



Local Cycling and Walking Infrastructure Plan

Buckinghamshire

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1 - Introduction

1.1 What is an LCWIP?

Local Cycling and Walking Infrastructure Plans (LCWIPs) are a nationally endorsed and strategic approach to identifying improvements to enable walking, wheeling and cycling journeys. LCWIPs recommend ways to create a network of safe, direct, attractive, comfortable and coherent active travel infrastructure.

‘Wheeling’ is an emerging term that refers to journeys made using wheeled mobilities, such as wheelchairs, mobility scooters and adapted cycles. Collectively walking, wheeling and cycling are often referred to as ‘active travel’, this terminology is used throughout this document.

LCWIPs set out a long-term plan that is evidence-led and informed by local engagement and data analysis.

The Buckinghamshire LCWIP includes:

- A summary of the local context;
- A proposed countywide active travel infrastructure network plan;
- A delivery programme for the active travel infrastructure improvements;
- An explanation of the process followed to develop the LCWIP;
- Commentary about how active travel infrastructure will be designed and delivered in Buckinghamshire.

The Buckinghamshire LCWIP is intended to support the Council and partners in determining priorities to be investigated further, however it does not bind the Council or partners to delivery. Proposals identified in the LCWIP will all be subject to further development and engagement, with their delivery being subject to further governance, prioritisation and funding availability.

1.2 Why is developing LCWIPs important?

LCWIPs help local authorities and partner organisations to take an informed network-based approach to planning and delivering active travel infrastructure. LCWIPs are a key tool in supporting funding applications and guiding investment.

Buckinghamshire Council has already developed ‘town level’ LCWIPs for Aylesbury Garden Town, Buckingham and High Wycombe. A LCWIP for Chesham is being developed locally, led by Chesham Town Council.

The purpose of the Buckinghamshire LCWIP is to:

- Provide an evidence base that identifies walking, wheeling and cycling infrastructure priorities across Buckinghamshire, focusing on opportunities for inter-settlement connectivity;
- Help the Council progress and achieve a range of its policy objectives (including responding to climate change, improving air quality, encouraging physical activity and creating healthy and well-connected communities);
- Support the emerging Local Transport Plan (LTP) 5 and Local Plan;
- Guide future investment decisions and strengthen funding bids, including to national government or organisations such as Active Travel England.

[Active Travel England \(ATE\)](#) is a national government agency with an objective of making walking, wheeling, and cycling the preferred choice for everyday local journeys. In recent years, funding eligibility for active travel infrastructure has been linked to whether LCWIPs, setting out priorities informed by evidence and engagement, are developed by local authorities.

1.3 Buckinghamshire Council LCWIP process

The Buckinghamshire LCWIP has been developed in line with the principles set out in the government's [LCWIPs Technical Guidance](#), with technical support provided by transport consultancy WSP. The Technical Guidance has been applied flexibly to reflect the Buckinghamshire LCWIP's countywide scale of coverage.

The development the Buckinghamshire LCWIP has been shaped by data analysis and stages of engagement with Buckinghamshire Council's [Councillors](#) and [Community Boards](#), who provided input on local aspirations and priorities for active travel infrastructure improvements.

Community Boards bring together local representatives of Buckinghamshire Council, Town and Parish Councils, the voluntary and community sector, strategic partners and local residents. Each Community Board uses local data, intelligence and the views of the community to identify and take action on key local priorities.

In addition, workshops were held with national and local stakeholders.

The draft Buckinghamshire LCWIP was subject to public consultation in Autumn 2024. The consultation invited feedback on the proposed Buckinghamshire LCWIP network and collected information on respondents' travel patterns and perceptions of walking, cycling and wheeling. A total of 678 responses were received through the online consultation survey, alongside additional email representations. A summary of the consultation results is available at <https://yourvoicebucks.citizenspace.com/>.

- 82% of respondents strongly agreed or agreed with the network plan (249 respondents answered).
- 80% of respondents strongly agreed or agreed with the Buckinghamshire Greenway vision and objectives (246 respondents answered).

The consultation also collected information on respondents' travel perceptions.

The top three barriers to active travel in Buckinghamshire identified by respondents were: (276 respondents answered).

- *Busy roads (79% of respondents);*
- *Lack of suitable routes (67% of respondents); and*
- *Personal safety concerns (41% of respondents).*

Factors that most respondents said would greatly encourage or encourage them to travel more actively in Buckinghamshire were:

- *Separation from motorised vehicles (94%);*
- *Safe crossing points and junctions (87%);*
- *Smooth path surface (85%);*
- *Separation of users [e.g. cycling; walking] (70%); and*
- *Lighting and visibility (69%).*

The consultation was promoted through the following methods:

- Briefing sessions with Town and Parish Councils.
- Market stalls and public drop-in events.
- Promotions, including flyers, social media posts and digital adverts.
- Targeted youth engagement at the Bucks Youth Summit 2024.

Further information about the process followed to develop the Buckinghamshire LCWIP is included in **Annex A**.

2 - Buckinghamshire Context

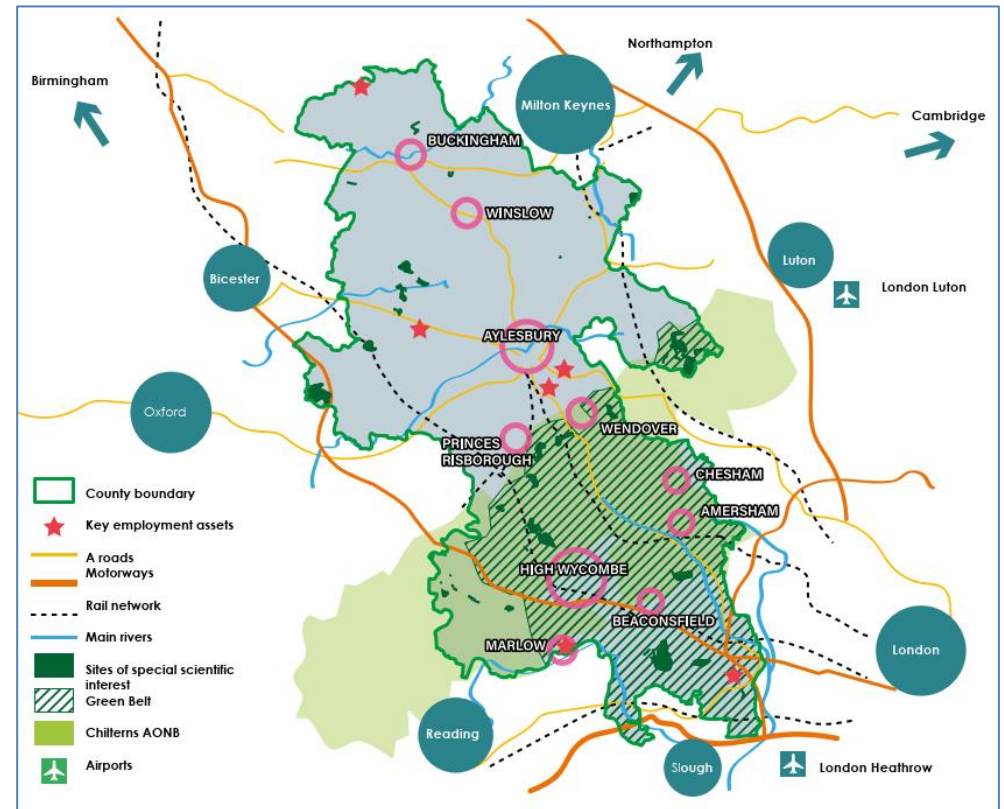
2.1 The Geography and Places

Buckinghamshire is a highly attractive county located in the south east of England. Over a quarter of the county is situated within the Chiltern Hills Area of Outstanding Natural Beauty and a third is covered by the Metropolitan Green Belt. The county is in a strategic location between London and Birmingham and between Oxford and Milton Keynes, with many communities being well-served by strategic road and rail links and connections to international gateways. There are significant levels of commuting out of the county, to London and other nearby large towns and cities. **Figure 1** shows the county's geographical context.

Overall, Buckinghamshire is a prosperous county, supporting a diverse economy, from local start-ups to international companies. Key areas of employment and economic activity include the Enterprise Zones at Silverstone Park, Westcott Venture Park, and Arla/Woodlands east of Aylesbury. However, areas of Buckinghamshire experience significant hardship and poorer health, employment and education outcomes, including the identified '[Opportunity Bucks](#)' ward areas in Aylesbury, Chesham and High Wycombe.

Buckinghamshire has a wide variety of cultural, natural and visitor attractions throughout the county. The countryside and villages are key destinations in themselves and many are also home to heritage sites. The towns are important centres for leisure, retail and tourism. The county also has an extensive network of public rights of way and trails that provide a resource for leisure and everyday journeys. The county, specifically Stoke Mandeville, is the birthplace of the Paralympic movement. This legacy means that accessibility is an important principle for active travel infrastructure in Buckinghamshire, with the aim of making the county and its destinations more accessible for all.

Figure 1 – Buckinghamshire's geographical context



2.2 Existing Active Travel Network

There are over 2000 miles (3000km) of public rights of way across Buckinghamshire. Approximately 81% are public footpaths, 18% are bridleways and 1% are restricted byways and BOATs. All the public rights of way are collectively called ‘the public rights of way network’, as shown in **Figure 2**. Cycling is permitted on certain public rights of way. Some paths are allowed by landowners but are not public rights of way, these are known as permissive paths.

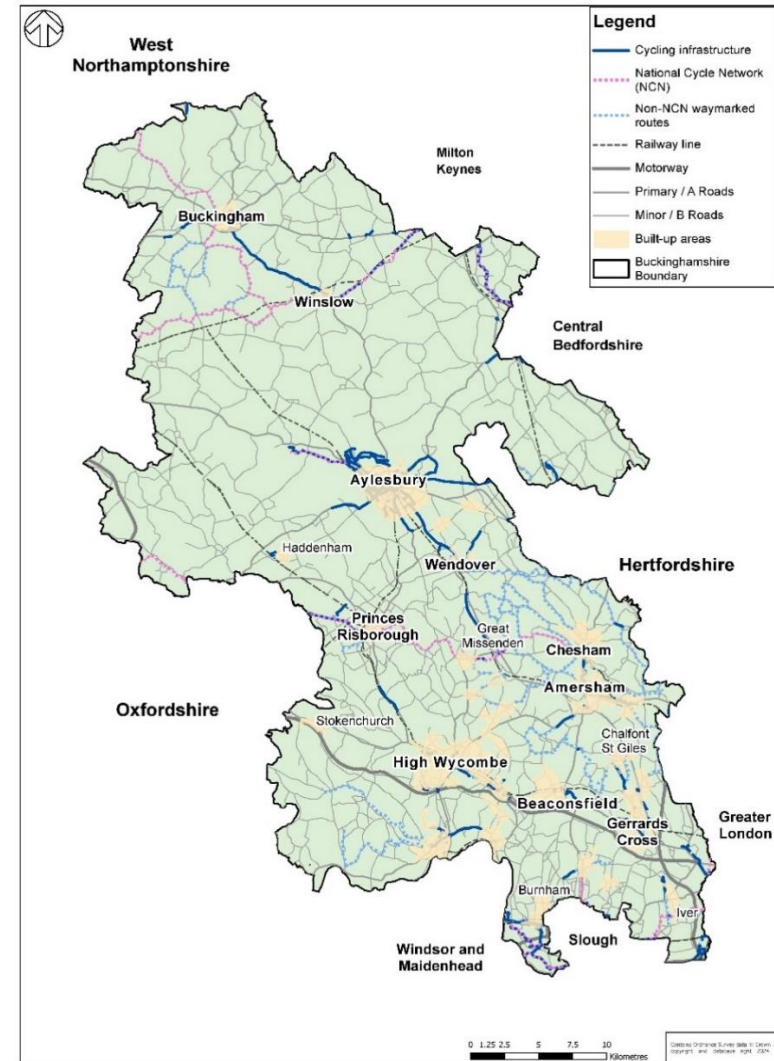
In addition, there are a number of leisure walking trails including the Aylesbury Ring, Thames Path, The Ridgeway, The Chiltern Way.

Figure 2 – Public Rights of Way in Buckinghamshire



Figure 3 shows the existing cycle network in Buckinghamshire. This includes cycling infrastructure (off-road segregated paths and shared walking and cycling paths) and waymarked routes. Cycling is permitted on certain canal towpath routes. There are also sections of the National Cycle Network (NCN) that connect through Buckinghamshire and with surrounding areas, including a combination of signed on-road routes and off-road paths. Existing infrastructure within individual settlements is not shown at this scale.

Figure 3 – Existing Cycling Network in Buckinghamshire



2.3 Population

Census 2021 data indicates Buckinghamshire has a population of 553,100 residents, with more than a third of residents living in the towns of Aylesbury and High Wycombe. The county has a predominantly rural north and a more urban south, with **Figure 4** showing the population density. This indicates that Amersham, Aylesbury, Chesham and High Wycombe have the highest population densities. The north of the county and parts of the Chiltern Hills have lower population density, with some residents living in dispersed villages and hamlets. Key everyday facilities, such as health, education and local services, tend to be located in towns and larger villages. For many journeys, accessing these facilities can involve travelling between settlements or into neighbouring authority areas.

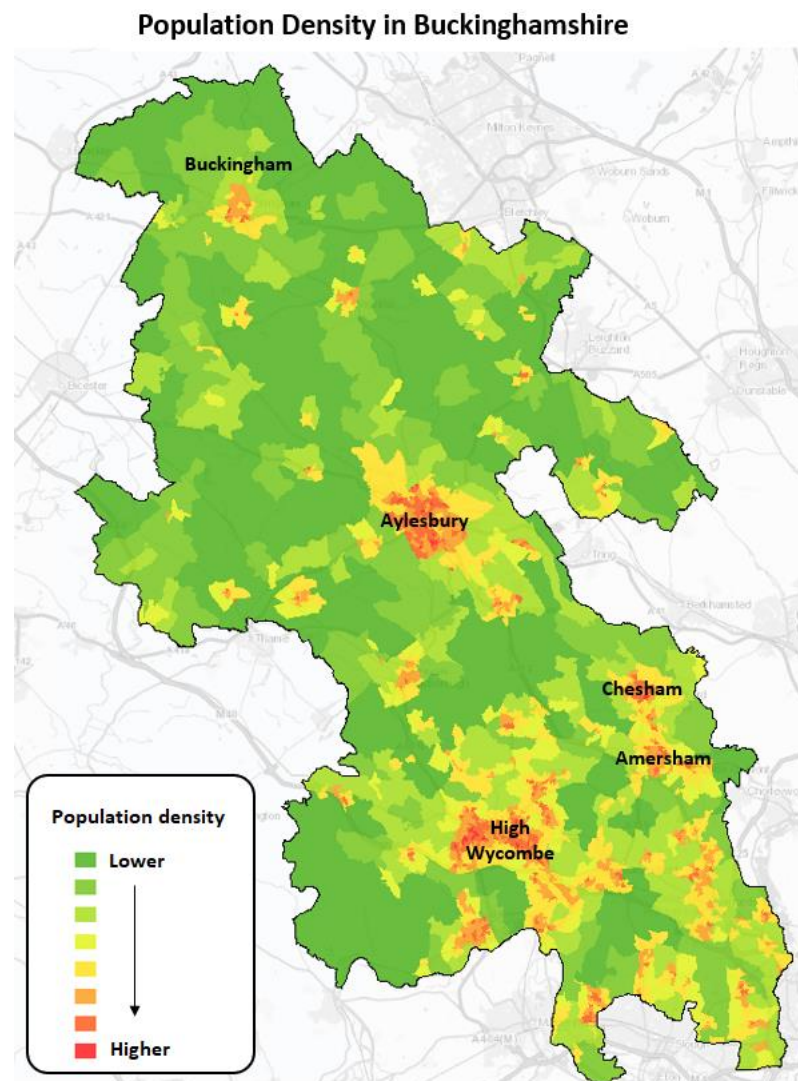
2.4 Active Travel Patterns and Potential

Data suggests that, in 2022, three-quarters of Buckinghamshire adults walked at least once a week for any purpose, whereas less than 10% cycled once a week. These were similar to the national averages ([DfT Statistics CW302 and CW303](#)).

At the national level, the most common purposes for cycling trips in 2022 were for leisure (36% of trips), commuting (30%), to education (13%), and shopping (11%). Walking was most commonly used for travel to education (19% of trips), to shop (15%) and for leisure (14%). The remaining 52% of walking journeys were for a mix of other purposes, including 'just going for a walk' ([National Travel Survey 2022](#)).

Comprehensive local data on walking and cycling journeys is not available for all journey purposes in Buckinghamshire; however, information is available for travel to school and to work, and this is presented below. Data is taken from the national Census. The 2021 Census took place when COVID-19 restrictions on travel were in place, therefore 2011 Census data is used. Additional analysis has been conducted at Community Board level to inform the LCWIP, and further local data on travel patterns and perceptions was collected through the public consultation on the LCWIP conducted in Autumn 2024.

Figure 4 – Population Density in Buckinghamshire



Source: <https://bucksdataexchange.org/data/population-density/>

Travel to school: At the time of the [2011 schools Census](#), 40% of Buckinghamshire children walked to school and 1% cycled. Individual schools recorded higher levels of walking or cycling, including several with more than 80% of children walking to school, or more than 5% cycling to school. Over 70 schools across Buckinghamshire have gained accreditation for excellence in their school travel plans through the national Modeshift STARS scheme. Buckinghamshire is a leading local authority nationally in terms of the number of schools which have an up-to-date travel plan registered with Modeshift STARS.

Travel to work: The [2011 Census](#) indicates that 10% of Buckinghamshire residents usually walked to work and 2% typically commuted by bicycle. Urban centres generally had higher mode shares of active travel, and in parts of Aylesbury and High Wycombe, up to 18% of people walked to work.

The government-funded [Propensity to Cycle Tool \(PCT\)](#) forecasts potential future demand for cycling to work and to school under different scenarios, accounting for trip distance and hilliness. The scenarios are based on 2011 Census data for travel to work (national census) and travel to school (schools census) [2021 Census data is not available through the Tool]. With the right combination of infrastructure and supporting measures, the most ambitious forecasts suggest up to 40% of commuting journeys and 50% of education trips made by Buckinghamshire residents have the potential to be cycled.

2.5 Key Opportunities and Constraints

In approaching the LCWIP, a range of opportunities and constraints relating to increasing uptake of active travel in Buckinghamshire were identified:

Opportunities

- Evidence from national and local engagement and schemes delivered shows there is broad support for improving active travel infrastructure;
- The National Travel Survey shows that, in 2021, 60% of trips under 5 miles were made by car. With appropriate infrastructure, these trips could potentially be walked, wheeled or cycled by many people;
- Forthcoming growth offers opportunities to make walking, cycling and wheeling the first choice and an option for local trips. This can be achieved by connecting new developments into a network and with local amenities;
- Active travel can bridge the gap to enable people to access local services in locations where public transport is unavailable or limited;
- Active travel can support onward connectivity, such as via public transport, serving as the means of travel for the 'first' or 'last' mile of a longer journey.

Constraints

- The availability and quality of existing active travel infrastructure varies across Buckinghamshire, with several areas currently having limited or no dedicated infrastructure, particularly between settlements. Consultation feedback identified a lack of infrastructure as a key barrier to uptake;
- The geography in parts of Buckinghamshire can make walking, wheeling and cycling journeys challenging, although electrically assisted bikes (e-bikes) can reduce these issues;
- Physical barriers, such as railway lines, motorways and main roads can deter or create severance for walking, wheeling, and cycling journeys;
- There is often limited public highway land available in which to readily accommodate new infrastructure for different transport modes.

2.6 Recent Investment in Buckinghamshire

Recent examples of Buckinghamshire Council's investment in active travel infrastructure are outlined below, with a focus on inter-settlement connections:

- **A413 Buckingham-Winslow Cycleway:** 5mi/8km route alongside the main road corridor. The route enables residents of rural communities to access facilities in the two towns of Buckingham and Winslow, including secondary schools, and will provide a connection to Winslow's new rail station, serving East West Rail.
- **Waddesdon Greenway, Aylesbury:** 2.5mi/4km traffic-free greenway delivered in 2018, connecting Aylesbury Vale Parkway rail station with Waddesdon Manor. The route provides a surfaced path of generous width and gentle gradient, making it an accessible and attractive alternative to the A41. The route has been hugely successful, with over 160,000 trips recorded in 2020; and has since benefited from an 800m extension to provide a connection into Waddesdon village via local schools. The Greenway route forms the first section of the Buckinghamshire Greenway.
- **St Peter's Greenway, Aylesbury:** 1 mi/1.7km traffic-free greenway link, delivered in 2022, connecting the two key development areas of Berryfields and Buckingham Park. The route passes adjacent to the remains of St Peter's Church.

In funding, designing and delivering its active travel infrastructure, Buckinghamshire Council works closely with local and national partner organisations, landowners and volunteers. The ambition is to achieve infrastructure that is inclusive and attractive, incorporating features such as resting points, wayfinding and sensitive lighting. During and after its delivery, infrastructure is promoted through initiatives that seek to encourage local ownership and usage.

Figure 5 – Waddesdon Greenway & St Peter's Greenway



2.7 Buckinghamshire Greenway

The Buckinghamshire Greenway, shown in **Figure 7** is the Council's vision for a flagship active travel route across Buckinghamshire, forming a north-south spine running from Brackley and Silverstone in the north to the Colne Valley in the south. As currently proposed, over 80% of the overall route will be off-road greenways, with the remainder running alongside highways or on quiet roads

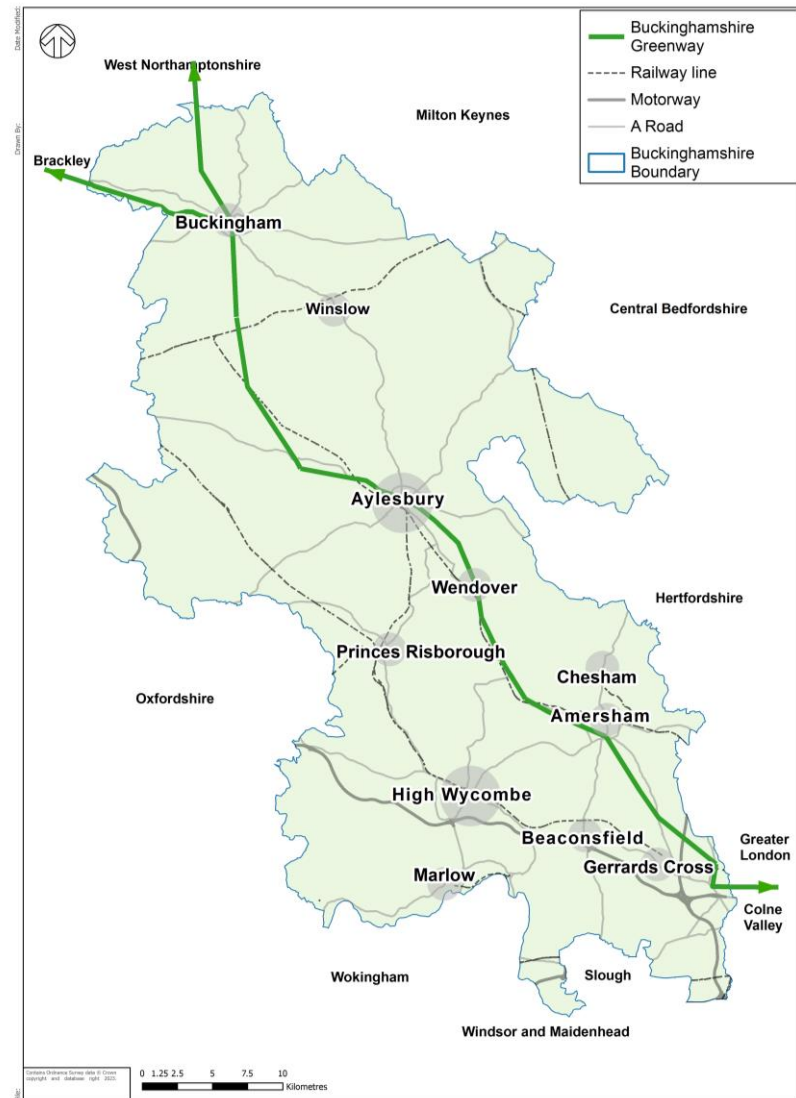
The Buckinghamshire Greenway has been split into discrete route sections to enable progressive delivery as and when necessary funding and consents are secured. Each section serves as a key inter-settlement link, as well as forming part of the wider countywide route. The first section to be delivered in 2018 was between Aylesbury Vale Parkway Station and Waddesdon Manor (Waddesdon Greenway), with the section between Wendover Dean and Great Missenden (Misbourne Greenway) completing in 2025. This route is being delivered by Sustrans in partnership with the Council and the Chiltern Society.

The Council is working closely with partner organisations across Buckinghamshire to bring the Greenway vision to life. This includes work with other public bodies, Town and Parish Councils, local and national charities, third-party landowners, local businesses and developers where relevant.

The alignment of HS2 intersects with the Buckinghamshire Greenway in several locations. The Council has secured agreement with the Department for Transport (DfT) and HS2 Ltd. to ensure that HS2 designs incorporate the Greenway alignment at each of these interface points.

The Buckinghamshire Greenway is intended to form the core spine of the Buckinghamshire LCWIP network and provide opportunities for connectivity with surrounding settlements.

Figure 6 – Buckinghamshire Greenway



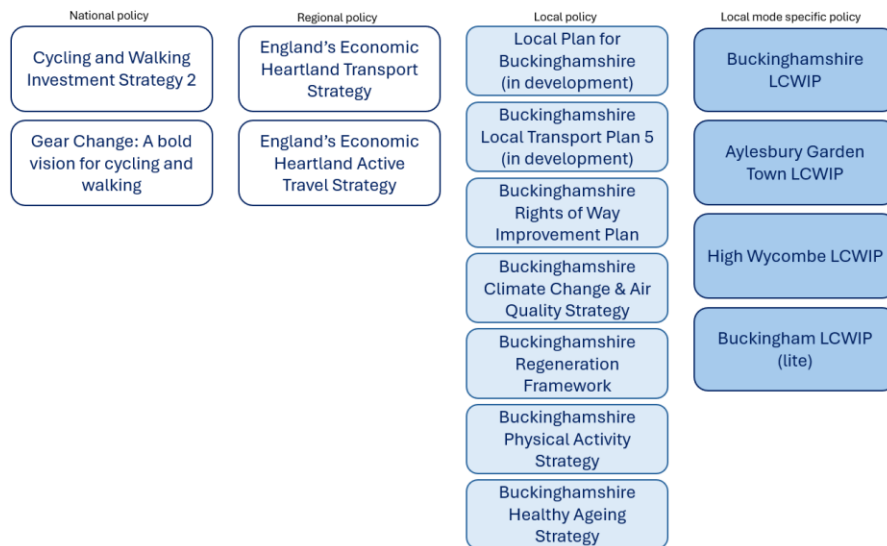
3 - Policy and Objectives

3.1 LCWIP investment and our policy objectives

The diagram in **Figure 7** sets out the relevant national, regional and local policy context for the Buckinghamshire LCWIP.

The development of the Buckinghamshire LCWIP is an identified priority in the Council's [Corporate Plan](#). Investment in active travel supports progress on Council's policy objectives, offering benefits including improving public health, air quality and road safety, reducing congestion, boosting the local economy, supporting leisure, tourism and tackling climate change.

Figure 7 - Buckinghamshire LCWIP Policy Context



National policy specific to active travel is set by the [Cycling & Walking Investment Strategy \(CWIS2\)](#). The Buckinghamshire LCWIP will contribute at a local level to the achievement of the four objectives set out in CWIS2.

At the **regional level**, Buckinghamshire is a member of the sub-national transport body [England's Economic Heartland](#), which has prepared an [Active Travel Strategy](#) that identifies 15 high potential active travel cross-border links across the region. 4 of these links interact with Buckinghamshire; these are Chesham-Berkhamstead, Newton Longville-Milton Keynes, Thame-Haddenham and Tring-Aylesbury.

England's Economic Heartland and Sustrans have identified ways in which the 'Varsity Way' route between Oxford and Cambridge could be improved. The ambition is for an improved Varsity Way route to serve local communities and become a leisure and tourism asset for the region. The route section within Buckinghamshire has been incorporated into the Buckinghamshire LCWIP.

Buckinghamshire Council policies, primarily the Local Transport Plan (LTP), set out the ambition, policies and plans for all types of transport across the county. The current version, [LTP4](#), was published in 2016. Its successor, [LTP5](#), is currently being prepared, and a consultation on the draft vision and objectives took place in 2023.

The draft Buckinghamshire LTP5 vision is:

“By 2045 it will be easier for our residents to travel to work, school or college, to shop, use public services, or visit friends or leisure destinations.

For journeys in our towns, people will feel able to choose to travel on foot, by bicycle, or on public transport as these will be attractive, reliable and affordable alternatives to taking the car for local journeys.

In our villages and between our towns travelling on foot, by bicycle or by public transport will be better and safer than it is now, but we will support those who need and want to travel by car to do so by tackling congestion, reducing delays and improving road safety.

By improving people’s travel choices and helping our residents make the shift to electric and alternatively fuelled vehicles, we will have reduced our transport carbon emissions, reduced noise and air pollution from traffic, and created healthy and thriving neighbourhoods.”

The Buckinghamshire LCWIP supports progress on the Council’s Climate Change & Air Quality Strategy, which includes an action to improve infrastructure for walking, cycling and wheeling (action 42). The Buckinghamshire LCWIP is intended to be read alongside the emerging Local Plan for Buckinghamshire and LTP5, town-specific LCWIPs and the [Rights of Way Improvement Plan](#).

4 - Buckinghamshire LCWIP Network

4.1 The Countywide Approach

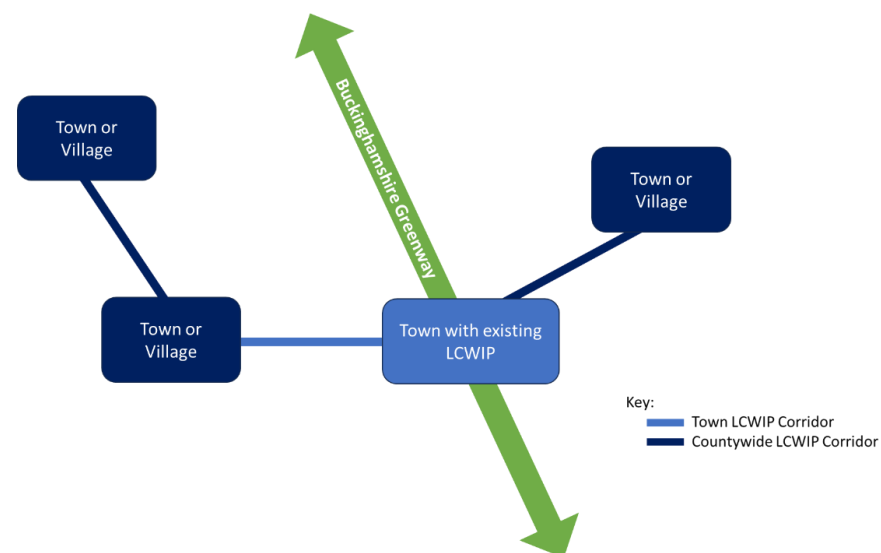
The Buckinghamshire LCWIP represents a strategic approach to planning walking, wheeling and cycling improvements. The LCWIP outlines a proposed network which has been shaped by data and engagement with Buckinghamshire Council's [Councillors](#) and [Community Boards](#), and through wider public consultation.

The Buckinghamshire LCWIP network approach:

- Seeks to recognise and build upon the networks and proposals contained in the Council's existing and emerging town LCWIPs;
- Identifies priorities across the wider Council area not covered by LCWIPs;
- Indicates where local settlements and networks could connect with the Buckinghamshire Greenway – the proposed flagship north-south network spine through the county;
- Given its scale, focuses on strategic connections between settlements – links 'to and through' towns and villages, providing new or improved connectivity, rather than proposals located wholly within settlements;
- Considers connections that could support walking, cycling wheeling; and
- Considers places in neighbouring authority areas close to the county border, which generate travel demand into and out of the county.

Figure 8 provides, in simple diagrammatic form, an indication of how the countywide approach has informed the development of a network. Due the strategic scale of analysis, the proposed network is presented as indicative **straight-lines** between the communities, referred to as **corridors**. This approach ensures consistency, reflecting that corridors are currently indicative, and each will require further work to identify specific requirements and interventions.

Figure 8 – Buckinghamshire LCWIP network approach



The Buckinghamshire LCWIP is to be used to support funding applications. Therefore the LCWIP network incorporates a shortlist of priorities, focused on corridors that are identified as having higher demand, are forecast to have high potential for active travel and which also align with local aspirations.

The Buckinghamshire LCWIP does not:

- Include proposals for every village, town, or Community Board area, or
- Identify every aspiration for active travel improvements.

Three main strands of analysis and engagement have been used to identify the priority corridors for inclusion in the Buckinghamshire LCWIP:

- Firstly, digital software was used to calculate the likely scale of trips by active travel which could be enabled between locations if high-quality infrastructure was in place. This considered links from towns and villages to key journey destinations including community facilities; employment; education; public transport (rail/bus); shops; and leisure and tourism sites. To calculate journey demand, consideration was given to existing homes and allocated development sites in adopted local plans.
- Secondly, input was invited from Buckinghamshire Council's [Councillors](#) and [Community Boards](#) on local aspirations for active travel improvements. The aspirations identified were added into the digital mapping software. Through workshops with Buckinghamshire Council's [Councillors](#), the following criteria were used to select priority corridors which were both **likely to enable high numbers of active travel journeys**; and **aligned to local aspirations** and priorities for improvements.

This analysis and engagement was completed by Community Board area to ensure that priority corridors are geographically distributed. In locations where town-level LCWIPs are in place, the inter-settlement links that those LCWIPs identify were all incorporated into the LCWIP network.

- Thirdly, the draft Buckinghamshire LCWIP was subject to public consultation in Autumn 2024. The consultation invited feedback on the proposed Buckinghamshire LCWIP network, with respondents able to indicate their views on the overall network and on any of the proposed 'corridors'. The consultation results showed overall support for the proposed LCWIP network and the Buckinghamshire Greenway. Respondents could also suggest additional 'corridors'. Following consultation, 5 additional 'corridors' were incorporated into the LCWIP.

Through the development of the Buckinghamshire LCWIP, a high volume of local aspirations have been identified. Aspirations that are not included in the adopted LCWIP network are shown in **Annex B**. These aspirations are recorded for information and for input into any future localised studies.

4.2 Buckinghamshire LCWIP Network

The Buckinghamshire LCWIP Network is shown in **Figure 9**. The map shows, in a **straight-line** diagrammatic form, the priority connections between communities which the Council proposes to investigate further. This includes:

- The Buckinghamshire Greenway network spine;
- Towns covered by LCWIPs and the inter-settlement corridors they identify;
- The priority inter-settlement corridors that have been identified through the Buckinghamshire LCWIP analysis. This includes corridors crossing into neighbouring authority areas where relevant.
- England's Economic Heartland's recommendations, including improvements to the Varsity Way within Buckinghamshire and 4 cross-authority links relevant to Buckinghamshire that are identified in the Active Travel Strategy.

4.3 Timescales

In line with the government's LCWIP Technical Guidance, the Buckinghamshire LCWIP is a long-term strategy outlining the approach to planning active travel infrastructure improvements over the next 10 to 20 years. The LCWIP will be reviewed and updated periodically to reflect progress, funding, and changes in circumstances (see Chapter 6 for more information).

It is important to note that the LCWIP does not provide or guarantee funding for, or the delivery of, the proposed corridors. Instead the LCWIP outlines the Council's ambition across the county and indicates priority corridors for further investigation. The broad options for the corridors are explored in Section 5.3.

Figure 9 – Buckinghamshire LCWIP Network



5 - Designing the Network

5.1 Who are we designing for?

The active travel network will be designed to enable people of all ages and abilities acrosss Buckinghamshire to walk, wheel and cycle. This includes:

- Designing and catering for people of all ages and abilities;
- Creating routes that are accessible regardless of gender, ethnicity or disability;
- Designing for people using wheelchairs, mobility scooters, non-standard cycles such tricycles and for cargo bikes; and
- Considering different perceptions of safety.

Parts of the active travel network may utilise or provide useful routes for equestrians. The Council will work with the British Horse Society and local user groups to identify these opportunities as part of network development and, where possible, provide for riding in the delivery of relevant new infrastructure. Constraints, including available space and landowner agreements, mean that provision for equestrians cannot be guaranteed in all circumstances.

Inclusive design is a requirement of the Equality Act and supports the county's Paralympic Legacy. These underscore the importance of designing an accessible active travel network.

The [Equality Act 2010](#) provides the legal framework for protecting people from discrimination, including in terms of the transport network and services. This includes making reasonable adjustments to the existing built environment to ensure new infrastructure is accessible for all.

The active travel network needs to be suitable for people making everyday trips, as well as tourism and leisure journeys.

5.2 Summary of Design Principles and Standards

Government and other organisations publish best practice guidance on planning and designing active travel infrastructure. Key current documents include:

- [Local Transport Note \(LTN\) 1/20 - Cycle Infrastructure Design \(2020\)](#);
- [Inclusive Mobility - A Guide to Best Practice on Access to Pedestrian and Transport Infrastructure \(2021\)](#); and
- [Manual for Streets 1 \(2007\)](#) and [2 \(2010\)](#).

The guidance in LTN 1/20 sets out key principles for when designing for cycling. Buckinghamshire Council will seek to design and deliver infrastructure in accordance with LTN 1/20. In circumstances where this is not possible or considered inappropriate, the Council will endeavour to follow best practice and draw on local guidance. In complex situations where provision for several different travel modes needs to be balanced, or where space is limited, the Council will work with relvant stakeholders to identify the most appropriate solutions.

Some parts of the transport network are important for movement (such as strategic routes between settlements), whereas other parts are important as places (for example, where people live, shop, or spend leisure time). Some parts of the network play both roles. The planning and delivery of active travel improvements needs to consider and respond to these local contexts.

Guidance documents outline core design criteria which represent the essential requirements to support and enable more walking, wheeling, and cycling journeys. Summaries of these design principles are set out below.

Key **design principles for walking** include:

- Walking routes should connect all areas with key trip attractors, such as public transport stops, schools, work and leisure destinations. Routes should form a comprehensive network;
- Walking routes and public spaces should be pleasant to use and allow other users and walkers to interact safely;
- Wayfinding should be clear and legible, if necessary with the help of signposting and waymarking;
- Walking environments should provide high quality pavements, attractive landscapes and ideally be away from noise, pollution and segregated from vehicles, with opportunities for people to rest and shelter; and
- Routes should be direct and convenient with adequate crossings that meet pedestrian desire lines.

[Local Transport Note 1/20](#) outlines key **design principles for cycling**, as follows:

- Coherent – Cycle networks should be planned and designed to allow people to reach their day-to-day destinations easily, along routes that connect, are simple to navigate and are of consistently high quality;
- Direct – Cycle routes should be at least as direct, and preferably more direct, than those available for private motor vehicles;
- Safe – Cycle infrastructure should be both safe and perceived as safe so that more people feel able to cycle;
- Comfortable – Cycle routes should have good quality, well maintained, smooth surfaces of adequate width for the volume of users, minimal stopping distances and should avoid steep gradients; and
- Attractive – Cycle infrastructure should help to deliver public spaces that are well designed and finished in attractive materials and be places that people want to spend time using.

5.3 Types of Infrastructure

Broad options for inter-settlement corridors

The corridors comprising the Buckinghamshire LCWIP network will be subject to further investigation. The broad options for the corridors are summarised below. These are indicative and interventions for specific corridors will be informed by further assessment and engagement as they are developed. Corridors may consist of one option or a combination of options, as illustrated in the **Case Studies**.

Greenways

Traffic-free routes, often called Greenways, can either be created by upgrading Public Rights of Way, to make them accessible and suitable for everyday journeys, or by constructing new links, sometimes across privately owned land.

Routes on public highways

Off-road paths

This involves providing dedicated space for walking, wheeling, and cycling on paths alongside roads. This is particularly important to protect active travel users from high speed and/or high flows of traffic, and the faster the vehicle speeds, the greater the physical separation that is desirable. Providing this infrastructure along main road corridors usually offers the most direct routes between settlements and can also connect intermediate communities.

On-road quietways

In parts of the Buckinghamshire there are networks of adopted highways that have, or could have, suitable conditions for active travel (e.g., light traffic flows and low motor vehicle speeds). Measures such as traffic calming can be used to support active travel in these locations.

New and Improved Crossings

Providing safe crossings enables people to cross physical barriers, including motorways, railways or rivers, as well as roads with fast vehicle speeds or high traffic flows. Crossings can link together parts of the active travel network and reduce severance. Crossing types include overbridges and underbridges, signal crossings, zebra crossings (for pedestrians only), parallel crossings (similar to zebra crossings, but with separate space for people walking and cycling), pegasus crossings (suitable for equestrians) and priority crossings (controlled by give-way markings).

Case Studies

Waddesdon Greenway

- 2.5mi/4km off-road greenway
- Shared use path catering for all users – walking, wheeling and cycling
- Mixture of permissive routes and Public Rights of Way
- Road crossings: 1 (uncontrolled)
- Intersects with the HS2 route – a bridge carrying the Greenway over the railway is to be constructed by HS2 in future

Platinum Way, Aylesbury

- 1.5mi/2.3km off-road greenway
- 0.6mi/1km segregated shared use path
- 1mi/1.7km quietways (using lightly trafficked residential streets)
- Road crossings: 3 (controlled); 10 (uncontrolled); 2 (side priority); 4 (grade separated)
- Railway crossings (grade separated): 2
- River crossings: 5

5.4 Supporting Measures

Measures to be considered for inter-settlement active travel infrastructure include the following:

- **Benches and seating** – to allow people to rest on their journeys and extend the distance they are comfortable travelling;
- **Footway widening and resurfacing** – measures to ensure there are level surfaces and sufficient footway width to safely accommodate everyone walking and wheeling;
- **Junctions** – redesigned road junctions can reduce the distance people walking, cycling and wheeling have to cross, enhance safety, and emphasise pedestrian priority, in line with the [revised Highway Code rules](#). This is suited to areas with lower slower vehicle speeds and higher pedestrian flows;
- **Lighting** – providing lighting increases a sense of personal security and helps support year-round utility journeys. Depending on the location and circumstances, options include low-level lighting on bollards, solar-powered studs, lighting only between certain times, or installations activated by the presence of people walking, wheeling or cycling;
- **Tree, planting and greening** – to provide shade and shelter and enhance the attractiveness of routes; and
- **Wayfinding** – clear and consistent signs and road markings help people navigate, particularly to and from traffic-free routes. They can also promote general awareness of a route. Wayfinding information can, for example, include destination and distance information;

Alongside this, a range of other measures can give people the support and confidence to travel actively, including:

- **Cycle hire** programmes that offer a variety of options for visitors and residents, including e-bikes or cargo bikes;
- **Cycle parking** provided at destinations and designed into residential developments. Facilities should be secure, and well located, and cater for all users and cycle designs. Recent investment includes secure high-quality cycle parking at rail stations in partnership train operating companies;
- **Information and promotion** can play vital roles in and encouraging active travel. Examples include *Simply Walk*, the Council's health walk programme which offers free, volunteer-led walks; the *Modeshift STARS* school travel initiative, encouraging children to travel actively to school; and smartphone apps such as *BetterPoints* to encourage physical activity;
- **Public Transport Networks**, with suitable infrastructure and services, public transport can be important in supporting active travel, and in turn, active travel can enable people to access public transport. Opportunities to strengthen the integration between active travel and public transport can include stations and bus stops with step-free access and suitable waiting environments and innovations like Demand-Responsive, which brings public transport provision closer to the user;
- **Training programmes**, such as Bikeability cycle training available for primary and secondary school age children, which gives them the skills and confidence to cycle safely, whilst providing practice in planning routes;
- **Travel planning and community initiatives** – Buckinghamshire Council publishes travel planning guidance for developers, businesses and communities and provides resources for promoting active travel in local communities.
- **Technology Integration**, with active travel routes being fully integrated into websites such as Google Maps or smartphone apps; to simplify and improve journey planning.

6 - Delivery, Funding and Next Steps

6.1 Introduction

The Buckinghamshire LCWIP is intended to ensure that future investment is targeted to where it can have the greatest impact, providing opportunities for increasing the numbers of journeys being walked, wheeled and cycled. This section sets out the Council's intended approach to progressing the Buckinghamshire LCWIP corridors and integrating them into relevant workstreams.

6.2 Integration with Council workstreams

The Buckinghamshire LCWIP will form a supporting modally-focused delivery plan to the forthcoming LTP5. It will be used to:

- Provide evidence for use in future localised studies
- Provide evidence and justification for funding bids and proposals;
- Help develop future local planning policy;
- Provide information for inclusion in Travel Plans, Transport Assessments and Statements as part of planning applications; and
- Inform the determination of planning applications and inform financial contribution requests and/or infrastructure to be delivered by developers.

6.3 Partnership Working

Developing and delivering active travel infrastructure requires partnership working with many stakeholders, including funding bodies, landowners, local residents and town/parish councils. It is crucial to thoroughly assess the feasibility of such projects, seek local views and build support among relevant stakeholders.

6.4 Making the Case for Investment

Councils are often required to make the case for investment and demonstrate value for money when seeking funding. Many factors influence the value for money of proposed active travel investment, including scheme cost, the positive impacts (such as the likely number of journeys that will be enabled), and consideration of any adverse impacts.

Case Study

The Denham Link

Working with partners, the Council has been gathering evidence to support the development of business cases for rural active travel infrastructure routes in Buckinghamshire, such that when relevant funding opportunities do arise, a compelling case can be made for them.

An example is the Denham Link scheme, a proposed route section of the Buckinghamshire Greenway that would connect Higher Denham, Denham Green and Denham village. Should the route come forward, the three communities, impacted by severance issues would be better connected, with improved access to local rail and bus services. The route would also contribute to the development of a more comprehensive active travel network across the Colne Valley.

6.5 Development and delivery

The corridors that are included in the Buckinghamshire LCWIP are those that were identified as local priorities during the LCWIP development process.

A tabulated development and delivery plan for the LCWIP priority corridors is provided in **Annex C**.

The corridors are not placed into a specific order of development and delivery, but commentary is provided on the following factors that influence prioritisation:

- Current stage of development;
- Wider connectivity the corridor could provide;
- Potential scale of cost.

Each corridor will require more detailed design, engagement and consultation in order to determine specific interventions (see section 6.8). Nearly all active travel schemes delivered by the Council are done so in partnership with external organisations across the public, private and charitable sectors. Continued partnership working will be essential in order to deliver on the growth in active travel for Buckinghamshire envisaged in this LCWIP.

The priority corridors outlined in the development and delivery plan are expected to require investment over a phased delivery period. The Council will seek to identify appropriate funding sources to deliver the Buckinghamshire LCWIP proposals; however, in most cases this will be highly dependent on:

- successful funding applications;
- securing developer contributions as planning applications come forward;
- obtaining match funding from partner organisations.

Buckinghamshire Council will work in close partnership with planning applicants, to ensure they deliver specific elements of infrastructure where possible.

Some of the priority corridors connect into neighbouring authority areas. Delivering cross-boundary priority corridors will be subject to engagement with the relevant neighbouring authorities.

6.6 Monitoring the Progress of the LCWIP

The Buckinghamshire LCWIP will provide a local contribution to support the achievement of the four national objectives set out in the government's CWIS2. These national objectives are to:

- 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 to 365 stages per person per year by 2025 (trips can consist of one or more stages, with a new stage for each transport mode used; for example, cycling to the station and then catching the train);
- Double cycling from 0.8 billion stages in 2013 to 1.6 billion stages in 2025; and
- Increase the percentage of children aged 5 to 10 who usually walk to school from 49% in 2014 to 55% in 2025.

Through the use of data counters, Buckinghamshire Council already collects data on walking and cycling journeys at a selection of locations around the county.

Opportunities for additional data collection will be considered and integrated as part of the planning and delivery of any new schemes. As part of the preparation of LTP5, the Council will also be reviewing and updating monitoring and evaluation processes, and this will consider active travel.

6.7 Maintenance

The maintenance of roads and other highway assets is a challenge for councils such as Buckinghamshire. Ringfenced funding from government is often available for infrastructure but is much scarcer for ongoing maintenance or repairs to existing infrastructure. The Council is advocating for greater funds for

maintenance, including for its expanding Greenway network. Ongoing costs will be considered, and potential funding identified as part of the scheme development process. In some cases, community involvement and support from charities and businesses may be possible to help with some elements of maintenance, such as looking after planting or keeping routes free clear of obstruction.

6.8 Next Steps

The priority corridors identified within the LCWIP will be taken forward for further development and will be subject to further design work and engagement. This investigation work will require funding. Sometimes funding is available for design only, or for construction and delivery only. Therefore, delivery is not guaranteed and is subject to further governance, prioritisation and funding availability.

In broad terms, the next steps for each corridor will be as follows:

- The corridor will be selected for progression; for example where it meets funding bid criteria or where opportunities arise;
- The interventions required for a corridor and their feasibility will be investigated, with early stage inputs from, and engagement with, stakeholders and the public;
- The Council will then decide the interventions and whether to proceed;
- Following a decision to proceed, a detailed design will be prepared, along with any supporting work to secure necessary approvals and consents, such as with landowners, planning applications or public rights of way orders.
- Subject to approvals and funding availability, the interventions would be delivered.

More detail on the approach that will be taken to engagement when developing and delivering new active travel infrastructure is set out on the [Council's website](#).

Corridors will be designed and developed in partnership with Buckinghamshire Council Councillors Community Boards, town and parish councils, neighbouring authorities, landowners, and other key stakeholders.

The LCWIP is intended to be a live document and will be reviewed periodically to reflect progress made. Updates will indicate significant changes in local circumstances, such as the completion of infrastructure, publication of new policies or strategies, major new development sites, or new sources of funding.

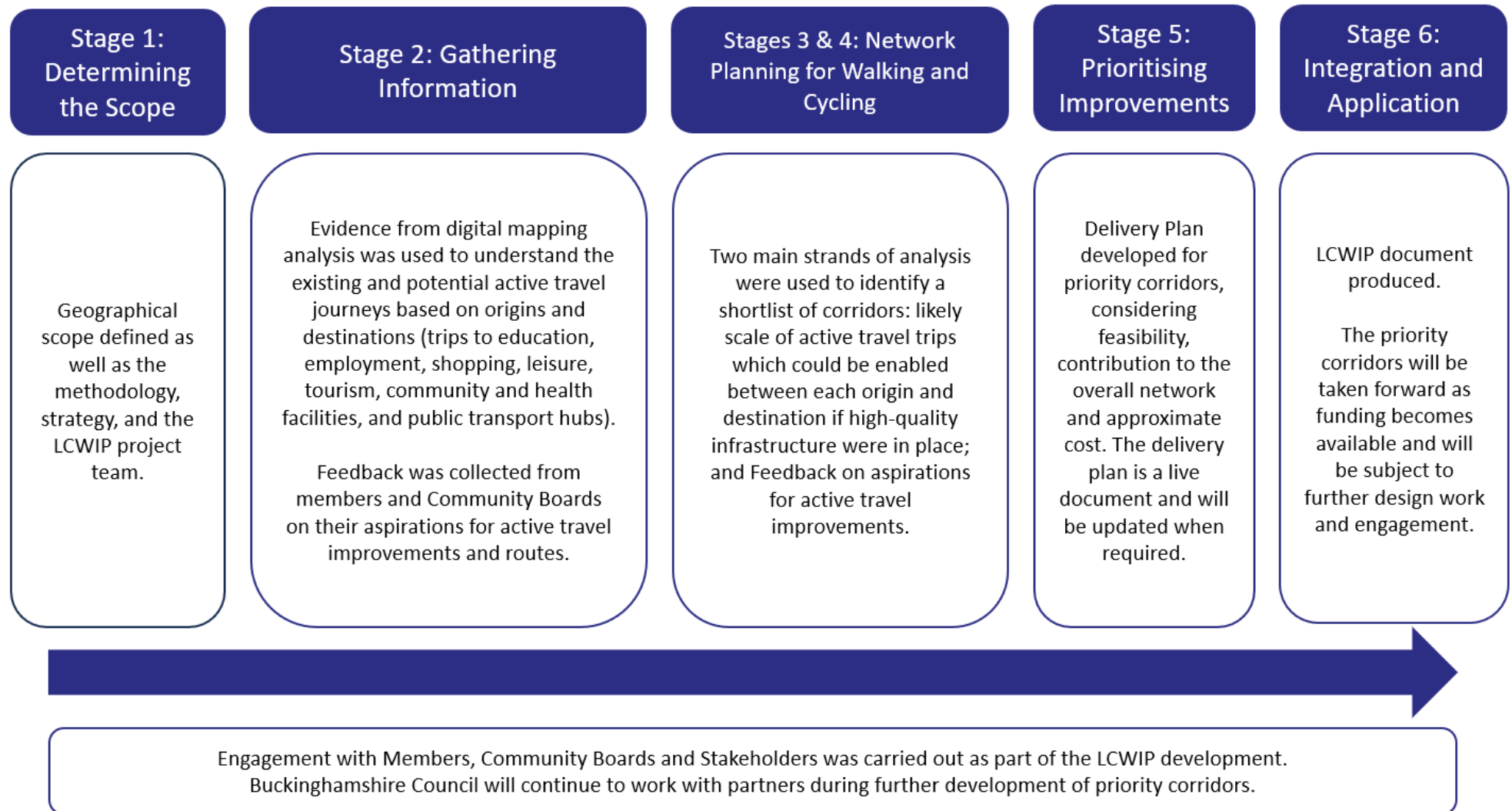
6.9 Conclusion

Establishing active travel as the first choice for local everyday journeys has the potential to unlock major benefits, including improved health, better air quality, improved place-making and town centre regeneration, boosted connectivity, strengthened local communities and economies and reduced congestion.

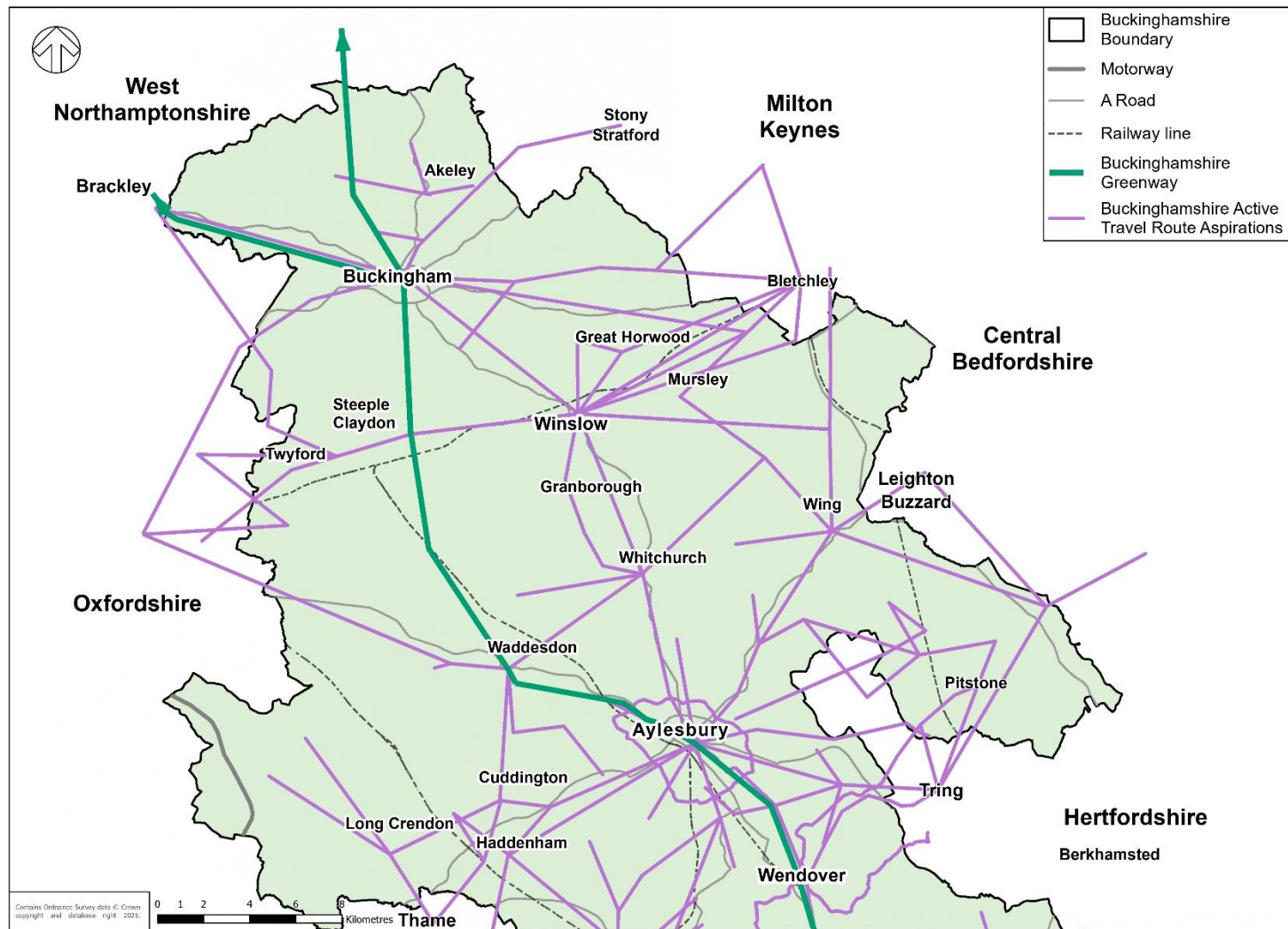
The Buckinghamshire LCWIP provides the long-term framework setting out the Council's priorities for routes, informed by evidence on the potential for active travel, and feedback from Council members and Community Boards.

The LCWIP sets out an ambitious vision of a connected network for walking, wheeling and cycling, to connect communities together. The realisation of this network will provide new transformational opportunities for active travel across Buckinghamshire.

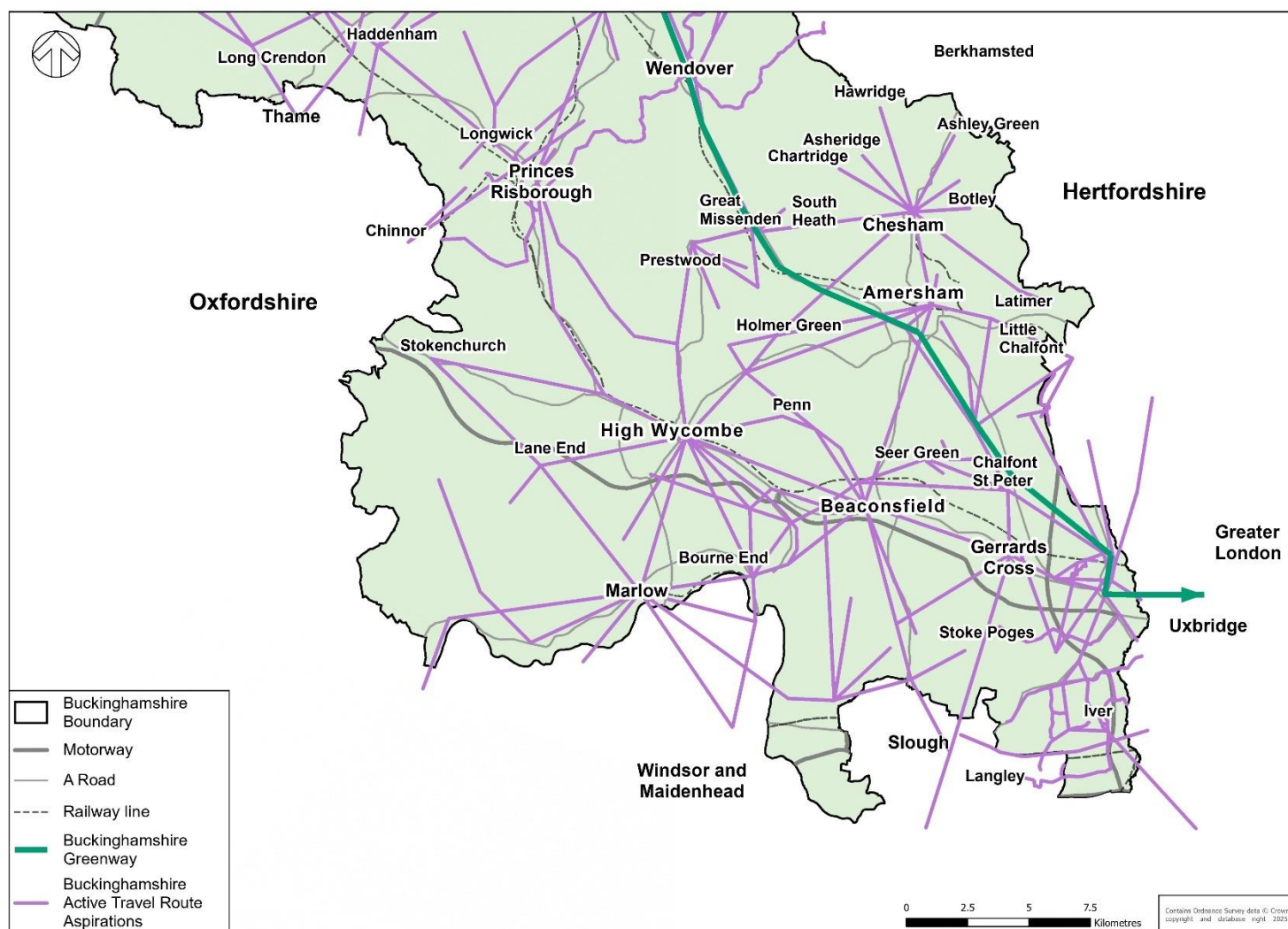
Annex A - Summary of Buckinghamshire LCWIP Process



Annex B - Additional Active Travel Aspirations*



Buckinghamshire LCWIP



**Annex B does not form part of the adopted Buckinghamshire LCWIP network. The above two plans show the Buckinghamshire Greenway alongside all local aspirations for active travel infrastructure that were identified during the development of the Buckinghamshire LCWIP. Those aspirations that are shown in Annex B, but not in the adopted Buckinghamshire LCWIP network (Figure 9), are recorded for reference and for input into any future localised studies.*

Annex C - LCWIP Development and Delivery Programme

The corridors that are included in the Buckinghamshire LCWIP are those that were identified as local priorities during the LCWIP development process. Alongside this, the inter-settlement corridors that are identified in the adopted or emerging town-level LCWIPs are included in the Buckinghamshire LCWIP, as well as the Buckinghamshire Greenway and improvements identified by England's Economic Heartland.

In the programme detailed below, corridors are listed alphabetically but not placed into a specific order of development and delivery. Commentary is provided on the following factors that could influence prioritisation:

- Any **additional connectivity** the corridor could provide, such as forming part of the Buckinghamshire Greenway or linking into a neighbouring authority area;
- The **current stage of development** of a corridor, where applicable this includes any potentially relevant investigative work previously undertaken;
- Anticipated **scope for contributory funding** from known or allocated local development sites in existing local plans or other relevant sources;
- Potential **scale of cost** that could be required to deliver improvements, giving consideration to overall distances between settlements and drawing on relevant comparable case studies. The cost categories are defined as follows:

Category	Scale
£	Under £1 million
££	Between £1 million and £2 million
£££	Between £2 million and £5 million
££££	Over £5 million

Please note, information provided in Annex C is indicative. Each corridor will require more detailed design, engagement and consultation in order to determine specific interventions and associated costs. This work will be progressed on a phased basis and will enable the development and delivery programme to be reviewed and updated.

Buckinghamshire LCWIP

Corridor	Town-level LCWIP corridor?	Buckinghamshire Greenway connection?	Cross-border connection?	Current stage of development	Scope for contributory funding	Cost category
Akeley - Maids Moreton - Buckingham	Yes			Concept or at early stages of development and would need significant further investigation to proceed	Medium	££
Amersham (Old Town) - Little Missenden - Great Missenden		Yes		Concept or at early stages of development and would need significant further investigation to proceed	Low	£££
Amersham-on-the-Hill - Chesham	Yes			Concept or at early stages of development and would need significant further investigation to proceed	Medium	£££
Amersham-on-the-Hill - Little Chalfont				Concept or at early stages of development and would need significant further investigation to proceed	Low	££
Aston Clinton - Wendover		Yes		Concept or at early stages of development and would need significant further investigation to proceed	Medium	££
Aston Clinton - Weston Turville - Aylesbury	Yes			Concept or at early stages of development and would need significant further investigation to proceed	Medium	£££
Aylesbury - Whitchurch – North Marston	Yes			Concept or at early stages of development and would need significant further investigation to proceed	Low	£££

Buckinghamshire LCWIP

Beaconsfield - Farnham Common - Farnham Royal - Slough			Yes - Slough	Concept or at early stages of development and would need significant further investigation to proceed	Low	£££
Beaconsfield - Flackwell Heath				Concept or at early stages of development and would need significant further investigation to proceed	Low	££
Beaconsfield - Knotty Green - Penn				Concept or at early stages of development and would need significant further investigation to proceed	Low	£
Beaconsfield - Seer Green - Chalfont St Peter				Concept or at early stages of development and would need significant further investigation to proceed	Low	££
Beaconsfield - Wooburn Green				Concept or at early stages of development and would need significant further investigation to proceed	Low	££
Bierton - Wing – Leighton Buzzard	Yes		Yes – Central Bedfordshire	Concept or at early stages of development and would need significant further investigation to proceed	Low	£££
Bourne End - Marlow				Concept or at early stages of development and would need significant further investigation to proceed	Medium	££
Buckingham - Brackley	Yes	Yes	Yes - Oxfordshire and West Northamptonshire	Concept or at early stages of development and would need significant further investigation to proceed	Low	£££

Buckinghamshire LCWIP

Buckingham – Stony Stratford	Yes		Yes – Milton Keynes	Concept or at early stages of development and would need significant further investigation to proceed	Medium	££££
Buckingham - Milton Keynes	Yes		Yes - Milton Keynes	Concept or at early stages of development and would need significant further investigation to proceed	High	££££
Buckingham - Stowe - Silverstone	Yes	Yes	Yes - West Northamptonshire	Some design and study completed, however further investigation would be required to prepare for funding and delivery	Medium	£££
Chalfont St Giles - Amersham (Old Town)		Yes		Some design and study completed, however further investigation would be required to prepare for funding and delivery	Low	££
Chalfont St Giles – Little Chalfont				Concept or at early stages of development and would need significant further investigation to proceed	Low	££
Chalfont St Peter - Chalfont St Giles		Yes		Some design and study completed, however further investigation would be required to prepare for funding and delivery	Low	££
Chesham - East (Chesham - Botley - Lye Green)	Yes			Concept or at early stages of development and would need significant further investigation to proceed	Low	££
Chesham - North (Chesham - Ashley Green - Hawridge - Berkhamsted)	Yes		Yes - Hertfordshire	Concept or at early stages of development and would need significant further investigation to proceed	Low	£££

Buckinghamshire LCWIP

Chesham - West (Chesham - Asheridge - Chartridge)	Yes			Concept or at early stages of development and would need significant further investigation to proceed	Low	£
Chinnor - Bledlow - Princes Risborough			Yes - Oxfordshire	Concept or at early stages of development and would need significant further investigation to proceed	Medium	££
Cuddington - Haddenham				Concept or at early stages of development and would need significant further investigation to proceed	Low	£
Denham - Denham Green - Higher Denham		Yes	Yes - London Borough of Hillingdon	Some design and study completed, however further investigation would be required to prepare for funding and delivery	Low	££
Denham - Tatling End - Gerrards Cross				Concept or at early stages of development and would need significant further investigation to proceed	Low	££
Farnham Royal - Burnham				Concept or at early stages of development and would need significant further investigation to proceed	Low	£
Farnham Royal - Stoke Poges				Concept or at early stages of development and would need significant further investigation to proceed	Low	£
Gerrards Cross - Chalfont St Peter				Concept or at early stages of development and would need significant further investigation to proceed	Medium	££

Buckinghamshire LCWIP

Great Missenden – Holmer Green				Concept or at early stages of development and would need significant further investigation to proceed	Medium	££
Great Missenden - Prestwood				Concept or at early stages of development and would need significant further investigation to proceed	Low	£
Great Missenden - South Heath				Concept or at early stages of development and would need significant further investigation to proceed	Low	£
Greatmoor - Middle Claydon - Steeple Claydon		Yes		Some design and study completed, however further investigation would be required to prepare for funding and delivery	Medium	£££
Haddenham - Thame			Yes - Oxfordshire	Some design and study completed, however further investigation would be required to prepare for funding and delivery	High	£££
Haddenham - Aylesbury	Yes			Some design and study completed, however further investigation would be required to prepare for funding and delivery	High	£££
Halton - Wendover		Yes		Concept or at early stages of development and would need significant further investigation to proceed	High	£
High Wycombe – Flackwell Heath - Wooburn Green - Bourne End	Yes			Some design and study completed, however further investigation would be required to prepare for funding and delivery	Medium	£££

Buckinghamshire LCWIP

High Wycombe - Hazlemere - Holmer Green	Yes			Concept or at early stages of development and would need significant further investigation to proceed	Medium	££
High Wycombe – Hughenden Valley	Yes			Some design and study completed, however further investigation would be required to prepare for funding and delivery	Medium	£
High Wycombe - Marlow Bottom - Marlow	Yes			Concept or at early stages of development and would need significant further investigation to proceed	Medium	£££
High Wycombe - Penn	Yes			Concept or at early stages of development and would need significant further investigation to proceed	Low	£
High Wycombe - Stokenchurch	Yes			Concept or at early stages of development and would need significant further investigation to proceed	Low	££
High Wycombe - Stoke Mandeville	Yes			Concept or at early stages of development and would need significant further investigation to proceed	High	££££
Higher Denham - Chalfont St Peter		Yes		Concept or at early stages of development and would need significant further investigation to proceed	Low	££
Iver - Iver Heath				Some design and study completed, however further investigation would be required to prepare for funding and delivery	Medium	££

Buckinghamshire LCWIP

Iver - Richings Park				Some design and study completed, however further investigation would be required to prepare for funding and delivery	Medium	£
Lane End - Marlow				Concept or at early stages of development and would need significant further investigation to proceed	Low	££
Little Horwood - Great Horwood - Winslow				Some design and study completed, however further investigation would be required to prepare for funding and delivery	Medium	££
Long Crendon - Thame			Yes - Oxfordshire	Concept or at early stages of development and would need significant further investigation to proceed	Medium	££
Longwick - Princes Risborough				Some design and study completed, however further investigation would be required to prepare for funding and delivery	High	££
Marlow-Henley on Thames			Yes - Oxfordshire	Concept or at early stages of development and would need significant further investigation to proceed	Low	£££
Newton Longville – Milton Keynes			Yes - Milton Keynes	Concept or at early stages of development and would need significant further investigation to proceed	Medium	££
North Marston - Granborough - Winslow				Concept or at early stages of development and would need significant further investigation to proceed	Low	££

Buckinghamshire LCWIP

North Marston – Swanbourne - Mursley - Winslow				Concept or at early stages of development and would need significant further investigation to proceed	Low	£££
Pitstone-Tring			Yes-Hertfordshire	Concept or at early stages of development and would need significant further investigation to proceed	Low	£££
Richings Park - Langley			Yes - Slough	Some design and study completed, however further investigation would be required to prepare for funding and delivery	Medium	£
Steeple Claydon - Buckingham	Yes	Yes		Concept or at early stages of development and would need significant further investigation to proceed	Low	£££
Tring-Aylesbury	Yes		Yes - Hertfordshire	Some design and study completed, however further investigation would be required to prepare for funding and delivery	Medium	£££
Twyford - Steeple Claydon - Winslow				Concept or at early stages of development and would need significant further investigation to proceed	Medium	£££
Varsity Way (Buckinghamshire sections)			England's Economic Heartland	Some design and study completed, however further investigation would be required to prepare for funding and delivery	Low	£££
Waddesdon - Quainton - Greatmoor		Yes		Concept or at early stages of development and would need significant further investigation to proceed	Medium	£££

Buckinghamshire LCWIP

Wendover – Wendover Dean		Yes		Some design and study completed, however further investigation would be required to prepare for funding and delivery	High	££
Wendover - Weston Turville - Aylesbury	Yes	Yes		Some design and study completed, however further investigation would be required to prepare for funding and delivery	Medium	£££