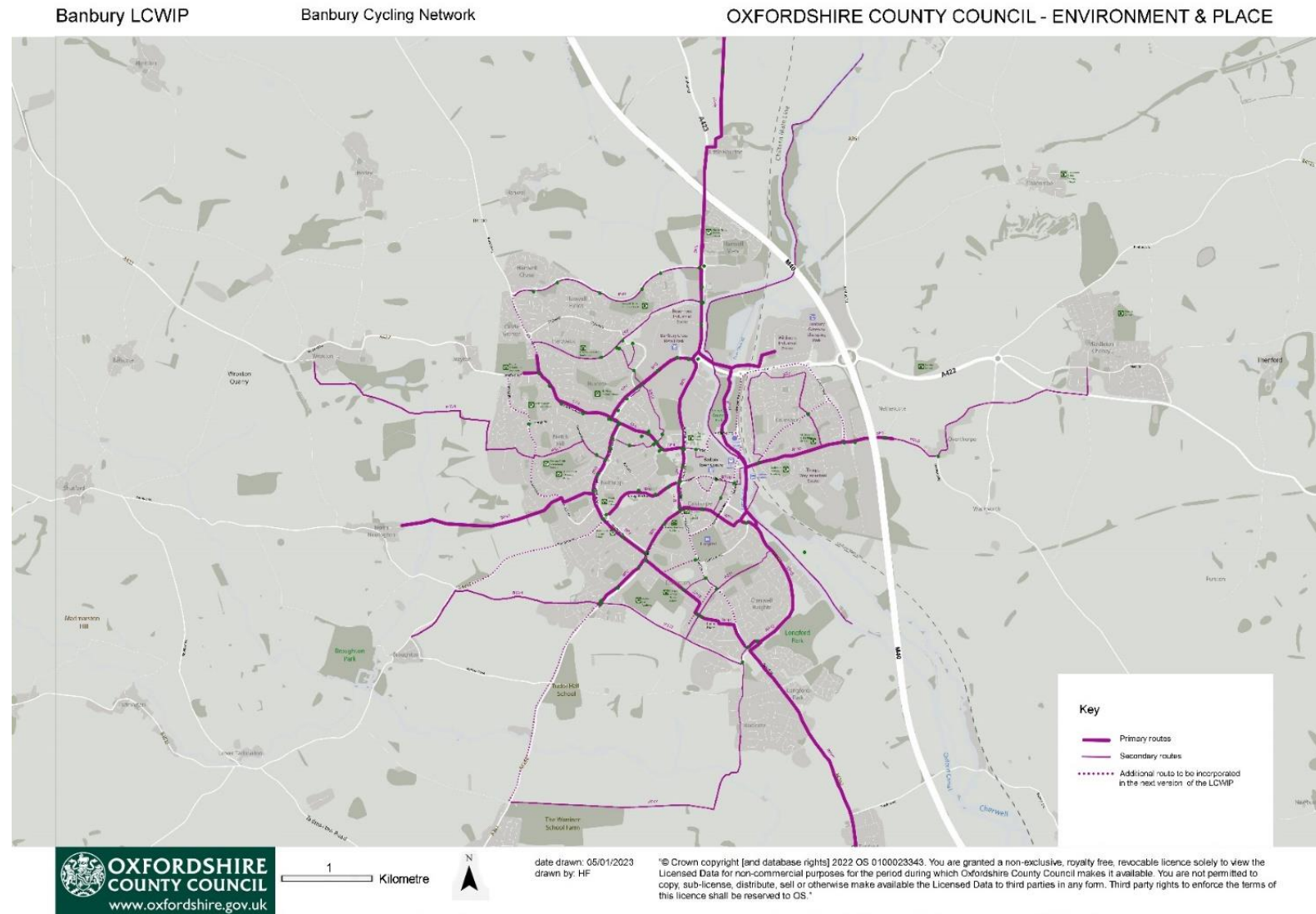
Route location:



Map Reference	Improvement Reference	Improvement
Link V7a to V7b	V7.1	Reduce speed limit to 30mph on Bloxham Grove Road, with traffic calming and lighting.

Link V7b to V7c	V7.2	Identify a route from eastern end of Bloxham Grove Road to Bodicote utilising public footpaths and bridleways as much as possible in discussion with landowners. Aim to provide all weather hard surfacing, with consideration for equestrian also.
-----------------	------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Figure 23: The Banbury Cycling Network



The classification of these routes is generally as follows:

- **Primary Routes:** Main routes for both walking and cycling, typically linking key origin and destination locations (e.g., a large residential area to the town centre) in the most direct way. High walking and/or cycling flows are forecast along these routes. These routes are often classified roads which may require significant investment in walking and cycling infrastructure to achieve these high walking and cycling flows.
- **Secondary Routes:** Routes with local importance, typically linking trip generators such as education and employment sites, linking primary routes to one another or providing less direct alternatives to primary routes. Medium walking and/or cycling flows are forecast along these routes.

Table 8: Proposed cycle network by primary or secondary priority

Route	Classification and (Ref No.)	Ref No. on Figure	Location
Route 1	Primary	BP1	A361 North Bar Street/ Oxford Road
Route 2	Primary	BP2	A361 Bloxham Road
Route 3	Primary	BP3	A422 Ruscote Avenue/ Orchard Way/ Wood Green/ Queensway ('Western Corridor')
Route 4	Primary	BP4	A422/ B4100 Warwick Road
Route 5	Primary	BP5	A361/A423 Southam Road
Route 6	Primary	BP6	B4035 Broughton Road
Route 7	Secondary	BS7	Former railway path through Hardwick
Route 8	Secondary	BS8	Dukes Meadow Drive
Route 9	Secondary	BS9	Grimsbury
Route 10	Primary	BP10	Overthorpe Road via Causeway and Bridge Street
Route 11	Primary	BP11	St John's Road/ Lamb's Crescent
Route 12	Secondary	BS12	Salt Way
Route 13	Primary	BP13	Bankside/ White Post Road
Route 14	Primary	BP14	Wildmere to Bridge Street via Spiceball Park
Route 15	Secondary	BS15	Easington

Route 16	Secondary	BS16	Off-road route via St Louis Meadow Park
Route 17	Secondary	BS17	Longelandes Way
Route 18	Primary & Secondary		Canal Towpath
Village Route 1	Secondary	BSV1	Wroxton
Village Route 2	Primary	BPV2	Great Bourton and Little Bourton
Village Route 3	Primary	BPV3	North Newington
Village Route 4	Secondary	BSV4	Broughton
Village Route 5	Primary	BPV5	Adderbury
Village Route 6	Secondary	BSV6	Middleton Cheney
Village Route 7	Secondary	BSV7	Bloxham

5.3. Complementary measures and schemes

Complementary measures and schemes are considered vital to any infrastructure that prioritises and separates people cycling from other road users and will support the delivery of this LCWIP. Measures include:

- **Signage and wayfinding** – the delivery of strategic, comprehensive and consistent signage and wayfinding is important to support people cycling to navigate their way around Banbury.
- **Cycle parking** – should be secure and conveniently located for where people want to travel. This could include cycle hubs at public transport interchanges or ‘Sheffield’ cycle stands outside key trip generators. Cycle parking should accommodate all types of bikes, including adapted bikes and cargo bikes. An audit of cycle parking in Banbury will be carried out. This will assess the location and condition of current cycle parking and consider where upgrades and additional cycle parking is required. This will be a supporting document to this LCWIP.

To encourage active travel for rail commuters, Chiltern Railways have already been successful in a bid to the government’s Cycle Safety Fund and constructed up-and-over cycle parking at the railway station, jointly funded by OCC. OCC will continue to identify any need for cycle parking in its response to planning applications for residential or employment sites.

- **Banbury eBike programme** – CDC has a Cycling and Walking Activation Plan (CWAP) that will address some of the barriers to cycling and walking, including increasing the confidence of people cycling and walking and supporting the maintenance of bikes in the district. As part of a two-year scheme, Cherwell will be

making available ten electric bikes free of charge. The bikes will provide GPS data that will help identify the most popular routes and thus those routes which would benefit most from improvement. In turn, this information can inform future updates of the LCWIP.

6. Network Plan for walking

This section provides an overview of the process followed to develop the proposed network for walking and sets out details of the walking network and improvements proposed.

The development of the Banbury walking network has been an iterative process, combining the analysis of data collected, site audits and stakeholder engagement. The identification of a Core Walking Zone has been key in locating improvements for walking in Banbury.

6.1. Methodology

6.1.1. Identifying trip generators

The same trip generators used to develop the cycle network have been used for the walking network. There are noticeable clusters of trip generators, for example a retail and employment cluster in the town centre.

6.1.2. Identifying a Core Walking Zone (CWZ)

On average people tend to walk up to 2km for a local trip, although it is noted that some people will walk further. To reflect this, a Core Walking Zone (CWZ) has been created – see **Figure 4**. This extends 2km from the Market Square and encompasses most schools, retail, and employment areas in Banbury, alongside many residential areas. All aspects of the walking environment in this area are important and considered for improvement. The key routes into this area are also considered for improvement.

6.1.3. Identifying walking network improvements

A walking audit of the key routes into Banbury town centre (Market Place and the latterly defined CWZ) was conducted by OCC in 2019. This has been reviewed and updated where necessary and used to inform the suggested improvements in this LCWIP, alongside analysis of the data gathered, consultation feedback from *'Let's Talk Oxfordshire'* and stakeholder engagement.

This walking audit used the Walking Route Audit Tool³⁸ to assess the current suitability of each route for walking against set criteria that included attractiveness, comfort, directness, safety, and coherence. The resultant issues identified highlighted the location and type of improvement required.

The improvements identified are high-level proposals and options, which will require further feasibility and design work, along with public consultation before being implemented. The

³⁸ Walking Route Audit Tool, <https://www.gov.uk/government/publications/local-cycling-and-walking-infrastructure-plans-technical-guidance-and-tools>

use of footpaths by wheeled users must also be considered in this process to ensure an inclusive space is created for people walking and wheeling.

6.1.4. Types of improvements

Below is a summary of some of the possible improvements to the walking experience in Banbury that have been proposed.



Dropped kerbs – features to facilitate non-stepped access to allow wheelchair/mobility aid users and people with pushchairs to cross the road unimpeded.



Tactile paving – paving that warns visually impaired people about where the footway ends and the carriageway begins. There are different types of tactile paving.



Refuge island – a small area of footway in the centre of the road to allow people walking to cross in two stages. Refuge islands are usually found on roads with higher speeds and greater numbers of vehicles, where crossing in a single movement is more difficult.

Controlled pedestrian crossing – there are three types of controlled pedestrian crossings: Zebra, Pelican and Puffin.

Zebra – these crossings are marked out by black and white stripes across the road with flashing beacons and zig zag markings.



Pelican – these are signalised crossings and require people walking to press a button and wait for the green man to appear before crossing the road.

Puffin – these are signalised crossings similar to Pelican crossings in that they require people walking to press a button. However, they are more advanced than Pelican crossings as they can detect people walking in the waiting area and whilst they are crossing the road.



Uncontrolled pedestrian crossing – unlike controlled crossings, people walking must wait for traffic to stop or for a suitable gap to cross the road. These crossings may include dropped kerbs, tactile paving and a refuge island.



Raised table – a form of traffic calming that aims to slow the speed of vehicles and to emphasise features such as crossing points. They are sometimes used at the entry of a side road to provide a level surface for people walking to cross the road without the need for dropped kerbs.



Footway buildout – widening of footways that run beside a carriageway and provide greater space for people walking to wait, reduce crossing distances, and improve the visibility of people walking and other road users.

6.2. Proposed walking improvements

Improvements have been proposed in the first phase of the LCWIP for eight key routes in the town centre that provide connectivity within the CWZ, these are:

- Route 1 – Market Place to Daventry Road
- Route 2 – Market Place to Bankside
- Route 3 – Market Place to Horton View
- Route 4 – Market Place to Easington Road
- Route 5 – Market Place to Queensway
- Route 6 – Market Place to Woodgreen Avenue
- Route 7 – Market Place to Orchard Way
- Route 8 – Market Place to Hennef Way

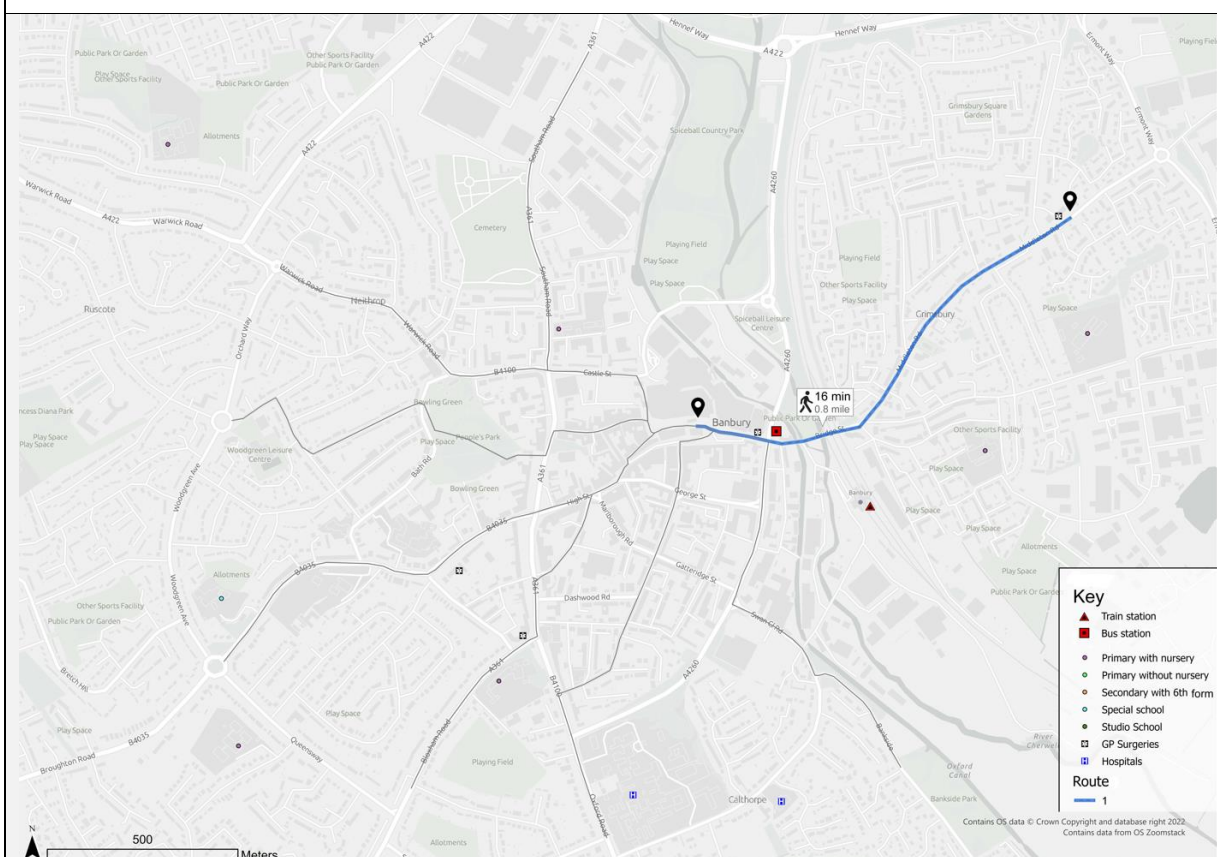
Full details of suggested improvements can be found below.

ROUTE 1 **Market Place to Daventry Road (via Bridge Street and Middleton Road)**

This route is key for many journey types. It provides a connection between Market Place and residential areas in the east of the town. It provides a connection to Banbury Station, employment areas and schools in the east also.

This route passes through the Bridge Street/ A4260 junction. This is an extremely poor junction for people travelling by all modes and requires a comprehensive review. As the gateway to the town centre, place shaping in this area is particularly important.

Route location:



Proposed improvements

Ensure consistent dropped kerb and tactile paving provision along the route

Modify Station Approach junction to allow safer crossing opportunities for people walking

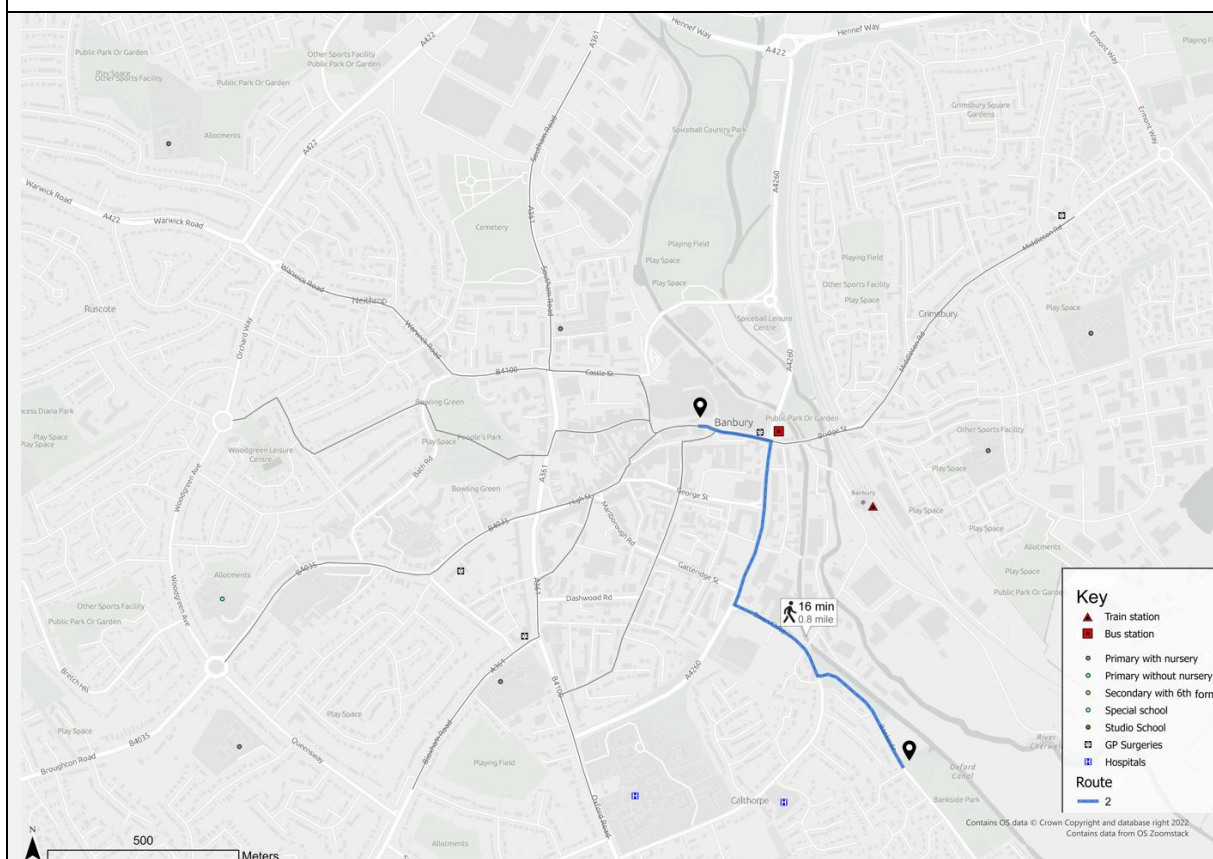
Reduce crossing wait times for people walking at the Bridge Street/ A4260 junction

ROUTE 2 Market Place to Bankside (via Cherwell Street and Swan Close Road)

This route provides a connection between Market Place and residential areas in the south of the town. There are several bus stops on this route and retail and employment sites.

This is an unattractive route for walking, with high traffic flows on A4260 contributing to this. This route also passes through the Bridge Street/ A4260 junction. This is an extremely poor junction for people travelling by all modes and requires a comprehensive review. As the gateway to the town centre, place shaping in this area is particularly important.

Route location:



Proposed improvements

Ensure consistent dropped kerb and tactile paving provision along the route

Modify Bankside junction to allow safer crossing opportunities for people walking

Modify Tramway Road junction to allow safer crossing opportunities for people walking

Reduce crossing wait times for people walking at the Bridge Street/ A4260 junction

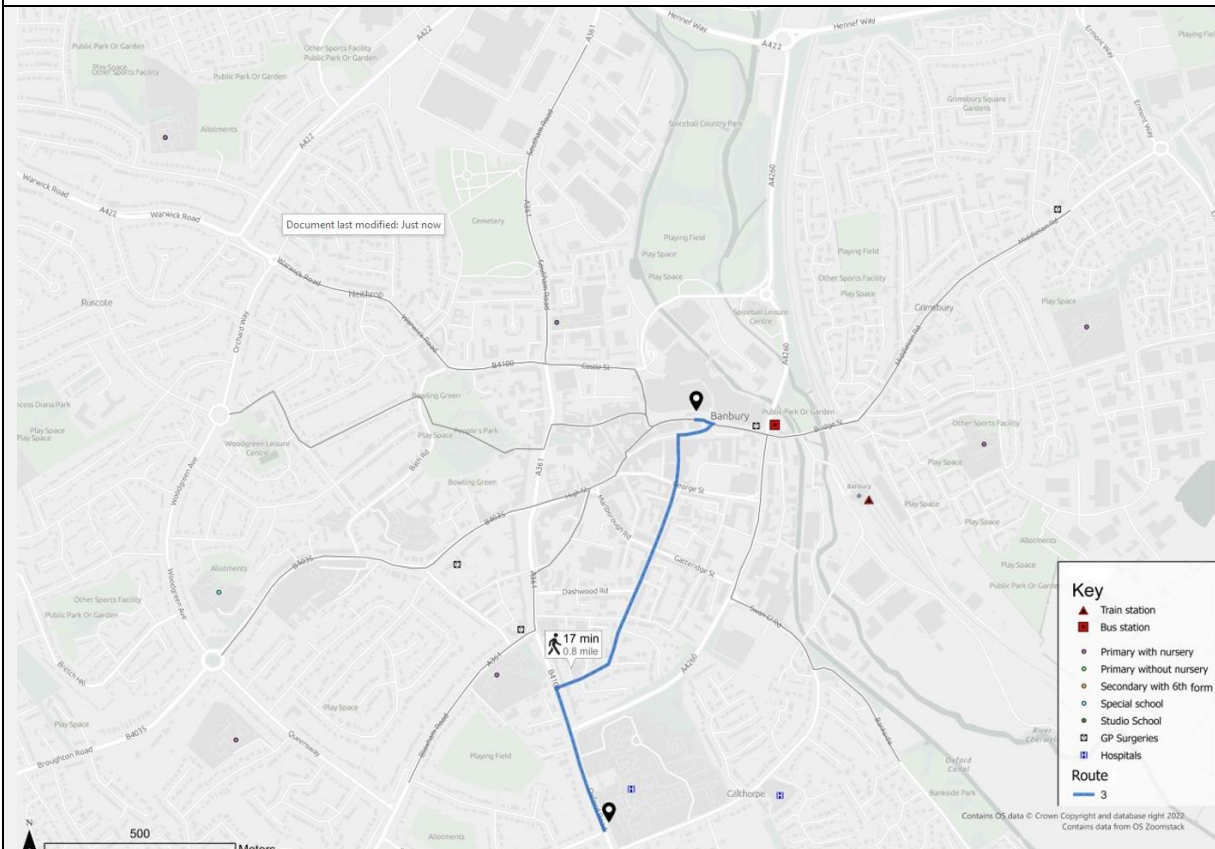
Consider footpath widening on Bankside Road and Swan Close Road

ROUTE 3 Market Place to Horton View (via Broad Street and Oxford Road)

This route provides a connection between Market Place, Horton General Hospital, and recreation areas in the south of the town.

Footpaths are narrow along much of this route and there are parked cars alongside the footway for most of the route.

Route location:



Proposed improvements

Ensure consistent dropped kerb and tactile paving provision along the route

Reduce crossing wait times for people walking at Upper Windsor Street junction

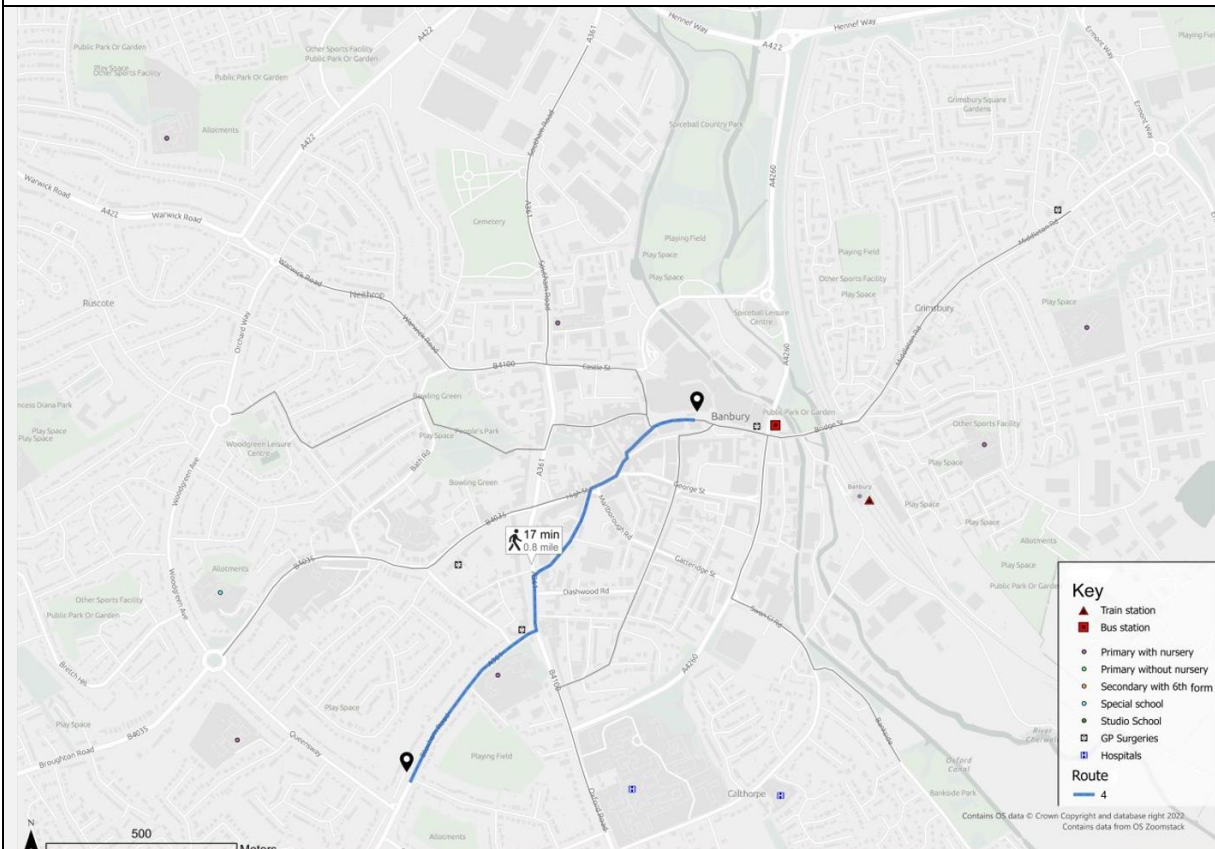
Replacement of buildout at George Street/ Broad Street junction with safer and more convenient feature for people walking

ROUTE 4 Market Place to Easington Road (via Calthorpe Street and Bloxham Road)

This route provides a connection between Market Place and many of the town centre shops, multiple town centre car parks, and Harriers Banbury Academy.

Ensuring safe walking provision is essential to facilitate walking journeys to school and for shopping trips in the town centre.

Route location:



Proposed improvements

Ensure consistent dropped kerb and tactile paving provision along the route

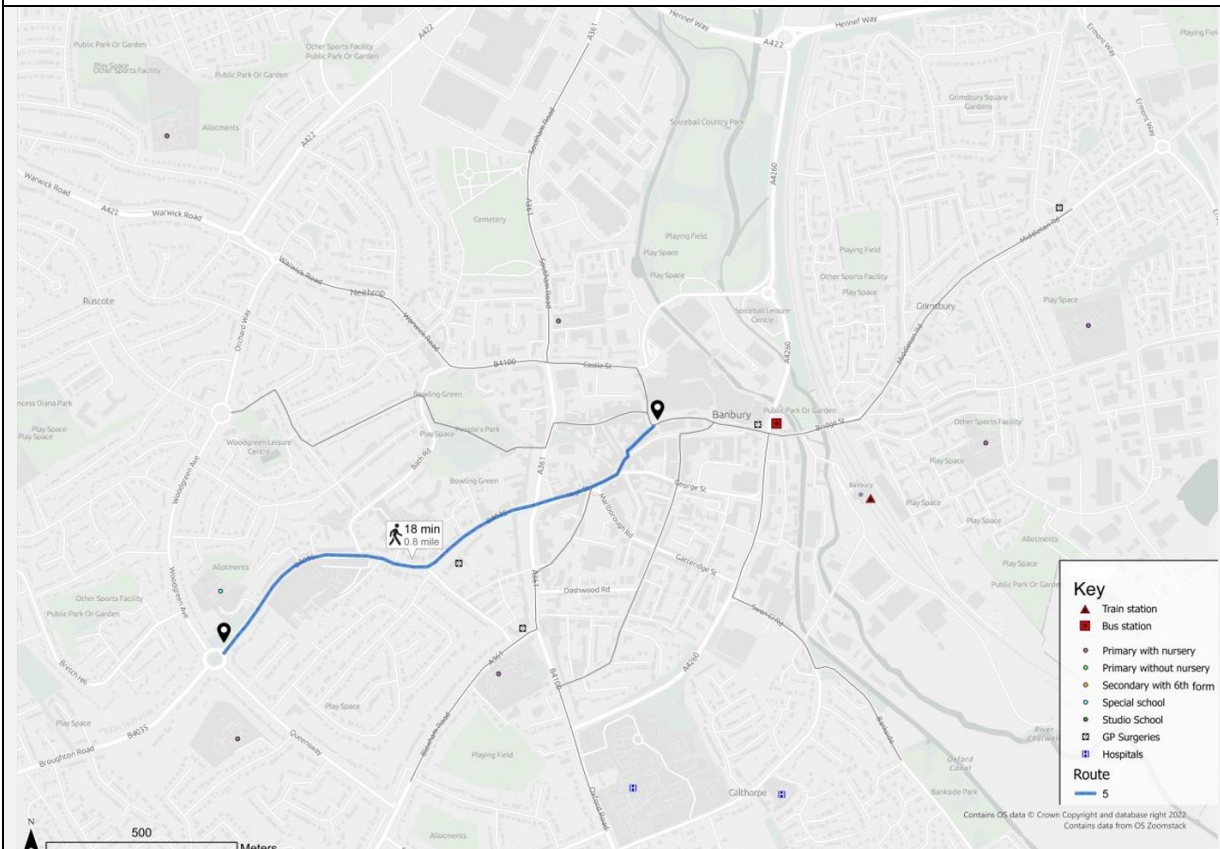
Consider how to reduce parking on footways

ROUTE 5 **Market Place to Queensway (via High Street and Broughton Road)**

This route provides a connection between Market Place, Banbury and Bicester College, and residential areas to the south-west of the town.

This also links into the western corridor, which has been highlighted as an important active travel route, thereby extending the active travel network across Banbury.

Route location:



Proposed improvements

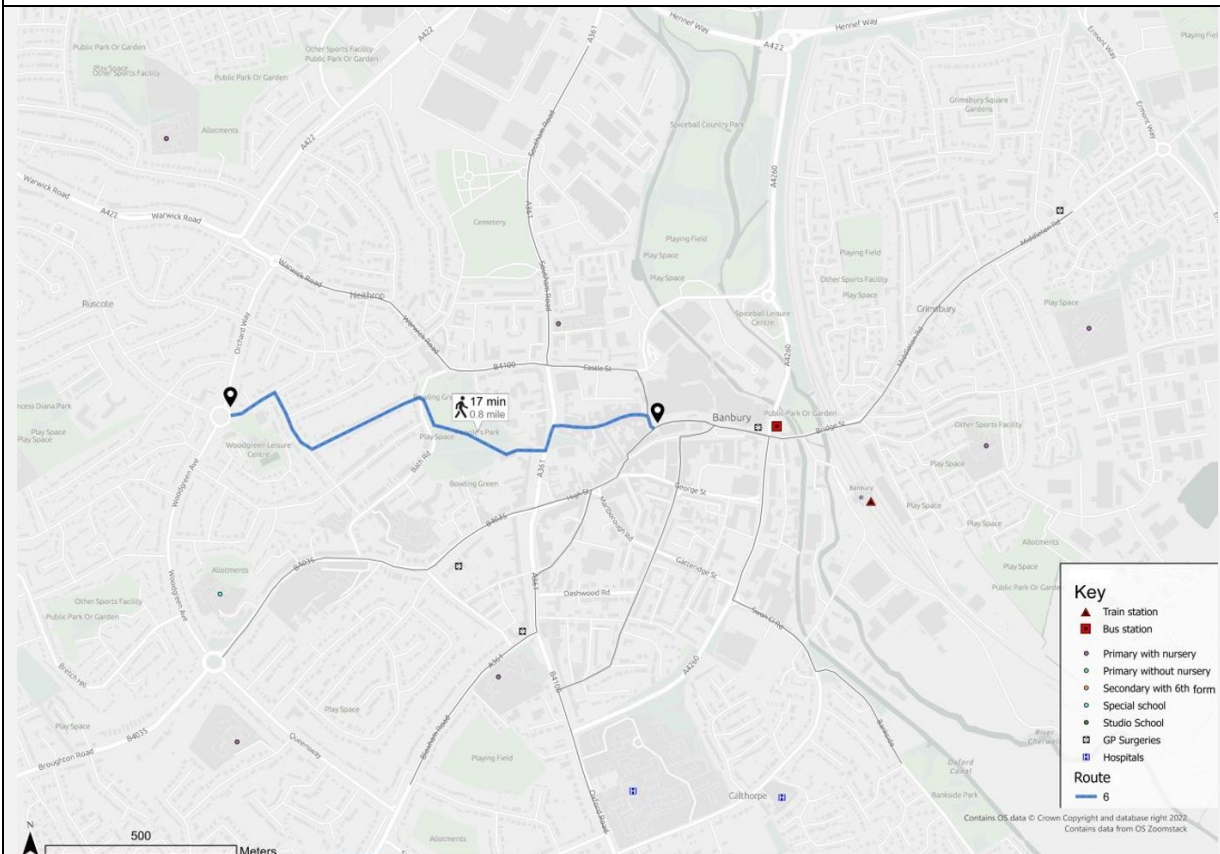
Ensure consistent dropped kerb and tactile paving provision along the route

Improvements to the crossing of the Broughton Road arm of the Queensway roundabout to increase safety for people walking

ROUTE 6 Market Place to Woodgreen Avenue (via People's Park and King's Road)

This route provides a connection between Market Place, residential areas in the west of the town and many schools. This also links into the western corridor, which has been highlighted as an important active travel route, thereby extending the active travel network across Banbury.

Route location:



Proposed improvements

Ensure consistent dropped kerb and tactile paving provision along the route

Consider ways to reduce street clutter

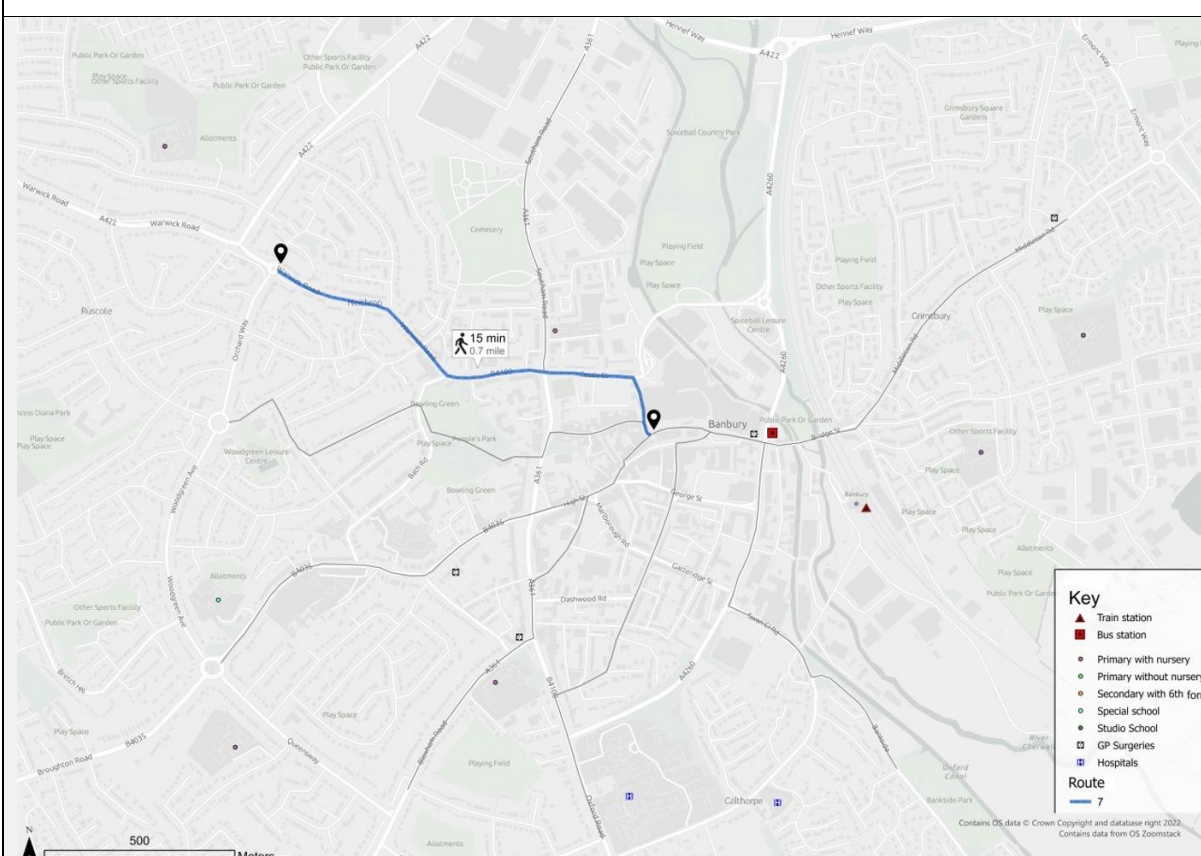
Provision of signalised crossing on Bath Road to provide a safe connection between People's Park and King's Road

ROUTE 7 Market Place to Orchard Way (via Castle Street and Warwick Road)

This route provides a connection between Market Place and residential areas in the west of the town. This also links into the western corridor, which has been highlighted as an important active travel route, thereby extending the active travel network across Banbury.

There are generally high traffic speeds and noise along this route, making it unattractive for walking.

Route location:



Proposed improvements

Ensure consistent dropped kerb and tactile paving provision along the route

Improve crossing facility for people walking at Bolton Road junction and including consideration of a signalised crossing

Modify crossings on all arms of Orchard Way/ Warwick Road roundabout to make it safer for people walking

Footway resurfacing and widening where possible

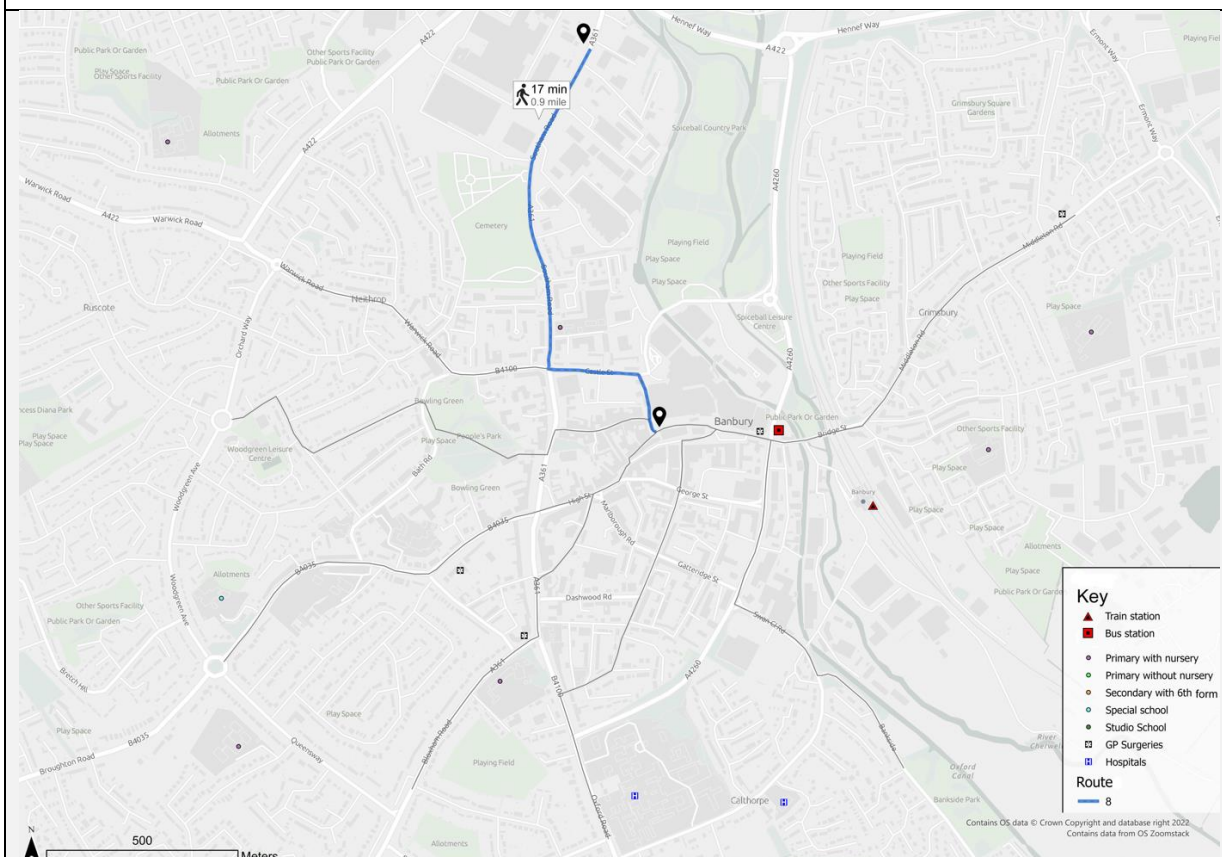
Reduce crossing wait times for people walking at Warwick Road/ Castle Street signalised crossing

ROUTE 8 Market Place to Hennef Way (via Castle Street and Southam Road)

This route provides a connection between Market Place and major retail and employment areas.

There are generally high traffic speeds and noise along this route. Pollution levels are also high due to this route falling within one of Banbury's Air Quality Management Areas, making it unattractive for walking.

Route location:



Proposed improvements

Ensure consistent dropped kerb and tactile paving provision along the route

Consider ways to reduce footway parking

Provision of additional signalised crossing on Southam Road

Healthy Streets³⁹

To enhance the spaces in which people walk, Healthy Streets indicators should be considered - this is important within the CWZ and along the 8 key routes into the CWZ. This will ensure walking is comfortable, safe and inclusive for all. Healthy Streets indicators encourage the implementation of well-thought-out street furniture such as seating, to make walking more accessible for all. Planting trees in the urban environment can also contribute to the creation of Healthy Streets, including by providing shade, greater connection with the natural environment and improved visual amenity. These improvements will also benefit cyclists. They should be considered as part of all route improvements and as individual measures.

6.3. Complementary measures and schemes

Complementary measures and schemes are considered vital to any infrastructure that prioritises and separates people walking from other road users and will support the delivery of this LCWIP. This includes:

- **Signage and wayfinding** – the delivery of strategic, comprehensive and consistent signage and wayfinding is important to support people walking to navigate their way around Banbury. A study is required to identify how this can be achieved in Banbury.
- **Public Health Routes** – CDC's Public Health team have implemented three 'health routes' through Banbury for walkers, joggers and runners. The trails are walking routes marked by a prominent painted line and designed to be accessible to everyone and easy to follow. On each trail there are pavement games and activities, benches and picnic spots, green spaces to enjoy nature, parks, shops and community facilities. OCC aims to expand on this scheme by introducing similar routes in Cherwell Heights, Easington and Bodicote.
Existing trails are⁴⁰:
 - Green Star Trail – 5km or 3 km route in Grimsbury and Moorfield Park.
 - Blue Hexagon Trail – 5km route around Ruscote Park, Trinity Park, Princess Diana Park, The Hill and The Sunshine Centre.
 - Pink Diamond Trail – Neithrop, Golden Villa, the old farmhouse, Princess Diana Park.
- **The Tramway Road Improvement Scheme** – due to be delivered during 2024/2025 will provide enhanced access to the rail station for people cycling and walking from the south.

³⁹ <https://www.healthystreets.com/>

⁴⁰ <https://www.cherwell.gov.uk/downloads/download/1458/banbury-shape-trails>

7. Emerging prioritisation of active travel improvements

This section identifies how the proposals in the Banbury LCWIP will be prioritised.

The guidance from the DfT recommends that the infrastructure improvements proposed in an LCWIP should be prioritised into short term (measures requiring less than three years to deliver), medium term (between three to five years to deliver) and long term (requiring more than five years to deliver).

Cycling levels in Banbury are lower than most other towns in Oxfordshire. Delivering a couple of high-quality, exemplary routes would build confidence and numbers without significant impact on the road network. The Banbury Active Travel Supporters (BATS) in their response to the consultation have called for two key routes to be implemented as soon as possible:

- Route 3 - the western corridor incorporating Ruscote Avenue to Queensway, and
- Route 10 - Overthorpe Road to Spiceball Park.

OCC has been successful in bidding for some initial funding from the DfT to start to look at the options for these two routes. Route 3 should be deliverable within a three-year window, depending on any land issues, and would connect to retail, employment, residential areas, and a number of schools including two secondary schools. Route 10 may be more of a medium term delivery, particularly if there are any requirements to amend the bridge over the motorway.

There could be other quick wins from the off-road routes that could be implemented if funding is allocated – Routes 7, 9, 12, 16 and 17.

Another priority is to look at safety concerns, which raises the need to look at St John's Road junction with South Bar.

In terms of walking improvements, the LCWIP proposes an action plan to identify a package of measures to improve the Core Walking Zone (400m from town centre destinations including the train station). This will include dropped kerbs, crossing facilities, wayfinding, benches, improving pavement quality and removal of street furniture clutter.

Table 9: Table of Prioritisation

No.	Priority Schemes	Potential delivery period	Reason for prioritising
1	Route 3 – western corridor	Short term	Demand demonstrated through PCT tools, including the school routes tool (Figure 15: Propensity to Cycle Tool school cycle route network (School Census 2011 scenario flows) Figure 15 and Figure 16). Accident issues along the corridor (Figure 19). Local stakeholder support (BATS consultation response).
2	Route 10 – Overthorpe Way	Short to medium (depending on motorway bridge)	Demand demonstrated through PCT tools and would provide a safer route than the one through M40 Junction 11. School route between Grimsbury and Middleton Cheney. Supported by local stakeholders (BATS consultation response).
3	Core Walking Zone	Short term	Action Plan required to identify a comprehensive package of measures in conjunction with local user groups and stakeholders.
4	Route 2 - Bloxham Road	Medium term	The PCT tools show this as a high demand route, particularly under the school routes map (Figure 15). Would work well Route 3 to build a wider cycling network.
5	St John's Street/ South Bar	Short term	Raised as a safety concern during the consultation. Propose to investigate in the short term; delivery dependent on funding.
6	Off-highway routes e.g. Routes 7, 9, 12, 16 and 17	Short to medium term	There are several routes away from the highway within the town presenting quick wins.
7	Village Route 5 - Adderbury	Short to medium term	A very popular route which would link up the village and developments to the south of town.
8	Remaining primary routes Key Walking Zone	Medium term	
9	Connecting links that will require a more radical review	Long term	

The crucial factor, which will determine the order and speed of delivery, will be the availability and the sources of funding to undertake the feasibility, design and delivery of schemes to complete the LCWIP network.

Consideration will be given to the use of a more sophisticated prioritisation approach in a future review of the Banbury LCWIP. Some of the more complex routes will require more lead in time to deliver.

8. Integration and application

This section summarises how the Banbury LCWIP will fit with other pieces of work and policies, and how improvements will be funded.

8.1. Embedding the Banbury LCWIP

The Oxfordshire Local Transport & Connectivity Plan and Banbury Area Travel Plan

The Banbury LCWIP will form a key component of the Banbury Area Travel Plan, which is a supporting document to LTCP. The Banbury Area Travel Plan will identify how the policies in LTCP can be applied to the Banbury area through a series of actions. These actions cover all types of transport, such as public transport and road schemes, as well as, cycling and walking. The improvements in this LCWIP are key actions that will improve cycling and walking in Banbury and the surrounding area, contributing to healthy place shaping, and addressing the climate emergency.

- **Local Transport and Connectivity Plan (parent document)**
 - Banbury Area Travel Plan (place-based document)
 - Banbury LCWIP (supporting document)

Future developments

The improvements identified in this LCWIP are required to facilitate sustainable travel in Banbury and the surrounding area. It is important to embed sustainable travel choices from first occupation of new developments. Contributions from developers will be sought and/or developers will be requested to provide the improvements identified in this LCWIP where they are relevant to their development. Additional improvements may be identified as this LCWIP is reviewed or through the individual planning application processes.

Funding bids

The prioritised measure list in this LCWIP will support future funding bids, by guiding what funding should be sought and where it should be spent. This LCWIP provides an evidence-based justification for the improvements proposed, which gives weight to the need for funding. Funding opportunities can arise from a variety of sources, including central government, Oxfordshire Local Enterprise Partnership, planning obligations from development and internal OCC funds.

Initiatives to support infrastructure improvements

To support the implementation of infrastructure improvements, initiatives will be needed that engage and empower the community to choose cycling and walking for journeys. These initiatives can include cycle hire schemes and cycle training. We will work with colleagues, such as those in public health, and local stakeholders to bring forward improvements.

8.2. Reviewing the Banbury LCWIP

This LCWIP will be regularly reviewed to ensure that progress is being made in achieving the vision for cycling and walking in Banbury, and that the improvements reflect the needs of the community.

Understanding changes in the number of people cycling and walking in association with the implementation of improvements will be important in showing whether this LCWIP is effective. OCC have permanent cycle counters installed in Banbury, which provide daily counts of people cycling at that location. These counts can then be compared over time. There are a range of methods for counting the number of people walking. These are often ad hoc surveys that are commissioned over a specified period e.g., one week, and make use of traffic monitoring cameras.

Stages of monitoring and review

1. A baseline level of the current number of people cycling and walking will be established by using the permanent cycle counters and conducting walking surveys.
2. The Banbury LCWIP will be reviewed every two years. A supplementary document will be produced. This will include a review of progress against the LCWIP targets and local monitoring data for levels of cycling and walking in Banbury and the level of change recorded in association with implemented improvements.
3. The Banbury LCWIP will be updated and re-issued, if necessary, to reflect the current situation and aspirations.

8.3. Developing the cycle network further

Future iterations of the Banbury LCWIP will set out the quiet ways that can be used as alternatives to the primary and secondary routes or connecting links. **Figure 22** identified several low traffic flow routes. Officers will work with local councillors and communities to map this thoroughly and identify any minor improvements required. These could be particularly useful as the radial routes will take time to deliver.

There is also a need to consider how green spaces can be used to further develop the cycle network, particularly those linking out into the countryside. These have an important role to play in facilitating leisure cycling, which, as previously discussed, is important in supporting a shift to cycling for other journey purposes. Cycle routes that incorporate green spaces can also provide a quieter, more attractive and in some instances more direct connection for people making local trips. This can increase the health benefits of cycling.

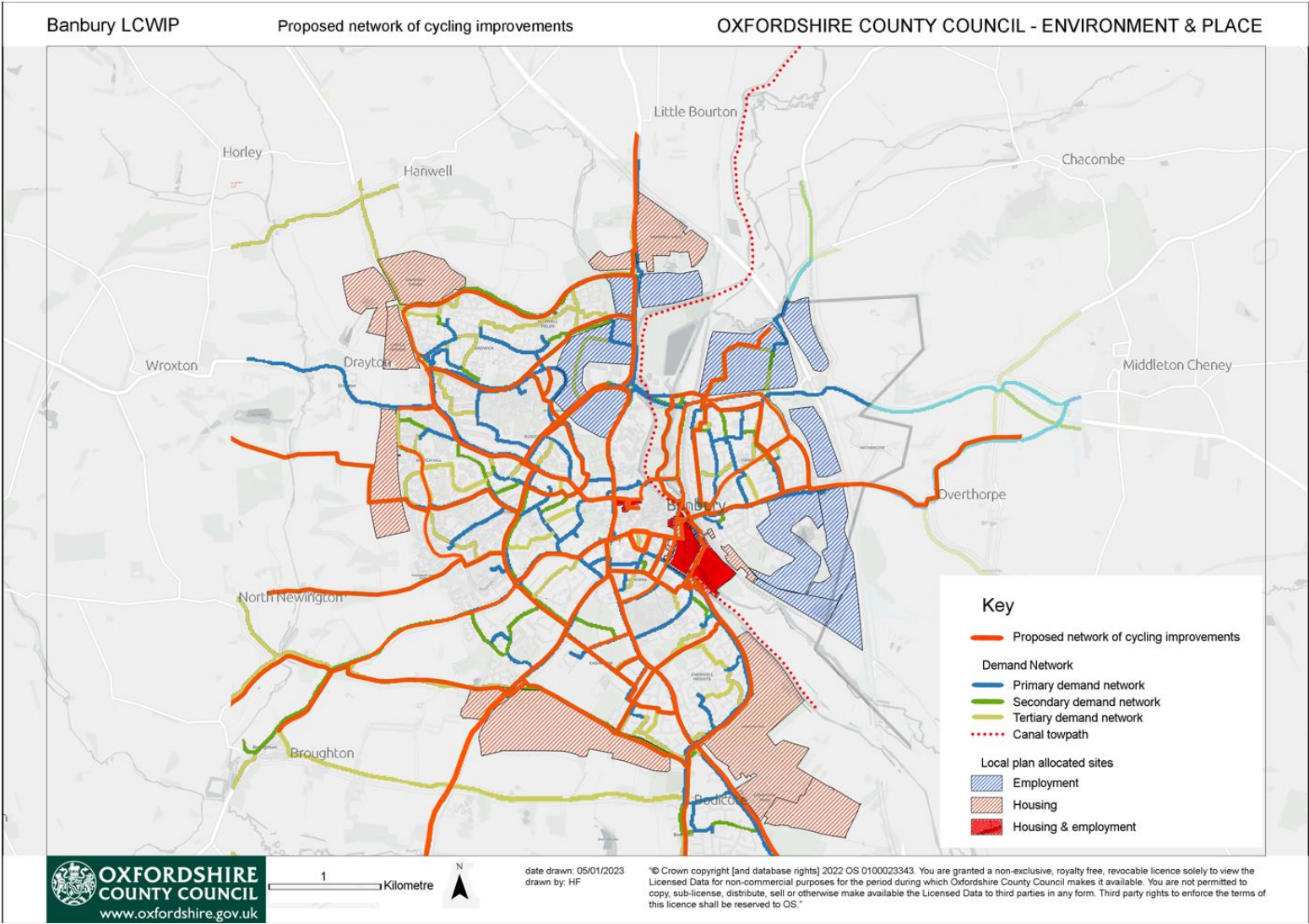
Routes to explore that use green space include:

- Ruscote shops to Longelandes Way
- Ferriston to Dukes Meadow via Highlands
- Devon Way to Pitmaston Close via Rother Road

The analysis tools have identified links that are not included within this phase of the LCWIP. The proposed network of cycling routes identified for improvement, informed by the data and inputs discussed in earlier chapters, is shown in

Figure 24. The routes are shown in red, super-imposed on the potential cycling demand network and will help to ensure are demand routes are picked up within future iterations.

Figure 24: Other routes required to complete a comprehensive network

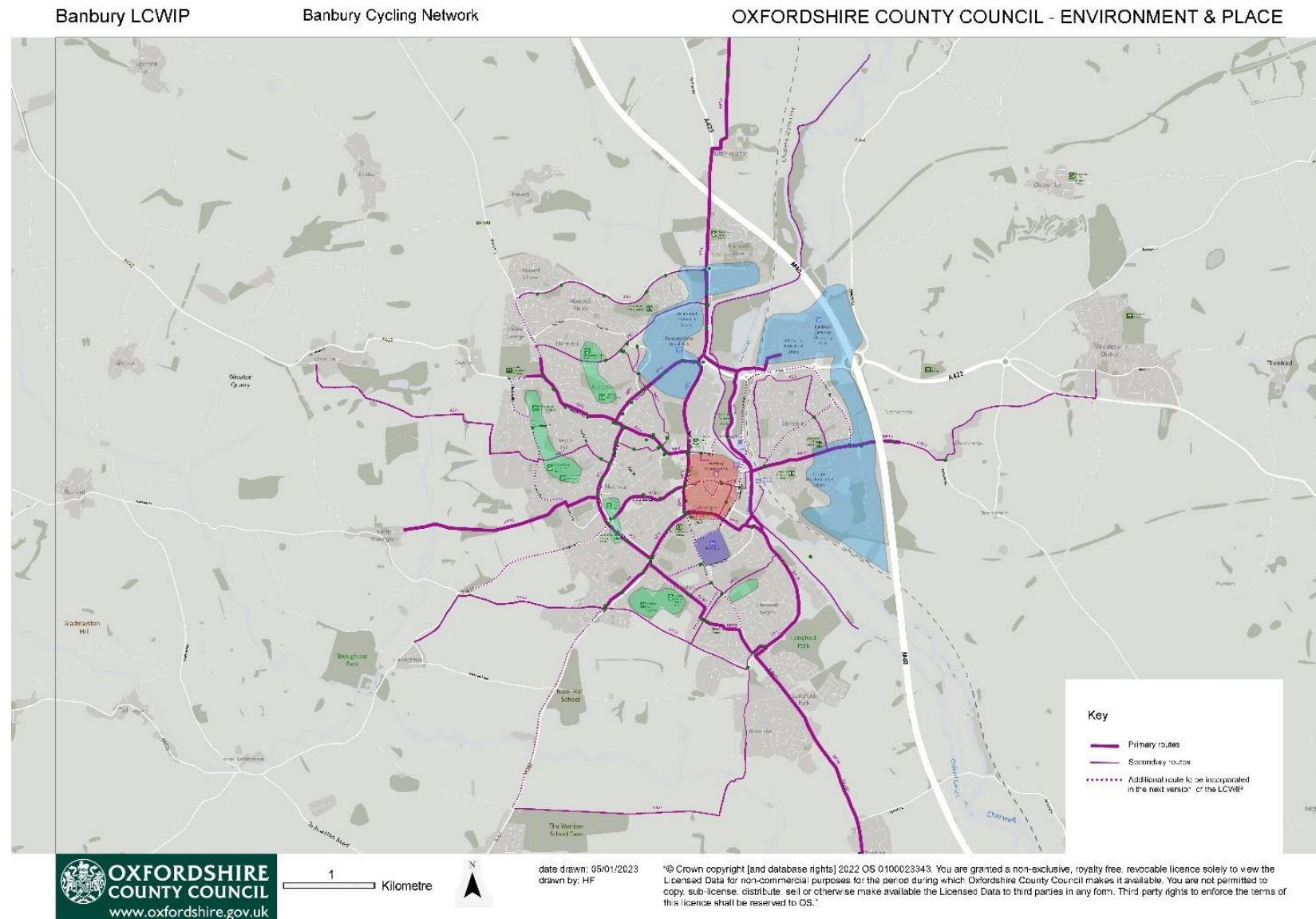


We have also looked at clustering the key destinations identified in **Figure 11** and checking how well the proposals deliver to these locations. This is shown in

Figure 25. Gaps that require further consideration include:

- Access to the Horton Hospital site
- Oxford Road
- A connection between the housing estates on the south side of the town and the industrial estates at Chalker Way and Thorpe Way
- Parts of the Bretch Hill.

Figure 25: The LCWIP network compared with clusters of destinations



9. Glossary

Active travel	‘Making journeys in physically active ways – like walking, wheeling (using a wheelchair or mobility aid), cycling, or scooting’ ⁴¹
Air Quality Management Area (AQMA)	Areas where air pollution levels exceed the accepted national air quality objectives.
All bike types	Refers to all forms of bicycle including standard bikes, cargo bikes, tandem bikes, and tricycles etc.
Appraisal	An assessment
Areas of deprivation	Areas that do not have something that is essential for day-to-day life and where there are less opportunities compared to other areas
Audit	The examination of something against set criteria
Contraflow cycle lane	A cycle lane which allows people cycling to travel in the opposite direction to other traffic. Often used on one-way roads to allow people cycling a direct passage along the road
Core Walking Zone (CWZ)	An area that has many trip generators that can be accessed within a 2km all. All walking infrastructure is important in this zone.
Continuous footways	An uninterrupted footway extending across a side road where people walking have priority.
Department for Transport (DfT)	The government department responsible for the English transport network
Desire lines	The most direct route for people cycling or walking to travel; this may not be a formal path
Dropped kerbs	Features to facilitate non-stepped access to allow wheelchair/mobility aid users and people with pushchairs to cross the road unimpeded
Dutch-style roundabout	As the name suggests, this type of roundabout has been inspired by the Dutch, with a priority lane for people cycling around the outside of the roundabout and controlled crossings on each arm of the junction for people walking.

⁴¹ Paths for all, *About Active Travel*, <https://www.pathsforall.org.uk/about-active-travel>

Vehicles are expected to give way to people cycling and walking crossing at the entry/exit arms of the roundabout

Entry treatments	Measures to improve the safety of people cycling and walking crossing at side roads. This can include reducing the road width and raising the road to footway level, in effect extending the footway across the side road entrance to give clear priority to people cycling and walking.
Feasibility	How easy something is to do
Filtered permeability	Reducing through traffic on certain streets to create streets that are more pleasant for people cycling and walking. This can be achieved in multiple ways including using bollards. Streets can still be accessed by residents and for emergencies and deliveries.
Footway buildout	Widenings of footways that run beside a carriageway to provide greater space for people walking to wait, to reduce the crossing distances or to improve the visibility between people walking and other road users
Green routes	Cycling and waling routes that provide recreation, public health and well-being benefits as well as connecting people to trip generators.
Junction narrowing	Reducing the width of a road where one road meets another. This can be achieved in a number of ways, but most commonly involves extending the kerb into the road.
Local cycling and walking infrastructure plan (LCWIP)	Strategic policy documents that identify improvements to active travel infrastructure at the local level
Local Enterprise Partnership (LEP)	Voluntary partnerships between local authorities and businesses
Local Transport and Connectivity Plan (LTCP)	Oxfordshire County Council's new Local Transport Plan (2022)
Lower Super Output Area (LSOA)	A geographic area that has a population of approximately 1,500 and is based on Census data
Middle-layer Super Output Area (MSOA)	A geographic area that has a population of approximately 7,000 to 10,00 and is based on Census data

Network plan	A map showing routes for cycling and walking and how these connect together between origins and destinations
Pelican crossing	A type of controlled pedestrian crossing. These are signalised (traffic light) crossings and require people walking to press the button and wait for the green man to appear before crossing the road
Permanent cycle counters	OCC owned counters on roads that continuously count how many people are cycling at that location. This data is projected onto an online platform that can then be analysed
Place shaping	Multi-faceted approach to creating public places that support health, well-being and happiness and increase people's connection to the place, thereby maximising the shared value of public places
Propensity to Cycle Tool (PCT)	A tool that shows routes where cycling is currently common and routes where there is the potential for cycling to increase
Public Rights of Way (PRoW)	Network of routes where public use is legally protected
Public transport	Transport that is available to the public for a set fare and includes buses and trains
Raised table	A form of traffic calming which aims to slow the speed of vehicles and to emphasise features such as crossing points. They are sometimes used at the entry of a side road to provide a level surface for people walking to cross the road without the need for dropped kerbs
Refuge island	A small area of footway in the centre of the road to allow people walking to cross in two stages. Refuge islands are usually found on roads with higher speeds and greater numbers of vehicles where crossing in a single movement is more difficult
Segregated cycle track	A cycle facility physically segregated from vehicles and people walking
Segregated shared footway/cycleway	A footway that legally allows cycling, with separate spaces for people walking and cycling. Segregation is usually light and consists of signage and markings
Shared use footway/cycleway	Shared use paths allow people cycling and walking to share the space, although people walking have priority. These

	paths are identified by a blue circle with a white symbol of people walking and a bike
Sheffield cycle stand	A metal cycle stand that is inverted U shaped
Sparrow crossing	A sparrow crossing is the same as a tiger crossing; however, it is at a signal-controlled (traffic light) junction
Steering group	A group of local stakeholders and council officers, which gathers to discuss progress and ideas and ensures that local views are represented
Strategic Active Travel Network (SATN)	An Oxfordshire County Council project to develop a county-wide network for cycling and walking. SATN considers the county as a whole and concertation links between settlements.
Tactile paving	There are different types of tactile paving with the purpose of providing a warning to visually impaired people who would otherwise find it difficult to differentiate between where the footway ends, and the carriageway begins
Tiger crossing	(Parallel crossing) – A tiger crossing consists of a zebra crossing with a parallel priority space for people cycling to cross
Topography	The natural form and features of an area
Toucan crossing	A signal-controlled (traffic light) crossing that allows people cycling and walking to cross together. Toucan crossings are usually wider than standard pedestrian crossings to accommodate people cycling safely
Trip generator	An area or place people travel from and to
Uncontrolled pedestrian crossing	Unlike controlled crossings, people walking must wait for traffic to stop or for a suitable gap in order to cross the road. These crossings may include dropped kerbs, tactile paving and a refuge island
Walking Route Audit Tool (WRAT)	A tool developed to assess the condition and suitability of walking routes. This requires evaluation of features along the route including crossings and dropped kerbs
Wayfinding	Signage to support people cycling and walking to navigate their way around a place
Western corridor	A corridor comprised of Ruscote Avenue, from west of the junction with Hennef Way/Southam Road, continuing via the Parklands/Warwick Road junction to Woodgreen Avenue,

Queensway, Springfield Avenue and onward connections to the schools in Easington including Blessed George Napier School, Banbury Academy and Wykham Park Academy

Wheeling/ Wheeled users

People who use a mobility scooter or wheelchair instead of walking. Also includes people with pushchairs and who travel by small, self-propelled wheeled modes such as skateboards, rollerblades and scooters

Zebra crossing

A type of controlled pedestrian crossing. These crossings are marked out by black and white stripes across the road with flashing beacons and zig zag markings