



East Hertfordshire

LOCAL CYCLING AND WALKING INFRASTRUCTURE PLAN

Hertfordshire County Council / East Herts Council

Type of document (version) Public

Project no. 70093355

Date: April 2026

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Quality control

Issue/revision	First issue	Revision 1	Revision 2	Revision 3
Remarks	DRAFT	FINAL	FINAL (EHC Updates)	FINAL (Post Consultation)
Date	July 2025	August 2025	September 2025	April 2026
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Project number	70093355	70093355	70093355	70093355
Report number	V.01	V.03	V.05	V.06

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1 Introduction

1.1 Background

WSP has been commissioned by Hertfordshire County Council (HCC) and East Hertfordshire Council (EHC) to develop a district-wide Local Cycling and Walking Infrastructure Plan (LCWIP).

Local Cycling and Walking Infrastructure Plans, as set out in the Government's Cycling and Walking Investment Strategy (CWIS), are a strategic approach to identifying cycling and walking improvements required at a local level.

This LCWIP represents a first stage in the councils' aspirations for active travel network development across the district, with the LCWIP approach being brought forward across the rest of the county in stages. As such, and in line with the approach elsewhere in Hertfordshire, the East Herts LCWIP will be revisited periodically and updated as infrastructure is built throughout the district. This means that initially the areas and routes in the district being considered are those where the greatest potential for cycling and walking exists and therefore where targeted infrastructure improvements could help generate the greatest number and types of new active trips.

Key outputs from this LCWIP include:

- Primary and secondary cycle network
- Primary and secondary walking network
- Scheme concepts
- Prioritised list of interventions

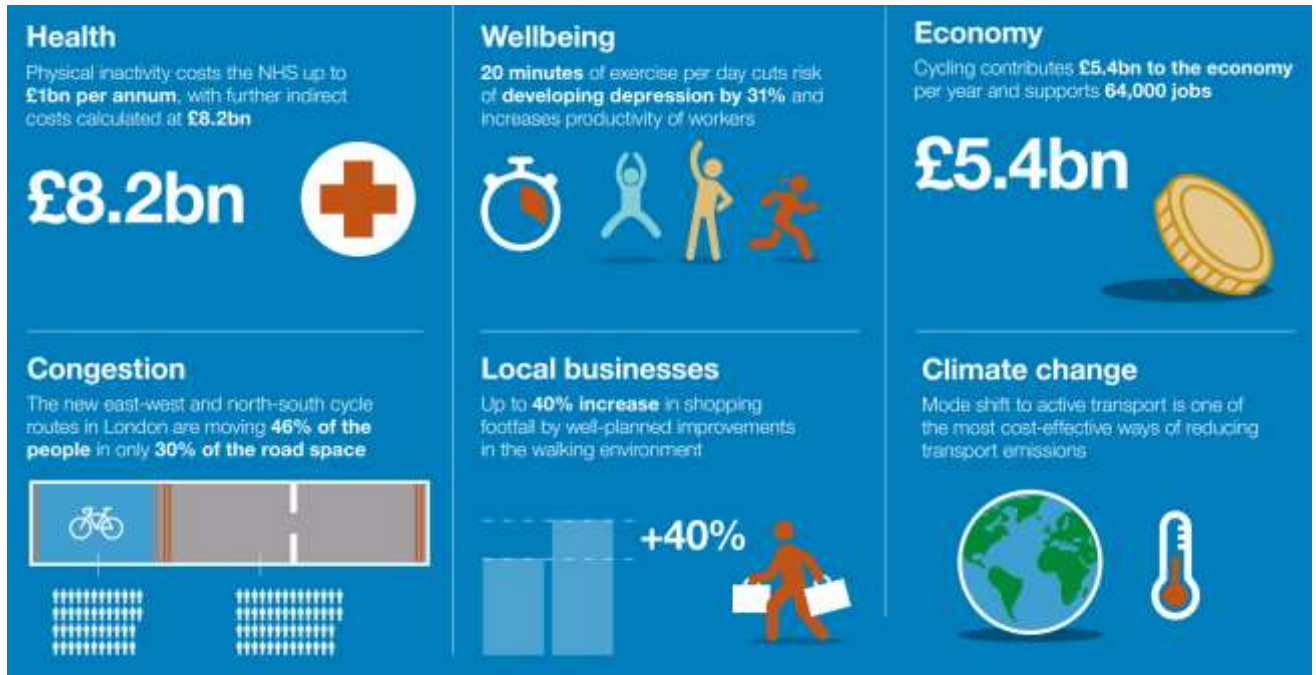


Figure 1-1 - The Benefits of Cycling and Walking Investment (Gear Change, DfT)

1.2 LCWIP Background

In April 2017, the Department for Transport (DfT) published the first National Cycling and Walking Investment Strategy¹.

The CWIS is based around the ambition to make cycling and walking ‘the natural choices for shorter journeys, or as part of longer journeys’ the strategy is seeking to support the transformation of local areas where the dominance of private motorised vehicle will be reduced to tackle congestion, support local economies and improve physical and mental health.

The CWIS identified short to long term objectives for cycling and walking with short term targets focusing on increased journeys by active modes including an increase in the percentage of children that walk to work. Short term safety targets have also been identified to reduce the rate of cyclists killed or seriously injured on England’s roads.

¹ <https://assets.publishing.service.gov.uk/media/5f622fade90e072bb68d5c74/cycling-walking-investment-strategy.pdf>

Table 1-1 presents the long term DfT aspirations (by 2040) relating to cycling and walking.

Table 1-1 - DfT Cycling and Walking Aspirations

Government Ambition	Objectives
Better Safety – ‘A safe and reliable way to travel for shorter journeys’	<ul style="list-style-type: none"> ▪ Streets where cyclists and walkers feel they belong and are safe ▪ Better connected communities ▪ Safe traffic speeds, with low-speed limits where appropriate ▪ Cycle training opportunities for all children.
Better Mobility – ‘More people cycling and walking – easy, normal and enjoyable’	<ul style="list-style-type: none"> ▪ More high-quality cycling facilities ▪ More urban areas that are considered walkable ▪ Rural roads which provide improved safety for cycling and walking ▪ More networks of routes around public transport hubs and town centres ▪ Better links to schools and workplaces ▪ Technological innovations that can promote more and safer cycling and walking ▪ Behaviour change opportunities to support increased walking and cycling ▪ Better integrated routes for those with disabilities or health conditions.
Better Streets – ‘Places that have cycling and walking at their heart’	<ul style="list-style-type: none"> ▪ Places designed for people of all abilities and ages ▪ Improved public realm ▪ Better planning for walking and cycling ▪ More community-based activities such as led rides ▪ A wider green network of paths, routes and open spaces.

1.3 The LCWIP process

1.2.1. In 2017 the DfT produced a technical guidance document to help local authorities develop LCWIPs. Figure 1-2 shows the five stages of the LCWIP process outlined by the DfT in the LCWIP technical guidance (2017) on which the six phases of this LCWIP closely aligns with.

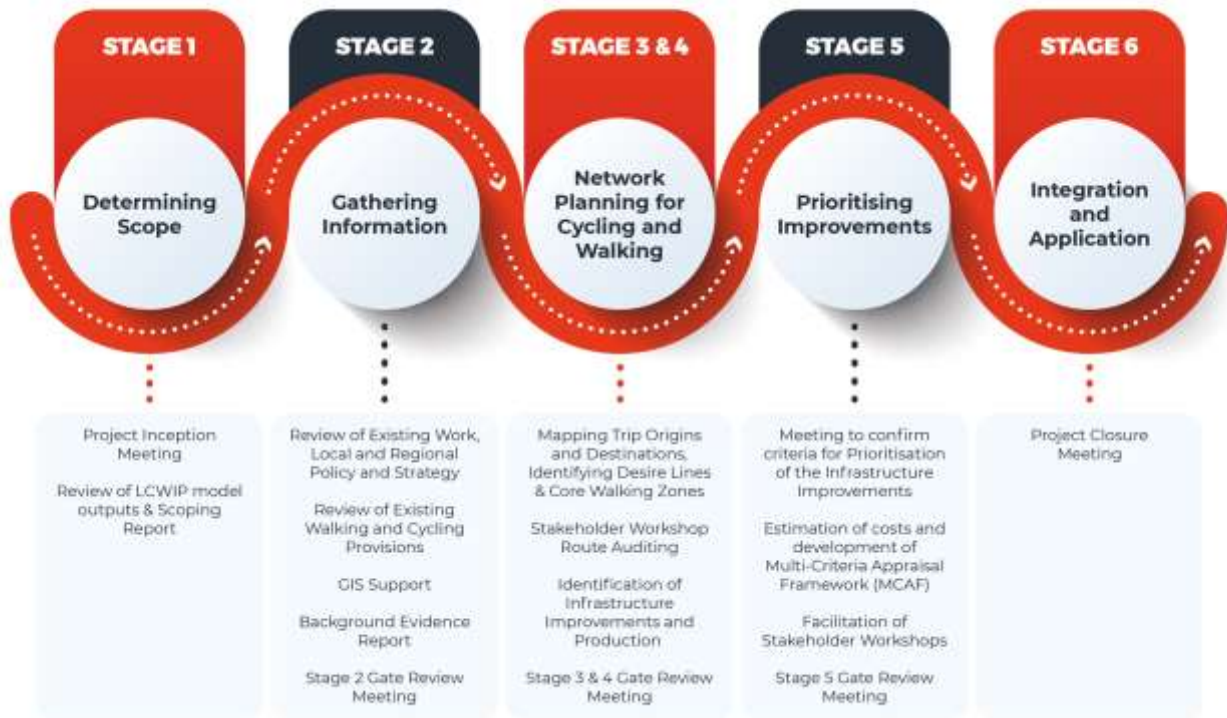


Figure 1-2 - LCWIP Process

1.4 Report structure

This LCWIP is structured into six phases which closely aligns with the first five stages of the LCWIP process outlined by the DfT in the LCWIP technical guidance (2017). This main report adopts this structure, with a summary of each chapter outlined below:

Section 2: Defining the approach

Outlines the methodology this LCWIP has adopted and its alignment with the DfT recommended process.

Section 3: Information Gathering and Baseline Analysis

Presents the background information collected as part of this LCWIP including the extent of existing infrastructure and analysis of potential walking and cycling desire lines. This chapter also outlines findings from public engagement.

Section 4: Network Planning

Presents the primary and secondary walking and cycling networks and outlines how these have been informed by the baseline analysis.

Section 5: Route Auditing and Concept Design

Summarises concepts for infrastructure improvements on the identified routes that are compliant with latest government guidance on walking and cycling infrastructure design.

Section 6: Investment Prioritisation and Cost Estimation

High level cost estimates for the infrastructure improvements proposed are provided.

Section 7: Integration and Application

Considers how the LCWIP should be integrated into local policy, strategies and plans, as well as possible practical application of outputs.

Table 1-2 - Report Structure

Section	Title	Associated LCWIP stage(s)
2	Defining the approach	1 – Determining Scope
3	Information Gathering and Baseline Analysis	2 – Gathering Information
4	Network Planning	3 & 4 – Network Planning for Cycling & Walking
5	Route Auditing and Concept Design	3 & 4 – Network Planning for Cycling & Walking
6	Investment Prioritisation and Cost Estimation	5 – Prioritising Improvements
7	Integration and Application	6 – Integration and Application



1.4.1 The appendices following the main body of the report contain additional information and LCWIP deliverables. The content of each appendix is listed in the report contents before this introduction. Of particular help to the reader may be the separate document Appendix A, which contains a list of acronyms used in this report.

2 Defining the Approach

2.1 East Herts LCWIP Study Area

2.1.1 The East Herts LCWIP includes the extent of the East Herts Council local authority area, with a focus on four geographical areas defined as Phase A-D. The LCWIP focus areas, identified as Phase A-D, includes the main urban settlement areas and eight villages identified as Group 1 Villages as defined in Policy VILL1 of the East Herts District Plan, 2018. It should be noted the purpose of Phase A-D is to manage the geographic scope of the East Herts LCWIP and is not attributed to delivery timeframes or priorities.

2.1.2 Figure 2-1 shows the geographical scope of this LCWIP, illustrating the East Herts district boundary and the Focus areas Phases A-D which include:

- Phase A: Hertford and Ware Cycling and Walking Network
- Phase B: Bishop's Stortford and Sawbridgeworth Cycling and Walking Network
- Phase C: Buntingford Cycling and Walking Network
- Phase D: Group 1 Villages Cycling and Walking Network
 - Braughing
 - Hertford Heath
 - Hunsdon
 - Much Hadham
 - Standon and Puckeridge
 - Stanstead Abbots and St Margarets
 - Watton-at-Stone
 - Walkern.

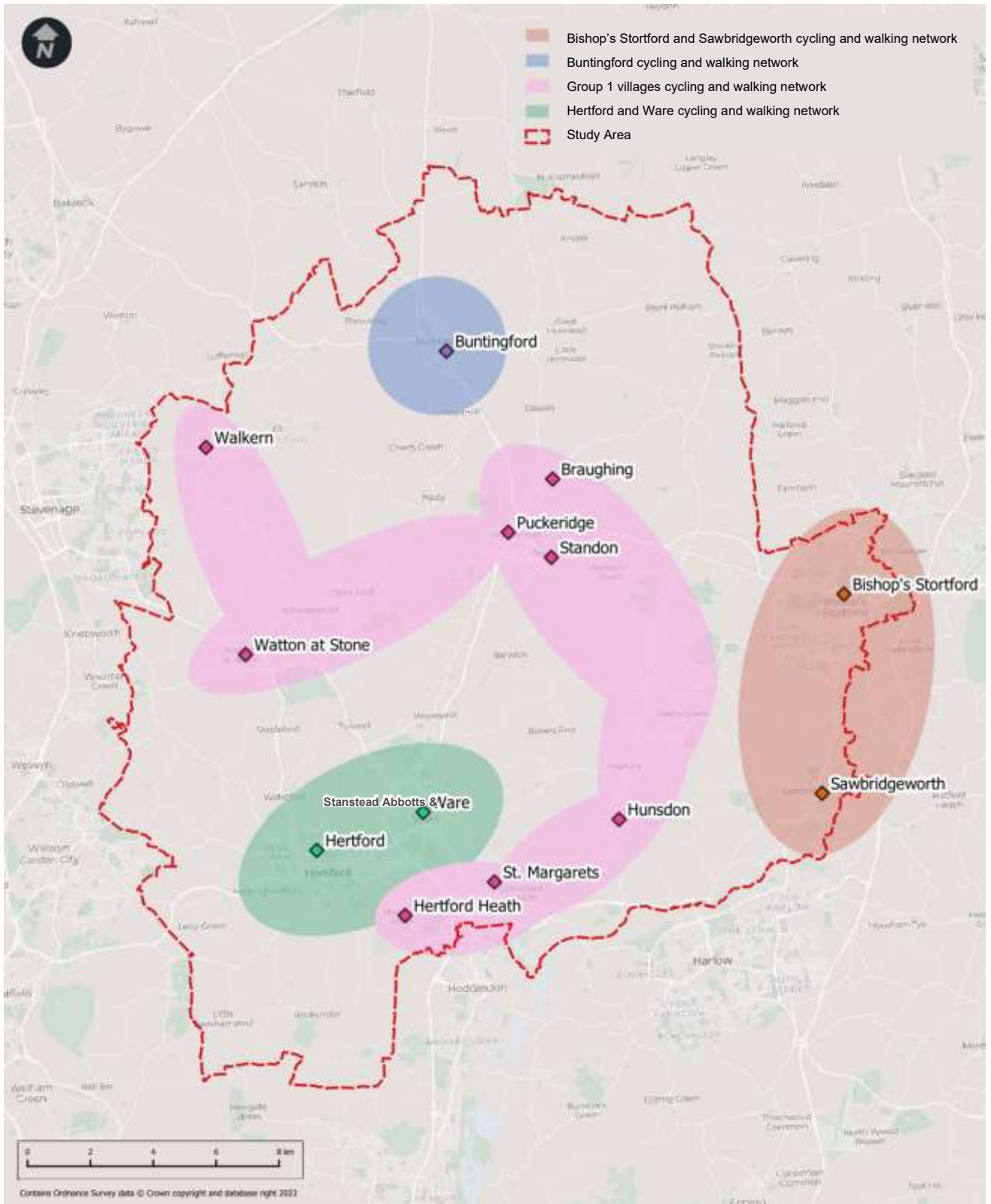


Figure 2-1 - Geographical Scope of the East Herts LCWIP

2.2 LCWIP Process

Defining the Approach

- 2.2.1 To develop this LCWIP a project schedule, governance structure and geographical scope were agreed during the inception stage in April 2023 whilst also considering potential for cross-boundary connections with neighbouring local authorities.
- 2.2.2 Key population centres within this boundary include Hertford, Ware, Buntingford, Bishop's Stortford and Sawbridgeworth in addition to a number of rural villages (which are classified as Group 1 Villages in the East Herts District Plan 2018) as shown in Figure 2-1, which illustrates a map of the study area.
- 2.2.3 The agreed methodology for this LCWIP is summarised on the subsequent pages and a flowchart of the process is shown in Figure 1-2. Appended to this document is a Stakeholder Engagement Plan which outlines the engagement process and consultation activities undertaken to guide engagement and consultation activities to best inform this LCWIP.

Section 2 (this section) aligns with Stage 1 of the DfT LCWIP process which is to:

“Establish the geographical extent of the LCWIP and arrangements for governing and preparing the plan.”

Information Gathering and Baseline Analysis

This LCWIP has collated information and data that can inform the development of a walking and cycling network for East Herts.

- 2.2.4 Review, mapping and classification of existing infrastructure

Existing infrastructure considered as part of this process includes cycle infrastructure, severance issues, future development areas, public transport provision and road network access.

- 2.2.5 Review of existing policies and plans

To ensure the LCWIP aligns with other strategic objectives in the East Herts district, relevant policies such as the East Herts Climate Strategy, the East Herts District Plan and

the Environmental Sustainability Action Plan have been reviewed alongside plans for future active travel routes.

2.2.6 Identification of desire lines

A GIS model has been developed to identify potential new journeys that could be walked and cycled. Census data and information on large developments have been used to determine trip origins (where trips start), whilst destinations incorporate employment sites, schools, supermarkets, hospitals, GPs and leisure centres. The outputs of this model have been presented alongside the DfT's Propensity to Cycle Tool to show key desire lines for walking and cycling.

2.2.7 Engagement with communities

To understand user needs, travel patterns and harness local knowledge, the LCWIP process draws on general feedback on the walking and cycling network shared publicly online through the Widen My Path website and engagement with key stakeholders.

Widen My Path allows members of the public to place comments on an interactive map. The site asks respondents to locate where issues are present, and where they felt investment in walking and cycling infrastructure would be valuable. Data was extracted from this website to further understand key issues and user needs on the walking and cycling network to support the LCWIP process and network planning stage.

Four engagement workshops were held through this project – two during the network planning stage and then two during the infrastructure improvements stage. The workshops involved local elected members, with external stakeholders being involved separately. Representatives from several external stakeholder groups were invited to and participated in the workshops, including representatives from cycling groups, adjoining authorities, equestrian groups and environmental groups to name a few.

Section 3 aligns with Stage 2 as defined in the DfT LCWIP guidance:

“Identify existing patterns of walking and cycling and potential new journeys. Review existing conditions and identify barriers to cycling and walking. Review related transport and land use policies and programmes.”

Network Planning

- 2.2.8 Using the background data collected, a walking and cycling network for the district was developed that:
- Fills gaps in the existing network / infrastructure in the Phase areas
 - Serves key desire lines not currently served, as identified by our spatial analysis
 - Considers feedback received during the public engagement
- 2.2.9 The primary walking and cycling networks were developed to establish core links along desire lines where high active travel flows were forecasted. Secondary routes were added to enhance overall network connectivity and where they had been identified by stakeholders and considered appropriate.
- 2.2.10 Priority rated primary walking and cycling routes were then audited in person by a team from WSP alongside HCC and EHC staff, using the Department for Transport Route Selection Tool (RST) and the Walking Route Audit Tool (WRAT). A few additional route sections were also audited in person following comments received at the public consultation stage.

Scheme Concept Development and Definition

- 2.2.11 The outcomes from the route audits were used to produce high level active travel infrastructure options consistent with the latest government guidance contained within Gear Change (2020) and Local Transport Note (LTN) 1/20.
- 2.2.12 The outputs of this exercise resulted in the development of summary plans for each of the identified primary routes, with consideration given to suitable improvements at a high level that appear achievable given on-site constraints.

Sections 4 and 5 aligns with Stages 3 and 4 as defined in the DfT LCWIP guidance.

Stage 3 is defined in the guidance as:

“Identify origin and destination points and cycle flows. Convert cycle flows into a network of routes and determine the type of improvements required.”

Stage 4 is defined in the guidance as:

“Identify key trip generators, core walking zones and routes, audit existing provision and determine the type of improvements required.”

Investment Prioritisation and Cost Estimation

2.2.13 High level cost estimates were calculated for the infrastructure proposals contained within the scheme concepts. These were fed into a Multi-Criteria Appraisal Tool (MCAT), which ranked the schemes according to their alignment with agreed criteria, including:

- Forecast increases in walking and cycling
- Catchment populations
- Stakeholder support
- Existing infrastructure conditions
- Alignment with existing network
- Road safety
- Proximity to schools, employment and railway connections
- Rural severance
- Carbon/air quality
- Cost effectiveness

Section 6 aligns with Stage 5, which is defined in the DfT LCWIP guidance as:

“Prioritise improvements to develop a phased programme for future investment.”

2.3 Engagement Approach

2.3.1 Stakeholder engagement is important to inform the development of the LCWIP, ensure ownership in the process and to secure buy-in of the process and proposals arising from it.

2.3.2 The East Herts LCWIP scoping report, prepared by HCC and EHC, sets out a long list of key stakeholders to be included in project workshops. Stakeholders engaged with and invited to participate in the development of the East Herts LCWIP include but are not limited to:

- Councillors, including District, County, Town and Parish Council representatives
- HCC transport
- EHC officers
- Local walking groups
- Local cycling groups



- Environmental groups
- Representatives of other user groups, such as transport operators and schools
- Businesses (including large employers) and Bishop's Stortford Business Improvement District (BID) group
- Local Enterprise Partnership (LEP), while in operation, and Hertfordshire Chamber of Commerce
- Health Services and other health representatives

Section 4.5 provides greater detail on the engagement process and timeline followed.

3 Information Gathering and Baseline Analysis

3.1 Vision Statement and Objectives

Overarching Vision

- 3.1.1 Local Cycling and Walking Infrastructure Plans (LCWIPs) are a strategic approach to identifying cycling and walking improvements required at a local level. They enable a long-term approach to developing networks and routes and form a vital part of the Government's strategy to increase the number of trips made on foot or by cycle. LCWIPs are instrumental in leveraging funding from the Cycle Infrastructure Fund along with other national and local funding streams, which may not be open to application without an LCWIP in place.
- 3.1.2 An overarching vision will help to determine how the East Hertfordshire LCWIP can define desirable and achievable outcomes from an active travel and sustainable mobility perspective.
- 3.1.3 This vision will guide the development, implementation and evolution of this LCWIP and support the UK Government's target that 50% of all journeys will be made on foot or by cycle by 2027 (Gear Change, 2020), and East Hert's commitment to achieving carbon neutrality by 2027.

3.2 Active Travel Context

Climate Emergency

- 3.2.1 The transportation sector is the second largest source of greenhouse gas (GHG) emissions in the UK, behind only the energy supply sector. Decarbonising our transport network is fundamental to ensure the country is working towards its target to be net zero by 2050.
- 3.2.2 The DfT's Decarbonising Transport (2021) paper states that passenger cars and taxis were responsible for 55 per cent of domestic greenhouse gas emissions in 2019, a share that remains almost unchanged from 1990. The paper also sets out a path to Net Zero, citing a reduction in emissions from domestic transport as essential to meet the UK's net zero targets. One way of achieving this is by facilitating a mode shift away from passenger cars towards zero emission modes like walking and cycling for shorter journeys.
- 3.2.3 Emissions from all road transport make up 42 per cent of East Herts District's total emissions (East Herts Climate Change Strategy, 2022), bookmarking transport as a key

industry to target. The council made a Climate Change Declaration in 2019 and have since produced a roadmap to achieve their goals of zero net carbon emissions by 2027.

The Case for Walking and Cycling

- 3.2.4 A key component of the DfT's transport decarbonisation plan (2021) is ensuring that public transport, cycling and walking is the natural first choice for all who can take it. This strategic priority is to be achieved by delivering a world class cycling and walking network in England by 2040.
- 3.2.5 Embracing new modes of sustainable transport, such as e-cycles and other emerging technologies will create opportunities to access longer journeys using active transport. LCWIPs are an important component of using the built environment to promote health and wellbeing.

3.3 Policy Review – National Policy Context

3.3.1 Decarbonising Transport (DfT, 2021)

Sets out the Government's commitments to reduce carbon emissions through investing in walking and cycling networks with the aim of half of all journeys in towns or cities to be walked or cycled by 2030. This will support their overall vision to achieve a NetZero transportation sector by 2050.

3.3.2 Gear Change: A bold vision for cycling and walking (DfT, 2020)

Sets out Government's vision for delivery of far higher quality cycling infrastructure, focusing on segregated cycle routes with local authorities being expected to deliver a step change in the Level of Service for cycling and walking. It establishes "Active Travel England" that will assess local authorities' performance on active travel, with findings influencing the funding authorities receive across all transport modes. The accompanying Local Transport Note 1/20 Cycle Infrastructure Design sets out new ambitious cycle design standards.

3.3.3 Cycling and Walking Investment Strategy (DfT, 2017)

Sets out the government's ambition for walking and cycling to become the de facto choice for shorter journeys or stages of longer journeys, with ambitious targets of doubling cycling trips to 1.6 billion by 2025.

3.3.4 Cycling and Walking Investment Strategy 2 (DfT, 2022)

Sets the ambition that 50% of all journeys in towns and cities should be walked or cycled by 2030. The strategy sets out how the government intends to target investment in active travel through to 2025. The strategy supports locally targeted investment identified via LCWIPs to connect people with places – creating vibrant, healthier and productive places and communities.

3.3.5 Future of Mobility: Urban Strategy (DfT, 2019)

Nine principles to address the challenge of transforming towns and cities to meet current and future transport demands. Includes the principle that ‘walking, cycling and active travel must remain the best option for short urban journeys.

3.3.6 Everybody Active, Every Day (Public Health England, 2014)

Indicates how the built and natural environment impact on the travel choices people make and highlights the necessity for effective urban design and transport systems which create ‘active environments’ to promote walking, cycling and more liveable communities.

3.3.7 Clean Air Strategy (DEFRA, 2019)

Outlines how achieving modal shift is key to delivering emissions reduction. LCWIPs have a part to play in tackling the climate emergency by reducing emissions through the delivery of walking and cycling options for journeys.

3.3.8 Inclusive Mobility (DfT, 2021)

This document outlines best practice on inclusive design of pedestrian and transport infrastructure. Inclusive design requires that the needs of all disabled people are considered from the outset of any transport and pedestrian infrastructure. LCWIPs identify improvements to build active travel networks and key routes fit for all users.

3.3.9 Net Zero Strategy: Build Back Greener (DBEIS, 2021)

Outlines the government’s aims to transition the UK to a net zero economy by 2050. Notably, the document highlights a commitment to build ‘hundreds, then thousands’ of segregated cycle lanes alongside an increase in low traffic neighbourhoods.

3.3.10 National Disability Strategy (DWP, 2021)

Outlines the government's commitment to removing the barriers disabled people experience across everyday life and highlights the support of active travel and reduction in vehicle journeys in clearing carriageway space for those that need to travel.

3.3.11 Inclusive Transport Strategy (DfT, 2018)

Outlines the government's plans to increase the accessibility of the transport system, principally in the promotion of appropriate infrastructure, guidance for staff, and the provision of more accessible vehicles to cater to a wider range of user types. The key objective is ensuring the public realm is made more suitable for all user types.

3.3.12 Local Transport Note (LTN) 1/20: Cycle Infrastructure Design (DfT, 2020)

Provides a suite of design principles and guidance to facilitate the creation of high-quality, safe, and effective infrastructure. LTN 1/20 provides for five core design principles which should be required on all schemes: coherent, direct, safe, comfortable and attractive.

3.3.13 Local Cycling and Walking Infrastructure Plans: Technical Guidance for Local Authorities (DfT, 2017)

Outlines the framework for undertaking strategic walking and cycling network developments, including the six-stage process that LCWIP's follow and the nature of data used as part of the process.

The Figure 3-1 below shows the core design principles regarding accessibility for all.



Accessibility for all				
Coherent	Direct	Safe	Comfortable	Attractive
 <p>DO 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 a consistently high quality.</p>	 <p>DO Cycle routes should be at least as direct – and preferably more direct – than those available for private motor vehicles.</p>	 <p>DO Not only must cycle infrastructure be safe, it should also be perceived to be safe so that more people feel able to cycle.</p>	 <p>DO Comfortable conditions for cycling require routes with good quality, well-maintained smooth surfaces, adequate width for the volume of users, minimal stopping and starting and avoiding steep gradients.</p>	 <p>DO 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.</p>
 <p>DON'T Neither cyclists or pedestrians benefit from unintuitive arrangements that put cyclists in unexpected places away from the carriageway.</p>	 <p>DON'T This track requires cyclists to give way at each side road. Routes involving extra distance or lots of stopping and starting will result in some cyclists choosing to ride on the main carriageway instead because it is faster and more direct, even if less safe.</p>	 <p>DON'T Space for cycling is important but a narrow advisory cycle lane next to a narrow general traffic lane and guard rail at a busy junction is not an acceptable offer for cyclists.</p>	 <p>DON'T Uncomfortable transitions between on-and off carriageway facilities are best avoided, particularly at locations where conflict with other road users is more likely.</p>	 <p>DON'T Sometimes well-intentioned signs and markings for cycling are not only difficult and uncomfortable to use, but are also unattractive additions to the street scape.</p>

Figure 3-1 - LTN 1/20 Core Design Principles

3.4 Policy Review – County Level Policy Context

3.4.1 Local Transport Plan 4, 2018-2031 (HCC, 2018)

Hertfordshire’s fourth Local Transport Plan, LTP4, provides the vision for future transport across Hertfordshire, covering a period of substantial expected growth and development across the county and the necessary mitigations to facilitate these developments within the existing network.

The plan recognises the considerable potential for mode shift in terms of cycling, with the 2015 County Travel Survey showing a 1.7% share for trips less than a mile, 4.8% 1-3 miles, and 3.1% 3-5 miles. Barriers recognised include concerns over safety and security and in general a lack of infrastructure provision to enable end to end journeys. Of specific importance are policies 1, 7 and 8 which refer apply to active travel.

3.4.2 South Eastern Area Growth and Transport Plan (SEGTP) (HCC, 2022)

This plan consists of a suite of area-based transport strategies which support LTP4. The area covered by SEGTP includes East Herts (Hertford, Ware and linkages to Broxbourne and Welwyn Hatfield) and Broxbourne. The SEGTP recognises the large amount of development proposed which will increase demand on an already constrained highway network unless a significant shift towards walking, cycling and public transport is achieved.

3.4.3 Eastern Area Growth and Transport Plan (EAGTP) (HCC, 2022)

The area covered by EAGTP includes East Herts (Bishop's Stortford, Sawbridgeworth and linkages to other areas in Hertfordshire and Essex). The EAGTP recognises the large amount of development proposed which will increase demand on an already constrained highway network unless a significant shift towards walking, cycling and public transport is achieved.

3.4.4 Intalink Hertfordshire Bus Strategy (HCC, 2020)

Though predating both the establishment of the Enhanced Partnership (April 2020) and the severe impact on passenger transport numbers seen as part of the coronavirus pandemic, the Intalink Hertfordshire Bus Strategy remains a valid document with a clear focus and ambition to increase bus patronage across the network.

The strategy recognises the importance of connection with other modes, both as a policy under LTP4 but additionally due to the importance of a well-connected network where sustainable modes can suitably interface and share available network capacity. Transport interchanges are recognised in the LCWIP guidance as being common destination points to be considered, and as such the LCWIP has a role to play in supporting the connectivity of bus infrastructure to facilitate end to end journeys and providing high quality facilities for users of all modes.

3.4.5 Bus Service Improvement Plan (BSIP) (HCC, 2021)

This plan outlines the ambition of Hertfordshire County Council to improve bus services within the County and how that ambition will be delivered through the Intalink Enhanced Partnership. The BSIP will be critical when the Government is deciding how new funding is allocated.

It acts as the vision for how bus services will be developed and enhanced across Hertfordshire in the coming years. Key corridors with gaps in the bus network across Hertfordshire have been identified; these corridors would benefit from increased frequencies and enhanced connectivity particularly during the weekday peak and interpeak periods.

3.4.6 Highways Place and Movement Planning Design Guide (HCC, 2024)

This is a technical approach to highway design which recognises the needs of different road users in Hertfordshire and the interfaces between them. It intends to provide a way of looking at the appropriate function of any section of highway and a basis for deciding which activities should be prioritised. In doing so, it aims to provide a means to translate LTP4 policies into practice.

3.4.7 Sustainable Hertfordshire Strategy (SHS) (HCC, 2020)

The strategy principally recognises that the council has three levels of influence – to lead, to enable, and to inspire. The provision of active travel infrastructure and other surrounding mechanisms to support mode shift is seen to operate at all levels and is noted numerous times within the strategy as being key to introducing and supporting a low (and, eventually, zero) carbon transport network. The SHS is ambitious, but there are three particular targets of relevance to the LCWIP:

- A net zero carbon county ahead of 2050,
- Ready for Future Climates, and
- Clean air for all by 2030

3.4.8 Accessibility Strategy (HCC, 2019)

The Accessibility Strategy promotes the county council’s vision: “To have a reasonable standard of access for all by appropriate transport to the key services of health, learning, work, food shopping and leisure”.

Principally, the document serves as a strategic analysis of existing accessibility within Hertfordshire, based around distance to services using the TRACC software to isolate distance and access via travel modes. The methodology is extensively documented within the strategy, but the key recognition is that fourteen of the sixteen recognised services are accessible to 95% of the population within the upper journey time thresholds

3.4.9 Speed Management Strategy (SMS) (HCC, 2020)

The SMS recognises the link between lower vehicle speeds and the uptake of active travel modes (now expressed in LTN 1/20), recognising that 20mph speed limits in key locations such as residential roads can reduce the perception of car dominance and support journeys by other modes where dedicated infrastructure may be difficult or impossible to install.

3.4.10 Maintenance for Active Travel Strategy (HCC, 2019)

The Maintenance for Active Travel Strategy (MATS) outlines how routine or ad hoc highway maintenance programmes may contribute to the uptake of active travel, by ensuring that existing infrastructure is kept to the appropriate standards and new infrastructure suitably maintained to ensure a long, efficient lifecycle.

3.4.11 Air Quality Strategy (HCC, 2019)

The Air Quality Strategy provides the county position on air quality, including both the strategic vision and the aims and objectives that will contribute to delivering this vision. It is heavily aligned with the sustainability strategy but provides an additional layer of policy support for both air quality monitoring and air quality improvements across the network.

3.4.12 Roads in Hertfordshire: Highway Design Guide (2011)

The Highway Design Guide for Hertfordshire provides information on the two different approaches to highway design, dependant on the character and function of the road. It outlines the different recommendations in terms of speed, visibility and layout, with different design codes. This includes carriageway width, road curvature, and gradients. This guide aims to “ensure the quality and consistency in highways works, which is considered vital to ensuring that developments in the county remain sympathetic to their surroundings, and sustainable in their use of natural resources.” The document encourages a holistic approach to street design and a reduced dominance of motorised traffic through design objectives that promote alternative modes of transport.

3.4.13 Sustainable Travel Towns (HCC)

The strategy provided an analysis of the national and local policy context and associated evidence, to identify the key challenges and issues that people living and working in Hertfordshire face when making decisions to replace car journeys, or generate new trips, through more walking and cycling.

It identified a list of possible interventions to help deliver the strategy, including physical measures such as traffic calming and improved crossing facilities, as well as policy measures such as incorporating active travel into air quality management plans.

3.4.14 Rural Transport Strategy (HCC, 2019)

This strategy is to assist in the delivery of LTP4 policies within the context of rural transport, recognising that for rural residents (roughly 12% of the Hertfordshire population) there are often transport-related barriers to accessing services which mean the motor car remains the dominant transport choice.

Primarily, the document serves to translate what may otherwise appear more urban-centric strategies and policies included within other documents – such as the LTP4 ambitions for active travel – into the rural context, recognising the unique barriers and opportunities presented to rural communities and additionally the distances involved in travelling to access core services.

3.4.15 Rights of Way Improvement Plan (RoWIP) (HCC, 2017)

The RoWIP provides the framework for the changes, enhancements, and improvements to Hertfordshire's extensive Right of Way network, aiming to provide better provision for walkers, cyclists, and equestrians regardless of ability level or familiarity with the network.

The plan recognises that the majority of users of the Hertfordshire Right of Way network are walkers, cyclists, and horse riders; the reasons for usage ranging from leisure and exercise through to desiring off-road routes and a network more suitable for the usage case than mingling with higher speed vehicles or busier traffic. Barriers identified include access, lighting, wayfinding, poor surface conditions, obstructions caused by structures or vegetation, and a lack of promotion of the network that may hinder or prevent usage by those that would otherwise benefit from access to the network.

3.4.16 Hertfordshire Active Travel Strategy (HCC, 2023)

Hertfordshire’s 2023 Active Travel Strategy was an ambitious document which set out how the County Council and its partners would identify, deliver and promote interventions to increase the numbers of people walking and cycling in Hertfordshire.. This plan intends on improving the wellbeing of residents through helping them to walk and cycle where possible. It seeks to enhance economic growth, improve public health, and reduce carbon emissions, as currently vehicular transport represents 33% of emissions. The strategy seeks to target short journeys, urban congestion, active travel for schools, and poor health ‘hotspots.

The Figure 3-2 shows some of the published documents.



Figure 3-2 – Country Level Policy Documents

3.5 Policy Review – District Level Policy Context

3.5.1 East Herts District Plan, 2011-2033 (EHC, 2018)

This framework identifies a number of challenges facing East Herts and sets out a vision to address them through its development strategy and policies, to create and maintain a high quality, successful, environment for the district. The plan is divided into three parts: the development strategy, the development management policies, and the delivery and monitoring. It contains specific policies about sustainable development and promotes sustainable transport including making appropriate provision for pedestrians and cyclists.

3.5.2 Infrastructure Delivery Plan (IDP) (EHC, 2017)

The purpose of the IDP is to identify the infrastructure requirements arising out of an authority's Local Plan over the entire plan period, considering the cost, timing, potential funding mechanisms and responsibilities for delivery. Improvements to the district's existing green travel infrastructure network and the provision of new green travel infrastructure, will be crucial in supporting the levels of development identified in the District Plan.

3.5.3 Neighbourhood Plans (Various Town and Parish Councils, 2017-2025)

Neighbourhood Plans supplement the District Plan and set out planning policies for development and the use of land in a local area. They must be in general conformity with the District Plan. Once adopted a Neighbourhood Plan forms part of the statutory documentation that is used to determine planning applications in the neighbourhood area. These plans identify priorities and policies to guide future development in their areas and cover a wide range of topics including the environment, local character, transport, housing, employment and community facilities. This may include preserving historically important sites of interest, improving car parking facilities to reduce on street parking, and ensuring housing grows organically to meet local needs. Currently, there are 16 adopted 'made' Neighbourhood Plans in East Herts and 2 in development. Details about the adopted and emerging neighbourhood plans can be viewed on the Council's website ([Neighbourhood Planning Activity in East Herts | East Herts District Council](#)).

3.5.4 Environmental Sustainability Action Plan (EHC, 2023)

The Environmental Sustainability Action Plan is a working document which is continually developing, assisted with input from a range of sources including third sector organisations and the local community. Going beyond carbon, it includes specific, measurable projects including supporting local households to become energy efficient and implementing a Local Cycling and Walking Infrastructure Plan.

3.5.5 Masterplanning Frameworks (Various)

In order to ensure that the development outlined in the District Plan provides a well-designed, high-quality, environment and does not occur in isolation, East Hertfordshire District Council is committed to ensuring that all new allocated sites in the District Plan undergo a "master planning" process. This involves working with the various councils, local interest groups, the main site promoter, and other landowners, to achieve a vision for the overall development of the site and ensure key important elements are achieved in a way

that will contribute to a great place for people to live, work and study. Key strategic development sites within the district have published their own Masterplan Framework, each responding their specific local context and site features, to use creative place-making skills for new developments.

3.5.6 Sustainability Supplementary Planning Document (EHC, 2021)

The District Plan incorporates a suite of policies to help ensure that new development in East Herts reduces its environmental impact. The Sustainability Supplementary Planning Document (SPD) supports the implementation of the District Plan policies by providing technical guidance on how schemes can both meet and exceed policy requirements across a range of topics, including transport provision.

The SPD is structured by the different topics that must be covered to protect environmental assets, mitigate the impacts of climate change, and adapt to its impacts. This includes:

- Holistic approach
- Energy and Carbon
- Sustainable Transport

3.5.7 East Herts Climate Strategy, 2022-2026 (EHC, 2022)

In July 2019, East Hertfordshire District Council unanimously approved a Climate Change Declaration which committed the council to take action to address the causes and impacts of climate change across the district. The Climate Change Strategy lays out a route map for the council itself to achieve a net-zero carbon position by 2030 while at the same time working with residents, community groups and other public and private sector partners to encourage the whole district to achieve the same position by that date.

The Figure 3-3 below shows some of the published documents.

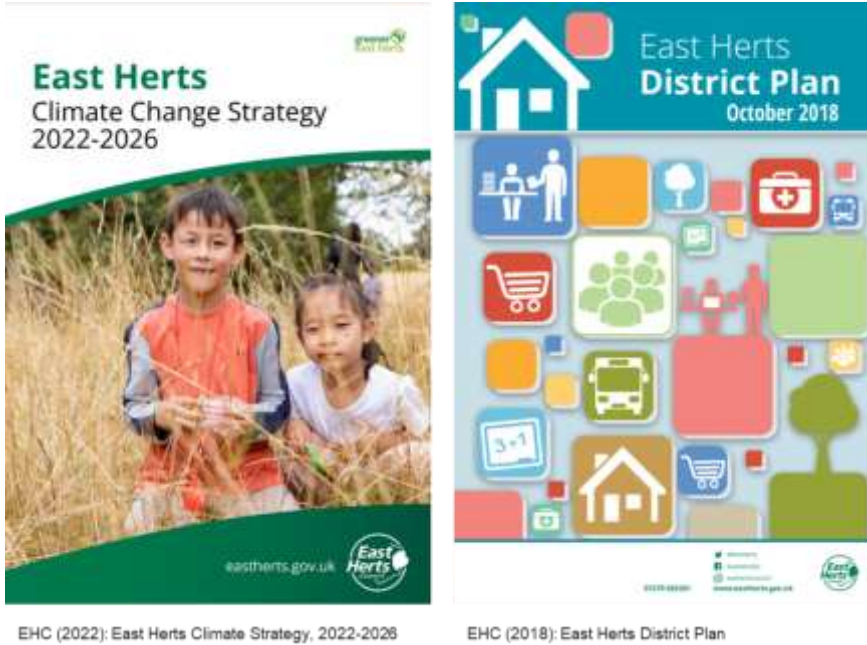
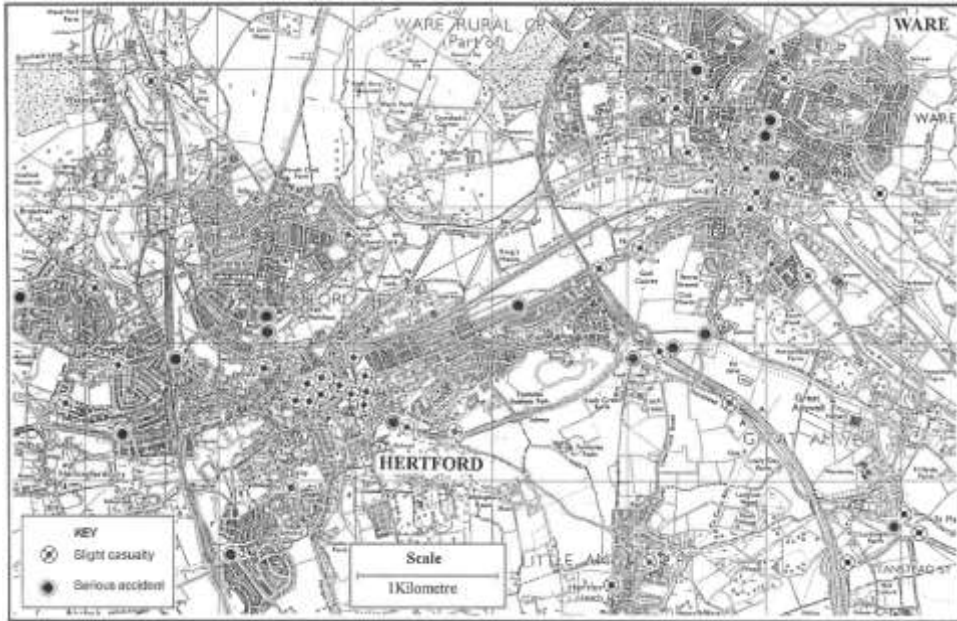


Figure 3-3 - District Level Policy Documents

3.6 Hertford and Ware Cycling Study 1994

Purpose of Study

- 3.6.1 The purpose of this study is to promote a shift away from the reliance on the car given that at the time three-quarters of all journeys were less than 5 miles. This study includes ways that planning can popularise cycling as a more sustainable mode of travel, especially for shorter journeys, by addressing concerns over the dangers of this mode of transport. Figure 3-4 shows the location of casualties from cycling, proving the need for this study to improve safety and perceived safety of cycling.



3.6.2

Figure 3-4 - Cycling Casualty Sites

3.6.3 The key messages within the appendices of this study are:

- Emphasise alternative sustainable modes of travel to car
- Reduce driving, especially for shorter journeys
- Improve cycling infrastructure on both commuter and leisure routes
- Improve urban cycle links
- Prioritise suburban cycle links
- Provide an alternative to cycling along major roads used by high volumes of drivers
- Create recreational routes to improve the confidence and ability of beginner cyclists, and to improve the accessibility and safety of cycling.

Key Routes and Infrastructure

3.6.4 As shown in the Main Report, within Phase 1 there were two key sets of routes to focus on. The first aims to improve connection between Hertford and Ware along the River Lee Navigation towpath. The purpose of this link is primarily for commuting to school and work. Within the study, found in Appendix B, we learn that in 1994 the key employment centre in Ware was the Glaxo site, and the leading employer in Hertford was the county council with offices in County Hall and Goldings.

- 3.6.5 The second set of routes to focus on are those connecting Ware and Hertford to suburban areas around them. These routes are intended to improve connectivity for recreational purposes.
- 3.6.6 For this LCWIP, this means the network should revisit these routes, focusing on the inter urban links and outer suburban connections.



Figure 3-5 - Proposed Cycle Routes

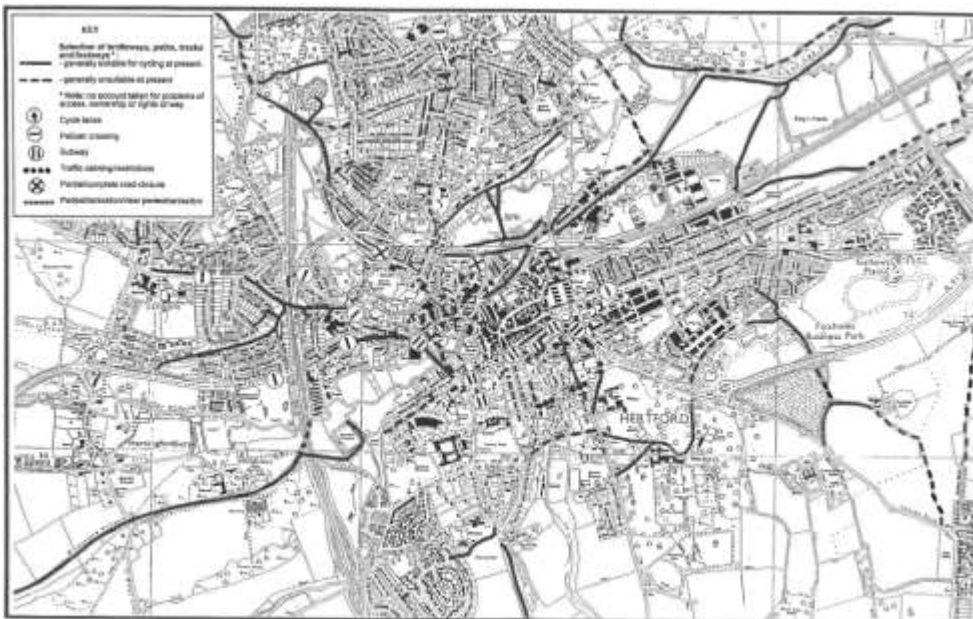


Figure 3-6 - Suitable Cycling Routes

3.6.7 Figure 3-5 shows cycle routes that have been proposed in the past, and Figure 3-6 shows the routes which were seen to be more suitable for cycling which were used to influence the chosen proposed routes.

3.6.8 The infrastructural improvements which this study focuses on, with specifics found in Appendix 9 of the study (found in Appendix B), centre around coherence, directness, attractiveness, safety, and comfort. Some examples of the types of changes this refers to are as follows:

- Dropped kerbs
- Cycle gaps in road closures
- Two-way streets for cyclists
- Bus and cycle lanes
- Signal-controlled cycle crossings
- Advanced stop lines
- Mapping and signs

For Hertford and Ware this will be revisited in Phase 5.

3.7 Future Developments

3.7.1 There are numerous Neighbourhood Plans within East Hertfordshire. Of these documents, several of them include plans for Future Developments that will be taking place soon. The location, land size, and density of these sites is important to consider in the network planning process because it will impact the travel patterns within the district, along with the destinations that residents are travelling to and from.

3.7.2 As of 20/10/2023, the Neighbourhood Plans which have allocated sites for housing are:

- Braughing: 5 sites
- Hunsdon: 1 site
- Much Hadham: 4 sites
- Standon and Puckeridge: 1 site
- Watton-at-Stone: 4 sites
- Stanstead Abbots and St Margarets: 3 sites

3.7.3 Some site allocations will have a lower impact due to their scale, such as the sites in Much Hadham. The largest of these is H5, shown in Figure 3-7, and this only consists of 9 new dwellings.

3.7.4 Conversely, there are two strategic developments allocated in the Watton-at-Stone Neighbourhood Plan (amounting to 120 dwellings) shown in the north-west of Figure 3-8 below, which will have a greater impact on travel patterns and desire lines.

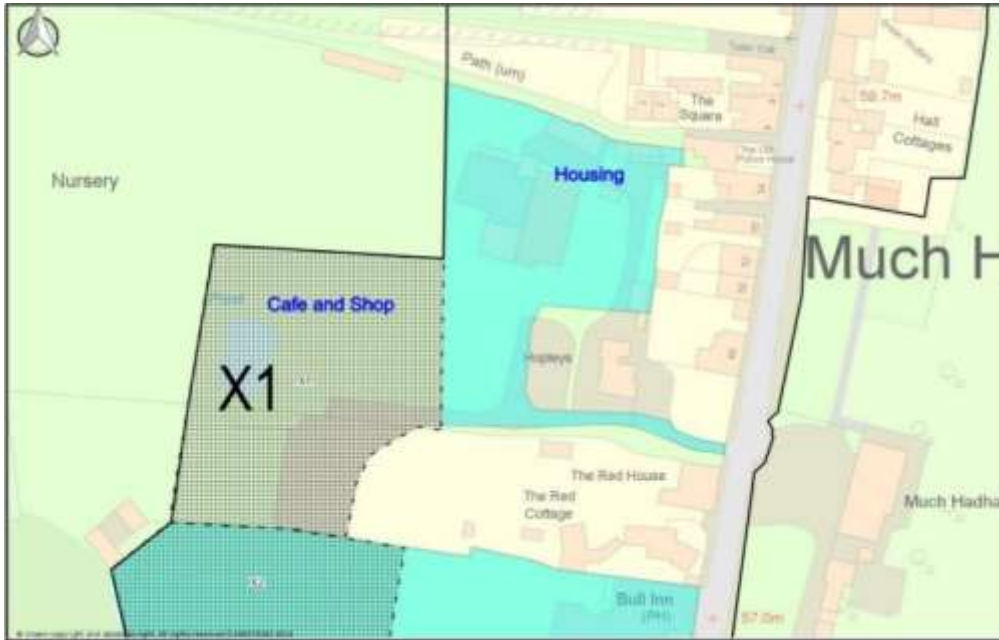


Figure 3-7 – Much Hadham H5 Future Development

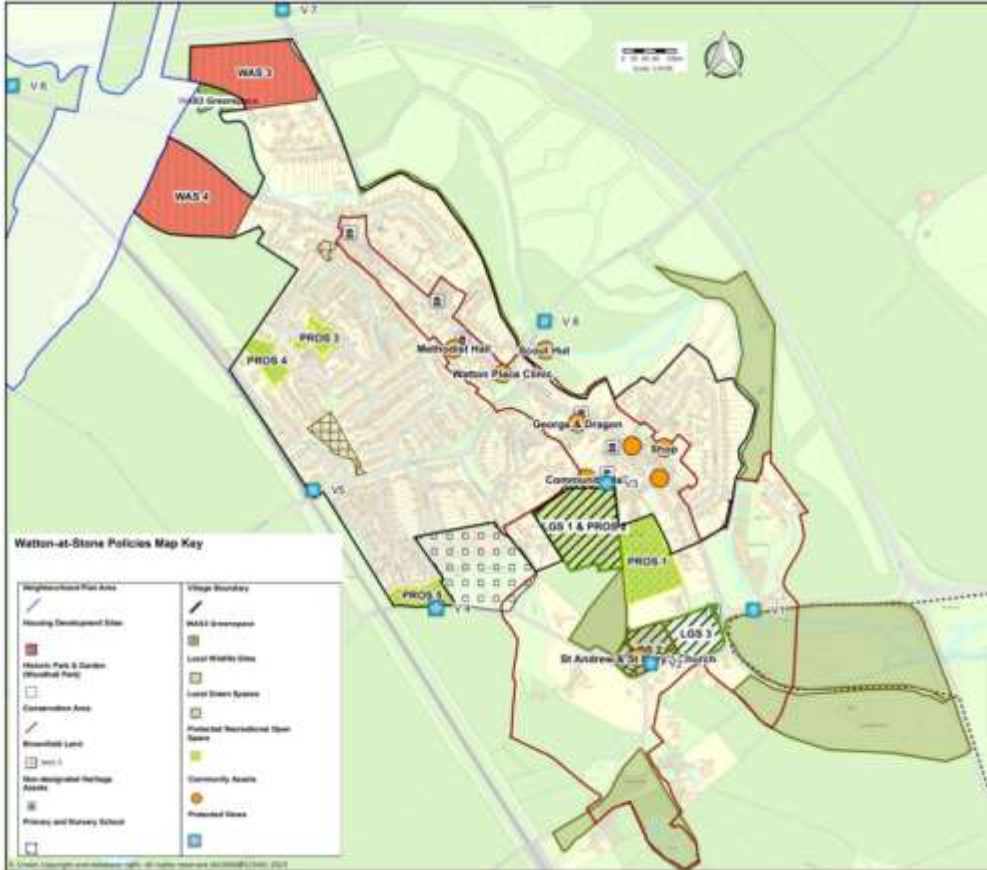


Figure 3-8 - Watton-at-Stone Neighbourhood Plan 2017-2033

– Watton at Stone Neighbourhood Plan Policies Map

3.8 Transport Studies

20 mph Zone Study

3.8.1 In 2021, Hertfordshire County Council announced a programme which identified over 500 areas that are suitable for 20mph speed limits. The programme aims to improve road safety and create calmer streets which will support increased walking and cycling. Local environments assessed as appropriate for 20mph zoning are generally residential roads, town and city centres, high streets and local commercial areas. The majority of which currently have 30mph speed limits.

3.8.2 The shaded areas of Figure 3-9 show the 20mph zones within the study area and adjoining areas proposed by Hertfordshire Country Council, which are mostly located towards the

south of the district. There is a hub around Hertford, and Stanstead Abbots, as well as to the east with Bishop's Stortford and Sawbridgeworth. Most of the proposed zones are the major towns, which suggests that the current travel habits and patterns within towns have the highest potential to create positive change by reducing speeds. In 2026, the 20mph programme policy was updated to focus on area wide schemes and deliver road markings and signage prior to speed calming measures.

LCWIP Context

- 3.8.3 The 20mph zones will support the LCWIP process as they will create street environments that are more suitable for cycling and walking. Especially in Phase A-D in core urban centres where higher vehicle volumes, and in turn greater number of conflict points with vehicles, are expected.

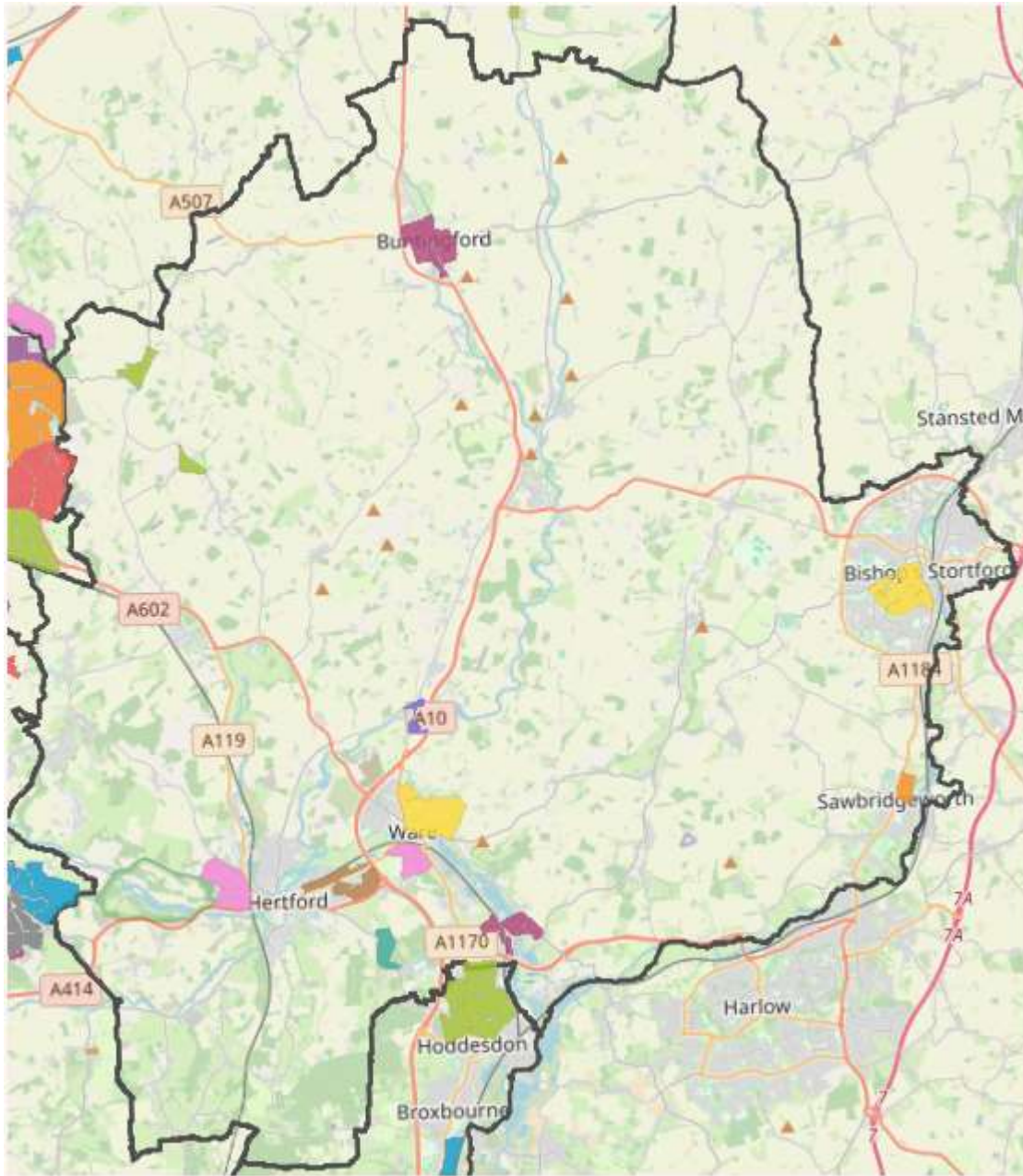


Figure 3-9 - HCC Proposed 20mph Zones

(N.B. Colours in figure 3-9 have no significance other than to differentiate between 20mph zones)

3.9 Socio Demographics

Experian mosaic

3.9.1 Figure 3-10 gives an idea of the demographics and typical lifestyles of residents in East Herts by segmenting the population into groups with shared characteristics. This dataset, from Experian Mosaic 2022 data, shows that there is significant variation in the populations

found in urban centre areas compared to villages and more rural areas. A summary of the dominant mosaic group categories is provided overleaf.

- 3.9.2 Within and around the larger urban centres, such as Bishop's Stortford and Hertford, there are clusters of both Prestige Position and Suburban Stability residents. These are typically home-owners of an older generation with older children, who tend to have above average household incomes. This population is likely to have high car ownership levels and be retired or retiring soon. This population may be less receptive to cycling for commuting due high car ownership and limited trip demands as they may be comfortable with their current ways of travel. These groups may be more receptive to localised walking and cycling uptake, especially for recreational trips
- 3.9.3 According to the dataset in rural areas, including villages such as Puckeridge, the dominant group is Country Living closely followed by Rural Reality residents. According to Experian Mosaic, these groups are a combination of well-off owners living comfortable country lives, alongside householders in inexpensive village communities. Whilst those in the Country Living group tend to have high car ownership, Rural Reality residents are more likely to benefit from the scheme as they are less likely to own multiple vehicles and might now own their own bikes and therefore more receptive to change their behavioural patterns to walk and cycle more.

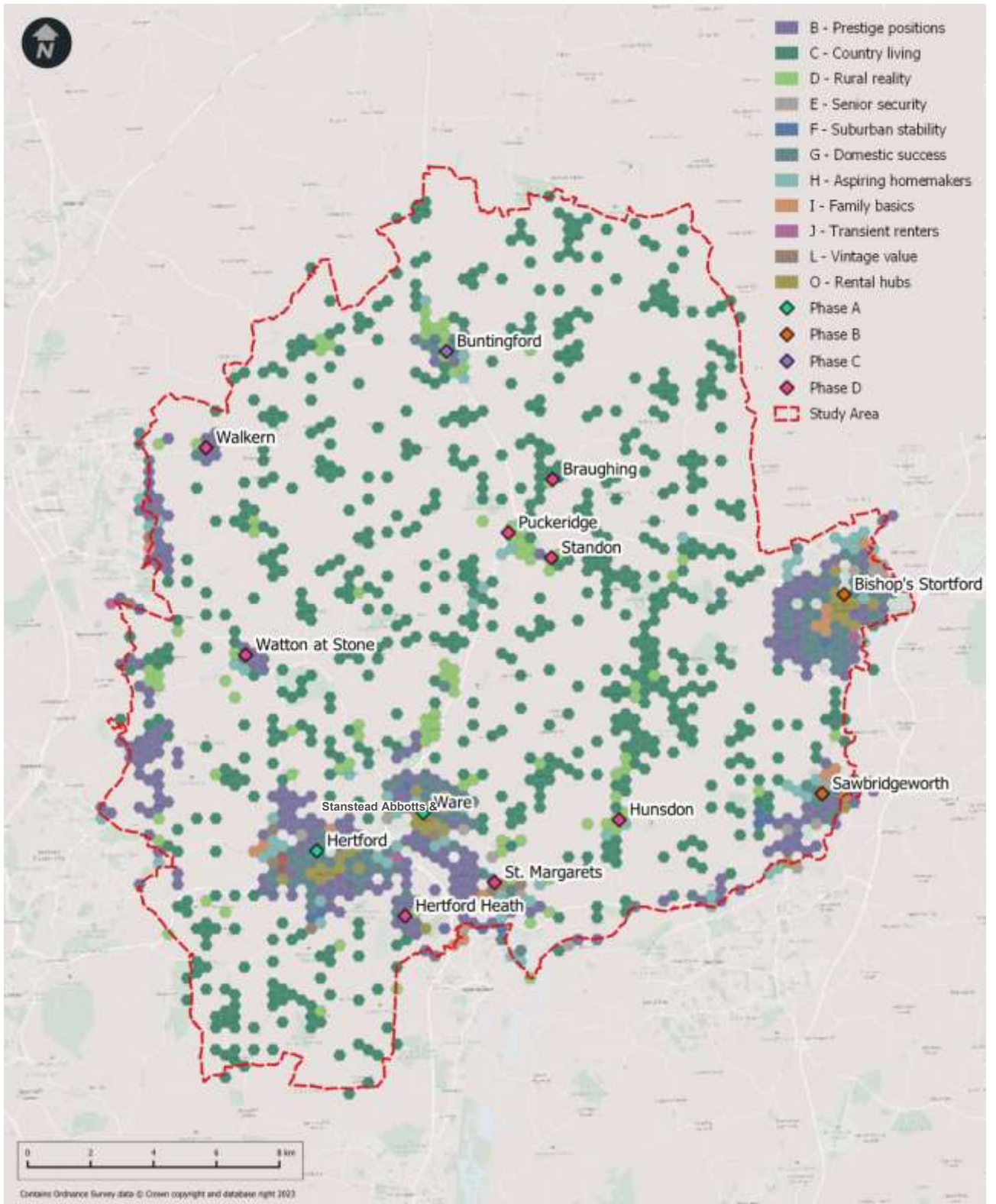


Figure 3-10 - Dominant Mosaic Group, Experian Mosaic
Experian Mosaic Definition

- 3.9.4 Country Living – Well-off homeowners who live in the countryside often beyond easy commuting reach of major towns and cities. Some people are landowners or farmers, others run small businesses from home, some are retired, and others commute distances to professional jobs.
- 3.9.5 Prestigious Positions – Affluent married couples whose successful careers have afforded them financial security and a spacious home in a prestigious and established residential area. While some are mature empty-nesters or elderly retired couples, others are still supporting their teenage or older children.
- 3.9.6 Domestic Success – High-earning families who live affluent lifestyles in upmarket homes situated in sought after residential neighbourhoods. Their busy lives revolve around their children and successful careers in higher managerial and professional roles.
- 3.9.7 Rural Reality – Households who live in rural communities and generally own their relatively low-cost homes. Their moderate incomes come mostly from employment with local firms or from running their own small business.
- 3.9.8 Aspiring Homemakers – Younger households who have, often, only recently set up home. They usually own their homes in private suburbs, which they have chosen to fit their budget.

Table 3-1 - Mosaic Group Distribution

Mosaic Group	East Herts LCWIP Study Area	UK Average
Country Living	52%	7%
Prestige Positions	19%	7%
Domestic Success	9%	9%
Rural Reality	8%	7%
Aspiring Homemakers	5%	10%
Rental Hubs	3%	8%
Family Basics	1%	8%
Senior Security	1%	7%

Mosaic Group	East Herts LCWIP Study Area	UK Average
Suburban Stability	1%	5%
Vintage Value	1%	5%

Indices of Multiple Deprivation

- 3.9.9 The English index of deprivation combines 7 domains including income, employment, education, health, crime barriers to housing and living environments which are weighted to create the Index of Multiple Deprivation. These indices can be used to compare small areas across England to understand relative deprivation amongst areas which may lack access to the 7 domains.
- 3.9.10 Within East Herts all the key urban towns, including Bishop’s Stortford, Hertford, Ware, Buntingford, and Sawbridgeworth, are amongst the least deprived areas. As shown in Figure 3-11, they score 90-100% on the indices of deprivation with pockets of 80-90%.
- 3.9.11 These towns are generally concentrated to the south of the district, except for Buntingford. However, the only pocket where levels of deprivation are at 20-30% is between Hunsdon, Sawbridgeworth and Bishop’s Stortford which is most rural. This area falls into Phase D and includes the rural villages of Much Hadham.
- 3.9.12 This shows that there is a high disparity between the levels of deprivation in rural and urban areas and demonstrates the importance providing good connectivity between rural and urban towns. Areas with low deprivation scores will benefit from improved active travel infrastructure as it provides an alternative means for connectivity.

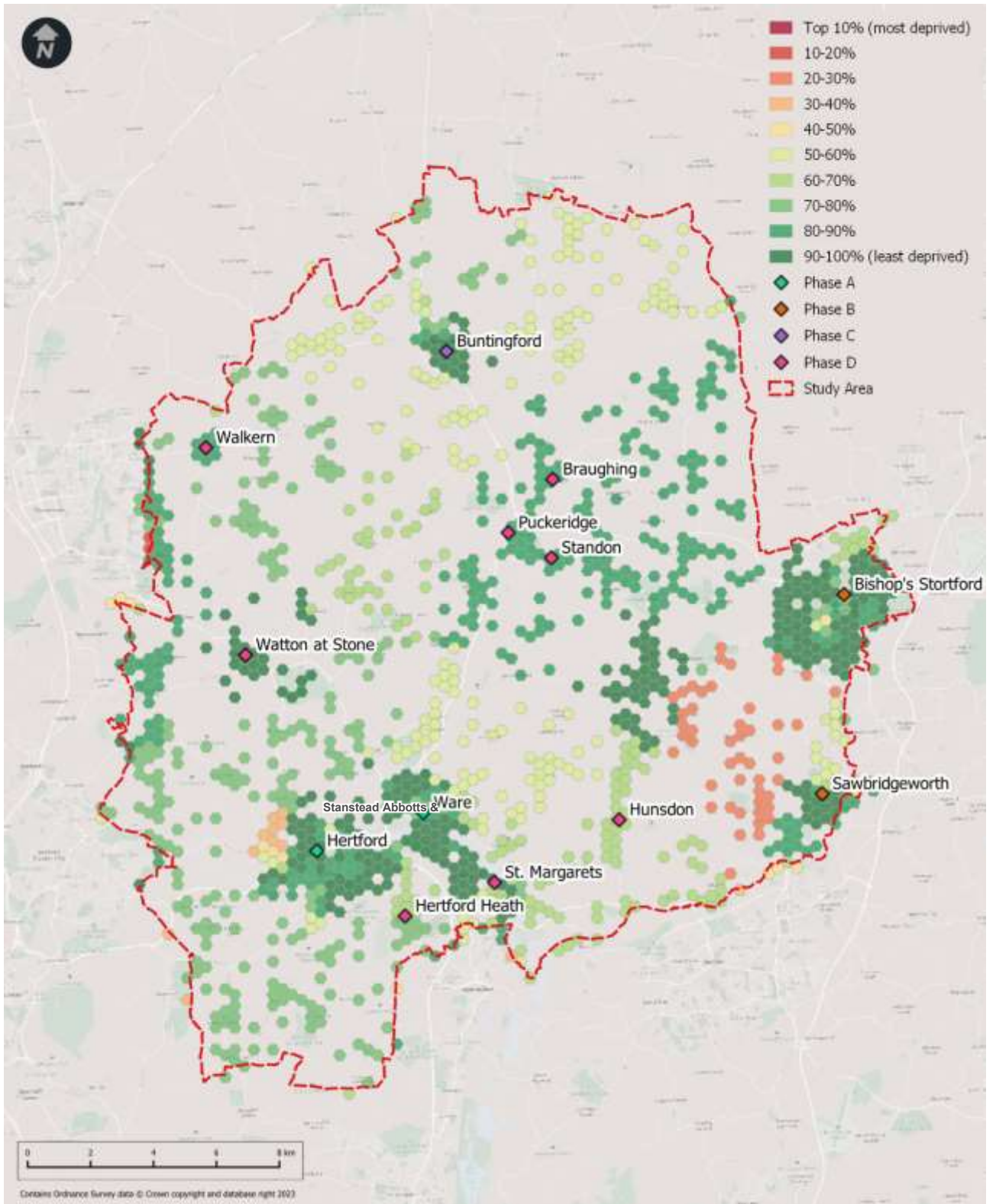
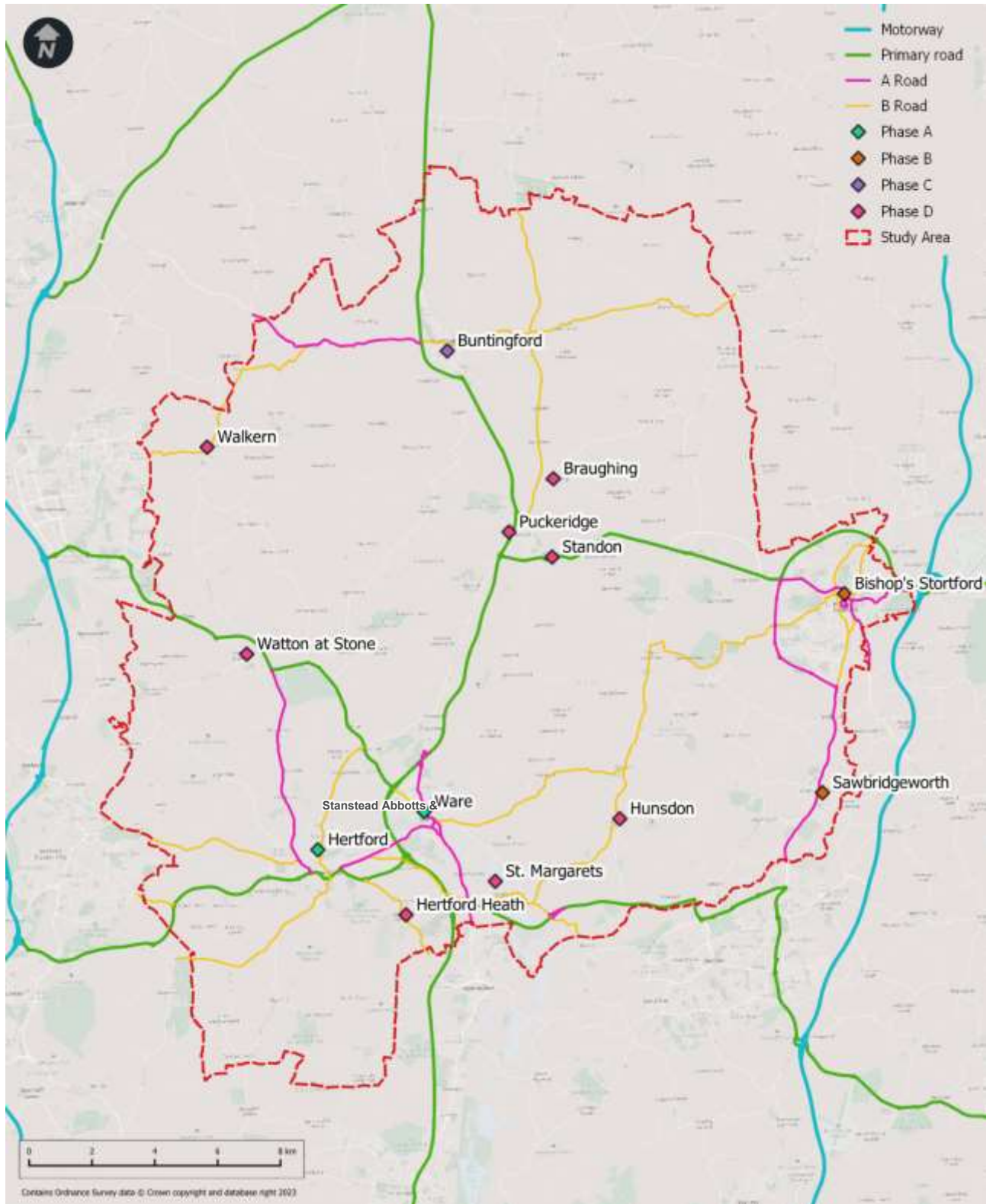


Figure 3-11 - Indices of Multiple Deprivation, Experian Mosaic

3.10 Characteristics and Constraints – Review of Existing Conditions

Road Network Hierarchy

- 3.10.1 Hertfordshire's Active Travel Strategy published May 2025, (subject of public consultation which concluded in May 2023) identified that Hertfordshire's highway network comprises around 5,100km of roads, this includes 705km of A Roads, 335km of B Roads, 829km of C Roads and 3,200km of unclassified roads.
- 3.10.2 Traffic data from the DfT shows that, annually, there are around 8 billion vehicle miles travelled across the county. Apart from 2020 which showed a substantial decrease in vehicle miles to 6.5 billion due to successive lockdowns and the overall impact of the coronavirus pandemic, this has been increasing since 2010.
- 3.10.3 Figure 3-12 shows East Herts' existing main transport connections. Whilst there are no motorways within the district, there is a network of primary roads connecting each town in Phases A-C, along with a network of A roads around the periphery and B roads throughout the district that provide access to most villages in Phase D. The A roads are typically located around the railway stations, whereas the B roads connect the rural areas to the larger town centres.
- 3.10.4 While these major roads may provide the most direct vehicle and cycle access between towns and to rural villages, it is important that walking and cycle access considers traffic volumes and posted speed limits. In some instances, it may be appropriate for the walk and cycle networks to consider nearby alternative routes on less trafficked roads, where safe infrastructure can be provided.



**Figure 3-12 - Road Classification
Rail and Bus Stops**

- 3.10.5 Figure 3-13 shows the locations of public transport bus stops and rail stations within the district. The railway stations are all located around the south and eastern part of the district, connecting the urban centres in Phase A and B including Hertford, Ware, Bishop's Stortford and Sawbridgeworth. Watton-at-Stone and Stanstead Abbots & St Margarets are the only Group 1 villages in Phase D which are connected by railway stations.
- 3.10.6 There were two other rail routes serving rural communities until they were discontinued in Dr Beeching's cuts in 1964-5. A line connecting St Margarets to Buntingford ran from Hertfordshire to London, and also a line between Welwyn and Hertford. The large section of the Welwyn to Hertford line has since been converted for active travel use as The Cole Green Way and forms part of National Cycle Network Route 61.
- 3.10.7 The network should aim to provide direct connections from surrounding destinations to the remaining railway stations and local bus stops.
- 3.10.8 In the centre and north of the district there are no railway stations or railway lines. Instead, these areas are services by the bus network, predominantly along the major road networks.
- 3.10.9 Bus stops are more spread throughout rural areas, which can be expected given population density in these areas. This highlights the importance of walking and cycling accessibility to bus stops in rural areas, or where railway access is limited.
- 3.10.10 HertsLynx is HCCs Demand Responsive Transport (DRT) service, launched in September 2021, and since expanded, which offers flexible bus travel for passengers within the county. The service does not follow a timetable or set route, but instead collected passengers from their choice of pick up and drop off location in the operating zones across Hertfordshire. The service helps to improve bus travel options and helps to address the sparsity of bus stops in rural areas.
- 3.10.11 A key focus area will be connecting areas with high deprivation scores to nearby urban centres, to improve access to services and nearby destinations and to promote sustainable forms of transport in these journeys.

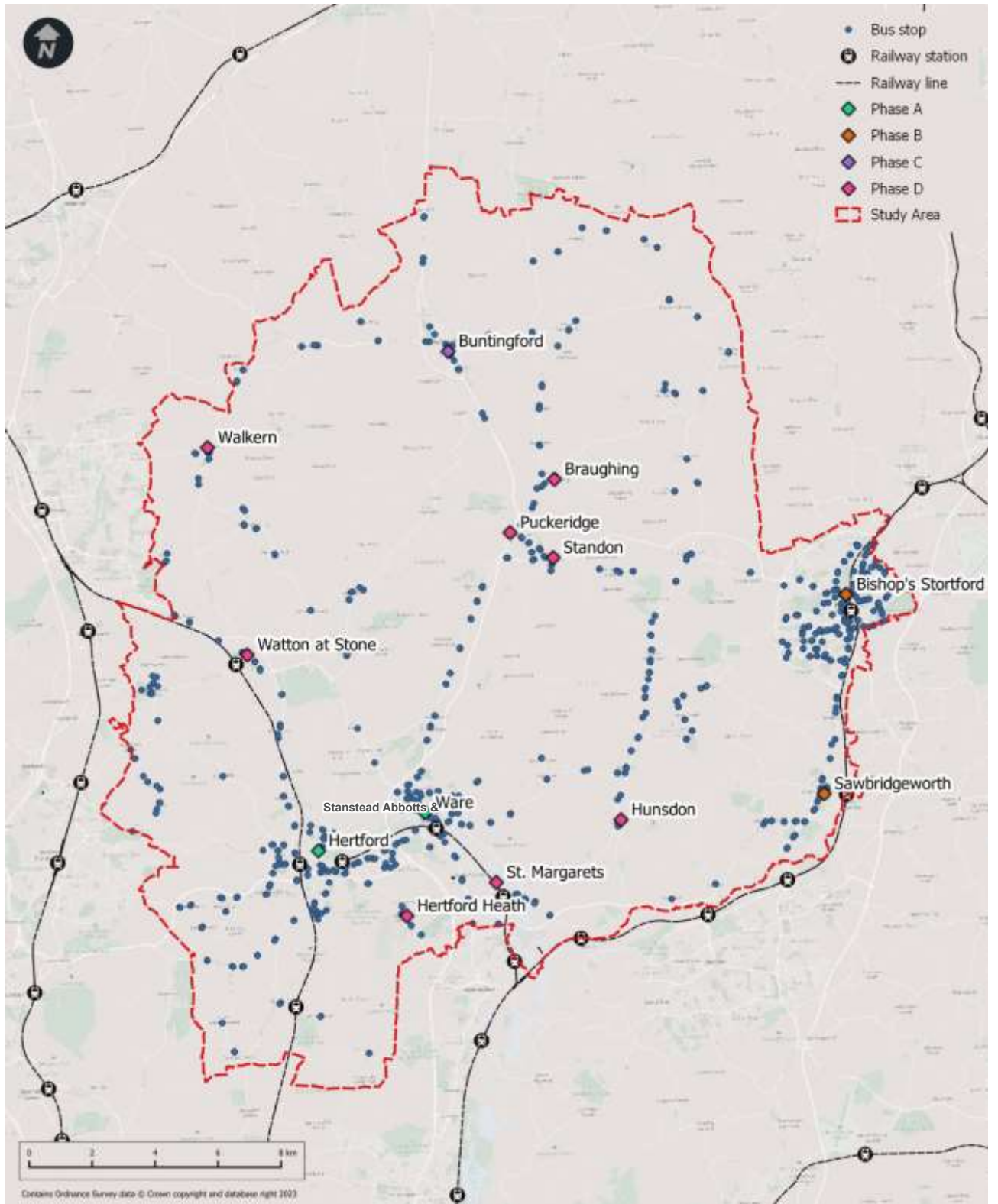


Figure 3-13 - Public Transport Infrastructure

Strategic Cycle Network

- 3.10.12 Figure 3-14 shows the current cycle network within East Herts, which is limited to local on-road routes to the north-east and south-west and the national off-road recreational route connecting Hertford and Ware.
- 3.10.13 The National Cycle Network (NCN) Route 61 runs in the south from Welwyn Garden City to Hertford and Hoddesdon via Ware. NCN Route 1 in Harlow runs just outside of the district, however this route has several gaps in it, so there is clear space for improvement. Additionally, part of NCN Route 11 runs between Sawbridgeworth and Bishop's Stortford. Again, this route is incomplete and can be improved to provide better cycling infrastructure in the district.
- 3.10.14 While this network connects key urban destinations and some smaller villages, these networks offer limited guidance to improving and encouraging cycling uptake across the district.
- 3.10.15 While the development of the East Herts LCWIP should consider the existing network, taking a district wide approach that considers demand, demographics, connectivity, directness, safety and cohesion is important to influence meaningful planning and investment decisions.

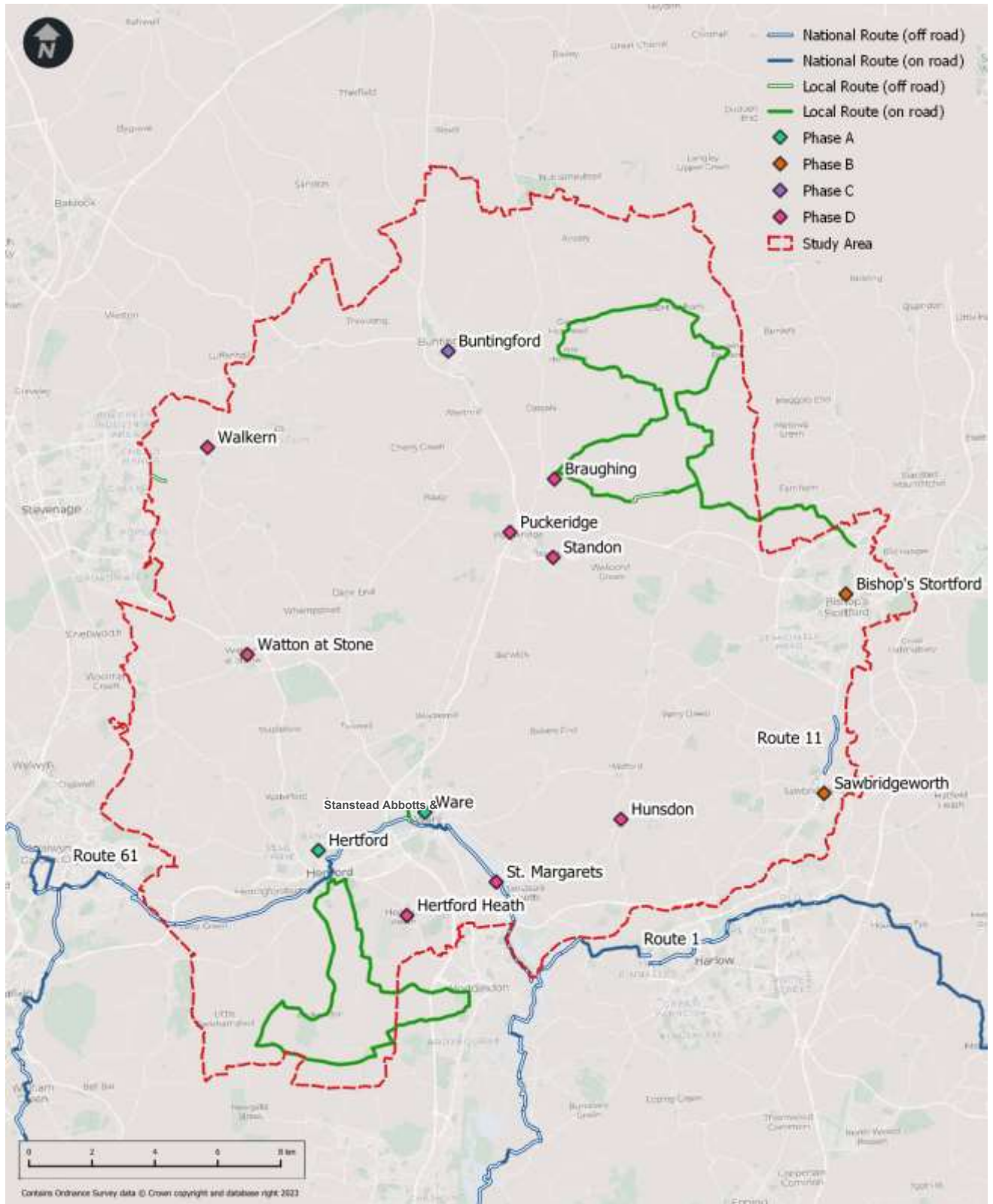


Figure 3-14 - Cycle Network, Sustrans

Cycle Count Data

- 3.10.16 Figure 3-15 identifies the Average Annual Daily Traffic (AADT) cycle count data for East Herts and the surrounding area in 2021. The data provides cycle count data on indicative cycle routes and key desire lines, to capture available data collected on nearby routes and roads.
- 3.10.17 Relatively low cycle count data is recorded across the District, with an average daily cycle volume count of 200 or less cyclist recorded along indicative desire lines – even through the key urban areas. This may be reflective of the predominant rural land-uses, and lack of cycle infrastructure in the district which may not accommodate or encourage a higher rate of cycling.
- 3.10.18 Based on the data available, it is clear there are existing cycle demands between key urban centres in Phase A-C and some rural villages in Phase D.
- 3.10.19 Cycle count data external to East Herts has been shown to understand key destinations users are accessing, and which routes they may take, in adjoining authorities. While the count data is relatively low, the desire lines demonstrate demands to external towns including Welwyn Garden City, Stevenage, Harlow, Hoddesdon and Royston, along with demand for Stansted Airport.
- 3.10.20 These counts demonstrate the current need for local and inter-urban cycle connections for East Herts, which should be considered in the development of the LCWIP.

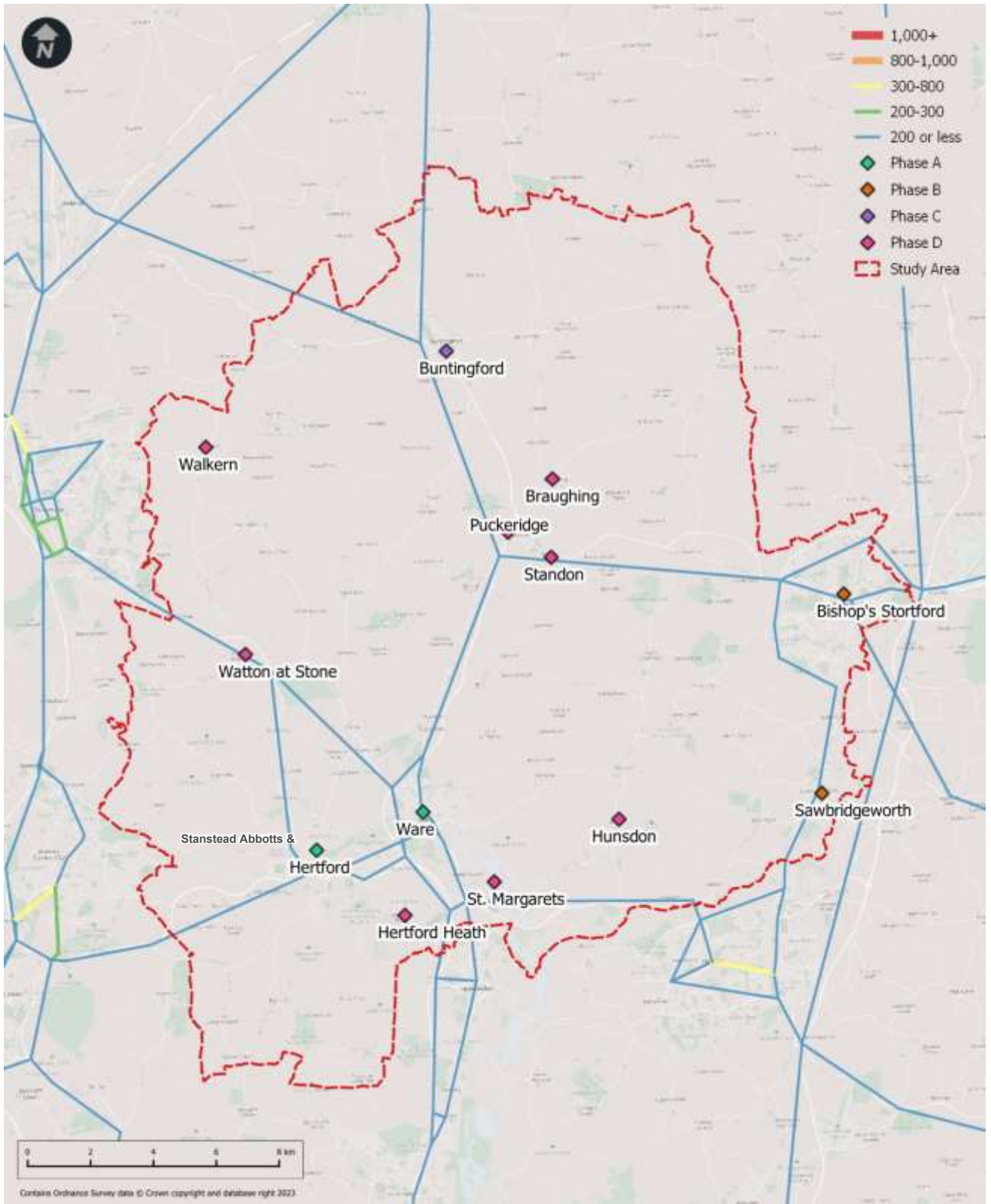


Figure 3-15 - AADT Cycle Volume Counts, DfT, 2021

Widen My Path

- 3.10.21 “Widen My Path” is an online website that allows anyone in the UK to suggest walking and cycle infrastructure improvements at specific points on a map. Data from this website has been used to provide an insight to the safety issues some members of the community may experience on the East Herts network.
- 3.10.22 Within the East Herts district area there had been 274 comments made on Widen My Path as of 20/10/2023 about improvements that could be made to improve walking, wheeling and cycling and encourage active travel. This information will be considered in during the LCWIP process as it offers additional information about where the public believes interventions would be most effective and needed.
- 3.10.23 Widen My Path data highlighted several key issues which impact people from walking or cycling in the study area. The three main issues for each location are shown in Table 3-2. Overall, the key theme is about the lack of adequate footways and cycleways. One key comment at each location was the issue of speeds around schools. It has been repeatedly noted that speeds should be reduced to 20mph on these roads, to improve road safety.
- 3.10.24 Note that the smaller villages had fewer comments so didn’t all have multiple issues noted, as reflected in the table.



Figure 3-16 - Widen My Path Comment Locations

Table 3-2 – Widen My Path Key Issues by Location

Location	Issue
Bishop’s Stortford	Inadequate crossing facilities Unsafe cycle path provision Inadequate pedestrian infrastructure
Buntingford	Lack of segregated cycleway Unsafe, unsegregated footways Lack of public footpaths
Hertford	Unsafe cycle and pedestrian facilities on London Road Inadequate and inaccessible public footpaths Inadequate crossing facilities
Much Hadham	Lack of cycleway
Sawbridgeworth	Inadequate pedestrian infrastructure Infrastructure prioritises motor vehicles
Ware	Inadequate footways on High Street Extend cycleway to Ware Road Inadequate active travel infrastructure
Watton at Stone	Unmaintained footways A602 inadequate cycleway

Cycle and Pedestrian Collisions

3.10.25 Figure 3-17 indicates that there are fairly low levels of cycle and pedestrian collisions with vehicles within the district. The heat map shows that collisions recorded are typically concentrated in Hertford, Ware and Bishop’s Stortford. The following pages provide further detail about the location and type of accidents recorded between 2017-2021.

3.10.26 Ware shows low collision rates, whilst Hertford and Bishop’s Stortford show darker spots surrounding the towns which demonstrates a higher number of recorded cycle and pedestrian accidents in these areas.

3.10.27 Safety and the perception of safety is one of the key reasons along with ability why people do not cycle. There is a strong consensus that cycling under mixed traffic conditions presents a high personal risk to safety. Segregated cycle infrastructure helps to break down these barriers by providing separation from other road users on both links and junctions.

3.10.28 During the COVID-19 pandemic, cycling rates increased by 46 percent and a million more people started walking for leisure. With quieter roads came increased confidence to cycle. Building on this success, emergency pop up cycleways were rolled out in areas across the UK to safely accommodate active travel users and provide a greater perception of safety compared to mixing with motor traffic. The LCWIP provides an opportunity to build on this momentum.

3.10.29 Protecting pedestrians and cyclists from motor traffic movements through safe crossings, junction upgrades and protected facilities forms a key part of this LCWIP, contributing to road danger reduction. Collision data has also formed part of our appraisal of the active travel routes identified, with routes with high levels of accidents prioritised.

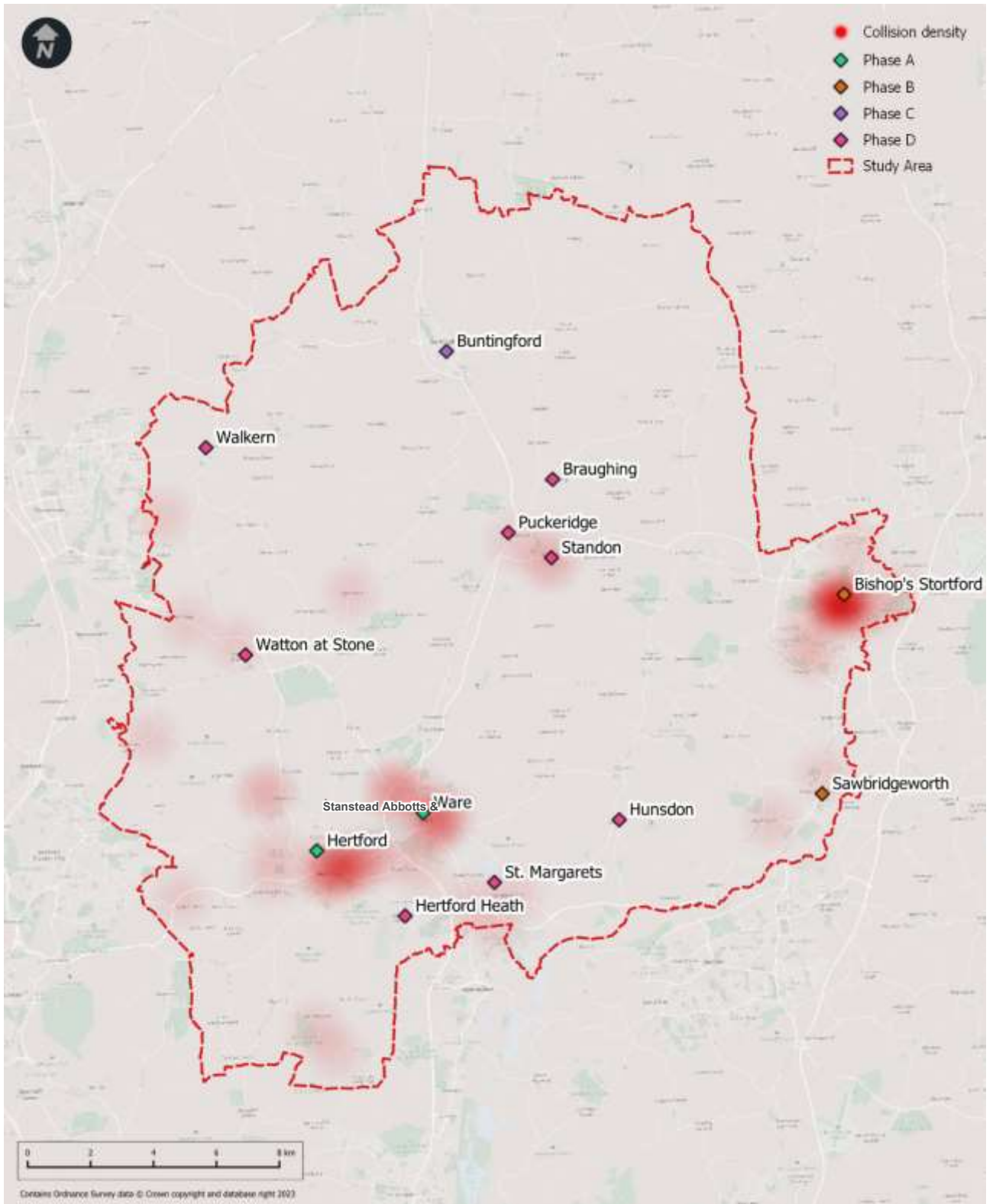


Figure 3-17 - Cyclist and Pedestrian Accident Heat Map, DfT, 2017-21



Collision Data – Hertford and Ware

- 3.10.30 Figure 3-18 shows that there have been several reported serious and slight incidents in both Hertford and Ware. There is also a serious accident recorded to the south of Ware.
- 3.10.31 The accidents are mainly located within urban areas along key routes, including several located along the route connecting Hertford to Ware. Most of the collisions visible on the map are along Ware Road, Hertford. This road has received many comments on Widen My Path, because the footpaths are poorly maintained, and there are no dedicated cycling facilities
- 3.10.32 In consideration of crash data, it will be important to identify if there are viable and alternative walking and cycle routes available that limit conflicts with vehicle traffic. Where this cannot be avoided, high-quality and safe infrastructure will be required along these links.

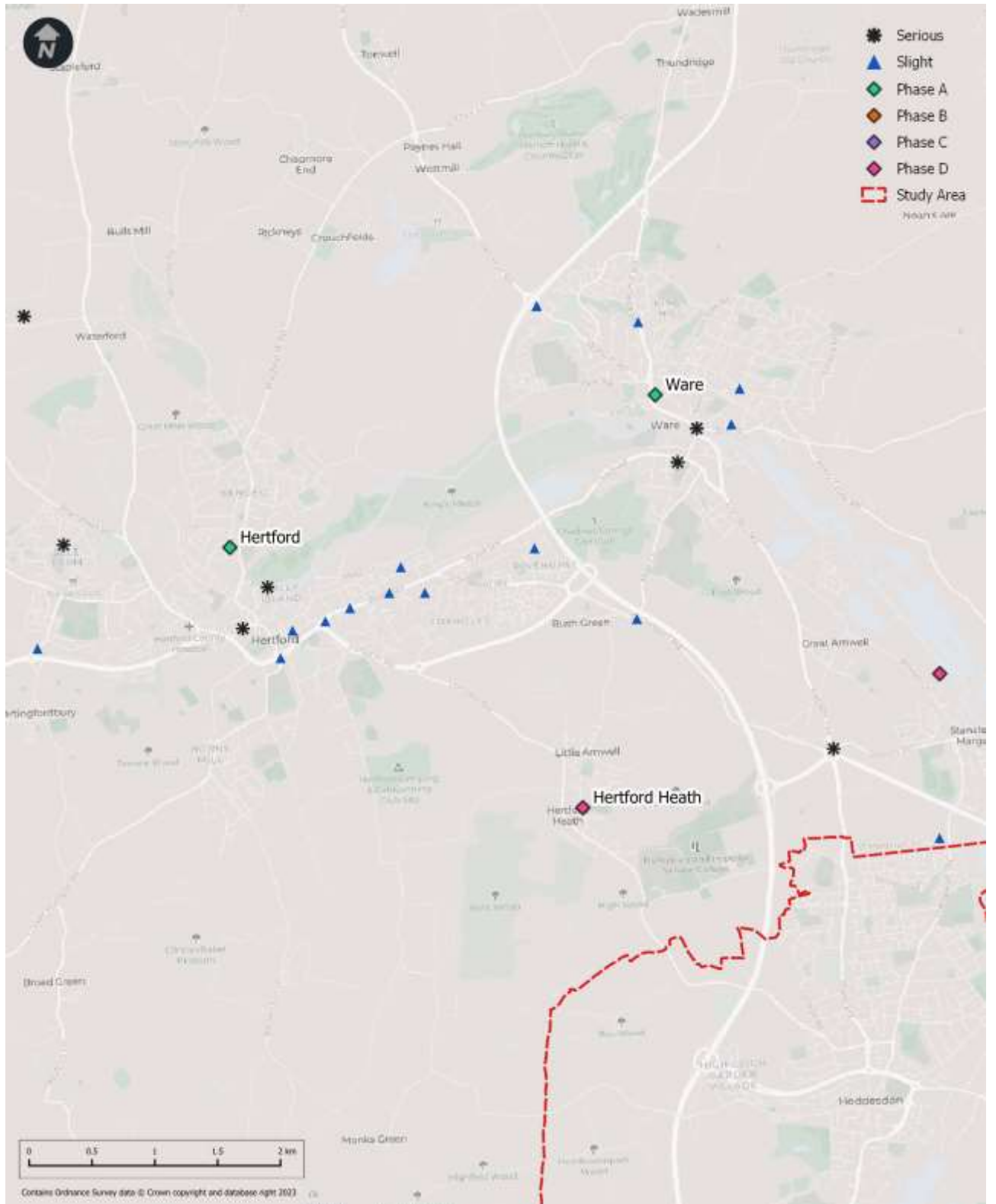


Figure 3-18 Hertford and Ware Collision Data, DfT, 2017-21

Collision Data - Bishop's Stortford

- 3.10.33 In Figure 3-19 there are several reports of serious accidents in the town centre of Bishop's Stortford, and many more reports of slight accidents both in and around the town. The distribution of collisions being weighted towards the urban areas is likely due to the closer proximity of motor vehicles and pedestrians/cyclists in the town centres.
- 3.10.34 Notably, the slight collisions have tended to occur within close range of each other, around the same roads in the town centre, which could suggest a pattern in the causes of collisions.
- 3.10.35 A number of these incidents are recorded on core roads that provide access to and within Bishop's Stortford, which are expected to be considered through the network planning phase. In consideration of crash data, it will be important to identify if there are viable and alternative walking and cycle routes available that limit conflicts with vehicle traffic. Where this cannot be avoided, high-quality and safe infrastructure will be required along these links.

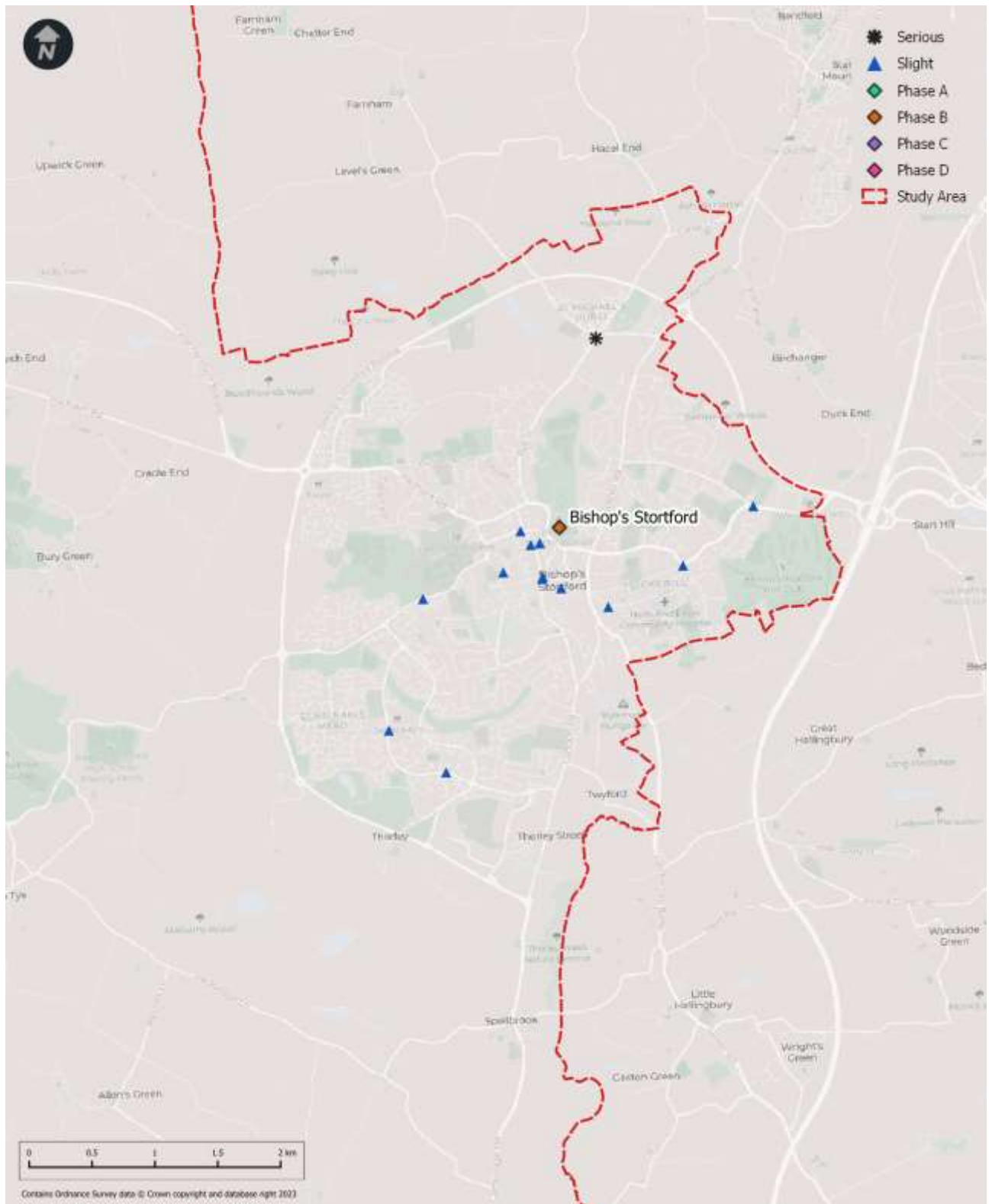


Figure 3-19 - Bishop's Stortford Collision Data, DfT, 2017-21

Collision Data - Rural Villages

- 3.10.36 As shown in Figure 3-20, there are limited recorded cycle and pedestrian collisions with vehicles in 2017-21 around the rural villages. This could be attributed to the low traffic volumes associated with rural land-uses in this area. This excludes Hertford and Ware, which were analysed earlier in this report.
- 3.10.37 Between Watton at Stone, Walkern and Puckeridge we can see that there have been approximately three serious and another four slight collisions.

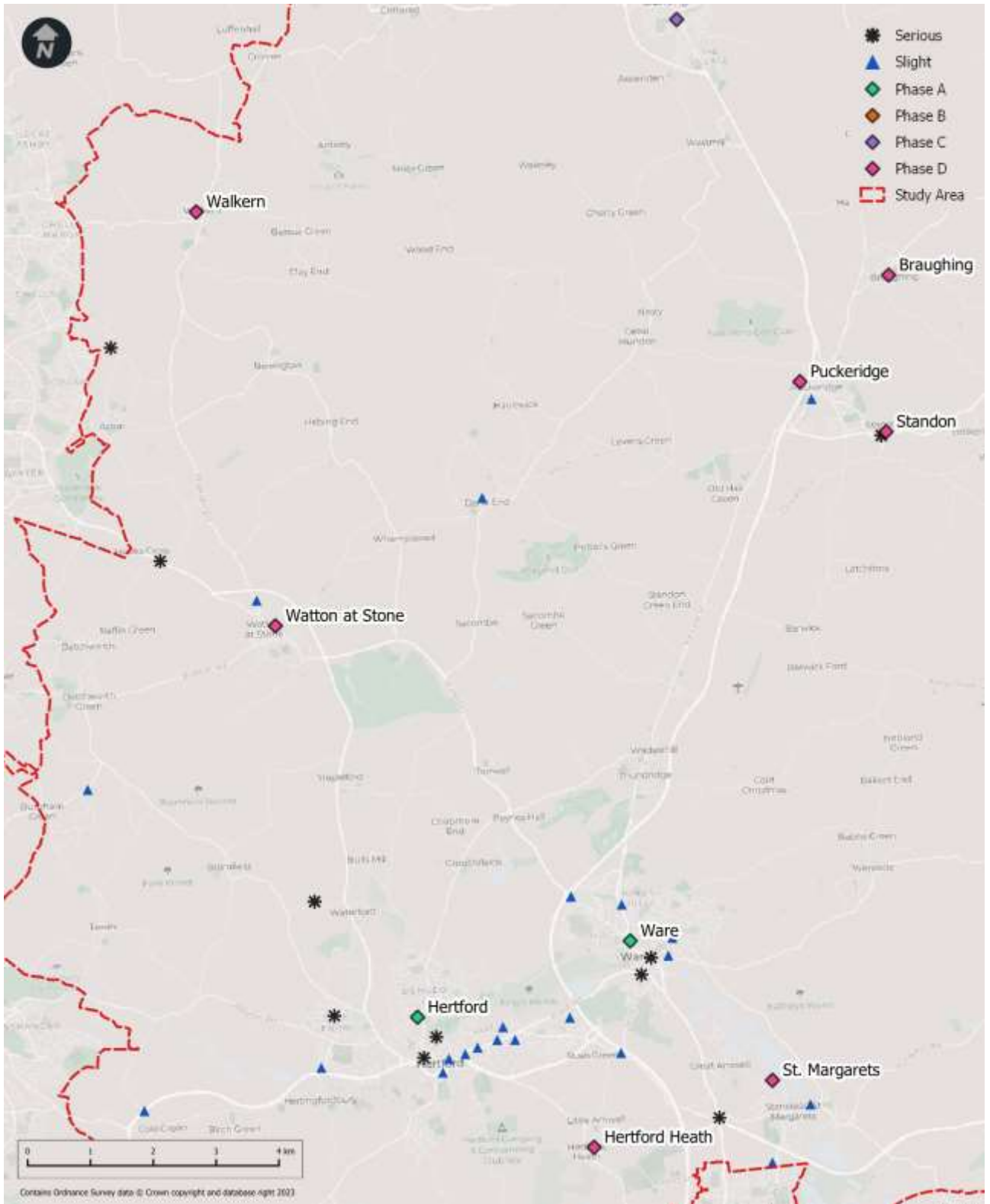


Figure 3-20 - Rural Villages Collision Data, DfT, 2017-21

4 Network Planning

4.1 Identifying Active Travel Potential

Overview and Methodology

- 4.1.1 DfT guidance advocates the usage of the Propensity to Cycle Tool (PCT), an online resource funded by the department to support the planning of cycle networks, to identify current and potential future distribution of cycling trips by making use of 2011 census data. It does this by reflecting existing data through several scenarios – including government targets, current (2011 census based), and a high uptake ‘Go Dutch’ framework – to better understand the potential growth routes for cycling, which may be then translated by planners and data analysts into corridors and schemes that may be a barrier to said uptake.
- 4.1.2 The PCT is itself limited, not solely because of the age of the data but due to limitations in relative scope of focusing almost entirely on commuter trips and excluding where there may be latent demand for other journeys not suitably served or accounted for.
- 4.1.3 HCCs approach, to mitigate this, has been to establish a GIS model that is instead built around origin and destination points to better assess – at a network level – where trips may be undertaken. This includes future development and employment sites, to ensure the LCWIP is catering both for expected growth and the needs of the existing network.
- 4.1.4 The GIS model has been developed by the consultant to interface with existing HCC owned and used systems and is intended for use on all LCWIPs across the county to ensure a consistent approach. More information on this model, including the outputs and data sources, are included later in this document.
- 4.1.5 Prior to establishing and running this model, HCC reviewed data from numerous sources to better inform existing patterns, potential areas of improvement, and whether key barriers are evident in the data. These data sets include:
- PCT data
 - Widen My Path data
 - Rapid Cycleway Prioritisation Tool Data
 - 2021 census data
 - County Travel Survey data

- Slow Ways

Analysis of this data and key findings are presented on the following pages, though it should be stressed that these are not representative of the full LCWIP at this stage.

Propensity To Cycle ‘Go Dutch’ Vs ‘Government Near Market’ Scenario

- 4.1.6 The Propensity to Cycle Tool (PCT) was developed on behalf of the DfT between 2016-2019. It is a web-based tool designed to help authorities plan cycle networks, with LCWIPs in mind. The PCT helps identify desire lines for cycle traffic for trips to work and to schools. It can also help inform network development, as its outputs can be configured to be applied to the existing network, giving ‘heat maps’ of indicative demand.
- 4.1.7 It is based on data from the 2011 Census, which is then manipulated and uplifted to represent a number of future scenarios, showing potential cycle demand patterns. Two scenarios, shown in Figure 4-1 and 4-2 respectively, were modelled in the study area for this LCWIP: “Government Target (Near Market)” and “Go Dutch”. The latter looks at the distances between homes and workplaces and applies Dutch willingness to cycle to these, imagining how many additional trips could be cycled if there was Dutch-style cycle infrastructure in the UK and Dutch levels of willingness to cycle.
- 4.1.8 The parts of the network highlighted in orange and red in these figures show the routes with greatest potential for commuter cycle trips. There is greater potential shown in the “Go Dutch” output, as this scenario is more optimistic. These outputs show that the routes with the most potential are mostly within and between Hertford and Ware, and Bishop’s Stortford. There is also a high potential link between Bishop’s Stortford and Harlow and the inter-urban link between Hertford and Welwyn Garden City.

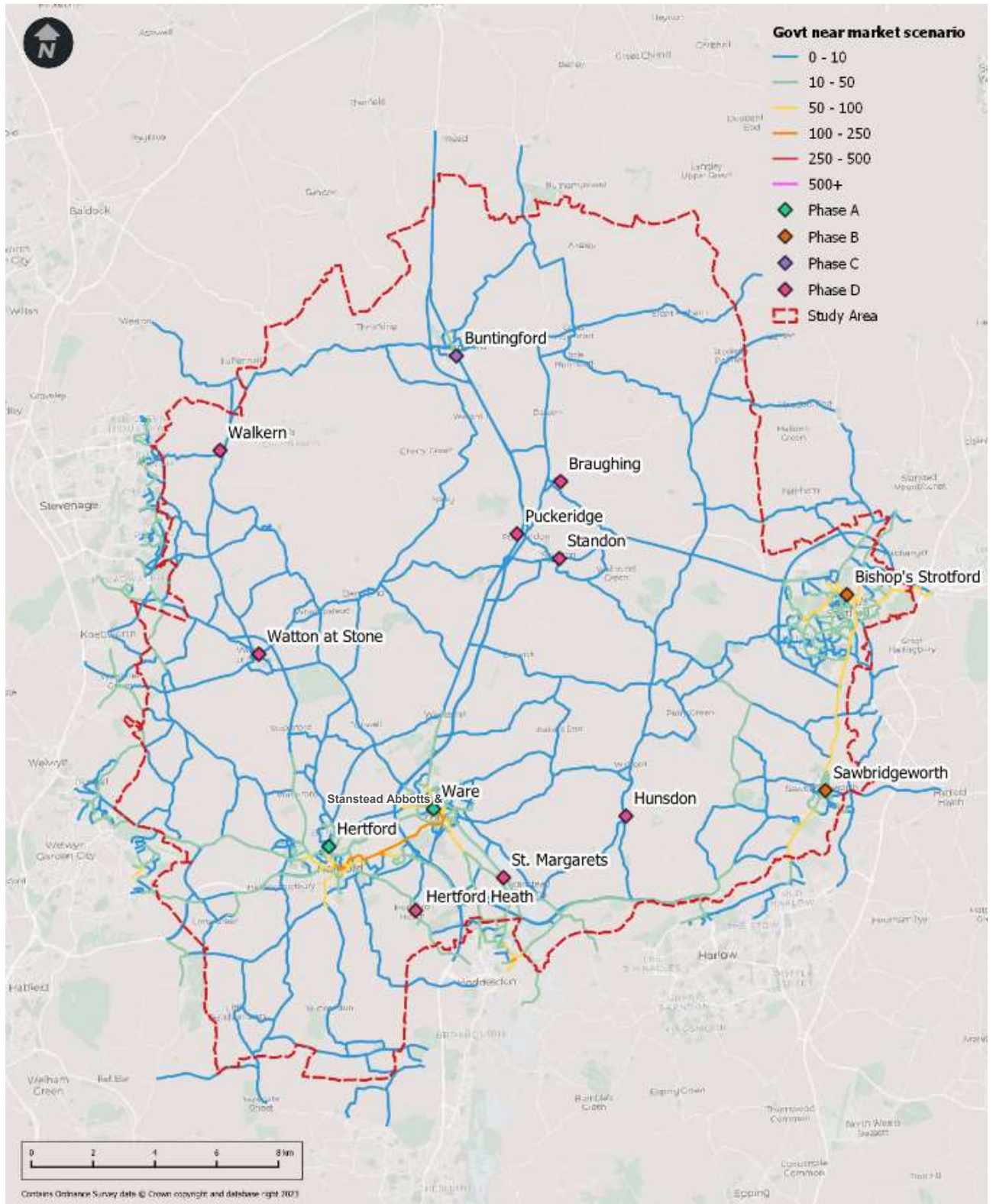


Figure 4-1 - Government Near Market Scenario

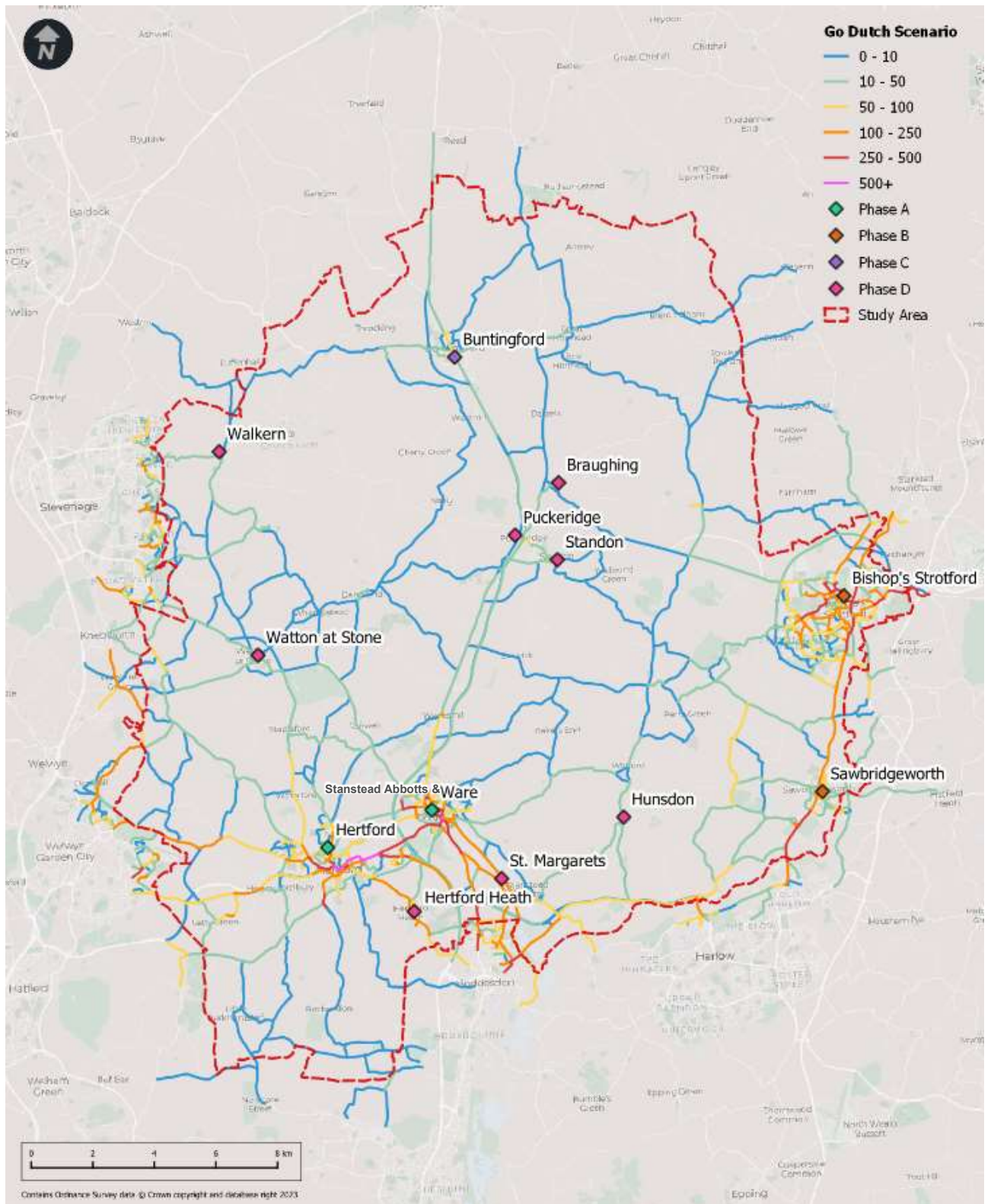


Figure 4-2 - Go Dutch Scenario

Rapid Cycleway Prioritisation Tool

- 4.1.9 The Rapid Cycleway Prioritisation Tool (RCPT) was developed at haste, in response to the Emergency Active Travel Fund. This was a means of allowing authorities without well-developed cycling strategies or network plans to identify potential cycling routes and corridors. Primarily built on data from the PCT, the tool ranks and selects roads based on:
- Cycling potential, estimated from PCT data and 2011 census information
 - Spare space, those being roads that appear to be either overly wide or have spare capacity due to additional running lanes.
- 4.1.10 In addition, the tool generates what is termed the ‘cohesive network’ which is intended to show what an integrated cycle network could look like if more measures were able to be considered, up to and including one-way systems or full road closures, on roads with a high potential but without the expectation of spare carriageway space. This is recognised as being principally useful for long term planning.
- 4.1.11 The tool identified a number of potential routes towards the south of the District (Figure 4-3), both in terms of a cohesive network potential and section marked as being top ranked cycleways. It should be noted that the tool operates at a county level, and as such to score highly is much more significant. The cohesive network is shown in purple, potential new routes shown in blue.
- 4.1.12 The cohesive network broadly matches the findings of the PCT data, showing a concentration of cycling activity around Hertford and Ware. However, Bishop’s Stortford is not seen in this dataset as a location with cycling potential. It is included neither in the cohesive network not in the top ranked new cycleways. Although the existing cycleways in Bishop’s Stortford are seen on the map, as the largest towns in the East Herts District the absence of ‘Top ranked new cycleways’ and ‘Cohesive network’ routes, reflected by the purple and blue lines, is notable.

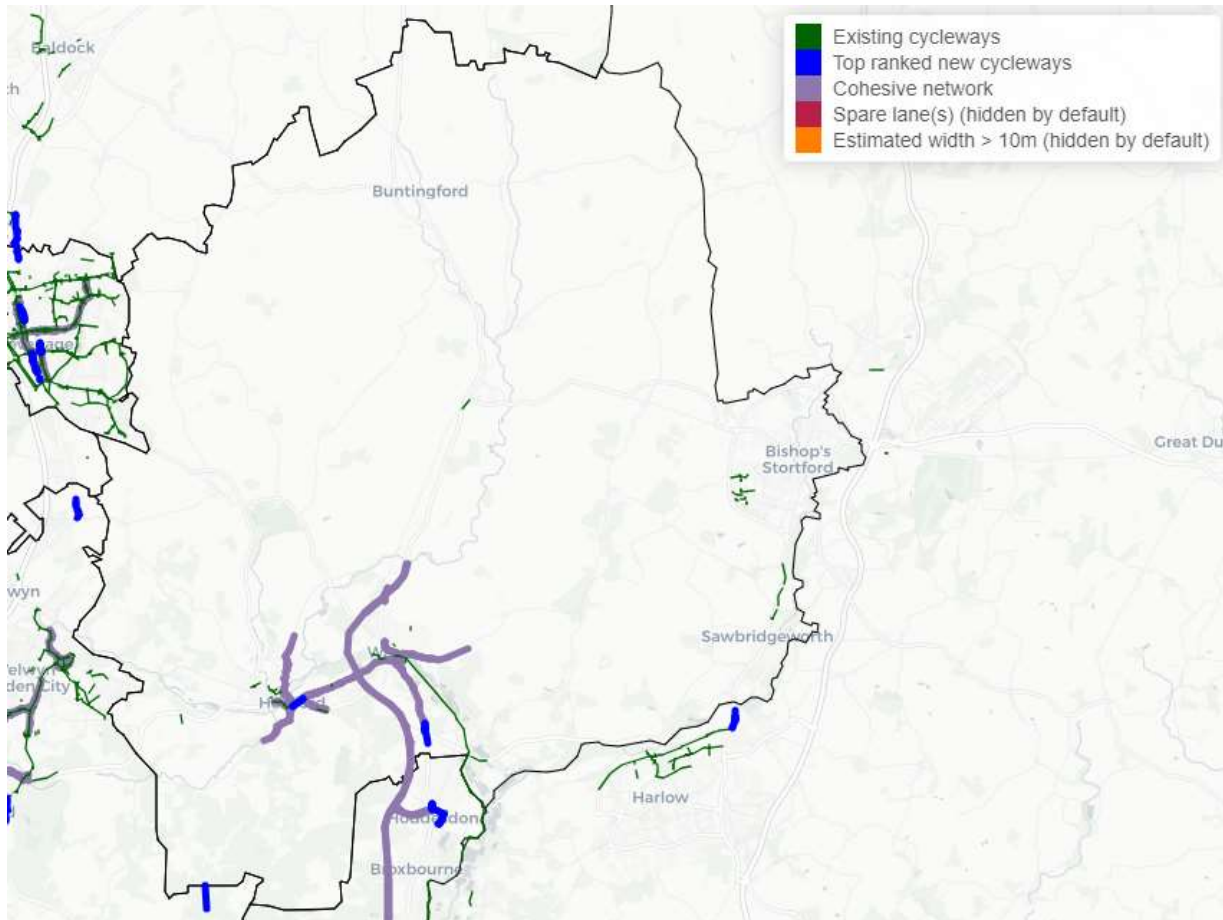


Figure 4-3 - RCPT Proposed Routes

Strava Data

- 4.1.13 Strava data is an aggregated dataset collected from users of the Strava platform – a popular means of tracking physical activity (specifically walks/rides/runs). The data is anonymous but does highlight routes and corridors based on route volume and as such can provide a key insight into mobility patterns.
- 4.1.14 There is an inherent bias in the data, favouring those that both possess a smartphone and have opted to install and use the application, but the resultant trends are still sufficient to show relative popularity of routes under existing conditions. Data can be viewed at various levels, from individual road and street units through to wider routes and corridors within or between settlements.
- 4.1.15 As part of preparation for this LCWIP, assessments were done at varying levels including Strava analysis on the below areas to understand existing cycling trips, both for commuting

and leisure. The following maps illustrate activities recorded on Strava across East Hertfordshire across July 2023.

Figure 4-4 shows Section 1: Ware Road (on-road between Hertford and Ware), the on-road connection between Ware and Hertford along Ware Road. It shows a total of 895 trips in July 2023. 87% of these trips are for leisure, compared to 13% for commuting trips. Most of these trips take place on the weekends between 7am and midday.



Figure 4-4 - Section 1: Ware Road

Figure 4-5 shows Section 2: River Lee Navigation, the off-road connection between Ware and Hertford, along the River Lee Navigation. Compared to Ware Road, this route has slightly fewer trips at 835 throughout July 2023. Comparatively, a lower proportion of these trips are for leisure, at just 74%, with double the number of commuters choosing this route, 26%. Whilst the majority of trips are still taken on the weekends, a higher proportion of weekday trips occur on this route to the on-road link, with a peak during the middle of the week.



Figure 4-5 - Section 2: River Lee Navigation Path

Figure 4-6 shows Section 3: A119, the link between Hertford and Watton-at-Stone. This route has a surprisingly low demand given the relatively high populations in the two settlements. There were 545 trips in July 2023, with the majority taking place on the weekends between 7am and midday. 5% of these trips are made by commuters, likely contributing to the morning and evening peaks which are seen along this route. The speed and volume of motorised vehicles along this route, which is an A-road, may be a contributing factor to the low demand and low uptake of this route amongst commuters.



Figure 4-6 - Section 3: A119

Figure 4-7 shows Section 4: Walkern Road. It is interesting to note that there is a higher demand for routes out north from Watton-at-Stone towards Walkern, than there are for journeys south towards Hertford, given the relative size of the three settlements. This link had 965 trips throughout July 2023, with a higher proportion of commuter trips than for the link shown in Figure 22. The demand for this route could be because of the proximity to Stevenage, a much larger town to the west of East Hertfordshire. When we reviewed the Strava count for a link to Stevenage, however, the counts were notably lower than the connection shown here, likely because the volume and speed of motorised vehicles is relatively low, making it more comfortable to ride along.



Figure 4-7 - Section 4: Walkern Road

Figure 4-8 shows Section 5: Hay Street. This route can connect Buntingford to Braughing, and then on to Puckeridge and Standon. Whilst there is a more direct route along the A10, the infrastructure is not adequate for cycling, and as a result the Strava count shows there is no activity along this route. As the figure shows there is demand for this route, with 440 trips taken in July 2023, and there is a potential for mode shift if the infrastructure for active travel was improved. 99% of trips are for leisure, and there is a clear preference for weekend travel between 9am-1pm along this route.



Figure 4-8 - Section 5: Hay Street

Figure 4-9, Section 6: Ford Bridge, shows the route south of Braughing connecting to Puckeridge. Despite the proximity to the route, this one has much higher demand, possibly because of the shorter distance between these two villages, or because of better infrastructure supporting active travel. This section had 995 trips in July 2023, with the same proportion of leisure to commuting trips as Hay Street, at 99% to 1%. The low proportion of commuting and utility trips may be attributed to the lack of shops and a secondary school, limiting the number of trip generators in Braughing.



Figure 4-9 - Section 6: Ford Bridge

Figure 4-10, Section 7: New Road, which connects Little Hadham to Much Hadham, is a short route and there is a high demand. This demand is likely to be attributed to the short distance between the two villages. With 99% of the 880 journeys made in July 2023 being for leisure it is clear there is a high proportion of people using this route for recreational sport, in part because the only shop in both settlements is in Much Hadham. The indices of deprivation maps show that these areas are more deprived than other areas within the District. This means that it is important to connect these areas, capturing and building on the demand to improve access to active travel.



Figure 4-10 - Section 7: New Road

Figure 4-11 shows Section 8: Widford Road. As with the above section, this connects two villages with high levels of deprivation, Much Hadham and Widford, along Widford Road. Consequently, this is an important corridor as it provides connections not only between these two villages, but also onto Ware, the closest major town. This route has extremely high demand, with 1,070 trips in July 2023. Only a small proportion of these trips were for commuting, at 2%, however there is the potential for mode shift given the existing demand and the proximity to Ware, a likely employment destination.



Figure 4-11 - Section 8: Widford Road

Figure 4-12 shows Section 9: B1004. The activity on the B1004, the road which connects Much Hadham to Bishop’s Stortford. There is a level of demand for this route, with 530 trips in July 2023, and it is an important connection as Bishop’s Stortford, the larger and less deprived of the two towns, has a higher population and is a likely employment centre. This is indicated partly with the fact that far more trips here, compared to other sites, are for commuting at 11%. The use of this route for commuting is also evident with the morning and evening peaks, because compared to other routes there is a far higher proportion of trips during the afternoon, from 5-7pm. Also, except for Sundays where travel is the most frequent, trips are more evenly spread out across the week.



Figure 4-12 - Section 9: B1004

Figure 4-13 shows Section 10: Cambridge Road. The route between Bishop’s Stortford and Sawbridgeworth along Cambridge Road is important as they are the two major towns to the East of the District. Whilst there is a low demand, with only 200 trips in July 2023, a high percent of these were commuter trips at 13%. This indicates that the route is an important one for both leisure and employment, and there is high mode shift potential given the affluence in these areas. The low trip rate is likely a result of infrastructure which is inadequate, dissuading people from active travel.



Figure 4-13- Section 10: Cambridge Road

Figure 4-14 shows Section 11: Harlow Road, the route between Sawbridgeworth and Harlow. Although Harlow is outside the East Hertfordshire District boundary it is an important route, because 31% of trips are used by commuters. Although the demand is not as high as some of the other sections analysed, with 265 trips in July 2023, there is a high potential for mode shift due to the affluence of the areas, and the existing demand amongst commuters, especially if issues associated to the high volumes and speeds of motorised vehicles are addressed.



Figure 4-14- Section 11: Harlow Road

Figure 4-15 shows Section 12: Lower Road. The route between Ware and Stanstead Abbotts & St Margarets is in high demand for a mixture of both leisure and commuting, with 850 trips in July 2023. The combination of journey purposes is likely a result of the short distance between the two settlements and indicates that the infrastructure supports a variety of travel for different demographics. This route has one of the highest levels of commuter travel at 20%, showing that it is an important connection throughout the week. This is also evident given that the volume by hour is heavily weighted to the morning between 6-11am, and except for Sundays where travel is significantly higher, travel volume is spread evenly throughout the week.

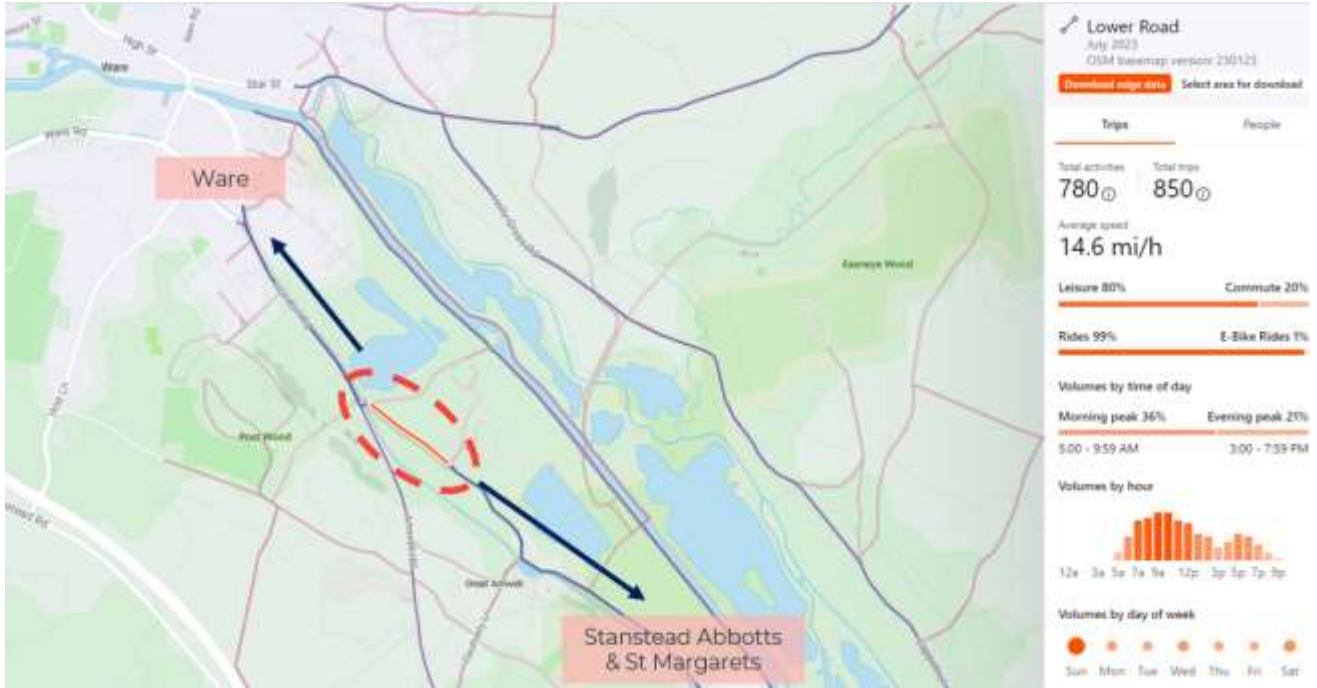


Figure 4-15- Section 12: Lower Road

Census Data

4.1.16 Data from the 2021 Census includes data on home-work distance and modes of transport. This data provides valuable insight into current travel patterns for those living in the district and provides a high-level indication of the propensity for modal shift. However, note that this Census was carried out during the Covid-19 pandemic during a period of national lockdown, the associated guidance and furlough measures, which is expected to have had an impact on the data.

4.1.17 Distance travelled to work

Table 4.1 below provides an overview of current work travel distances in East Hertfordshire, translated into Figure 4-16, where we can see that there is a mix of distances travelled to work across the district. In the northern and more rural areas of the district, where transport links are weaker, residents travel significantly longer distances to work, with less than 40% within 10km of work. Towards the southern part of the district, around the more urban areas, residents generally live much closer to their workplaces. In many of these areas between 60-80% of journeys are under 10km, and this rises to over 80% around Ware and Bishop’s Stortford.

Table 4-1 – Distance Travelled to Work

Distance Travelled to Work	East Hertfordshire
Less than 10km	23%
10km to less than 30km	16%
30km and over	6%
Works mainly from home	41%
Not in employment or works mainly offshore, in no fixed place or outside the UK	14%

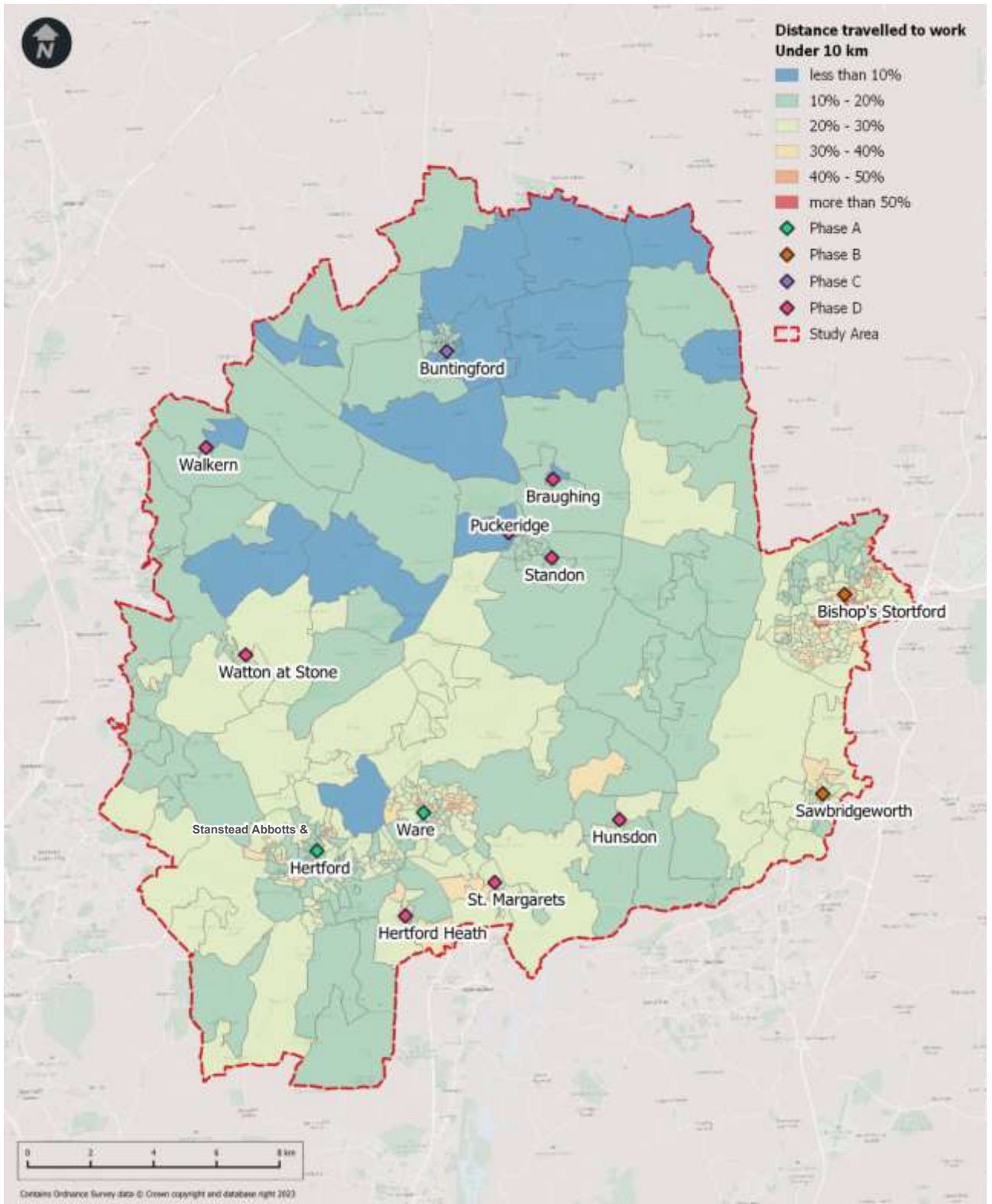


Figure 4-16 - Distance travelled to work Under 10 km (Population %)

Mode of Travel to Work

- 4.1.18 Figure 4-17 shows that overall bike usage is low across the whole of the district, with bike share below 2% for most of the district.
- 4.1.19 The areas with the lowest usage are typically in rural areas, with pockets of use increasing to 5% in certain rural and urban areas, such as around Bishop’s Stortford and to the West of Puckeridge.
- 4.1.20 Only a very small number of areas have bike usage above 5%. The key areas to note are around pockets around the East, West and South of Hertford, and a larger pocket to the South of Hertford Heath.
- 4.1.21 Looking at other modes used, over 42% of East Hertfordshire residents drive to work in either a car or van, with an additional 2% as a passenger. This amounts to nearly half the population; however, it is important to note that another 40% of residents work from home.

Table 4-2 - Mode of Travel to Work

Mode of Travel to Work	East Hertfordshire
Work mainly at or from home	40.8%
Underground, metro, light rail, tram	0.4%
Train	4.0%
Bus, minibus or coach	1.3%
Taxi	0.3%
Motorcycle, scooter or moped	0.3%
Driving a car or van	42.1%
Passenger in a car or van	2.4%
Bicycle	0.8%
On foot	6.6%
Other method of travel to work	0.9%

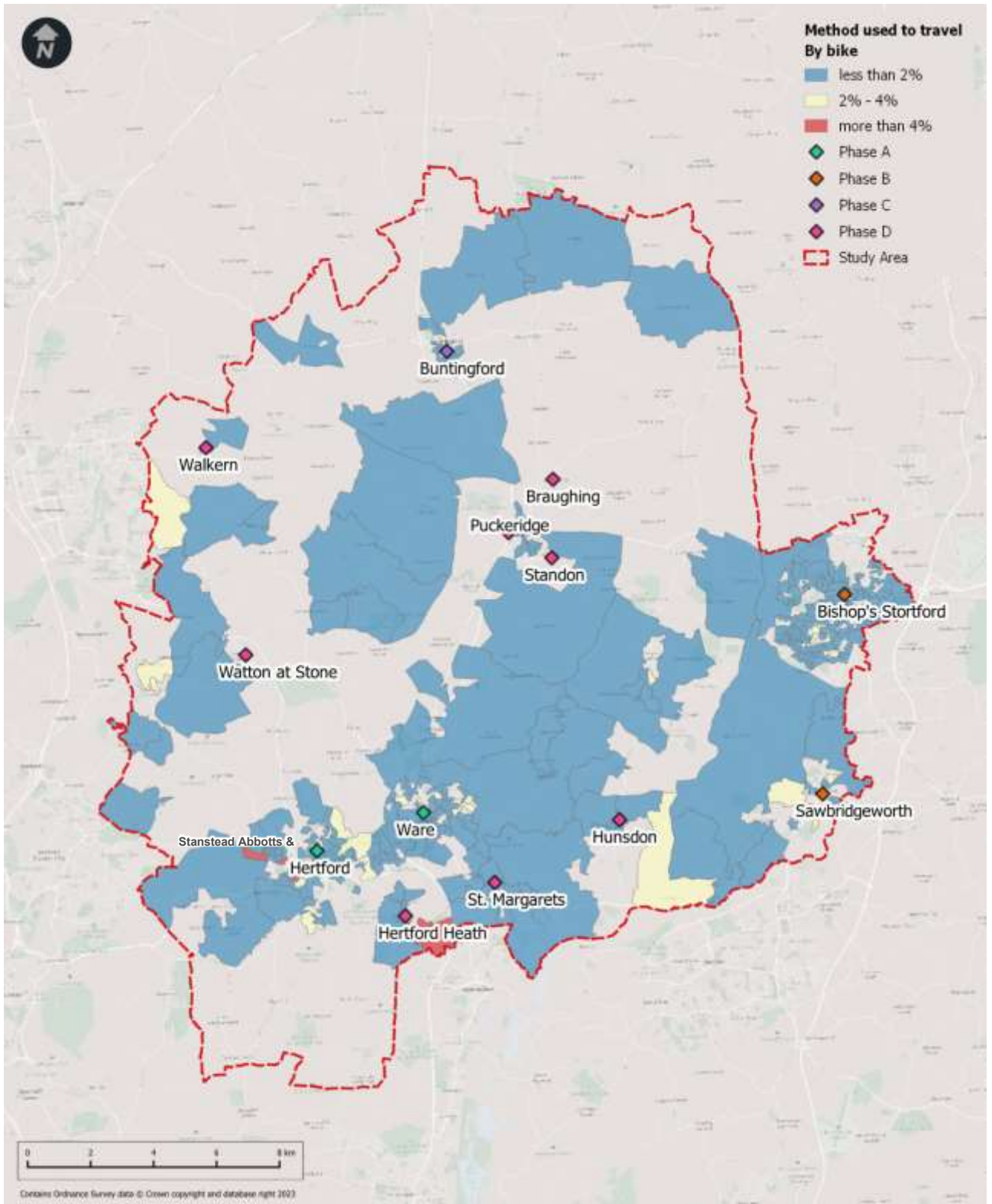
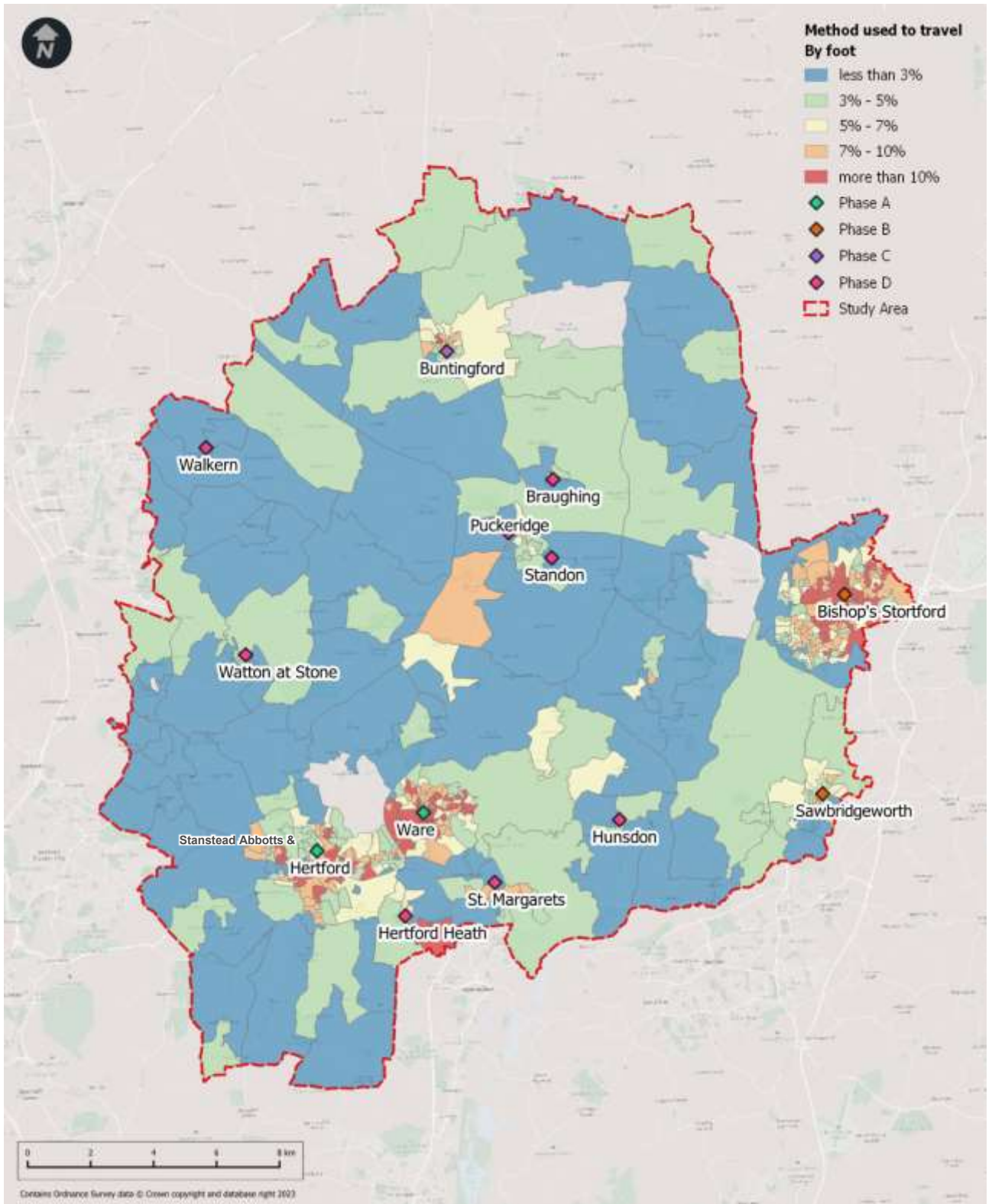


Figure 4-17 - Mode of Travel – Cycling

4.1.22 Figure 4-18 shows a similar pattern for walking as a mode used to travel as cycling. The percent of people travelling by foot is less than 10% across the majority of the district, especially in the rural areas. However, in certain pockets in some urban areas as well as an area just South of Puckeridge, walking levels increase above 10%. Only in urban areas do we see walking as a mode used to travel between 20-40%, especially in the southern towns of Hertford and Ware. Two notable locations are Hertford Heath and Bishop's Stortford where walking levels are over 40% in certain areas.



**Figure 4-18 - Mode of Travel – Walking
Hertfordshire County Travel Survey**

4.1.23 The Hertfordshire County Travel Survey (HCTS) was undertaken between April-June 2022 to provide insight into travel patterns and journeys made by Hertfordshire residents.

4.1.24 Postal questionnaires were sent to a random sample of addresses from across the county. An online version was also provided to boost participation. 1,603 addresses were selected in East Hertfordshire, of which 318 residents completed the questionnaire. This equals a 20% response rate.

- Access to Transport – Access to Car/Van: Looking at the county as a whole, the survey reveals that most households have one or two cars (79.3%) and 8.2% have three or more. In 2022, 12.5% of households had no car. District level analysis shows that most households in St Albans, East Hertfordshire and Dacorum had at least one car (91.4%, 91% and 90.4% respectively), and on average East Hertfordshire has the second highest number of cars per household of all the districts in Hertfordshire, following just behind Dacorum.
- Access to Transport – Access to Bicycle: The county average for bicycle ownership is 44%, which puts East Hertfordshire above average at nearly 49%. Despite being the third leading district for within this category, bicycle use as a main mode of transport is significantly lower than there is the potential for, at only 1% currently.
- Trip Distance: 60% of trips in East Hertfordshire made by residents are under 5 miles, likely a result of the district having one of the highest rates of car ownership in the county.
- Therefore, although car ownership is above county average, most trips are done at a local level, indicating that there is a high potential for modal shift to sustainable modes.
- Main Mode Used: The survey also provides a breakdown of main mode used by district. Whilst 31% of East Hertfordshire residents use active modes as their main mode of travel, 42% drive and an additional 18% are car/van passengers. Of the 31% who travel by active modes, only 1% cycle. Table 4-3 provides a breakdown of main mode of travel for residents in East Hertfordshire.

Table 4-3 - Main Mode of Travel

Main Mode of Travel	East Hertfordshire
Walk	31.4%
Cycle	1.0%
Motorcycle/Moped	0.2%
Scooter/e-Scooter	0%
Bus	1.8%
Train	5.2%
Car/Van Driver	41.9%
Car/Van Passenger	17.8%
Tube	0.1%
Taxi	0.5%
Other	0%

- **Journeys to Work:** Despite nearly 50% of East Hertfordshire residents living within 10 miles of their workplace, over 60% travel to work by car/van and just 16% use active modes. Further to this, 34% of Hertfordshire residents travel to work within their home district, whilst 27% travel to a neighbouring Hertfordshire district. For East Hertfordshire specifically, however, only 19% of residents travel to a neighbouring district for work. Subject to distance, this data suggests that these journeys could be done by sustainable modes or by multi-mode. For example, where East Hertfordshire residents are travelling to neighbouring districts for work, ensuring the appropriate walking and cycling infrastructure is provided on key routes to and from the railway stations would support these multi-modal journeys and could encourage more residents to choose sustainable options over private car use.
- **LCWIP Context:** Understanding existing travel patterns at the County and District level provides valuable insight on how residents are travelling and where they are travelling

to. This data helps to identify potential opportunities for modal shift, for example where car journeys are less than 5 miles and are therefore likely to be achievable by sustainable, or preferably, active modes.

Slow Ways

- 4.1.25 Slow Ways is an initiative to create national network of walking routes connecting all towns, cities, and villages. Users map routes along existing paths, trails, and roads, to facilitate active travel connections between neighbouring settlements. Purple routes have been verified, meaning they have received at least three positive reviews from volunteers. Green routes, which consist of the majority, are suggested routes with fewer than three reviews.
- 4.1.26 The routes shown in Figure 4-19 connect the key urban areas in the East Hertfordshire District to each other, and each of the study areas are covered.
- 4.1.27 Hertford and Ware have the highest number of Slow Ways routes, connecting to Buntingford, Watton-at-Stone, Sawbridgeworth, and many more places. This aligns with the previous data we have analysed which shows these areas as ones with some of the highest prevalence to walking and cycling. Despite the low uptake of walking and cycling towards the north of the district, there are a significant number of Slow Ways routes around Buntingford, Puckeridge, and Braughing, indicating potential for mode shift.
- 4.1.28 The Slow Ways will help inform the walking network within the Core Walking Zone. One limitation of the routes is that they are predominantly long inter-urban connections across rural areas, which can make it less accessible for rural villages. However, the data suggests that the highest potential for mode shift is within urban areas.

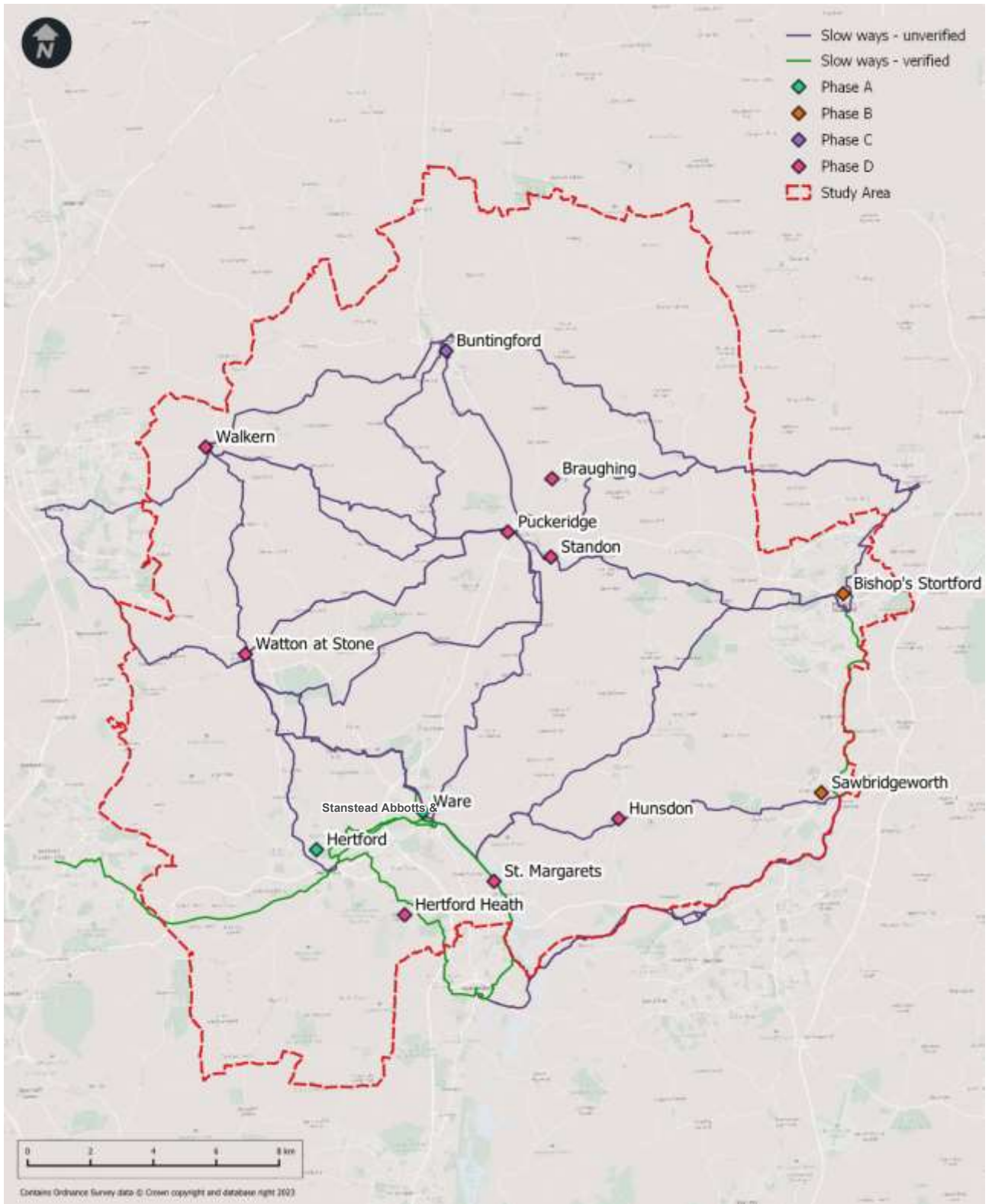


Figure 4-19 - Slow Ways Routes

4.2 Origin – Destination Analysis

Current and Future Origins and Destinations

- 4.2.1 The LCWIP Technical Guidance notes that identify demand for a planned cycle network should start by mapping the main origin and destination points.
- 4.2.2 In line with the guidance, census output areas were chosen to represent journey origins from existing residential areas. Additional origins and destinations were identified as:
- Future housing and employment sites adopted in the District Plan
 - Core tourism areas and attractions
 - Town, District, and Neighbourhood Centres as identified in the District Plan
 - Current and proposed rail stations
 - Hospitals and secondary schools
- 4.2.3 LCWIP work for Essex and other Hertfordshire districts that is either underway or has already been adopted will help to further improve both inter and intra-county infrastructure and connections.
- 4.2.4 This analysis considered connectivity to large scale site allocations including, but not limited to, the Gilston area to understand current and future walking and cycling demands within East Herts. However, as large-scale site allocations will include separate access and transport strategies to deliver sustainable transport facilities and connections, network development to and through these sites were excluded from the LCWIP, except for a few instances where sites have already been constructed and opportunities for linkages were obvious.

GIS Output Model

- 4.2.5 WSP has built a GIS model for informing LCWIPs, which is customisable depending on local assumptions applied. This model compensates for the limitations in the PCT by allowing the latest origin and destination data to be input and applied to a custom network. This gives us an indication of potential demand for cycle and walk trips beyond the commute and the school run and also considers potential demand from housing built since 2011 and housing planned for the future.
- 4.2.6 In brief, this model has looked at how many people live in the area, employment centres and future developments and calculated the potential number of cyclists travelling between

these origin and destination points. This gives an indication of where on the network there may be suppressed travel demand for walking and cycling trips, and/or potential future demand.

- 4.2.7 Figure 4-22 and Figure 4-27 respectively show the outputs of this model for both the cycling and walking potential in the East Herts district.

GIS Output Model: Assumptions

- 4.2.8 Not all origin points are linked to all destination points. For most destination types, origin points are only linked with the closest of each type (e.g., the closest library, the closest supermarket).
- 4.2.9 For some destination types, such as schools, origin points were linked with the nearest 3 or 5 destinations of that type.
- 4.2.10 For a small number of destination types, including town centres and key employment areas, origin points were linked with every destination of that type.
- 4.2.11 Where origins linked with multiple destinations of a type, the model assigned more trips to closer destinations and, in the case of key employment areas, it additionally factored in the likely number of jobs (based on the size of the key employment area) and would assign more trips to larger, closer employment sites.
- 4.2.12 Origins are linked with destinations along the shortest route available on the network, as directness is a key factor when considering walking and cycling desire lines.
- 4.2.13 Trips over 2km in length are excluded from the walking model, as the focus in an LCWIP is on short utility trips. 2km is length referred to in the LCWIP guidance and most people can walk this distance in 20-30 minutes.
- 4.2.14 Trips over 8km in length are excluded from the cycling model for a similar reason. Gear Change refers to trips up to 5 miles (roughly 8km) in length as journeys 'perfectly suited to cycling' for 'many people'.

4.3 Planning for Cycling Networks

Process

- 4.3.1 This section details how the steps undertaken in Section 2.2 have been used to develop a draft cycling network for East Herts district.
- 4.3.2 The stakeholder engagement helped to determine key areas where LCWIP development can be used to resolve high carbon emissions and other social problems including road safety and personal security.
- 4.3.3 A key goal in this stage of the LCWIP was to determine where the greatest propensity for cycling exists. In other words, areas where targeted investment in infrastructure could generate the greatest number of new cycling journeys.
- 4.3.4 The process for planning the cycling network is identified in Figure 4-17. The Propensity to Cycle tool has assisted in identifying desire lines for cycle traffic for trips to help inform network development, while the GIS LCWIP Model has analysed origin and destination data relevant to the East Herts District.

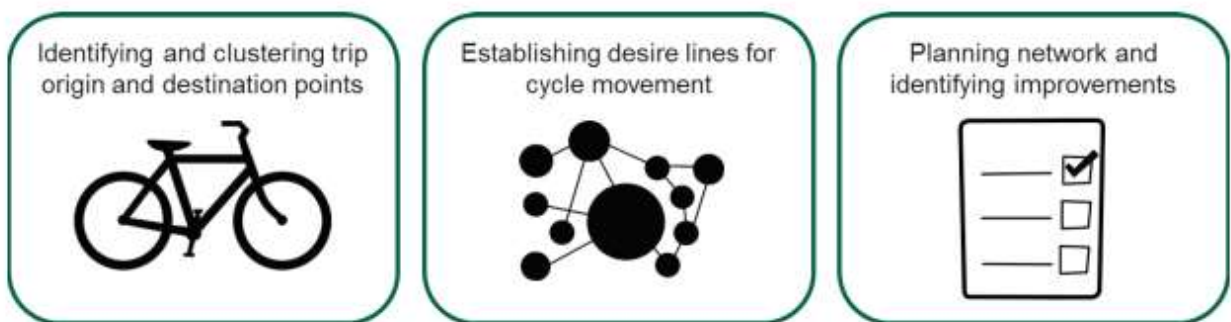


Figure 4-20 - Planning Cycling Networks, DfT (2017)
Network Planning

- 4.3.5 The flow diagram in Figure 4-18 shows the six stages to planning a cycling network according to the DfT Technical Guidance for LCWIP design. Each of these stages were undertaken throughout this LCWIP development process.
- 4.3.6 As part of the LCWIP design, primary and secondary routes have been identified. Primary routes provide links to key destinations including commercial areas, schools, large housing developments and key links through and between the towns.
- 4.3.7 Secondary routes provide further connections to schools and smaller housing developments and are feeder routes to the primary network.

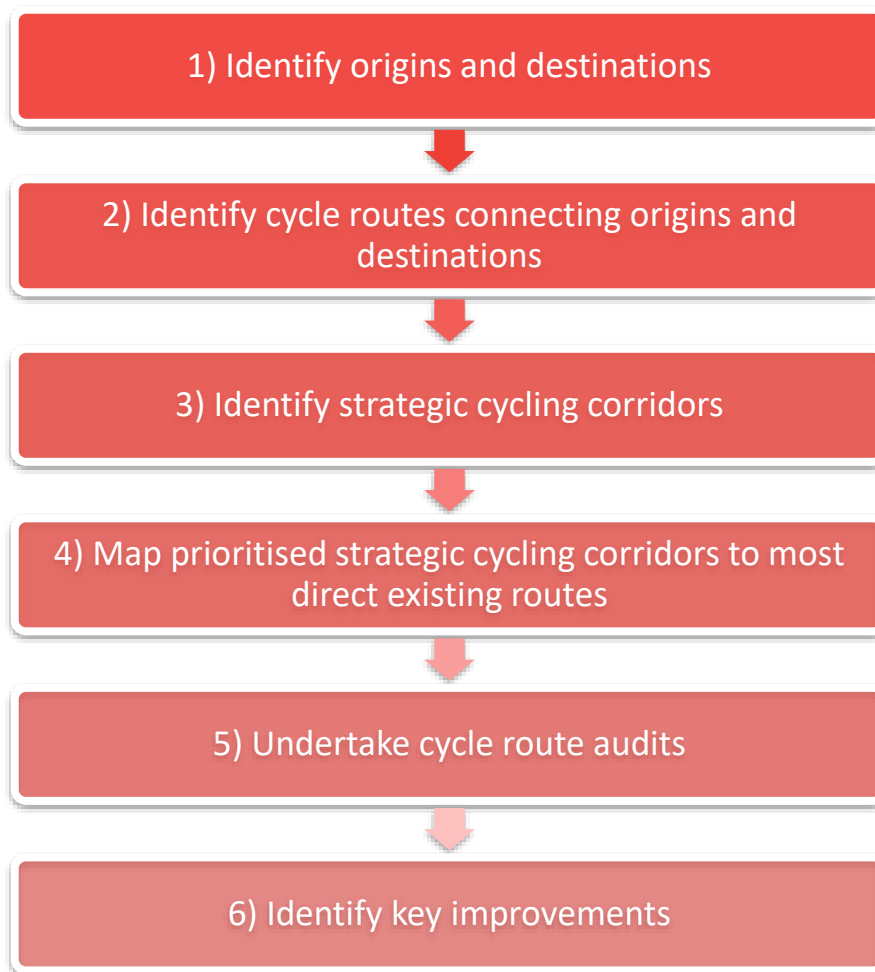


Figure 4-21 - Cycling Network Planning Stages

GIS Model – Potential Cycling Network

- 4.3.8 The highest cycling potential, shown in Figure 4-22, is seen towards the south of the district, in and around the main towns of Hertford, Ware, Bishop’s Stortford, and Harlow which is just outside of the district to the south east. The potential here is between 1,000 and 6,508 journeys per day. The routes connecting these towns have similar levels of potential, but the lower range goes down to 500. Key potential cycle routes connecting towns include the A1184, connecting Sawbridgeworth and Bishop’s Stortford, and the A414 which extends out of Hertford.
- 4.3.9 Over half of the routes within Bishop’s Stortford, Hertford, and Ware have the potential for over 1,000 cycle journeys per day, showing the preference for active travel for shorter urban journeys.

4.3.10 Outside of the main towns in the district, the cycling potential is relatively low, between 0-300 on average, with most routes lying below 100. The A10, which connects Buntingford to Ware, via Braughing, Standon and Puckeridge, has the potential to accommodate 200-300 journeys per day. Given the length of this route, and the fact that it connects multiple settlements, suggests that this is an important route despite it not having as high potential of some of the routes towards the south of the district.

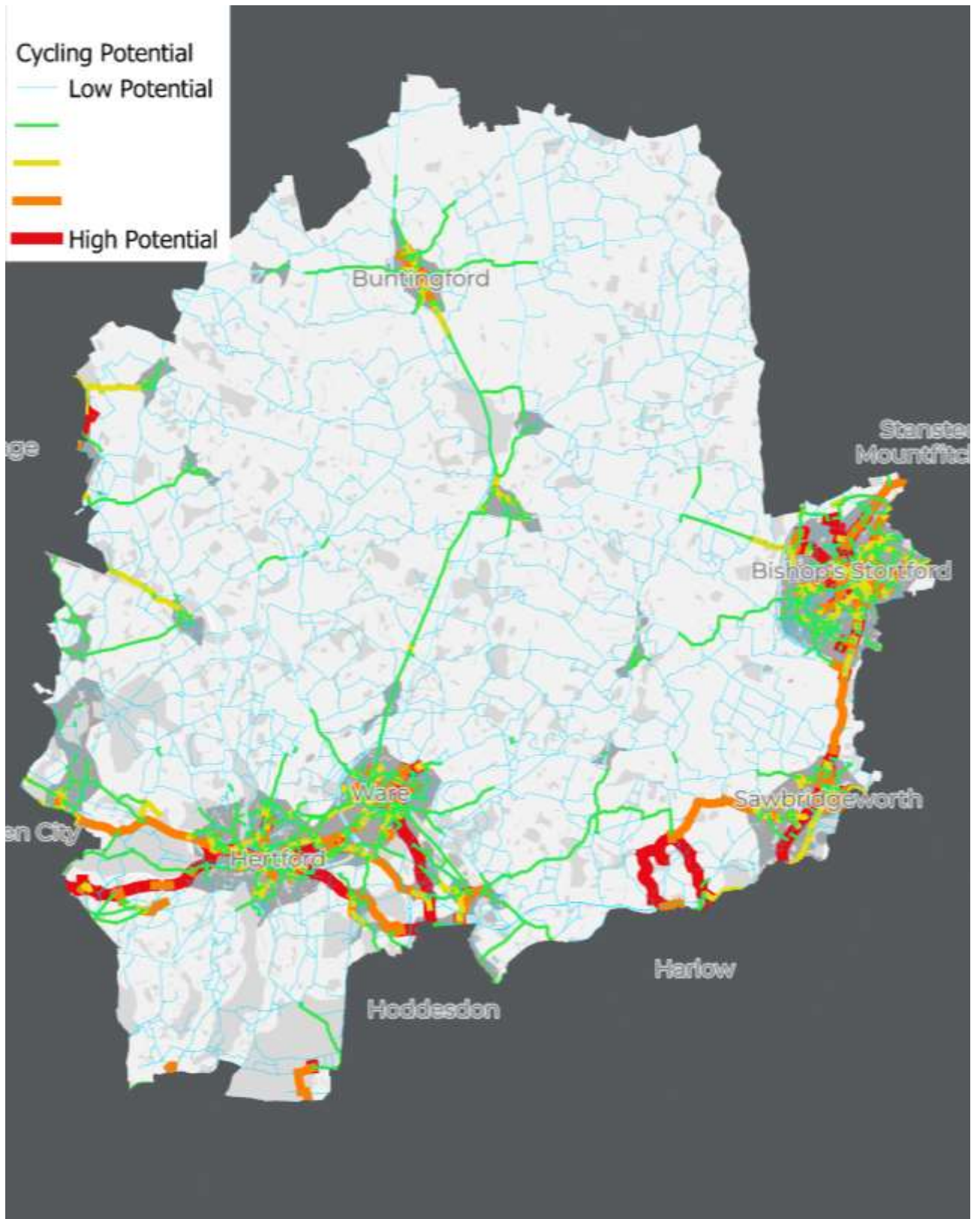


Figure 4-22 - Cycling Potential GIS Model

Draft Network Plan for Cycling – Route Development Process

- 4.3.11 Having determined areas where demand is likely highest the next phase of the process is to identify real world routes that can accommodate these desire lines. For example, via existing roads or paths, or identifying opportunities to create new routes.
- 4.3.12 The importance of each link and route needs to be understood in terms of their overall significance in the network – this will largely relate to the numbers of cyclists that each will cater for in the future. The following hierarchy was therefore applied to the links in the network:
 - 4.3.13 Primary routes are generally those which align with the agreed desire lines and are therefore most likely to cater for the highest level of existing and forecast flows.
 - 4.3.14 Secondary routes are those with lower expected flows of cyclists, generally those links that connect to specific attractors such as schools, colleges and employment sites, or which add to the density and the connectivity of the overall network.
- 4.3.15 Figure 4-23 illustrates the Draft Network Plan for Cycling, developed as an initial plan based on available data before the network was refined and updated to account for stakeholder feedback.

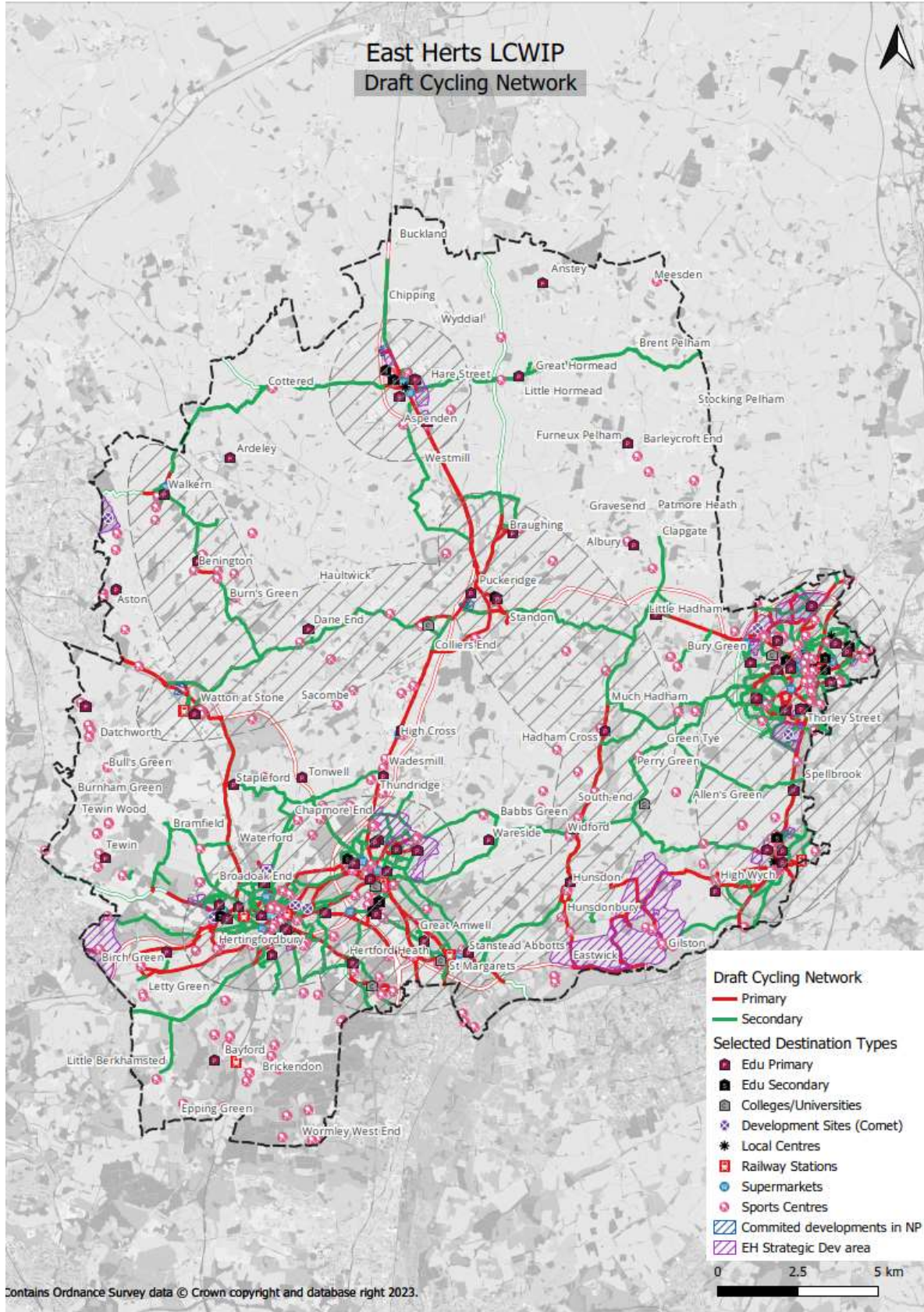


Figure 4-23 - Primary and Secondary Cycling Network

4.4 Planning for Walking Networks

Process

- 4.4.1 Similarly to the cycling network plans, the information gathered in Section 2 was used to develop a draft network plan for walking, with core walking zones and key walking routes. The draft network was presented to stakeholders, amended and then used to determine the relative importance of different routes and thus which routes to audit and develop infrastructure plans for.
- 4.4.2 A key goal in this stage of the LCWIP was to determine where the greatest propensity for walking exists – where targeted investment in infrastructure can generate more journeys on foot.
- 4.4.3 The methodology for developing the network plan for walking is shown below in Figure 4-24.
- 4.4.4 The following section maps the journey taken to develop our proposed walking routes. Various models have assisted the design for East Herts District’s LCWIP. These have been mapped alongside the Widen My Path so that infrastructure is to be developed where the community need it most.



Figure 4-24 - Planning Walking Networks, DfT (2017)

Network Planning

- 4.4.5 The flow diagram in Figure 4-22 shows the six stages to planning a walking network according to the DfT Technical Guidance for LCWIP design. Each of these stages were undertaken throughout this LCWIP development process.

- 4.4.6 Similarly to the cycling process, both primary and secondary walking routes have been identified. Core Walking Zones (CWZ's), Figure 4-26, are defined in the LCWIP guidance as: "areas consisting of a number of walking trip generators that are located close together- such as a town centre or business park."
- 4.4.7 Within CWZ's, all the pedestrian infrastructure should be of a high standard and support journeys for vulnerable users.

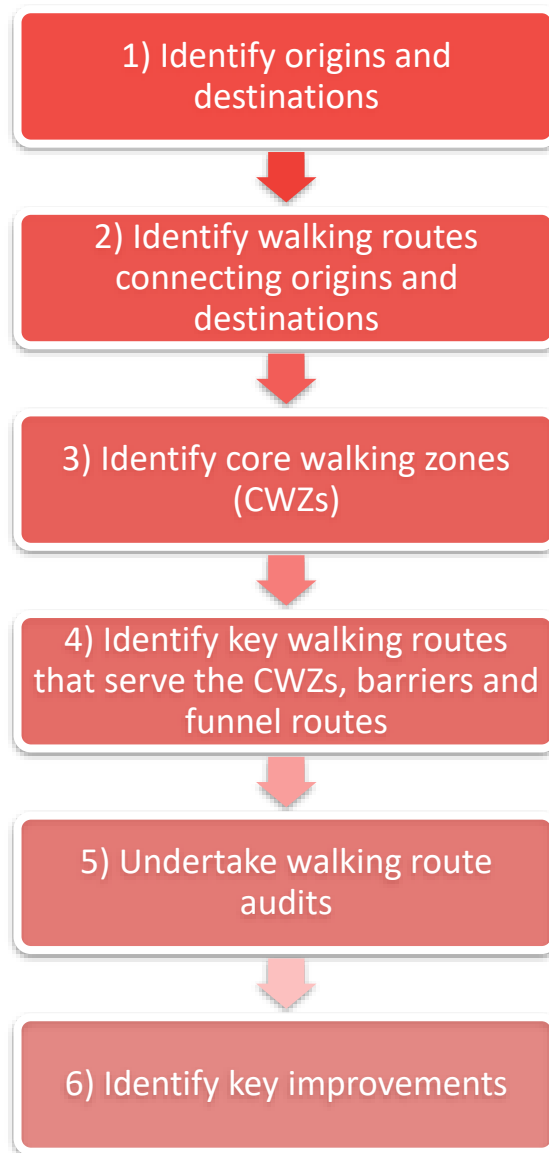


Figure 4-25 - Walking Network Planning Stages

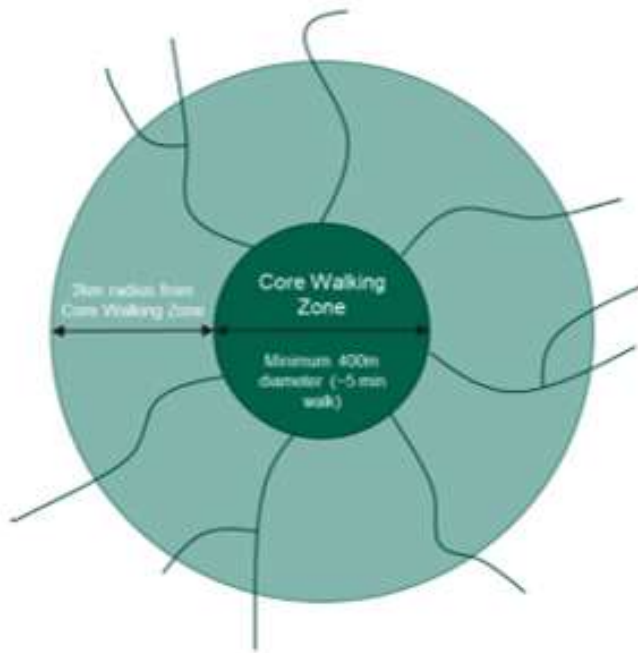


Figure 4-26 - Core Walking Zone

GIS Model - Potential Walking Network

- 4.4.8 There is low walking potential, up to 100 journeys per day, across the rural areas of the district. Given the nature of the district most of it consists of rural landscapes, whilst the towns are typically concentrated around the southern edge. Unlike with cycling potential, the roads that connect towns have an equally low walking potential to the rural routes in the district.
- 4.4.9 The highest walking potential is found within the major towns, specifically within Bishop's Stortford, Ware, and Hertford. Buntingford and Sawbridgeworth have slightly lower potential, but it is still significant.
- 4.4.10 It is acknowledged that not every road or path on the network will be walkable, nor cyclable for the model in Figure 4-27.

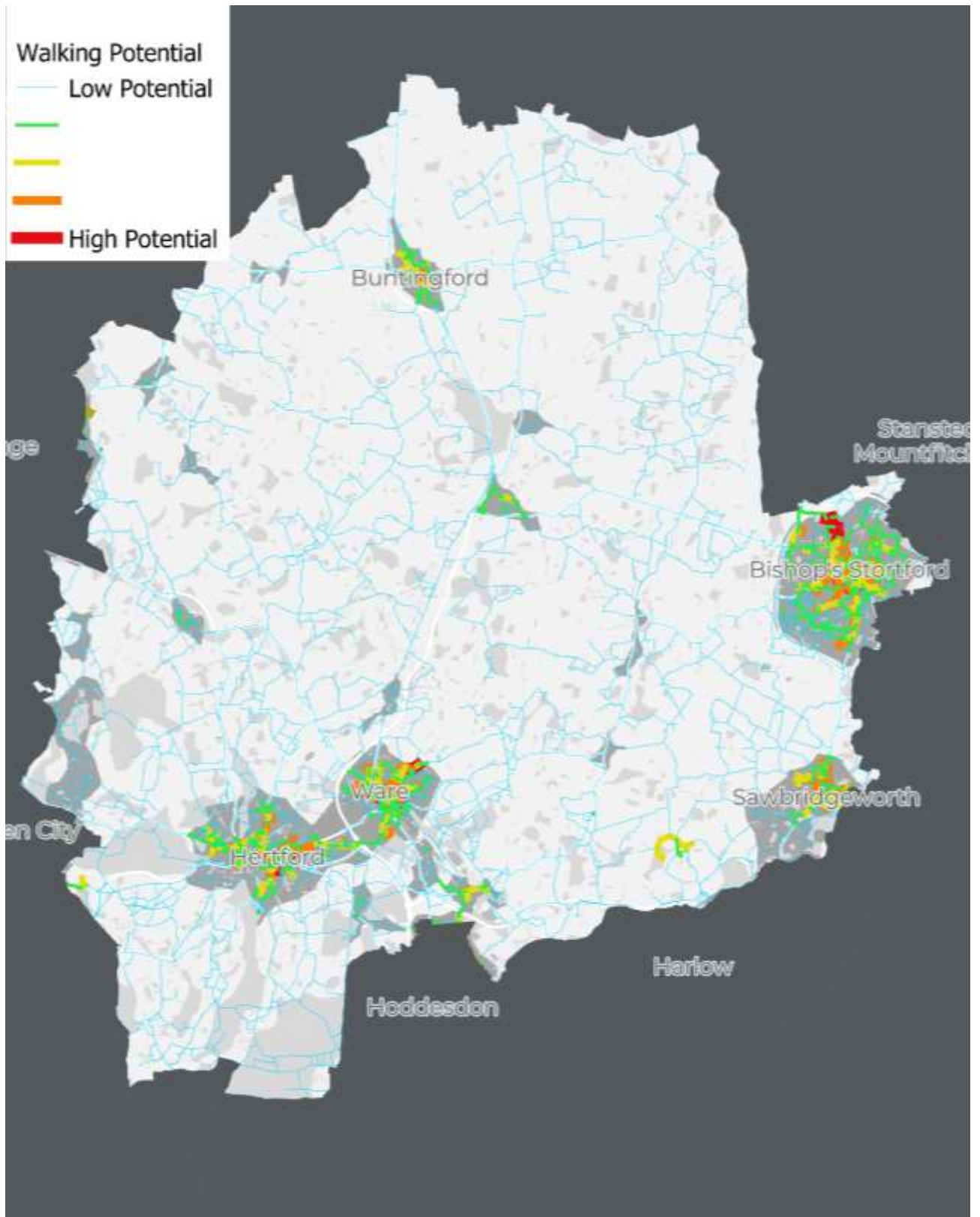


Figure 4-27 - Walking Potential GIS Model
Public Rights of Way

- 4.4.11 East Hertfordshire District Council provided WSP with a GIS database of the existing Public Rights of Way (PRoW) across the district, shown in Figure 4-28. This database shows four different classifications: Bridleways, Byways, Footpaths, and Restricted Byways. Each of these are Rights of Way where walking, cycling and horse-riding are permitted and are the main modes of transport. Byways are the only routes where motor vehicles are allowed, although it is not always possible given the infrastructure along these routes.
- 4.4.12 Footpath and bridleway coverage is extensive across the entirety of the district, with the latter typically concentrated in rural areas whereas footpath coverage is across both rural and urban areas. Hertford and Sawbridgeworth are examples of urban areas with many footpaths but no bridleways.
- 4.4.13 Byway coverage is limited, and they are only found in rural areas, such as to the east of Walkern or the north of Hunsdon. Restricted byway coverage is equally limited, again found almost solely in urban areas. The exception of this is those found in between Hertford and Ware.
- 4.4.14 It is noted that there is a total absence of any of the classifications to the south of Buntingford and in a small pocket between Hunsdon and Standon. This could be a result of missing data, or areas of high private land ownership.
- 4.4.15 In general, there is high coverage across the district. It would be useful if, in future, information on surfacing, walkability, and cyclability of these PRoWs could be logged.

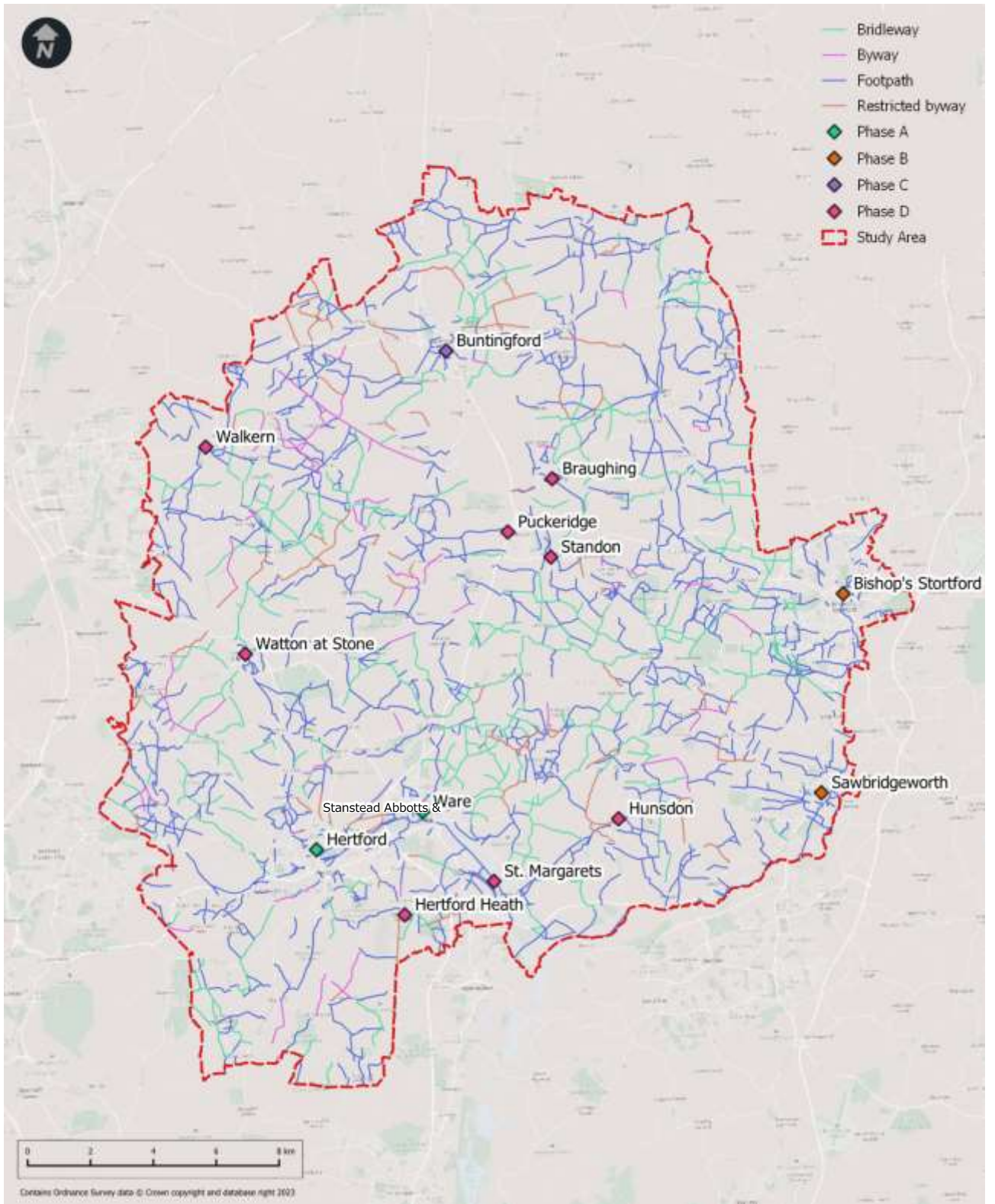


Figure 4-28 - Public Rights of Way

4.5 Stakeholder Engagement 2023/24

4.5.1 As part of the walking and cycling network planning phase, two engagement workshops were held with relevant stakeholders and members in July 2023 by East Herts LCWIP Project team comprising of Hertfordshire County Council, East Herts Council and WSP. The first event was a Member workshop held on 6th July 2023 from 7 pm and second was Stakeholder Workshop held on 7th July 2023 from 1 pm onwards via online platform using Miro board and Microsoft Teams

The objective of the engagement was:

- To provide the stakeholders with sufficient information about the LCWIP
- To include local knowledge on the walking and cycling network (including missing key origin destinations)
- To seek feedback on the network plans to inform the next stage of the East Herts LCWIP.

Stakeholder Engagement Process

4.5.2 Stakeholder engagement was carried out for the draft walking and cycling network plans, including the CWZs, to identify the routes along with any preferred alternate alignments. The engagement process was as follows:

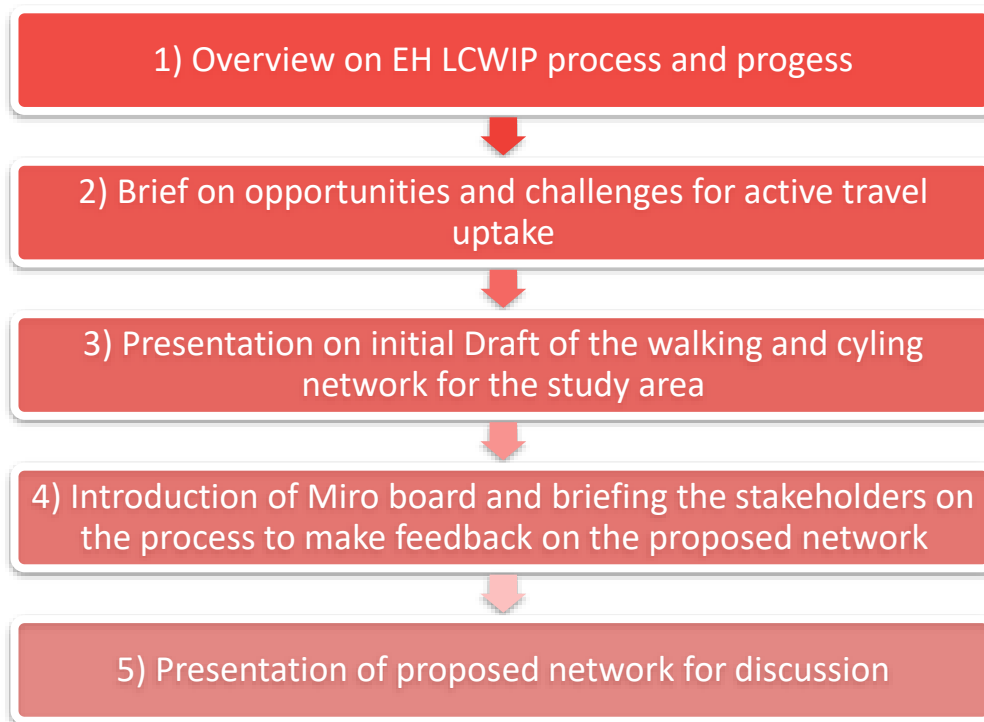


Figure 4-29 - Stakeholder Engagement Process

- 4.5.3 The Miro board was accessible to stakeholders for comments till 18th of August 2023, i.e., the consultation was open for a period of 6 weeks. Around 900 Miro board comments were received along with the feedback received via email.
- 4.5.4 Organisations, groups and authorities across East Herts, Hertfordshire and England were invited to participate in the engagement process through Workshop 1 and 2. The full invitee list is found in Appendix E.

Stakeholder Engagement Register

- 4.5.5 All comments received via the Miro board and email were logged in the 'Stakeholder Engagement Register'. Eight comments were received via email for the walking network and 11 for the cycling network. 338 were received via the Miro board for the walking network and 463 for the cycling network. Each piece of feedback logged included the following details:

- 'Comment ID'
- 'Author' name
- 'Organisation' name
- 'Date' - of feedback

- 'Location and Road name'- for which the feedback is provided
- 'Hierarchy of road'- primary/secondary
- 'Comment'- by the Author
- 'Email/ Miro replies' to the comments made by the Author
- 'Action Category'- Categorising the comment received into Possible network action, Definite network action, Land Ownership, Maintenance, Infrastructure, Planning and Others
- 'WSP Comment'- Addressing the action to be taken for the comment by author
- 'WSP Action Category'- Addressing the action to be taken for the comment by author

4.5.6 The Stakeholder engagement register allowed for comments to be recorded and addressed. WSP reviewed and addressed all network amendments, seeking input from HCC and EHC. During the assessment some of the general comments included:

- Impact of Gilston to be considered
- The use of opencycle map, which shows Sustrans routes, would be the most effective
- Possibility to use a more detailed base map to illustrate the LCWIP
- Red route connection to Stansted airport
- Possibility of making one-ways in Bishop's Stortford
- Provision for continuous cycle routes
- Possibility of differentiating the leisure/ fitness routes from other routes
- Ensuring the walk and cycle route chosen to be away from motor vehicle route leading to reduced exposure to air pollution
- Inclusion of Datchworth and Tewin in LCWIP
- Concern about lack of planning for equestrians - ridden horse and horse carriage

Public Engagement

4.5.7 HCC and EHC ran an extended ten-week public engagement (which was originally planned for six weeks) from 8th July 2024 to 20th September 2024, to let the public have their say on the draft walking and cycling network plans. Individual draft maps for the walking network and cycling network were made available to provide the local community with the opportunity to review and comment on the plans. The community were offered opportunities to meet the team and discover more about the walking and cycling plans at events held during the engagement period. These included the Hertford – Cars at the Castle, 2nd June

12-4pm, Ware Carnival, 6th July, Buntingford Outdoor Market, 29th July 11am-3pm, the Bishop’s Stortford – Love Parks Event, 30th July 12-3pm and the Sawbridgeworth – Love Parks Event, 1st August 12-3pm. Two separate feedback forms were available on the East Herts ArcGIS website, one for the walking network and another for the cycling network, as shown in Figure 4-27. The eastherts.LCWIP@hertfordshire.gov.uk email address was also available as a line of communication. This stage was managed and coordinated by HCC and EHC.

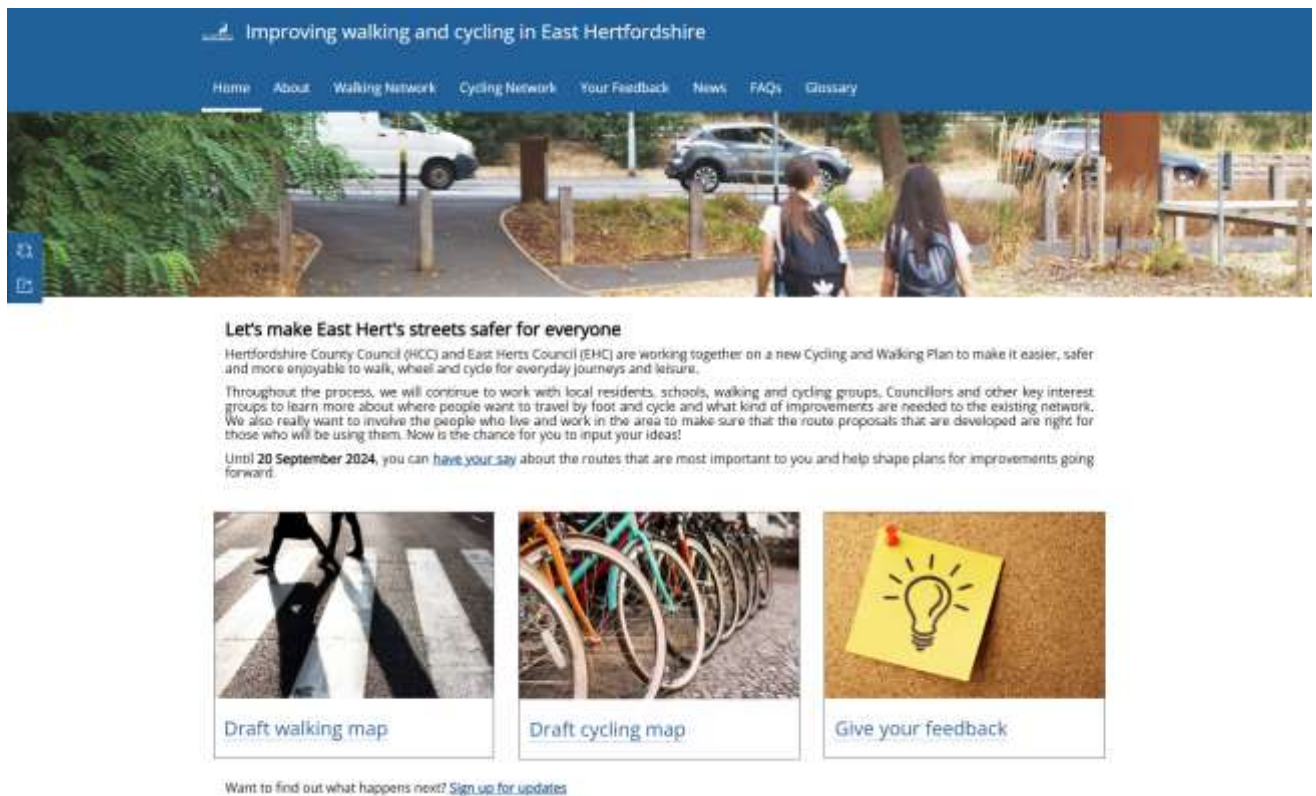


Figure 4-30 - LCWIP Public Engagement Webpage

Following the ten-week extended engagement period, all feedback received was compiled into an Engagement Log, totalling over 1,300 comments. HCC and EHC jointly reviewed each individual comment over a three-month period. The network plans were then revised accordingly, using the feedback to ensure that the plans were developed with the involvement of the people who live and work in the area.

5 Route Auditing and Concept Design

5.1 Route Auditing

Overview

- 5.1.1 Once the network plans were updated following stakeholder comments, a priority network of primary walking routes in East Herts were audited by the LCWIP project team. A decision around which of the primary walking routes were taken forward to audit on the ground in person was made with HCC and EHC officers, based primarily on their strategic importance and comments received during Public Engagement from the residents, interest groups and local Councillors.
- 5.1.2 Due to the large geographical extent of the district, it was not possible within the resource limitations of the LCWIP for all routes to be individually audited on the ground. Therefore, some primary, and all of the secondary, walking and cycling routes were omitted from the audit process. It is to be noted that some of the non-audited routes are still the subject of other HCC work and will be examined as part of other projects.
- 5.1.3 On-site audits were undertaken on the agreed routes in two phases: Phase 1 in February and Phase 2 in October and November 2024 by trained WSP, EHC and HCC personnel (majority WSP with EHC and HCC undertaking audits in the Group 1 villages). WSP helped to train EHC and HCC officers to build their confidence in the auditing process and enable them to be able to undertake audits independently. Using the DfT's Walking Route Audit Tool (WRAT), a total of 73.7kms were audited for walking. Using the Route Selection Tool (RST), 62.4kms were audited for cycling within the study area. It is to be noted that there is some crossover, as a number of the 63 routes were audited for both the walking network and the cycling network. It is also to be noted that, following the public consultation which concluded in November 2025, a further two walking routes were audited.
- 5.1.4 **Walking Route Audit Tool (WRAT)**
- This tool assesses existing infrastructure on the routes against five core design outcomes for pedestrian infrastructure: attractiveness, comfort, directness, safety, and coherence. The WRAT process considers the needs of all users, including vulnerable pedestrians, such as those who are older; visually impaired; mobility impaired; hearing impaired; with learning difficulties; buggy users or children. The process of scoring routes against the criteria in the

WRAT identified issues (e.g., lack of crossing points) which informed the identification of infrastructure solutions (e.g., new zebra or signalised crossings). The assessors are also experienced in conducting safety inclusion assessments which focus on identifying improvements through a gender inclusive lens. These insights were integrated into the infrastructure improvements

5.1.5 Route Selection Tool (RST)

The tool was used to assess the suitability of a route in its existing condition against the core design outcomes of directness, gradient, safety, connectivity, and comfort. The process of scoring routes against the criteria in the RST identified issues (e.g., cyclists mixing with high volumes of traffic) which informed the identification of infrastructure solutions (e.g., segregated infrastructure). The RST also identified critical issues at junctions to be addressed.

Methodology

5.1.6 Route auditing followed the below steps identified in Figure 5-1.

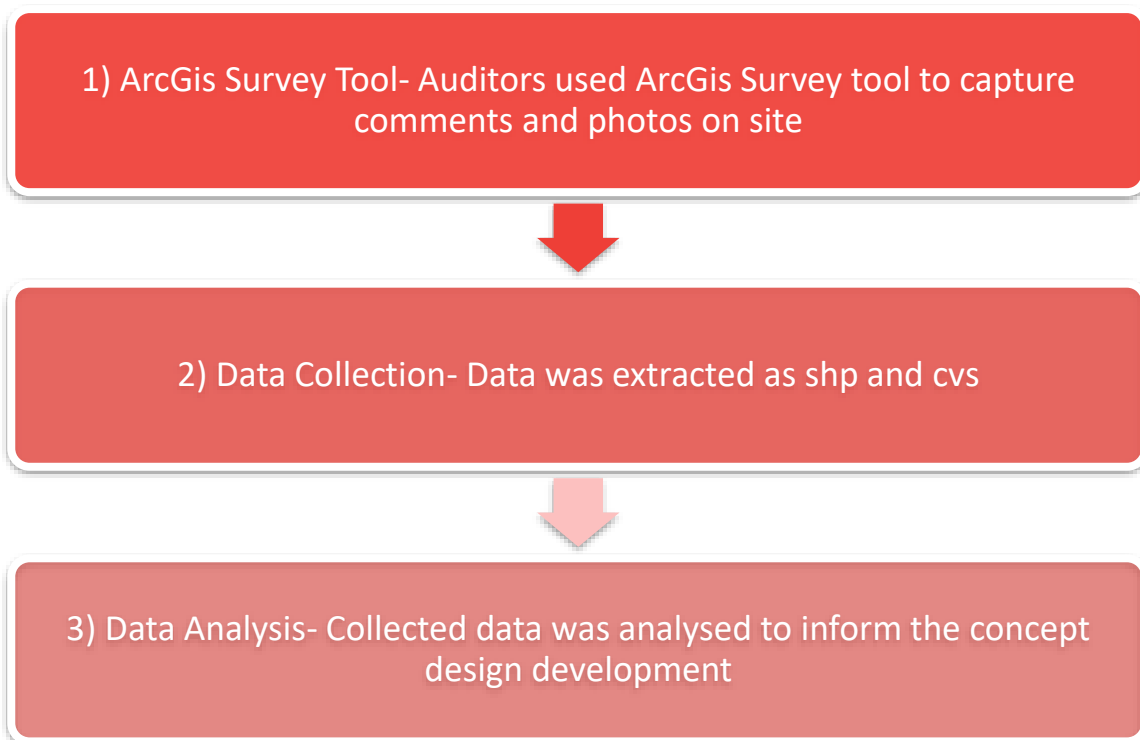


Figure 5-1 - Route Audit Methodology

5.1.7 Infrastructure Development Plan Preparation

Once route audits were complete; infrastructure improvement plans were developed for these walking and cycling routes. The improvements identified in this report are high level at this point and have not been taken through the design stages. The following pages provide an overview of the varying infrastructure improvements which have been considered for East Herts.

5.1.8 Optioneering, Project Validation & Feasibility

It should be noted that a number of key schemes within East Herts have not progressed through the full auditing and ranking stages which are ordinarily used in the development of the LCWIP. This is because these schemes have already been the subject of other pre-existing workstreams outside of the LCWIP and have been progressing independently through project validation, feasibility work, or preliminary design, and in several cases already feature in existing programme rankings or have secured funding, including Section 106 contributions. The following summaries outline the current status and purpose of each of these separate schemes and highlights their alignment with wider LCWIP objectives.

Cycle Route North, Bishop's Stortford, is currently undergoing a feasibility study commissioned by Bishop's Stortford Town Council and undertaken by Walk Wheel Cycling Trust (formerly Sustrans). The scheme proposes a traffic-free route through parkland, connecting Rye Street in the north of the town with Grange Paddocks Leisure Centre and providing further links towards the town centre. Its intention is to offer residents of new housing developments and nearby schools a safe and accessible alternative to the narrow and fast-moving highway network.

North Street, Bishop's Stortford, has been the subject of concept design work commissioned by the Bishop's Stortford Business Improvement District, with support from the Town Council, to explore opportunities for public realm enhancement and traffic management changes. The work proposes measures including the weekend closure of part of North Street to vehicles to create expanded pedestrian space and permanent alterations to traffic flow to reduce rat-running between North Street and South Street, thereby decreasing vehicle dominance and improving pedestrian accessibility. Hertfordshire County Council and East Herts Council remain engaged in the ongoing development of this scheme.



Ware Road, Hertford, has been the focus of a project validation exercise undertaken by Hertfordshire County Council to assess improvements to pedestrian movement between Hertford East Station and the town centre. This work generated several viable options to enhance comfort, safety, and accessibility for people walking along this key corridor, and the scheme has secured Section 106 funding to support its next stages of development.

Park Road, Ware, has been subject to feasibility work examining opportunities to improve pedestrian accessibility and comfort along Park Road and within the surrounding area. The intention of the scheme is to strengthen connections to the Ware towpath and improve access to nearby businesses and schools. Some Section 106 funding has been allocated to enable further development of this work.

Hertford East Station, Hertford, is undergoing design options to develop a scheme aimed at improving pedestrian access to the train station. This includes proposals for new crossing facilities and upgraded footways. The scheme has benefits from secured Section 106 funding which will support the development of this scheme to the final design stages. The highway outside of Hertford East Station is the sole entry point for the homes and businesses off Mead Lane, and the S106 agreement stipulates an emergency access provision throughout construction and post implementation.

Active Travel Phase 1 and Phase 2, Buntingford, represent a phased approach to improving walking and cycling infrastructure within the town. Phase 1, funded by Active Travel England and constructed in 2023, delivered a shared-use path along London Road and Station Road together with upgraded crossing facilities. Phase 2 has been developed to extend walking and cycling infrastructure into the town centre and is also funded by Active Travel England, with a public consultation on the scheme which concluded 26 April 2026.

London Road, Hertford Heath, has previously been assessed through the exploration of routing options to improve active travel connections between Hertford Heath and Hertford. The proposals aim to improve access to local schools and employment sites for residents travelling on foot or by cycle. Some of the options considered would require land acquisition to meet current design and policy standards, and further scheme development will be dependent on securing additional funding.

5.2 Walking and Cycling Network

5.2.1 61 of the 63 prioritised routes were audited for the walking network, using the WRAT, whilst 38 of the 63 routes were audited for the cycling network using the RST. The list of routes, along with their location, length and network category, are shown in Table 5-1 below. Note that many of the routes within the cycling network are longer than those in the walking network, since it is expected that cyclists will often be travelling longer distances than pedestrians. Figure 5-2 shows a map of the audit routes.

Table 5-1 – Prioritised Walking and Cycling Network

Route	Area	Length	Walking/Cycling
Hertford 1	Hertford	7.2km	Walking and cycling
Hertford 2a	Hertford	760m	Walking and cycling
Hertford 2b	Hertford	1.4km	Walking and cycling
Hertford 3	Hertford	1.8km	Walking and cycling
Thieves Lane	Hertford	493m	Walking
Welwyn Road	Hertford	710m	Walking
Royston Close to North Road	Hertford	132m	Walking
Sacombe Road	Hertford	402m	Walking
Hertingfordbury Road North / Southbound	Hertford	143m	Walking
Hertingfordbury Road East / Westbound	Hertford	373m	Walking
Hertford to Ware Tow Path	Ware	6.3km	Walking and cycling
Ware 1	Ware	4.6km	Walking and cycling
Ware 2	Ware	5.0km	Walking and cycling
Bishop's Stortford 1	Bishop's Stortford	1.7km	Walking and cycling
Bishop's Stortford 2a	Bishop's Stortford	2.0km	Walking and cycling
Bishop's Stortford 2b	Bishop's Stortford	1.2km	Walking and cycling
Bishop's Stortford 3	Bishop's Stortford	1.6km	Walking

Route	Area	Length	Walking/Cycling
Dunmow Road	Bishop's Stortford	370m	Walking
Rye Street / Meadowlands	Bishop's Stortford	2.0km	Walking
Newtown Road	Bishop's Stortford	964m	Walking and cycling
London Road	Bishop's Stortford	333m	Walking
Thornbera Gardens	Bishop's Stortford	217m	Walking and cycling
Dane Street	Bishop's Stortford	273m	Walking and cycling
Cemetery Road	Bishop's Stortford	519m	Walking and cycling
Apton Road	Bishop's Stortford	20m	Walking and cycling
Magnaville Road	Bishop's Stortford	228m	Walking and cycling
Whittington Way	Bishop's Stortford	203m	Walking and cycling
Obrey Way	Bishop's Stortford	609m	Walking and cycling
Norfolk Way	Bishop's Stortford	395m	Walking and cycling
Park Avenue	Bishop's Stortford	192m	Walking and cycling
Bishop's Avenue	Bishop's Stortford	285m	Walking and cycling
Hayley Bell Gardens	Bishop's Stortford	237m	Walking and cycling
Pig Lane	Bishop's Stortford	528m	Walking
Bishop's Stortford - Sawbridgeworth	Bishop's Stortford	4.8km	Walking and cycling
Sawbridgeworth 1	Sawbridgeworth	1.8km	Walking and cycling
Sawbridgeworth 2	Sawbridgeworth	656m	Cycling
Sawbridgeworth 3	Sawbridgeworth	895m	Walking
High Wych Road/Bonks Hill/ London Road	Sawbridgeworth	996m	Walking
London Road	Sawbridgeworth	428m	Walking
Bell Street	Sawbridgeworth	261m	Walking
West Road – Sawbridgeworth	Sawbridgeworth	678m	Walking

Route	Area	Length	Walking/Cycling
Cambridge Road – Sawbridgeworth	Sawbridgeworth	583m	Walking
Buntingford 1	Buntingford	469m	Walking
Buntingford 2	Buntingford	758m	Walking
Bowling Green Lane and Norfolk Road	Buntingford	950m	Walking
High Street	Buntingford	869m	Walking
A10 between Puckeridge and Buntingford	Buntingford	4.7k	Walking and cycling
Braughing 1a	Braughing	875m	Walking and cycling
Braughing 1b	Braughing	1.6km	Walking and cycling
Hertford Heath 1	Hertford Heath	1.4km	Walking and cycling
Hunsdon 1	Hunsdon	799m	Walking and cycling
Hunsdon 2	Hunsdon	233m	Walking
Much Hadham 1	Much Hadham	1.1km	Walking and cycling
Hadham Road	Much Hadham	3.3km	Cycling
Station Road	Standon and Puckeridge	1.2km	Walking
Puckeridge 1	Standon and Puckeridge	1.8km	Walking and cycling
High Street	Standon and Puckeridge	230m	Walking
Stanstead Abbots 1	Stanstead Abbots	597m	Walking
Watton-at-Stone 1a	Watton-at-Stone	821m	Walking and cycling
Watton-at-Stone 1b	Watton-at-Stone	779m	Walking and cycling
Watton-at-Stone 2	Watton-at-Stone	655m	Walking
High Street	Watton-at-Stone	403m	Walking and cycling
Clappers Lane	Watton-at-Stone	244m	Walking
Walkern Road	Watton-at-Stone	398m	Walking and cycling
Walkern 1	Walkern	1.1km	Walking and cycling

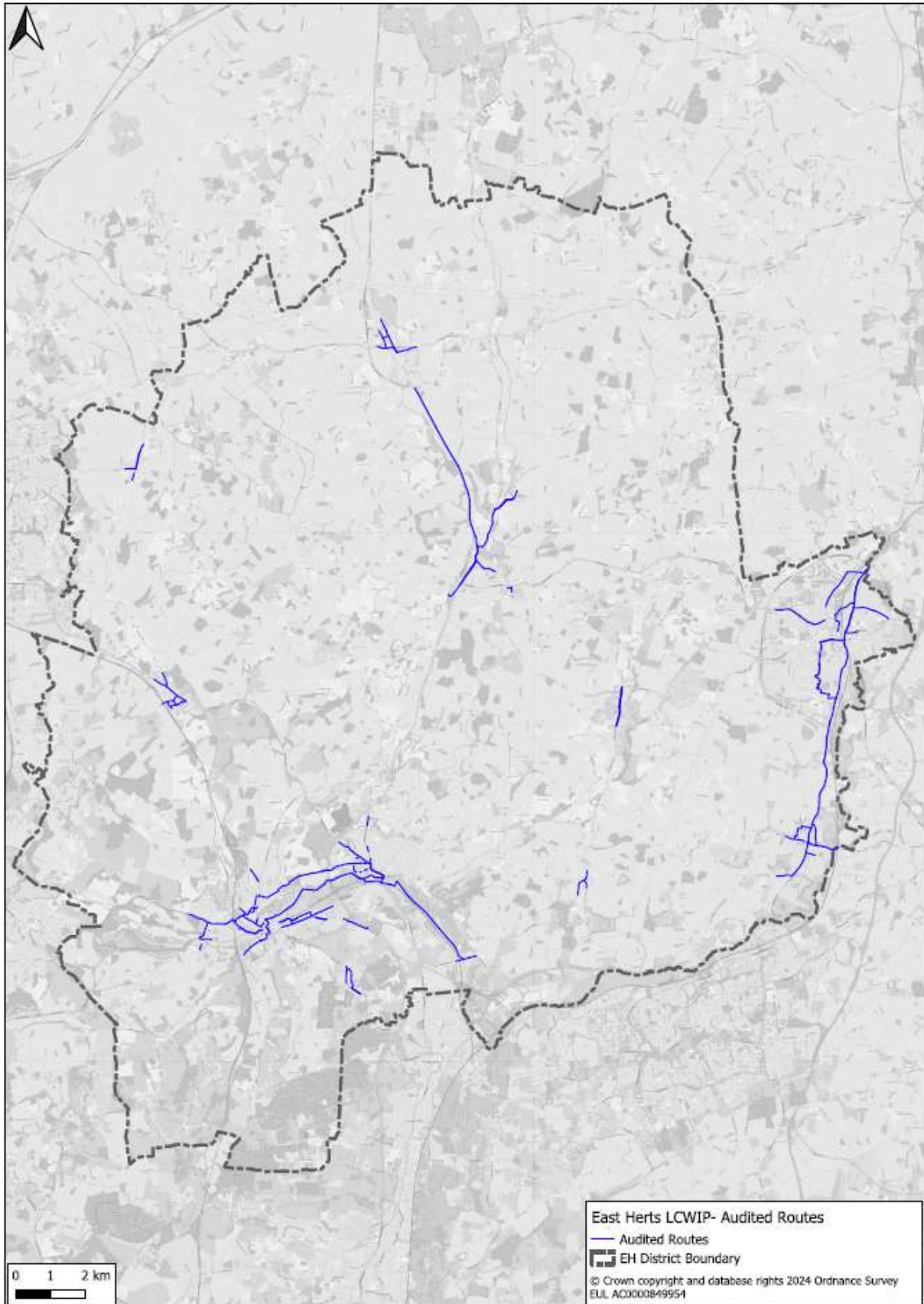


Figure 5-2 - Audit Routes

5.3 Walking and Cycling Infrastructure Improvements

- 5.3.1 Following the route audits, auditors generated plans of the high-level infrastructure improvement that could be designed to enable significant mode shift to walking and cycling. This was originally done individually by auditors (i.e., walking infrastructure improvements were generated separately from cycling infrastructure improvements). The plans were reviewed to ensure that there are no contradictions where the walking and cycling routes overlap and combined into draft infrastructure plans covering the following areas: Hertford and Ware; Bishop's Stortford and Sawbridgeworth; Buntingford; and the Group 1 Rural Villages. The final versions of these plans can be seen in Appendices C and D, in map and list format respectively.
- 5.3.2 The completed and detailed walking and cycling audit forms are not included in this report but have been retained by HCC for use when schemes are taken forward.
- 5.3.3 The completed walking audit forms (and associated documentation) contain the detailed information on what specific footway improvements (e.g. widening, resurfacing, lighting) would be needed where in order to bring the infrastructure in line with current best practice. The plans shown in Appendices C and D do not go into this level of detail for footway improvements as this is simply too much information to convey in the report format. The plans in the report and appendices instead identify the locations where footway improvements are needed (without specifying precisely what form these may take), alongside the locations where there is a need for new/improved crossings and other relevant walking (and cycling) infrastructure.
- 5.3.4 In terms of cycle infrastructure, more detail of the suggested improvements is contained in this report and its appendices. Specific design details are not included (for example bus stop treatments where segregated cycleways are proposed) but general principles and assumptions are given where possible.
- 5.3.5 The infrastructure improvements identified in this section of the report have not been taken through feasibility design. Rather, they are concepts of the types of infrastructure which are believed possible, should be investigated further and, if implemented correctly and in appropriate packages, should bring about modal shift. For example, where segregated cycle lanes are proposed on bus routes, the design used will require comprehensive optioneering and consultation to determine the appropriate treatment at each specific location.

5.4 Intervention Types

5.4.1 Information on each type of intervention shown in the infrastructure plans is given below:

- **Minor junction improvement:** Where a need for minor junction improvements has been identified at side roads or mini roundabout, this typically denotes a need to build out the footways (to tighten junction geometry, reduce turning speeds and shorten crossing distances) and add dropped kerbs and/or tactile paving where missing. In some cases, these improvements could be complemented by other measures, such as raised tables, continuous footway or cycleway crossings, or to replace them with unsignalised priority T-junctions, especially where there are double mini roundabouts.
- **Medium junction improvement:** At mid-size junctions, improvements typically denote a need for pedestrian crossings and protected cycle infrastructure on the approach legs, for example providing Advanced Stop Lines (ASL) that improve visibility and safety for cyclists ahead of queuing vehicles. In some cases, this might mean signalising the junction. Other medium junction improvements can involve providing step-free access over existing footbridges or replacing existing bridges with ground-level crossings.
- **Large junction improvement:** At large junctions where a need for junction improvements has been identified, this typically denotes a need for pedestrian crossings and protected cycle infrastructure on all arms. At particularly large junctions this might mean a Dutch-style roundabout (with parallel crossings on each arm). Some large junctions which are roundabouts may need converting to signalised crossroads or other forms of signalised junction to be able to provide the required improvements to pedestrians and cyclists.
- **New / improved pedestrian crossing:** Where these are included in the plans, this denotes providing new priority (controlled) crossings for pedestrians to reduce severance or improving existing crossings. In some cases, this might mean installing new zebra or signalised pedestrian crossings. In other cases, this may refer to improving an existing crossing, for example by increasing the green time available at signalised crossings or replacing informal traffic island crossings with zebra crossings. This has the added benefit of reducing pinch points on the carriageway for cyclists.

- **New / improved pedestrian and cyclist crossing:** Where these are included in the plans, this denotes providing new priority (controlled) crossings for pedestrian and cyclists. In some cases, this might mean installing a new parallel crossing, or a new signalised pedestrian and cycle crossing (ideally not toucan crossings as these rely on shared use which is discouraged in LTN 1/20). In other cases, it might mean improving an existing crossing, for example by upgrading a zebra crossing to a parallel crossing which cyclists can also use.
- **Potential areas for traffic filtering:** Areas in which traffic filtering is suggested are areas in which there is a need for reduced traffic volumes and/or speeds. Methods of implementing this include traffic filtering using modal filters, banned turns, or one-way systems. Bus filters/bus gates can also be suggested. These prevent non-bus motor traffic from entering a road. They can use various enforcement measures including signage, rising bollards and traffic signals. LTN 1/20 guidance recommends that bus gates and bus-only roads are by default accessible by cyclists; cycling infrastructure has been considered where bus filters are recommended.
- **Footway improvements:** This could refer to a number of different types of footway improvement. It could denote ensuring footways have 1.5m clear width to allow wheelchairs and buggies to pass, widening and/or relocation of permanent/temporary footway obstructions as necessary (including footway parking). It could also denote resurfacing to fix surface issues (patching, trenching, uneven surfaces, trip hazards), lighting improvements, and/or the removal of excess bollards, guard railing and vegetation.
- **Segregated cycleway:** This denotes the addition of LTN 1/20 compliant segregated cycle facilities such as kerb-segregated tracks, stepped cycle tracks, footway level tracks, off-road cycle tracks or lightly segregated cycle lanes (whichever is judged most suitable in feasibility design). It also includes the necessary traffic calming and speed limit changes need to make the route LTN 1/20 compliant, as well as any necessary bus stop redesign (i.e. to bus stop bypass or shared use bus border) resurfacing, wayfinding, and gully cover replacement as necessary. Generally, where this is shown on the plans, a single red line will refer to a one-way cycle facility on both sides of the road. In some cases, e.g. where there are more space limitations, a two-

way track on one side of the road may be preferable. All options should remain open for investigation at the feasibility design stage.

- **Shared-Use Paths/Footways:** These denote sections of routes where cyclists can use the footway as their main travel corridor rather than the carriageway. These are typically suggested in locations where the highway is spatially constrained or where available road space needs to be used for other measures such as bus priority. Footways with shared-use facilities are anticipated to have relatively low numbers of pedestrians (up to 300 pedestrians per hour). Where a shared-use facility carries up to 300 cyclists per hour, the footway width should be a minimum of 3.0m. Where the facility carries over 300 cyclists per hour, footway width should be a minimum 4.5m to reduce the risk of conflict.
- **Mixed Traffic Cycling:** Cyclists are likely to be able to cycle on-carriageway under mixed traffic conditions on roads with light traffic flows (up to 2,500 vehicles per day) and low speeds (up to 20mph). Where mixed traffic has been recommended in the infrastructure plans, crossings and junction treatments have also been recommended to maximise user safety and ease connections to local networks. Most cycling on mixed traffic route segments will take place without any specific cycling infrastructure. Mixed traffic has been suggested in predominantly space constrained highways where the existing road conditions are assumed to be safe enough to support cycling under mixed traffic conditions.
- **Suggested Alternative Cycle routes:** Alternative route alignments have been recommended in places where existing constraints limit the ability to achieve LTN 1/20 standards. This has been identified along a link between Hertford and Ware following a PRow, along Hadham Road outside Bishop's Stortford, in Sawbridgeworth connecting West Road and Cambridge Road.
- **Scheme Under Development:** This shows existing walking and cycling projects that are either in the planning stage or committed to in separate studies. It is important to show these links to ensure that this LCWIP focuses on connectivity to existing and planned sites.

5.4.2 Finally, the plans also show existing Rights of Way and National Cycle Network routes, and existing shared footways. In some cases, these are of a decent standard and upgrading them should not be an immediate priority (in favour of instead creating new infrastructure).

In other cases, some improvements to these have been suggested on the plans (both through other infrastructure proposed and suggestions in the textboxes).

5.5 Workshop 2: Member and Stakeholder Engagement 2025

- 5.5.1 The two draft infrastructure plans (showing proposed prioritised walking and cycling routes) were presented to members and key stakeholders in a third and final round of stakeholder engagement in March 2025. The purpose of this third period of engagement was to inform the stakeholders about the infrastructure improvements identified and give stakeholders an opportunity to comment and provide additional improvements that could be considered. Stakeholders were also shown updated network plans which had been amended in light of information received following stakeholder feedback from the second period of engagement, as well as the subsequent public engagement responses.
- 5.5.2 As with the second round of stakeholder engagement, feedback was primarily obtained using the online engagement platform (ArcGIS online). Access to the ArcGIS online survey was available for two weeks after the workshop to ensure all stakeholders had an opportunity to review the materials and leave comments. Stakeholders were also given the option to provide feedback via email.
- 5.5.3 A wide range of organisations and members were invited to attend the workshops, and comments were left by representatives from across these groups.
- 5.5.4 Members from disability groups were invited to engage (please see Appendix E for full list), however, there was no attendance from these members of the community in Workshop 2.
- 5.5.5 Stakeholders provided valuable feedback with 208 comments received online and additional emailed responses in relation to the infrastructure plans, including:
- Whether they were supportive of particular infrastructure or not
 - Potential issues and opportunities which might be associated with implementing the infrastructure
 - Further issues and opportunities for active travel (some of which were not raised in the first period of engagement)
 - Suggestions for additional routes and infrastructure
- 5.5.6 A number of valuable comments were also made with regard to infrastructure improvements in areas not included in the infrastructure plans. While these were not in scope for this

iteration of the LCWIP, the comments have been recorded and acknowledged as part of this process.

5.6 Public Consultation 2025

- 5.6.1 Following the consideration of responses to the public engagement held in 2024 and subsequent member and stakeholder feedback to the route prioritisation engagement in 2025, the two councils worked jointly to shape a final draft of the document and mapping for public consultation purposes. The LCWIP schemes were refined and prioritisation included, with costings applied to the highest rated routes.
- 5.6.2 The public consultation version of the LCWIP was presented to members from all three tier authorities and stakeholders through briefings held on 17 and 18 September 2025, respectively, ahead of the launch of full public consultation.
- 5.6.3 A six-week full public consultation was then undertaken between 25 September and 05 November 2025. Both councils' communication teams promoted the event both prior and during the consultation period through numerous publicity methods.
- 5.6.4 As part of the consultation strategy a number of public events were organised so that officers, supported in several cases by local members, could raise awareness and discuss the proposals face to face with the public.
- 5.6.5 Public events were held with stalls set up with relevant material and tablets to enable input on-site in each of five of the towns in the district. Single events were held in Sawbridgeworth 27 September, Buntingford 29 September, Hertford 11 October and Ware 13 October. Although officers were in attendance and met with people and businesses in Bishop's Stortford on 04 October, due to gales the planned event was unable to have a stall presence, so a second full event was held in the town on 01 November.
- 5.6.6 Further to the public events, a total of 81 schools across East Herts were also engaged during the LCWIP development process. This outreach encompassed all state schools within the district's boundary, with a focus on ensuring consistent messaging, accessible information, and opportunities to contribute feedback.

- 5.6.7 In addition to districtwide communications, 11 priority schools received an enhanced level of engagement due to their proximity to proposed priority walking and cycling routes.
- 5.6.8 Following the close of the consultation a total of 444 comments were received. These comments comprised:
- 269 comments made online
 - 149 via email
 - 26 issues raised at events (which may have been raised by more than one person)
- 5.6.9 The assessment of the responses to the public consultation by both councils led to the refinement of the previous walking and cycling networks, as appropriate, as well as two additional walking route extensions being audited in Sawbridgeworth and Buntingford.
- 5.6.10 The public consultation responses have been captured in a way that will enable future scheme delivery to easily identify specific points raised around issues that need addressing and suggested potential solutions, where such information was provided, for any given mapped location.

5.7 Proposed Infrastructure Improvements

- 5.7.1 Following the third round of member and stakeholder engagement, the draft infrastructure improvements were finalised and infrastructure plans were produced. These plans were subject to public consultation between September and November 2025.
- 5.7.2 The final versions of the plans consider the relevant comments from all member and stakeholder engagement sessions, public engagement, public consultation, the results of all audits, and further internal discussions between HCC and EHC officers. It is important to note that where stakeholders expressed opposition to certain infrastructure, this has not necessarily resulted in removal of the infrastructure from the plans unless this opposition was informed by a particular technical or political constraint which could not feasibly be overcome. Moreover, it is important to note any infrastructure identified in this LCWIP would undergo additional stakeholder and public consultation, as appropriate, in due course as part of the standard design and development process for schemes at a more detailed level – allowing a fuller picture of support/opposition to be developed at that time.

5.8 Rural Connectivity

- 5.8.1 As discussed previously in this report, there are certain routes within the East Herts district that have not been audited as part of this stage of the LCWIP but are nonetheless key to active travel plans in the district. Many of these routes are in fact already undergoing some form of analysis and/or development as part of separate projects. For example, a number of improvements in Bishop's Stortford and Sawbridgeworth are in the proposals for the HCC Stanstead to Rye House Cycle Route study, such as links along Cemetery Road and Warwick Road.
- 5.8.2 The WARE2 emerging development has also identified several improvements to the cycle network through infrastructure upgrades, such as those along Ware High Street. Since many of these improvements are being brought forward through these other workstreams, this LCWIP has focused on routes and connections elsewhere which are a priority for creating mode shift.
- 5.8.3 This LCWIP has reviewed connections within and between the key urban areas discussed along with the key rural villages identified in Phase D. The study also considers the potential for cross border connections to other areas in Hertfordshire and Essex. Where possible, the LCWIP routes developed for East Herts have been designed to connect into neighbouring LCWIP routes. Although many of these cross-boundary routes are rural, so future iterations of this LCWIP will explore more strategic rural connections than has been possible at this stage.

5.9 Final Network Plans for Walking and Cycling

- 5.9.1 The network plans have been revised following each round of workshops and public engagement and consultation, to reflect the feedback received.
- 5.9.2 All rail stations, town centres and schools are connected to the networks with either primary or secondary routes.

The final network plans for both walking and cycling for all Phase areas can be found in Appendix F.

6 Route Costing and Prioritisation

6.1 Approach to Route Costing

6.1.1 Each infrastructure improvement or 'scheme' was given a high-level costing estimate based on typical unit costs by type of infrastructure. Indicative costs were sourced from LCWIP guidance and reference schemes in Hertfordshire and nearby counties and are the same as those used in the North Hertfordshire, Stevenage and Welwyn Hatfield LCWIPs. They are given in Table 6-1.

Table 6-1 - High Level Cost Estimate by Infrastructure Type

Infrastructure	Cost
Shared Use Path	£216,000.00 per km
Mixed Traffic Cycling	£71,000.00 per km
Footway Improvements	£200,000 per km
Traffic Calming	£350,000 per km
New / Improved Pedestrian Crossing	£65,000
New / Improved Pedestrian & Cycle Crossing	£65,000
Minor Junction Improvement	£30,000
Medium Junction Improvement	£500,000
Large Junction Improvement	£1,580,000

6.1.2 It is very important to note that these costs are high level approximations of construction costs only for indicative purposes. They do not account for inflation and do not include design, risk, and contingency costs. They also do not account for optimism bias. All these elements can add significantly to the estimates as individual schemes progress. Further feasibility design work accompanied by a more detailed costing process will be needed for any scheme which is being considered for funding or further development. This includes additional considerations, including matters such as land acquisition.

6.2 Approach to Route Prioritisation

6.2.1 Individual infrastructure improvements were grouped to form a selection of 'prioritised routes', which combine all the infrastructure improvements on an alignment – including both pedestrian and cycling improvements. Each route was considered in terms of its alignment and the infrastructure proposed and then scored in terms of:

- How likely walking and cycling trips are to increase in this location (based on the GIS models introduced in Section 4)
- How well it fits with the strategic road network
- How well it supports the strategic fit, connecting to routes which are allocated growth and development areas in line with the East Herts' District Plan or relevant Neighbourhood Plans
- How well it supports access to educational facilities
- Whether it supports access to jobs
- How well it aligns with LTN 1/20
- How technically feasible it is likely to be
- Its dependency on other schemes and projects

6.2.2 The total scores of each were then used to rank the routes/groups in a prioritised list. Concurrently, the costs of individual infrastructure items were summed to create an indicative total cost for each prioritised route/group, although cost has not factored into the prioritisation of routes/groups.

6.2.3 The likely level of stakeholder support was considered as a metric, but there is not enough information available at this stage to accurately quantify and score this. As such, this measure has not fed into the prioritisation process at this stage. Further stakeholder engagement, as appropriate, will be undertaken for individual schemes in due course before any routes are taken forward through design and implementation.

6.2.4 The costed, prioritised list of routes can be seen in separate document Appendix D.

6.3 Scoring Criteria and Ranges – Multi criterial analysis tool (MCAT)

6.3.1 Different scoring ranges were given for the criteria, based on their perceived relative importance. Details of the scoring ranges of the different criteria are outlined in Table 6-2, along with a commentary of how they were scored. At this stage, no additional weighting was applied to the criteria.

Table 6-2 – Scoring Criteria and Ranges

Criteria	Range	Description of How Scheme Was Scored
Increase in walking & cycling trips	0 to 2	Locations of proposed route were compared against the outputs from the relevant LCWIP GIS Model run (e.g. footway improvements were compared against the walking model output; segregated cycleways were compared against the cycling model outputs). Where outputs indicated higher potential for trips, higher scores were given. The GIS models factored in allocated growth and development areas in line with the East Herts' District Plan and other relevant neighbourhood plans.
Infrastructure impact on active travel	-1 to 3	Routes scored '-1' if there would be a reduction in walking and cycling rates, a '0' if there would be no change, and between 1-3 for a small, moderate or significant increase and modal shift away from car.
Connectivity	0 to 2	Routes that connect to multiple and diverse primary destinations were scored a '2', routes that connect to some primary and secondary routes scored a '1', and those that do not do either scored a '0'. This involved reviewing how well a route fits with the strategic road network.
Access to education facilities	0 to 2	Routes that were directly connected to education facilities (primary and secondary schools) were scored a '2', routes that were connected to routes with education facilities were scored a '1' whilst routes further away from schools scored '0'.

Criteria	Range	Description of How Scheme Was Scored
Access to jobs	0 to 2	Where routes were on or connected to routes to key employment areas, these were scored higher than infrastructure improvements which were further away.
LTN 1/20 compliance	-1 to 3	Where routes strongly supported the principles of LTN 1/20 (e.g., modal filters, segregated cycleways), these were scored higher than other infrastructure improvement types (e.g., traffic calming).
Technical feasibility	-2 to 2	Routes with no significant technical or land ownership obstacles were considered 'quick wins' and scored higher than those with such challenges.
Dependency	-1 to 1	Routes which could be implemented in isolation and would still bring benefit if implemented were scored higher than routes which were dependent on the implementation of other infrastructure for success.

6.3.2 The maximum number of points a proposed route could score was 17. Routes were then sorted by total score, creating a 'ranked order' of prioritised routes.

6.4 Commentary on the Prioritised List

6.4.1 A total of 63 priority routes were identified across East Hertfordshire. The 10 highest scoring routes are detailed in Table 6-3 below, with the full table available in Appendix D showing the results for each route individually along with the costing estimate. There is a separate document in Appendix C showing the location of each route along with the proposed infrastructure improvements.

Table 6-3 – 10 Highest Scoring Routes

Route	Mode Supported	Total Cost	Total Score
Bishop's Stortford - Sawbridgeworth	Walking and cycling	£4,762,598	15

Route	Mode Supported	Total Cost	Total Score
Hertford 2b (Welwyn Road & North Road)	Walking and cycling	£3,685,459	15
Hertford to Ware Tow Path	Walking and cycling	£4,455,562	15
Stanstead Abbots 1 (High Street)	Walking	£1,062,986	14
Station Road, (Puckeridge & Standon)	Walking	£3,089,558	14
Bishop's Stortford 2a (Stansted Road)	Walking and cycling	£2,504,865	14
Dunmow Road – Bishop's Stortford	Walking	£5,592,817	14
Hertford 2a (Port Vale/Beane Road)	Walking and cycling	£3,402,662	14
Bishop's Stortford 3 (Hadham Road)	Walking	£13,392,817	14
Sawbridgeworth 1 (Footpath 017/Cambridge Road)	Walking and cycling	£1,317,329	14

6.4.2 The three top scoring routes are located in the key urban areas, scoring 15 out of the maximum 17. *Bishop's Stortford* connects Sawbridgeworth to Bishop's Stortford. *Hertford 2b* is within Hertford, and *Hertford to Ware Tow Path* connects Hertford to Ware. All three of these routes are walking and cycling routes. These routes scored highly due to their potential to link people to employment and education, their potential to generate mode shift from car use, and their compliance with LTN 1/20.

6.4.3 The top scoring routes for Phases A, B, C and D are shown in Tables 6-4, 6-5, 6-6 and 6-7 respectively.

Table 6-4 – Phase A Top 5 Scoring Routes

Route	Mode Supported	Total Cost	Total Score
Hertford 2b (Welwyn Road & North Road)	Walking and cycling	£3,685,459	15
Hertford to Ware Tow Path	Walking and cycling	£4,455,562	15
Hertford 2a (Port Vale/Beane Road)	Walking and cycling	£3,402,662	14
Hertford 1 (Stanstead Road/Rush Green)	Walking and cycling	£6,487,733	13
Ware 2 (Park Road/Ware Park Road)	Walking and cycling	£6,352,081	13

Table 6-5 - Phase B Top 5 Scoring Routes

Route	Mode Supported	Total Cost	Total Score
Bishop's Stortford (Bishop's Stortford to Sawbridgeworth)	Walking and cycling	£4,762,598	15
Bishop's Stortford 2a (Stansted Road)	Walking and cycling	£2,504,865	14
Dunmow Road – Bishop's Stortford	Walking	£5,592,817	14
Bishop's Stortford 3 (Hadham Road)	Walking	£13,392,817	14
Sawbridgeworth 1 (Footway 017/Cambridge Road)	Walking and cycling	£1,317,329	14

Table 6-6 - Phase C Top 5 Scoring Routes

Route	Mode Supported	Total Cost	Total Score
Bowling Green Lane and Norfolk Road (Buntingford)	Walking	£1,146,159	13
A10 between Puckeridge and Buntingford	Walking and cycling	£3,619,293	11
High Street (Buntingford)	Walking	£2,278,118	10
Buntingford 1 (Baldock Road)	Walking	£638,333	9
Buntingford 2 (Hare St Road)	Walking	£1,154,950	9

Table 6-7 - Phase D Top 5 Scoring Routes

Route	Mode Supported	Total Cost	Total Score
Stanstead Abbots 1 (High Street)	Walking	£1,062,986	14
Station Road (Puckeridge & Standon)	Walking	£3,089,558	14
Puckeridge 1 (High Street/Cambridge Road)	Walking and cycling	£4,846,356	13
Braughing 1a (connection to Puckeridge)	Walking and cycling	£1,591,579	12
Braughing 1b (Ford Street/The Street)	Walking and cycling	£1,404,305	12

6.4.4 Many of the routes which had the highest scores included the following types of infrastructure improvement, which may reflect the higher 'impact on active travel' and 'LTN 1/20 compliance' scores these types of infrastructure received:

- Shared use paths

- Footway improvements
- Medium junction improvements
- Large junction improvements
- New/improved pedestrian crossings

6.4.5 It is also important to note that there are some plans for active travel improvements in East Herts being taken forward independently of this LCWIP that are not included in the costed, prioritised list. These remain unaffected by the LCWIP prioritisation.

6.5 Benefits and Limitations of Packaging Infrastructure into Prioritised routes

6.5.1 Packaging infrastructure improvements into routes has many benefits. One principal benefit is that it fits with HCC's method of taking coherent and connected schemes forward and makes it easier to apply for funds, which are often deliberately targeted at corridor schemes (for example, requiring the use of the DfT's Active Mode Appraisal Toolkit). Another benefit is that it combines pedestrian and cycling improvements, to ensure that both modes of transport are catered for when plans are taken forward.

6.5.2 One limitation of this approach is that junctions often sit at the intersection of multiple routes. Therefore, summing the total cost of all improvements in this LCWIP would count junction's multiple times and therefore be inaccurate. This can also lead to higher costs overall and more complex infrastructure schemes. Care must also be taken when schemes are taken forward to ensure that junctions are not just improved to facilitate the connection that is being made along the single linear corridor being developed but also considers the other links.

6.5.3 Another limitation of packaging infrastructure into routes is that there are several schemes identified in this LCWIP that do not easily align with any particular routes, such as individual crossings by schools on streets which were not audited (or do not require other improvements). It is important that these infrastructure improvements are not forgotten about simply because they don't fit neatly into a linear route. Similarly, just because an infrastructure improvement (such as a crossing) has been packaged into a particular prioritised route doesn't mean that it can't or shouldn't be taken forward on an individual basis if there is a good opportunity to do so.

7 Next Steps

7.1 Integration with Transport Policy

- 7.1.1 This LCWIP has identified specific walking and cycling infrastructure schemes that can be incorporated into local transport policy and capital investment programmes.
- 7.1.2 The LCWIP supports the East Herts District Plan 2018 (covering the period 2011 - 2033) by providing a focus on where and why targeted investment in active travel infrastructure needs to be taken forward across the district. It will also form part of the evidence base for the new emerging East Herts Local Plan and aid further the delivery of infrastructure through development schemes, as appropriate.
- 7.1.3 The LCWIP will also support other local policy areas such as the Eastern Area Hertfordshire Growth and Transport Plan (EAGTP) and the South East Hertfordshire Area Growth and Transport Plan (SEGTP), to create a more accessible, sustainable and efficient transport network for residents and visitors and the goal of making walking, cycling and public transport the natural choice for local journeys.
- 7.1.4 See Appendix G for further detail.

7.2 Integration with Highways Delivery Programmes

- 7.2.1 Once some packages of routes/schemes to be delivered in the short-term have been identified and confirmed, these should be added into HCC's highways delivery programmes. This would then see schemes go through HCC's project validation process, have concept designs developed, undergo further stakeholder engagement and, if there are no major obstacles and funding is available, the schemes can then be designed in detail and delivered once suitable funding becomes available.
- 7.2.2 Highway improvement programmes separate from the LCWIP will continue to be delivered in the coming years but there are a few key steps that could be taken to align delivery of non-LCWIP highway schemes with the LCWIP, most of which would be covered by a firm commitment to following the principles of Gear Change and the design guidance contained in LTN 1/20 when delivering new highways infrastructure. Some important examples of this would be:

- Aim to provide separate facilities for pedestrians and cyclists where space and usage levels allow. Where space is more constrained and there are low volumes of pedestrians and cyclists, shared-use footways can be considered as cost-effective solutions.
- Committing to avoiding speed cushions when adding traffic calming to streets, instead referring to LTN 1/20 for guidance on cycle-friendly traffic calming

7.2.3 Consideration will also be given to the interaction of LCWIP schemes with other packages of works, such as the Bus Service Improvement Plan, where limited carriageway space may lead to competing or supporting proposals for road space reallocation for walking, cycling and bus priority measures. Further analysis will therefore be required as to how the greatest benefits for active and sustainable travel can be achieved within physical and technical constraints. These constraints and opportunities will be considered through ongoing transport planning discussions with key stakeholders, and as part of the project validation process.

7.2.4 HCC are currently implementing 20mph speed limits across targeted areas. This programme complements the LCWIP by providing low speed environments where it becomes safer to cycle on the road without the need for additional cycle infrastructure. A number of 20mph areas have already been implemented in the key urban areas including Hertford, Ware and Bishop's Stortford.

7.2.5 As well as the route improvements, HCC are also committed to providing safe and secure cycle parking at key destinations in appropriate locations. Cycle parking provision should also encompass facilities for cargo bike parking and e-bikes where suitable. Facilities for traditional or e-bike hire schemes should also be considered in appropriate locations. This provision should be considered along the LCWIP routes where suitable with the aim of increasing the ease and accessibility of cycling across the district.

7.2.6 Beyond physical infrastructure measures, HCC is committed to improving wayfinding to support walking and cycling across the district. This will include the provision of clear, consistent signage and information to help people navigate key routes safely and confidently. Priority will be given to key everyday journeys, including routes linking bus and railway stations with schools, employment areas and leisure destinations. Delivery

opportunities will be pursued through development proposals, the implementation of future transport schemes, and the supported through appropriate funding mechanisms.

7.3 Personal Safety

- 7.3.1 The DfT recently published research (2024) which examines interventions which can improve the personal safety of women and girls when travelling as part of the national effort to reduce Violence Against Women and Girls (VAWG) in public spaces. The auditors for this LCWIP have experience in conducting women's safety audits using WSP's Safety Inclusion Assessment (SIA) tool.
- 7.3.2 Although the tool has not been used throughout the auditing process for this LCWIP, observations of potential issues which could cause personal safety concerns for women and girls were observed on site, and interventions to mitigate these concerns were integrated into the concept plan development. Interventions such as improving the quality and consistency of artificial lighting, improving bus stop infrastructure and providing wayfinding at regular intervals are examples of measures that can improve the perception of safety for women and girls. Additionally, protected cycle facilities and footway widening are active travel interventions which also improve the perceptions of safety and accessibility of networks for all users.
- 7.3.3 It is therefore essential that detailed designs for routes and improvements identified in this LCWIP are developed with the key principles of personal safety in mind.

7.4 Future Bids for External Funding

- 7.4.1 HCC will explore opportunities to apply for funding from external sources, such as any future Government capital grants or funding competitions for active travel infrastructure such as future tranches of the active travel fund. In these instances, additional business case developments may be undertaken on schemes outlined in this LCWIP to help form the basis for strong applications to secure funding for design and delivery.
- 7.4.2 The EHC LCWIP network plans set out a comprehensive framework for walking and cycling infrastructure across the area, aligned with both current and future development. The LCWIP supports planned growth through site allocations, existing commitments, and speculative applications that may emerge.

- 7.4.3 All walking and cycling networks and infrastructure schemes identified, whether prioritised or listed as primary or secondary on the full LCWIP maps, are integral to delivering sustainable transport options and must also be considered in the context of development-related funding. This includes opportunities to secure financial contributions via Section 106 agreements and other planning obligations.
- 7.4.4 The LCWIP provides a robust evidence base to justify such contributions, ensuring infrastructure delivery keeps pace with growth. By embedding the LCWIP into the planning process, the LCWIP sets out a clear plan for implementation and future funding and development opportunities, safeguarding the ability to secure developer contributions and enabling the delivery of a connected, accessible active travel network that supports future growth.
- 7.4.5 This LCWIP represents the culmination of a first round of developing cycling and walking networks and infrastructure improvement plans. The initial focus has been on Hertford, Ware, Bishop's Stortford, Sawbridgeworth, Buntingford and key rural District Plan Group 1 villages due to their density and associated higher potential for more active travel trips. Future iterations of this LCWIP should look to expand this process to other areas and routes, particularly in rural locations and where there are longer term aspirations to provide linkages between key settlements, such as Stevenage to Ware via Watton-at-Stone and linkages into Essex from Bishop's Stortford. Additionally, plans from other studies and developments, such as WARE2 and HCC Stanstead to Rye House Cycle Route should be incorporated into the LCWIP as these are developed further.
- 7.4.6 The next formal revision of the LCWIP should include audits of the remaining primary routes which were not audited in this first iteration of the LCWIP due to budgetary constraints.
- 7.4.7 Revisiting the LCWIP to include infrastructure improvement plans for these routes and areas will ensure a more inclusive East Herts-wide approach to the LCWIP is taken over time, and one which maximises opportunities for active travel trips between East Herts and its neighbouring authorities, although it is recognised that Local Government Reorganisation (LGR) may potentially result in an expansion of its coverage in the future. It is, however, currently envisaged that all existing LCWIPs will continue to remain in place post-LGR until revisions are deemed appropriate under new local authority arrangements.



7.4.8 HCC and EHC (or successor authorities post-LGR) will therefore review and update this LCWIP document going forward in response to new funding and delivery opportunities as a commitment to having an on-going and sustained investment plan for active travel infrastructure.

8 Appendices

Appendices are not included within this report but are listed below for information purposes.

Appendix A – List of Acronyms Used in Report

Appendix B – Hertford and Ware 1994 Study

Appendix C – Concept Design Plans

- Hertford
- Ware
- Bishop's Stortford
- Sawbridgeworth
- Buntingford
- Hertford Heath
- Hunsdon
- Much Hadham
- Puckeridge-Braughing
- Walkern
- Watton-at-Stone

Appendix D – Prioritised Costed List of Infrastructure Improvements

Appendix E – Stakeholder List

Appendix F – Final Network Plans

- Walking Overview
- Cycling Overview

Appendix G – LCWIP Policy Context