

AtkinsRéalis



# Surrey Heath Local Cycling & Walking Infrastructure Plan

SURREY COUNTY COUNCIL & SURREY HEATH BOROUGH COUNCIL



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04						
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## Disclaimer

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# Executive Summary

# Executive Summary

AtkinsRéalis has been commissioned by Surrey County Council (SCC) to work in partnership with Surrey Heath Borough Council (SHBC) to develop a Local Cycling and Walking Infrastructure Plan (LCWIP) for the Borough.

An LCWIP is a key transport planning document that has been defined by the Department for Transport (DfT), which aims to support an uptake in the number of people walking and cycling by delivering improved facilities for existing active travel users whilst also encouraging mode shift by attracting new users.

The Surrey Heath LCWIP outlines a long-term plan (10+ years) to enhance active travel in the Borough. It has considered the full extent of Surrey Heath, with an emphasis on links to key trip attractors and destinations that will help encourage a greater mode share for walking and cycling.

The main outputs for an LCWIP are network plans to identify key walking and cycling corridors, initial high-level concept proposals, and a prioritised programme of infrastructure improvements. This LCWIP report documents the development of these key outputs.

This LCWIP report is the first step in the process for identifying priorities for future active travel investment. Future stages will examine potential schemes in more detail and, if appropriate, advance them through

subsequent design and delivery stages as funding is available.

The primary objective for the LCWIP is to increase the number of people walking and cycling in the Borough, particularly for short utilitarian journeys. This objective is also a reflection of the ambitions of the DfT LCWIP guidance and is supported by SCC and SHBC. Specifically, the Surrey Heath LCWIP aims to:

- » Make walking and cycling safe, attractive, convenient, and accessible modes of transport for everyone, regardless of age, gender and ability.
- » Expand the existing cycle network and establish an extensive, continuous active travel network.
- » Improve access and connectivity to key destinations, such as local high streets and commercial areas, schools, employment areas, and public transport services.
- » Foster a high quality of life in Surrey Heath for its residents, visitors, and workers by supporting a wide range of social, economic, health, and environmental aspirations.

Furthermore, as presented later in the report, Surrey Heath is one of a number of LCWIPs being developed in Surrey, some Borough/district-wide and some town-wide. It is paramount that there is effective coordination between them so that a continuous network

of cycle routes (as well as walking routes) is developed across Surrey.

## Methodology

In order to meet the objectives of the LCWIP, the project was divided into key tasks identified below and presented within Figure 1.

Further information on each activity is presented within Section 1: Introduction (page 13) and the structure of the report has been developed to align with these activities.

- » Review of previous studies, strategies and guidance.
- » Background data analysis.
- » Draft active travel network development.
- » Stakeholder engagement to refine the draft proposed network.
- » Prioritisation of 'Phase 1' corridors/areas using a multi-criteria assessment framework (MCAF).
- » Site visits and formal assessments (for the Phase 1 areas) using standardised tools (Walking Route Audit Tool (WRAT) and Route Selection Tool (RST)) for the prioritised networks.
- » Identification of potential interventions for the Phase 1 areas.
- » Further stakeholder engagement to review the proposed interventions.
- » Programme prioritisation and cost estimating.

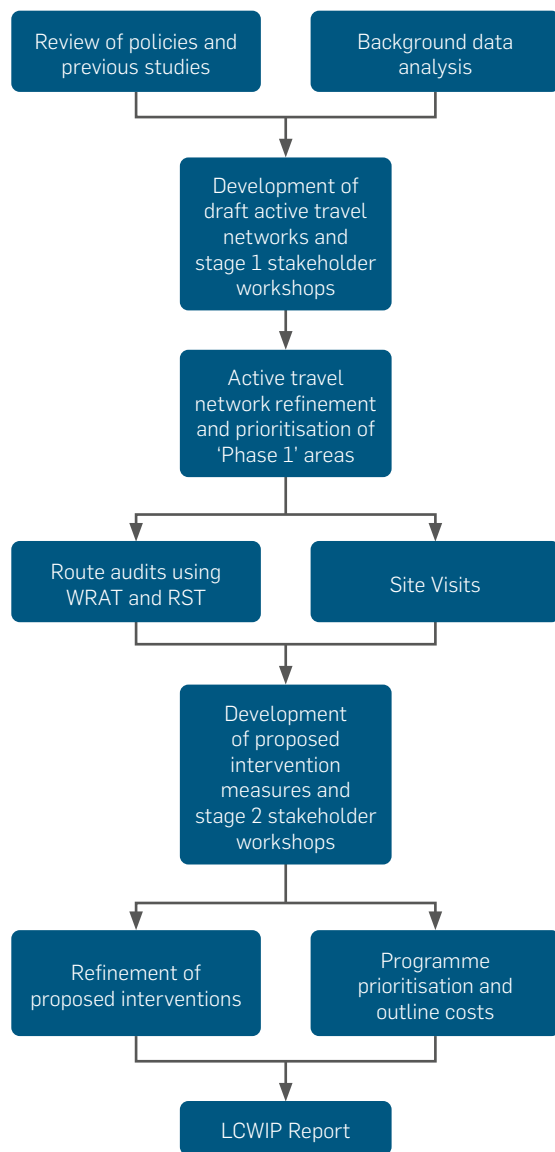


Figure 1. LCWIP process overview

## Vision and Design Approach

The overarching vision behind the LCWIP is one which supports strong and sustainable growth for Surrey Heath and a high quality of life through investment in active travel and an enhanced public realm.

The proposed interventions and high-level concepts seek to increase the number of people walking and cycling for short journeys or as part of a longer journey, thus reducing the number of short car trips. This is important to promote health and well-being, reduce congestion and pollution, achieve climate change targets, provide inclusive travel options, and improve the economic vitality of the Borough and its local high streets.

The LCWIP design strategy aims to address these issues with the development of deliverable and attractive Borough-wide active travel infrastructure that prioritises people walking and cycling.

Good design is vital to the successful delivery of facilities that encourage more people to walk or cycle and achieve the full benefits of a scheme. The LCWIP approach and proposals strive to reflect the high aspirations of the DfT's design guidance - Cycle Infrastructure Design (LTN 1/20) and Inclusive Mobility. It incorporates best practice guidance and aims to address the five key design principles of effective walking and cycling infrastructure:<sup>1</sup>

- » Coherent
- » Direct
- » Safe
- » Comfortable
- » Attractive

Ultimately, the design strategy looks to identify short as well as long term solutions that could be applied across the Borough.

<sup>1</sup> Department for Transport, Cycle Infrastructure Design (LTN 1/20).



## Stakeholder Engagement

Early engagement was a key element of the LCWIP as it ensured that the views and knowledge of local residents and stakeholders were taken into account. At the outset of the study, public input on existing issues and desired improvements related to walking and cycling was obtained through the Cycle Infrastructure Map Viewer and the Commonplace website.

During the study, two sets of workshops were held with representatives from SCC, SHBC, Sustrans, representatives from neighbouring local authorities, external stakeholders (e.g., local cycling and walking groups, local business community), and local members (SHBC / SCC councillors). The first phase of workshops provided feedback on existing issues and the identification of draft walking and cycling networks. The second set of workshops reviewed the proposed infrastructure interventions for the prioritised routes. A summary of the engagement activities is provided in Section 4 on page 77.

## Walking and Cycle Network Selection

Working with SCC and SHBC, key findings from the review of previous studies, data analysis and stakeholder engagement sessions were used to inform the development of the walking and cycling networks and route selection process.

The assessment process involved two stages. Firstly, an 'aspirational list' was developed using both qualitative and quantitative information to

identify a comprehensive active travel network and focus areas across the Borough. The cycle elements included strategic corridors linking key destinations and population centres, while the walking elements focused on 'core walking zones' (CWZs) which identified areas with high propensity for walking in the Borough, primarily around town/village centres and local high streets/commercial areas. The output was the aspirational networks for walking and cycling in Surrey Heath, which included 34 cycle corridors and 15 CWZs (see Figure 2 on page 10).

The second stage of the LCWIP utilised a multi-criteria assessment framework (MCAF) and stakeholder input to prioritise the aspirational network and select a 'short list' for further analysis as part of the LCWIP. These 'Phase 1' corridors/areas were selected for development of initial concepts for potential infrastructure improvements, which included six cycle corridors and four CWZs, as shown in Figure 3 on page 11).

Areas not selected for the development of the first set of interventions (Phase 1) are retained as part of the aspirational network (referred to as Phases 2 and 3) and may be developed at a later stage.

## Proposed Interventions

The concept proposals for walking and cycling reflect the aspirations of SCC and SHBC whilst also adopting an equitable approach throughout the borough with regards to the location of cycle corridors and core walking zones.

Across Surrey Heath, there are a variety of barriers that discourage walking and cycling, such as physical severance caused by railways or motorways, and proximity to high traffic flows and speeds. A lack of or inadequate facilities can cause residents and visitors to rely on private transport, thus over stretching the already congested road network. Commercial areas and other key destinations could be better linked to foster economic and social vitality and cohesion in the area, supporting places where people would like to spend time.

The LCWIP strategy seeks to address these issues with the development of a local cycling and walking infrastructure plan that is innovative, aspirational, and deliverable, creating a network that truly prioritises pedestrian and cyclist movement and aims to integrate with other adjacent areas and schemes.

For the Phase 1 areas, a high-level package of proposed interventions was identified that incorporates current design best practice, providing short and long term concepts that could be further developed and implemented. The proposals aim to meet design guidance from the DfT's LTN 1/20 in order to leverage future funding opportunities from DfT for active travel.

The proposed interventions for cycling and walking are summarised on page 128 and page 171, respectively.



## Prioritisation

Following development of the proposed interventions, the Phase 1 walking areas and cycle corridors were prioritised to help guide future scheme development and implementation.

The prioritisation process included criteria related to stakeholder input, potential usage, design and access. These categories were intended to reflect the potential usage of each corridor, the potential feasibility of the proposed schemes, the potential of the improvements to encourage new walking and cycling trips, and the degree to which the corridors/areas foster pedestrian and cycle access to key destinations. A weighting was given to interventions which may provide a greater anticipated benefit over the existing condition, as this could support a more substantial uplift in walking and cycling.

## Costing

Indicative outline costs were provided for the proposed design measures. These estimates are reflective of the early concept development stage and are intended to provide a very indicative, rough order-of-magnitude cost only. The figures also reflect the diversity of the proposals which seek to meet LTN 1/20 guidance and subsequently vary significantly in terms of size and complexity. Indicative costs vary from approximately £9.3 million to £26.7 million for the cycle corridors and from approximately £6.8 million to £18.4 million for the CWZs.<sup>1</sup>

<sup>1</sup> High level costs applicable to this study only, review of costs required as design progresses to feasibility /preliminary design phases.

The costs for each area and mode (walking and cycling) were evaluated separately. This method provided a stand alone cost for each cycle corridor and CWZ and allows the proposals to be considered independently. However, if viewed as a network-wide package of improvements, there is an opportunity for potentially significant savings.

## Next Steps

The LCWIP report is the first stage in the process for investment in active travel in Surrey Heath and Surrey more broadly. The end-to-end process is outlined below:

- » **Stage 1 - Plan (LCWIP Report)**
- » Stage 2 - Feasibility
- » Stage 3 - Business case / secure funding
- » Stage 4 - Delivery

The LCWIP report should be used to support the case for further stages of assessment, design, and stakeholder engagement and to secure funding to progress improvements for the corridors identified. As an LCWIP is intended to facilitate a long-term approach to developing active travel proposals over a period of approximately 10+ years, all of the corridors identified within the active travel network maps are recommended for further consideration at an appropriate time in the life of the LCWIP implementation. The LCWIP outputs should also be integrated into local planning and transport policies, strategies and delivery plans, as per the DfT guidance.

The next stage of LCWIP implementation will be to advance the Phase 1 high-level concepts to feasibility assessment and design. This will allow a more detailed review of individual routes or interventions, evaluation of constraints, and refinement of the proposed design measures. The feasibility stage will also include a broader stakeholder and public consultation process, enabling local input to help further shape the proposals.

During this process, and subsequent design phases, stakeholder engagement and consultation will continue to be a key element of developing high-quality and attractive routes for local users. The progression of these schemes, either as a work package or individual schemes, will likely be subject to external factors such as funding applications or potential inter-dependencies with other proposals within the local area.

The LCWIP should be viewed as a 'living document' and reviewed and updated periodically to reflect evolving needs and opportunities. This could be in response to significant changes in local circumstances, such as the publication of new policies or strategies. Additional active travel opportunities may also be identified and incorporated into the LCWIP in response to major new development sites and as walking and cycling networks mature and expand. SCC will be responsible on providing updates on the LCWIP document following agreement from SHBC, and engagement with local members accordingly.



## Walking and Cycling Networks

Figure 2 illustrates the aspirational walking and cycling network identified through the LCWIP, including the cycle corridors and core walking zones. A multi-criteria assessment and stakeholder input was used to categorise the network into three phases and prioritise which areas to investigate further first.

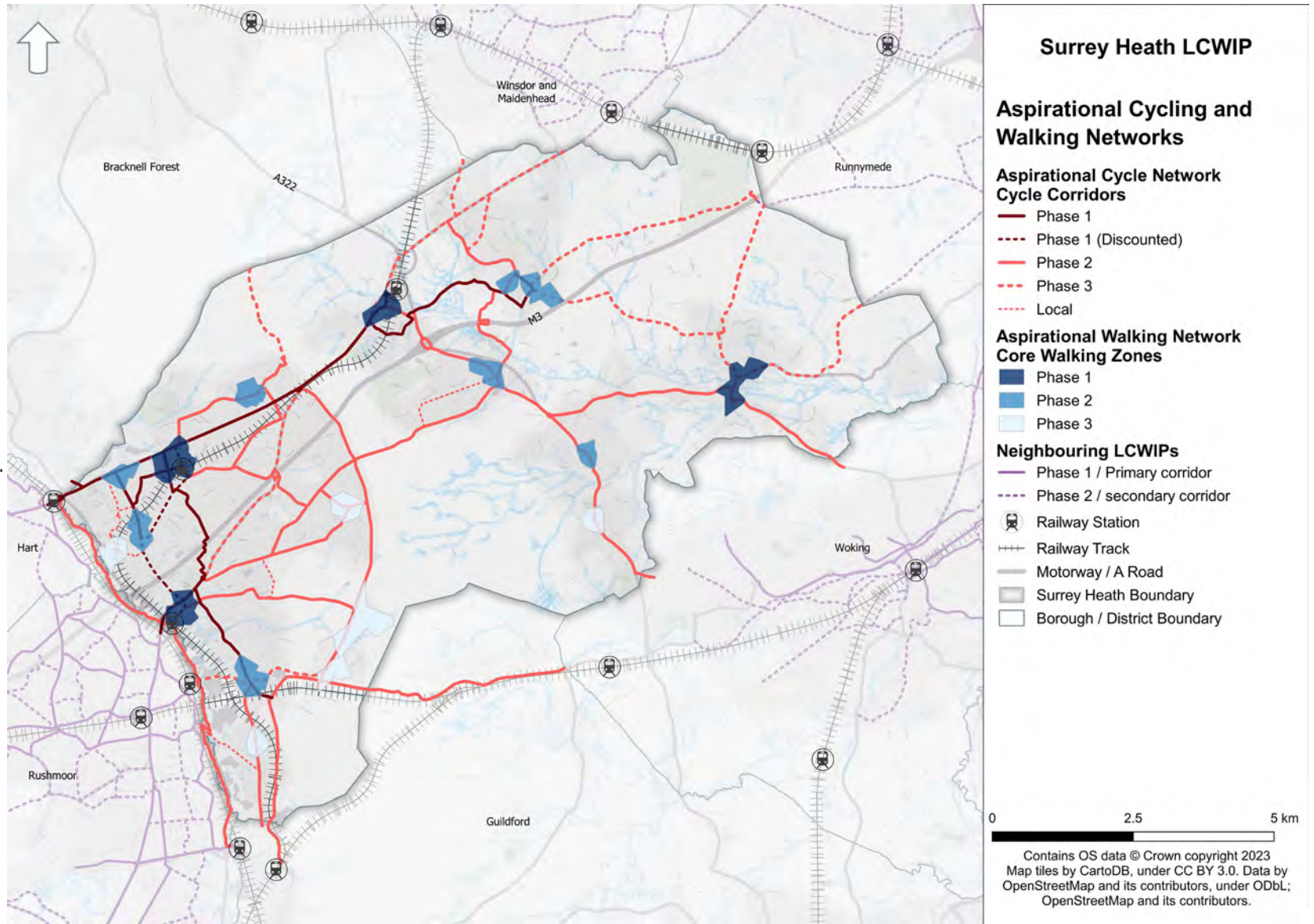


Figure 2. Surrey Heath LCWIP aspirational walking and cycling networks

## Phase 1 Walking Areas and Cycle Routes

Figure 3 highlights the Phase 1 elements of the network, for which the LCWIP developed high-level proposals to improve facilities for cycling and walking. The Phase 1 areas included:

### Phase 1 core walking zones:

- ② Camberley Town Centre
- ④ Frimley High Street
- ⑧ Chobham Village
- ⑨ Bagshot High Street

### Phase 1 Cycle routes

- ② A30 - Camberley to Bagshot Railway Station
- ③ A30 - Camberley to Blackwater
- ④ Frimley Road to Camberley High Street
- ⑥ Camberley to Rushmoor via Frimley Park Hospital
- ⑧ Frimley to Frimley Green
- ⑯ Bagshot to Windlesham

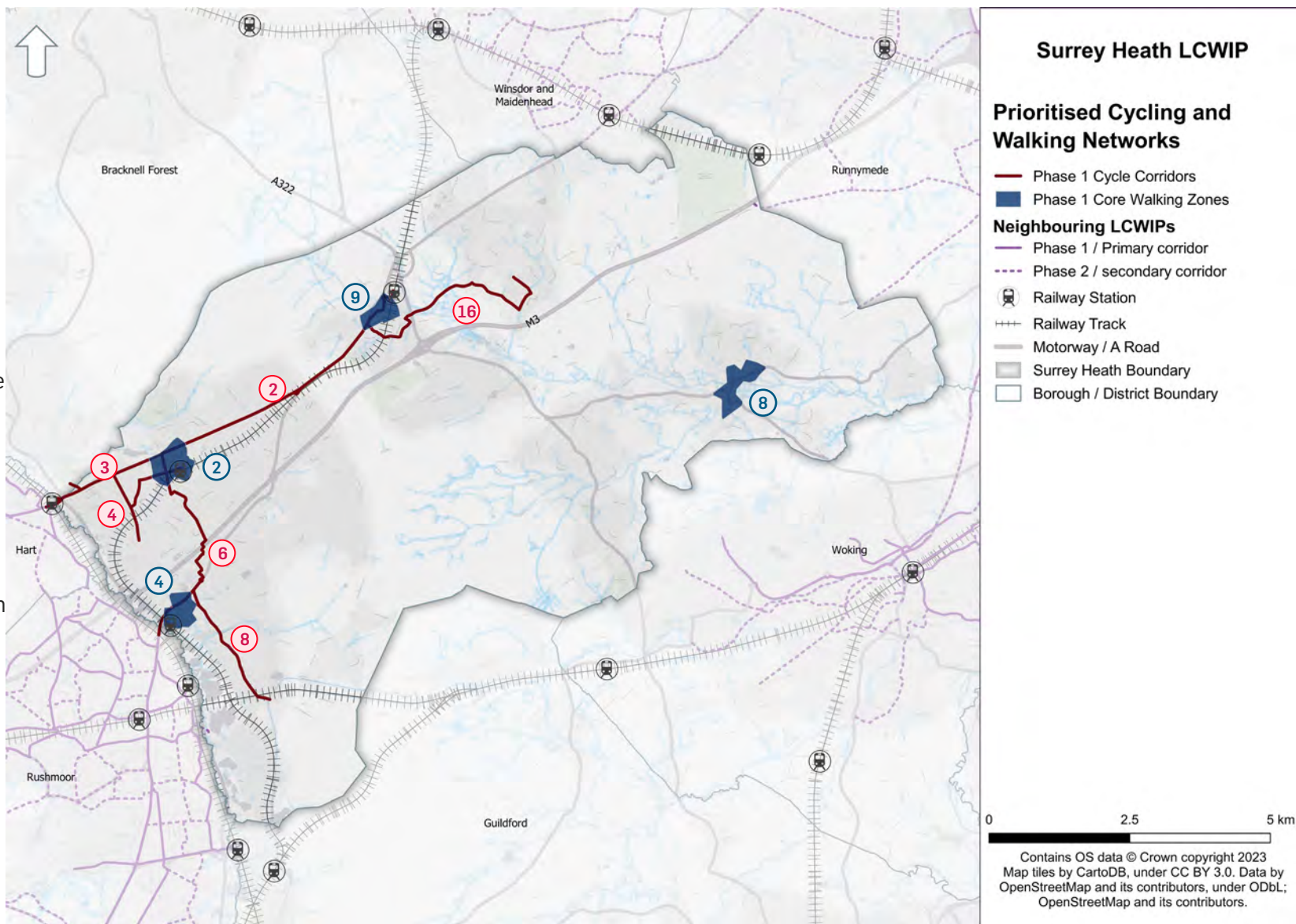


Figure 3. Surrey Heath LCWIP Phase 1 cycle corridors and core walking zones



# 1. Introduction

Approach

Vision and Design Approach

Reasons to Invest in Active Travel

Report Structure

# Approach

AtkinsRéalis has been commissioned by Surrey County Council (SCC) to work in partnership with Surrey Heath Borough Council (SHBC) to develop a Local Cycling and Walking Infrastructure Plan (LCWIP) for the Borough. The geographic scope is the entirety of the Borough, as shown in Figure 4.

The study approach follows Department for Transport (DfT) guidance<sup>1</sup> for an LCWIP, the core outputs of which are:

- » Network plans for walking and cycling which identify key routes and areas for further development.
- » Prioritised programme of improvements for future investment.
- » LCWIP report that sets out the underlying analysis carried out and provides a narrative which supports the identified improvements and network.

The proposed measures identified in the LCWIP are also intended to complement existing plans and networks for active travel, as well as align with adopted policy. Additionally, the LCWIP looks to support the following key aims which are aligned to the aspirations of the DfT LCWIP guidance and supported by SCC and SHBC:

- » Expand the existing cycle network and establish an extensive, continuous active travel network.

<sup>1</sup>Local Cycling and Walking Infrastructure plan, Technical guidance for local authorities, DfT (2017).

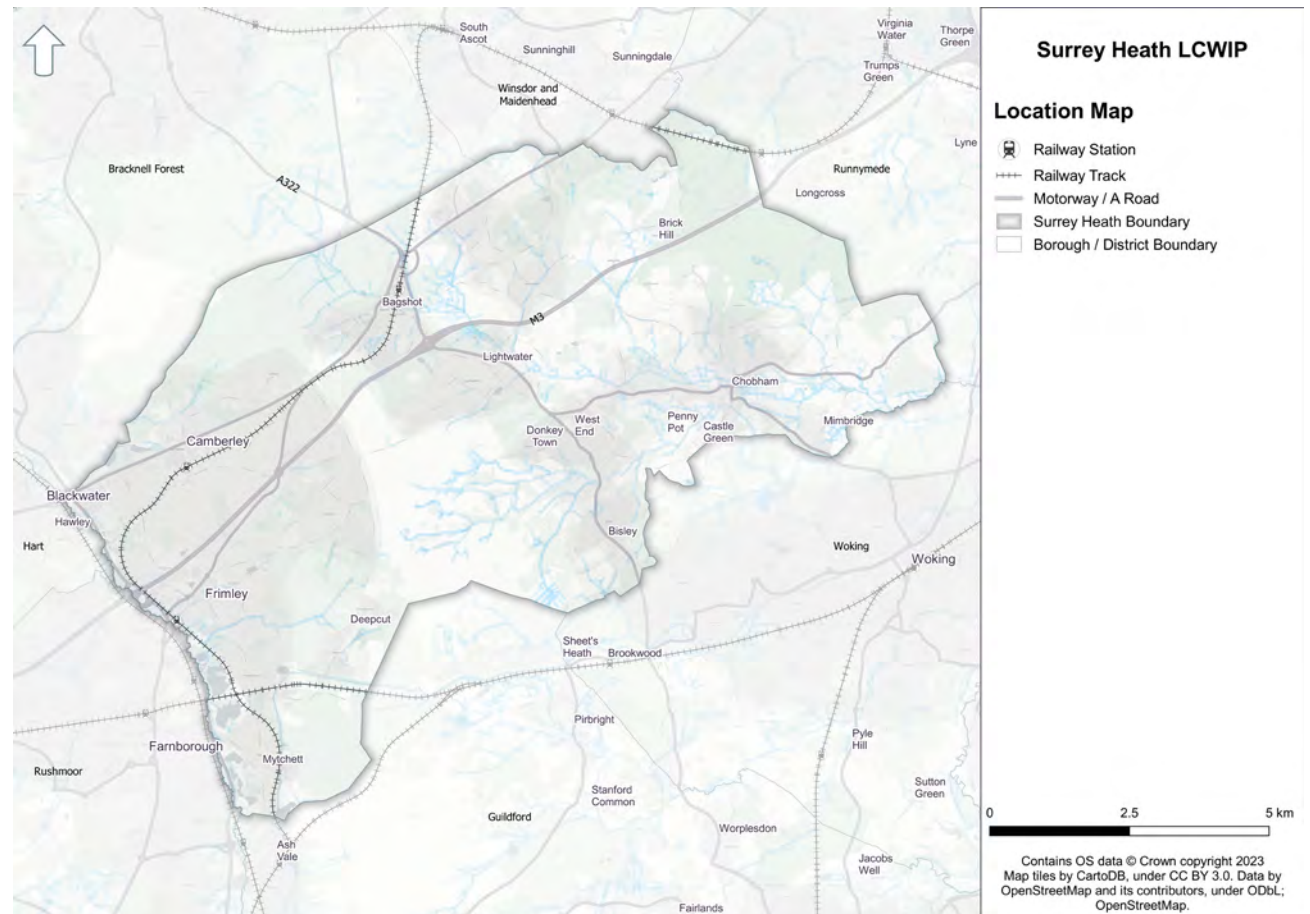


Figure 4. Surrey Heath LCWIP study area

- » Make walking and cycling safe, attractive, convenient, and accessible modes of transport for everyone, regardless of age, gender and ability.
- » Improve access and connectivity to key destinations, such as local high streets and commercial areas, schools, employment areas, and public transport services.
- » Foster a high quality of life in Surrey Heath for its residents, visitors, and workers by supporting a wide range of social, economic, health, and environmental aspirations.

## Methodology

In order to meet the objectives of the LCWIP, the project was divided into the following main tasks, as summarised below and illustrated in Figure 5 on page 16:

1. **Previous Studies Review:** AtkinsRéalis reviewed previous studies related to walking and cycling in Surrey Heath as well as previous/planned design proposals for active travel schemes, as detailed in the scope of work and identified by officers from the SCC/SHBC project team. Additionally national, county-wide and local policies related to transportation, walking, cycling, and public health were reviewed so that the LCWIP will align with the objectives of these policies.
2. **Data Analysis:** AtkinsRéalis also analysed and mapped a number of spatial and behavioural datasets, such as key destinations, pedestrian and cyclist activity and local networks, collision data, key barriers and severance, online public comments, census data and commuting patterns.
3. **Development of Draft Networks:** Draft network maps for key cycling corridors and core walking zones were developed based on the findings from the review of previous studies and data analysis. These draft maps were subsequently refined through engagement with both internal (SCC and SHBC officers) and external stakeholder groups (user groups), as well as local members and officers from neighbouring Boroughs/districts. Early engagement in the preparation of this LCWIP has ensured that

local knowledge was incorporated into the development of proposals.

4. **Network Refinement and Prioritisation:** Following the refinement of the active travel network maps, a multi-criteria assessment framework (MCAF) was undertaken to identify and prioritise the top six scoring corridors for cycling and top four scoring walking zones. These were identified as the 'Phase 1' elements of the active travel networks for advancement through the remainder of the LCWIP process. The MCAF considered each of the individual corridors and core walking zones against a number of metrics, such as: active travel demand, the potential to deliver a high-quality and inclusive route, safety issues that could be addressed, and connections to other active travel routes/zones.
5. **Audits and Site Visits:** Following the identification of the Phase 1 cycle corridors and walking zones, site visits were undertaken to audit the existing condition and identify opportunities for improvements. The audits utilised the DfT audit tools for an LCWIP, known as the Walking Route Audit Tool (WRAT) and Route Selection Tool (RST). These tools are used to audit routes against key metrics for active travel measures such as attractiveness, directness, comfort, and safety.
6. **Draft Proposed Interventions:** The audits were subsequently used to inform the development of high-level concept proposals for each of the Phase 1 corridors and zones. This process also benefited from the early stakeholder

engagement undertaken in Task 3 and the issues identified within the initial data analysis.

A second round of stakeholder engagement was also undertaken to review the draft concept proposals. This provided an opportunity for stakeholders to feed into the early concept development process by providing feedback on the types of interventions being proposed, key additional opportunities for improvements, as well as issues to consider during further development of the proposals in the next stage (feasibility).

7. **Concept Refinement, Costings, and Prioritisation Programme:** The feedback from the early stakeholder engagement process was subsequently reviewed to refine the draft concept proposals and also ensure that feedback was captured for taking forward into the future feasibility stage. After refining the concept proposals, the final activities within the LCWIP study included additional WRAT and RST assessments to review the potential quality of the routes following the proposed interventions. High level cost and programme estimates reflective of the early concept development stage were also prepared.
8. **LCWIP Report:** Outputs of the above tasks were compiled to form this LCWIP report.



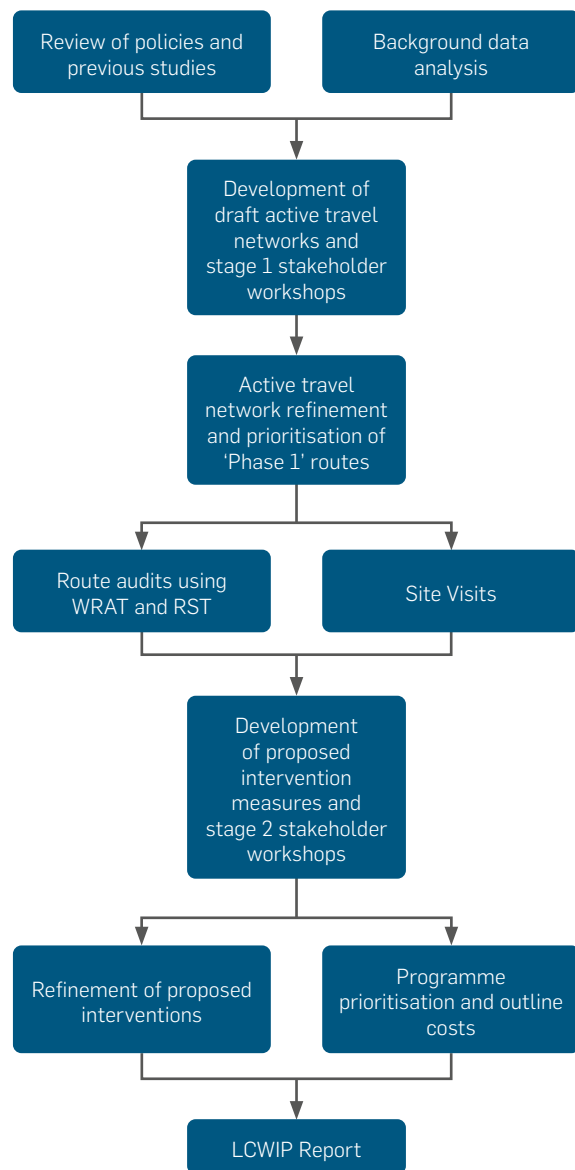


Figure 5. Study methodology

### Sustrans and Peer Review

Sustrans has contributed to the development of the LCWIP, acting as a 'critical friend' and providing feedback on study outputs. These activities were undertaken at key project milestones including the following:

- » Review of the approach and methodology, and participating in early stakeholder engagement.
- » Review of the initial proposed cycle network and walking zones, including a check and review against DfT guidance.
- » Audit of a corridor to benchmark, identify potential improvement measures and quality assure against AtkinsRéalis own quality assurance process (see Appendix 7: Sustrans Cycle Corridor 5 Review on page 222).
- » Review of the first draft LCWIP report including recommendations commensurate with LTN 1/20 guidance.

### Next Steps

The LCWIP report is the first stage in the process for investment in active travel in the Borough and Surrey more broadly. The end-to-end process is outlined below:

- » **Stage 1 - Plan (LCWIP Report)**
- » Stage 2 - Feasibility
- » Stage 3 - Business case / secure funding
- » Stage 4 - Delivery

The LCWIP report should be used to support the case for further stages of assessment, design, and stakeholder engagement and to secure funding to progress improvements for the corridors identified.

As an LCWIP is intended to facilitate a long-term approach to developing active travel proposals over a period of approximately 10 years, all of the corridors and zones identified within the active travel network maps are recommended for further consideration at an appropriate time in the life of the LCWIP implementation. The LCWIP outputs should also be integrated into local planning and transport policies, strategies and delivery plans, as per the DfT guidance.

The next stage of LCWIP implementation will be to advance the Phase 1 high-level concepts to feasibility assessment and design. This will allow a more detailed review of individual routes or interventions, evaluation of constraints, and refinement of the proposed design measures. During this process, and subsequent design phases, stakeholder engagement will continue to be a key element of developing high-quality and attractive routes for local users. The progression of these schemes, either as a work package or individual schemes, will likely be subject to external factors such as funding applications or potential inter-dependencies with other proposals within the local area.

The LCWIP should be viewed as a 'living document' and reviewed and updated periodically to reflect evolving needs and opportunities.



# Vision and Design Approach

The overarching vision and objective of the LCWIP is to facilitate modal shift and increase the number of people choosing to walk and cycle for short journeys or as part of a longer journey (e.g., combined with public transport), particularly for utilitarian trips. The LCWIP proposals also seek to support a variety of other objectives of Surrey County Council (SCC) and Surrey Heath (SHBC), such as:

- » Achieving climate change and low-carbon targets.
- » Strong and sustainable growth.
- » Reducing short car journeys.
- » Promoting health and well-being.
- » Reducing congestion and pollution.
- » Providing inclusive travel options.
- » Improving the economic vitality of the Borough.
- » Supporting a high quality of life for all residents.

Across the Borough, there are a variety of barriers that discourage walking and cycling, such as physical severance caused by railways or motorways, and proximity to high traffic flows and speeds. Inadequate routes, or a lack of them, can bring residents and visitors to rely on private transport, thus leading to increased volumes of short car trips and congestion within town centres and other areas of high demand.

Additionally, local high street areas can benefit from a regeneration process and creating spaces where people enjoy spending time, which can subsequently support the economic and social vitality for the area.

Good design is vital to the successful delivery of facilities to encourage modal shift. The design strategy aims to address these issues with the development of attractive Borough-wide walking and cycling infrastructure that prioritises people walking and cycling.

To support the vision, the design approach incorporates best practice guidance and aims to address accessibility<sup>1</sup> and the five key design principles of effective walking and cycling infrastructure:<sup>2</sup>

- » Coherent
- » Direct
- » Safe
- » Comfortable
- » Attractive

Ultimately, the design strategy looks to provide short as well as long term solutions that could be applied to further designs across the Borough.

The full extent of the design principles and best practice is detailed in the Cycling and Walking Network Proposals sections on page 101 and page 149, respectively.

<sup>1</sup> Department for Transport, Inclusive Mobility.

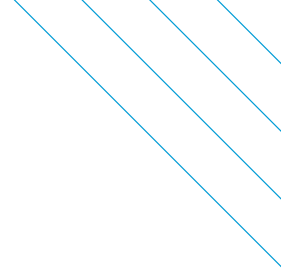
<sup>2</sup> Department for Transport, Cycle Infrastructure Design (LTN 1/20).



# Report Structure

The report is structured into the following sections:

- » **Executive Summary:** Presents a summary of the study process and the key outputs: selected walking zones and cycle corridors.
- » **Introduction:** Summarises the project aims, methodology and design approach.
- » **Previous Studies:** Summarises the policy and strategy context of the LCWIP, including walking and cycling strategies and previous proposals.
- » **Evidence Base / Background Data:** Information used to support the choice of potential walking and cycle corridors are introduced, such as key destinations, census data, collision data, and propensity to cycle tool (PCT) forecast flows.
- » **Stakeholder Early Engagement:** Meetings with stakeholders took place on nine occasions: an early engagement briefing on the scope of the LCWIP for the local members, four meetings were held during the selection of routes and a further four meetings were held to receive feedback on the proposed design interventions. This section summarises the meetings, with stakeholder comments included in the Appendices section on page 213.
- » **Cycle Network Development:** Summarises the optioneering process used for the selection of the cycle corridors, including the aspirational network and the Phase 1 corridors.
- » **Cycle Network Proposals:** This section presents the design approach and guiding principles for cycling, accompanied by images of best practice examples, followed by an overview of the proposed concepts for the Phase 1 cycle corridors.
- » **Walking Network Development:** In this section, the optioneering process used for the selection of core walking zones (CWZs) is presented, including the aspirational network and the Phase 1 CWZs.
- » **Walking Network Proposals:** This section includes the design approach and guiding principles for walking, accompanied by images of best practice examples, followed by an overview of the proposed concepts for the Phase 1 CWZs.
- » **Route Prioritisation and Costings:** Based on a multi-criteria framework (MCAF), this section presents a prioritised programme of infrastructure improvements and high-level, indicative costs for each corridor/CWZ.
- » **Conclusions:** This section considers the findings from the LCWIP and the next steps.
- » **Appendices:** In this last section, complementary data is presented such as walking and cycle audits and stakeholder engagement responses.



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## 2. Previous Studies

Introduction

Previous Studies & Policy Context

Relevant Schemes

# Introduction

The Surrey Heath Local Cycling and Walking Infrastructure Plan (LCWIP) is supported and informed by existing and emerging policies, previous and on-going studies, and existing scheme proposals. It is expected that many of the proposals included in this study will build upon their findings and recommendations.

To that end, this section reviews previous work relevant to the LCWIP, in so far as they inform the:

- » Policy context of the LCWIP.
- » Understanding and identification of key trip attractors and destinations.
- » Identification of preferred walking and cycling routes, existing issues, deficiencies and opportunities.
- » Development of a programme of infrastructure improvements.

# Previous Studies & Policy Context

## Cycling and Walking Investment Strategy 2 (2022)

The Cycling and Walking Investment Strategy 2 (CWIS2) sets out updated objectives and investments for active travel in England between April 2021 and March 2025. CWIS2 sets out the following ambition, which maintains the aim put forward in CWIS1 (2017):

*'To make walking and cycling the natural choices for shorter journeys, or as part of a longer journey by 2040.'*

Building on CWIS1 and Gear Change, CWIS2 sets out the following objectives:

- » Increase the percentage of short journeys in towns and cities that are walked or cycled from 41% in 2018 to 2019 to 46% in 2025.
- » Increase walking activity to 365 stages per person per year in 2025.
- » Double cycling from 0.8 billion stages in 2013 to 1.6 billion stages in 2025.
- » Increase the percentage of children aged 5 to 10 who usually walk to school from 49% in 2014 to 55% in 2025.

CWIS2 also promotes two longer-term objectives, which are aligned with the DfT's Gear Change and Transport Decarbonisation Plans and HM Government's Net Zero Strategy:

- » Increase the percentage of short journeys in towns and cities that are walked or cycled to 50% in 2030 and to 55% in 2035.
- » Deliver a world-class cycling and walking network in England by 2040.

CWIS2 outlines investment principles to achieve the objectives and enable everyone to walk, wheel and cycle. Central to this is a long-term investment approach to deliver high-quality infrastructure, supported by the development and delivery of LCWIPs, adherence to DfT's Cycle Infrastructure Design Guidance (LTN 1/20), and Manual for Streets. The development of the Surrey Heath LCWIP will support the achievement of the CWIS2 objectives and targets locally.

## DfT's LCWIP Technical Guidance (2017)

To assist local authorities, the DfT published guidance which broadly outlines the core elements and tasks that should be considered when developing an LCWIP. The methodology is intended to be flexible and adaptable to a given local authority's context, geographic scope, and resources. The study approach used for the Surrey Heath LCWIP reflects the DfT guidance.



Figure 6. Gear Change and LTN 1/20 documents. Source: DfT

## DfT's Gear Change & Cycle Infrastructure Design (LTN 1/20) (2020)

In 2020, the DfT published Gear Change and its updated Cycle Infrastructure Design (Local Transport Note 1/20). Both publications advance DfT's ambitions for a step-change in the provision of cycle infrastructure, a modal shift to cycling nationally, and establishing cycling as a form of mass transit. This supports issues related to public health, well-being, the economy and local business, climate change, the environment and air quality, and congestion.

Gear Change outlines four key themes to achieve a step-change in cycling:

- » Better streets for cycling and people.
- » Cycling at the heart of decision making.
- » Empowering and encouraging Local Authorities.
- » Enabling people to cycle and protecting them when they do.

LTN 1/20 provides a refresh of national cycle infrastructure design guidance (previously LTN 2/08), reflective of latest best practices. It is intended to support the delivery of the high-quality infrastructure necessary to achieve the ambitions of the CWIS2 and Gear Change. Inclusive cycling is an underlying theme, so that people of all ages and abilities are considered and empowered to take up cycling.

As with the CWIS2, development of the Surrey Heath LCWIP is central to achieving the ambitions of Gear Change locally. LTN 1/20 will be integrated into the LCWIP process, establishing the design aspirations of schemes identified as part of the LCWIP.

## DfT's Decarbonising Transport: Setting the Challenge (2020)

The strategy sets out the evidence and DfT's vision for the decarbonisation of the transport system. Transport is the largest contributor to UK domestic greenhouse gas emissions, contributing around 34% of all carbon dioxide emissions in 2019.

The strategy identifies six strategic priorities:

- » Accelerating modal shift to public and active transport.
- » Decarbonisation of road vehicles.
- » Decarbonising how we get our goods.
- » Place-based solutions.
- » UK as a hub for green transport technology and innovation.
- » Reducing carbon in a global economy.

Development of the LCWIP is aligned with accelerating the shift to active modes and supports place-based solutions.

## DfT's Decarbonising Transport: A Better, Greener Britain (2021)

The Transport Decarbonisation Plan (TDP) sets out a series of actions to decarbonise transport by 2050 and deliver against the UK Government's carbon budgets, focusing on 'in use' greenhouse gas (GHG) emissions from transport.

The TDP retains the six strategic priorities identified in 'Decarbonising Transport: Setting the Challenge', and outlines a range of measures to support these priorities. Related to active travel, these reiterate many of the actions and commitments of the CWIS and Gear Change, including:

- » Investing £2 billion in walking and cycling over five years with the aim that half of all journeys in towns and cities will be cycled or walked by 2030.



Figure 7. Decarbonisation Transport documents. Source: DfT



- » Delivering a world class cycling and walking network in England by 2040.
- » Creation of Active Travel England (ATE) to promote walking and cycling and act as statutory consultee in the planning process.
- » Funding for electric cycle trials.

The LCWIP is a fundamental element of the national policy strategy, and identifying active travel network improvements at the local level.

### Surrey County Council Local Transport Plan (LTP4)

Surrey's LTP4 sets the vision for the transport system in Surrey in 2032 and beyond. It marks a step change for transport in Surrey and is closely aligned with Surrey County Council's Climate Change Strategy and Surrey's commitment to achieving net zero carbon emissions by 2050.

The core principles of LTP4 are to avoid, shift, and improve travel, as outlined in the LTP4 extract (Figure 8). Shifting travel aims to follow the sustainable travel hierarchy, prioritising walking, wheeling and cycling over less sustainable modes through the delivery of facilities which make active travel more convenient, pleasant, and safe.

Key policy areas in LTP4 that are particularly pertinent to the LCWIP include:

- » Planning for place - Plan, design and improve local neighbourhoods to reduce the number and length of car trips.
- » Active travel and personal mobility - Prioritising walking and cycling to improve the health of the

county – this policy area includes the sustainable transport hierarchy, which prioritises walking and cycling over less sustainable modes (see Figure 9). The aim is to shift more journeys to sustainable modes by providing facilities to encourage many more journeys to be made actively (i.e., walking, wheeling, cycling).

- » Public and shared transport - Working with operators to improve journeys on public and shared transport. This includes reviewing opportunities to improve the walking and cycling networks that provide access to public transport services, with the aim of making them more direct, safer, easier to negotiate and more attractive to all sectors of the population.
- » Demand management for cars - Introducing measures to shift the priority from vehicles to active travel.
- » Efficient network management - Managing the efficiency of the highway network to minimise the impact on people and places.
- » Supporting behaviour change - Raising awareness to encourage more walking, cycling and use of public transport and electric vehicles.
- » Protecting the environment - Identifying and avoiding the impacts proposals may have on the environment wherever possible.

Development of the Surrey Heath LCWIP is critical to achieve LTP4 objectives. The LCWIP will identify potential infrastructure measures to encourage a modal shift to active travel, a shift to public transport by improving access to these services, and behavioural change. It will also support 'planning for place' and placemaking strategies of LTP4 which avoid the need to travel.

Local Transport Plan  
2022–2032

Get started

Draft for Consultation

Through collective action we can achieve our countywide LTP4 aspirations and our vision for:

**“A future-ready transport system that allows Surrey to lead the UK in achieving a low-carbon, economically prosperous, healthy and inclusive county with excellent quality of life for all residents, whilst seeking to enhance the built and natural environments.”**

**Avoid**  
Reduce the number and length of trips needed by improving land use planning, travel planning and levels of digital connectivity.

**Shift**  
Shift travel to more sustainable modes: public transport, walking, and cycling, away from car use.

**Improve**  
Improve emissions intensity and energy efficiency of vehicles and operational efficiency of roads, through technology improvements.

Figure 8. Surrey CC LTP4 vision and core principles. Source: SCC LTP4



## Surrey's Climate Change Strategy (2020)

Surrey's Climate Change Strategy sets out SCC's commitment to tackle climate change and support the UK's target of achieving net zero carbon emissions by 2050. It provides a joint framework for collaborative action on climate change across Surrey's local authorities and other partners.

The strategy sets a target of a 60% emissions reduction in the transport sector by 2035, and identifies the following ambition for the transport sector:

*"Deliver and promote an integrated, accessible, affordable and reliable public and active (walking or cycling) transport system across the County, thereby reducing journeys and improving local air quality for improved health*

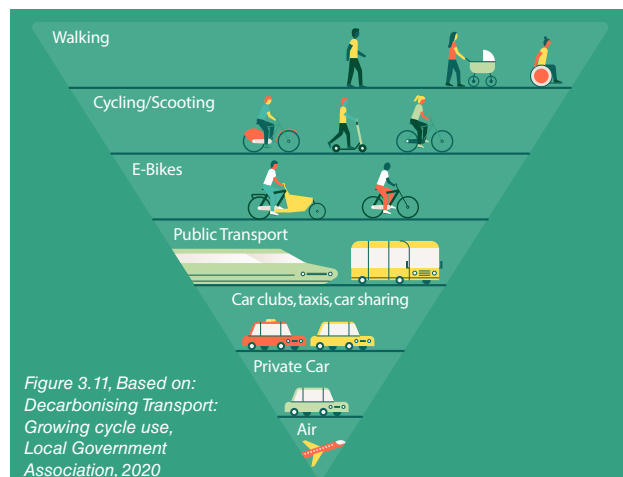


Figure 3.11. Based on: Decarbonising Transport: Growing cycle use, Local Government Association, 2020

Figure 9. LTP4 - Sustainable travel hierarchy: The sustainable travel hierarchy ranges from walking as the most sustainable travel mode, through to air travel as the least sustainable. Figure 3.11 from the LTP4 illustrates the types of travel option at each level. Source: SCC LTP4

*and well-being of our residents."*

Development and implementation of LCWIPs throughout Surrey is one of the actions of the Climate Change Strategy. Delivery of the LCWIP will provide high quality infrastructure to support and encourage modal shift to active travel options, and hence support achieving the Climate Strategy targets and ambitions.

## Surrey Cycle Strategy (2014-2026)

The Surrey Cycling Strategy was developed as part of the Surrey Transport Plan (LTP3) and sets out SCC's aim and approach for cycling in Surrey for the period to 2026. The aim of the strategy is 'more people in Surrey cycling, more safely.' The strategy recognises the multitude of benefits from encouraging people to cycle more, such as improved health, economic benefits from reduced absenteeism and reduced congestion, and improved air quality.

A key action of the strategy was the development of local cycling plans for each of Surrey's 11 districts and Boroughs to identify and deliver cycling improvements, reflecting local priorities and circumstances. The Surrey Heath LCWIP will be an opportunity to build



Figure 10. Surrey's Climate Change Strategy document. Source: SCC

upon the previous local plan and support delivery of the cycle network.

Another core strategy objective relevant to the LCWIP is to 'improve infrastructure to make cycling a safe, attractive and convenient mode of transport for people of all ages and levels of confidence.' The strategy presents principles by which cycling infrastructure should be designed and delivered, as follows:

- » Inclusivity
- » Safety and security
- » Comfortable and well maintained
- » Continuous and
- » Go where people want to go.

The above are consistent with the aims of the LCWIP and with the recent LTN 1/20 guidance. The core design principles will be considered as part of the network development and identification of infrastructure improvements as part of the Surrey Heath LCWIP.

## Right of Way Improvement Plan (RoWIP) (2014)

The Rights of Way Improvement Plan (RoWIP) was developed as part of the Surrey Transport Plan (LTP3). It identifies measures related to the management of and improvements to the local rights of way network, in order to meet the Government's aim of better provision for walkers, people cycling, equestrians and people with mobility difficulties.

There are 3,444km of rights of way across Surrey and 166km within Surrey Heath. This off-road network is a key component of the



broader active travel network, and provides opportunities to improve network connectivity and provide more direct links for pedestrians and people cycling.

The LCWIP will promote the core objectives of the RoWIP, particularly improving accessibility and connectivity and reducing severance. Development of the LCWIP will support more attractive walking and cycling routes to connect leisure, residential and employment areas.

### **Surrey Future**

Surrey Future brings together Surrey's Local Authorities and business leaders to agree the investment priorities to support the county's economy. It considers how to manage planned growth sustainably, both in Surrey and on its borders. The initial focus for Surrey Future is on the strategic physical infrastructure required to deliver the economic development and spatial growth priorities. As part of Surrey Future, the following plans have been developed.

#### **Surrey Community Vision 2030**

The Surrey Community Vision 2030 sets out a vision for people and place in the county for 2030, informed by current conditions and challenges within Surrey based on a range of quantitative sources including government statistics and Surrey-I (a platform which brings together data from key stakeholders across the county).

The Vision sets out an aim for people in Surrey to 'live healthy and fulfilling lives'. This could be supported through a modal shift towards

cycling and walking. The aims and objectives of this LCWIP therefore align with and support this aim put forward in the Surrey Community Vision 2030.

#### **Surrey 2050 Place Ambition (2019)**

Surrey as a place has a central role to play in the regional and national economy and is already making a significant contribution to wealth creation, enterprise, jobs, business, homes, physical infrastructure, and skills. The vitality of Surrey's places and communities is at the heart of what defines the approach to "good growth". Its vision is for a county of well-functioning and connected places, with healthy communities and a high quality of life.

The 2050 Place Ambition defines good growth for Surrey as something that:

- » Is proportionate and sustainable, focusing on the places where people both live and work.
- » Supports overall improvements to the health and well-being of our residents.
- » Supports the necessary infrastructure investment - including green infrastructure.
- » Delivers high quality design in our buildings and public realm.
- » Increases resilience and flexibility in the local economy.
- » Builds resilience to the impacts of climate change and flooding.
- » Is planned and delivered at a local level while recognising that this will inevitably extend at times across administrative boundaries.

The LCWIP will support the ambitions for 'good growth' through the development and promotion of high-quality active travel networks. This will support improved local access and connectivity, enhancing the sense of place within local communities, and health and environmental benefits.

#### **Surrey Infrastructure Study (2017)**

The Surrey Infrastructure Study (SIS) predates the Infrastructure Plan and presents a technical evidence base of Surrey's infrastructure needs to 2031.

The plan contains an overview of growth patterns and the infrastructure projects needed to support such growth, broadly encompassing education, health and social care, community, green infrastructure, utility, transport, flood defences, and emergency services.

Within the context of active travel and the LCWIP, the SIS notes that high level of cycle ownership in Surrey indicate significant suppressed demand for cycling. However, there are a number of issues and challenges, including but not limited to:

- » The need to equip different road users with the skills to share the road safely.
- » The challenge of achieving cycle infrastructure segregation on narrow, congested roads.

A series of walking and cycling improvements from the provision of new cycle routes to the widening of footways are required across all local authorities within Surrey in town centres and at busy junctions. Development of the LCWIP will help address the need for infrastructure investment. Improving access to public transport, particularly railway stations, will be a factor in identifying potential walking and cycling routes in Surrey Heath.

### Surrey Forward Programme 2018

The programme identifies short, medium, and long-term schemes and packages of measures which seek to deliver improvements in line with the objectives of the Local Transport Strategy and the identified problems and issues.

The Surrey Heath Forward Programme was last updated in 2018; however, it can help inform the LCWIP in terms of the existing and proposed schemes and transport interventions. The schemes are categorised into various 'Transport Types' including cycling, walking, bus, highways, and others. The schemes considered to be most relevant to the Surrey Heath LCWIP have been outlined in the 'Relevant Schemes and Previous Studies' section, and where available the current status of the scheme has been provided.

The Surrey Heath LCWIP will consider existing, ongoing and proposed schemes including those outlined in the Forward Programme.

### Draft Surrey Heath Current Local Plan (2019-2038)

The Surrey Heath Local Plan provides the local policy framework for the Borough against which planning applications will be assessed.

The adopted Plan currently consists of:

- » The Local Plan document.
- » The Core Strategy and Development Management Policies Development Plan Document 2012 and the Policies Map 2012.
- » Camberley Town Centre Area Action Plan (2011-28) and Policies Map.

The Council is preparing a single new Local Plan to cover the period to 2038. The emerging Plan is outlined beneath the existing planning policy documents.

#### The Local Plan document

The Surrey Heath Local Plan provides the local policy framework for the Borough against which planning applications will be assessed. This section discusses the 2000 Local Plan (extant saved policies only).

The Surrey Heath Local Plan 2000 was adopted in December 2000. Whilst the 2000 Local Plan document is highly outdated today, a number of the objectives and aims for the Borough remain the same, and the LCWIP will help contribute to continuing the progress towards achieving them, notably:

- » The alleviation of traffic congestion.
- » The enhancement of non-car based travel, particularly facilities for cyclists and pedestrians, including those with disabilities.

### Core Strategy and Development Management Policies Development Plan

The Core Strategy and Development Management Policies Development Plan Document (CS&DMP DPD) sets out the strategy and policies to address the future development of the Borough in the period up to 2028. Adopted in 2012, this document now forms part of the Local Plan for the Borough.

The Core Strategy seeks to address the key challenges faced by the Borough and sets out the overall vision for Surrey Heath. It states the following:

*'By 2028 residents will continue to enjoy a prosperous and high quality of life based around sustainable growth and a strong economy supporting a healthy, safe and diverse society that enjoys a high quality environment in which the natural heathland environment and character of towns and villages (with their green areas) is protected and enhanced...'*

The objectives outlined represent the key outcomes required to deliver the Vision for the Borough. There are some objectives particularly relevant to the Surrey Heath LCWIP, including:

- » Promote and deliver sustainable development in the Borough.
- » Minimise the effect of climate change upon the Borough through a reduction of greenhouse gas emissions and adoption of more environmentally friendly technologies and practices in both new and existing developments.



- » Improve travel choice and transport services to encourage sustainable travel patterns and, in particular, reduce reliance on the private car.
- » Promote the role of Camberley town centre as a secondary regional centre and as a safe and attractive retail, cultural and entertainment centre with a high quality of environment.
- » Maintain the role of Bagshot and Frimley as district centres for local shops, services and community facilities and protect these uses elsewhere in the Borough.

Many of the policies are centred around achieving sustainable development, with public transport and active travel identified in many policies as a key investment opportunity to contribute towards this. The LCWIP will encourage and identify walking and cycling opportunities that will help the Borough grow in a more sustainable way and encourage mode shift away from the existing over-reliance on private vehicles.

The Princess Royal Barracks development in Deepcut is identified within the Core Strategy as a strategic development site and a major regeneration opportunity for Surrey Heath, after the Council prepared significant and detailed guidance regarding the development of Deepcut in the form of a supplementary planning document in 2011.

The development will include 1,200 new homes and other leisure and employment land uses. It will contribute significantly to the housing growth targets for the Borough. The

development site is referenced in Core Policies (CP);

- » CP1 Spatial Strategy.
- » CP3 Scale and Distribution of New Housing.
- » CP4 Deepcut.

The Princess Royal Barracks (Mindenhurst) Development site is outlined in further detail in the 'Relevant Schemes & Previous Studies' section.

Camberley Town Centre Area Action Plan (2011-2028) and Policies Map is outlined in further detail in the 'Relevant Schemes and Previous Studies' section.

### Emerging Surrey Heath Local Plan 2019-2038

The Draft Surrey Heath Local Plan will replace policies in the Core Strategy and DM Policies DPD, the Camberley Town Centre AAP and the existing Adopted Local Plan (2000) for the Borough. It will set out a vision for how Surrey Heath will develop as a place up to 2038. It will outline future needs for development and provide guidance as to where development will go. The emerging Local Plan is under preparation and planned to be adopted in 2025.

The Plan will play an important role in shaping the Borough's future, including focus on how communities will develop, policies around protection and enhancement of the natural environment, developing the local economy and generating jobs, improving leisure and visitor facilities, and supporting more sustainable forms of transport. The Surrey Heath LCWIP will support

the vision of the Draft Local Plan in delivering more sustainable modes of transport. It will propose appropriate walking and cycling routes to improve active travel infrastructure within towns and villages, and between them, creating a better-connected Borough, and facilitating and encouraging more sustainable lifestyles.

A new Strategic Highways Assessments Report is prepared alongside the Local Plan to support the latest version of the Local Plan.

### Surrey Heath Infrastructure Delivery Plan (2013-2023)

The Infrastructure Delivery Plan (IDP) is an important item of evidence which supports the adopted Surrey Heath Local Plan and outlines what infrastructure is required to for the development proposed in the Core Strategy & Development Management Policies DPD and a future Camberley Town Centre AAP.

There are numerous transport infrastructure projects and highway improvement schemes identified within the IDP, with specific focus around the areas of:

- » Camberley Town Centre (Highway and cycle improvements).
- » Blackwater Valley Route and the Yorktown (Highway improvements).
- » Frimley and Frimley Green (Highway and cycle improvements).

These are outlined further in the 'Relevant schemes & Previous Studies' section.

## Draft Surrey Heath Infrastructure Delivery Plan (2022)

The Draft Infrastructure Delivery Plan (IDP) provides context, evidence, and information about the delivery of necessary infrastructure to support the growth identified in the Draft Local Plan (2019-2038). The Draft Local Plan is currently (2023) under development by Surrey Heath Borough Council.

The Local Plan spatial strategy over the Plan period (Local Plan Policy SS1) comprises the delivery of 5,680 new homes as well as employment and retail development. The Plan identifies that the Borough's infrastructure needs will be the greatest in and around Camberley Town Centre and at Deepcut, where a significant proportion of the planned growth will take place.

The LCWIP will identify opportunities for sustainable transport network links within and between existing settlements in Surrey Heath and new development areas, helping to make active travel a more attractive mode choice, particularly for shorter journeys.

## Surrey Heath Borough Council Climate Change Action Plan

In 2019, the Council declared a Climate Emergency and pledged to become carbon neutral by 2030 across its estate and operations, including contractors used, and support the actions being taken by Surrey County Council in the area.

The Surrey Heath Climate Change Action Plan has two key objectives:

- » To work towards achieving the ambitious net-zero carbon emission target by 2030 as an organisation and contribute to making the Borough net zero by 2050 (with the aspiration for net zero by 2030).
- » To ensure the Council as an organisation is resilient to the impacts of climate change and support the resilience of the Borough to the impacts of climate change.

Relevant to this document, the plan sets the objective to "*Work with partners to support initiatives and infrastructure to increase the uptake of walking, cycling and public transport, and low emission vehicles*".

The LCWIP supports the aims of the Action Plan, particularly the delivery of initiatives and infrastructure improvements to increase the uptake of walking, cycling and public transport, as well as the council's objective to encourage the adoption of more sustainable lifestyle choices.

## Surrey Heath Local Transport Strategy (2014)

The strategy supports the growth set out within the Borough Local Plan and provides a programme of transport infrastructure required to deliver it.

The strategy outlines the main transport challenges in Surrey Heath. Those most relevant to the LCWIP include:

- » Environmental issues such as impacts of congestion and transport impacts on air quality.
- » Heavy reliance on private car travel.

- » Cycling and walking infrastructure accessibility issues between employment, commercial and residential centres.

It also discusses localised problems and issues faced by each of the settlements and communities within the Borough, with solutions proposed. There are some common issues highlighted including:

- » Community severance caused by congestion.
- » Poor walking infrastructure in places.
- » Safety issues for pedestrians due to poor infrastructure.
- » Road safety issues for cyclists and pedestrians.
- » Poor cycle links and infrastructure.

The Local Transport Strategy will help to inform the LCWIP in terms of the Borough-wide problems and transport objectives, but also localised issues being experienced in the communities within Surrey Heath.



## Healthy Streets for Surrey (2023)

Surrey's Healthy Streets aims to create streets which are safe, green, and resilient in line with the ambitions of Community Vision for Surrey 2030. The Healthy Streets for Surrey design code provides developers and other professionals planning for Surrey a reference to relevant national and local guidance and policies. While this document provides context-specific guidance on street design for Surrey, it builds on existing national guidance including the National Planning Policy Framework (NPPF), the National Model Design Code (NMDC) and Manual for Streets 1 and 2 and the forthcoming update. Some key principles and design standards to follow are as follows:

### Healthy Streets for Surrey core principles

The guidance document outlines that streets must be designed with a clear hierarchy of users; firstly, for pedestrians, cyclists, public transport, and then private vehicles.

- » The networks for each user should provide direct routes and be designed as pleasant places that are attractive and feel safe to use for pedestrians and cyclists.
- » The networks should link to existing roads and local services and must be finely defined, providing direct and pleasant routes for walking and cycling.
- » Streets should have regular green elements (such as trees) and public spaces and make positive use of existing natural features.

- » **Governance:** Healthy Streets for Surrey summarises funding agreements that arise from development and the importance of working closely with developers and communities throughout the design process to develop a coherent network of infrastructure across Surrey. Section 106 Agreements (S106) must be spent at a specific location relevant to the source funding, whereas with the increasing provision of funding through CIL, there is greater flexibility within a wider community as to where these monies are spent. Section 38 and Section 278 Agreements do not directly involve payments but provide prime opportunities for well-designed improvements/infrastructure in kind. Any new Proposals should align with the District LCWIPs and any relevant local Supplementary Planning Document (SPD), Borough or Neighbourhood Plan to ensure the delivery of a coherent network of infrastructure.
- » **General Layout principles:** Surrey's streets must be designed in a way that provides a sense of place as well connectivity and accessibility to Surrey's Boroughs and districts.
- » **Carriageway and junction design:** Streets should be designed to move people safely, happily, and healthily and minimise the negative impact of traffic such as carbon emissions and air and noise pollution. The aim should be to move people, rather than just vehicles, efficiently.
- » **Pedestrian and pavement design:** Pedestrian paths and spaces for people take precedence over other street design elements. They must be well connected to homes, local services

and other uses, feel safe and easy to navigate. This section details the design specification of pavements such as minimum and maximum widths and materials used. It also specifies that two types of level surface streets should be used; pedestrian priority streets on narrow and low trafficked streets, and delineated level surface streets.

- » **Street furniture, lighting and signage:** Street lighting must meet the requirements outlined in the Surrey County Council Street Lighting Developer's Brief and associated specification documents. The selection of bollards must reflect their setting especially in heritage or rural contexts.
- » **Vehicle Parking:** Parking demands within Surrey are set by Boroughs and districts. Surrey is adopting split parking provision for when more than one parking space is provided. Parking provision should respond to the standards set out in the relevant District and Borough guidance.
- » **Cycling:** The latest SCC Local Transport Plan (LTP4) aims to connect key destinations with a comprehensive cycle network. It also includes the provision of segregated or low speed, traffic calmed routes with separation between cyclists and pedestrians. The proposed Street Hierarchy in this guidance document sets out the requirements for each street typology. Any design infrastructures should follow the LTN 1/20 guidance.

» **Public Transport Introduction:** Routes must be designed holistically and consider pedestrian and cycle access to and from bus stops to allow for seamless transitions with different modes of public and active travel. Parking control, bus stop location and highway geometry are key considerations. Speed management should be bus friendly, however in high streets or areas with high footfall, it is fine to allow slower bus speed where pedestrians will become priority. Sufficient safe cycle parking by bus stops/railway stations and locating bus stops in development centres or next to schools is essential. This document also contains bus stop technical specifications and links to resources to public transport design. On larger schemes or where distances to local services may be prohibitive to pedestrian and cycle access, mobility hubs should be included.

Additionally, the Healthy Streets for Surrey design code sets out the guidance for the processes of new schemes, governance, street trees and sustainable drainage systems.

Development of the LCWIP will support the hierarchy of users, having pedestrians and vulnerable road users on the top of the pyramid, followed by cyclists and public transport, by ensuring that a coherent active travel network is developed for the Borough. Infrastructure improvements for the prioritised areas and corridors, aiming to improve safety for road users, will follow the Healthy Streets for Surrey and national guidelines.

# Relevant Schemes & Previous Studies

## Draft Surrey Heath Local Street Improvements Plan

Local Street Improvements (LSIs) are being planned across Surrey in defined areas to ensure streets recognise their importance as places for people, and not just their importance for the movement of vehicles. Surrey's LSI programme aims to create safer, healthier and more attractive places, which include appropriate vehicle speed limits and improved facilities for walking, wheeling and riding. Preliminary work has been undertaken to identify potential zones across Surrey Heath. The draft locations identified to date have been shared to inform the development of the LCWIP. The extents of the LSIs are still work in progress therefore are not presented in the report.

## Surrey Infrastructure Plan

The Surrey Infrastructure Plan contains a list of 12 transport schemes and projects that are located in Surrey Heath. Those of most relevance to active travel and the LCWIP are outlined below and presented in Figure 16 on page 41. The majority of the projects are existing commitments, with a degree of certainty attached; either having commenced, planning permission granted or funding being secured, and are all at different stages of development.

## Camberley to Frimley Cycleway (National Highways Designated Funds)

Surrey County Council has been awarded design funding for this scheme. The scheme is aiming to improve active travel infrastructure between Camberley and Frimley (key urban centres of Surrey Heath). The design work is ongoing. The draft route alignment includes Park Street, Gordon Road, Gordon Avenue, Belmont Road, Park Road, Bristow Road, Frimley Road, Lyon Way, Station Road and Frimley High Street.

## Surrey Heath Villages Cycle Links

This scheme proposes a number of off-carriageway cycle routes along A319 and A322 corridors, to create better connections between settlements in Surrey Heath, with specific active travel links between;

- » West End and Chobham.
- » Lightwater, West End and Bisley to Brookwood Railway Station.

## A30 London Road Bagshot

Pedestrian and cycling improvements between Camberley and Bagshot. This includes widening of existing footway on the southern side of

the A30 carriageway between Jolly Farmer roundabout and Waterers Way.

## Camberley Station and Pembroke Broadway

Interchange and Last Mile Pembroke Broadway to become a multi-modal gateway to Camberley with improved pedestrian, cycling and bus infrastructure.

## Frimley Smarter highway and bus corridor improvements

Smart highway and bus infrastructure measures and improvements proposed in Frimley.

## Railway station hubs and access programme

Designed to improve access by all modes between railway stations and town centres.

## Surrey Forward Programme 2018

The Surrey Heath LCWIP will consider existing, on-going and proposed schemes including those outlined in the SCC Forward Programme.

The schemes considered to be relevant to the LCWIP are outlined below, however many other sustainable transport schemes are listed in the Programme. The schemes are presented in Figure 16 on page 41.



### **Borough wide schemes to improve Air Quality**

- » A322 cycle route: An off-carriageway cycle route connecting Lightwater, West End, and Bisley, linking to Brookwood Railway Station.
- » Borough-wide behaviour change programme: measures which encourage modal shift towards sustainable transport modes, including campaigns, engagement, and travel planning.
- » Borough-wide bus reliability and infrastructure improvements: The scheme aims to improve bus accessibility and reduce private car travel.

### **Camberley area**

- » A30/ A331/ Meadows Gyratory Corridor – (Construction completed in 2019): Improvements at the junction to reduce congestion and improve the provision for pedestrians and cycles.
- » A30 London Road/ Camberley Town Centre (Construction started in 2021): This scheme introduced highway interventions with cyclist/ pedestrian enhancements along the A30 to improve access for sustainable travel.
- » Camberley Town Centre Public Realm Improvements – Construction completed: Pedestrian improvements along the High Street, Princess Way and Knoll Walk.
- » Cycle route proposals: Proposals for new and improved cycle facilities have been included in the programme, however there are no further plans for implementation.
  - Between Deepcut and Camberley Railway Station via B3411 and Park Road.

- Between Tomlinscote School, Frimley and Camberley via residential roads and improved cycle footbridge over the M3.
- Between Camberley and Old Dean, connecting to leisure routes at Swinley Forest.
- Between Heather Ridge Infants School and Camberley via residential roads, Crawley Hill and Church Hill.
- » Camberley Sustainable Transport Package: Walking, cycling and bus corridor improvements to provide links to the railway station in the town centre.

### **Frimley area**

- » Frimley Transport Network Improvements: Improvements to reduce congestion and improve bus travel, cycling and walking in Frimley.
- » New shared use path on A325 between Frimley Park Hospital and Ravenswood Roundabout.
- » Cycle facility between The Maultway and Chobham Road via B311.

### **West End area**

- » A319 West End to Chobham cycle route: Interventions to improve cycle accessibility along the key corridor between the two settlements.

### **Chobham area**

- » Improve footways and cycle facilities within Chobham and linking Chobham with West End (as above).
- » Chobham to Woking cycle route via Station Road (A3046)/ Horsell Common Road and through Horsell to Woking Town Centre (Partially

completed).

The section within Woking is completed (including new off-road shared-use facility). The interventions included improvements and widening of the existing paths to facilitate shared-use paths. Surrey Heath section has been partially delivered, with the existing footway to the south-eastern most access to Deep Pool Lane being widened.

### **Bagshot area**

- » A30 Cycle route linking the High Street with Maultway Roundabout (Partially completed): Cycle improvements were implemented at Waterers Way and American Golf Roundabout late 2018/ early 2019 and included a shared use path on the southern section of the road.
- » Cycle route connecting Lightwater and Bagshot to address severance of the M3 and accessibility.

### **Other areas (Bisley, Lightwater, Mytchett, Windlesham, Deepcut)**

Improvements to sustainable transport infrastructure specifically walking and cycling provision to enhance connectivity between settlements and to local amenities.



## Neighbouring Borough/ District LCWIPs

The Surrey Heath LCWIP is part of Surrey's broader LCWIP programme to develop LCWIPs county-wide (see Figure 11).

LCWIPs have been completed or are in development in several neighbouring Boroughs/ districts, towns and local authorities. These have been considered during development of the Surrey Heath LCWIP to provide broader cycle network connectivity across administrative boundaries.

Neighbouring areas with LCWIPs completed or in progress (as of December 2023) include:

- » Woking Town LCWIP (SCC) - Completed / adopted. The plan identified cycle corridors with Woking Town that extend towards Surrey Heath via Knaphill. A separate LCWIP for the Borough will be produced in the future.
- » Runnymede Borough LCWIP (SCC) – completed / adopted. The aspirational cycle network for Runnymede extends to the Surrey Heath boundary and provides connections to Longcross Development and Stonehill.
- » Guildford Borough LCWIP (SCC)- Initiated in 2023.
- » Rushmoor Borough LCWIP (HCC) – completed / under consultation. The proposed cycle and

walking networks extend through the urban area in Farnborough up to Surrey Heath's boundary providing crossings of the railway lines, the A331 and the watercourses. s

- » Hart District LCWIP (HCC) – in development.
- » Bracknell Forest Borough LCWIP – in development.
- » Windsor and Maidenhead Borough LCWIP (RBB) – completed / not adopted.

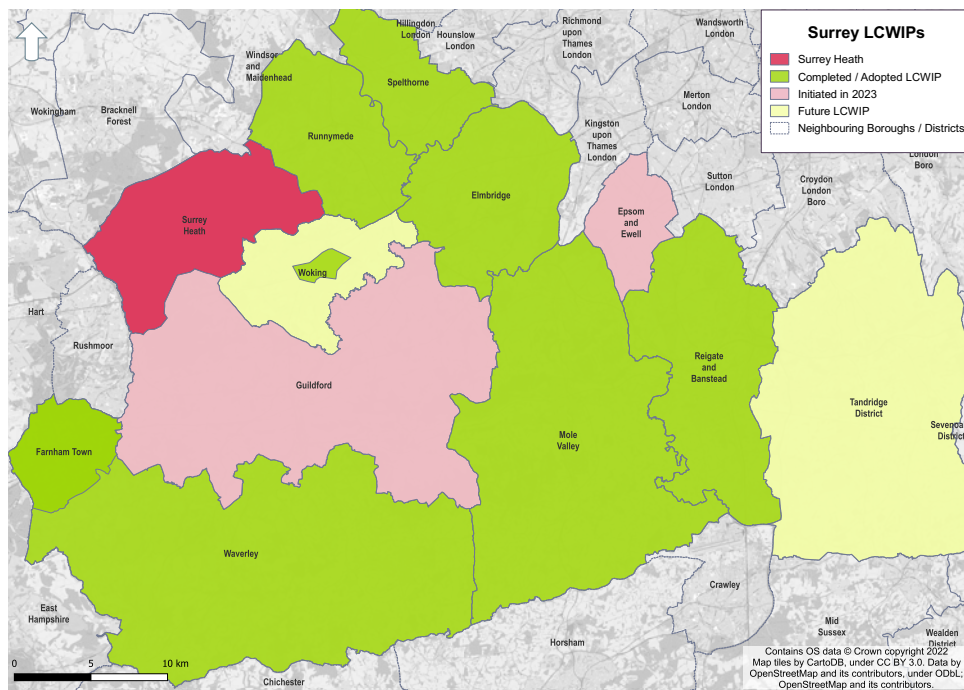


Figure 11. Surrey LCWIP roll-out programme

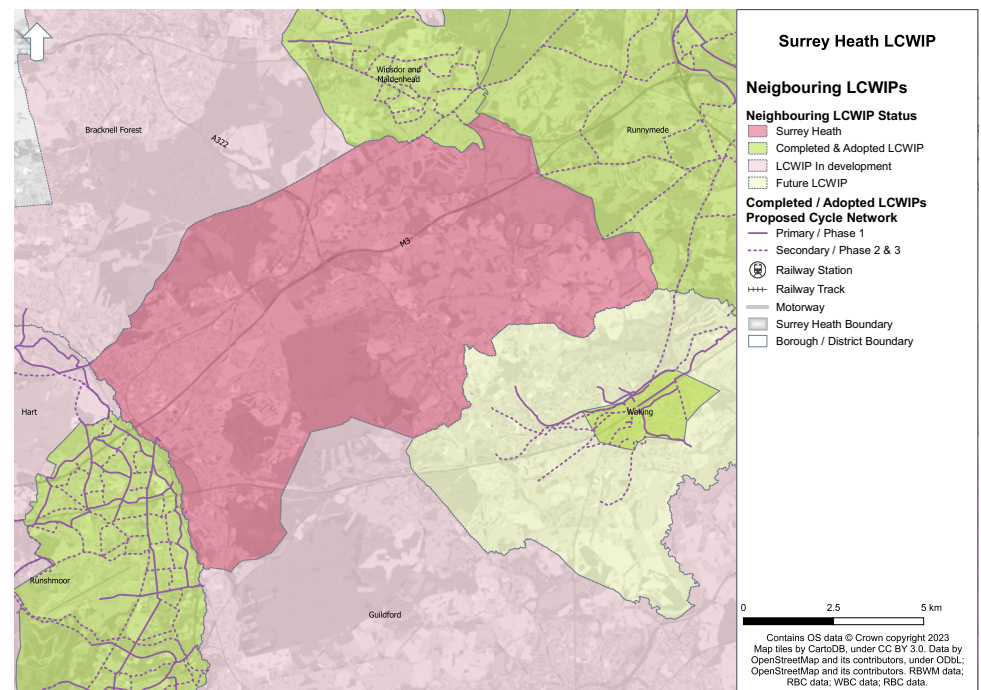


Figure 12. Neighbouring LCWIPs and potential links

## Surrey Heath Infrastructure Delivery Plan (2013-2023)

The Infrastructure Delivery Plan (IDP) is an important item of evidence which supports the adopted Surrey Heath Local Plan. There are numerous transport infrastructure projects and highway improvement schemes identified within the Infrastructure Delivery Plan (IDP) for the period of 2013-2018.

The majority of the projects are existing commitments, with a degree of certainty attached; either having commenced, planning permission granted or funding being secured. The schemes are outlined below and presented in Figure 16 on page 41, which are all at different stages of development.

### Camberley Town Centre

Highway improvements identified by SCC include:

- » Improved bus stop facilities close to the junction of London Road/ High Street junction possibly extending along the High Street-Park Street, with pedestrian improvements.
- » Bus priority measures.
- » Cycle Forum Priority Route 1 – London Road off-carriageway route.
- » Cycle Forum Priority Route 2 – Toucan/ Pelican crossing on Portsmouth Road Camberley Centre to Tomlinscote.
- » Cycle Forum Priority Route 3 – Old Dean Estate to Camberley Town Centre.
- » Cycle Forum Priority Route 4 – Heatherside/ Deepcut to Camberley Town Centre.

Various junction improvements are proposed including new signalised crossings, and improvements to traffic signals and junction layouts:

- » A30 London Road/ Park Street.
- » A30 London Road/ Knoll Road/ Kings Road.
- » Knoll Road/ Portesbery Road.
- » High Street/ Portesbery Road/ Pembroke Broadway.
- » A30 London Road between Town Centre and Meadows Gyatory.
- » Cycle network along A30 London Road/ Knoll Road/ Portesbery Road/ Pembroke Broadway/ Charles Street.

### Blackwater Valley Route and the Yorktown

Improvements identified by SCC include:

- » Bus lay-bys, improved passenger transport information, bus gates and priority measures, provision of bus services between Yorktown and Camberley Town Centre.
- » Blackwater Valley cycle route.
- » Toucan crossings, cycle crossing at Watchmoor Park.

### Frimley and Frimley Green

Improvements identified include:

- » Junction improvements to A325 Frimley 'Toshiba' Roundabout: The A325 Frimley 'Toshiba' Roundabout implemented to tackle issues such as peak hour congestion, traffic diverting to the High Street to access the A331 and to improve safety by controlling the conflict between traffic and pedestrians.

- » Traffic management measures along Buckingham Way.
- » Alteration of the two access roads at The Green into the Hatches to form a one-way route.
- » Junction of Frimley Green Road with Henley Drive.

## Neighbourhood Planning for Surrey Heath

The Council has designated the following Neighbourhood Planning areas, where Neighbourhood Plans exist or are currently being prepared:

- » Windlesham (2018-2028)
- » Deepcut (2014)
- » Chobham (2013)

### Windlesham Neighbourhood Plan 2018-2028

The Windlesham Neighbourhood Plan (WNP) is the only completed and adopted Neighbourhood Plan in Surrey Heath. Adopted in 2019, it sets out a vision for Windlesham village that reflects the desires of local people and the community. The Plan sets objectives on key themes such as housing, transport, green space and employment.

There are no dedicated cycleways within the WNP area and many roads are unsuitable for cycleways due to being narrow. Surveys with residents set out a list of routes they would like to see prioritised. The top three in order are from Windlesham to Lightwater, Sunningdale and Bagshot.

The LCWIP will consider opportunities for cycle routes for the residents of Windlesham as these were outlined in the Neighbourhood Plan.



## Surrey Heath Current Local Plan - Identified schemes

### Camberley Town Centre Area Action Plan (2011-028) and Policies Map

The Camberley Town Centre AAP forms part of the Local Plan for Surrey Heath and sets out policies relating to the future development of Camberley Town Centre.

The Plan was adopted in 2014 and will shape development within the town centre in the period up to 2028 until replaced by a new Local Plan.

Within the context of transport and accessibility, the AAP lists a number of key issues relevant to active travel and the LCWIP including:

- » Improving public and sustainable modes of transport and increasing the use of modes of travel other than the car.
- » Balancing the need to keep traffic flowing on the road network with opportunities to give greater priority to pedestrians, cyclists, people with disabilities and buses.
- » A network of cycle routes and improved cycle parking.
- » Improving pedestrian links and access for people with disabilities within and to the town centre.

Development of the Surrey Heath LCWIP will support addressing some of the issues identified in the AAP. The LCWIP identifies potential walking and cycling routes across the Borough to improve accessibility in and between communities.

The AAP includes several high-level proposals for walking and cycling measures which aim to improve accessibility in the town centre, enhance the attractiveness of sustainable modes of travel and the overall quality of the public realm. Key Town Centre (TC) policies and measures mentioned are listed below and presented in:

#### TC9 Pedestrians:

Proposals for policies which will create a pedestrian friendly area within the High Street with limited vehicle access on the High Street between Princess Way and Obelisk Way, including Obelisk Way.

Additionally, the following pedestrian routes are proposed:

- » Connecting the east and west sides of Obelisk Way.
- » Connecting the east and west sides of Princess Way.
- » Between Pembroke Broadway and Princess Way.
- » Between Pembroke Broadway and the Station.

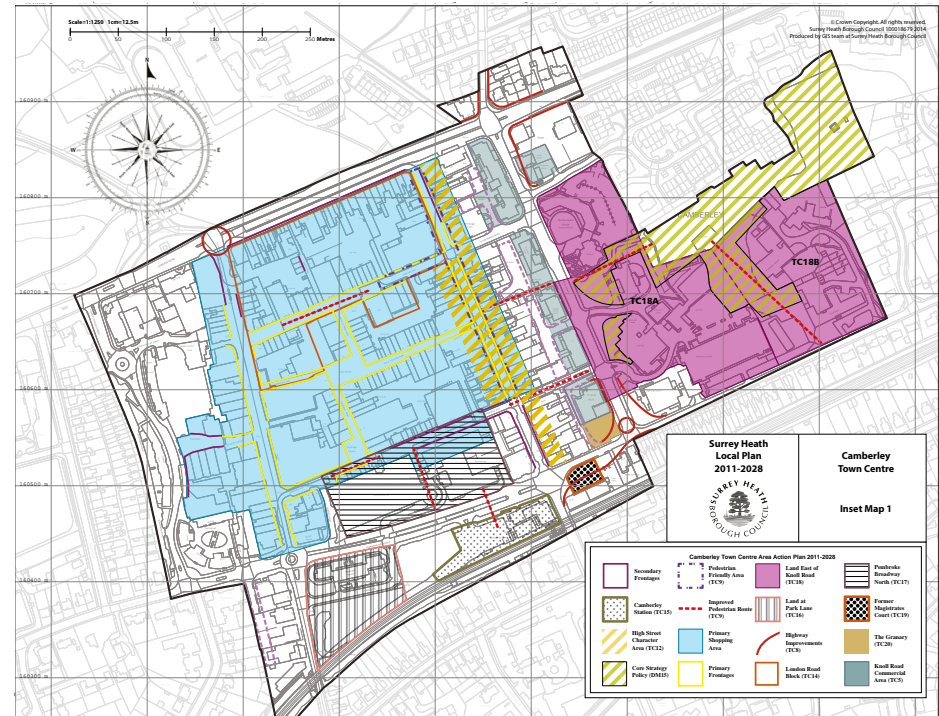


Figure 13. Camberley Town Centre Area Action Plan (AAP) Source: Surrey Heath Borough Council, Camberley Town Centre Area Action Plan Policies Map

- » Between High Street and Knoll Road along Knoll Walk and Bissingen Way, then connecting to the Land east of Knoll Road.
- » Connections to Camberley Park from Knoll Road and Portesbery Road.

### TC 14 London Road Block, Camberley Town Centre

The London Road Block is a key development site within Camberley Town Centre, which provides an opportunity for a major, residential-led regeneration scheme. Owned by Surrey Heath Borough Council, regeneration of the London Road Block site will revitalise an underutilised area of Camberley Town Centre, providing a contemporary, sustainable, mixed-use development, with an attractive and accessible public realm.

Regeneration of the London Road Block will improve the integration of services for the public within the Town Centre area and provide high-quality residential development. According to the policy, the London Road Block site is allocated for a comprehensive, residential-led, mixed-use redevelopment, comprising approximately 550 new homes (net) with supporting infrastructure, an appropriate mix of Town-Centre uses with well-integrated services and the creation of a high-quality public realm.

Development proposals are required to accord with a masterplan for the site that is agreed by the Council and are required to adhere to various housing, commercial, public realm, design, infrastructure, transport, environmental and climate change conditions listed in the document. The policy for transport infrastructure includes providing appropriate contributions toward highways and public transport, and to incorporate improved transport infrastructure comprising:

- » Improvements to the London Road junctions with the High Street and Park Street and the creation of pedestrian friendly areas at Obelisk Way (east) and the High Street (north).
- » Improved pedestrian and cycle links between the High Street and Park Street, and London Road to the Square Shopping Centre.
- » Provision of a new bus stop and taxi rank at the London Road gateway.
- » Improved pedestrian and cycle links along the London Road.
- » Potential provision of a short-stay drop-off or pick-up point and on-street disabled parking located at the London Road gateway, which provides electric vehicle charging capacity for all parking spaces.
- » Support for accessible and well-connected bus services to the London Road Gateway.
- » Appropriate accesses for service vehicles that are convenient for use but designed discreetly to ensure they do not detract from the attractiveness of the new development.

TC15 Camberley Railway Station: Camberley Railway Station is proposed for redevelopment. Any redevelopment should:

- » Provide a new station and associated car parking.
- » Contribute towards improved facilities for bus users.
- » Contribute towards environmental improvements on Pembroke Broadway which should reduce the speed of road traffic and provide an improved sense of connection for pedestrian movement.

### **Mindenhurst (Princess Royal Barracks) Development**

Planning permission was granted in 2014 for the major residential-led development. It is located on the site of the former Princess Royal Barracks, Mindenhurst and will consist of approximately 1,200 new homes, as well as essential local amenities. It will feature the following:

- » 1,119 new homes and 81 converted homes which retain buildings currently on the site.
- » A varied housing mix including a good range of housing sizes and tenures, creating a well-balanced community.
- » A new primary school and nursery for 420 children (anticipated to open in 2023).
- » Retail and sports facilities, and 69 hectares of public green space.

A key element of the delivery of this development is the sustainable transport network and connectivity and the integrated network of proposed routes for pedestrians and cyclists. The LCWIP should consider the transport delivery planned as part of the Mindenhurst development and the integration of this development in the Borough by sustainable modes.

A Cycle Network Strategy for Royal Princess Barracks development (Mindlehurst) was developed as part of the master plan. A number of cycling interventions are proposed to be implemented over the different phases of development of the site at Deepcut.



These are presented in Figure 16 on page 41 and include:

- » Provision of new shared pedestrian/cycle route in various locations;
  - Between the site east of Deepcut Bridge Road and Deepcut Bridge Road via approved site access junctions.
  - Between the site east of Deepcut Bridge Road and Blackdown Road via Northern Access Roundabout.
  - Between Deepcut Bridge Road and part of the development north of Dettingen Park.
  - Between the site east of Deepcut Bridge Road and Spine Road.
- » Upgraded shared pedestrian and cycle route from Deepcut Bridge Road along the existing path extending directly behind Frimley Lock Cottage.
- » Provision of ramped shared pedestrian/cycle route from Deepcut Bridge Road to the towpath on the southern side of the canal.
- » Provision of Frith Hill Cycle Route.
- » Upgrade of Basingstoke Canal towpath between Frimley Lock and Pirbright Bridge.
- » Upgrade of Basingstoke Canal towpath between Deepcut Bridge Road and visitor centre (east side).
- » Provision of shared pedestrian cycle route between spine road and Deepcut Bridge Road.
- » Provision for cyclists to connect to and through environmental improvements on Deepcut Bridge Road.



Figure 14. Mindenhurst (Princess Royal Barracks) Development Master Plan

### Surrey Heath Youth Council Report

The Surrey Heath Youth Council (SHYC) explores the results of a survey conducted within secondary schools (Tomlinscote School, Collingwood College, Kings International School) in December 2021 and analyses the barriers that discourage students from cycling and ways to mitigate these factors. The survey results (320 responses) indicate that 23% of respondents have reported to cycle regularly to get around. The two biggest barriers identified were the lack of direct routes and lack of

dedicated cycle paths. On condition that a safe cycling route was provided, respondents reported that they would like to cycle to school/college, town centre, high street, leisure centre, parks and to visit friends/family. The key roads that young people in survey responses indicated were of particular concern were:

- » Portsmouth Road.
- » Frimley Road.
- » Park Road.
- » Frimley Green Road.
- » A322.
- » A325.

» London Road.

The findings and proposals from the SHYC report, presented in Figure 16 on page 41 have been considered during the development of the Surrey Heath LCWIP to identify barriers to walking and cycling among young people, key roads that are of concern and potential routes for consideration in the aspirational cycle network.

## Surrey Heath School Travel Plans (2016)

This report provides awareness of the issues local communities face travelling to and from school and the impact School Travel Plans have on reducing congestion, pollution and road traffic incidents. The County's school expansion programme has been a priority of the School Sustainable Travel Team's in producing Travel Plans alongside schools.

In 2016, only Connaught Junior School had an active Travel Plan due to recent expansions. The County Council's School Sustainable Travel Team (SSTT) has encouraged the remaining 30 schools in Surrey Heath to write, review or update their School Travel Plans using the Modeshift STARS (Sustainable Travel Accreditation and Recognition for Schools) System. Schools have undertaken initiatives to support behaviour change amongst their families and wider school community, however, some schools may need further encouragement to write and complete their Travel Plan.

These travel plans include modal split targets for both staff and students, which detail existing travel and transport issues and outline the schools' travel initiatives to encourage modal shift towards more active and sustainable travel.

Figure 15 on page 40 presents the results of the Modeshift STARS review. Six schools have provided information. On average 32.2% of the students walk to school, 27.6% use car (either for a single student or car sharing) and 24.5%

of the students park and stride to schools. Only 3.6% (on average) of students cycle to school.

Mytchett Primary and Nursery Academy has the highest percentage of students walking to school (50%). Kings International College in Camberley (older students - year 7-11) has the highest percentage of students to be driven to school (30.5%) and cycling to school (8.1%).

## Surrey Heath Road Safety Outside Schools (RSOS)

Five schools in Surrey Heath have completed full Road Safety Outside Schools (RSOS) reports with proposals of interventions included. A further 11 schools have completed RSOS reports but without any proposed interventions. See Figure 16 that shows the existing mode share for the travel to school in Surrey Heath's schools.

Within the RSOS reports, the schools have proposed various highway improvements to improve the safety of their students. Examples of the highway improvements proposed within these reports are:

- » New and improved pedestrian crossings.
- » Raised tables to encourage slower speeds in the vicinity of the schools
- » Reduced speed limits to 20mph to encourage slower vehicle speeds and safer walking, cycling and scooting.
- » Refresh road markings outside schools.
- » Installation of speed recording devices to deter speeding.



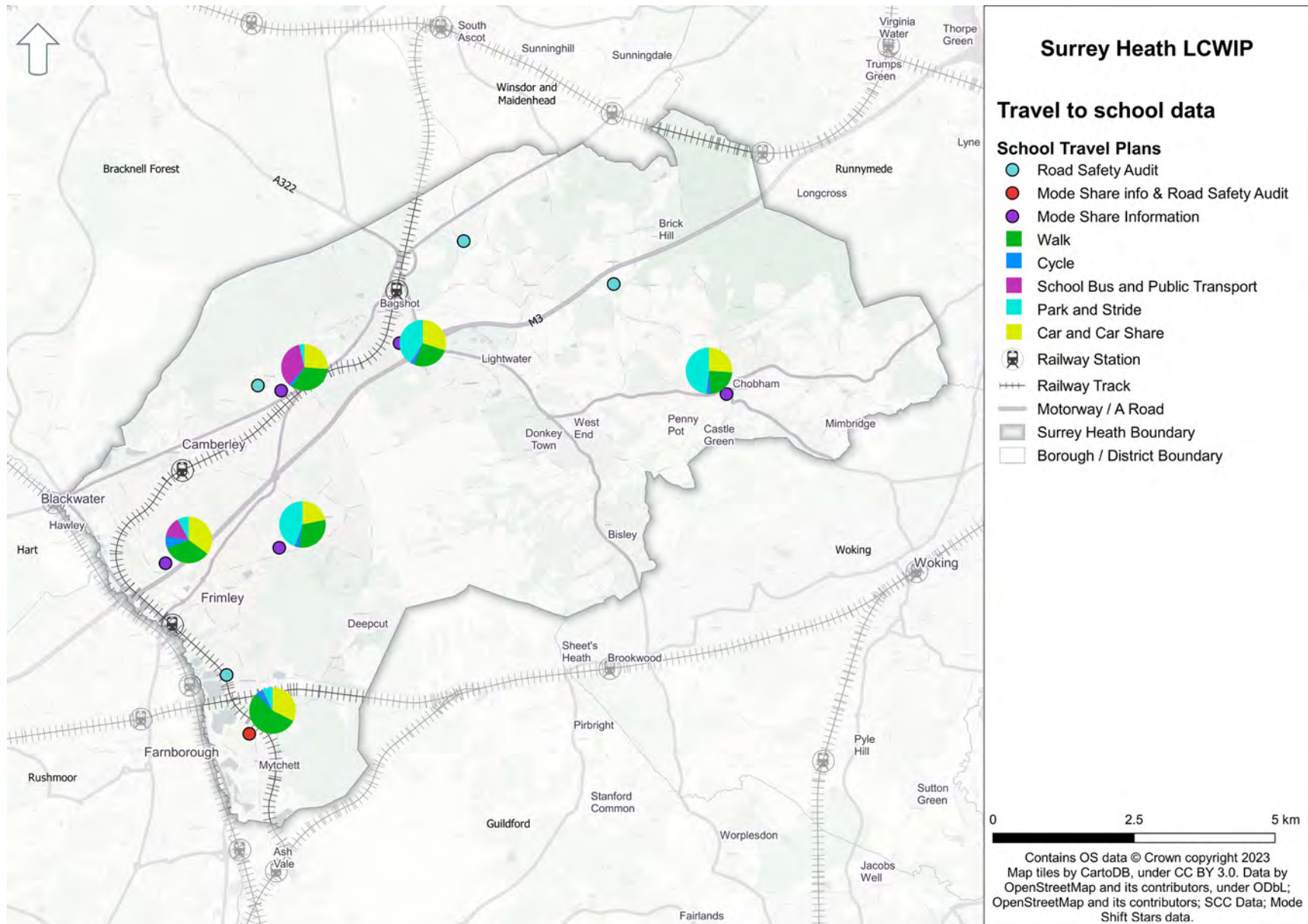


Figure 15. Existing Mode Share in Surrey Heath's schools



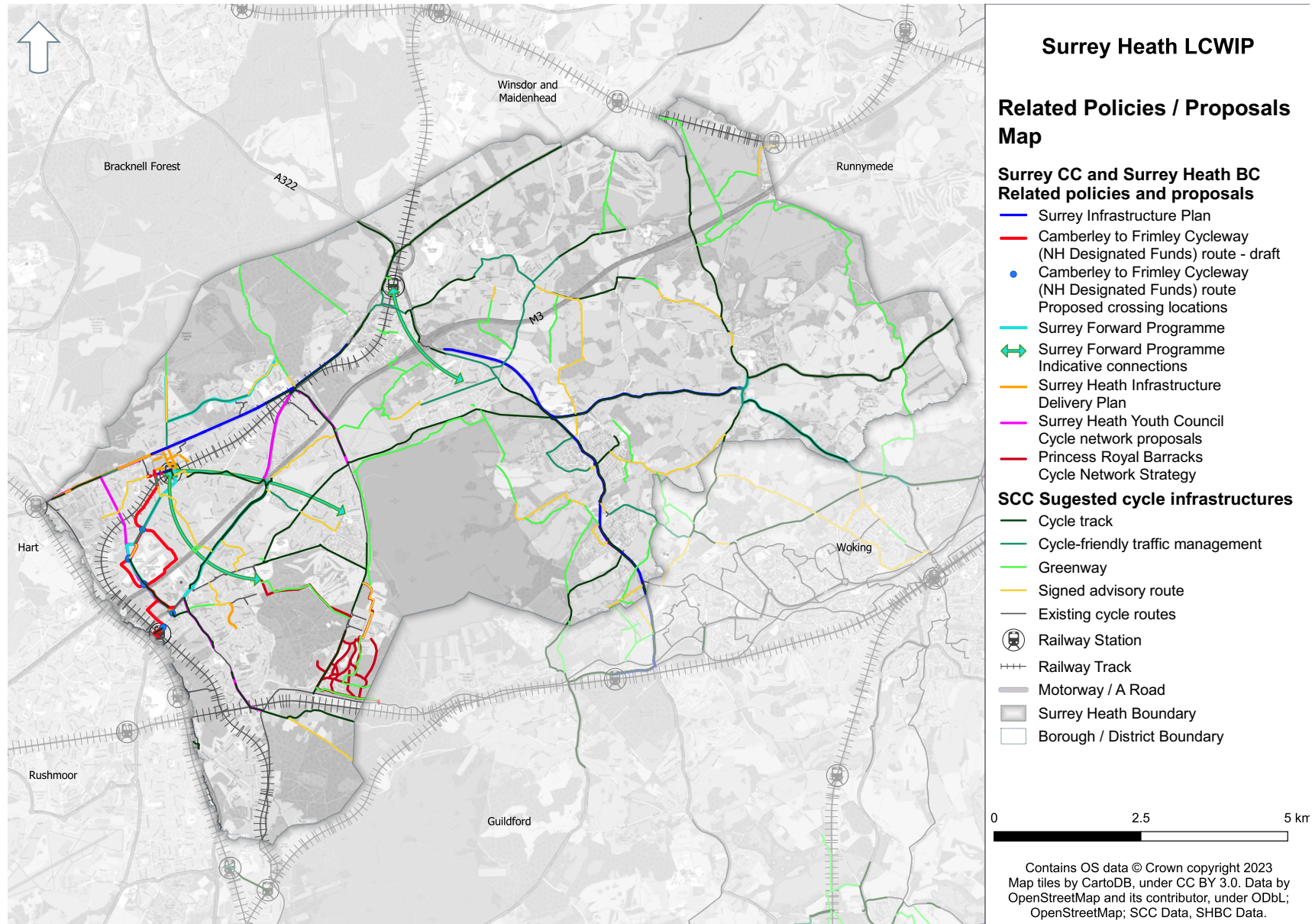


Figure 16. Related Policies and Studies map





# 3. Evidence Base

Introduction

Review of Relevant Background Data

# Introduction

AtkinsRéalis developed an evidence base for the Surrey Heath LCWIP, compiling and reviewing a range of existing spatial data. This data helped to provide an understanding of existing and potential demand, issues, and barriers for active travel. Where appropriate, the data was mapped to overlay different pieces of information. The analysis included the following data sets:

- » Key origins and destinations.
- » Demographics, such as resident and workplace population, and access to a car/van.
- » Indices of multiple deprivation.
- » Existing walking and cycling networks.
- » Propensity to Cycle Tool (PCT).
- » Strava data.
- » Barriers and topography.
- » Collision data.
- » Public suggestions for active travel provisions.

This chapter documents and summarises the data review. This background data informed the identification of key cycle corridors and core walking zones, which is discussed in Chapters 5 and 7 respectively.

The analysis was undertaken using 2011 Census data and estimates from the Office of National Statistics for year 2020. Census 2021 detailed data was not released during the development of the LCWIP (Spring 2023), however where information was available it was referenced in the report.

# Relevant Data

## Key Destinations

Key destinations within Surrey Heath were mapped to identify locations or clusters that attract walking or cycling utilitarian and/or leisure trips (see Figure 17). These included:

- » Medical facilities (hospitals, GP surgeries and pharmacies).
- » High street/ Retail areas (primary shopping areas and local shopping centres containing clusters of shops, restaurants, and other services).
- » Leisure centres.
- » Post offices.
- » Tourist Destinations.
- » Educational establishments (primary, secondary and further education, and special needs education).
- » Railway stations.
- » Strategic employment areas.
- » Parks and recreation grounds.
- » Public open and natural space.

To support future demand and local growth, opportunities for future development were also considered as part of the LCWIP. These are included in the emerging Local Plan (which at the time of the development of the LCWIP is under consultation) which provides the local policy framework for the Borough against which planning applications are assessed.

Several retail centres/local commercial areas were identified within Surrey Heath, which included Camberley, Frimley and Chobham centres and several local commercial areas in Lightwater, Bagshot, Frimley Green and Mytchett. These are particularly important from the perspective of walking and cycling, as they are compact areas, serving a mix of destination types and trip purposes throughout the day. These are often short trips, which could easily be made by walking or cycling. The local high streets and convenient access to local shops, services, etc. is also central to the 'Planning for Place' policy area of SCC's adopted Local Transport Plan 4 (LTP4).

Railway stations are another important destination, as improved walking and cycling links would facilitate mode shift via linked-trips with public transport and longer distance commuting to London, Woking, Guildford, and other regional hubs. All three railway stations in Surrey Heath are located close to the high street areas making 'last mile' linkages between the stations and residential areas or town centres via active travel convenient.

Key destinations tend to be more concentrated in the north and west of the Borough, encompassing Bagshot, Camberley and Frimley. Camberley and Frimley are the major destinations, located within the Borough with several employment sites.

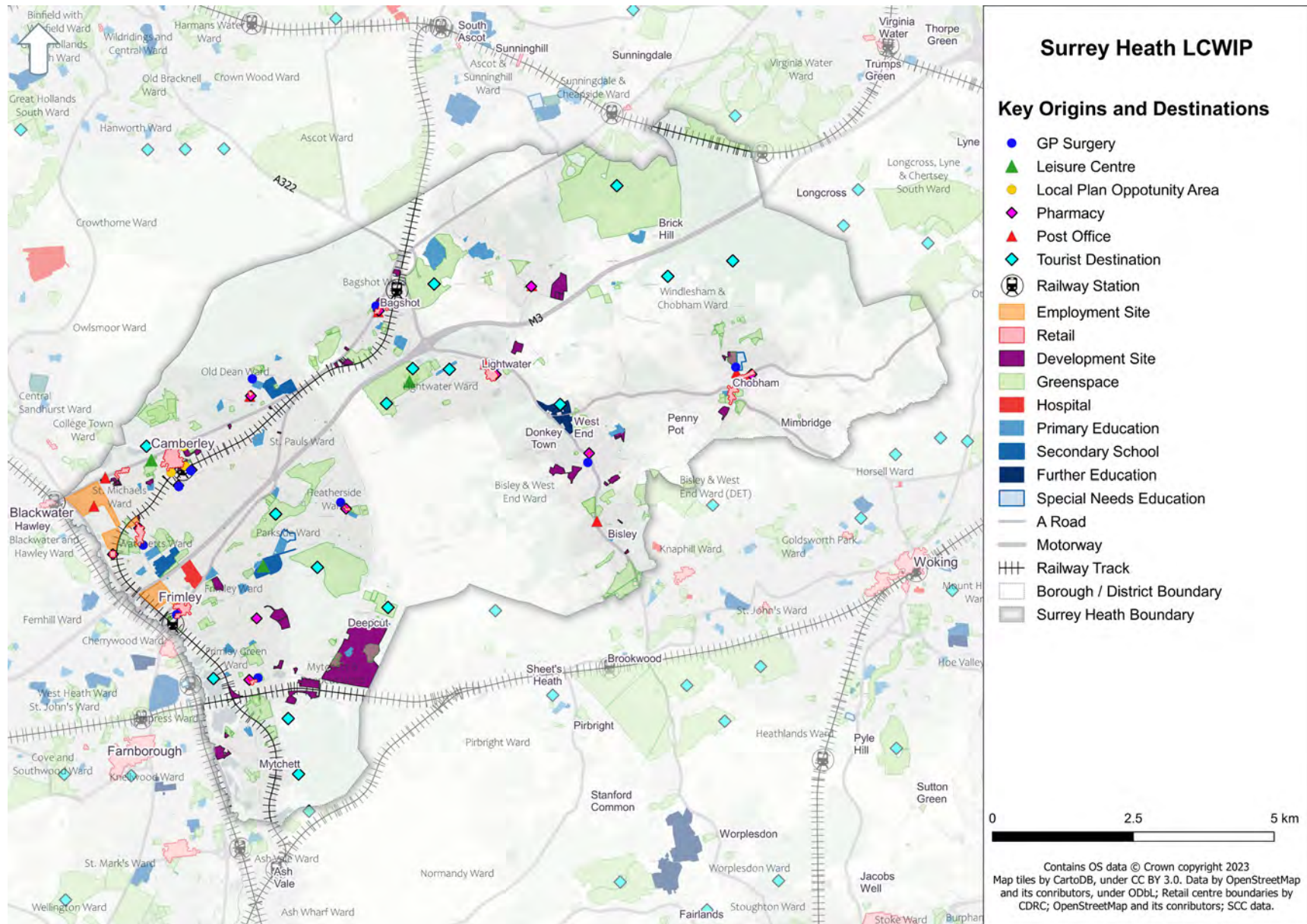


Figure 17. Key Origins and Destinations in Surrey Heath



## Existing Walking and Cycling Infrastructure

Existing walking and cycling infrastructure within Surrey Heath provides a potential foundation upon which to improve and expand the walking and cycling network through the LCWIP.

Information on existing cycling infrastructure is provided through the online SCC Cycle Facilities Map. There is a mix of facility types and routes across the Borough as shown in Figure 18. Several existing routes include:

- » London Road between Blackwater and Camberley.
- » Frimley Road near Camberley town centre,
- » Portsmouth Road and Chobham Road in Frimley between Frimley High Street and Tomlinscote Way.
- » Pembroke Broadway on the approach to Camberley Railway Station.
- » Along the Maultway.
- » Along Guildford Road in Bisley.
- » Several bridleways in the rural area and in green spaces.

Existing cycle facilities typically reflect earlier design guidance, and generally are not aligned with recent LTN 1/20 guidance. There are several proposed schemes to expand or improve the cycle network, as referenced in 'Relevant Schemes & Previous Studies' section. Connectivity to the existing and proposed facilities, and/or improvements to these facilities, should be considered as part of the LCWIP network development.

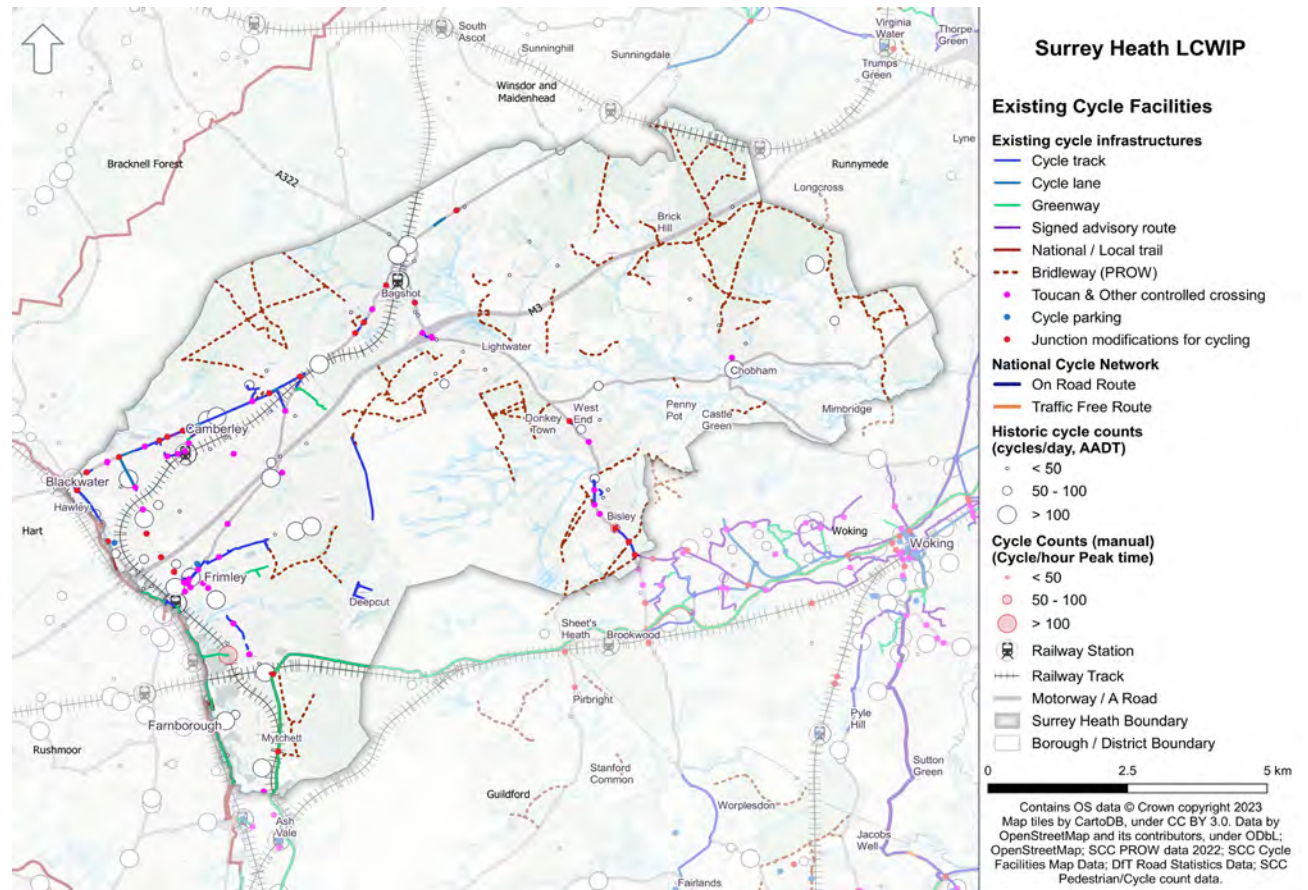


Figure 18. Existing cycling infrastructure in Surrey Heath

A limited number of locations with cycle count data is available through the Department of Transport's Road Traffic Statistics data portal<sup>1</sup>. Available count data within the study area from 2016 through 2020 is shown in Figure 18. The spot count locations indicate moderate existing cycle flows. The cycle flows are observed to

<sup>1</sup>Local Cycling and Walking Infrastructure plan, Technical guidance for local authorities, DfT (2017).

be higher in the town centres of Bagshot, the stretch of London Road near Camberley town centre, and stretches of Frimley Green and Frimley Bypass near Frimley town centre where there are existing cycle facilities. Manual count data was obtained for Frimley Green and Bisley showing a peak of ~250 cyclists per hour.

In addition to the road network, there are over 166km of footpaths and bridleways in Surrey Heath on the public rights-of-way (PRoW) network. This creates a large off-road network across the Borough and is part of the area's draw for leisure activities. Walking paths, including the Basingstoke Canal Trail and the Blackwater Valley Path also make Surrey Heath a popular leisure destination. However, these facilities do not provide a coherent network and are poorly integrated to provide connectivity and route choice options for utilitarian walking and cycling trips, linking to the street and footway networks in urban areas.

Various types of cycle infrastructure and their extents are shown in Table 1. Similarly, various types of PRoW present within Surrey Heath and their extents are shown in Table 2.

Table 1. Typology and lengths of various cycling facilities in Surrey Heath

Facility	Length (km)
Greenway	8.5
Cycle track	14
Cycle lane	1.8
Signed advisory route	0.6
<b>Total</b>	<b>24.9</b>

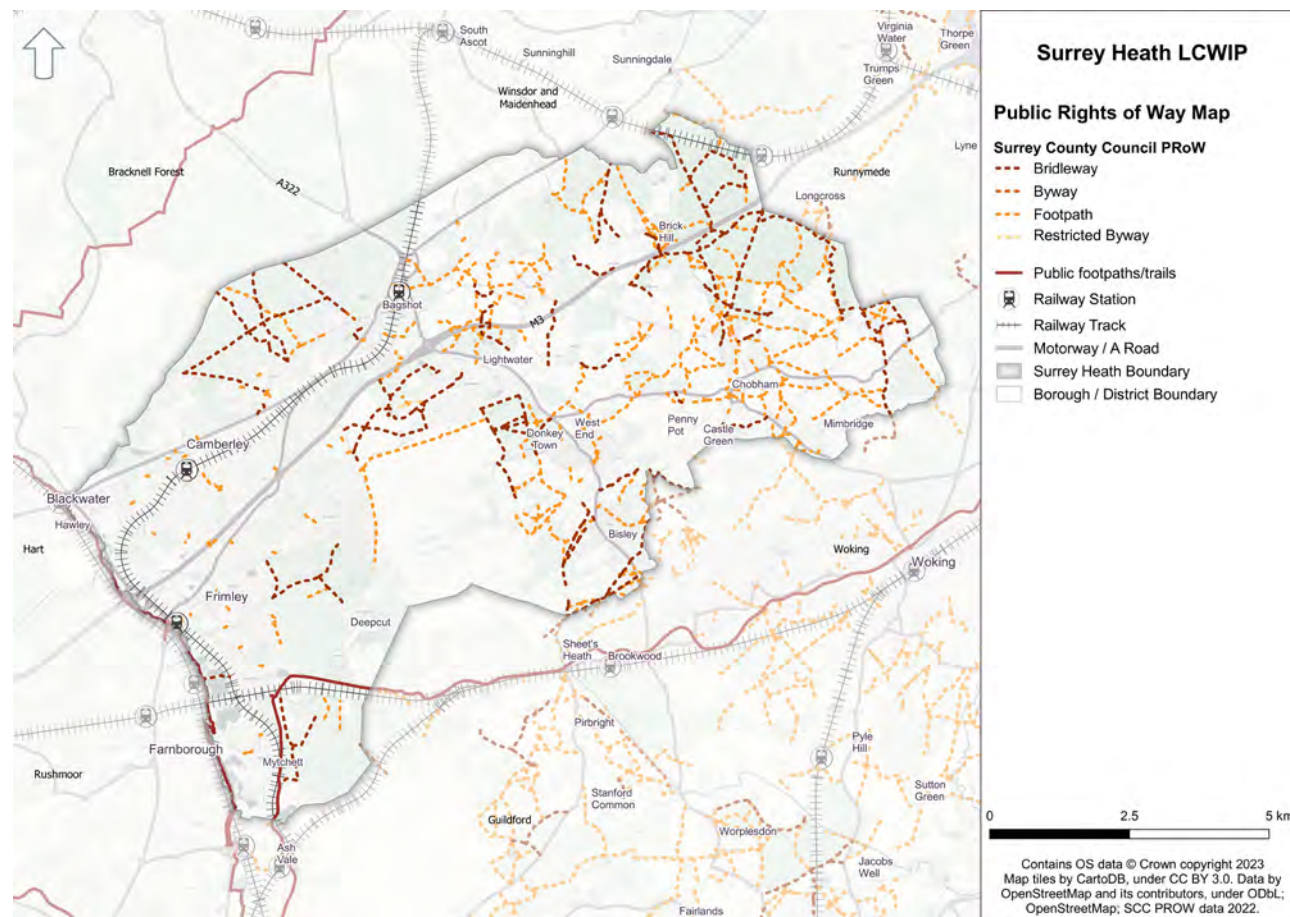


Figure 19. Existing public rights of way and public trails in Surrey Heath

Table 2. Typology and lengths of public rights of way in Surrey Heath

Public Rights of Way (PRoW)	Length (km)
Bridleway	69.5
Footpath	96.2
<b>Total</b>	<b>165.7</b>



## Public Transport

Several public transport services operate in Surrey Heath, including one railway line and several bus routes. They are mostly concentrated in the north and west of the Borough.

Walking and cycling are important first/last mile travel options to/from the railway stations, and so connections to the stations should be a consideration in development of the LCWIP network. High-quality long-term cycle parking should also be provided at the stations.

## Bus Network

Figure 20 illustrates the extent of the bus network in Surrey Heath, highlighting routes available, frequency of services and stops where passengers can access the bus services. Analysis reveals that there is a good provision of bus services between the main towns of Camberley and Frimley, with connections to Bagshot and Lightwater although availability in rural areas is limited and infrequent. This could be due to the lower population densities in these areas, which creates less demand and viability for a commercial bus service. The limited bus network in rural areas is likely to increase the extent of car ownership, as residents become more dependent on personal transport for accessing services and facilities.

Bus stop locations indicate areas of demand for short walking trips, linking bus passengers with surrounding residential areas or key destinations.

## Railway Network

Surrey Heath is connected to the National Rail Network and has three railway stations, including Bagshot, Camberley and Frimley (see Figure 20). These railway stations are key destinations as they provide opportunities for sustainable long distance travel and link with walking and cycling routes.

The Southern and South Western Railway passes through the Borough providing connections to London and Guildford. There is no railway line in the south-eastern half of the Borough, although, there is a railway line in the adjacent Woking District. Another railway line serves Hampshire, which is in close proximity to the urban areas on the west of the Borough.

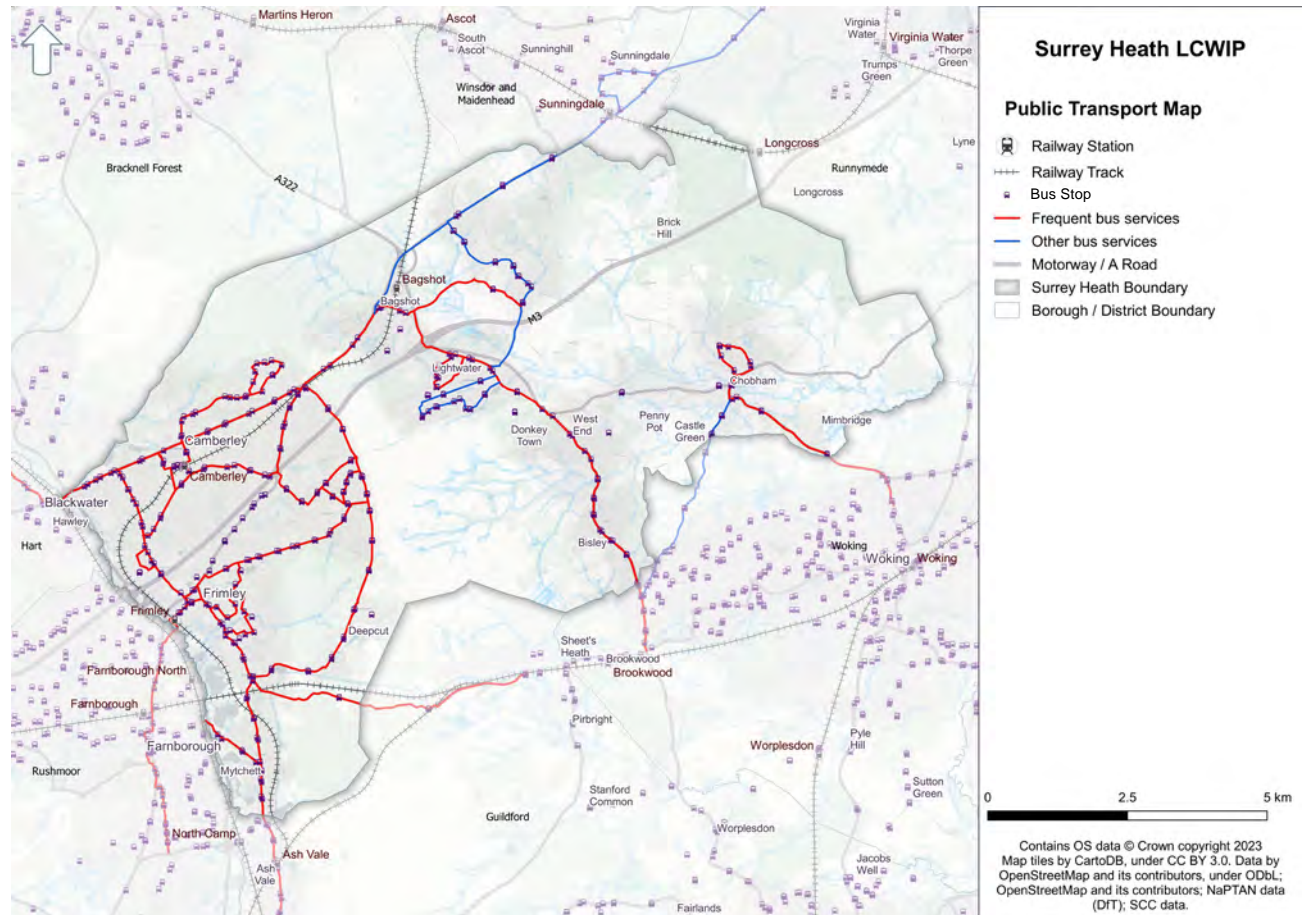


Figure 20. Public transport network in Surrey Heath



## Population Data

During the development of the LCWIP 2021 Census data were not available in MSOA and LSOA levels. The information provided in the section uses ONS data estimating the population in 2020.

Population data can provide a proxy for potential demand for walking and cycling trips. As many trips begin or end at home, higher population densities can indicate a higher propensity for walking and cycling trips. Higher densities can also indicate a more conducive environment for walking and cycling, such as closer proximity of origins and destinations and a more compact built-up area.

Based on the 2021 Census, the population in Surrey Heath is 90,500, increased by 5.1% from 2011.

As illustrated in Figure 21, the residential population of Surrey Heath, according to a 2020 ONS Estimate, is concentrated in three areas: (1) the north including Lightwater, Bagshot and Camberley; (2) the west including areas adjacent to Blackwater and Frimley; and (3) Chobham. With the exception of urban areas in the west and several villages, this suggests less opportunity for short utilitarian trips via walking or cycling elsewhere in the Borough and illustrates the rural character of much of Surrey Heath.

Table 3. Population data for Surrey Heath (Source - ONS Census 2021)

Area	2011 Census	2021 Census	% Change	Population Density <sup>1</sup>
Surrey Heath	86,144	90,500	5.1%	952
Neighbouring Boroughs <sup>2</sup>	759,496	812,900	7%	1,176 <sup>3</sup>
Surrey County	1,132,390	1,203,100	6.2%	724
England	53,012,456	56,489,800	6.6%	434

1 Usual residents per km<sup>2</sup>

2 Runnymede, Woking, Guildford, Rushmoor, Hart, Bracknell Forest, Windsor and Maidenhead

3 Average of 7 Boroughs/Districts

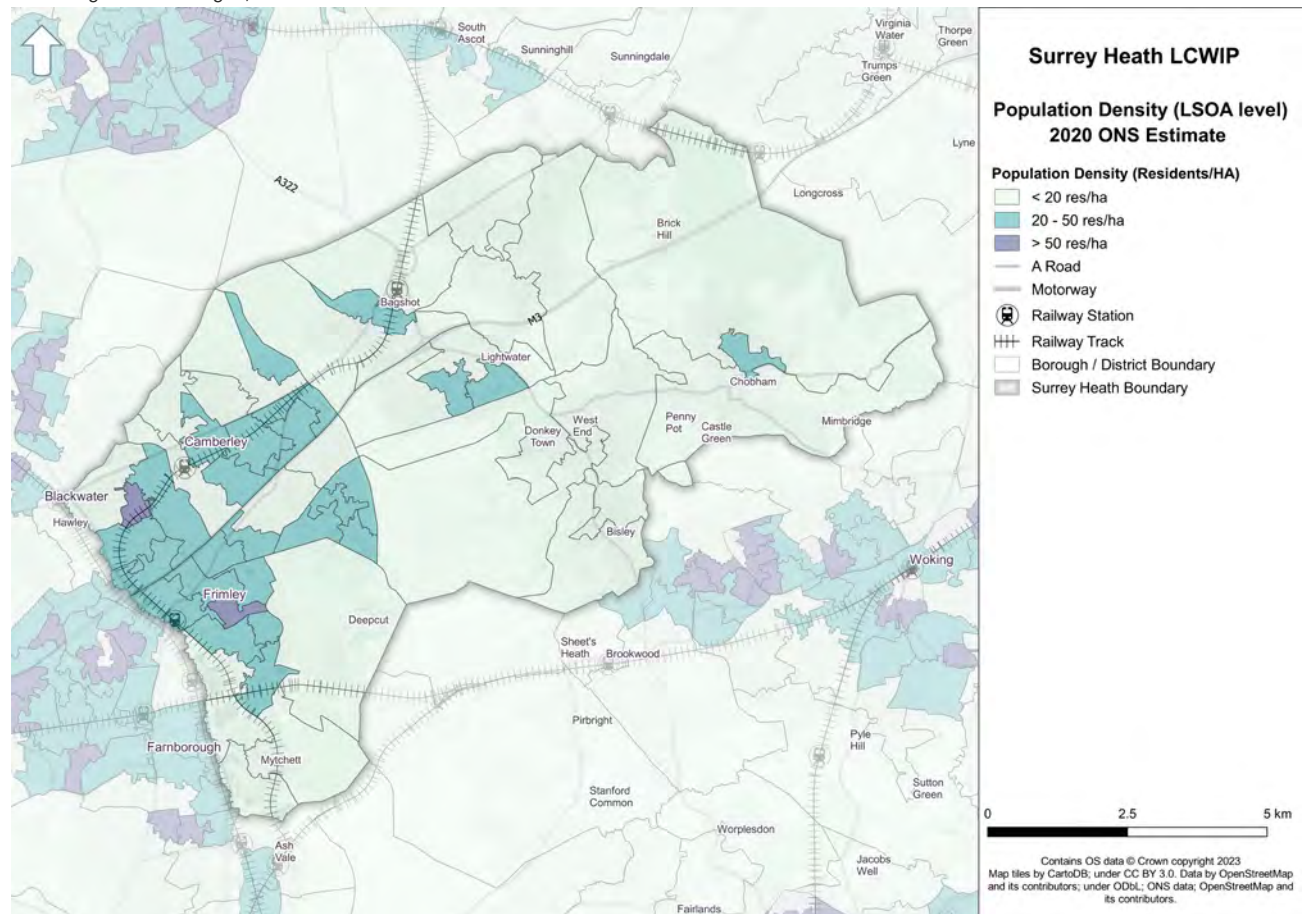


Figure 21. Resident population density in Surrey Heath



## Workplace Population Data

The workplace population is an estimate of the population working in an area. It includes usual residents aged 16 to 74 whose usual place of work is in the area and is based on the 2011 Census data<sup>1</sup>. People who work mainly at or from home or do not have a fixed place of work are included in their area of their usual residence.<sup>2</sup>

Figure 22 illustrates the workplace population density, which is indicative of key employment hubs in the area and another key input into the identification of walking and cycling networks. The larger employment areas are again focused around Camberley and Frimley.

Figure 22 and Figure 23 also indicate the importance of connectivity across Borough boundaries to provide linkages to the neighbouring areas (Farnborough, Blackwater, and Woking).

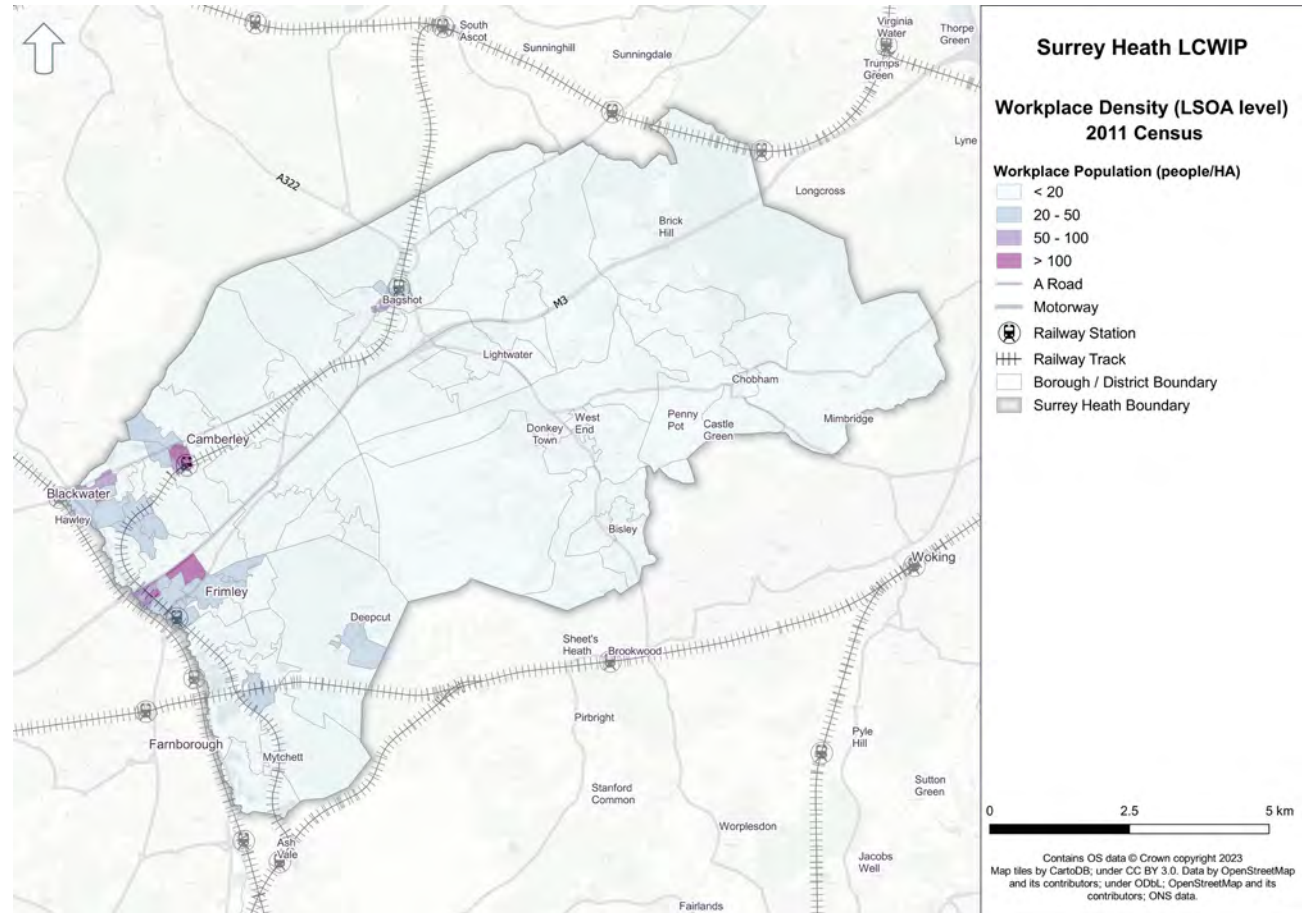


Figure 22. Workplace population density in Surrey Heath

<sup>1</sup> During the development of the LCWIP 2021 Census data were not available in MSA and LSOA levels.

<sup>2</sup> The following population groups are excluded from the workplace population of an area: Those living in England and Wales but working in Scotland, Northern Ireland, outside the UK or on offshore installations; Those with a place of work in England and Wales but who are not usually resident in England and Wales, and; Short-term residents.

## Car / Van Availability

Car / van availability is relatively high throughout Surrey Heath. It has a lower percentage (9.9%) of households who do not have access to a car or van, compared to 12.7% in the whole of Surrey<sup>1</sup>. Pockets of lower car availability (75-90% of households) are generally located in the more urban areas of the Borough, such as Chobham, Bagshot, Lightwater, Camberley, Blackwater, Frimley, and areas within the Borough near Blackwater and near Farnborough (see Figure 23).

<sup>1</sup> 2011 Census, QS416EW - Car or van availability

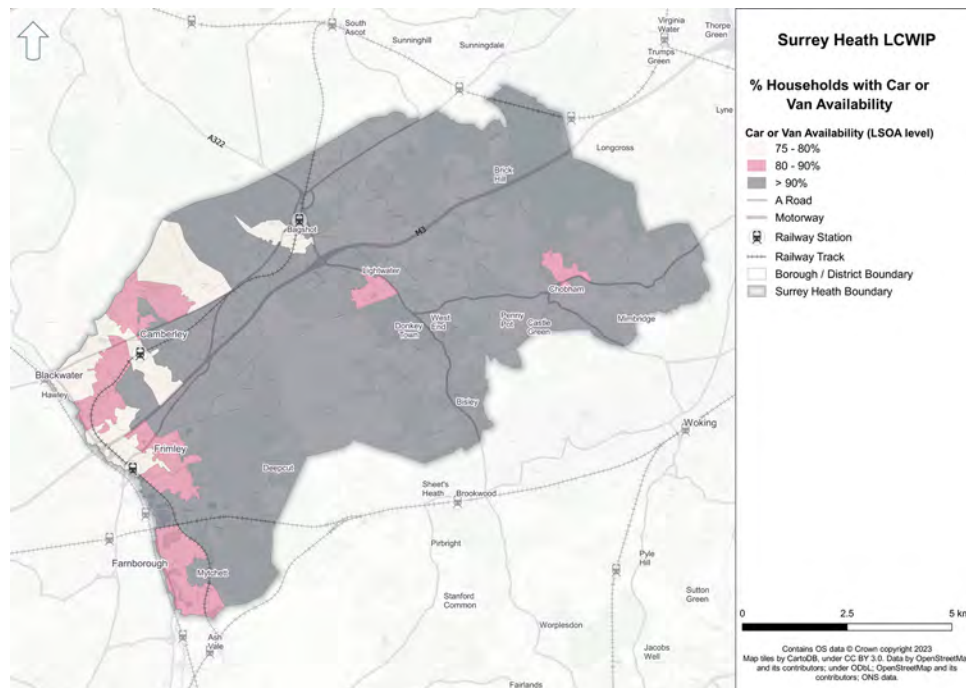


Figure 23. Car or van availability in Surrey Heath

## Indices of Multiple Deprivation

The Indices of Multiple Deprivation (IMD) is a measure of relative deprivation for small areas / neighbourhoods in England. It measures income, employment, health, education, crime, living environment and barriers to housing and services. The information was used for the identification of under served areas and therefore what areas may benefit the most from walking and cycle route improvements.

There are no areas within the top three most deprived deciles in Surrey Heath and most of the Borough is in the bottom half of the IMD (6th - 10th deciles), which suggests low deprivation levels. Relative to the rest of the Borough, lower rankings in the IMD occur within an area to the north; Old Dean, and towards the west; near Blackwater and north of Frimley. The IMD within Surrey Heath is shown in Figure 24.

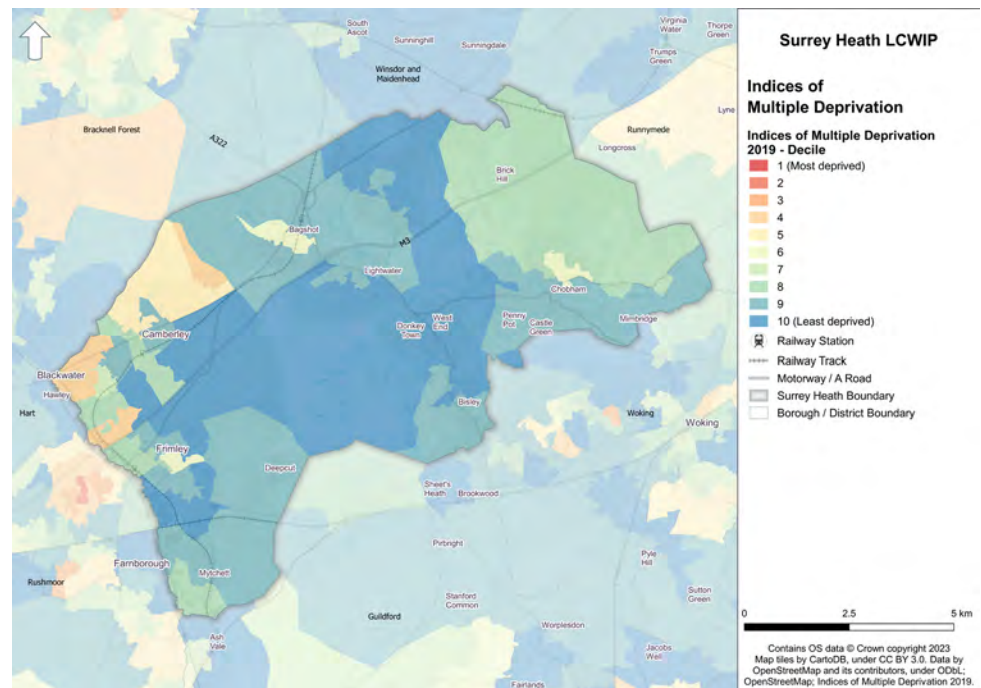


Figure 24. Indices of Multiple Deprivation in Surrey Heath



## Future Developments

To support future demand and local growth, opportunities for potential development were considered as part of the LCWIP. It is important to understand where future development is likely to take place, so that appropriate transport infrastructure can be provided, which will enable new residential populations to adopt sustainable travel practices.

The Emerging Surrey Heath Local Plan (2020)<sup>1</sup> has identified strategic sites for future residential development across Surrey Heath. These sites are highlighted in Figure 25 along with additional neighbouring areas including Runnymede and Hart that have been granted planning permission but are currently (2023) incomplete. Notable developments in Surrey Heath include:

- » Mindenhurst (Princess Royal Barracks) Development (more information provided in the 'Relevant Schemes and Previous Studies' section under Surrey Heath Current Local Plan - Identified schemes) which proposes 1,200 new homes, a primary school and a nursery, retain and sports facilities as well as 69 hectares of green space.
- » Several development sites in Camberley town centre, providing approximately 1,100 new dwellings.
- » Heathpark Wood, Windlesham adding a minimum of 116 new dwellings<sup>2</sup>.

1 The emerging Local Plan is under consultation and is planned to be adopted in December 2023.

2 Permission has not been granted for further dwellings at the time of the preparation of this plan.

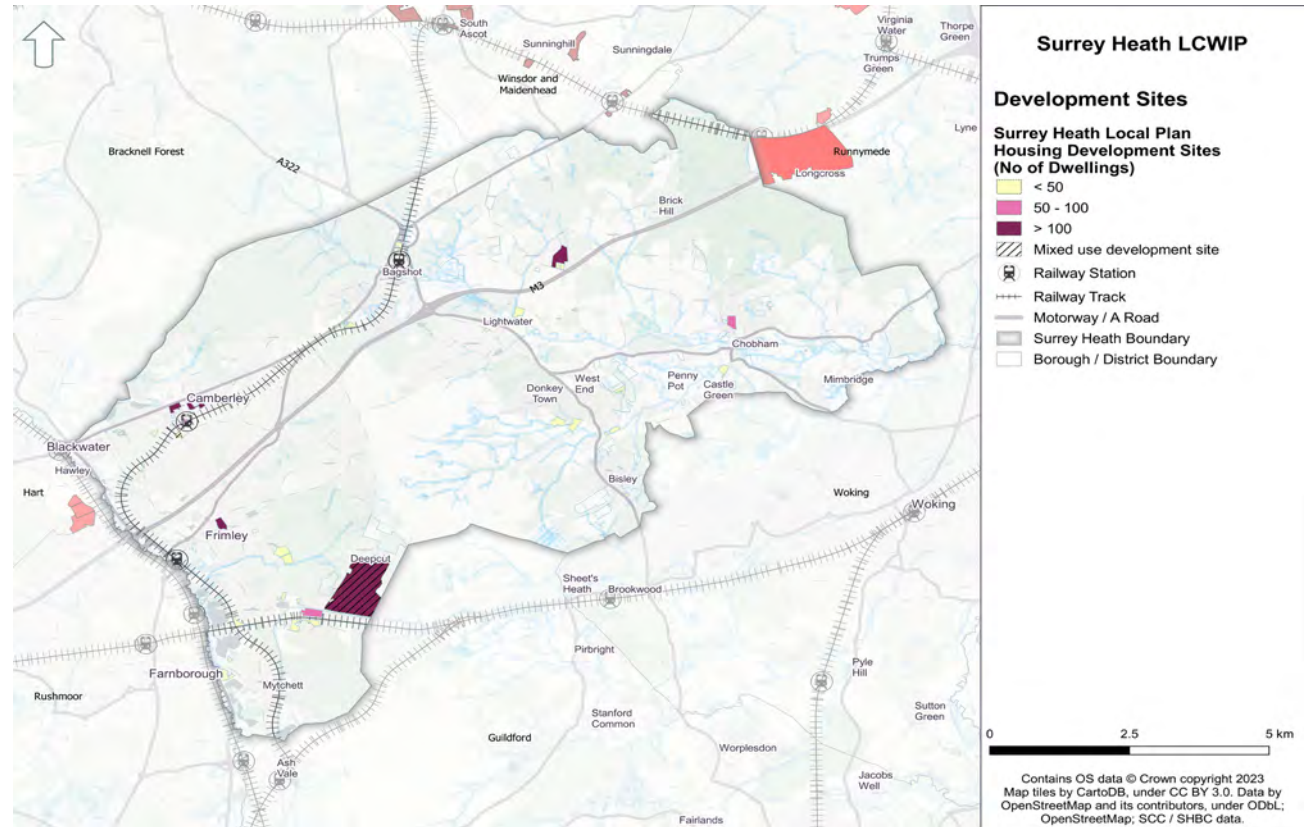


Figure 25. Development Sites in Surrey Heath

Additionally, development sites at neighbouring areas that may affect commuting patterns are:

- » Longcross Development at Runnymede with 1700 additional housing units.
- » Hawley Park Farm Development at Hart District with an additional 158 new houses.

## Commuting Patterns

The Census data provides information on the main commuting inflows and outflows to/from Surrey Heath, which is shown in Figures 27 and 28. While the data is now 10 years old, it still provides a snapshot of travel patterns in the region. The neighbouring Boroughs of Rushmoor, Hart, Guildford, Bracknell Forest and Woking are among the top five inflows and/or outflows. This indicates the importance of inter-Borough connectivity when developing the cycle (primarily) network<sup>1</sup>. Many of the commuter flows are also connected by railway services, including Guildford, Waverley and London. This indicates the importance of providing high-quality walking and cycling links to railway stations, to facilitate and encourage linked active travel/public transport trips.

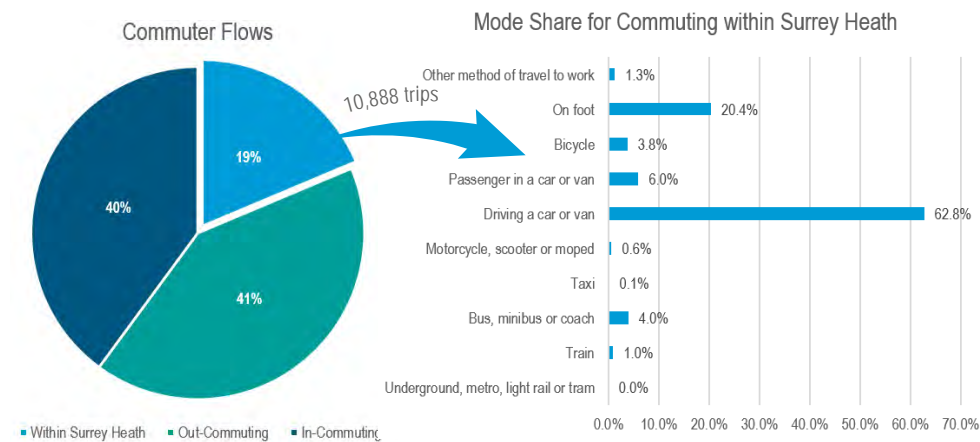


Figure 28. Travel to work commuter patterns for Surrey Heath and mode share for intra-Borough commuting (source: 2011 Census)

1 Pedestrian movements are limited to shorter distances, however there are instances that inter-Borough connectivity on foot may be achievable, i.e. to the west of the Borough for connections to Rushmoor.



Figure 26. Top commuter inflows and outflows from Surrey Heath (source: Method of travel to work, 2001 Census (source: <https://www.nomisweb.co.uk/>))

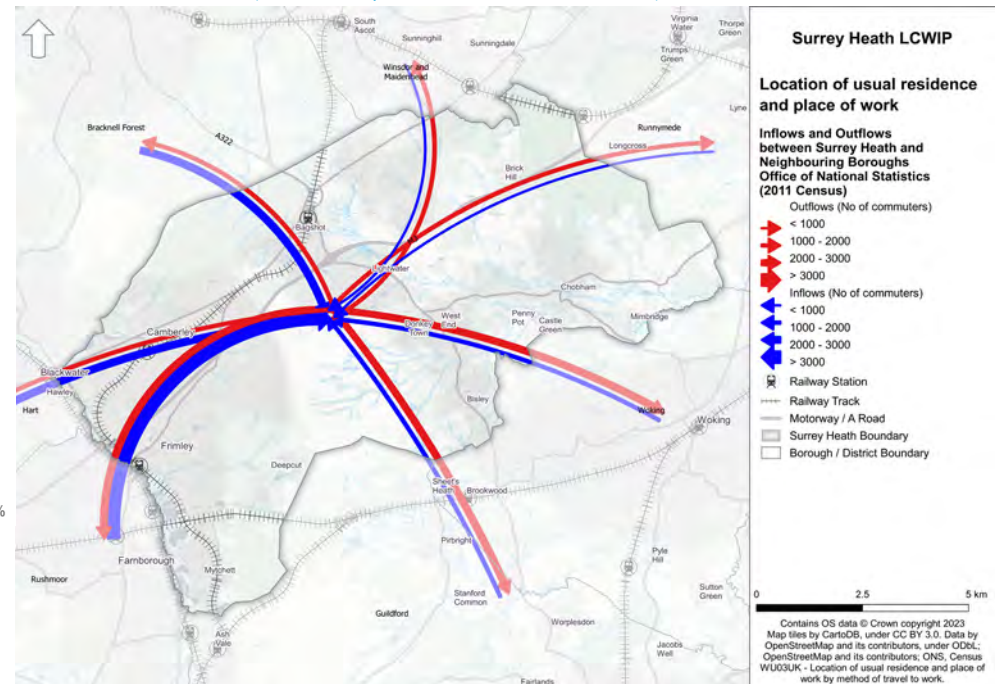


Figure 27. Travel to work commuter patterns for Surrey Heath Borough, illustrating the highest inflows and outflows (source: <https://www.nomisweb.co.uk/>)



Based on 2011 Census data<sup>2</sup> 10,888 people live and work in Surrey Heath, of whom 20.4% walked to work, 3.8% cycled to work and 68.6% drove or was a passenger of a car going to work (see Figure 28).

According to the 2021 Census 45,363 people live in Surrey Heath and are employed<sup>3</sup>. Almost 41% worked from home (Census 2021 took place during COVID -19 lockdown restrictions and people were asked to work from home where possible), 48% used a car to travel to

<sup>2</sup> During the analysis of this data Census 2021 data were not completely released, therefore 2011 Census data were used to estimate the commuting patterns.

<sup>3</sup> No detailed data on where people work were released during the development of the LCWIP.

work (either as a driver or passenger) and only 6% and 1% walked or cycled (respectively) to work.

However, the distance travelled was short, with 57.6% of the trips being shorter than 10km (a distance that is cyclable) and 16.4% of the trips shorter than 2km. This means that people are taking their cars to travel to work where they can easily shift to active travel modes.

Table 4 presents the method travelled to work and the distance travelled to work in Census 2021 and the comparison to 2011 Census data.

Table 4. Travel to work mode share and trip distance (Source: Office of National Statistics)

Census	Residents in employment	Mode Share (Commuting)			Trip Distance		
		% Walk	% Cycle	% Car/van	< 2km	2-5 km	5-10 km
2021	45,363	5.8%	1.1%	48.1%	16.4%	18.9%	22.2%
2011	44,968	7.3%	1.7%	73.4%	15.5%	17.7%	17.9%



## Barriers and Constraints

Severance is a barrier to mobility in Surrey Heath, particularly for active travel modes<sup>1</sup>. Severance issues can create longer journeys, making them less attractive to be made by foot or by cycle. Issues that contribute to severance in Surrey Heath are illustrated in Figure 29, including:

- » The M3 creates severance issues on the east-west corridor for movements between key destinations in the north and south of the Borough. It reduces the opportunities to cross the road, having on average 1.5 crossings per km on the stretch of the M3 within Surrey Heath, 40% of them are for pedestrian only. The improved provision of integrated cycling and pedestrian facilities and crossing points are expected to reduce severance.
- » The railway line that traverses the Borough, severs the local road network and funnels traffic for all modes to a limited number of crossing points. The related severance issues are most apparent towards north and west of the Borough through the most dense urban areas.
- » The A30 and A331 are dual carriageways that sever local street networks and create barriers to active travel due to high traffic flows, high speeds and wide crossings. The latter is a key barrier between areas of Frimley and Farnborough.

<sup>1</sup> Community severance is defined in the DfT'S Transport Appraisal Guidance (TAG) Unit 4-1 (Social Impact Appraisal) as the separation of residents from the facilities and services they use within their community caused by substantial changes in transport infrastructure, or by changes in traffic flows. This primarily concerns non-motorised modes, especially pedestrians and cyclists.

- » The road network outside of the urban, built-up areas is limited throughout the Borough, due in part to its more rural character and settlement patterns. This creates very limited options to link the town centres of Chobham and Lightwater to Frimley, and to link rural villages to each other, the town centres, or nearby railway stations. This is compounded by other barriers such as severance of the railways, M3 and topography.

- » Motor vehicle speed can be a barrier to active travel, where walking or cycling alongside or crossing high speed traffic can create an unpleasant, uncomfortable, or unsafe environment. A wide extent of A and B Roads with speed limits  $\geq 40$ mph traverse the eastern area of Surrey Heath constraining the connections to the villages for active travel.

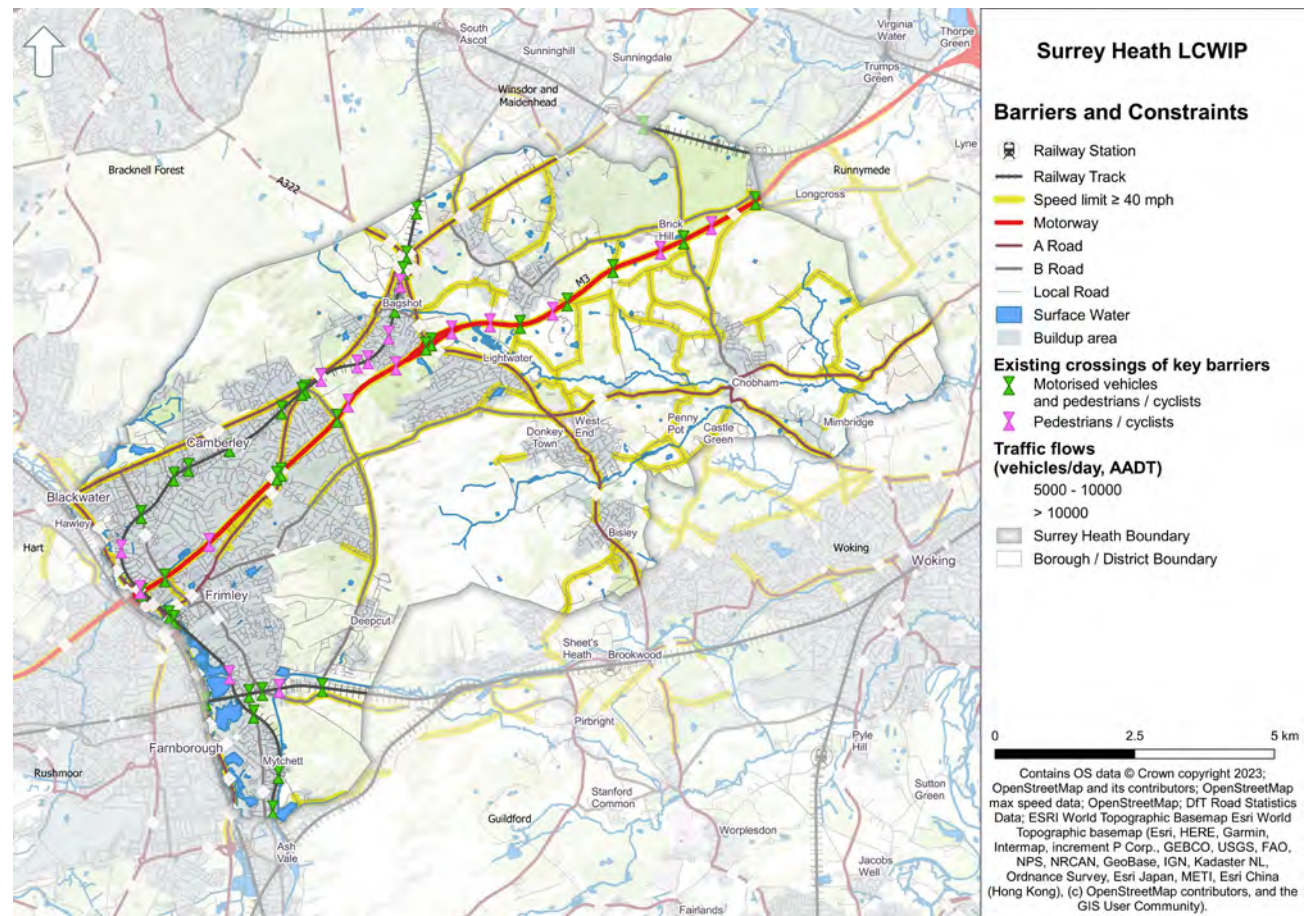


Figure 29. Barriers and constraints to walking and cycling



## Topography

Topography is a major barrier to active travel in Surrey Heath. Hilly terrain can discourage uptake in cycling due to the additional energy and fitness required to pedal uphill. Pedestrian movements are also restricted along hilly areas, especially for people with disabilities, as they will require more effort and wider facilities to move. Local topography can also constrain the road network and limit options for improvement measures which are physically possible without substantial earthworks and costs. The growing availability of e-bikes, however, can help overcome the barrier of hilliness by reducing the physical effort required.

As illustrated in the contour map in Figure 30, the western half of the Borough is very hilly. Particular constraints include the Old Dean, Heatherside and Deepcut. This essentially limits east/west travel options across the town centres. Camberley and Frimley areas which are among the key destinations in Surrey Heath, are also relatively hilly.

The north-east of the Borough also contain areas with relatively steep gradients; however, potential travel demand for short trips is relatively low in this area due to a low population and fewer key destinations.

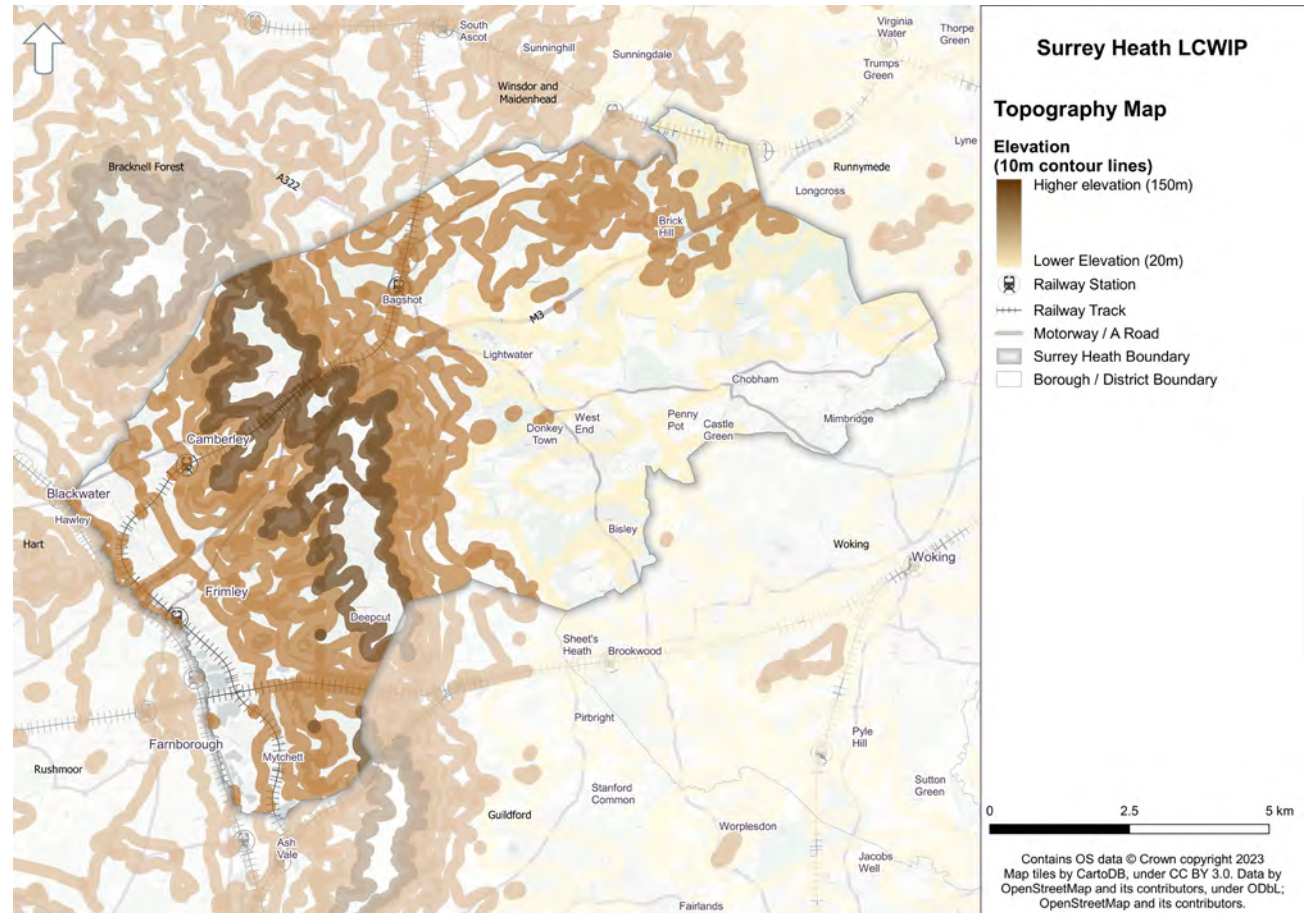


Figure 30. Hilliness and topography constraints illustrated by 10m contour lines



## Strava Data

Publicly available data for cycle trips recorded using Strava were also reviewed<sup>1</sup>. Strava is a cloud-based application for tracking various activities (i.e., cycling, running, etc.). The data represents running and cycle trips recorded by users of Strava's app<sup>2</sup>. Although the data tends to be skewed more heavily towards leisure/recreational trips rather than utilitarian trips, it provides a snapshot of preferred routes that supplement the commuter cycling trips provided in the Propensity to Cycle Tool (PCT) analysis.

Strava is publicly available as an online heatmap, which illustrates routes that are more heavily used by people cycling. The Strava data for Surrey Heath is shown in Figure 31.

The Strava data highlights some of the Borough's leisure/recreation areas which are known to be popular amongst recreational/sport cyclists, including the Blackwater Valley Trail, a 7.8 mile leisure trail following the Blackwater River between Camberley, Frimley, Farnborough and Aldershot and paths in Swinley Forest. Other routes with relatively high usage include:

- » The Maultway.
- » Basingstoke Canal.

<sup>1</sup> <https://www.strava.com/>

<sup>2</sup> The Strava data is illustrative only, limited to those trips recorded by Strava users and with data privacy settings allowing public access. Hence, the Strava data only reflects journeys by a limited number of users and may not reflect a representative proportion of trips types (e.g., commuting, utilitarian journeys) or types of cyclists.

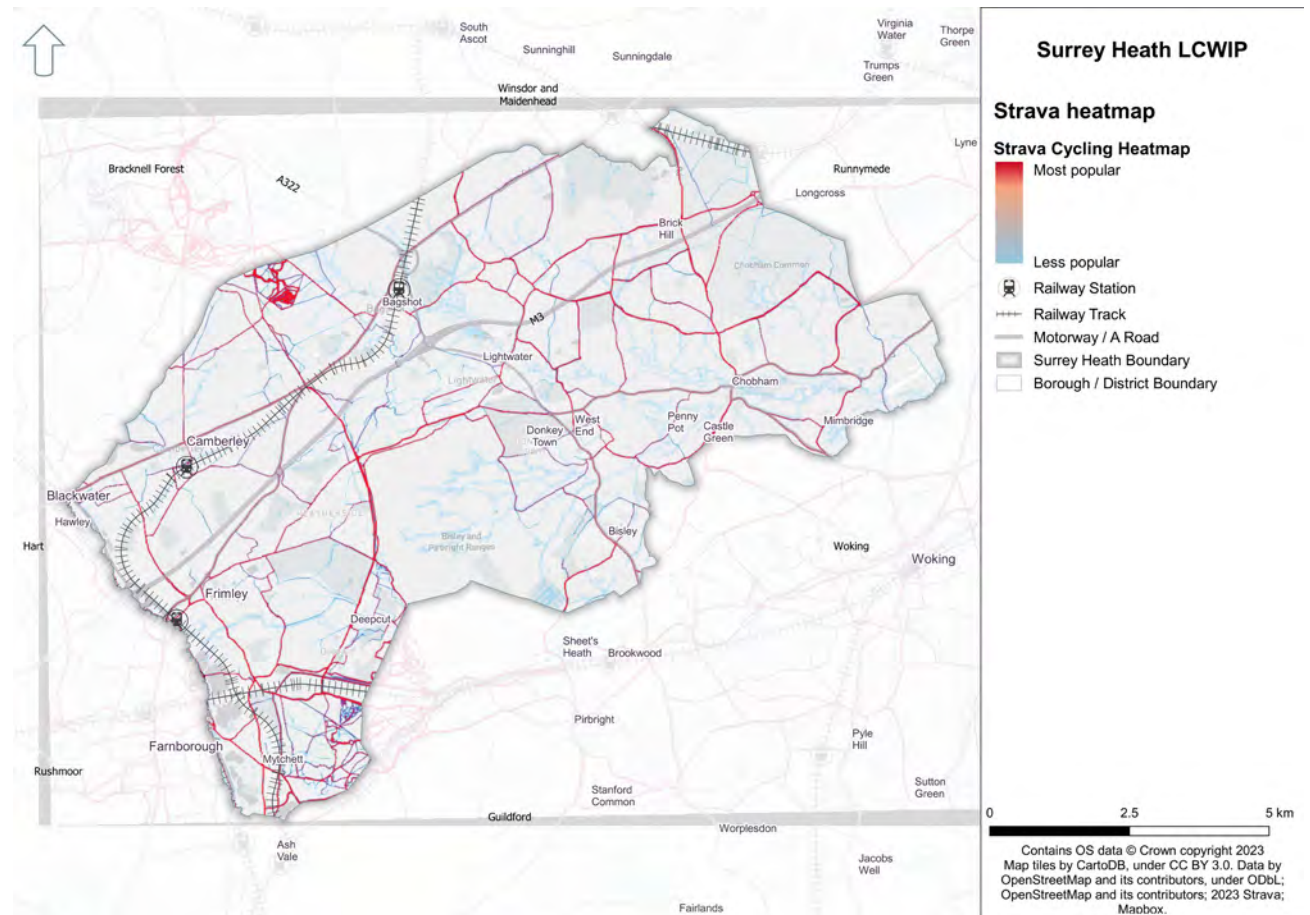


Figure 31. Indicative illustration of routes used for cycle trips recorded using Strava (source: Strava global heatmap)

- » London Road between Blackwater and Camberley, and to the north-east of Bagshot.
- » Frimley Road and Frimley Bypass to the northwest of Frimley.

recreational sites to the town centres, and public transport/ footway networks within Surrey Heath.

This suggests that there is demand for connectivity and route choice options for walking and cycling trips, linking popular

## Propensity to Cycle

The Propensity to Cycle Tool (PCT) is an online tool and dataset designed to assist with strategic planning of cycling networks. It illustrates an indicative current and potential future distribution of cycle trips to work and to school based on different growth scenarios. The model identifies preferred 'fast' and 'quieter' cycle routes between origin and destinations pairs, and assigns trips to these routes. 'Fast' routes are based primarily on the shortest distance (i.e., most direct route), while 'quieter' routes also consider motor vehicle traffic volumes. The hilliness of a route is also a key factor considered within the model when estimating the propensity for cycling.

The Surrey Heath LCWIP PCT analysis was conducted using data downloaded in January 2023. The following data categories were utilised for the analysis:

- » Geography: Middle Super Output Area (MSOA) geography was selected to provide an overview origin/destination pairs within Surrey Heath and Lower Super Output Area (LSOA) as they provide greater granularity in origin/destination pairs and detailed information on the estimated mode share.
- » Growth Scenario: The 'eBike' scenario was adopted to understand the potential growth in cycling with wider adoption of ebikes for commuter trips. Given the significant hilliness of the Borough, the eBike scenario was also considered to understand the potential for

growth due to increasing availability of ebikes to reduce barrier of topography.

- » The 'Go Dutch' scenario was selected to reflect the high aspirations of the LCWIP for a step-change in levels of cycling for commuter trips in the Borough. It models the potential for growth in cycling as a function of trip distance and hilliness, plus a number of socio-demographic and geographical characteristics, to reflect the proportion of commuters that would be expected to cycle if all areas of England and Wales had the same infrastructure and cycling culture as the Netherlands, where approximately 28% of trips are made by cycle while hilliness and distance factors are not a barrier to cycling.
- » Direct Desire Lines: Direct point-to-point desire lines in the PCT (desire lines between LSOAs or MSOAs) were reviewed to identify desire lines with higher levels of potential demand. The PCT model then applied these desire lines to the actual network, and the outputs were analysed as described below.
- » Most Cycled Network Links: The PCT aggregates all 'fast' route trips to provide a total of cycle flows along each link in the network. Commuter and school flows, however, are disaggregated and viewed independently. Cycle flows were categorised as high, medium, and low to illustrate the preferred routes (i.e., highest flows) and identify an initial cycle network with coverage across Surrey Heath. This is the key output of the PCT utilised from the PCT analysis.

The following sections summarise the analysis of the journey to work and journey to school PCT data. However, it is important to note that commuting and education only account for 28% of all trips.<sup>1</sup> Therefore, the available data is only representative of a small percentage of overall trips and potential demand for cycling.

<sup>1</sup> 2019 National Travel Survey, Table NTS0409a. Commuting accounts for 15% of all trips, education/escort to education 13% of all trips.

### PCT Commuter Flows - Desire Lines

The direct point-to-point desire lines in the PCT between home and work (MSOA pairs) (see Figure 32) and (LSOA pairs) (see Figure 33) were reviewed to understand the top commuter trips in the Borough with potential for increased cycle usage. The straight lines based on number of commuters per day by origin/destination (O/D) pairs are illustrated in Figure 32 and Figure 33 and the key outcomes of this analysis are:

» The top MSOA and LSOA - O/D pairs indicate two key centres of O/Ds Camberley and Frimley.

- » A strong desire line across the western urban area between Farnborough (RBC), Frimley, Camberley and Blackwater (HDC).
- » Distribution of shorter trips between Camberley and Blackwater, and between Frimley and the local neighbourhoods.
- » Woking Town creates high demand from trips from the southern villages, West End and Chobham.
- » High flows towards Bagshot from Camberley and Frimley and from Woking, Frimley, Windlesham and other settlements.

- » Ascot Railway Station (RBWM) shows a relatively high number of commuter trips from Bagshot and Windlesham, proving the demand for improved connections to public transport network.
- » Connection between the villages on the east of the borough are indicated as desire lines for shorter distances, in the LSOA pairs map, however, there is very poor connectivity today.

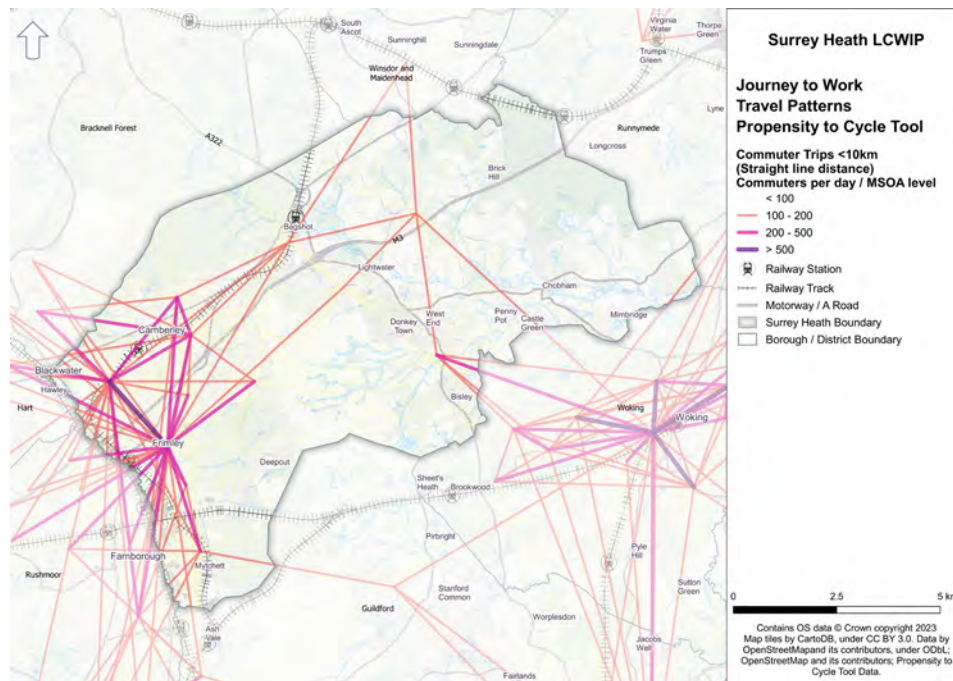


Figure 32. Journey to work - Desire Lines for Middle Layer Super Output Areas (MSOA) in Surrey Heath

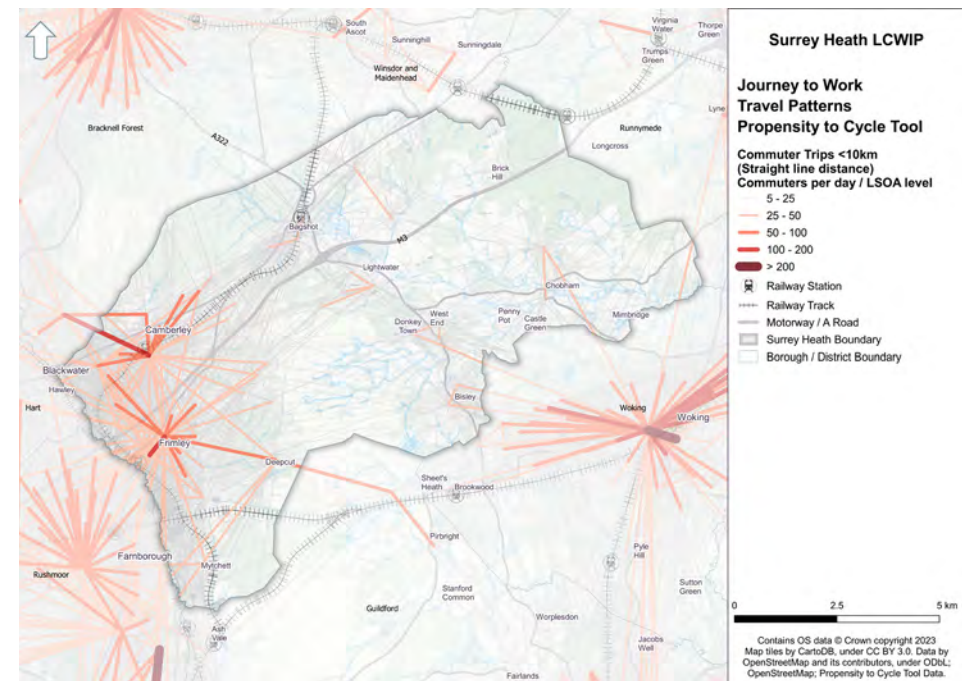


Figure 33. Journey to work - Desire Lines for Lower Layer Super Output Areas (LSOA) in Surrey Heath



### PCT Commuter Mode Share

Based on the 2011 Census, cycle mode share for commuting was low across the Borough - typically less than 3% as illustrated in Figure 34. The LSOAs with the highest percentages can be observed near Chobham, north of Camberley and Deepcut areas.

Similarly, the level of cycle flows was low across the Borough. Key corridors with relatively high flows include:

- » Staff College Road.
- » Kings Ride - A30.
- » Frimley Road.
- » Deepcut Bridge Road.
- » Gapemouth Road.

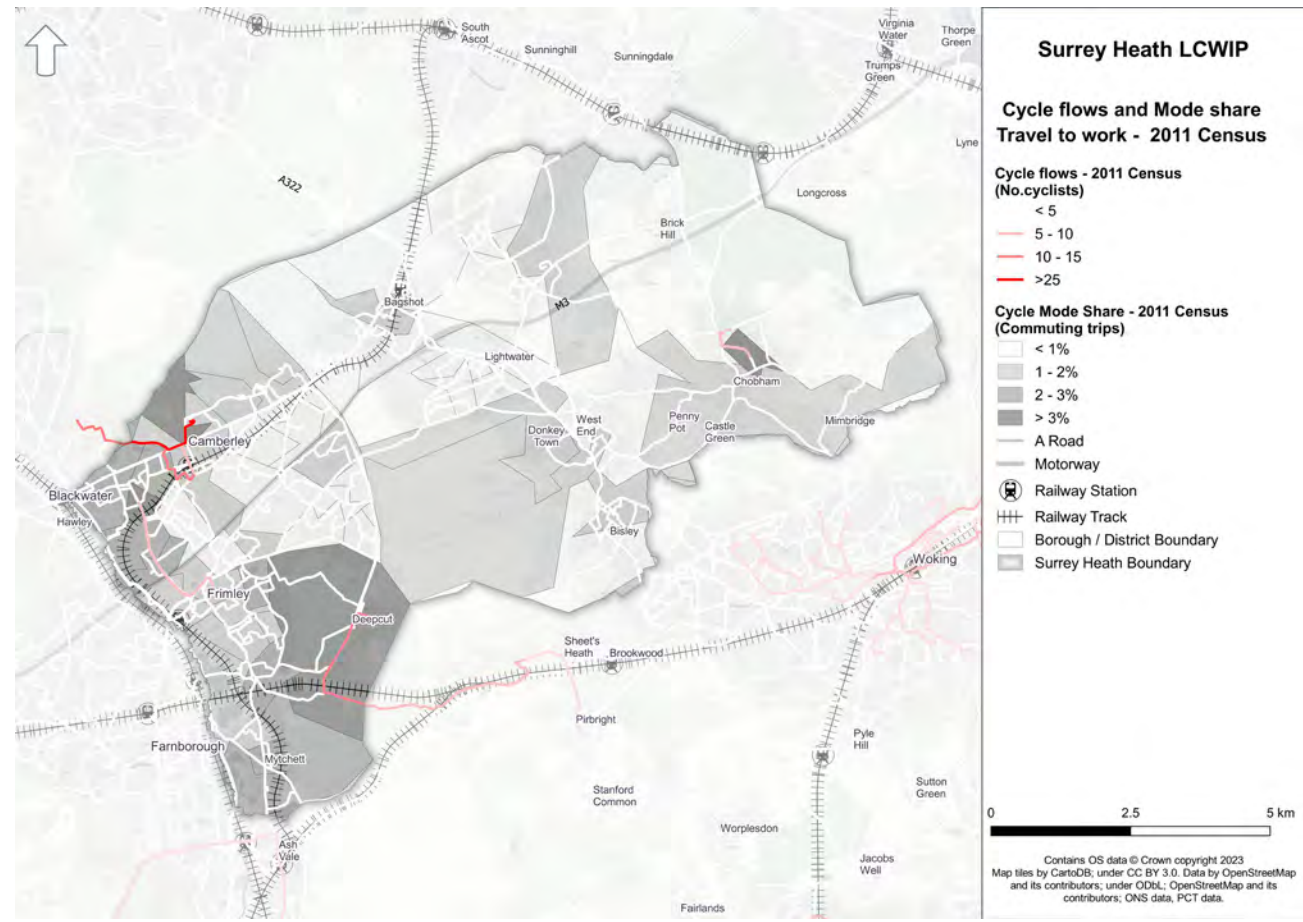


Figure 34. Journey to work - cycling mode share based on 2011 Census data

### PCT Commuter Flows - Go Dutch Scenario

Routes with the highest relative propensity for cycling in Surrey Heath based on journey to work data<sup>1</sup> from the PCT 'Go Dutch scenario' are illustrated in Figure 35. It illustrates potential for growth in cycling in Surrey Heath. As would be expected in the more densely populated area, primarily on the west of the Borough, in Frimley and Camberley as well as in the south near Bisley sections of the urban road network have higher propensity for cycling trips. The remainder of the Borough has comparatively lower cycle flows.

Indicative key corridors and linkages with relatively high flows include:

- » Frimley Bypass and Farnborough Road linking Frimley with neighbouring Rushmoor Borough.
- » Frimley Road that connects Frimley commercial centre to the A30.
- » Connections to Blackwater (i.e., London Road, Victoria Avenue etc).
- » Around Camberley (i.e., High Street, Charles Street, Park Street, Middle Gordon Road, Firlands Avenue etc).
- » Connections to Bagshot from Camberley via the A30 and connections to western end of Lighwater from Frimley via Red Road.
- » Relatively high demand is estimated for connections between Woking (Knaphill area) and Bisley and West End.

1 To approximate the number of cycle trips on a link for all trip purposes, the PCT commuter flows can be multiplied by 6 (based on National Travel Survey data for the share of cycle trips which are for commuting purposes and doubling the journey to work flows to account for roundtrip commuting).

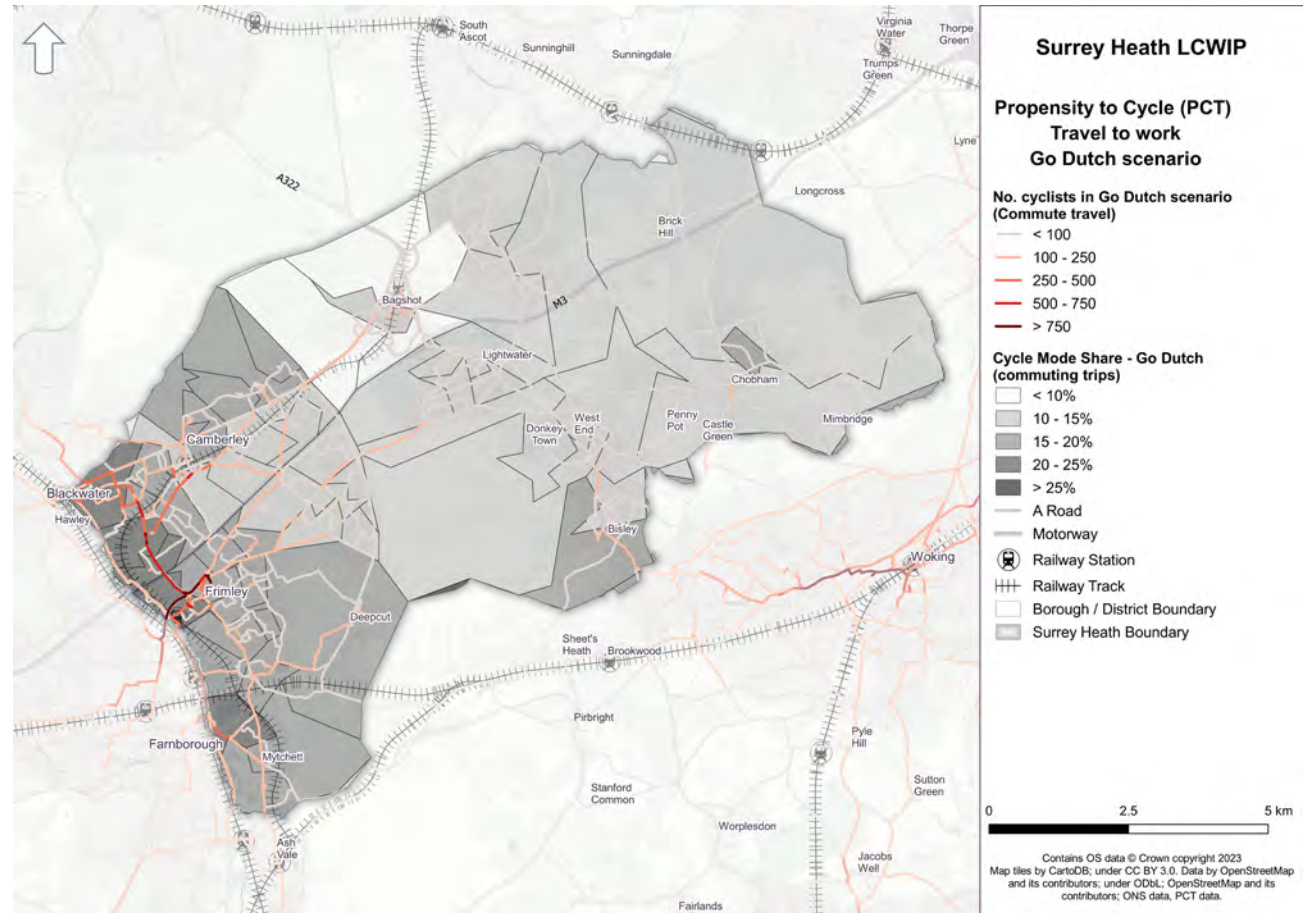


Figure 35. PCT daily commuter cycle flows, 'Go Dutch' scenario



### PCT Commuter Flows - eBike Scenario

Estimated daily commuter cycle flows from the PCT eBike scenario were also reviewed to understand the potential growth in cycling with wider adoption of ebikes, which could mitigate the hilly terrain of some areas of the Borough (shown in Figure 36).

Compared to the Go Dutch scenario, the key corridors and linkages are largely the same, but with additional growth in cycle flows.

EBike scenario estimates a mode share of over 15% in the Borough. The west, where population density and proximity to employment areas is also higher, has a projected mode share of over 20%, as does Bisley in the south (due to the proximity to Woking). The LSOAs bordering the west of the Borough around Blackwater and Mytchett, also increase to 25%, likely due in part to the eBike mitigating the hilliness of the area.

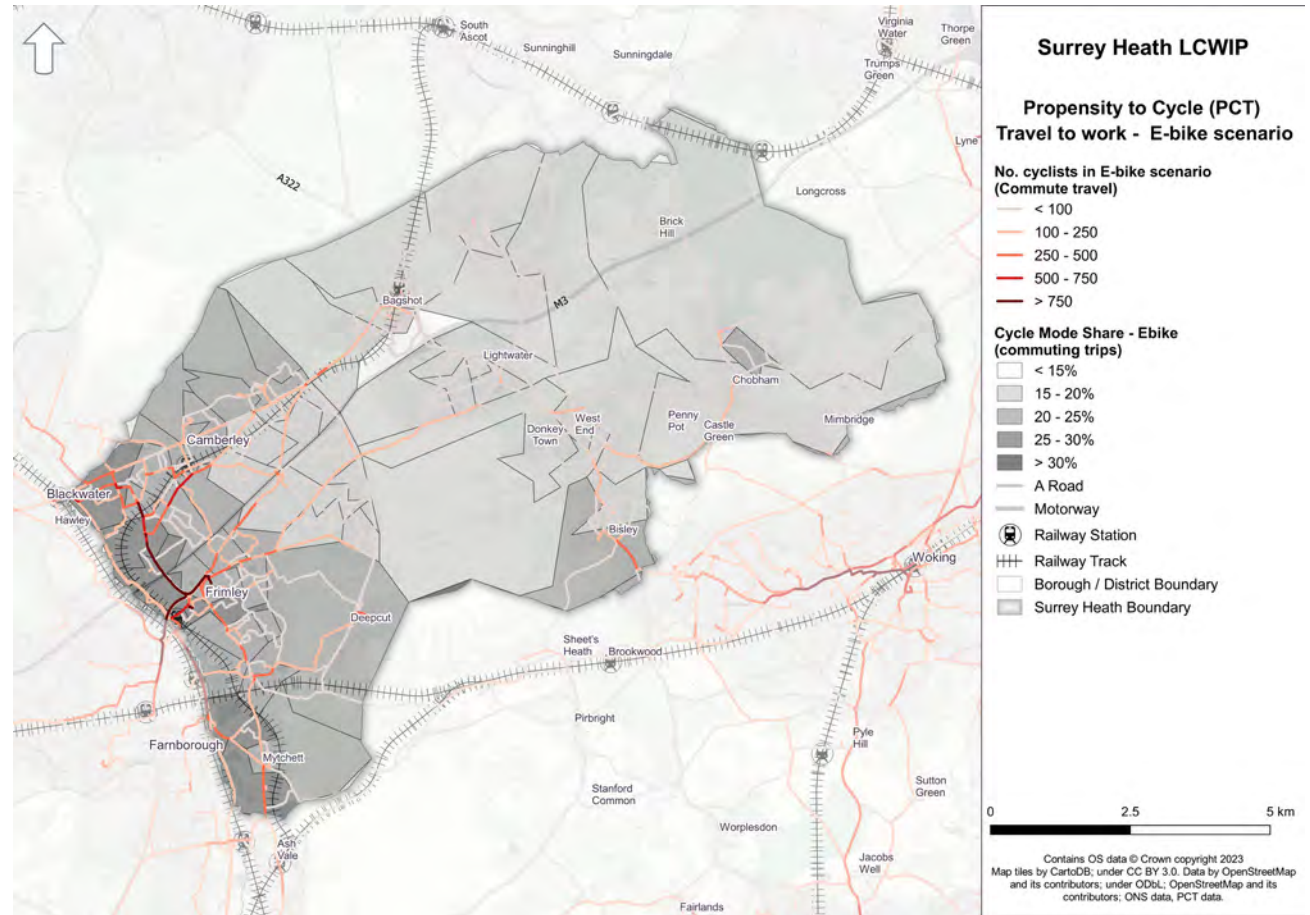


Figure 36. PCT daily commuter cycle flows - 'eBike' scenario

### PCT School Trip Mode Share

Based on the 2011 PCT baseline, cycle mode share for trips to school varies within Surrey Heath and is generally less than 5%. As with the commuter data the PCT school data indicates a higher propensity of cycling to school on the west of the Borough. The LSOA to the south of Frimley Green accounts for the highest rate (5.5%) of cycling to school with four schools in close proximity. The local road network including the A30 between Bagshot and Old Dean shows higher cycle flows. The existing journey to school cycle mode share is illustrated in Figure 37.

In the Go Dutch scenario, estimated daily journey to school cycle flows are illustrated in Figure 38. Cycling to school could be a preferred option for an average of 24% of children across the Borough and over 40% at areas that are with higher population density.

Figure 38 also indicates the routes with the highest relative propensity for cycling in Surrey Heath based on journey to school data. The higher propensity for cycle trips to school are again concentrated in the urban areas, west of the Borough, the north and some areas in the south.

These include the following areas:

- » London Road corridor between Bagshot and Camberley.
- » The Maultway, particularly between Old Dean and north of Heatherside.
- » Frimley Road, northwest of Frimley town centre
- » Guildford Road, south of Bisley for connections to Knaphill.

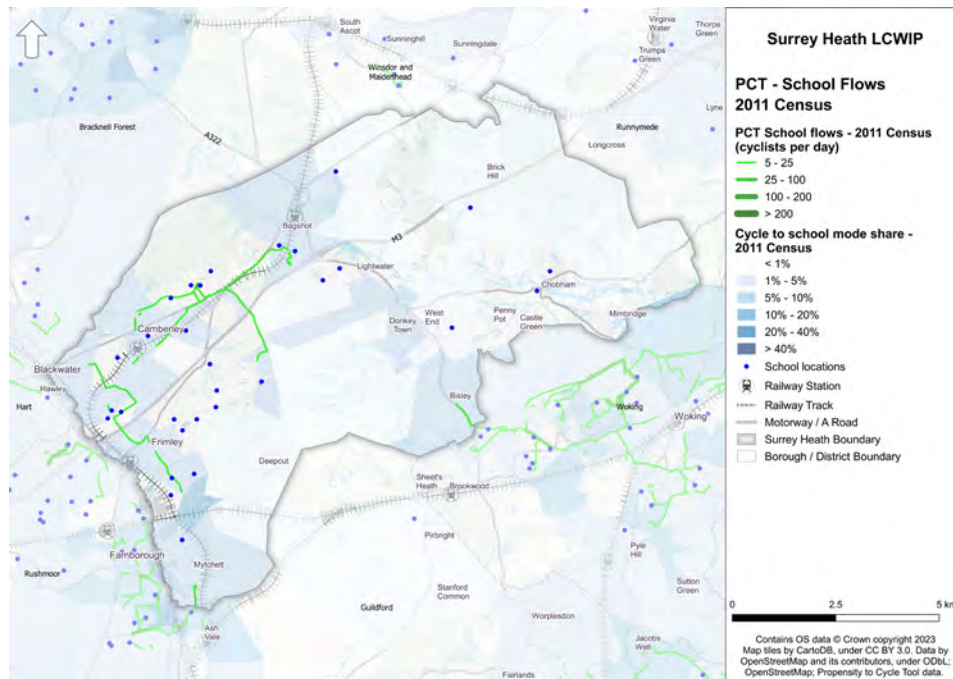


Figure 37. PCT school flows - cycling mode share based on 2011 Census data

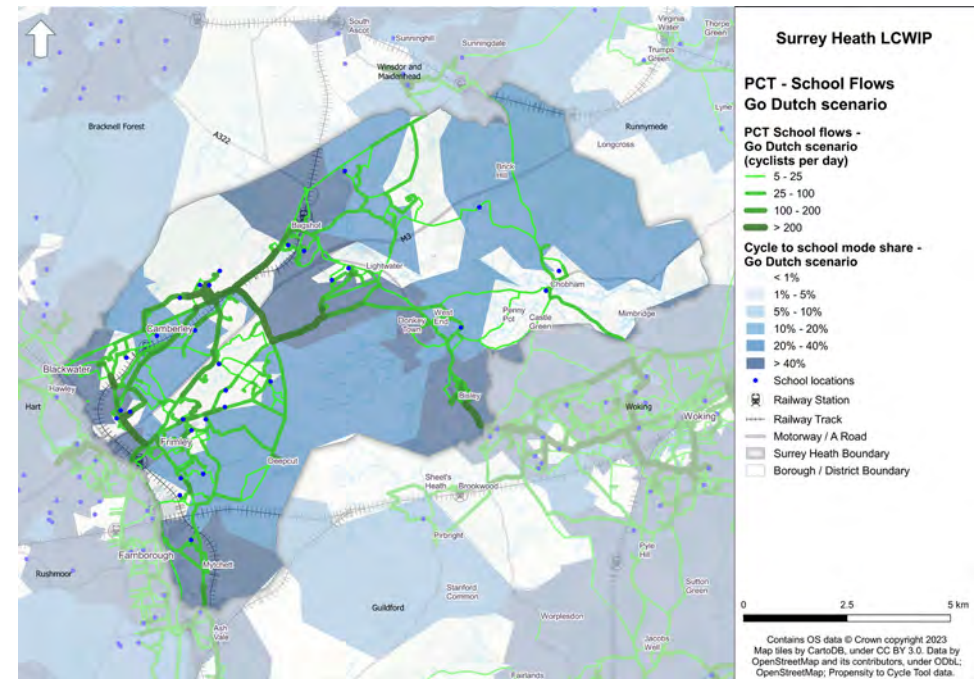


Figure 38. PCT school flows - cycling mode of share based on 'Go Dutch' scenario



## PCT Short Trip Opportunities

The PCT data also identifies where short commuter trips are currently made by car (Driver or car passenger) based on 2011 Census journey to work data. Figure 39 and Figure 40, illustrate commuter trips less than 2km and 5km made by private car which originate and/or end in Surrey Heath. This highlights trips that are within an easy walking (2km) and cycling (5km) distance and opportunities to encourage modal shift by providing improved walking and cycle infrastructure.

Areas with a higher number of short commuter trips made by car tend to be:

- » Along the west of Borough, around Camberley and Frimley.
- » Across the north of the Borough, linking Bagshot with Camberley and adjacent areas like Lightwater.
- » Connections to the railway stations in Bagshot, Camberley and Frimley.
- » In and around villages to the east including Chobham, Lightwater, West End and Bisley.

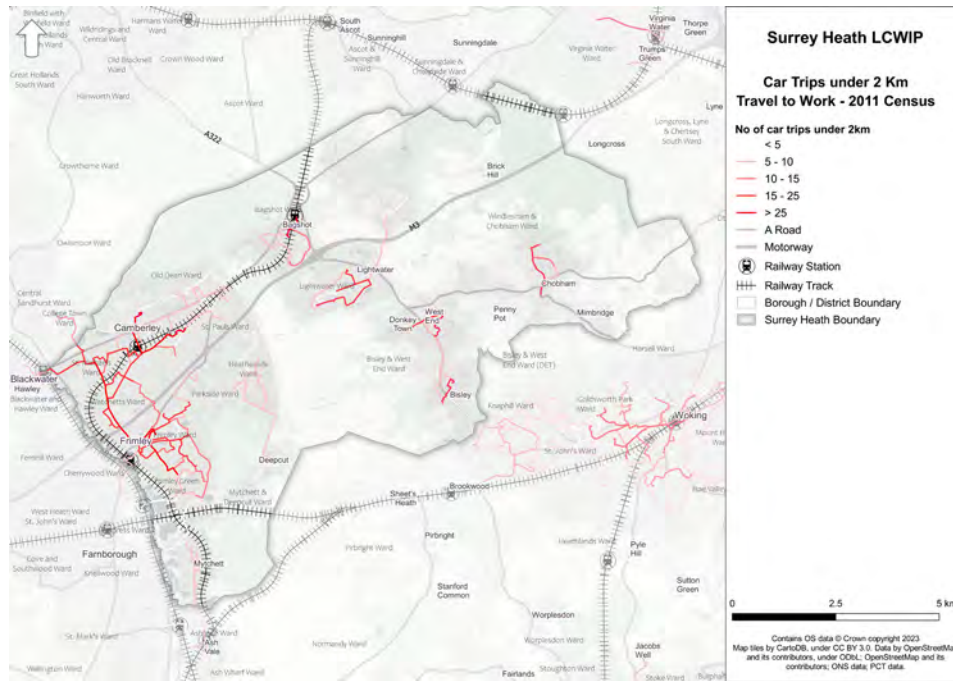


Figure 39. Commuter trips made by car (driver or passenger) ≤ 2km (PCT data, 2011 Census scenario)

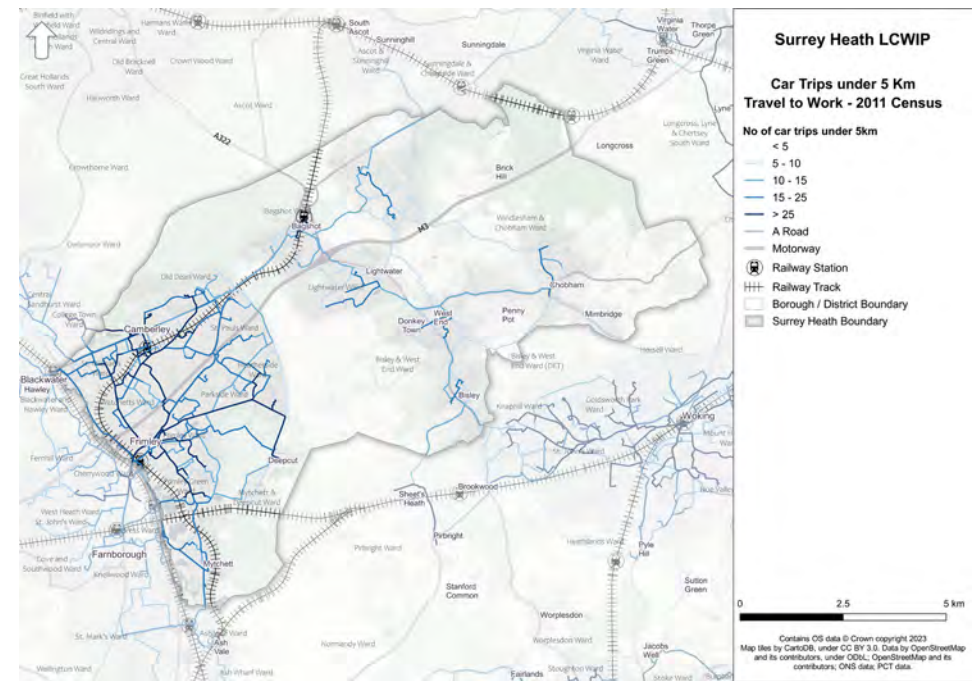


Figure 40. Commuter trips made by car (driver or passenger) ≤ 5km (PCT data, 2011 Census scenario)



## PCT Walking Commuter Trips

Similarly, the walking trips under 2km which originate and/or end in Surrey Heath are shown in Figure 41. Areas with higher number of walking trips are in/around denser areas of the Borough such as Camberley, Frimley, Old Dean, Bagshot, Lightwater and Bisley.

Walking commuter trips are shown towards the railway stations and through the retail areas, high streets and local commercial areas, as a high number of people are employed in these areas.

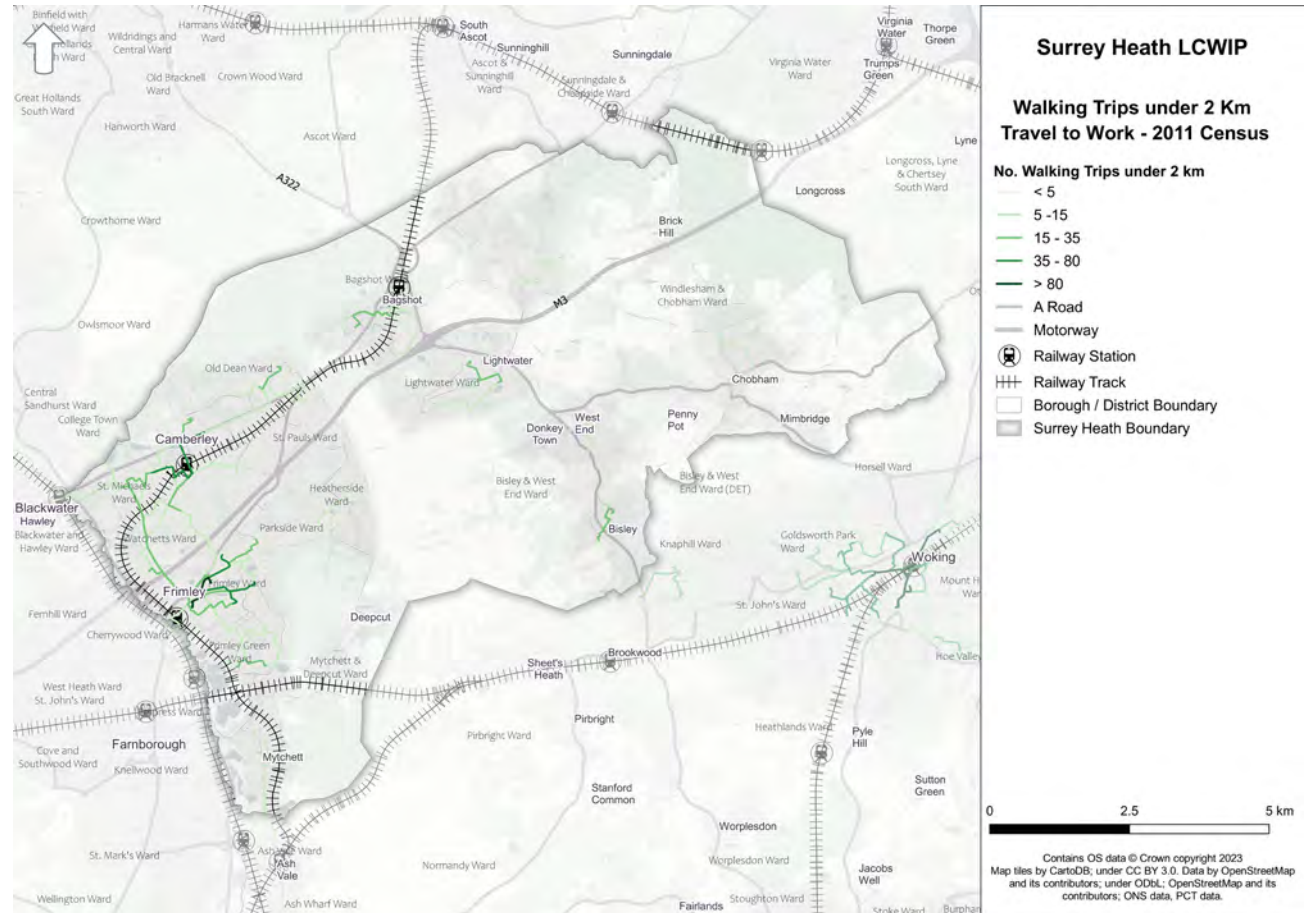


Figure 41. Walking Trips (PCT data, 2011 Census scenario)



## Collision Data

As part of the LCWIP, a high-level review of recent collision data (Dec 2017- Oct 2022) involving pedestrians and cyclists was undertaken. This data was used to identify hotspots of collisions within the Borough. AtkinsRéalis / SCC / SHBC are aware that many 'near misses' and possibly minor collisions, are not reported, and in areas where more people walk and cycle it is more likely for collisions involving pedestrians and cyclists to occur. Although it may be difficult to draw conclusions from the low numbers of reported collisions, this provided an understanding of where collisions are occurring and corridors that could benefit from safety improvements as part of an LCWIP scheme.

Surrey has one of the highest numbers of cycle collisions in the UK in comparison with other counties. 80% of the casualties are in a more built-up area, and 71% of the casualties are injured on a weekday (1 in 5 casualties occur during the commute to/from work, although this is an approximation of the data from the last 15 years)<sup>1</sup>.

Figures 43 and 44 present 'heatmaps' illustrating the location and relative concentration of pedestrian and cyclist collisions within the Borough along with collisions involving pedestrians and cyclists (respectively). Collisions were concentrated in the north west of the Borough. This is likely due to the higher population density and clustering

of key destinations in this area of the Borough (as summarised in previous sections), and hence there is greater propensity for walking and cycling activity and higher traffic in these areas.

Relative 'hotspots' include Camberley and Frimley town centres with high population densities and a high volume of visitors accessing the area for employment, retail and educational purposes. Key corridors with relatively high collisions include the London Road (A30) between Bagshot and Camberley, along Guildford Road between Bisley and Lightwater, and along Frimley Road.

During the five-year assessment period, there were 104 pedestrian casualties (22/year) and 93 casualties involving people cycling (23/year) in Surrey Heath.

Table 5. Pedestrian and cyclist casualties, by severity and year

	Severity	2017 <sup>1</sup>	2018	2019	2020	2021	2022	Total (2018-2021)	Avg/Yr (2018-2021)
Pedestrian casualties	Fatal	0	0	1	0	3	0	4	1
	Serious	0	6	4	1	5	3	19	4
	Slight	2	18	22	12	16	11	81	17
	Total	2	24	27	13	24	14	104	22
Cyclist casualties	Fatal	0	0	0	0	0	0	0	0
	Serious	1	6	3	12	8	4	29	7.25
	Slight	3	16	16	19	13	4	64	16
	Total	4	22	19	31	21	8	93	23.25

<sup>1</sup> <http://casualties.level123.uk/docs/comparegb/>

<sup>1</sup> Year 2017 data (column 2) includes pedestrian casualties for the month of December only..



The locations and severity of pedestrian collisions are shown in Figure 42. There were 23 killed or severely injured (KSIs) pedestrian casualties. The serious collisions tended to occur along the main road network (A and B roads), with clusters of serious incidents appearing on the London Road between Camberley and Blackwater and in/around Camberley and Frimley town centres and Watchetts Ward.

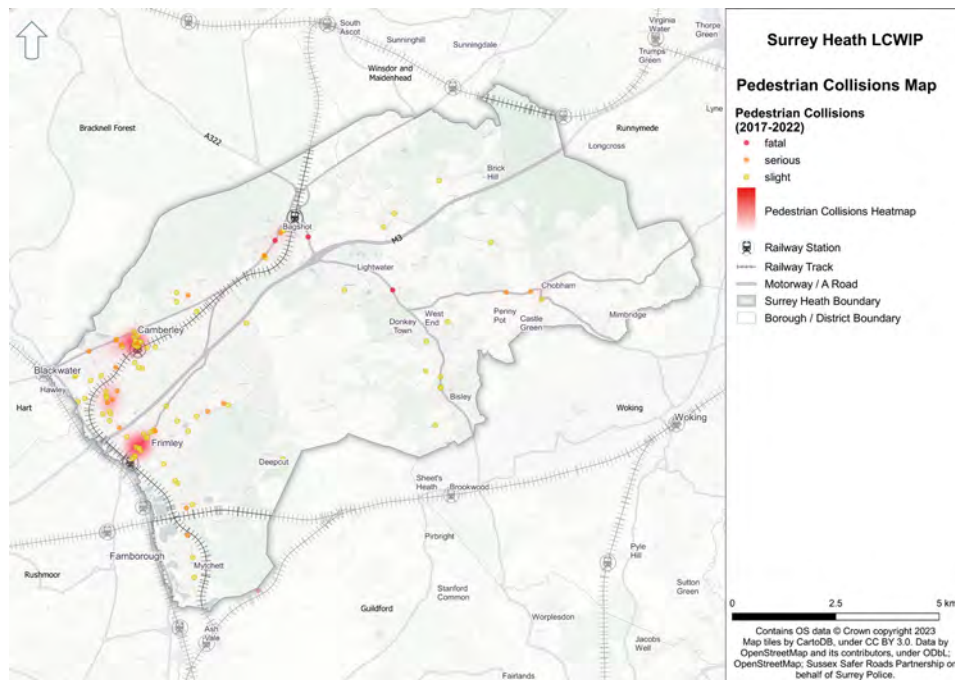


Figure 42. Pedestrian collisions, by severity

The locations and severity of cyclist collisions are shown in Figure 43. There were 29 KSIs casualties involving people cycling. As with the pedestrian collisions, clustering of the people cycling collisions along the main road network is apparent. Main roads include:

- » London Road between Bagshot and Camberley, and between Camberley and Blackwater.
- » Frimley Road between St. Michael's ward and Frimley.
- » Lightwater Bypass.
- » Guildford Road in Bisley.

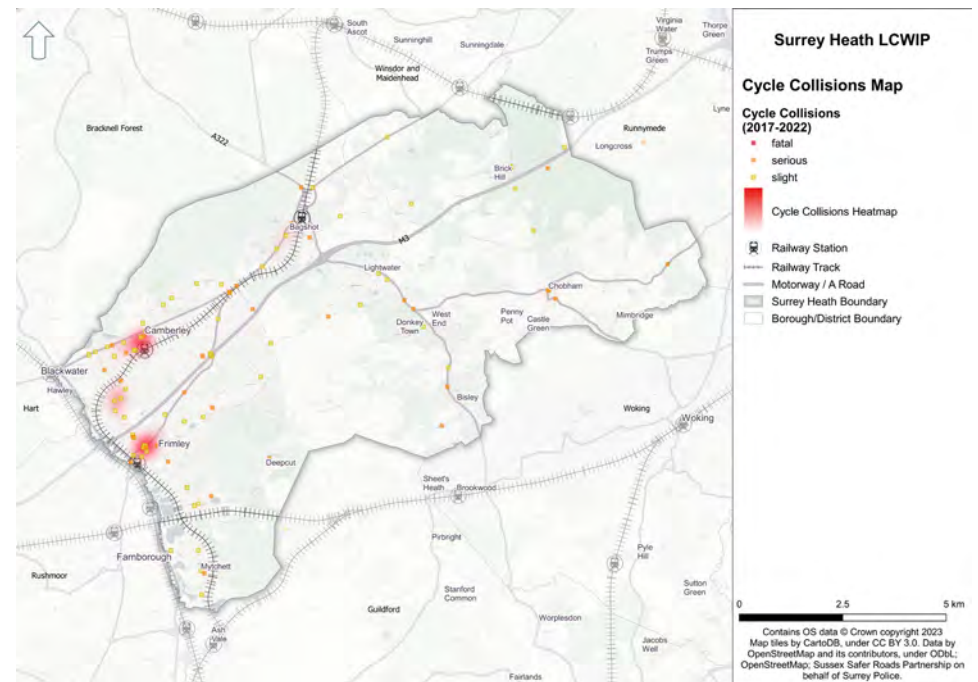


Figure 43. Cyclist collisions, by severity



## Online Public Comments

Several online platforms have been used recently to gather input from the public about their suggestions for active travel improvements and existing issues. These include the following platforms:

### Surrey LCWIP Commonplace Map<sup>1</sup>

Launched by SCC in summer 2020<sup>2</sup>, the website used the Commonplace platform to gather suggestions for active travel improvements in response to the Covid-19 pandemic and to support social distancing and encourage mode shift. In May 2021, the website was adapted for the Surrey LCWIPs and subsequently re-publicised to gather additional comments to support of the Surrey Heath LCWIP in December 2022 - January 2023. During this period 120 suggestions were provided within Surrey Heath.

Maps illustrating the location and frequency/relative popularity of cycling and pedestrian comments, and other issues are provided in Figure 44, Figure 45 and Figure 46 respectively.

Among participants who commented on cycling issues, most of them reported negative experiences, with a few of them reporting positive or neutral experiences, and recommendations for improvements. The key sections of roads where more issues have been reported are along the Basingstoke Canal, near Frimley Railway Station, along the north-west

1 <https://surreylcwip.commonplace.is/>

2 Initially referred to as 'Surrey Covid Transport Map' on the SCC Commonplace website prior to May 2021.

stretch of Maultway, and along the London Road, near Bagshot town centre.

It can be observed that respondents have quoted an absence of crossing facilities, poor air quality and exposure to road traffic as the main hindrance to cycling. Suggestions from participants were the provision of a dedicated

cycle track, widening of existing shared-use paths to avoid conflicts with pedestrians, improving the surface, providing adequate lighting and adding traffic calming measures.

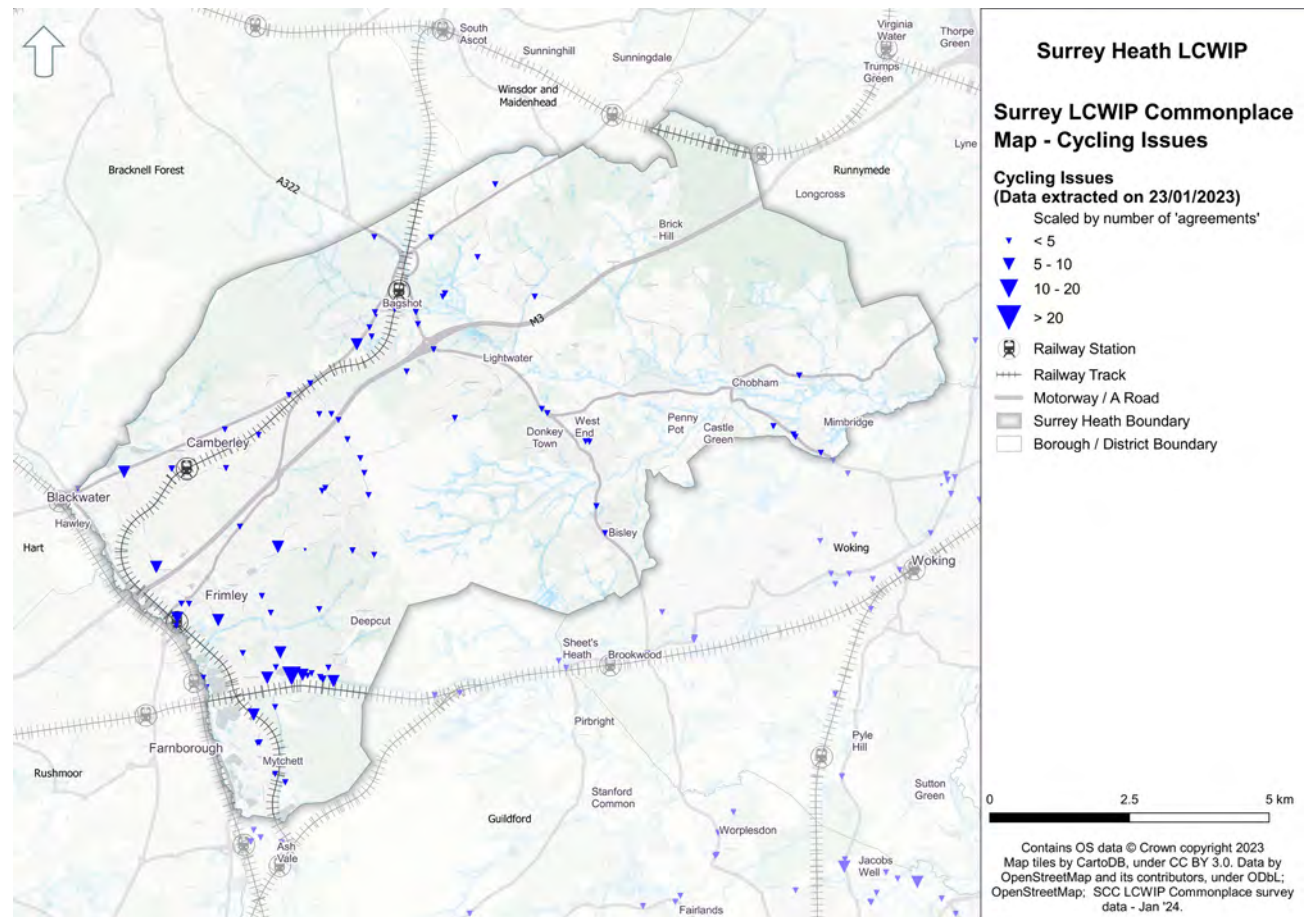


Figure 44. SCC LCWIP Commonplace Survey Map comments related to cycling issues

Similarly, participants who have commented on walking issues have also given negative responses highlighting issues such as a lack of sign posts, safe crossing facilities, high traffic speeds along roads, risk to personal security, narrow footways and being exposed to motorised traffic. Key stretches of roads where walking issues have been reported are similar to the cycling issues; particularly along the Basingstoke Canal, the Maultway and the London Road near Bagshot town centre.

Other issues reported by participants near major town centres as observed in Figure 46, include speed signs and road signs being obscured by vegetation or trees, uneven surface obstructing people with disabilities, poor connectivity, steep terrains, certain routes being inaccessible to cyclists and poor maintenance of roads affecting safety of active travel users.

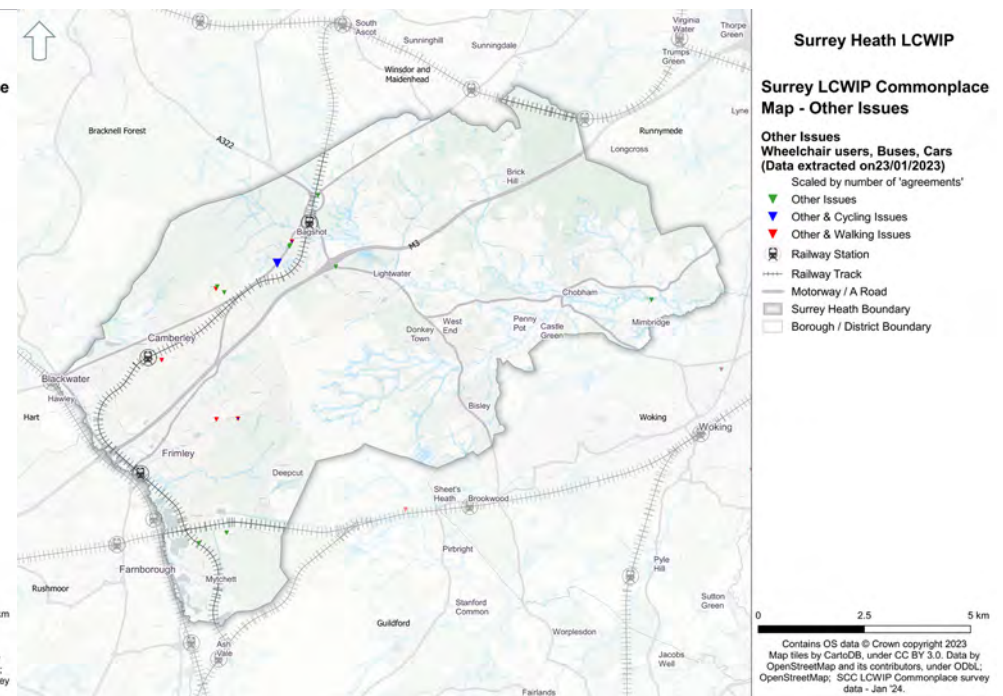
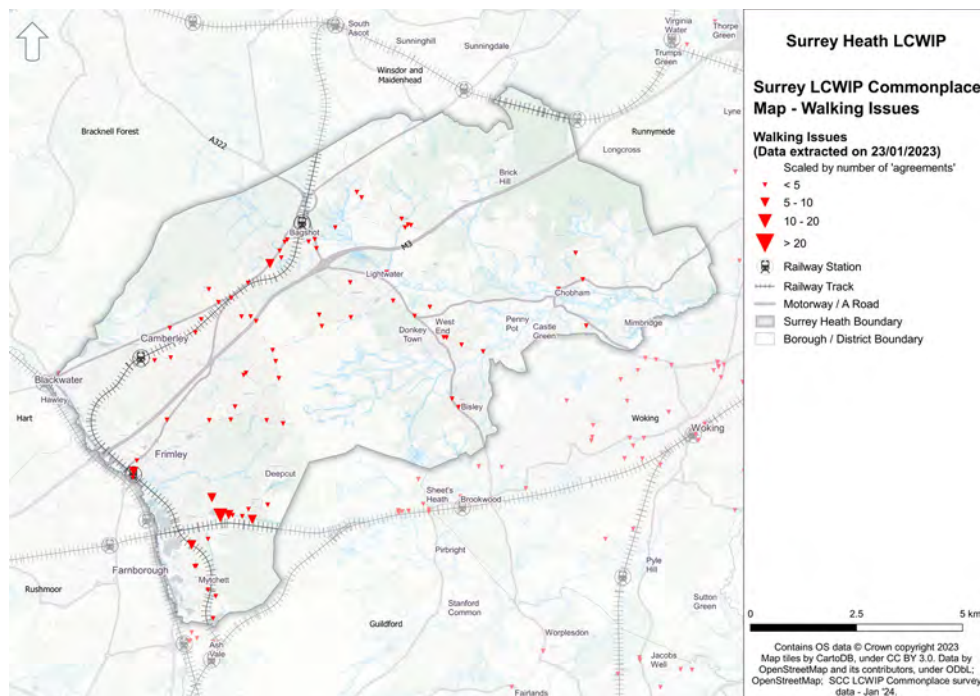


Figure 45. SCC LCWIP Commonplace Survey Map comments related to pedestrian issues

Figure 46. SCC LCWIP Commonplace Survey Map comments related to other issues



## Your Fund Surrey Map

'Your Fund Surrey' public engagement was launched by SCC on the Commonplace platform, had a broader remit although was not active-travel specific. However, the data could be filtered to identify walking and cycling infrastructure suggestions. Throughout April 2021, when the survey took place, there were 80 such suggestions within Surrey Heath, 7 of which were related to cycling and walking.

Maps illustrating the location and frequency/relative popularity of cycling and pedestrian comments is provided in Figure 47.

The most common suggestion received from this survey include provision of pedestrian crossings especially near schools in Frimley, and maintaining and widening footways and cycleways connecting the western half of the Borough to the urban areas on the west.

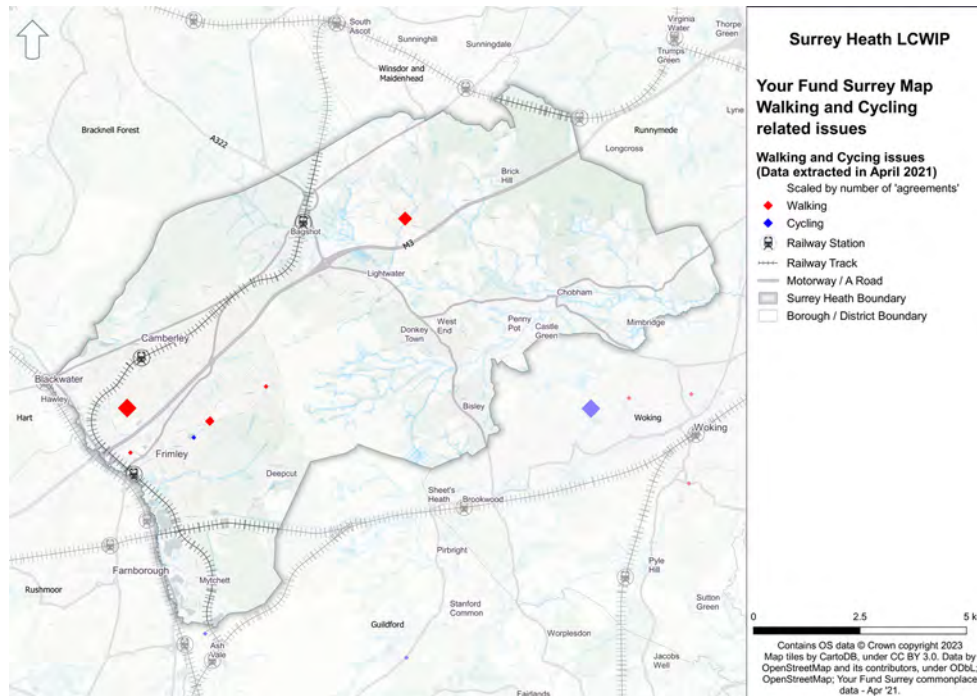


Figure 47. SCC Your Fund Surrey comments related to cycling issues

## Widen My Path

Similar to the SCC LCWIP Commonplace Map (Figure 44), 'Widen My Path' is a website launched by Cycle Streets during the Covid-19 pandemic as a tool to collect suggestions from the general public throughout the UK for active travel improvements. A total of 49 suggestions within Surrey Heath were received up to 23 January 2023. A map illustrating the location of the comments is shown in Figure 48.

Some recurring comments from participants were on pavement improvements, improvement of existing crossings and providing new crossings, and the introduction of 20 mph zones near schools.

Some specific comments from participants include providing wide, continuous and resurfaced active travel paths to or from Bagshot town centre, along the Basingstoke Canal, along the Maultway and the A30 and A325 roads. New shared use paths or segregated cycling or walking paths were suggested along the B311, Lake Road and Wharf Road, and restrictions on the motorised traffic through Frimley High Street.

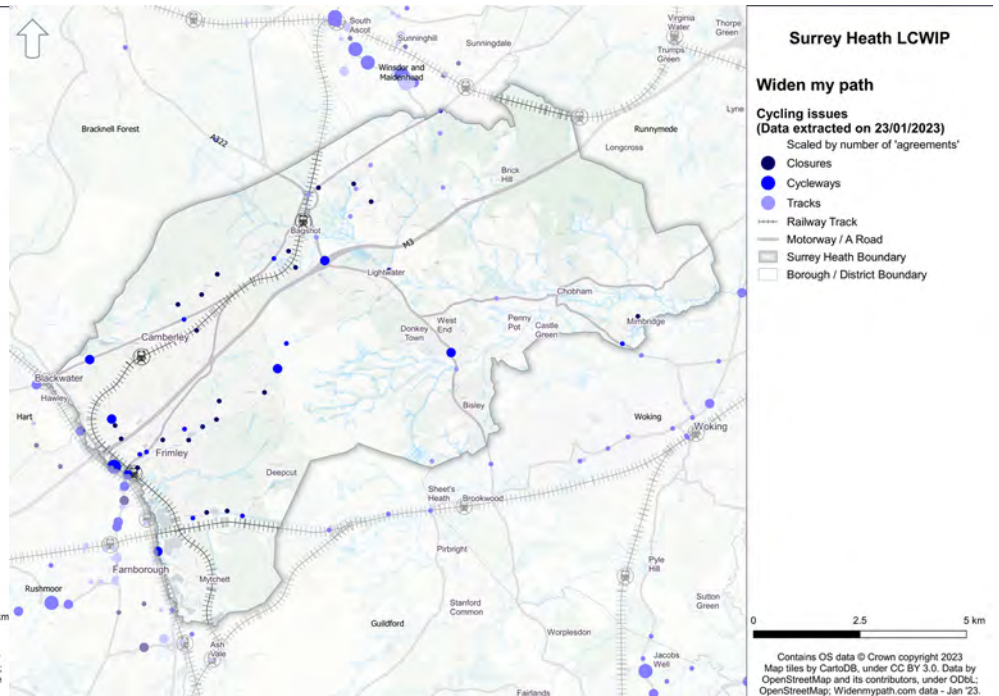


Figure 48. Comments obtained from Widen My Path website

## Key Findings from Public Comments

A composite heatmap illustrating the location and level of agreement for both pedestrian and cycling issues across the available online comment platforms is illustrated in Figure 49. Although this is weighted slightly to the Your Funds Surrey survey, which had a relatively higher response rate than the other sources (in terms of the 'like'/agreement feature), it provides a visual representation of higher priority areas for walking and cycling improvements, from the perspective of local residents. Some of the more common/popular comments and suggestions included:

- » Widen and resurface Basingstoke Canal trail, the nearby Lake Road and Wharf Road to allow cyclists and pedestrians to maintain social distance.
- » Provision of a more safe pathway and a segregated cycle track in several locations such as the B311, A30, A325 and cycleways that connect the east of the Borough to the urban areas on the west.
- » Closure of roads to motorised traffic with public realm and infrastructure improvements on Frimley and Bagshot High Streets.
- » Reducing speed limits, improved crossings and cycle infrastructure to or from Bagshot town centre.
- » New and improved crossing facilities and introduction of 20mph zones near schools around Frimley.

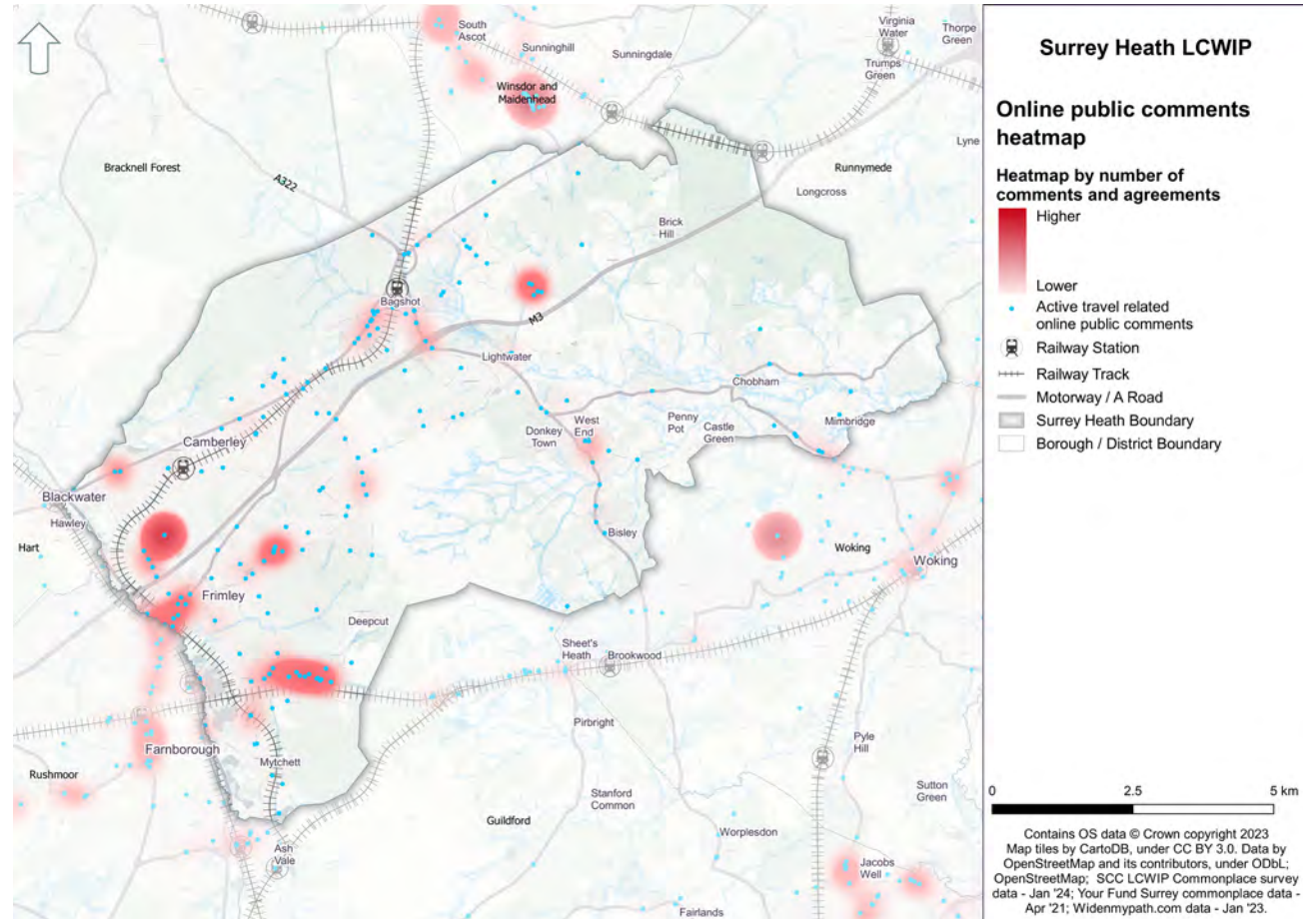


Figure 49. Heatmap illustrating the frequency of comments related to walking and cycling issues across multiple online public comment platforms

## Cycling Infrastructure Prioritisation Toolkit

The Cycling Infrastructure Prioritisation Toolkit (CylPT) is a collection of tools aiming to provide an evidence-base for prioritisation of transport infrastructure that will get more people cycling.<sup>1</sup>

CylPT uses the PCT to provide data on the existing and future cycling flows on each road. This data is in turn taken from the 2011 Census commuting flow data.

- » CylPT is biased towards commuter cycling due to using the PCT data.
- » CylPT baseline for predicting future demand is 2011 data (using the Census data) but does not hold any recent information on commuting patterns.

The top routes, cohesive networks and existing cycleways within Surrey Heath, identified through the CylPT tool are shown in Figure 50. As indicated, most of the top routes are located towards the west of the Borough, mainly along the London Road between Blackwater and Camberley, Frimley Road and Frimley Bypass near Frimley town centre, the A331 stretch bordering the Mytchett village and along a short stretch of London Road, north of Windlesham.

Similarly, the cohesive networks identified by the CylPT tool includes the top routes mentioned above and others are located in close proximity to the top routes, towards west

<sup>1</sup> <https://www.cylpt.bike/>

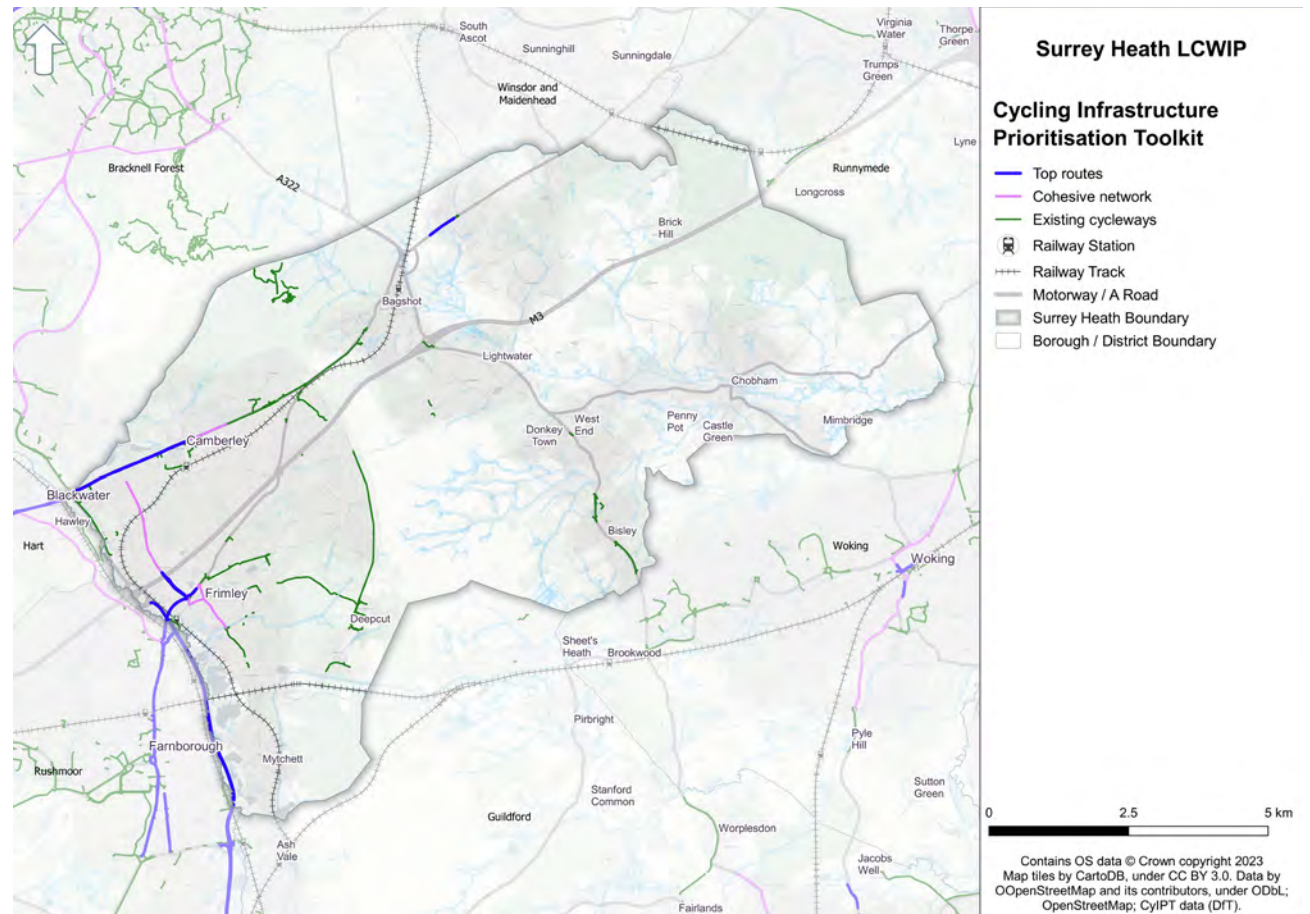


Figure 50. Cycling Infrastructure Prioritisation Toolkit illustrating the top routes, cohesive networks and existing cycleways

of the Borough, to fill in the gaps in the existing network with the cycle routes that were identified as top priorities within the Borough.



## Crime Data

The street-level crime incidents<sup>1</sup> reported by Surrey Police from September 2019 to October 2022 have been mapped for the Surrey Heath area (see Figure 51). This dataset was used to identify patterns of antisocial and dangerous behaviour that affects personal safety. Areas with higher concentration of crimes will be given greater focus in the development of the LCWIP to improve public realm that will potentially help reduce similar incidents in the future and attract more visitors/residents to walk and cycle.

It is evident from the map that most clusters of crimes have occurred near the main town centres and particularly the more densely populated western side of the Borough. The main areas affected were Camberley, Frimley and Bagshot; mainly around the railway stations, recreational areas and schools. Crime incidents can also be observed along local roads and in the smaller settlements across the Borough, potentially due to factors such as poor surveillance, lighting and public facilities.

Public space improvements, formal/informal surveillance, public signage, adequate lighting and safer active travel infrastructure throughout the LCWIP could potentially reduce the occurrence of crime.

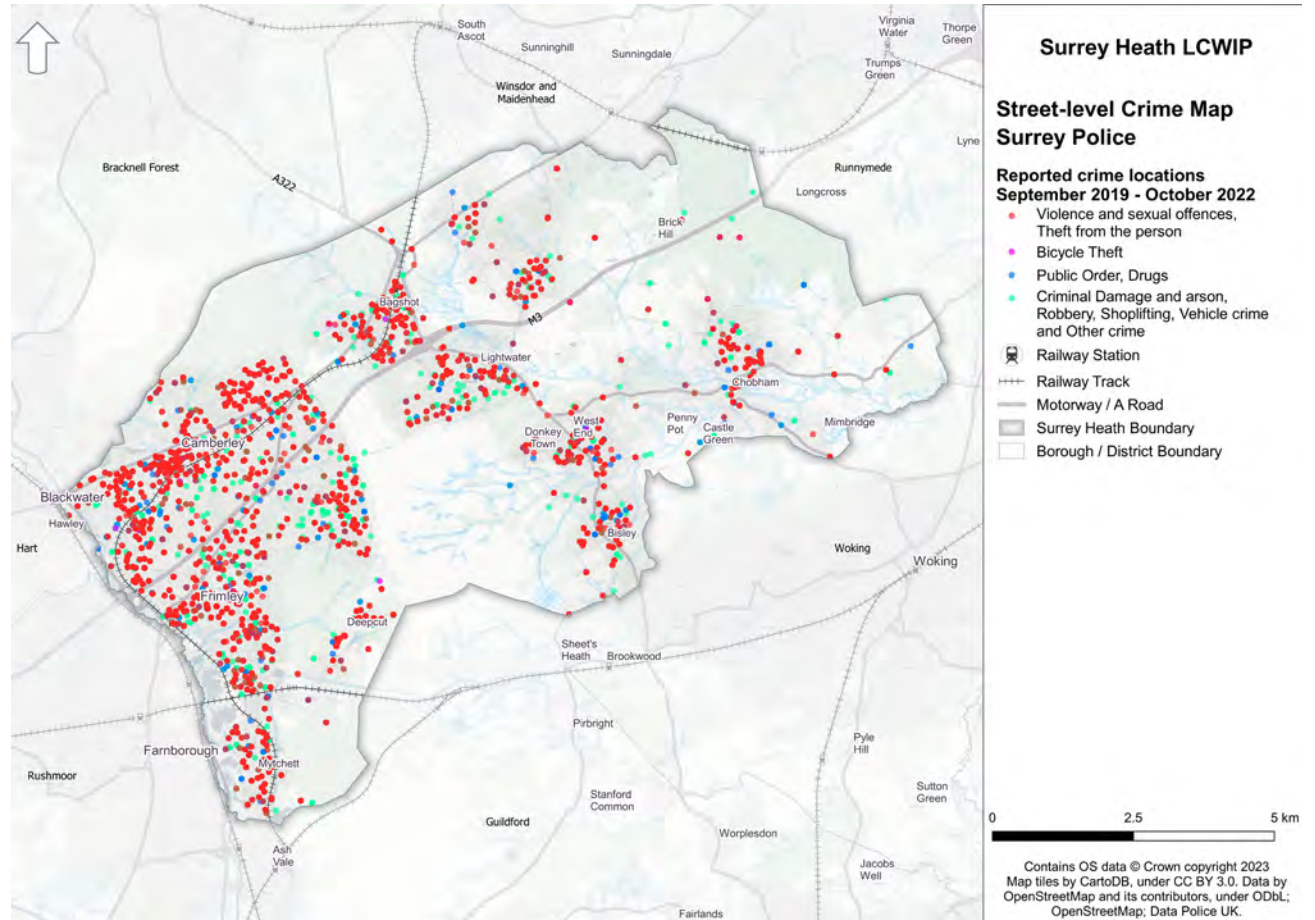


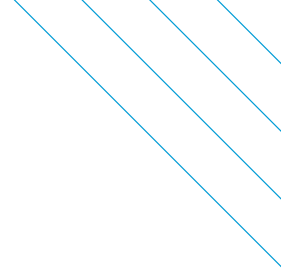
Figure 51. Street level crime map reported by Surrey Police for Surrey Heath Borough

<sup>1</sup> Crimes at street-level; either within a 1 mile radius of a single point, or within a custom area.

# Summary of Key Findings

The evidence base review provided a wealth of data and information related to walking and cycling in Surrey Heath, which were used to help inform the identification of key cycle corridors and walking areas. Some of the key findings included:

- » Settlement patterns in Surrey Heath are concentrated in the north and west of the Borough (encompassing Camberley, Frimley, Bagshot), as well as in Lightwater and Chobham in the more rural areas, as illustrated in the population data and locations of key destinations. The higher density and proximity of trip attractors leads to a higher propensity for walking and cycling in these areas of the Borough, as demonstrated by the PCT data.
- » Commuting data highlights the importance of linkages with neighbouring Boroughs, as well as access to railway stations to facilitate linked active travel/public transport journeys.
- » There are several physical barriers that sever active travel networks, including the M3 and railway network. The road network towards the periphery of the Borough is also more limited, due in part to its more rural character and settlement patterns, which creates limited opportunities for linkages between village centres and with the rest of the Borough.
- » Topography is also a potential barrier to cycling in some areas of the Borough, including to the west of the Borough around Camberley, Frimley and Deepcut. Additionally, while hilliness can be an appealing characteristic for recreational cycling, it can also deter potential utilitarian cycle journeys or new people from cycling. However, the increasing uptake of e-bikes is helping to mitigate topography as a barrier to cycling.
- » Strava data indicates several corridors with relatively high existing usage, including several rural roads and public trails, indicative of leisure cycling activity. Other routes with relatively high usage include the London Road and Frimley Road towards the north and west of the Borough.
- » The PCT indicates a relatively high propensity for cycling in Surrey Heath, both for commuter and school trips. Propensity is again highest in the west of the Borough due to the denser urban environment. There is also a propensity for commuter cycle flows in the south, from Bisley to Woking for the E-bike and Go Dutch scenarios.
- » The collision history indicates that the highest occurrences of cycle and pedestrian collisions are in Camberley and Frimley areas, again reflective of settlement patterns.
- » A number of online public engagement tools were available, which captured existing public input on active travel issues and suggestions. Mapping of this data highlights perceived local priorities amongst the general public. Clusters of comments appeared in the Camberley and Frimley town centre areas, on London Road (A30), Frimley Road, Bagshot town centre, the Basingstoke Canal and the Maultway.
- » There is an imbalance between the west and the east areas of the Borough. The western area is highly populated with dense urban environment and a large number of key destinations which increases the demand for improvements for active travel. The east of the Borough is a rural area with few settlements with lower population, which is isolated, and requires better connections to the urban centres to the west and south (Woking). The LCWIP will aim to address issues in the extent of the Borough, however it is anticipated that the western area is likely to have greater focus as it serves larger population.



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PASTIES  
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FLOWERS  
HOMEMADE  
IN-STORE

# 4. Stakeholder Early Engagement

Introduction

Stakeholder Workshop

Other Engagement Activities

# Introduction

Stakeholder engagement is a key element of the LCWIP as it ensures that the views and knowledge of local residents and stakeholders are taken into account. Early engagement activities undertaken during the LCWIP included:

- » A series of stakeholder workshops at two key points during development of the LCWIP.
- » Public engagement via an online survey.
- » Introductory briefing for local members.
- » Other project meetings.

The engagement activities are summarised in the following sections.

# Stakeholder Workshops

During the study two phases of workshops were held. Each phase involved meeting with four separate audiences: internal stakeholders (officers from Surrey County Council and Surrey Heath Borough Council), external stakeholders (such as representatives from walking and cycle groups, business groups, and Sustrans), local members from Surrey Heath Borough Council, Surrey County Council and Parish representatives and officers from neighbouring Boroughs (Runnymede, Woking, Guildford, Rushmoor, Hart, Bracknell Forest, and Windsor and Maidenhead).

The Phase 1 workshop presented the existing constraints and the initial identification of walking zones and cycle corridors. The Phase 2 workshop reviewed the proposed infrastructure interventions.

Stakeholder comments provided important feedback throughout each stage of the study. Comments were taken on board to refine the core walking zone (CWZ) and cycle corridor selection and the proposed intervention measures.

## Phase 1 Stakeholder Workshops

During the first phase of the LCWIP, stakeholder workshops were held in early March 2023. In total 34 participants (excluding AtkinsRéalis and SCC / SHBC core project teams) attended the Phase 1 workshops.

The workshop was divided into three main parts. The first included a presentation of the objectives of the LCWIP, the project and work so far (data collected), the second part a presentation of the proposed cycle network, and the third part included a presentation of the identified CWZs. After the presentation of the cycle and walking networks, there was an interactive session where participants' comments were added to the draft network maps (Figure 52 in the following page).

Participants were also asked to vote for their top five cycle corridors and top three CWZs. The results of the poll were subsequently incorporated into the MCAF process (refer to Cycling and Walking Network sections on pages 85 and 135, respectively) in order to select the Phase 1 areas to be advanced to the second phase of the LCWIP.

Local stakeholders were generally in agreement with the proposed aspirational networks, and most changes were in reference specific alignments of the cycle corridors, improved connections between areas and introduction of additional core walking zones. Four cycle corridor alignments were refined following the received comments and two core walking zones were added. Additional feedback from the stakeholders involved information of the existing issues along the corridors and the zones, and opportunities for connections.

The proposed cycle and walking networks were refined following the comments received. A log of stakeholder comments regarding the initial proposals is provided in Appendix 6.

## Phase 2 Stakeholder Workshops

During the second phase of the LCWIP, stakeholder workshops were held in September/early October 2023. The invitee lists were very similar to the ones for the Phase 1 workshops, although additional external stakeholders were also included since the areas with proposed interventions were more targeted at this phase of the LCWIP. In total 34 participants (excluding AtkinsRéalis and SCC / SHBC core project teams) attended the Phase 2 workshops.

The workshop was divided into two main parts. The first included a summary of the activities since the previous workshops to inform the stakeholders on the prioritisation process, and the second part included a presentation on the proposed interventions for the selected cycle corridors and CWZs in the different areas. After the presentation of the cycle and walking proposals, there was an interactive session where participants provided feedback on the potential improvement measures.

The proposed interventions for both the cycle corridors and walking areas were subsequently refined, as appropriate, to incorporate the stakeholder comments. A log of stakeholder comments regarding the initial proposals is provided in Appendix 6. The comments and feedback may help inform next stages of scheme development.

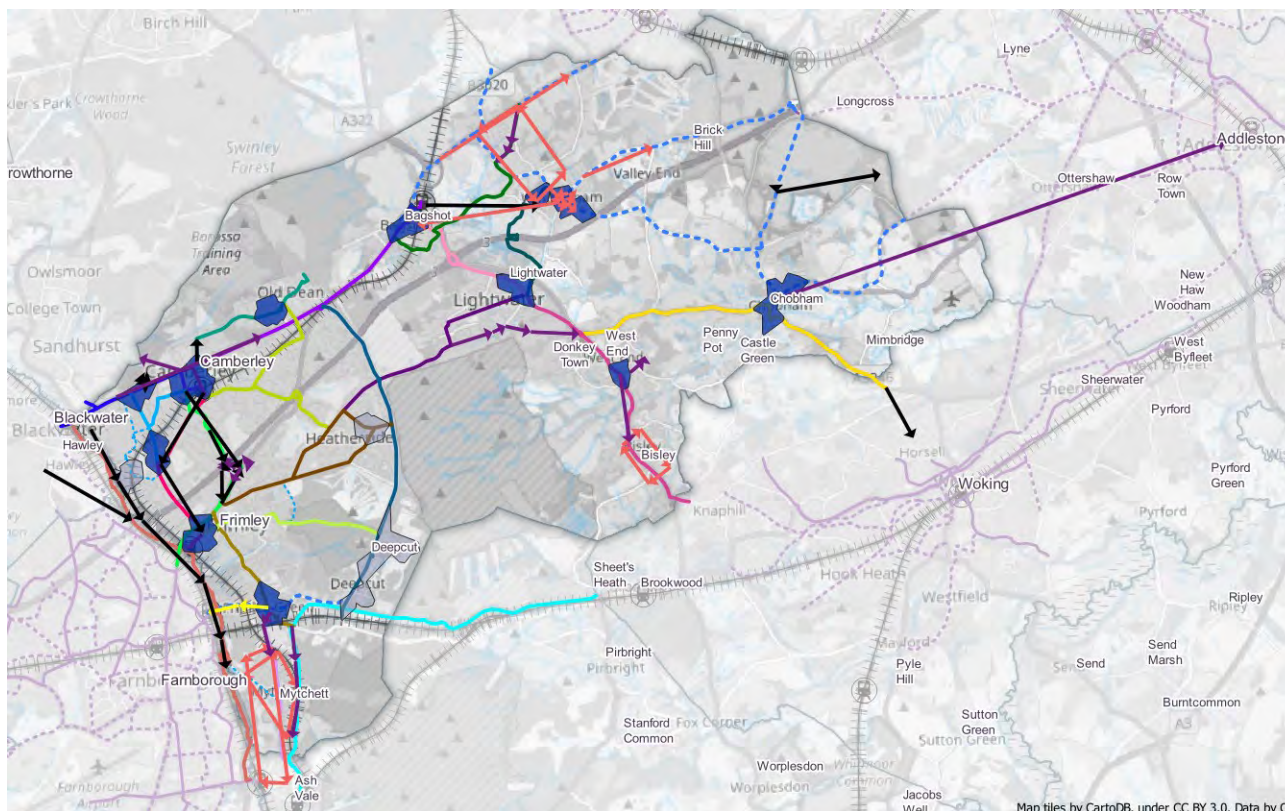


Figure 52. Stakeholder comments during Phase 1 Internal Stakeholder workshop (notes and mark-ups)



# Other Engagement Activities

## Public Engagement

Early public engagement was carried out via a number of web-based surveys. The primary tool was SCC's LCWIP Commonplace survey. Originally used during the Covid-19 pandemic, to identify potential schemes for Emergency Active Travel Fund support, the survey was re-publicised at the start of the Surrey Heath LCWIP study (December 2022 - January 2023) to encourage additional public input. Comments logged on other public survey platforms, such as Widen My Path and Your Fund Surrey, were also considered (see page 70).

The interactive sites allowed the public to leave comments about deficiencies and desired improvements related to walking, cycling and other issues. The information was used to help identify the proposed walking and cycling networks.

The surveys were opened to the public during the COVID-19 pandemic and AtkinsRéalis processed the available data up to the end of January 2023.

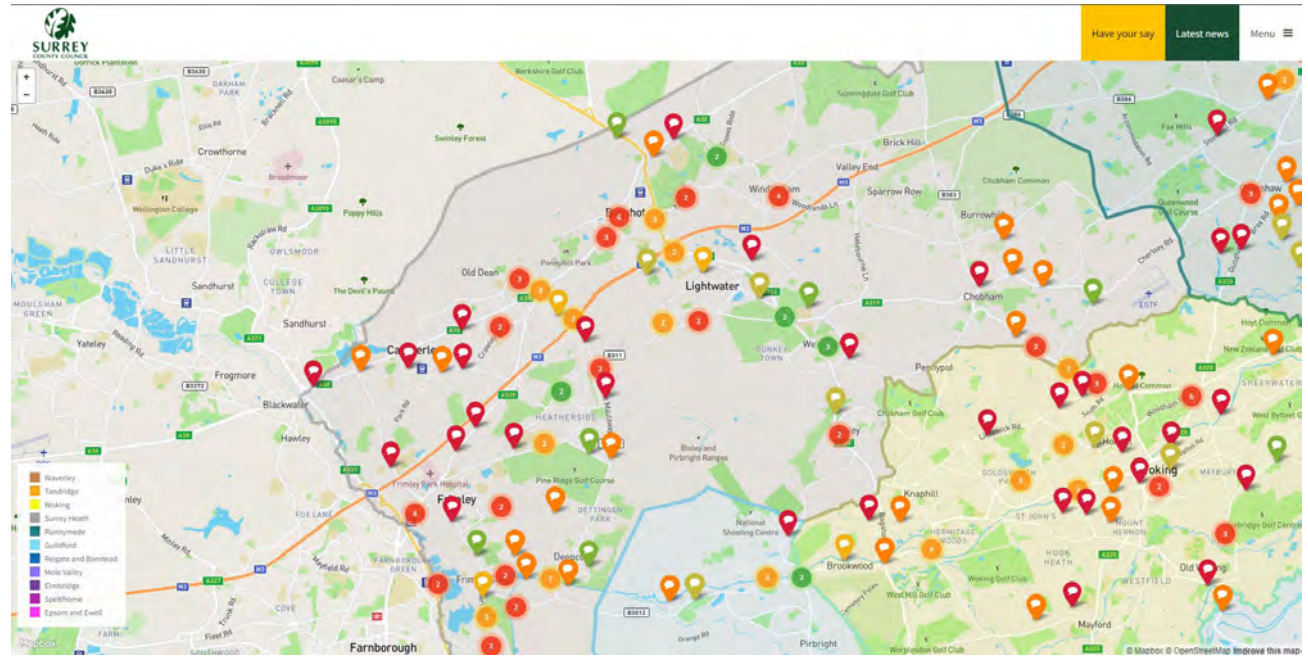


Figure 53. SCC LCWIP Commonplace map (source: <https://surreylcwip.commonplace.is/comments>)

## Member Briefing

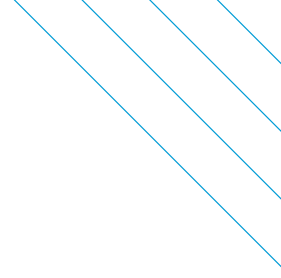
Two online briefings for local SHBC and SCC members were held in January and May 2023 (for latter following local elections) to introduce the Surrey Heath LCWIP at the start of the study process. The briefing provided an overview of the LCWIP process, objectives, key outputs, and programme. It also provided an overview of the Surrey-wide LCWIP programme and how the LCWIP fits into broader policy objectives (e.g., LTP4 and Climate

Change Strategy) and active travel scheme development and funding opportunities.

## Other Meetings

Throughout the development of the LCWIP, fortnightly meetings took place with the SCC and SHBC project team to review, discuss, and provide feedback on the direction of the study, cycle and walking network proposals, and potential interventions.





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# 5. Cycle Network Development

Introduction

Development of Long List

Identification of Phase 1 Cycling Corridors

Route Selection Tool

# Introduction

This chapter summarises the identification of the cycle network for the Surrey Heath LCWIP.

The primary aim of the proposed network is to identify strategic cycling corridors, connecting settlements both to each other and to clusters of key destinations (e.g. town centres, schools, railway stations, etc.). Additionally, further cycle corridors within the local network were identified to link the strategic corridors to residential areas (origins) and key destinations and enhance network connectivity. This is illustrated in the schematic in Figure 54.

Development of the cycle network had two key stages:

- » Development of the 'aspirational list', which identified key cycle corridors in the Borough. In total, 34 corridors were initially identified and 20 selected as 'primary' (phase 1 and 2) corridors for further assessment.
- » Selection of the 'short list', which prioritised six corridors as 'Phase 1' for further assessment and initial concept development as part of the LCWIP.<sup>1</sup>

The remaining corridors (categorised as Phase 2 and Phase 3) may be developed in future, as part of future workstreams or as other funding opportunities arise.

<sup>1</sup> While the proposals are focused around these areas they also provide examples of the type of improvements that can be implemented Borough-wide.

# Methodology

Surrey Heath has potential for growth in the amount of cycling. The dense urban environment and the relatively close proximity between towns and to key destinations allows many types of short trips (e.g., commuting, school, shopping, leisure, etc.) to be easily made on a bike. However, the cycling infrastructure in the Borough generally does not offer enough protection and cycling is not an attractive option to support new or less confident cyclists (when cycling with traffic). Additionally, the rural character of the area alongside the hilliness of the network could act as barriers to some cycle trips. Consequently, short trips into town centres, railway stations, schools, and leisure assets are overwhelmingly made by private car.

A key barrier to cycling at present is the inconsistent quality, accessibility and continuity of the cycling network. In order to identify and close the gaps, a network of preferred corridors has been defined drawing on the analysis from the existing data. The background information included mapping trip origins and destinations, identifying desire lines for cycle

movement, and review of PCT flows and key movement patterns.

The development of the cycling aspect of the Surrey Heath LCWIP focused on identification of a Cycling Network Map detailing key corridors for further development, as per the DfT's LCWIP technical guidance.

Development of the cycle network considers potential usage by both conventional pedal cycles and e-bikes, the latter of which would extend the range of cycle trips.

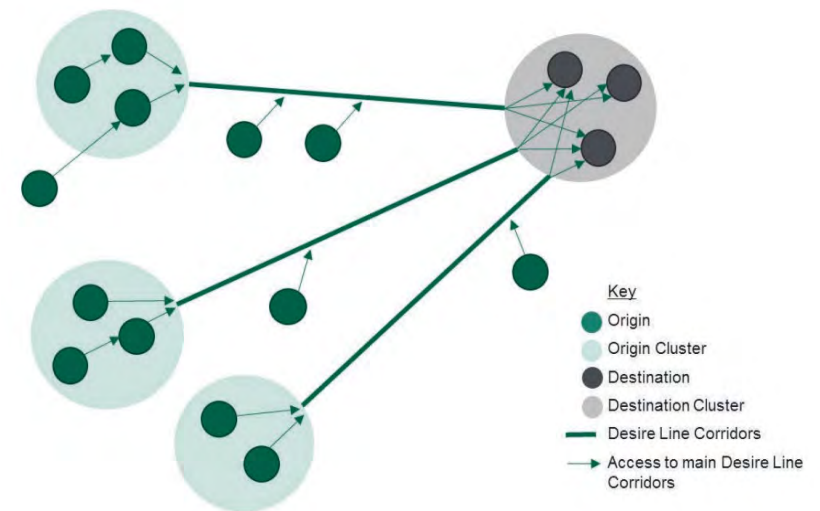


Figure 54. Clusters of trip origins and destinations and desire lines connecting them (DfT LCWIP Technical Guidance).

## Identification of Cycling Corridors

In Surrey Heath, and more widely in Surrey, there is a wealth of background information that can inform cycling patterns and highlight areas in need of improvement. The aim of this analysis is to meet the goal of significant mode shift to more sustainable travel. The target is short trips and utility trips such as school travel and commuting, as well as access to town centres and leisure areas. This can allow active and sustainable travel habits to appeal to the residents of the Borough.

### Clusters of key destinations

The first step for the cycle network development was to identify the key trip origins and destinations in the study area. The data gathered in the background analysis identified and mapped key trip attractors, including:

- » Educational facilities (primary schools, secondary schools and higher education facilities).
- » Hospitals.
- » Doctor surgeries.
- » Leisure centres.
- » Tourist attractions.
- » Railway stations.
- » Retail areas.
- » Employment sites.
- » Development sites.
- » Areas with high population density.
- » Areas with high workplace population density.

The mapping of trip attractors indicated the locations of key clusters across the study area, which represent groups of trip attractors within close proximity to each other. The clusters were categorised based on the relative concentration or number of trip attractors, as strategic, primary, secondary and local.

Additionally, clusters were identified in the neighbouring areas, such as urban centres or key destinations outside Surrey Heath which affect the travel patterns. The output of this process is shown in Figure 55.

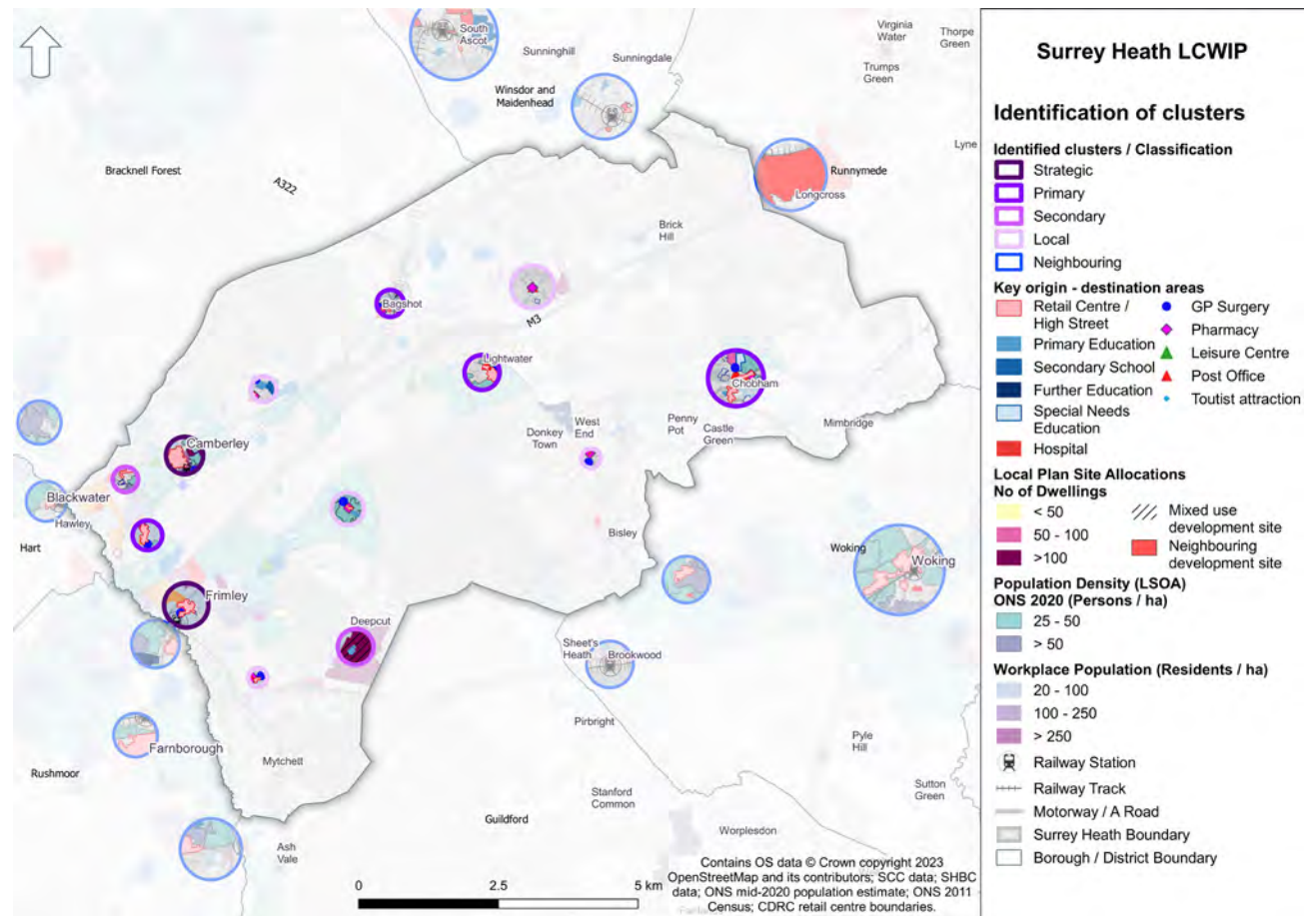


Figure 55. Identification and prioritisation of trip attractor clusters



## Key desire lines

Following the mapping of the clusters of origins and destinations within the study area, the main desire lines for all trips between those clusters were identified. These indicate the key movement patterns which corridors in the cycle network should aim to support. The data gathered in the previous steps and local knowledge from SCC and SHBC officers informed the development of the desire lines.

The Propensity to Cycle Tool (PCT) was utilised to obtain data based on the 2011 Census Travel To Work trips. Straight lines between the Middle Super Output Areas (MSOAs) were mapped for

all methods of travel, indicating the number of commuters between each MSOA pair. Trip distance was limited to 10km to capture a large sample size of origin/destination pairs, while also keeping the MSOA pairs within a reasonable cyclable distance<sup>1</sup>. Trips were categorised based on the nature of the commuter flows.

Additionally, links between each of the clusters were mapped to help identify potential desire lines between the key cluster areas. These links were then categorised based on the distance between destinations as shorter trips will have

<sup>1</sup> 10km is equivalent to approximately 37 minutes cycling at 10mph (16kph).

higher propensity for mode shift. Trip distance was limited to 10km.

Figure 56 illustrates the output from mapping desire lines for connections between clusters and existing commuter patterns. Based on the clusters and commuter flow patterns (see chapter 3 on page 53), the information was distilled to identify the key desire lines across the study area, as shown in Figure 57. The desire lines were classified based on the concentration of commuter flows across the area, the type of clusters/destinations they serve, and observations from other components of the data gathering analysis.

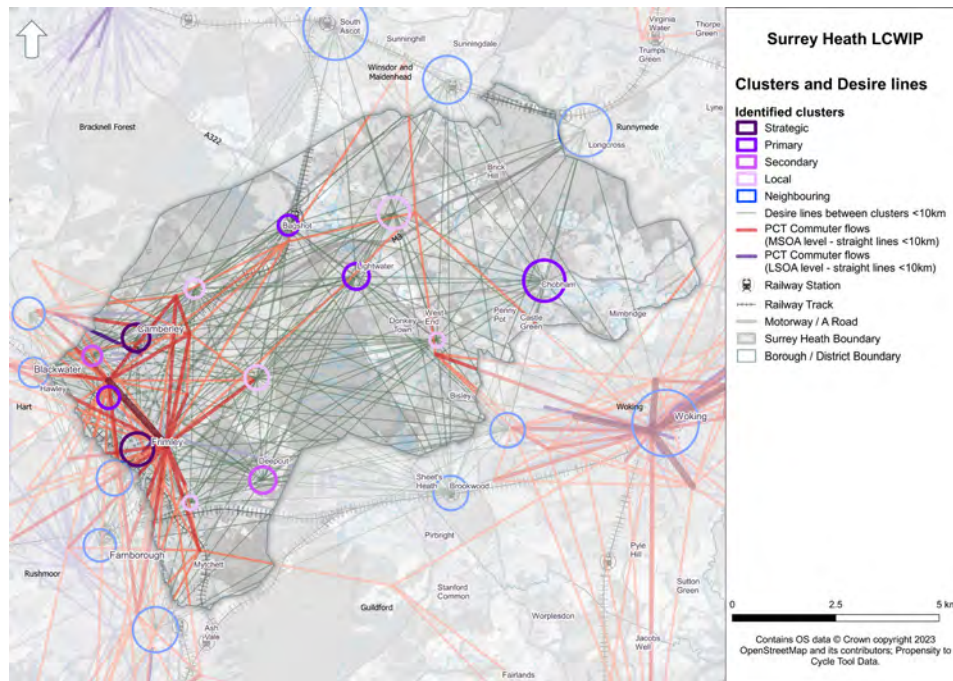


Figure 56. Straight lines between MSOAs and between the clusters to inform the desire lines for the cycle network. The width and colour intensity of the desire lines indicate potential higher demand

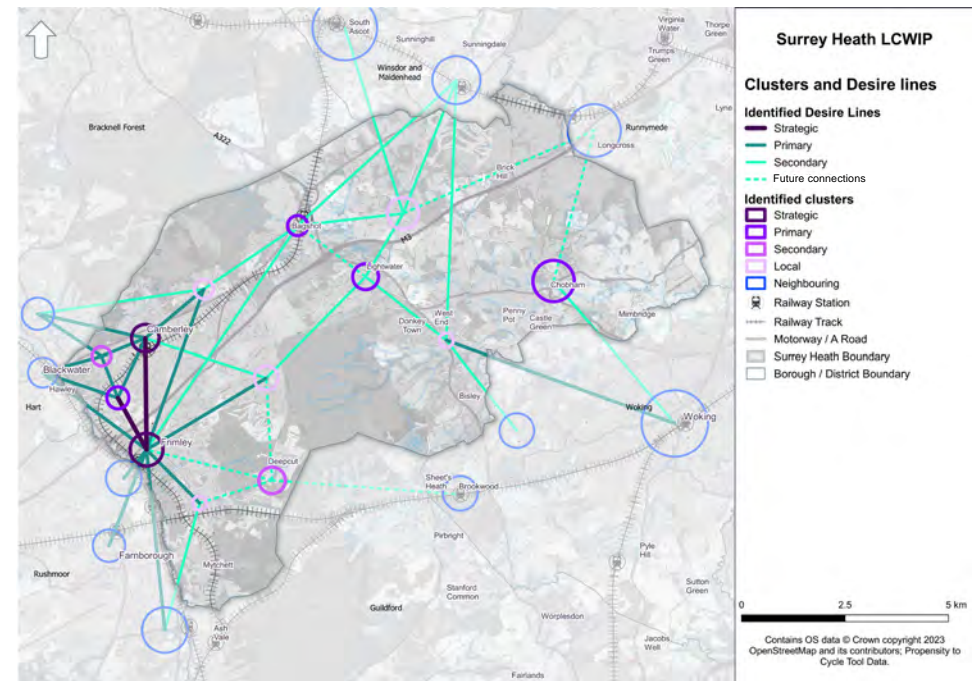


Figure 57. Key desire lines between the selected clusters

## Identification of the Cycle Network

The methodology used to identify key links in the study area involved the gradual overlaying of the following information to create a qualitative 'Heat Map' (see Figure 58) where the overlap of relevant criteria suggests locations where infrastructure improvements could provide the greatest level of service, connectivity, and safety benefits.

The following data was considered for the identification of the preliminary cycle network:

- » Key trip origins: such as denser residential areas and planned developments.
- » Key trip attractors: railway stations, retail centres, and local commercial areas, schools, employment areas, parks, and others, along with their catchment areas (i.e. 5-minute cycle catchment areas).
- » Indices of Multiple Deprivation and areas of low car-ownership (targeting areas of higher deprivation and lower car ownership, which would benefit from cycle improvements).
- » Propensity to Cycle Tool: highlighting areas with important cycle commuter and school flows, using the E-bike scenario.
- » Origin-destination data: highlighting the routes, origins, and destinations of short motor vehicle commuter trips (<5km) which could reasonably be replaced by cycling trips.
- » Cycle Collision points for the latest five years of available data.
- » Geolocated public suggestions for active travel improvements, including from Widen My Path and Surrey's LCWIP interactive map

» Existing cycle facilities and recently proposed facilities.

Mapping and overlaying these datasets, areas in higher intensity colour indicate a potential higher demand for utilitarian cycling trips or where there is higher potential for mode shift or new users. Corridors were selected along the road network to align with these areas, forming an initial draft cycle network.

This assessment provides an initial indication of possible routes between key origins and destinations. With further development of the LCWIP, in latter stages, further investigations will be undertaken as to whether the proposed alignments could be made compliant with LTN 1/20 and therefore whether alternative routes also need to be investigated.

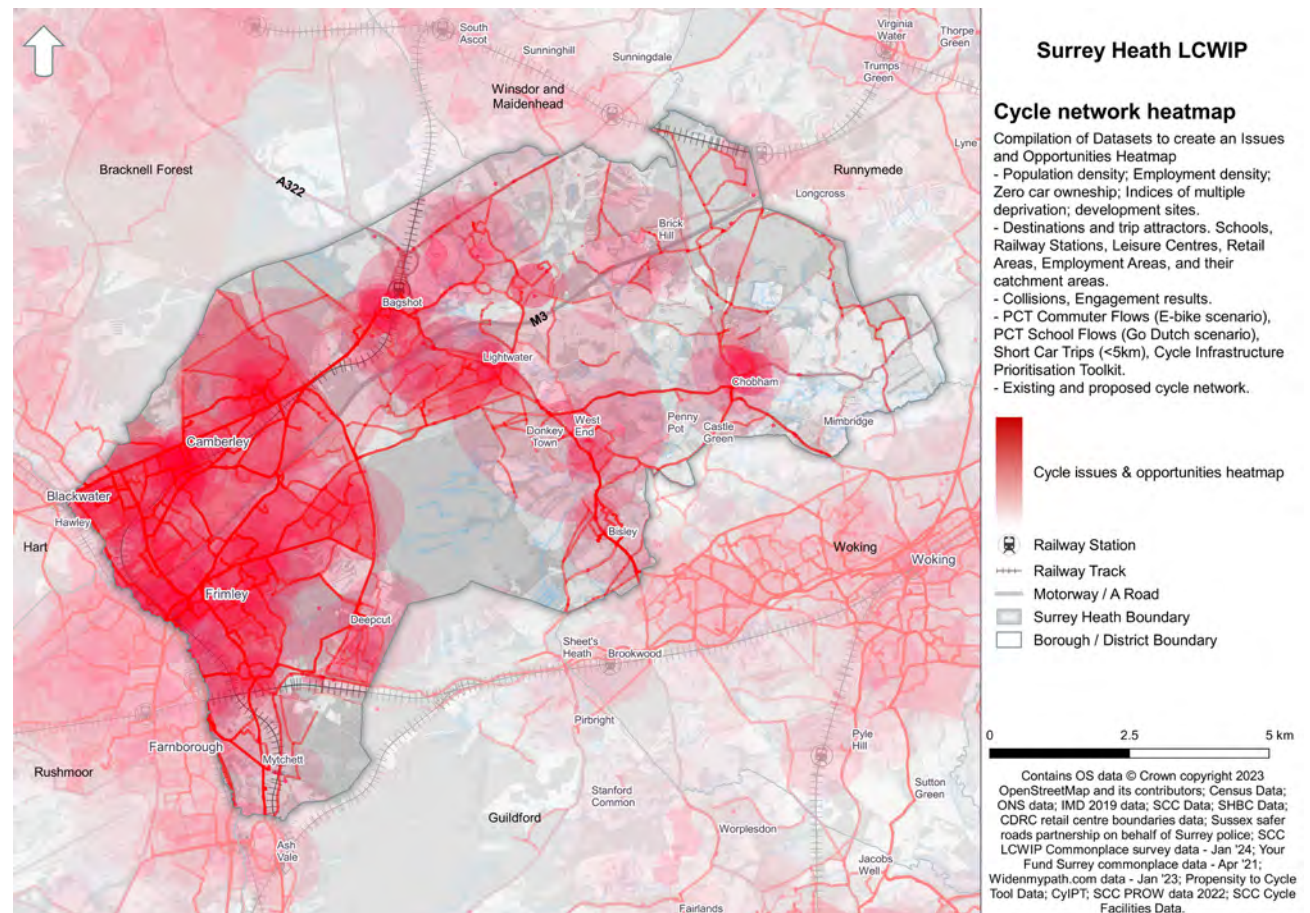


Figure 58. 'Heat Map' showing the various data elements overlaid to show concentration of issues and opportunities.

The sections of the road network indicated with higher intensity colour were selected to form the first draft of the proposed cycle network. The clusters with the desire lines were used to identify the cycle corridors that will be included in the aspirational network for cycling (Figure 59).

A filtering process was applied to identify the key corridors using the desire lines to trace the road network through the outcome of the 'X-Ray' map. The identified potential cycle corridors were selected to provide connections between all clusters.

Parallel corridors, that served similar areas were assessed using Google Street View to estimate the available widths for potential infrastructures and the ones with higher potential were selected to be included in the aspirational list.

The proposed cycle network was divided into different corridors/sections of the proposed network. Cycle corridors were identified and mapped as discrete features in the network using key destinations and existing cycle facilities. Each corridor was selected to be clipped to approximately 5-8km in length, which corresponds to a relatively easily cyclable distance. It was also intended to facilitate more manageable design and implementation in future, in a way that each corridor/section can be treated and progressed as individual schemes as opportunities arise.

Based on the data and evidence base compiled, potential demand and propensity for short,

utilitarian cycling trips is highest in the west and the north of the Borough, which tends to have a denser population and more compact, urban development patterns. Hence, the identified cycle network is also denser in this area. Cycle corridors providing connections to future developments (such as Longcross in neighbouring Runnymede, which will not have immediate demand for connections) and

with lower propensity for utilitarian trips are classified as Phase 3. These are potential cycle corridors included in the aspirational network for future consideration as opportunities arise (>10-year plan) and will not be included in the assessment for the next steps, i.e. identification of the short-listed routes to progress for further assessment as part of this study.

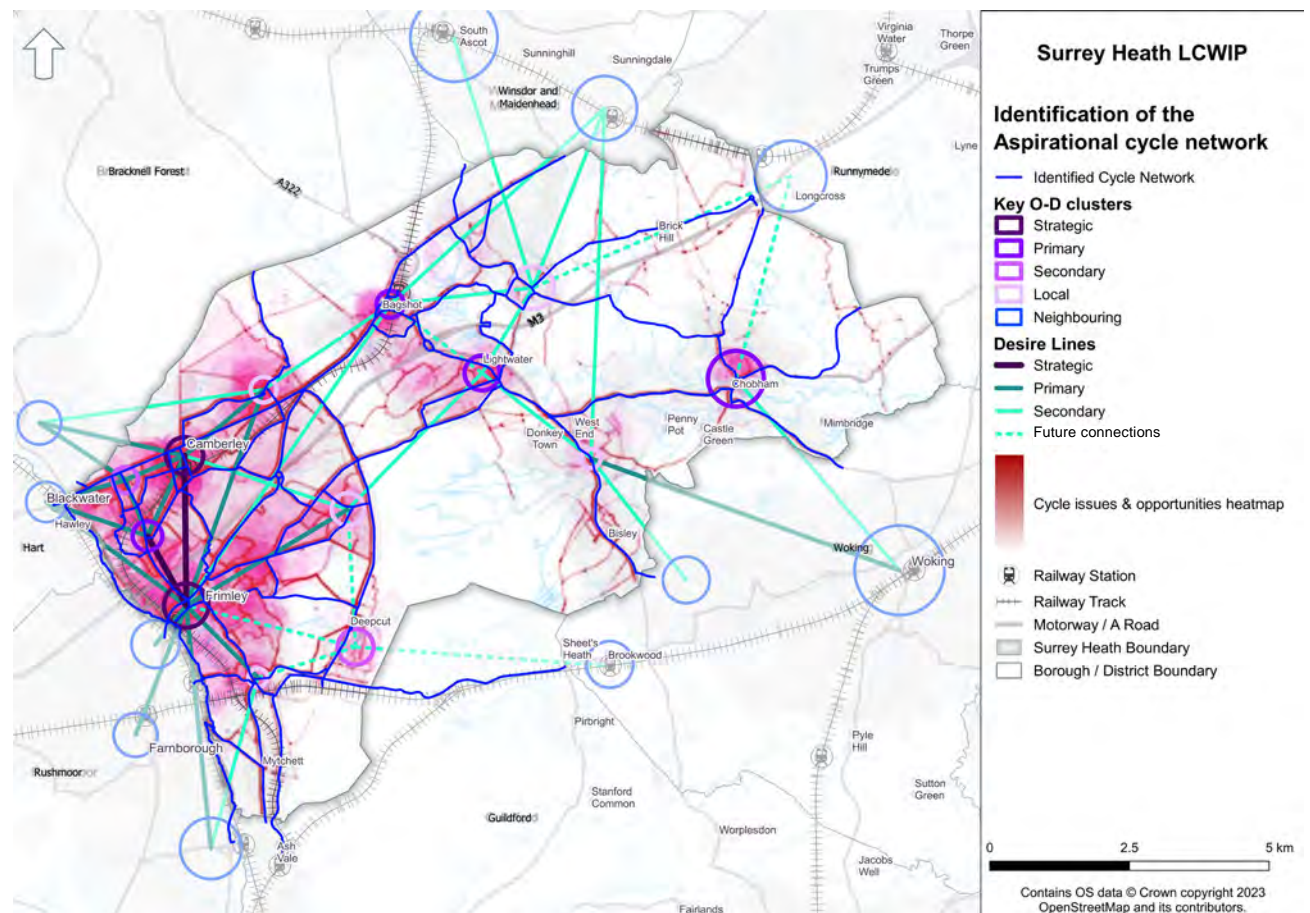


Figure 59. 'X-Ray Map' highlighting areas to consider as primary cycling corridors and the initial network (blue lines).



## Aspirational Cycle Network

The proposed network is distributed across the Borough and provides connections with existing and proposed facilities outside the Surrey Heath Borough boundary.

This identified cycle network has been refined and prioritised, drawing on data analysis, stakeholder input<sup>2</sup> and desktop investigations to create a core aspirational cycle network, as shown in Figure 60. The network includes 20 corridors categorised as Phase 1/Phase 2<sup>3</sup>, plus an additional 10 corridors/links categorised as Phase 3<sup>4</sup> for future consideration and four links to enhance network connectivity.

The phasing categories are intended to assist with the prioritisation process, whereby the Phase 1 & 2 corridors would be carried forward for further prioritisation. These reflect a higher propensity for cycle trips based on the data analysis undertaken and described previously. However, all the cycle links (including Phase 3) are retained as part of the aspirational network for future consideration as opportunities arise.

- 2 The proposed corridors were presented to local stakeholders during the early engagement workshops and amended following received comments that reflect the local needs and potential demand. Aspirational proposals from the local stakeholders, were included in the aspirational list for cyclists as Phase 3 corridors.
- 3 Phase 1 & Phase 2 corridors are part of the aspirational cycle network and will be prioritised for improvements in the 10-year plan SCC has set out. They will be assessed in the next step of this study to be prioritised for infrastructure improvements. Phase 1 corridors will be further assessed and initial concepts for potential infrastructure improvements will be developed as part of this LCWIP. Phase 2 will be developed as opportunities arise.
- 4 These are potential cycle corridors included in the aspirational network for future consideration as opportunities arise (>10-year plan) and will not be included in the assessment for the next steps.

1. Camberley to Frimley
2. A30 - Camberley to Bagshot Railway Station
3. A30 - Camberley to Blackwater
4. Frimley Road to Camberley High Street
5. Camberley to Old Dean
6. Camberley to Rushmoor via Frimley Park Hospital
7. Camberley to Heatherside and Old Dean
8. Frimley to Frimley Green
9. Frimley to Heatherside loop
10. Frimley to Deepcut
11. Frimley Green to Mytchett and Ash Vale
12. A30 to Basingstoke Canal via Deepcut
13. Blackwater Valley Path
14. Basingstoke Canal
15. Lightwater to Heatherside
16. Bagshot to Windlesham
17. Bagshot to Lightwater
18. Lightwater to Knaphill via West End
19. West End to Woking via Chobham
20. Lightwater to Windlesham

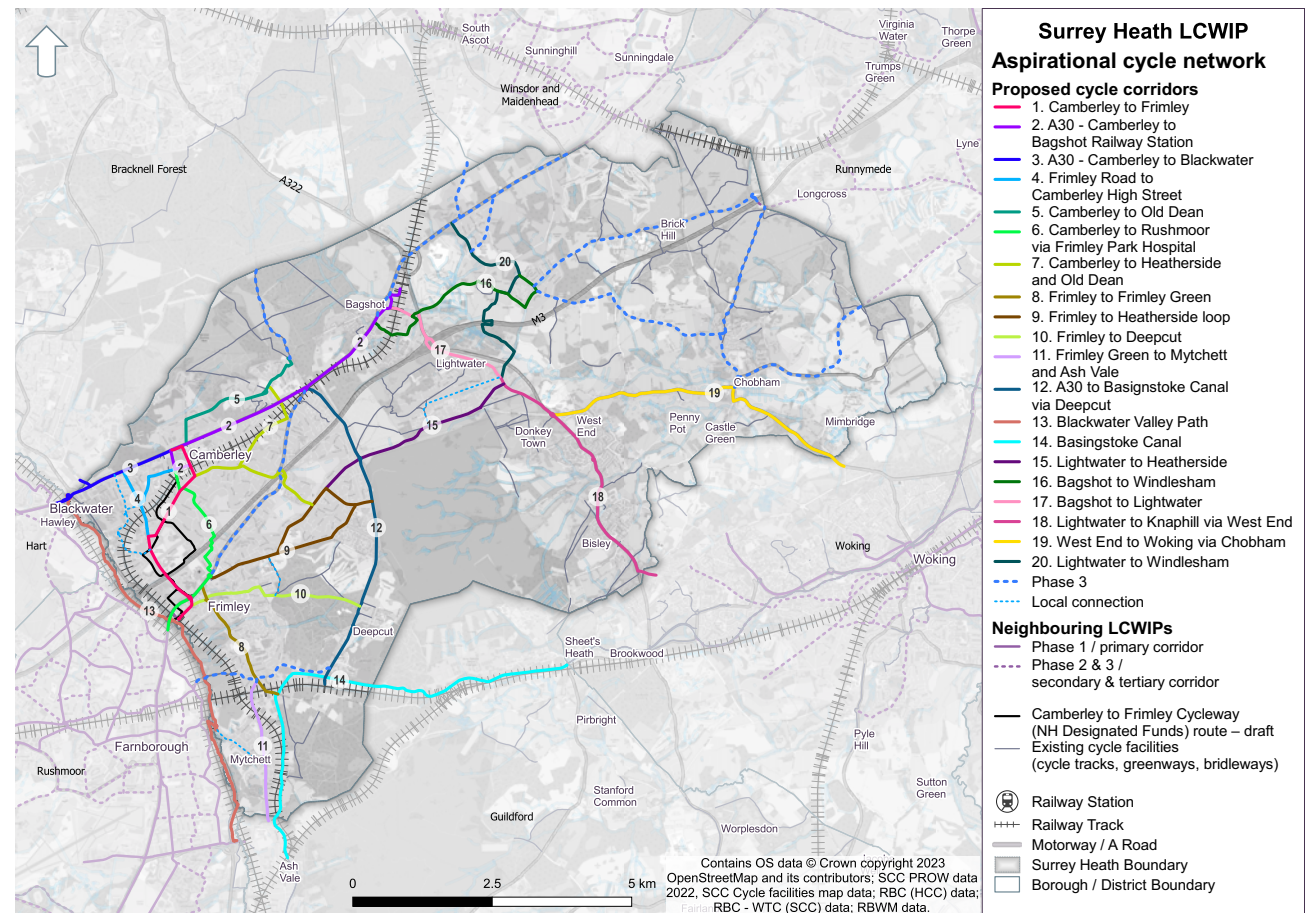


Figure 60. Aspirational cycle network



Table 6 on the following pages lists the Phase 1 and 2 cycle corridors comprising the aspirational list (Phase 3 corridors are excluded). Some of the corridors overlap with existing cycle facilities. These should be included in the aspirational network as the existing facilities may not reflect the latest best practice for cycle infrastructure design and so not support the aspiration for growth in levels of cycling. The intention for these corridors is to improve the quality to a high and accessible standard. Additionally, information is provided on the key destinations served, connections to other aspirational corridors, PCT commuter flows (e-bike scenario), PCT school flows (go-Dutch scenario) and cycle collisions.

Table 6. Summary of Aspirational Cycle Network (Phase 1 and 2 Routes)

(ID.) Cycle Corridor	Length (km)	Description
1. Camberley to Frimley	4.2	<p>The corridor connects Camberley Town Centre with Frimley Town Centre; via St Michael's and Watchetts wards, linking the Borough's main retail areas. Currently, only 3% of the proposed alignment benefits from existing cycle infrastructure and the route primarily follows Park Road and B3411 Frimley Road, both two-way roads. These act as local distributor roads and connect to multiple corridors proposed in the aspirational cycle network. The route serves two railway stations, three aspirational core walking zones as well as 1185 future housing units. It also provides access to five schools, and the PCT suggests high demand for commuter flows (1447 cyclists/day) and moderate school flows (327 cyclists/day). Along the corridor, there has been a high number of recorded cycle collisions too (19).</p> <p>Design work is under development for cycle infrastructure along the corridor, funded by National Highways (NH) Designated Funds. Some of the design proposals are being developed along roads parallel to the most direct alignment due to constraints identified during the feasibility study.</p>

(ID.) Cycle Corridor	Length (km)	Description
2. A30 - Camberley to Bagshot Railway Station	6.2	<p>This corridor connects Camberley Railway Station with Bagshot Railway Station following the A30 London Road, where the latter is a highly trafficked and high speeds two-way road. The route links Camberley and Bagshot commercial areas and connects to multiple corridors proposed in the aspirational cycle network, allowing further onward travel. The corridor serves two railway stations, three aspirational core walking zones as well as 1327 future housing units. Furthermore, it links seven schools, and the PCT suggests moderate demand for commuters (328 cyclists/day) and higher school flows (739 cyclists/day). There has been a relatively high number of cycle collisions recorded along this corridor too (9).</p>
3. A30 - Camberley to Blackwater	2.7	<p>This corridor connects Camberley Railway Station with Blackwater Railway Station following the A30 London Road, where the latter is a highly trafficked and high-speed-two-way road. The route links Camberley and Blackwater commercial areas and connects to multiple corridors proposed in the aspirational cycle network, allowing onward travel towards the south of the Borough and connects to aspirational corridors within Hampshire (Hart LCWIP proposals). The corridor serves two railway stations, two aspirational core walking zones as well as 1199 future housing units. The PCT suggests high demand for commuter flows (637 cyclists/day) and very low school flows (96 cyclists/day). Along the corridor, there have also been six recorded cycle collisions.</p>



(ID.) Cycle Corridor	Length (km)	Description	(ID.) Cycle Corridor	Length (km)	Description
4. Frimley Road to Camberley High Street	2.3	<p>The corridor connects Camberley Town Centre with the area of Frimley Road in Watchetts ward, linking three retail areas. The route follows Southwell Park Road, The Avenue and B3411 Frimley Road, where the latter acts as a local distributor road and connects to multiple corridors proposed in the aspirational cycle network. The route serves one railway station, three aspirational core walking zones, three schools as well as 1185 future housing units.</p> <p>The PCT suggests a high demand for commuter flows (991 cyclists/day) and a moderate demand for school flows (209 cyclists/day). Along the corridor, seven cycle collisions were recorded.</p>	6. Camberley to Rushmoor via Frimley Park Hospital	4.1	<p>The corridor connects Camberley Town Centre with Rushmoor (in Hampshire) via Frimley Park Hospital and Frimley Town Centre. The route follows Park Street and Brackendale Road, where the latter is a residential access road. It then continues along A325 Portsmouth/Farnborough Road, a highly trafficked and high-speed, two-lane single-carriageway which becomes dual carriageway towards Rushmoor. The corridor will be connected with the aspirational cycle network in the Rushmoor LCWIP. The crossing of the M3 motorway is one of the corridor's main barriers as utilises a narrow footbridge.</p> <p>The corridor serves the Borough's hospital, four schools, two railway stations, and two aspirational core walking zones as well as 890 future housing units. The PCT suggests a high demand for commuter flows (1447 cyclists/day) and a low demand for school flows (164 cyclists/day). A relatively high number of cycle collisions have been recorded along this corridor (13).</p> <p>Stakeholders highlighted that there are private roads along the proposed alignment plus, the bridge over the M3 a pedestrian-only while the parapet is currently low and not suitable for cyclists.</p>
5. Camberley to Old Dean	3.0	<p>The corridor connects Camberley Town Centre with Old Dean; linking the latter to Camberley Railway Station and its commercial area. Currently, there is no existing cycle infrastructure along the proposed alignment and the route primarily follows Upper College Ride/ Kingston Rd, a two-way residential road. The route links to multiple corridors proposed in the aspirational cycle network, allowing onward travel to South Camberley, Bagshot, and Blackwater to the west.</p> <p>The corridor serves four schools, one railway station and two aspirational core walking zones as well as 1140 future housing units. The PCT suggests a low demand for commuter flows (186 cyclists/day) and a high demand for school flows (1314 cyclists/day). Along the corridor, there have also been four recorded cycle collisions.</p>			



(ID.) Cycle Corridor	Length (km)	Description	(ID.) Cycle Corridor	Length (km)	Description
7. Camberley to Heatherside and Old Dean	4.8	This corridor connects Camberley Railway Station with Old Dean towards the northeast and with Heatherside to the south. The route mainly follows Crawley Ridge to the north and Upper Park Road/Church Hill/Crawley Hill to the south, and only 7% of the proposed alignment benefits from existing cycle infrastructure. The corridor serves one railway station, two aspirational core walking zones, five schools, as well as 598 future housing units. The PCT suggests high demand for commuter flows (725 cyclists/day) and very high school flows (1314 cyclists/day). Along the corridor, there have been four recorded cycle collisions.	9. Frimley to Heatherside loop	5.5	This corridor connects the outskirts of Frimley Town Centre with Heatherside. The route allows access to the village from the north via B3111 Chobham Road/Upper Chobham Road as well as from the south, through Old Bisley Road. The route serves two aspirational core walking zones, seven schools, and 200 future housing units. The PCT suggests a significantly high demand for commuter flows (1611 cyclists/day) and low school flows (146 cyclists/day). Along the corridor, there have been four recorded cycle collisions.
8. Frimley to Frimley Green	2.6	This corridor connects Frimley Town Centre with Frimley Green following the B3411 Frimley Green Road, where the latter is a single-carriageway local distributor road. The route links both local commercial areas and connects to multiple corridors proposed in the aspirational cycle network, allowing further onward travel to Mytchett. The corridor serves one railway station, two aspirational core walking zones, four schools as well as 271 future housing units. The PCT suggests a very high demand for commuters (1611 cyclists/day) and low school flows (146 cyclists/day). Along the corridor, there have been four recorded cycle collisions.	10. Frimley to Deepcut	3.2	This corridor connects Frimley Town Centre with Deepcut following a mixture of quiet roads and bridleways along Field Lane and Frith Hill Road. The route links Frimley commercial area with future development sites in Deepcut. The corridor serves one railway station, two aspirational core walking zones, three schools <sup>1</sup> as well as 1448 expected housing units. The PCT suggests a high demand for commuters (675 cyclists/day) and low school flows (133 cyclists/day). The school in Deepcut opened in 2023 therefore the school flows are expected to increase in the area. Along the corridor, there have been two recorded cycle collisions.

<sup>1</sup> Lakeside Nursery and Primary Academy relocated to the school in Deepcut that opened in September 2023.



(ID.) Cycle Corridor	Length (km)	Description	(ID.) Cycle Corridor	Length (km)	Description
11. Frimley Green to Mytchett and Ash Vale	2.6	<p>This corridor connects Frimley Green with Ash Vale in Guildford via Mytchett following Mytchett Road, a single-carriageway local distributor road. The route links the local commercial areas of Frimley Green and Mytchett and along the proposed alignment, there are no existing cycle facilities.</p> <p>The route connects to multiple corridors proposed in the aspirational cycle network, allowing travelling onwards to Guildford and Woking. The proposed corridor serves two railway stations, two aspirational core walking zones, two schools, as well as 50 proposed future housing units. The PCT suggests a low demand for commuters (301 cyclists/day) and low school flows (161 cyclists/day), while along the route, there have been five recorded cycle collisions.</p>	13. Blackwater Valley Path	8.5	<p>The corridor runs along the whole length of the western border of the Borough, parallel to the A331 and following the Blackwater River through a woodland area. The route links the northwest of Camberley with Mytchett and North Camp railway station towards the south, and the proposed alignment is 100% off-road. The route extends between Rushmoor, Hart and Surrey Heath and sections of the path belong to Hampshire CC.</p> <p>The route serves four railway stations, two aspirational core walking zones as well as 181 future housing units. It also provides access to eight schools, and the PCT suggests high demand for commuter flows (1165 cyclists/day) and low school flows (133 cyclists/day). Along the corridor, only one cycle collision has been recorded.</p> <p>Stakeholders noted that the Blackwater Path (between Rushmoor and Frimley Green) is only accessible for parts of the year, due to flooding and overgrown vegetation.</p>
12. A30 to Basingstoke Canal via Deepcut	6.1	<p>This corridor connects the A30 in Old Dean with Deepcut via Heatherside following the B3015 The Maultway, a single-carriageway local distributor road subject to a 50mph speed limit. Currently, only 30% of the proposed alignment benefits from existing cycle infrastructure, and the southern section is planned to introduce cycle facilities as part of the of the Princess Royal Barracks development. The route serves two aspirational core walking zones as well as 1299 future housing units. It provides access to three schools, and the PCT suggests low demand for commuter flows (293 cyclists/day) and moderate school flows (739 cyclists/day). Along the corridor, five cycle collisions were recorded.</p>			



(ID.) Cycle Corridor	Length (km)	Description	(ID.) Cycle Corridor	Length (km)	Description
14. Basingstoke Canal	8.8	<p>The route follows the Basingstoke Canal and links Ash Vale Railway Station in Guildford with Mytchett and Deepcut. Further on, it links the latter with the western end of Brookwood in Woking.</p> <p>The proposed alignment is 100% off-road as a shared use path and serves three railway stations, three aspirational core walking zones as well as 1301 future housing units. It also provides access to one school, and the PCT suggests low demand for commuter flows (170 cyclists/day) and low school flows (67 cyclists/day). No cycle collisions have been recorded along the corridor. The path is used for leisure activities for both pedestrians and cyclists throughout the year.</p> <p>Surrey Heath has secured S106 funding for improvements to the path east of the Princess Royal Barracks development.</p>	16. Bagshot to Windlesham	4.3	<p>The corridor links Bagshot's commercial area with Windlesham Village following a mixture of residential roads and bridleways, continuing onwards along New Road/Church Road. The latter is a single-carriageway road with a single footway and green verges on the opposite side, subject to high-speed flows (40 and 50mph). The proposed alignment serves two aspirational core walking zones and 145 future housing units, as well as one railway station and three schools. There are no cycling facilities along the corridor and the PCT suggests low demand for commuter flows (184 cyclists/day) and low school flows (165 cyclists/day). There have been two recorded cycle collisions along the proposed alignment.</p> <p>Stakeholders highlighted that around Windlesham, particularly on the section between the A30 and Kenell Lane, there are no footpaths, and there are high levels of vegetation and HGVs.</p>
15. Lightwater to Heatherside	3.8	<p>This corridor connects Heatherside with Lightwater commercial area following B3111 Upper Chobham Road/Red Road. The latter is a highly trafficked and high-speed (50mph) single-carriageway road with no footways or verges. The corridor serves two aspirational core walking zones and 21 future housing units, while there are no railway stations or schools along the proposed alignment.</p> <p>The PCT suggests low demand for commuter flows (200 cyclists/day) and low school flows (392 cyclists/day). Along the corridor, there have been three (3) recorded cycle collisions.</p> <p>Stakeholders highlighted that residents tend to use Red Road in Lightwater, being a heavily used route for both walking and cycling, including those going to Gordon's School.</p>	17. Bagshot to Lightwater	3.1	<p>The corridor links the retail areas in Bagshot and Lightwater following the A322, a dual carriageway subject to a 50mph speed limit. The route serves two aspirational core walking zones, one railway station, four schools, and 50 future housing units.</p> <p>Only 8% of the proposed alignment benefits from cycle facilities and the PCT suggests low demand for commuter flows (193 cyclists/day) and low school flows (125 cyclists/day). There has been one recorded cycle collision along the route.</p>

(ID.) Cycle Corridor	Length (km)	Description	(ID.) Cycle Corridor	Length (km)	Description
18. Lightwater to Knaphill via West End	5.1	<p>The corridor links the retail areas in Lightwater and West End following Guildford Road and A322 Guildford Road, both single-carriageways subject to a 40mph speed limit. Onwards, the route links West End and Knaphill via Bisley Village.</p> <p>The corridor serves three aspirational core walking zones, 62 future housing units and four schools. 24% of the proposed alignment benefits from cycle facilities and the PCT suggests low demand for commuter flows (252 cyclists/day) and low school flows (324 cyclists/day). Along the corridor, there have been four recorded cycle collisions.</p>	20. Lightwater to Windlesham	4.8	<p>The corridor links Lightwater's retail area with Windlesham Village and the A30 London Road, following bridleways and the B386 Kennel Lane/School Road. The alignment requires overcoming the severance caused by the M3, where the bridge currently caters for pedestrians only.</p> <p>The corridor serves two aspirational core walking zones, 28 future housing units and three schools. A third of the proposed alignment benefits from cycle facilities (bridleways) and the PCT suggests low demand for commuter flows (103 cyclists/day) and very low school flows (63 cyclists/day). Along the corridor, there has been a single (1) recorded cycle collision.</p>
19. West End to Woking via Chobham	6.0	<p>The corridor links the retail areas of West End and Chobham following A319 Bagshot Road, a single-carriageway subject to a 40mph speed limit. Onwards, the route connects Chobham and Woking via A3046 Station Road, a single-carriageway subject to a 50mph speed limit.</p> <p>The corridor serves one aspirational core walking zone, 106 future housing units and three schools. Currently, there are no existing cycle facilities along the proposed alignment, and the PCT suggests low demand for commuter flows (168 cyclists/day) and very low school flows (82 cyclists/day). Along the corridor, there have been four recorded cycle collisions.</p>			



# Identification of Phase 1 Cycle Corridors

## Multi-Criteria Assessment Framework

Once the aspirational cycle network was identified, an assessment of the proposed Phase 1 / Phase 2 corridors was undertaken. This utilised both qualitative and quantitative criteria to provide an initial prioritisation of the network and identify a first phase of corridors to progress within the LCWIP for development of potential improvement concepts.

A multi-criteria assessment framework (MCAF) was developed to identify the Phase 1 ('short list') cycle corridors, utilising various data inputs from the evidence base previously gathered. In combination, the MCAF criteria are intended to help identify and prioritise corridors with both a higher relative propensity for cycle trips and corridors with a greater relative potential to benefit from improvements (i.e., areas 'in need' or with lower quality existing cycling environment).

The criteria were categorised in five main groupings:

- » **Access** - reflects the number of key destinations along or in close proximity to the corridor (within 400m), to which cycle access would be improved, such as local high streets, railway stations, and schools. A higher number of destinations would indicate a greater propensity for utilitarian cycling trips and therefore a higher score. This criteria had a weighting of 30% in the overall score.
- » **Potential Demand** - this is based on the DfT's Propensity to Cycle Tool (PCT) flows and the development sites proposed by the Surrey Heath Local Plan. The high aspirational scenarios were used for both schools' flows (Go Dutch scenario) and commuter flows (eBike scenario). A higher score indicates higher potential demand. Additionally, the number of dwellings proposed by the Local Plan was used to estimate the future demand. This had a weighting of 30% in the overall score.
- » **Cycle Network** - this includes the centrality of the corridor to the broader cycle network (i.e., how many connections it provides to the rest of the proposed aspirational LCWIP network, and the neighbouring LCWIP networks developed by SCC, HCC, RBWM). It also includes the extent to which a proposed corridor has some form of existing cycle provision (either greenway/bridleway or cycle track, based on SCC Cycle Facilities map data and PRow information), regardless of the quality. This criterion is intended to give a higher score to corridors which may have minimal existing cycle facilities and therefore may have a greater benefit, rather than improving existing facilities to LTN 1/20 standards. The category also includes the number of collisions involving cyclists per km along the corridor. A higher rate would suggest a greater need or benefit from cycle interventions. This criteria had a weighting of 15% in the overall score.
- » **Deliverability** - This criterion aims to characterise the potential feasibility of significant improvements to a corridor, based on cursory, desktop check of potential constraints (e.g. width constraints). Low scores indicate potentially major barriers or constraints to providing high quality cycle facilities. Scoring was based on comments from the workshops and a cursory review via Google StreetView imagery. As the team has not been to the sites to assess this, this category has a lower weighting than the others, at 10%.
- » **Stakeholder Input** - This criteria considered feedback from the Stage 1 stakeholder workshops, considering comments and the results of a workshop poll. Additionally, comments from 'Surrey LCWIP Commonplace' and 'Widen my Path' platforms were also considered. High scores indicate a relatively high number of issues/comments noted by the public and known support for the corridor. This had a weighting of 15% in the overall score.

Each criterion was scored on a scale from 1 (low) to 3 (high). The total score for each category was also given a weighting. The intent of this weighting was to give a higher significance to factors relating to Access and Demand, which utilised more quantitative data and suggest the potential usage of each proposed route. A lower weighting was given to qualitative criteria.



The MCAF criteria for the selection of the Phase 1 cycle corridor short list and their weightings are listed in Table 7.

Table 7. Cycling network MCAF criteria

Category	Criterion	Cycle Corridors Rating
Access (30%)	Commercial areas served by corridor <sup>1</sup> within 400m	1 : < 2 CWZs 2 : < 3 CWZs 3 : ≥ 3 CWZs
	Rail Station Access within 400m	0 : none; 1 : < 2 stations 2 : < 3 stations 3 : ≥ 3 stations
	Number of Schools <sup>2</sup> within 400m	1: low number of schools; 2: medium number of schools; 3: high number of schools
Demand (30%)	PCT School Flows <sup>3</sup> - Go Dutch scenario	1 : less than 150 2 - 150 - 300 3 : Over 300
	PCT Commuter Flows <sup>3</sup> - eBike scenario	1 : less than 200 2 : 200 - 700 3: over 700
	Development Areas within 400m	1 : fewer than 105 housing units 2 : between 100 – 1000 units 3 : over 1000 units (# dwelling units)

- 1 Scores the number of the identified CWZs in the aspirational list for walking served by the corridor (see 7. Walking Network Development on page 135).
- 2 Each corridor is scored depending on the number of schools, weighted depending on the level of education (ages of pupils using the corridor): 30% Primary schools, 50% Secondary schools, 20% Special needs schools for all ages.
- 3 The highest recorded number of flows along the corridor on PCT.

Category	Criterion	Cycle Corridors Rating
Cycle network (15%)	Contributes to improved cycling network <sup>4</sup>	1 : fewer than 1 2 : between 1 and 1.5 3 : 10+
	% of route with existing cycle facility <sup>5</sup>	1 : over 25% 2 : less than 25% 3 : 0% (no section of the corridor is existing facility)
	Pedal cycle collision rate along corridor	1 : fewer than 0.5/km; 2 : 0.5-1.5/km; 3 : > 1.5/km (#collisions per km)
Deliverability (10%)	Potential ease of implementation	1 : likely major constraints, such as limited public highway 2 : potential significant constraints, expected interface with complex environments (e.g. town centres) 3 : localised constraints and potential for improvements within the existing kerb lines
Stakeholder input (15%)	Public Comments (from Commonplace & Widen my path)	1 : fewer than 4.5/km 2 : 4.5-7/km 3 : over 7/km (# comments per km)
	Stakeholder feedback (early engagement workshop 1)	1 : fewer than 2 2 : 2-3 3 : over 3 votes

- 4 Number of links to other segments of proposed LCWIP network, including Phase 3 cycle corridors of the proposed Surrey Heath LCWIP, and the aspirational networks for Runnymede (SCC), Rushmoor (HCC), Windsor and Maidenhead.
- 5 Intended to give a higher score to routes without existing cycle facilities, regardless of quality of provision; based on SCC Cycle Facilities mapping and facilities designated as 'greenway' or 'cycle track', and Public Rights of Way designated as 'bridleways'.



## Phase 1 Cycle Corridors

The MCAF outlined in the methodology previously was applied to the aspirational cycle network (candidate Phase 1 and 2 corridors). Using the criteria, the following short-list of cycle corridors was identified (the MCAF scoring and output is provided in Appendix 1 for reference):

- » **2: A30 - Camberley to Bagshot Railway Station**
- » **3: A30 - Camberley to Blackwater**
- » **4: Frimley Road to Camberley High Street**
- » **6: Camberley to Rushmoor via Frimley Park Hospital**
- » **8: Frimley to Frimley Green**
- » **16: Bagshot to Windlesham**

Corridor 1: Camberley to Frimley scores high in the MCAF. However, design work is under development for cycle infrastructure along this corridor, funded by National Highways (NH) Designated Funds. Note that the design proposals are being developed along some roads parallel to the most direct alignment, due to constraints identified during the feasibility design study. As design work is currently under development for a cycleway between Camberley and Frimley, Corridor 1 (Camberley to Frimley) is proposed to be discounted from the Phase 1 corridors for further development and the 6th ranked corridor, Corridor 3 (A30 to Blackwater), is included in the Phase 1 corridors for further assessment and design proposals.

The highest ranked cycle corridors in the Borough are focused on the west of the

Borough, as there is a higher concentration of key destinations and a denser urban environment which generates higher flows. Connections to the east of the Borough should be provided as part of the LCWIP to balance the extent of the facilities within the Borough and provide an opportunity for the local villages to be connected with active travel facilities. Therefore, the highest-ranking cycle corridor from the rural area on the east: Corridor

16 (Bagshot to Windlesham), is progressed as Phase 1, as an additional 6th corridor, to develop high level infrastructure improvements for cycling.

The six Phase 1 cycle corridors were advanced through the remainder of the Surrey Heath LCWIP activities, including review of existing conditions and development of initial concept proposals.

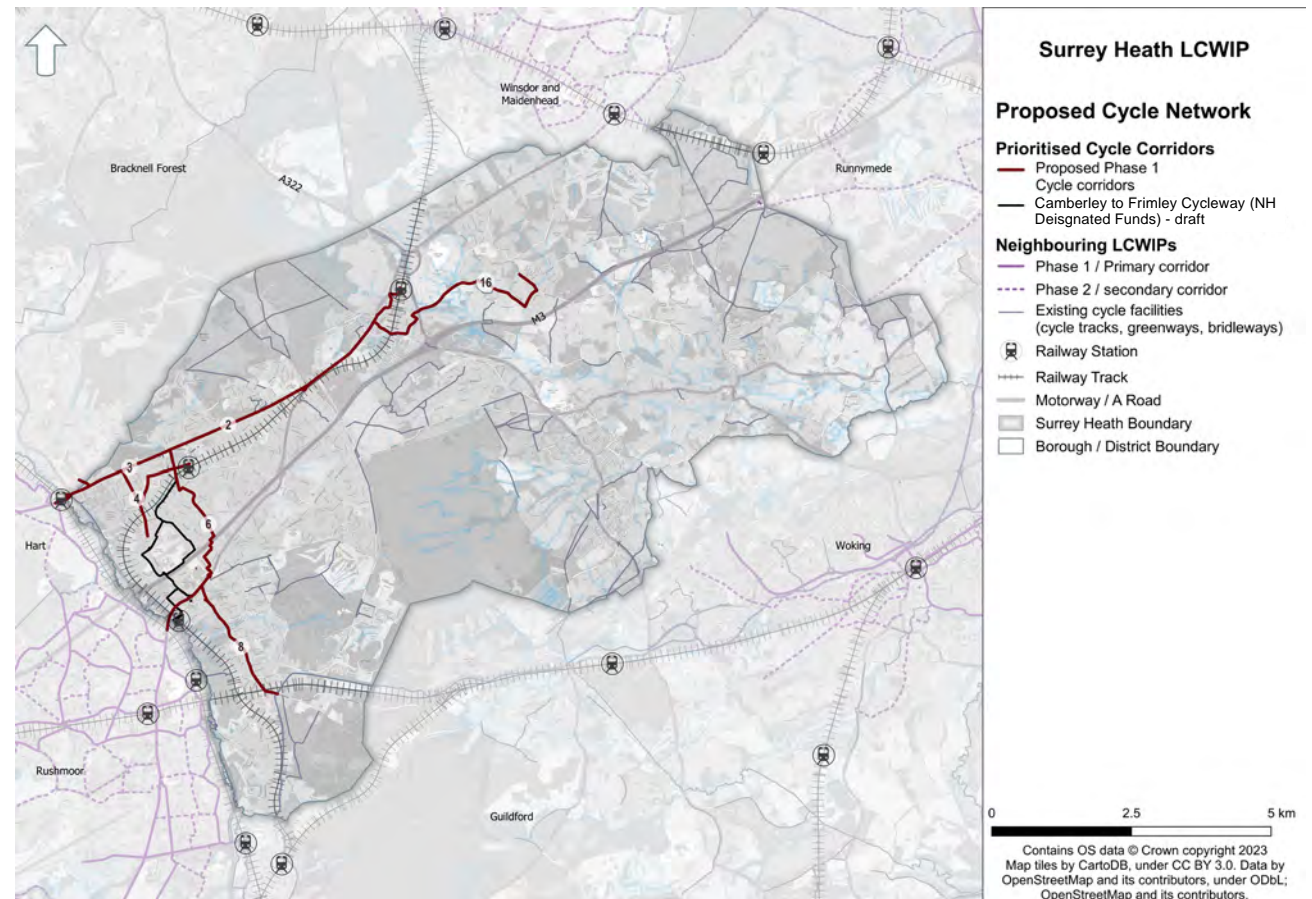


Figure 61. Phase 1 cycle corridors

## Cycle Corridor Audits

Once the Phase 1 corridors were identified, they were assessed using the DfT's Route Selection Tool (RST)<sup>1</sup>. The assessment provided a baseline for existing conditions and helped identify existing deficiencies and key issues in the area. The results are presented in Appendix 3: Route Selection Tool (RST) on page 204. The routes were also cycled in June 2023 to observe the existing condition and review potential opportunities and constraints.



<sup>1</sup> The RST is a framework for providing a high level assessment of a cycle corridor, covering the key parameters of directness, gradient, safety, connectivity, and comfort.



# 6. Cycle Network Proposals

Introduction

Design Tools / Best Practice Examples

Phase 1 Proposals

# Introduction

This chapter outlines potential design measures to enhance the Phase 1 cycle corridors identified in the previous chapter. The following sections summarise design guidelines considered during development of the proposed infrastructure improvements for cycling.

These guidelines aim to make cycling more attractive and encourage more users to make journeys within the Borough by cycle. They are particularly aimed at supporting growth in cycling for short, utilitarian journeys and making cycling an attractive, enjoyable option for people of all ages and abilities.

## Design Outcomes

Potential improvements for cycling were developed seeking to follow the desired core design outcomes stated in DfT's LTN 1/20 design guidance. These include<sup>1</sup>:

- » **Coherent** - Cycle networks should be planned and designed to allow people to reach their day to day destinations easily, along routes that connect, are simple to navigate and are of a consistently high quality.
- » **Direct** - Cycle routes should be at least as direct – and preferably more direct – than those available for private motor vehicles.

- » **Safe** - Not only must cycle infrastructure be safe, it should also be perceived to be safe so that more people feel able to cycle.
- » **Comfortable** - 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.
- » **Attractive** - Cycle infrastructure should help to deliver public spaces that are well designed and finished in attractive materials and be places that people want to spend time using.

## Guiding Principles

To support the desired design outcomes, the cycling improvements aim to follow several general principles, which can be applied throughout Surrey Heath. Examples of design elements that support these principles are shown on the following pages.

- » **Cycle facility typology** - The type of cycle facility appropriate for a given street is highly dependent on its context, including vehicle flows and speeds, carriageway space, surrounding development, and general character. However, selection of an appropriate cycle facility should follow the cycle design principles of segregation from traffic or low traffic speeds/volumes. Segregated facilities are typically preferred, creating a comfortable and attractive facility for users of all ages

and abilities and providing the greatest potential to encourage mode shift to cycling. Alternatively, cycle route alignments or design measures to support low traffic speeds ( $\leq 20$ mph) and flows may provide an attractive option if the route is direct.

- » **Access to town centre** - Each area of Surrey Heath should have access to a convenient, attractive, and safe route to cycle to/from key origins/destinations. Several Phase 1 cycling routes seek to accomplish this, while additional routes may be developed in future.
- » **Access to schools** - Safe cycling routes are essential to encourage more children to cycle to school. Several Phase 1 cycle routes seek to support this, while additional routes may be developed in future.
- » **Design for utilitarian trips** - Cater for utilitarian journeys, less than 5km that can be easily cycled.
- » **Reduce motor vehicle flows** - Strategies to reduce motor vehicle flows (e.g. local access only restrictions, time restrictions, or modal filters) should be considered on cycle routes where segregation is not feasible to improve comfort for people cycling and create a more attractive cycle route.

<sup>1</sup> Department for Transport, Cycle Infrastructure Design (LTN 1/20), section 1.5

- » **Lower traffic speeds** - High vehicle speeds reduce comfort and safety for people cycling. Motor vehicle speeds of  $\leq 20$ mph are preferred to minimise speed differential with people cycling<sup>2</sup>. Design elements such as vertical deflection (e.g. speed cushions, raised tables/ raised junctions) or horizontal deflection (e.g. kerb build-outs, tight kerb radii, priority working) may be used, as appropriate, to support the desired vehicle speeds and create an environment where the speed limit is self-regulating. Traffic calming measures should also consider design elements to mitigate impacts on people cycling, such as providing cycle bypasses at kerb build-outs to manage potential conflicts with other road users.
- » **Review on-street parking** - On-street parking provisions can create potential conflict points between people cycling and motor vehicles, particularly where there is high parking turnover. Conflicts can arise from either vehicles entering/ leaving a parking space, opening of vehicle doors, or when parking obstructs visibility. Reducing parking could enable carriageway space to be reallocated for active uses, such as improvements for people walking or cycling. Where parking is retained, providing parking on raised pads can provide wider, more flexible footway space and encourage slower speeds by reducing the carriageway width.
- » **Junction and crossing improvements** - Improvements should seek to improve priority for people cycling and visibility at junctions, enhancing safety and continuity of the cycle

<sup>2</sup> Studies have shown that 20 mph zones would be beneficial to encourage cycling, particularly by women.

route. At uncontrolled junctions and side roads, improvements should seek to maintain cycle priority along the route and reduce motor vehicle speeds (e.g. tighten junctions, reduce bellmouth at side roads, increase vehicle deflection at roundabouts).

- » **Uphill cycling** - Steep gradients are a significant constraint to cycling. Design should seek to incorporate provisions that enhance separation from motor vehicles for people cycling uphill, as the speed differential between motor vehicles and people travelling uphill is greater. In constrained areas, this may include prioritising cycle improvements for the uphill direction of travel.
- » **Wayfinding** - Good sight lines and visibility of destinations and of cycle routes are important elements that affect how easy a route is to navigate, how many people cycling use the route, and perceived personal security. Wayfinding signage should be used to aid navigation and encourage use of the designated routes. Appropriate signage can improve confidence in using the route and encourage more cycling trips, particularly for those unfamiliar with the area. Signage that includes a distance and estimated travel time can also help avoid overestimating the time it takes to make a trip by cycle, encouraging increased cycle use for short journeys. A consistent wayfinding system should be applied on cycling routes throughout the county.
- » **Compete with motor vehicle journey times** By considering the alignment of the route and the nature of the interventions it can help to

promote the mode of travel as an equal to motorised modes.

- » **Collision history** - Aim to address routes/ locations with a history of collisions involving people cycling. This would be reflected in both the route alignment and the nature of the infrastructure proposed.
- » **Secure cycle parking** - Offer a variety of cycle parking to improve convenience and security.
- » **Green buffers** - Where possible, provide green buffers between motor vehicle traffic and people cycling and walking. This increases safety and comfort, and provides opportunities for planting or sustainable drainage systems (SuDs). Minimum width of the buffer is dependent on traffic speeds, as per LTN 1/20 (refer to the shared-use path image overleaf).
- » **Context sensitive design** - Improvements should complement and enhance the character of urban and rural environments. The high-level concepts developed in the LCWIP should be suitable for the setting, and design guidance should be adapted to fit the local context and space constraints. Particular attention will be paid to the treatment of heritage assets.
- » **Inclusive design** - Cycle infrastructure should be accessible to everyone, regardless of age, gender, ethnicity, or disability, and should not create hazards for vulnerable pedestrians.
- » **Adaptability** - Improvements should be developed to accommodate all types of users, and potential growth in the numbers of people cycling.



## Example Design Tools - Cycling

- » **Design Guidance** - As proposed cycle improvements are advanced, design stages should utilise the latest best practice design guidance and standards available at the time, such as:
- Cycle Infrastructure Design (DfT, LTN 1/20)
  - CD 195 - Designing for Cycle Traffic (Highways England)
  - Manual for Streets / Manual for Streets 2 (Chartered Institution of Highways & Transportation)
  - Inclusive Mobility (Department for Transport)
  - Healthy Streets for Surrey.



### Segregated Cycle Lane / Cycle Track

Provides raised, physical separation between people cycling and motor vehicles, providing a more comfortable, more attractive, and safer facility for people cycling of all ages and abilities. A segregated cycle track can accommodate contraflow cycling on one-way streets.



### Lightly Segregated Cycle Lane

Provides some physical barrier between people cycling and motor vehicles to improve comfort for people cycling. May be applicable where space constraints limit segregation options. Types of segregation could include kerbing, bollards, planters, or armadillo humps (as shown above). (Image: Cycle Enfield)



### Off-carriageway Cycle Track

Motorised-traffic free routes away from the highway can form important links for everyday trips. They are attractive to those who prefer to avoid traffic and can provide more direct route options than the road network. They need to be designed and maintained to a high quality, particularly in terms of surfacing, accessibility, clearance of vegetation, and lighting.



### Shared Use Path

Provides an off-carriageway facility shared with people walking. While segregated from motor vehicles, conflicts between people walking and cycling may arise, depending on the relative flows of each. If space allows, light segregation may be considered to encourage separation of people walking and cycling.



## Example Design Tools - Cycling



### Mandatory Cycle Lane

Provides a dedicated space for people cycling within the carriageway, separated by road markings only. Motor vehicles are not permitted to enter the cycle lane. (Image: [rosslydall.workpress.com](http://rosslydall.workpress.com))



### Advisory Cycle Lane

Delineates an area intended for cyclists within the carriageway where the street is too narrow to accommodate dedicated cycle facilities. Advisory lanes should only be used when limitations on the overall space available mean that motor vehicles will sometimes need to enter the cycle lane.



### Dutch-style facility (Advisory cycle lanes)

Provides a delineated space for people cycling within the carriageway and seeks to prioritise people cycling over motor vehicles. Additional measures to support the facility include a 20mph speed limit, centre line removal and advisory cycle lanes on each side, narrowing the apparent space for motor vehicles. Parking is not permitted within the cycle lanes and can be enforced with added double yellow lines along the facility. (Image: [www.hedgehogcycling.co.uk](http://www.hedgehogcycling.co.uk))



### Quiet Mixed Traffic Street

Where traffic flows are light and speeds are low, people cycling are likely to be able to cycle on-carriageway without segregation. Traffic calming and traffic management measures may be required to reduce traffic flows and/or speeds to provide appropriate conditions for an inclusive and attractive facility. (Image: Google)



### Contraflow Cycle Lane

Improves the convenience, directness, and attractiveness of cycling by accommodating contraflow cycling on one-way streets, shortening cycle trips and improving cycle access. Contraflow cycle lanes may be segregated or non-segregated, depending on context and available width. (Image: LTN 1/20)



### Bus Stop By-pass

The cycle facilities are taken around the rear of the bus stop. The island between the cycle track and the carriageway needs to be wide enough for people to stand and wait for a bus and to site a shelter if one is to be provided. Pedestrian crossing points should be controlled if cycle traffic speed and flows are high. (Image: Google)

## Example Design Tools - Cycling



### Pedestrian/Cyclist Priority Street

Reduces vehicle dominance of the street and prioritises people walking and cycling. Elements may include restricted motor vehicle access, materials/markings to delineate space for different users, low traffic speeds, or features of a shared space environment.



### Dutch or Segregated Roundabout

Provides a segregated facility and enables priority to cyclists over vehicular traffic on all arms of the roundabout. (Image: rac.co.uk)



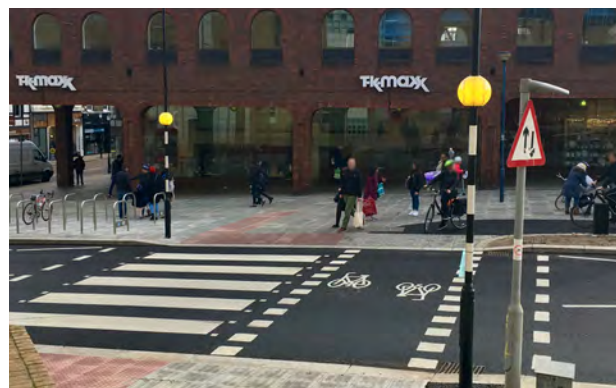
### Cycle Wayfinding

Improves the coherence of the cycle network and provides indicative journey lengths or times, making it easier for people to navigate and encouraging more trips to be taken by cycle. A consistent system should be applied county-wide.



### Toucan Crossing

Provides a controlled crossing for people cycling and walking, improving user comfort and safety, reducing delay at busy streets where there are limited gaps in traffic, and connecting off-carriageway cycle facilities.



### Parallel Crossing / Tiger Crossing

Provides priority for people walking and cycling at a crossing location, minimising the delay for people cycling, improving the directness of the route, and connecting off-carriageway cycle facilities.



### Side Road Entry Treatment

Encourages motorists to reduce speeds, indicates pedestrian and cycle activity, and encourages driver compliance with the (updated) Highway Code. Also enhances priority for people walking and cycling and makes the side road crossing easier and more convenient for people by maintaining the continuity of the route at footway level. (Image: Google Street View)



### Low Traffic Environment

Residential (primarily) areas with features that increase the comfort, safety and accessibility of walking and cycling; creating space for community facilities; and reducing the dominance of cars, resulting in improved safety, air quality and noise pollution to encourage more walking, cycling and social interactions. (Image: TfL)



### Modal Filter

Supports a safer, more attractive environment for walking and cycling by reducing motor vehicle traffic and permitting more direct, convenient access by foot or by cycle. Temporary or permanent highway features that permit access by certain vehicles (e.g., emergency vehicles, buses, blue badge holders). (Image: kingsheathltn.co.uk)



### Bus Gate

A type of modal filter that allows buses to move through a road section. It usually provides cycle by passes and operates with ANPR cameras to enforce the correct use of the feature. Restrictions may be enforced during specific times of the day to reduce traffic volumes, and/or also permit other users (e.g., emergency vehicles, taxis, blue badge holders). (Image: Google Street View)



### School Street

Implements timed vehicle access restrictions during school arrival/dismissal times to encourage more pupils to walk and cycle to school and improve the safety, comfort, and attractiveness of these modes. School streets may be configured to permit access by certain vehicles. (Image: wandsworth.gov.uk)



### Lower Traffic Speeds

Improves safety for all road users and fosters a more comfortable environment for cycling and walking. Should be supported by traffic calming measures, as needed, to make the speed limit self-enforcing. An area-wide policy could also be considered rather than changes on a street by street basis. (Image: WestLeedsDispatch.com)



### Cycle Parking

Cycle parking is an essential component of cycle infrastructure. Sufficient capacity, convenient, and secure cycle parking enables people to choose cycling. Proximity to destinations and security concerns can be a factor. Design should consider access for all types of cycles and their passengers.

# Phase 1 Proposed Cycling Interventions

The following sections present potential design measures to enhance the Phase 1 cycle corridors. The proposed measures are high level and identify initial concepts for consideration in the next stage of scheme development. They seek to address issues identified during the audit activities, as well as to incorporate proposals from previous studies and comments from early stakeholder engagement.

For cycling, the proposed interventions aim to improve the cycle environment to a high standard following DfT's LTN 1/20 technical guidance. At this early stage of concept development, the interventions for cycling are intended to identify preferred facility typologies, needs for crossing or junction improvements, etc. All proposed measures would be subject to varying levels of additional analysis, feasibility assessment, and design.<sup>1</sup> Next stages of scheme development would develop the concepts in greater detail and during which further observations, data, and information would be obtained to continually refine and improve the initial proposals.

<sup>1</sup> The design stage of the LCWIP proposals is initial concept development. All the proposed interventions are subject to further assessment during feasibility planning and design, such as topographic survey, traffic modelling, vehicle swept path analysis, utility survey, availability of land, traffic/speed survey, further stakeholder input, ecology survey, etc., as applicable.

Specific measures, such as traffic speed reduction, road space reallocation, changes to access/circulation, or parking restrictions, would require further stakeholder engagement in the next stages of design, following further analysis to estimate the impact of the proposals. Wider consultation would also be part of further scheme development.

The proposed interventions are presented by cycle corridor over the following pages. While these proposals are focused on the Phase 1 corridors, they also provide examples of the types of interventions that can be implemented Borough-wide as needs or opportunities arise.

Some of the desirable locations for active travel improvements may be privately owned and not within SCC's publicly maintained roads. As such, collaborative working with the respective owners would be required to explore opportunities to improve conditions for active travel.

Additionally, consideration should be given during subsequent development phases to review and coordinate future opportunities for integration with other schemes, workstreams or active travel improvements, including those identified within the aspirational LCWIP networks for walking and/or cycling.

The identified cycle corridors were reviewed in detail and sections were amended or

added to the initially identified alignment to ensure the proposed facilities will be linked to other schemes or provide connections to key destinations.

The proposed cycle corridors are linked to a cycle route that is under development between Camberley and Frimley, funded by National Highways (NH) Designated Funds. Cycle Corridor 4 as identified in the Network Development activity was not linked directly to the cycle scheme, therefore is proposed to be extended further from the initial alignment, to the south via Frimley Road to link with the NH cycle route.

Additionally, Cycle Corridor 6 is proposed to be extended further from the initial alignment, to the east, along Frimley High Street. SCC and SHBC aspiration is that cycle facilities will be provided through Frimley Town Centre and to Frimley Railway Station to improve the connectivity to key destinations. This alignment will also provide an opportunity to link Cycle Corridor 8, to the Town Centre and the railway station, as well as to provide a connection from the south to the NH cycle route. The section of Cycle Corridor 6 along Frimley By-pass is proposed to be retained as part of the scheme to improve the connectivity of the Surrey Heath network with the Rushmoor existing and aspirational (LCWIP) network.

## Cycle Network Typology

The proposed cycle facility typologies across the cycle network selected for Phase 1 are illustrated in Figure 62. The proposed facilities reflect the design principles, local aspirations for cycling, and anticipated potential constraints along each route at this initial stage of option assessment.

Future feasibility design stages would be required to review constraints and cycle facility options in more detail. The proposed cycle network comprises a mix of facility typologies, indicative of the varying facility contexts and constraints across the Borough. It includes, for example, sections of segregated cycle facilities where there is potential to reallocate space within the public highway or during future development. In significantly constrained areas, it includes proposals to improve cycling with mixed traffic, such as: reducing traffic speeds<sup>1</sup>, providing advisory cycle lanes, restricting motor vehicle access, tightening side road junctions, providing cycle markings, or redesigning streets to enhance cycle and pedestrian priority.

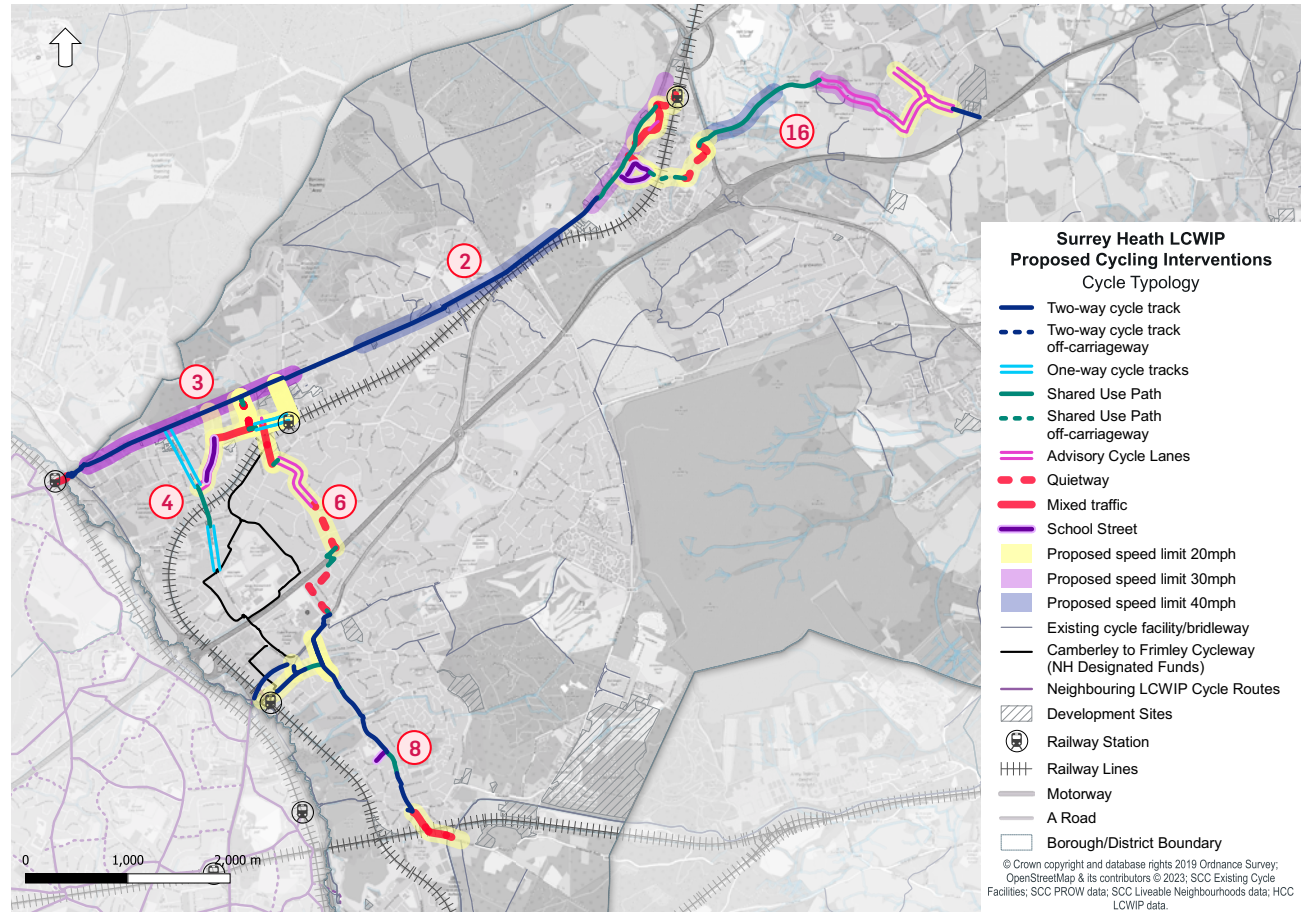


Figure 62. Network map of proposed Phase 1 cycle typologies

<sup>1</sup> Additional measures to support speed limit changes will be investigated in the next stage of scheme development, as necessary, such as traffic calming measures, camera enforcement, reduction of carriageway width, etc.

## Cycle Corridor 2: A30 - Camberley to Bagshot Railway Station

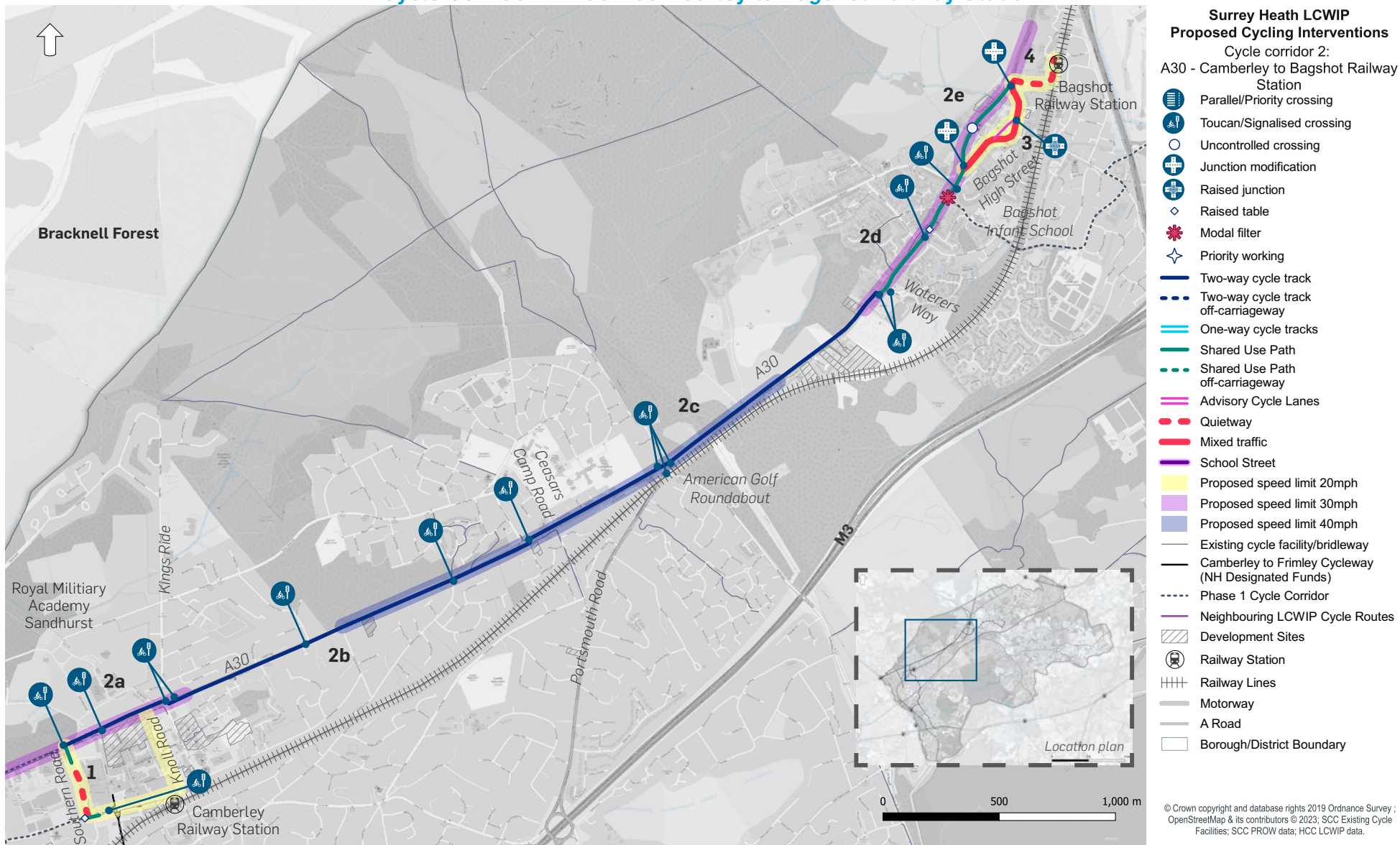


Figure 63. Cycle Corridor 2: A30 - Camberley to Bagshot Railway Station

## Cycle Corridor 2: A30 - Camberley to Bagshot Railway Station

The corridor provides a connection between Camberley town centre, Old Dean and Bagshot, extending along the A30. The corridor serves two railway stations, local commercial centres and residential areas. The proposed interventions aim to improve the east-west active travel corridor within the Borough via a key corridor, and upgrade the existing facilities to higher and accessible standards. See also LCWIP Core Walking Zones 2 and 9 proposals for this area.

### Proposed Interventions

- 1** Southern Road: Quietway through the residential street. Introduce short sections of shared use path at the north and south ends of the road. Introduce a raised table at the southern end of the section to allow for safe transition between the existing cycle facilities on Pembroke Broadway and the quietway. Introduce 20mph speed limit and traffic calming measures to complement the proposals. Introduce toucan crossings at the existing traffic signals on the A30 to provide access to the existing cycle facilities.
- 2** A30 - London Road: Combination of two-way cycle track and shared use path with improved priority crossings throughout the extent of the section. Improvements to the existing facilities.
  - a.** *Between Southern Road and Knoll Road*: Two-way cycle track on the northern

side. Convert the northern footway to cycle only,<sup>1</sup> and widen the facility by reallocating space from the verge and the carriageway. Introduce a green buffer between motorised traffic and the cycle track where space allows. Permit access for pedestrians to the bus stop. Improve access for cyclists by introducing cycle crossings at the existing signalised junctions. Reduce speed limit to 30mph<sup>2</sup> to improve road safety.

- b.** *Between Knoll Road and Caesar Camp Road*: Two-way cycle track alongside a widened footway on the southern side by reallocating space from the carriageway. Introduce a green buffer between motorised traffic and the cycle track



Figure 64. Existing shared use path along the A30

- <sup>1</sup> Estimated pedestrian flows on the northern side of the A30 are low, as the Royal Military Academy creates a barrier for connections to the north.
- <sup>2</sup> Speed reduction measures along the A30 between Camberley and Bagshot are also part of a separate works package. Proposal to support improved air quality and noise at the edge of the residential area.

where space allows. Upgrade existing crossings to toucan to accommodate cycles to access the facilities and the residential areas on both sides of the road. Reduce the speed limit to 40mph<sup>2</sup> (east of Knightsbridge Road).

- c.** *Between Caesar Camp Road and Waterers Way*: Two-way cycle track on the north side of the road by reallocating space from the verge and the carriageway. Introduce a green buffer between motorised traffic and the cycle track where space allows. Upgrade existing crossings<sup>3</sup> at the American Golf roundabout to toucan crossings to accommodate cycles to access the facilities and provide safer connections to other destinations. Reduce the speed limit to 40mph<sup>2</sup>.

- <sup>3</sup> Existing uncontrolled crossings and in-formal crossings at the traffic signals.



Figure 65. Existing crossings on the A30 to be retained and upgraded to toucan crossings to accommodate cyclists

**d. Between Waterers Way and High Street:** Shared use path on the south side by reallocating space from the carriageway<sup>4</sup>. Introduce a green buffer between motorised traffic and the cycle track where space allows. Ensure cycle priority at the side roads and entrances to properties to improve users' safety. Improvements at Waterers Way/ A30 London Road<sup>5</sup> and High Street/ A30 London Road junctions to accommodate pedestrian and cycle priority crossings with potential signalisation of the High Street/A30 London Road junction<sup>6</sup>.

Improvements to the existing School Lane modal filter for access to Bagshot Infant School and the residential area, and upgrade existing crossings to toucans. Reduce speed limit to 30mph<sup>7</sup> to improve road safety and for opportunity to reduce traffic lane width to accommodate the proposals.

**e. Between High Street and Station Road:** Shared-use path on the southern side by reallocating space from the carriageway<sup>8</sup>. Introduce a green buffer between motorised traffic and the cycle track where space allows. Improvements at Station Road/ Bridge Road/ A30 London Road junction to tidy the movements and introduce safe pedestrian and cycle crossings. Reduce speed limit to 30mph<sup>9</sup> to improve road safety, and for opportunity to reduce the width of traffic lanes to accommodate the proposals.



Figure 66. Existing uncontrolled crossings at the American Golf Roundabout require upgrading to toucan crossings to allow safer access to the proposed cycle facilities.



Figure 67. Improvements to the existing cycle facilities along the A30. New facilities would allow for a continuous cycle route to link Camberley and Bagshot.

<sup>4</sup> Segregation between pedestrians and cyclists is desirable according to LTN 1/20, but may not be feasible due to limited public highway space. The estimated pedestrian flows at the location are high due to the proximity to school and the local shops. Longer term aspirational proposal: segregated pedestrian/cycle facilities depending on the available highway land. Proposal to be investigated during the feasibility design stage.

<sup>5</sup> Proposal to be developed and funded by the development site south of the A30.

<sup>6</sup> Proposal to be investigated further in the next stages of the design following traffic surveys. New signalised junction would aim to reduce traffic congestion along the A30 with the implementation of smart signals.

<sup>7</sup> Speed reduction measures along the A30 between Camberley and Bagshot are also part of a separate works package. Proposal to support improved air quality and noise at the edge of the residential area.

<sup>8</sup> Segregation between pedestrians and cyclists is desirable according to LTN 1/20, however the estimated pedestrian flows at the location are low. Longer term aspirational proposal: segregated pedestrian/cycle facilities if required depending on the available highway land and pedestrian and cycle counts. Proposal to be investigated during the feasibility design stage.

<sup>9</sup> Speed reduction measures along the A30 between Camberley and Bagshot are also part of a separate works package. Proposal to support improved air quality and noise at the edge of the residential area.



**3** High Street - Bridge Road: Mixed traffic provision through the local commercial centre as the available highway width is limited<sup>10</sup>, and allow contraflow cycling at the one-way section of the High Street with the introduction of an advisory cycle lane. Public realm improvements as part of Core Walking Zone 9, and traffic calming measures to improve cyclists' safety. Introduce 20mph speed limit and traffic calming measures to complement the proposals.<sup>11</sup>

**4** Station Road: Quietway to Bagshot Railway Station as the traffic flows are estimated low. Introduce a 20mph speed limit complemented by traffic calming measures. Recommendations to Network Rail to improve the railway bridge to accommodate cyclists, introducing a channel along the steps or step-free access.

Additional interventions along the proposed corridor to include wayfinding posts at key junctions and key destinations, secure cycle parking at schools, commercial areas and employment sites.



Figure 68. A30/Bagshot High Street junction requires modification to allow for safer pedestrian and cycle crossings and tidy vehicular movements.



Figure 69. Bagshot High Street is constrained and no segregated cycle facilities may be proposed. Mixed traffic provision and traffic calming measures to reduce speeds proposed.

<sup>10</sup> The estimated traffic flows on the High Street are likely >5000 vehicles per day, which is above the recommended threshold for mixed traffic by LTN 1/20. However, due to the width constraints at the section, and the estimated high pedestrian flows, a segregated cycle facility is likely not feasible. An alternative alignment for north - south cycle connections is provided via the A30. In the next stage of the design implementation of a shared use path or introduction of traffic restriction measures may be investigated.

<sup>11</sup> Investigate options to reduce rat-running through the village for motorised traffic between the A30 and Bagshot Bypass: Modal filter or bus gate on Guildford Road will reduce the traffic flows within the village and allow for safer interactions between cyclist and motorised traffic on the carriageway.

## Cycle Corridor 3: Camberley to Blackwater



Figure 70. Cycle Corridor 3: Camberley to Blackwater

## Cycle Corridor 3: Camberley to Blackwater

The corridor extends along the A30 and provides a connection between Camberley town centre and Blackwater (Hart District). The corridor serves two railway stations, local commercial centres, large employment sites and residential areas. It will link directly to the Hart LCWIP aspirational network for cycling. The proposed interventions aim to improve the east-west connectivity within the Borough via a key corridor, and upgrade the existing facilities to higher and accessible standards. See also LCWIP Core Walking Zone 2 proposals for this area.

### Proposed Interventions

- 1 Southern Road<sup>1</sup>:** Quietway through the residential street. Introduce short sections of shared use path at the north and south ends of the road. Introduce a raised table at the southern end of the section to allow for safe transition between the existing cycle facilities on Pembroke Broadway and the quietway. Introduce 20mph speed limit and traffic calming measures to complement the proposals. Introduce toucan crossings at the existing traffic signals on the A30 to provide access to the existing cycle facilities.
- 2 A30 - London Road:** Two-way cycle track on the north side. Convert the northern

footway to cycle only,<sup>2</sup> and widen the facility by reallocating space from the verge and the carriageway. Introduce a green buffer between motorised traffic and the cycle track where space allows. Permit access for pedestrians to the bus stops. Improve access for cyclists by introducing cycle crossings at the existing signalised junctions, and upgrading existing crossings to toucans operating on demand<sup>3</sup>. Reduce the speed limit to 30mph<sup>4</sup> to improve road safety. Additional public realm improvements to be considered to improve the attractiveness of the link and personal safety.

- 3 The Meadows Roundabout:** Retain existing cycle facilities on the southern side of the roundabout and provide connection to the proposed facilities on the northern side of the A30. Reduce cycle waiting times at the toucan crossings<sup>4</sup>.
- 4 Station Approach:** (Section within Hart District) Mixed traffic provision to provide connection to Blackwater Railway Station as the traffic flows are estimated low. Introduce a 20mph speed limit complemented by traffic calming measures.

<sup>2</sup> Estimated pedestrian flows on the northern side of the A30 are low, due to Royal Military Academy.

<sup>3</sup> Proposal subject to traffic surveys and modelling to estimate the impact on queuing for motorised traffic and impact on bus services.

<sup>4</sup> Speed reduction measures along the A30 between Camberley and Bagshot are also part of a separate works package.

Additional interventions along the proposed corridor to include wayfinding posts at key junctions and key destinations, secure cycle parking at schools, commercial areas and employment sites.



Figure 71. Northern footway on the A30 presents low pedestrian flows as it extends along Royal Military Academy fence.



Figure 72. Existing cycle facilities and crossings at The Meadows Roundabout.

<sup>1</sup> Same proposal as presented on Cycle Corridor 2

## Cycle Corridor 4: Frimley Road to Camberley High Street

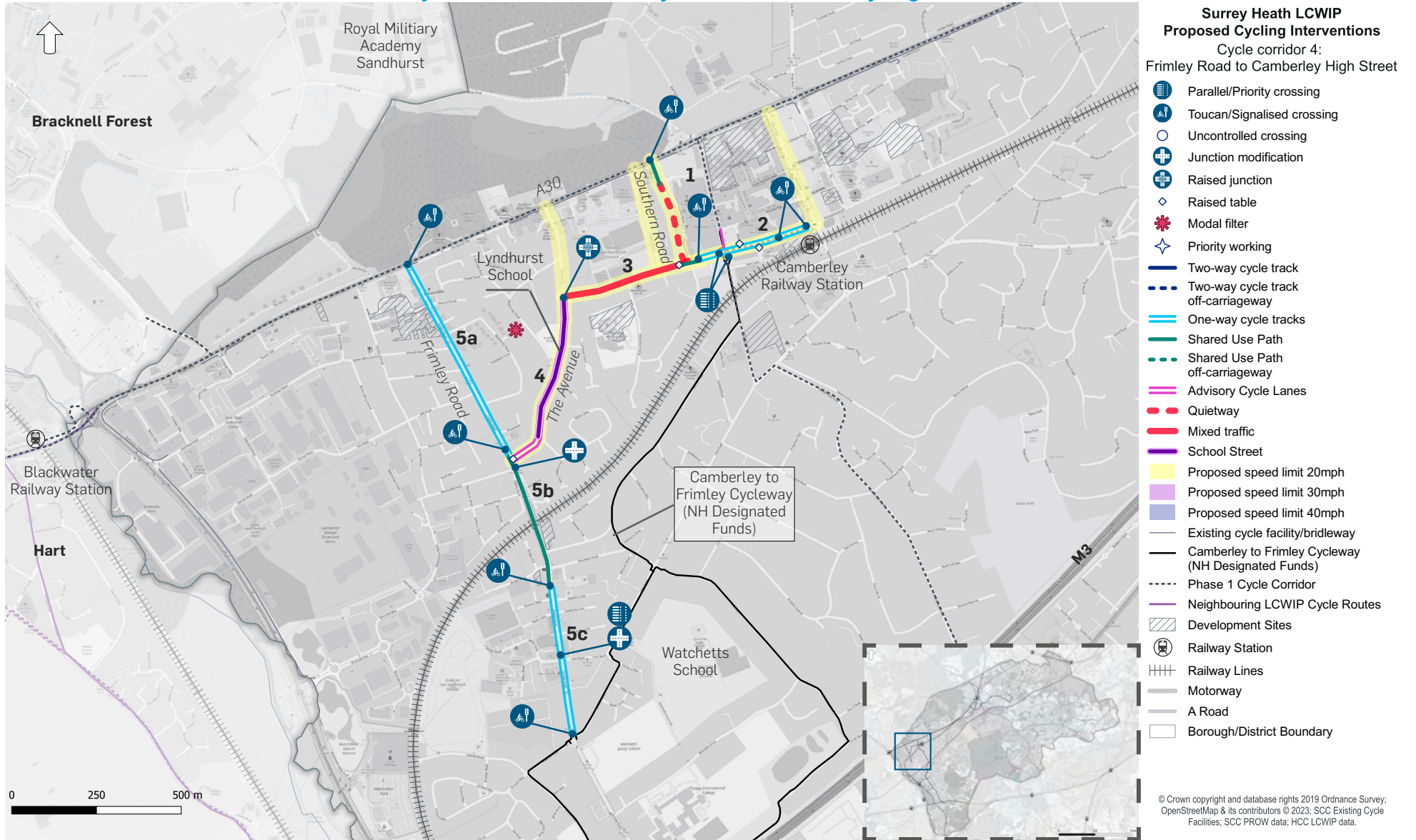


Figure 73. Cycle Corridor 4: Frimley Road to Camberley High Street

## Cycle Corridor 4: Frimley Road to Camberley High Street

The corridor connects Camberley Town Centre and the railway station to Frimley Road local commercial area. It serves local schools and major employment sites as an alternative to Camberley to Frimley Cycleway (National Highways Designated Funds), and provides a connection from Frimley to the A30. See also LCWIP Core Walking Zone 2 proposals for this area.

### Proposed Interventions

- 1** Southern Road<sup>1</sup>: Quietway through the residential street. Introduce short sections of shared use path at the north and south ends of the road. Introduce a raised table at the southern end of the section to allow for safe transition between the existing cycle facilities on Pembroke Broadway and the quietway. Introduce 20mph speed limit and traffic calming measures to complement the proposals. Introduce toucan crossings at the existing traffic signals on the A30 to provide access to the existing cycle facilities.
- 2** Pembroke Broadway: One-way cycle track on each side of the road. Upgrade existing cycle facilities, by widening the tracks and providing continuous segregation between pedestrians and cyclists. Ensure access to the bus stops and the railway station with infrastructure improvements (bus boarder or cycle by-pass). Introduce continuous

<sup>1</sup> Same proposal as presented on Cycle Corridors 2 and 3.



Figure 74. Park Street pedestrianised section. Wide space to allow cyclists to access the shops and provide a link between the A30 and Camberley Railway Station



Figure 75. Existing cycle facilities on Pembroke Broadway require improvements for the coherence of the facility.

facilities at the side roads on raised tables and improve the connectivity on to the town centre with new and upgraded pedestrian and cycle priority crossings. Public realm improvements as part of the Core Walking Zone 2. Introduce a 20mph speed limit complemented by traffic calming measures.

Additionally, introduce a contra flow cycle lane (advisory cycle lane) on Park Street

to provide access to the pedestrianised section. Proposal to be in line with Camberley to Frimley Cycleway (NH Designated Funds)

- 3** Southwell Park Road: Mixed traffic provision<sup>2</sup> with additional traffic calming measures (e.g. horizontal and vertical deflections and side road crossing treatments). Introduce 20mph speed limit and traffic calming measures to complement the proposals..
- 4** The Avenue: Advisory cycle lanes along with removal of the centre line<sup>3</sup>. On-street parking to be retained at sections following parking surveys to estimate the demand. Proposed School Street, to improve safety and encourage active travel modes for daily trips to Lyndhurst School. Reduce the speed limit to 20mph and introduce a modal filter on Woodway to restrict potential rat running in the area.

<sup>2</sup> The estimated traffic flows on the Southwell Park Road are likely >5000 vehicles per day, which is above the recommended threshold for mixed traffic by LTN 1/20. However, due to the width constraints at the section a segregated cycle facility is likely not feasible. In the next stage of the design implementation of a shared use path or introduction of traffic restriction measures may be investigated.

<sup>3</sup> The traffic flows along the section are likely >4000 vehicles per day which is above the recommended threshold for on-carriageway facilities by LTN 1/20 and removal of the centre line. Options for segregation were considered, but likely not feasible due to carriageway and public highway constraints. In the next stages of the design, options to reduce traffic would be further investigated. These could include: converting The Avenue to one-way, or modal filter/ bus gate.

- 5** Frimley Road: Combination of one-way cycle tracks and shared use paths.
- a.** *Between A30 London Road and The Avenue*: One-way cycle tracks (upgrading the existing advisory cycle lanes) by reallocating space from the carriageway<sup>4</sup>. Review on-street parking needs to ensure continuity of the cycle facilities. Introduce pedestrian and cycle crossings at the singalised junction on the A30 London Road and new toucan crossing at the junction with The Avenue for the transition between the different facilities.
- b.** *Between The Avenue and Bridge Road*: Shared use path<sup>5</sup> on the west side of the road delivered by carriageway space reallocation. Improvements at the Frimley Road/ Moorlands Road / Oakley Road junction to tidy the movements and reallocate space for pedestrians and cycles.
- c.** *Between Bridge Road and Crabtree Road*: One-way cycle track on each side of the road; improvements to the existing cycle facilities by widening the tracks and providing continuous segregation between

<sup>4</sup> At localised pinch points segregation may not be feasible and short sections of shared facilities may be provided.

<sup>5</sup> The railway bridge is creating a pinch point for pedestrians and cyclists. Segregation between pedestrians and cyclists is desirable according to LTN 1/20, but may not be feasible due to limited public highway space. Longer term aspirational proposal: Introduce a pedestrian and cycle bridge over the railway lines or provide segregated pedestrian/cycle facilities by introducing traffic changes at the bridge (one-way system or shuttle working). Proposal to be investigated during the feasibility design stage.

pedestrians and cyclists. Extension of the facilities to the south by reallocating space from the carriageway. Review of on-street parking to ensure continuity of the cycle facilities and to retain adequate buffer between the cycle tracks and the parking bays. Convert Frimley Road/ Park Road roundabout to a priority junction and introduce priority crossings at the north, east and west arms. Proposal to tie in with the Camberley to Frimley Cycleway (NH Designated Funds) at Crabtree Road at the proposed toucan crossing.

Additional interventions along the proposed corridor to include wayfinding posts at key junctions and key destinations, secure cycle parking at schools, commercial areas and employment sites.



Figure 76. Existing advisory cycle lanes on the north extent of Frimley Road to be upgraded to segregated cycle tracks.



Figure 77. Frimley Road/ Moorlands Road / Oakley Road junction requires improvements to accommodate the proposed priority crossing



Figure 78. Existing cycle tracks along Frimley Road require improvements to ensure segregation between users.

## Cycle Corridor 6: Camberley to Rushmore via Frimley Park Hospital

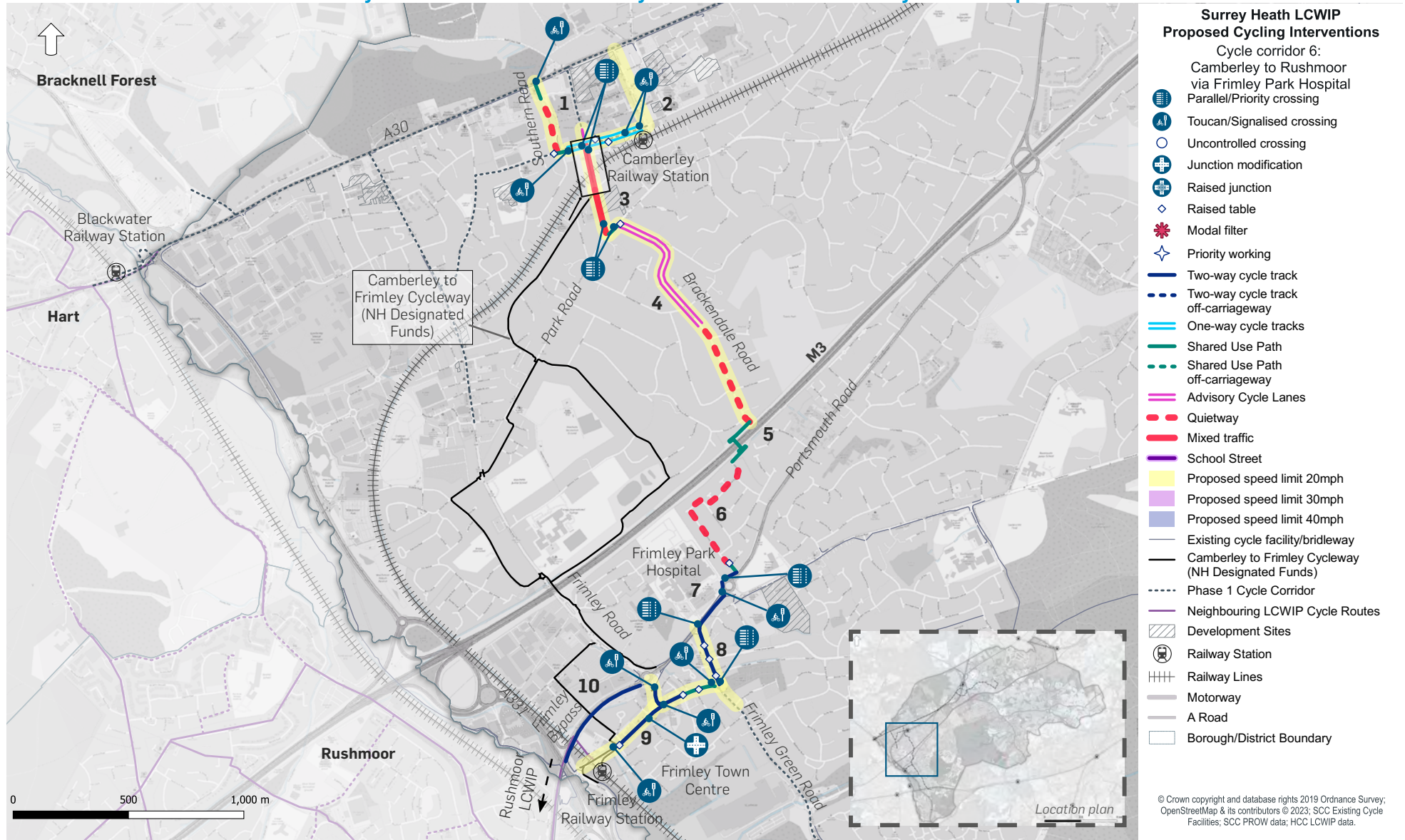


Figure 79. Cycle Corridor 6: Camberley to Rushmore via Frimley Park Hospital



## Cycle Corridor 6: Camberley to Rushmoor via Frimley Park Hospital

This corridor provides a connection between Camberley Town Centre, the residential areas south of the town centre, Frimley Park Hospital and Frimley Town Centre. It serves the commercial centres, provides a connection to the existing cycle facility on Portsmouth Road and a connection to Rushmoor LCWIP proposed cycle network. The LCWIP proposals aim to incorporate existing proposals as part of the Camberley to Frimley Cycleway (National Highways Designated Funds). See also LCWIP Core Walking Zones 2 and 4 proposals for this area.

### Proposed Interventions

- 1** Southern Road<sup>1</sup>: Quietway through the residential street. Introduce short sections of shared use path at the north and south ends of the road. Introduce a raised table at the southern end of the section to allow for safe transition between the existing cycle facilities on Pembroke Broadway and the quietway. Introduce 20mph speed limit and traffic calming measures to complement the proposals. Introduce toucan crossings at the existing traffic signals on the A30 to provide access to the existing cycle facilities.
- 2** Pembroke Broadway<sup>2</sup>: One-way cycle tracks. Upgrade existing cycle facilities, by widening the tracks and providing

1 Same proposal as presented on Cycle Corridors 2, 3 and 4.

2 Same proposal as presented on Cycle Corridor 4.

continuous segregation between pedestrians and cyclists. Ensure improved access to the bus stops and the railway station with infrastructure improvements (bus boarder or cycle by-pass). Introduce continuous facilities at the side roads on raised tables and improve the connectivity on to the town centre with added and upgraded pedestrian and cycle priority crossings. Public realm improvements as part of the Core Walking Zone 2. Introduce 20mph speed limit and traffic calming measures to complement the proposals.

Additionally, introduce a contra flow cycle lane (advisory cycle lane) on Park Street to provide access to the pedestrianised section. Proposal to be in line with Camberley to Frimley Cycleway (NH Designated Funds)

- 3** Park Street: Mixed traffic provision<sup>3</sup> with additional traffic calming measures (e.g. horizontal and vertical deflections and side road crossing treatments). Introduce 20mph speed limit and traffic calming measures to complement the proposals. Northern section of Park Street is part of the Camberley to Frimley Cycleway (NH Designated Funds) and continuation of the

3 The estimated traffic flows on the Southwell Park Road are likely >5000 vehicles per day, which is above the recommended threshold for mixed traffic by LTN 1/20. However, due to the width constraints at the section a segregated cycle facility is likely not feasible. Additionally, proposals are introducing the same facility as the Camberley to Frimley Cycleway (NH Designated Funds) for coherence of the network. Further measures to reduce traffic flows to be investigated in the next stages.

proposed facility is proposed throughout this section. Introduce priority crossings at both ends of the link to ensure safe transition for cyclists between the different facilities.

- 4** Brackendale Road: Advisory cycle lanes with removal of the centre line and a quietway at the southern end, along with traffic calming measures<sup>4</sup>. Introduce 20mph speed limit and traffic calming measures to complement the proposals. Enhance street lighting to increase personal safety and resurface any defects on the road.

4 Estimated traffic flows are low as the road is a quiet residential street with no through traffic.



Figure 80. Park Street is constrained and segregation may not be feasible for cyclists. Traffic calming measures proposed as part of the Camberley to Frimley Cycleway (NH Designated Funds).





Figure 81. Brackendale Road has low traffic flows therefore on-carriageway cycle facilities will be suitable for most people. Bend at the northern end of the road requires review to improve road safety.



Figure 82. M3 footbridge is narrow (approx. 2.2m width) and widening will be required if the pedestrian and cycle flows increase.



Figure 83. Existing toucan crossing on Portsmouth Road to link to the proposed cycle facilities on the south side.

- 5 M3 footbridge: Shared-use path along the footbridge. Permit cyclists along the paths and the footbridge. Improvements to the existing path to include vegetation clearance to increase the effective width and improve natural surveillance, widening of the path where feasible and new lighting to improve personal safety<sup>5</sup>. Improvements on the approaches to the paths to include resurfacing of the carriageway and the path, increasing the space between the guardrail to accommodate larger bikes, widening of the dropped kerbs and introducing double yellow lines to keep the access points clear of parked vehicles. This will require agreement with National Highways (NH) as the landowner of the paths either side and owner of the bridge. Discussions with NH are also required to increase the height of the parapets to improve safety for cyclists.

Aspirational proposal: widening of the existing footbridge and footpath to accommodate wider pedestrian and cycle facilities with potential for segregation between users.

- 6 Blythwood Drive - Badgerwood Drive: Quietway through the residential area. Improvements to the path on the approach to Portsmouth Road by introducing a raised table at the exit of the path, also path resurfacing and widening the gap between

<sup>5</sup> Added lighting along with further vegetation clearance will help improve personal safety as the path will be more overlooked. Proposed interventions to be investigated further following environmental and arboricultural surveys

existing guardrail to accommodate larger bikes.

- 7 Portsmouth Road: Two-way cycle track on the south side by reallocating space from the green area<sup>6</sup>. On the approach to the roundabout cyclists to be directed to the north side and access the path at Badgerwood Drive. Introduce priority crossings at the roundabout and investigate tightening of the approaches, while ensuring the emergency vehicles turning movements are accommodated.
- 8 Grove Cross Road: Two-way cycle track on the east side by reallocating space from the green area and the carriageway<sup>7</sup>. Introduce priority crossings at both ends of the section to ensure safe transition to the existing cycle facilities. Introduce 20mph speed limit and traffic calming measures to complement the proposals.
- 9 Frimley High Street - Church Road: Two-way cycle track and shared use path<sup>8</sup> on the south side of the road, by reallocating space from the carriageway. Introduce green buffer between the cycle facilities and the motorised traffic where space allows.

<sup>6</sup> Location of the two-way cycle track to be determined in the feasibility stage following topographic, environmental, and arboricultural surveys. Trees to be retained.

<sup>7</sup> Proposals are subject to topographic surveys and review of on-street parking requirements.

<sup>8</sup> Segregation between pedestrians and cyclists is desirable according to LTN 1/20, but may not be feasible due to limited public highway space. Longer term aspirational proposal: provide segregated pedestrian/cycle facilities by introducing traffic changes at the section (e.g. one-way system). Proposal to be investigated during the feasibility design stage.

Introduce 20mph speed limit and traffic calming measures to complement the proposals. Extend the facilities to the north to tie in with the existing cycle track at the Portsmouth Road/ Farnborough Road/ Frimley Road roundabout<sup>9</sup>.

Public realm improvements including footway widening and new parking bays at footway level as proposed at Core Walking Zone 4.

- 10 Upgrade existing signalised crossings to toucan to accommodate cycles and investigate improvements at Hale Way/ High Street junction to enhance pedestrian and cycle priority. Proposal to tie in with Camberley to Frimley Cycleway (NH Designated Funds), at the proposed toucan crossing west of Station Road. Introduce 20mph zones and traffic calming measures to complement the other proposals.

<sup>9</sup> Proposal may require removal of the bus layby, the slip lane and reduction of the number of the traffic lanes. To be confirmed following traffic surveys.



Figure 84. Existing cycle facility on Frimley Road.

Aspirational proposal to introduce an accessible ramp at the railway station to access Frimley High Street.

- 11 Frimley By-pass: Two-way cycle track on the south side by reallocating space from the verge and the carriageway<sup>10</sup>. Introduce a green buffer of 1m minimum width between cycles and motorised traffic.

<sup>10</sup> Proposal may require reduction of the number of the traffic lanes, which will be confirmed in the next stages of the design where more data will be available and traffic surveys will determine the requirements for the motorised vehicles.



Figure 85. Frimley Bypass provides an east-west connection between Rushmoor and Surrey Heath. Cycle facilities are provided west of the railway lines in Rushmoor and east of Frimley Road in Surrey Heath. Implementation of cycle infrastructures in the section will allow for a continuous facility through Frimley and between the two areas.

Proposal to tie in with the existing cycle facilities on Frimley Bridge and Rushmoor LCWIP aspirational cycle network.

Additional interventions along the proposed corridor to include wayfinding posts at key junctions and key destinations, secure cycle parking in commercial areas, employment sites, the hospital and the railway stations.

## Cycle Corridor 8: Frimley to Frimley Green

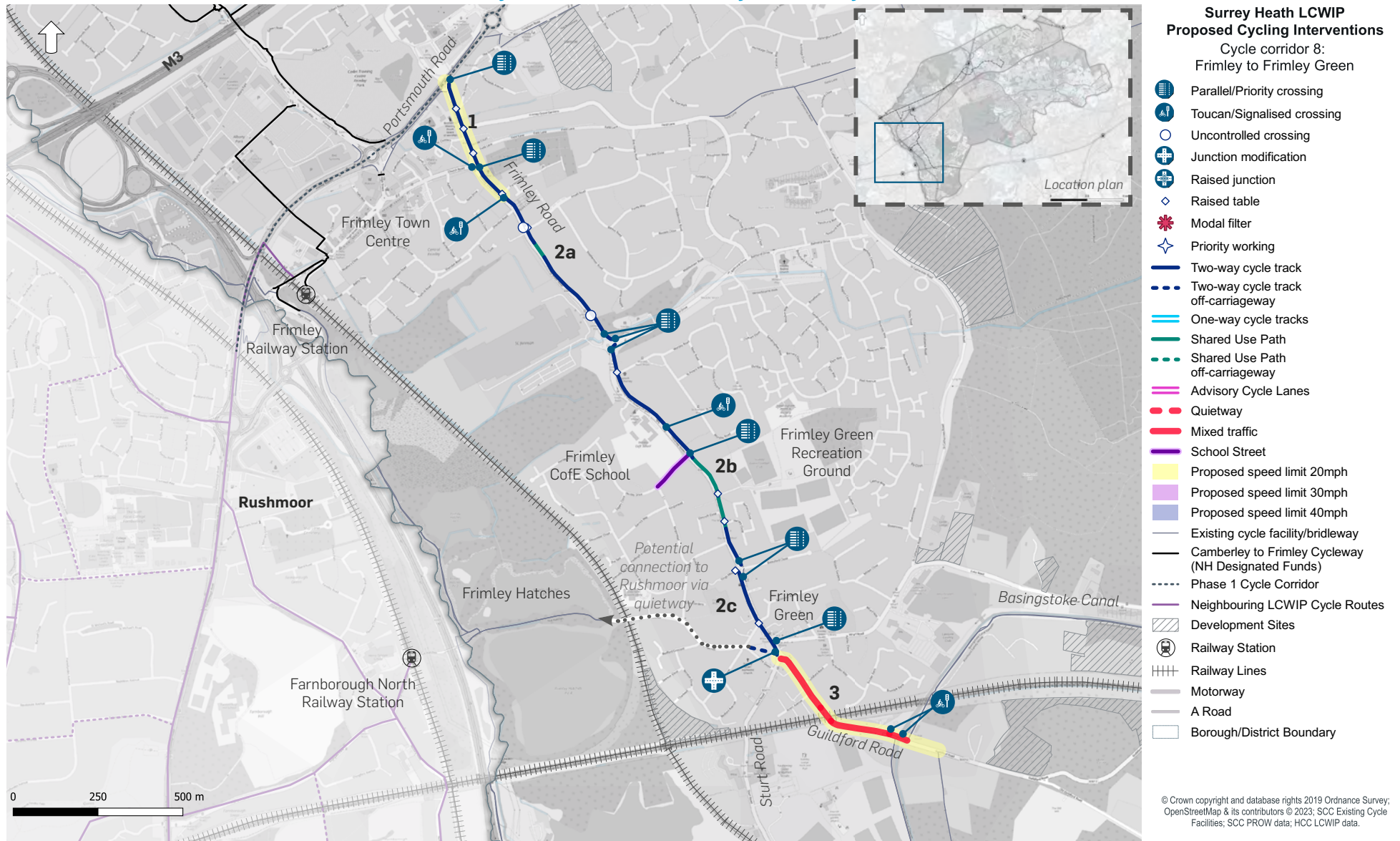


Figure 86. Cycle Corridor 8: Frimley to Frimley Green



## Cycle Corridor 8: Frimley to Frimley Green

The corridor provides a connection between Frimley Town Centre and Frimley Green. It serves the local commercial area, schools, and employment sites. The proposed facilities will provide links to existing cycle facilities on Portsmouth Road and Basingstoke Canal towpath. See also Core Walking Zone 4 proposals for this area.

### Proposed Interventions

- 1** Grove Cross Road<sup>1</sup>: Two-way cycle track on the east side by reallocating space from the green area and the carriageway<sup>2</sup>. Introduce priority crossings at both ends of the section to ensure safe transition to the existing cycle facilities. Introduce 20mph zones and traffic calming measures to complement the other proposals.

<sup>1</sup> Same proposal as presented on Cycle Corridor 6.

<sup>2</sup> Proposals are subject to topographic surveys and review of on-street parking requirements. Location of the two-way cycle track to be determined in the feasibility stage following topographic, environmental, and arboricultural surveys. Trees to be retained.



Figure 87. Frimley Green Road/ Church Road/ Grove Cross Road junction, requires improved crossings for cyclists.

- 2** Frimley Green Road: Combination of two-way cycle tracks and shared use paths. Proposal to improve existing facilities to higher and accessible standards.
  - a.** *Between Church Road and Henley Drive*: Two-way cycle track on the east side of the road by reallocating space from the carriageway and the verge<sup>3</sup>. Introduce a green buffer between cycle facilities and motorised traffic where space allows. Upgrade existing uncontrolled or pedestrian only crossings to toucan to accommodate cyclists. Removal or relocation of the bollards along the existing shared use path to accommodate the changes to the facility.
  - b.** *Between Church Road and Beresford Close*: Shared-use path<sup>4</sup> and two-way cycle track by reallocating space from the carriageway. Introduce a School Street to improve safety and encourage active travel modes for daily trips to Frimley Church of England School. Introduce 20mph zones complemented by traffic calming measures. Upgrade existing uncontrolled

<sup>3</sup> In short sections segregation between pedestrians and cyclists may not be achievable due to the limited highway width and a shared use path would be proposed. Locations of pinch points to be investigated further during the feasibility stage.

<sup>4</sup> Segregation between pedestrians and cyclists is desirable according to LTN 1/20, but may not be feasible due to limited public highway space. Longer term aspirational proposal: provide segregated pedestrian/cycle facilities by introducing traffic changes at the section. Proposal to be investigated during the feasibility design stage.



Figure 88. Existing shared use path on Frimley Green Road to be upgraded to segregated cycle track.

or pedestrian only crossings to toucan to accommodate cyclists.

- c.** *Beresford Close and Guildford Road*: Two-way cycle track on the west side of the road by reallocating space from the carriageway<sup>5</sup> and through the green area<sup>6</sup>. An additional link is proposed through the green area to provide an west-east connection to the residential area<sup>7</sup>. Improvements to Frimley Green Road/ Sturt Road/ Guildford Road junction by converting the roundabout to a priority junction for opportunity to reallocate space for active travel, public realm improvements at the local commercial area and introduce priority crossings<sup>8</sup>.

<sup>5</sup> Proposals are subject to topographic surveys and review of on-street parking requirements.

<sup>6</sup> Subject to topographic, environmental and arboricultural surveys.

<sup>7</sup> The aspiration of this link is to direct cyclists towards Frimley Hatches existing shared facilities and Farnborough North Railway Station.

<sup>8</sup> Proposal part of major road works scheme by SHBC and SCC, developer-led by Deepcut development.

**3** Guildford Road: Mixed traffic provision along this section<sup>9</sup>. On-street parking to be retained at sections following parking surveys to estimate the demand. At the Basingstoke Canal Bridge the shuttle working will be retained and priority crossings are proposed to provide safe access for pedestrians and cyclists to the section and to the towpath. Reduce speed limit to 20mph to support the on-carriageway facilities along with traffic calming measures (horizontal and vertical deflection).

Additional interventions along the proposed corridor will include wayfinding posts at key junctions and key destinations, secure cycle parking at the schools, commercial areas and employment sites.



Figure 89. Changes to Frimley Green Road/ Sturt Road/ Guildford Road roundabout to a priority junction are required to increase the space for pedestrians and cyclists, introduce priority crossing and tidy vehicular movements.



Figure 90. Existing path through Frimley Green area to allow cyclists in order to connect to a quietway to Farnborough North Railway Station. Path will be linked to the proposed crossing.



Figure 91. Access to Basingstoke Canal requires improvements.

<sup>9</sup> The traffic flows along the section are ~3000 vehicles per day (AADT, 2022) which allows non-segregated facilities to be suitable for most users by LTN 1/20. Options for segregation were considered, but likely not feasible due to carriageway and public highway constraints. Alternative proposal to introduce advisory cycle lanes with removal of the centre line and new shuttle working system with traffic signals at the railway bridge.

## Cycle Corridor 16: Bagshot to Windlesham

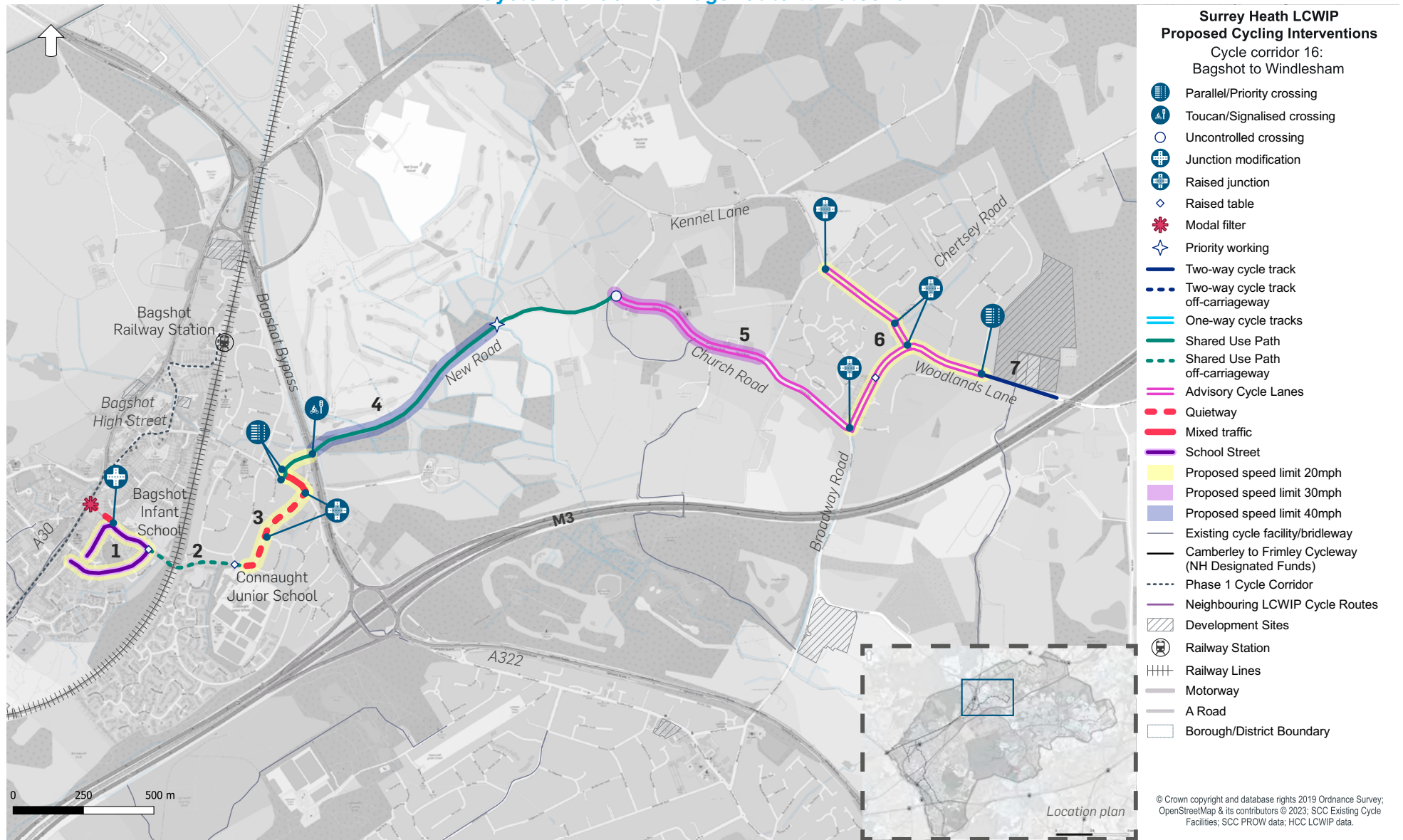


Figure 92. Cycle Corridor 16: Bagshot to Windlesham



## Cycle Corridor 16: Bagshot to Windlesham

This corridor provides a connection between the Bagshot Village and Windlesham. The corridor extends primarily through rural areas and will allow access to Bagshot railway station, local schools, and the development sites in Windlesham. See also Core Walking Zone 9 proposals for this area.

### Proposed Interventions:

- 1 School Lane - Chapel Lane:** Quietway through the residential area with additional traffic calming measures (e.g. horizontal and vertical deflections and side road crossing treatments). Introduce 20mph speed limit and traffic calming measures to complement the proposals. Introduce a School Street to improve safety and encourage active travel modes for daily trips to Bagshot Infant School. Improvements to the existing modal filter are also proposed to improve accessibility and personal safety. Proposal to link with recently implemented shared use path.
- 2 School Lane footpath:** Improvements to the existing shared use path to include resurfacing, potential widening and added lighting to increase personal safety<sup>1</sup>.
- 3 Green Lane - Whitmoor Road:** Quietway through the residential area<sup>2</sup> with additional traffic calming measures (e.g.

1 Ecology survey would be required for the proposed interventions to investigate the impact of the proposals.  
2 Traffic flows on Whitmoor Road are ~3000 vehicles per day (AADT, 2022) which allows non-segregated facilities to be suitable for most users by LTN 1/20.

horizontal and vertical deflections and side road crossing treatments). Introduce 20mph speed limit and traffic calming measures to complement the proposals.

Aspirational proposal: introduce a School Street to improve safety and encourage active travel modes for daily trips to Connaught Junior School.

- 4 New Road:** Shared-use path on the southern side by reallocating space from the verge and the carriageway<sup>3</sup>. Introduce priority crossings at Guildford Road/ New Road/ Whitmoor Road roundabout for cyclists to access the proposed facilities. Improvements to New Road/ A322 junction to include intergeneration of on-demand pedestrian and cycle crossings at the traffic signals<sup>4</sup>, with short waiting time and adequate time for people of all abilities. Introduce shuttle working at the canal bridge to reallocate space for the shared facilities at the pinch point. Reduce speed limit to 40mph along the extent of the road and introduce street lighting.
- 5 Church Road (Windlesham):** Advisory cycle lanes with removal of the centre line along with traffic calming measures<sup>5</sup>. On-street parking to be retained at sections following

3 Segregation between pedestrians and cyclists is desirable according to LTN 1/20, but may not be feasible due to limited public highway space. Longer term aspirational proposal: provide segregated pedestrian/cycle facilities by acquiring land at the section. Proposal to be investigated during the feasibility design stage.  
4 Junction modelling required to estimate the impact on traffic flows and to calculate the timings of the different phases.  
5 Estimated traffic flows are low. Traffic surveys in the next stages of the design to determine the requirement for

parking surveys to estimate the demand. Reduce the speed limit to 30mph along the extent of the section to improve safety<sup>6</sup>.

- 6 Windlesham Village:** Advisory cycle lanes with removal of the centre line along with traffic calming measures (e.g. horizontal and vertical deflection)<sup>5</sup>. Reduce the speed limit through the village at 20mph to improve road safety.
- 7 Woodlands Lane:** Two-way cycle track to ensure connectivity between the village centre and the development<sup>7</sup>.

Additional interventions along the proposed corridor to include wayfinding posts at key junctions and key destinations, secure cycle parking at the schools, and commercial areas.

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segregation and investigate options for cycling improvements and reduction of any rat-running in the area.

- 6 Subject to speed surveys in the next stages of the design.  
7 Heathpark Wood development site: Proposal to be considered with developers in context of planning permission allowed on appeal for this site and any other future development proposals permitted in the vicinity.



Figure 93. New Road/Bagshot Bypass junction does not provide crossings for pedestrians and cyclists

## Summary of Phase 1 Cycle Corridors

Table 8. Summary of Phase 1 Cycle Corridors

Corridor	Public Benefit	Stakeholder Support	Link to SCC Climate Emergency Policy	Protected Group Benefit (Equality & Diversity)	Other Benefit	Potential Issues*
2: A30 - Camberley to Bagshot Railway Station	Links Bagshot Village to Camberley commercial centre and improves cycle access to railway stations.	Stakeholder groups provided input during the LCWIP process.	Supports the policy by encouraging mode shift from car to active travel for short journeys.	Aims to improve cycle access for people of all ages and abilities through provision of segregated facilities, seeks to improve public realm in the centre of the village and seeks to improve personal safety along an isolated corridor (particularly benefiting women, young people, and older people).	Potential increase in cycling to 190 commuter trips/day (one-way flows; growth based on PCT ebike scenario) and to 740 school trips/day (based on PCT go Dutch scenario).	Sections of the A30 London Road potentially constrained and segregation between pedestrians and cyclists likely not feasible; proposed interventions partially compliant to LTN 1/20; Potential environmental constraints due to the vegetation required to be removed for the proposed facility.
3: A30 - Camberley to Blackwater	Links the two commercial centres and improves cycle access to railway stations; provides a connection to Blackwater existing cycle facilities and the LCWIP.	Stakeholder groups provided input during the LCWIP process. HCC Stakeholders commented on the need for the connection between the Boroughs.	Supports the policy by encouraging mode shift from car to active travel for short journeys.	Aims to improve cycle access to the commercial centres for cyclists of all ages and abilities through provision of segregated facilities where feasible; and seeks to improve personal safety along an isolated corridor (particularly benefiting women, young people, and older people).	Potential increase in cycling to 410 commuter trips/day (one-way flows; growth based on PCT ebike scenario) and to 96 school trips/day (based on PCT go Dutch scenario).	Proposals at section of the corridor to be agreed with Hampshire CC; Potential opposition for the conversion of the footway to a cycle track.

\*Potential Issues: due to a variety of reasons, such as space restrictions in historic streets, adherence to LTN1/20 was not always possible. In such cases, alternative options or complementing measures were suggested.





Corridor	Public Benefit	Stakeholder Support	Link to SCC Climate Emergency Policy	Protected Group Benefit (Equality & Diversity)	Other Benefit	Potential Issues*
4: Frimley Road to Camberley High Street	Links the local commercial areas, schools, employment sites and railway station.	Stakeholder groups provided input during the LCWIP process.	Supports the policy by encouraging mode shift from car to active travel for short journeys and school trips.	Aims to improve cycle access for people of all ages and abilities through provision of segregated facilities; Improves facilities for children, parents, and young people cycling to school.	Potential increase in cycling to 820 commuter trips/day (one-way flows; growth based on PCT ebike scenario) and to 210 school trips/day (based on PCT go Dutch scenario).	Sections of existing and proposed facilities potentially not LTN 1/20 compliant, due to the constraints on the railway bridge; Potential opposition to reallocation of on-street parking for active travel.
6: Camberley to Rushmoor via Frimley Park Hospital	Improves access to the hospital from the two railway stations; Provides a connection to Rushmoor existing cycle facilities and the LCWIP; Improves the public realm through the town centre benefiting local businesses.	Stakeholder groups provided input during the LCWIP process; improves the connectivity between the residential areas north and south of the M3.	Supports the policy by encouraging mode shift from car to active travel for short journeys and reduction of car trips through residential areas.	Aims to improve accessibility for cycling for people of all ages and abilities through provision of segregated facilities where feasible or lower traffic speeds/flows and new and improved crossings; Improves public realm through the town centre; and seeks to improve personal safety along an isolated corridor (particularly benefiting women, young people, and older people).	Potential increase in cycling to 1050 commuter trips/day (one-way flows; growth based on PCT ebike scenario) and to 160 school trips/day (based on PCT go Dutch scenario).	Full adherence to LTN 1/20 guidance may not be possible; interface with other workstreams; Potential opposition to reallocation of on-street parking spaces for active travel; limited scope to improve M3 crossing at existing footbridge; Potential land ownership issues as Brackendale Road is an unadopted road.



Corridor	Public Benefit	Stakeholder Support	Link to SCC Climate Emergency Policy	Protected Group Benefit (Equality & Diversity)	Other Benefit	Potential Issues*
8: Frimley to Frimley Green	Improves access to Frimley Green town centre and the schools; provides connectivity to Basingstoke Canal towpath; Improves the public realm through the town centre benefiting local businesses; potential connectivity to Deepcut Village development via Basingstoke Canal.	Stakeholder groups provided input during the LCWIP process.	Supports the policy by encouraging mode shift from car to active travel for short journeys and journeys to school.	Aims to improve cycle access for people of all ages and abilities through provision of segregated facilities where feasible; seeks to improve access for young people to schools; improves connection to existing cycle facilities for leisure activities.	Potential increase in cycling to 730 commuter trips/day (one-way flows; growth based on PCT ebike scenario) and to 150 school trips/day (based on PCT go Dutch scenario); Corridor to serve connections to Deepcut Village via Basingstoke Canal.	Potential constraints widening the existing SUP due to level differences; sections potentially not LTN 1/20 compliant.
16: Bagshot to Windlesham	Improves connectivity between villages; Improves access to the schools.	Stakeholder groups provided input during the LCWIP process; Corridor prioritised for connections to the east.	Supports the policy by encouraging mode shift from car to active travel for short journeys.	Aims to improve accessibility for people of all ages and abilities through provision of segregated facilities, where feasible; seeks to improve access for young people to schools.	Potential increase in cycling to 100 commuter trips/day (one-way flows; growth based on PCT ebike scenario) and to 165 school trips/day (based on PCT go Dutch scenario).	Potential opposition to reallocation of on-street parking and road space for active travel; sections potentially not fully LTN 1/20 compliant.

# Assessment of Proposals

Following the initial concept development, the proposed interventions were assessed using the Route Selection Tool (RST) with the same criteria used for the assessment of the existing situation of the corridors.

The RST facilitates a high-level, comprehensive review of existing conditions for people cycling along a route based on the key metrics of directness, gradient, safety, connectivity, and comfort. Lower scores suggest a poorer quality route, which may benefit from infrastructure interventions (i.e., to improve safety or comfort) or selecting an alternative route alignment (i.e., more direct or reduced gradient). The following assumptions were applied in completing the RST assessment:

- » Routes were divided into subsections that were  $\leq 1$ km in length and reflected consistent characteristics in factors that may impact RST output (such as existing facility type, width, traffic speeds or volumes, etc.).
- » Where existing traffic speed data was not available, the existing speed limit was utilised.
- » Where existing traffic volume data was not available, professional judgement and best practice was used to categorise the route within the RST categories for traffic flows.

A summary of the results for the Phase 1 corridor proposals is presented in the following tables and each assessment is presented below

each table illustrating the changes within each category following the proposed interventions.

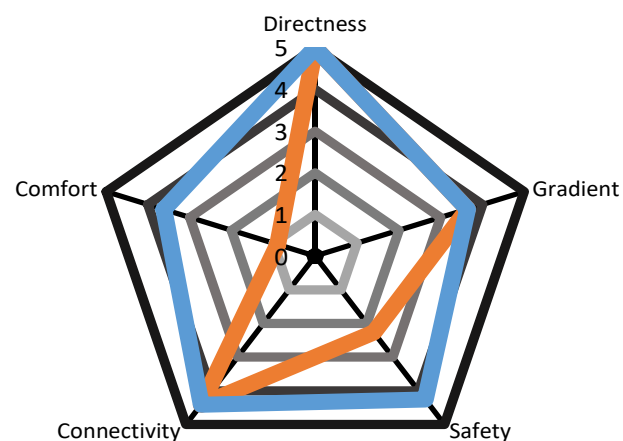
For each route a comparison was made between the existing situation and the potential of the improvements.

Every cycle corridor is improved in terms of comfort, and safety, since the interventions are proposing protected cycle facilities (at least in parts). Gradient and connectivity remain the same as the alignments are retained.



Table 9. RST results - Cycle corridors

Cycle Corridor 2: A30 - Camberley to Bagshot Railway Station		
	Existing	Potential
Directness	5.00	5.00
Gradient	3.64	3.64
Safety	2.27	4.25
Connectivity	4.41	4.41
Comfort	0.90	3.62
<b>Total</b>	<b>16.22</b>	<b>20.93</b>
<b>Improvement (compared to existing)</b>		<b>4.71 (29%)</b>

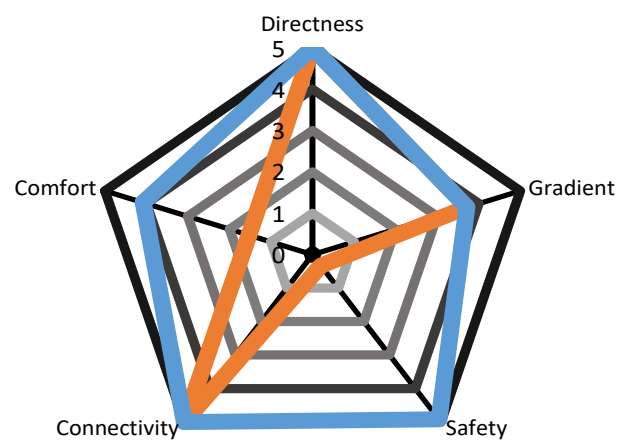


Spider diagram produced in the RST:

Amber colour: Existing scores

Blue colour: Potential scores

Cycle Corridor 3: Camberley to Blackwater		
	Existing	Potential
Directness	5.00	5.00
Gradient	3.71	3.71
Safety	0.33	4.92
Connectivity	5.00	5.00
Comfort	1.53	4.08
<b>Total</b>	<b>15.57</b>	<b>22.71</b>
<b>Improvement (compared to existing)</b>		<b>7.14 (46%)</b>

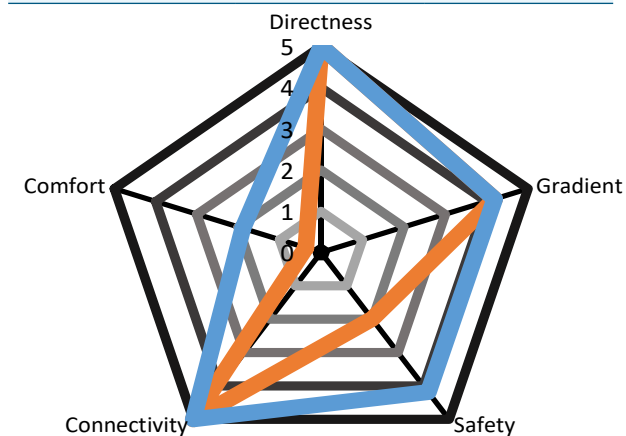


Spider diagram produced in the RST:

Amber colour: Existing scores

Blue colour: Potential scores

Cycle Corridor 4: Frimley Road to Camberley High Street		
	Existing	Potential
Directness	5.00	5.00
Gradient	4.19	4.19
Safety	1.99	4.19
Connectivity	5.00	5.00
Comfort	0.37	1.89
<b>Total</b>	<b>16.54</b>	<b>20.27</b>
<b>Improvement (compared to existing)</b>		<b>3.73 (23%)</b>



Spider diagram produced in the RST:

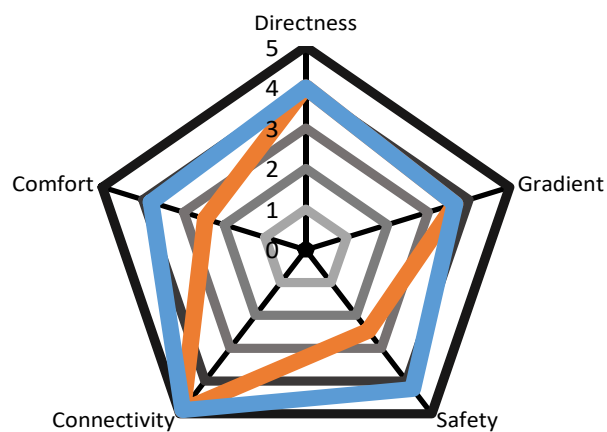
Amber colour: Existing scores

Blue colour: Potential scores



### Cycle Corridor 6: Camberley to Rushmoor via Frimley Park Hospital

	Existing	Potential
Directness	4.00	4.00
Gradient	3.65	3.65
Safety	2.47	4.24
Connectivity	4.89	4.89
Comfort	2.47	3.80
<b>Total</b>	<b>17.48</b>	<b>20.58</b>
<b>Improvement (compared to existing)</b>		<b>3.10 (18%)</b>



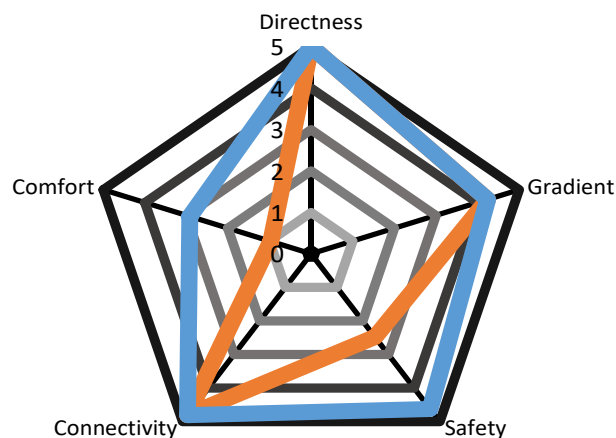
Spider diagram produced in the RST:

Amber colour: Existing scores

Blue colour: Potential scores

### Cycle Corridor 8: Frimley to Frimley Green

	Existing	Potential
Directness	5.00	5.00
Gradient	4.24	4.24
Safety	2.48	4.62
Connectivity	4.81	4.81
Comfort	0.97	2.92
<b>Total</b>	<b>17.50</b>	<b>21.59</b>
<b>Improvement (compared to existing)</b>		<b>4.09 (23%)</b>



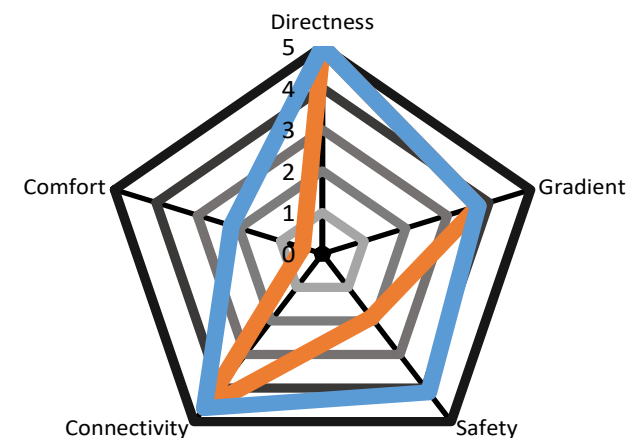
Spider diagram produced in the RST:

Amber colour: Existing scores

Blue colour: Potential scores

### Cycle Corridor 16: Bagshot to Windlesham

	Existing	Potential
Directness	5.00	5.00
Gradient	3.74	3.74
Safety	1.89	4.13
Connectivity	4.60	4.60
Comfort	0.48	2.19
<b>Total</b>	<b>15.71</b>	<b>19.66</b>
<b>Improvement (compared to existing)</b>		<b>3.94 (25%)</b>



Spider diagram produced in the RST:

Amber colour: Existing scores

Blue colour: Potential scores





# 7. Walking Network Development

Introduction

Development of Long List

Identification of Phase 1 Core Walking Zones

Walking Route Audits

# Introduction

This chapter summarises the identification of the walking network for the Surrey Heath LCWIP. The development of the walking network had two key stages:

- » Development of the 'aspirational list', which identified key focal areas of pedestrian activity in the Borough. In total, 16 areas were identified, and 11 were selected as 'primary' (Phase 1 and 2) areas for further consideration.
- » Selection of the 'short list', which prioritised 4 areas as 'Phase 1' for further assessment and concept development as part of the LCWIP.

The remaining areas (categorised as Phase 2 and Phase 3) may be further developed in future, as part of future workstreams or as other funding opportunities arise.

# Development of the Aspirational List

A walking network of key zones and routes has been defined drawing on the analysis from the existing data. The background information identified local destinations, amenities, population centres and movement patterns within the Borough which foster a higher potential for short utilitarian trips to be made on foot.

The development of the walking network for the Surrey Heath LCWIP focused on the identification of 'Core Walking Zones' (CWZs), as per the DfT's LCWIP technical guidance, which is illustrated in Figure 94. The CWZs represent nodes of relatively high pedestrian activity within the Borough, typically consisting of several walking trip generators that are located close together – such as a high street, schools, or employment areas / business parks. CWZs are intended to enhance the pedestrian environment around these key trip generators rather than longer, linear routes. The CWZs play a significant role in promoting walking to key trip attractors, supporting the local economy, and achieving the LCWIP objective of encouraging shorter, utilitarian trips to be made on foot.

For Surrey Heath, the aspirational list of CWZs was developed utilising three main inputs:

- » Retail areas within the Borough's towns and local centres: High streets and areas with local

commercial activity were selected as the key trip generators.

- » Key data collected as part of the Evidence Base (page 43) was analysed to help support the identification and prioritisation of the CWZs across the Borough.
- » These were supplemented with additional areas suggested through the stakeholder engagement activities.

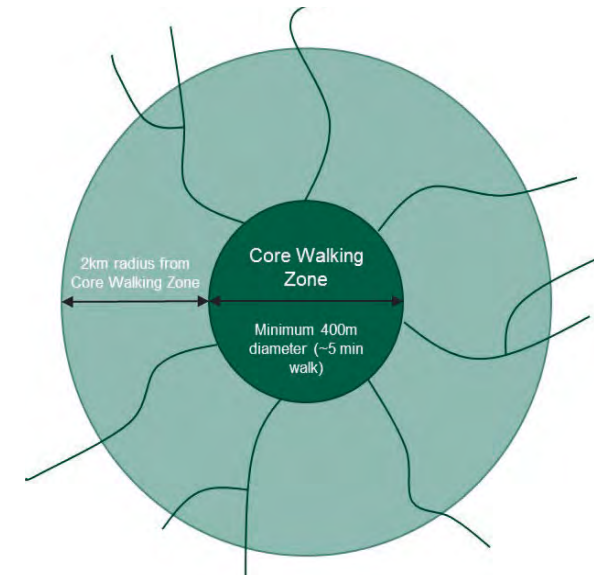


Figure 94. Process of identifying the walking network (DfT, LCWIP - Technical Guidance for Local Authorities)



## Identification of Clusters

In Surrey Heath, and more widely in Surrey, there is a wealth of background information that can inform commuting patterns and highlight areas in need of improvement. The aim of this analysis is to meet the goal of significant mode shift to more sustainable travel. The target is short trips and utilitarian trips such as school travel and commuting, as well as access to town centres and leisure areas. These can promote active and sustainable travel to appeal to the residents of the Borough.

The key trip origins and destinations in the study area were identified following the analysis of the data gathered, and include:

- » Educational facilities (primary schools, secondary schools and higher education facilities)
- » Hospitals
- » Doctor surgeries
- » Leisure centres
- » Tourist attractions
- » Railway stations
- » Retail areas
- » Employment sites
- » Development sites
- » Areas with high population density
- » Areas with high workplace population density.

The mapping of trip attractors indicated the locations of key clusters across the study area, which represent groups of trip attractors within close proximity to each other. The clusters were

categorised based on the relative concentration or number of trip attractors, as strategic, primary, secondary and local. Additionally clusters were identified in the neighbouring areas, as urban centres or key destinations outside Surrey Heath affect the commuting patterns. The output of this process is shown in Figure 95.

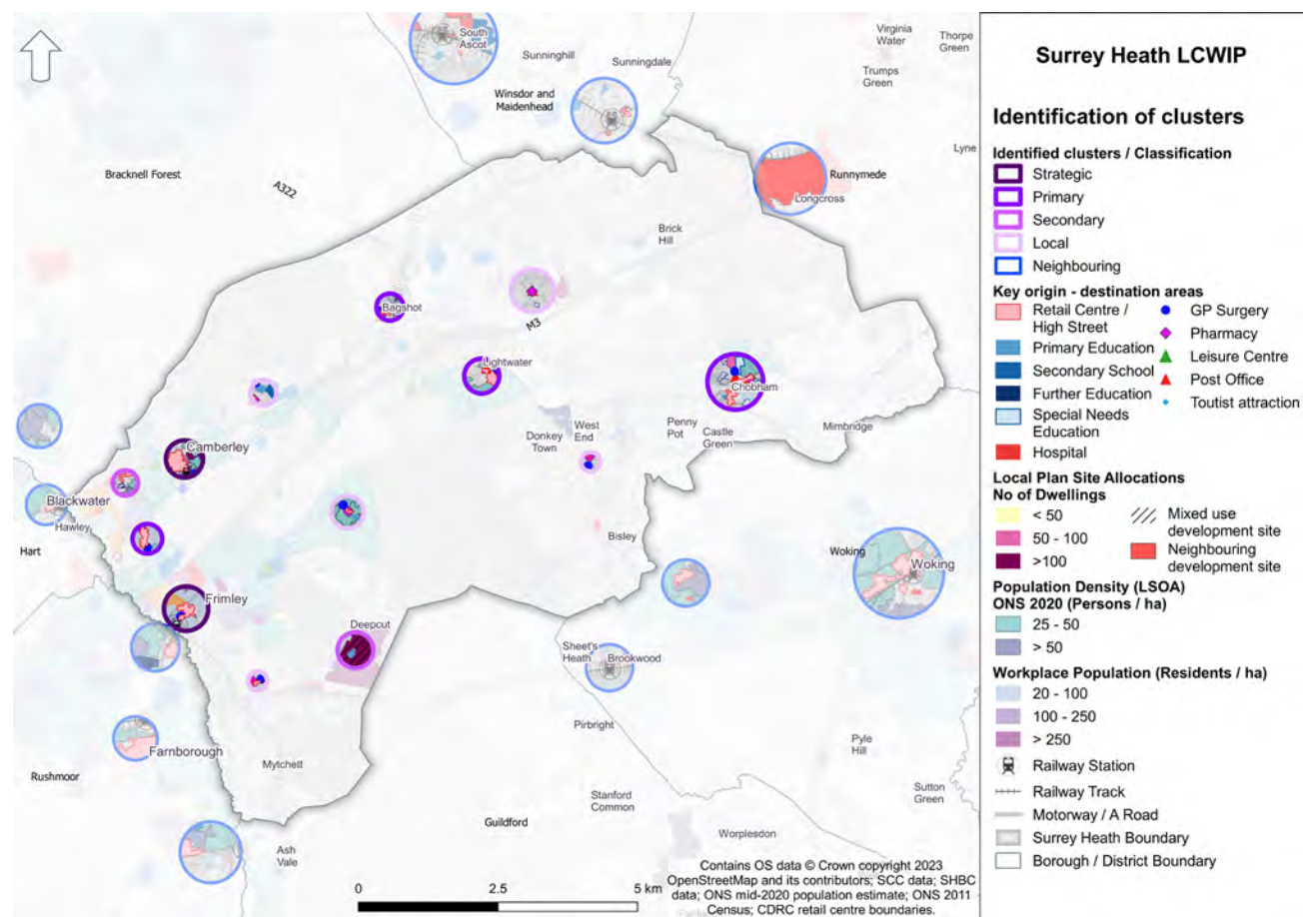


Figure 95. Identification and prioritisation of trip attractor clusters



## Identification of core walking zones

High streets and local commercial centres represent key hubs of pedestrian activity, where multiple destinations are found in close proximity, generating and attracting trips of numerous purposes (e.g. shopping, dining, employment, personal business, leisure/social, etc).

Local high street areas usually benefit from more compact, urban environments and have higher densities of population and employment, thus, increasing the propensity for short, utilitarian walking trips. Focus on these areas will support economic vitality and SCC's planning and place policy area for the LTP4.

The CWZs were then created by drawing 250m isochrones around the key trip attractors within the local centres. This was in keeping with the DfT technical guidance that a CWZ should be a minimum diameter of 400m (approximately 5-minute walk). The extent of the CWZ covers the main commercial area/high street and the key access corridors.

This process identified 13 candidate CWZs around local centres and commercial areas within Surrey Heath, which are shown in Figure 96.

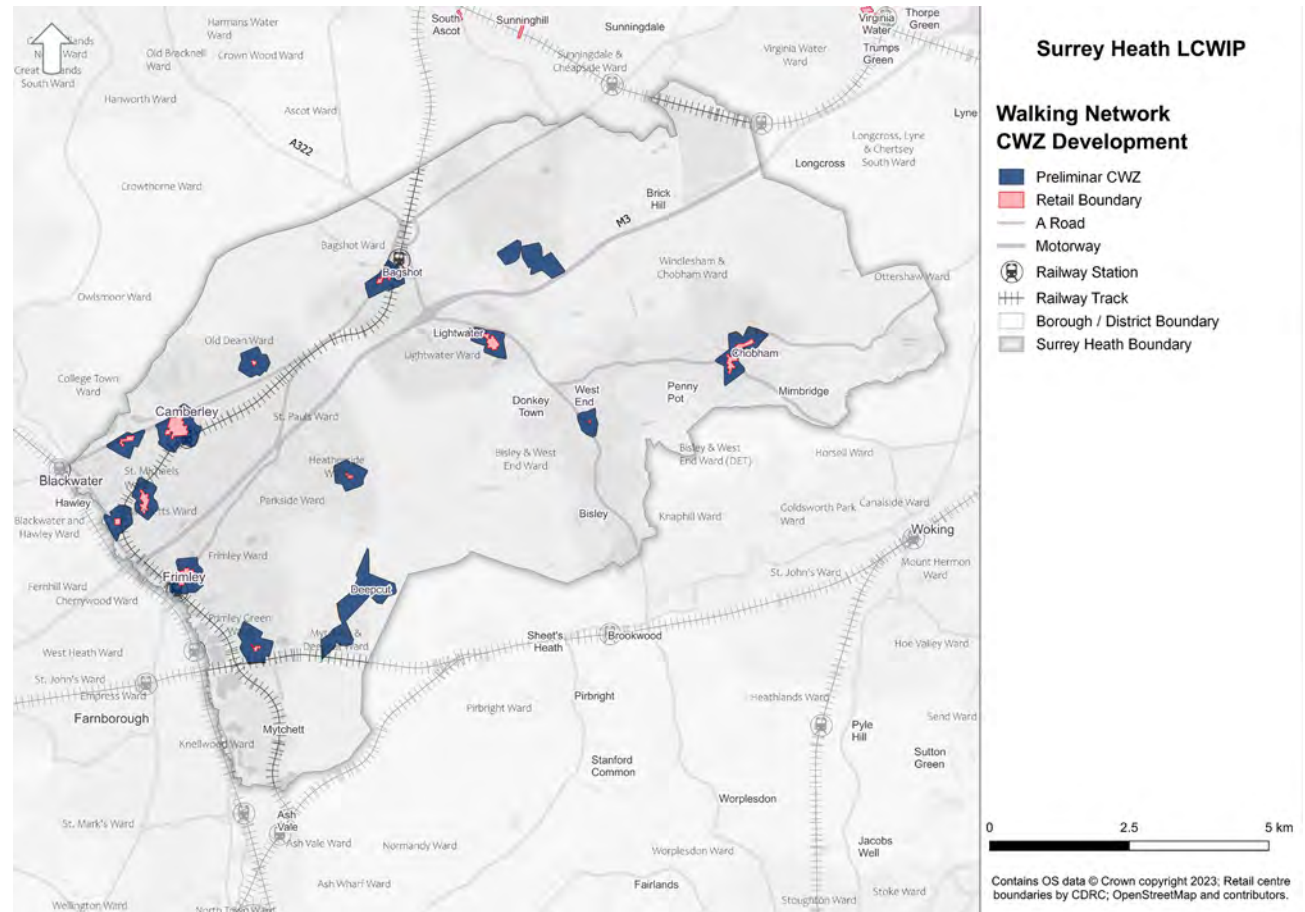


Figure 96. Identified core walking zones around high streets and local commercial areas

## Additional Data Review

The background data compiled and summarised in Chapter 3 (page 43) was then used to create a qualitative 'heatmap' of pedestrian issues and opportunities, where the overlap of relevant criteria suggests locations with a higher propensity for walking trips and greater potential benefit from infrastructure interventions. The criteria included the following:

- » Key destinations and trip attractors (schools, shopping areas, leisure centres, parks, libraries, medical facilities, and their catchment area).
- » Travel to work – short trips (using PCT information) with potential for mode shift to walking (<2km).
- » Public transport: bus stops (5-min walk distance), railway stations (10-min walk distance).
- » Collisions involving pedestrians.
- » Public comments related to walking.
- » Areas with the highest population density & development areas.
- » Areas with the highest employment density & employment areas.
- » Zero car ownership.
- » Indices of multiple deprivation.
- » Public rights of way network.

The pedestrian opportunities and issues heatmap was used to support an initial, qualitative sifting of the selected CWZs and, as shown in Figure 97, those are represented

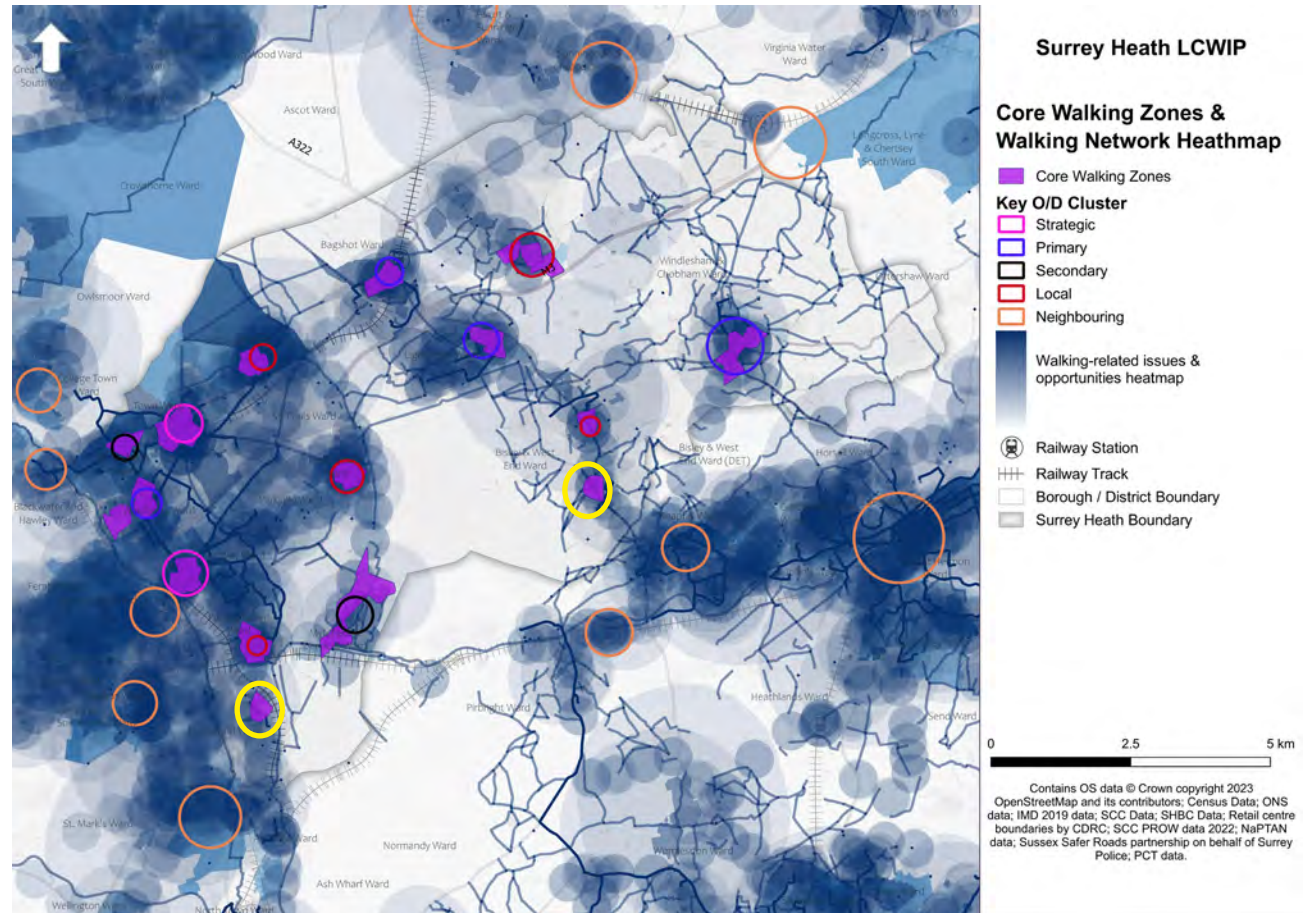


Figure 97. Qualitative 'heatmap' of pedestrian issues and opportunities, overlaid with the clusters of key destinations, and the identified CWZs. The Yellow circles indicate the locations of CWZs proposed to be added.

by their respective clusters overlaid on the heatmap.

A higher intensity colour denotes a potential higher demand for utilitarian walking trips or pedestrian improvements. The process supports the preliminary selection of CWZs,

with local town centres and high street areas broadly aligning with the areas of highest potential benefit across the Borough.

The draft CWZ aspirational list was reviewed with local stakeholders during the first round of early engagement workshops (see page 77). Attendees were generally in agreement with the identified CWZs, with Windlesham highlighted as a priority and considered for Phases 1 and 2. Furthermore, during the engagement phase, two additional CWZs were recommended by local stakeholders (Bisley and Mytchett) and consequently added to Phase 3 CWZs. Figure 98 shows the preliminary aspirational list, which incorporates the suggested CWZs.

### Prioritisation of core walking zones

The data assessment, presented as the pedestrian issues and opportunities heatmap, allowed for the prioritisation of 11 CWZs as Phase 1/Phase 2 and the remainder (five) as Phase 3<sup>1</sup>.

The phasing categories are intended to assist with the prioritisation process, whereby the Phase 1 & 2 CWZs would be carried forward for further assessment in the next steps of the LCWIP and will be prioritised for improvements in a 10-year plan SCC has set out. Nonetheless, all CWZs are retained as part of the aspirational network for future consideration as opportunities arise. Phase 1 CWZs will be further assessed and initial concepts for potential infrastructure improvements will be developed as part of this LCWIP. Phase 2 CWZs will be developed as opportunities arise.

<sup>1</sup> Phase 3 CWZs are included in the aspirational network for future consideration as opportunities arise (>10-year plan) and will not be included in the assessment for the next steps.

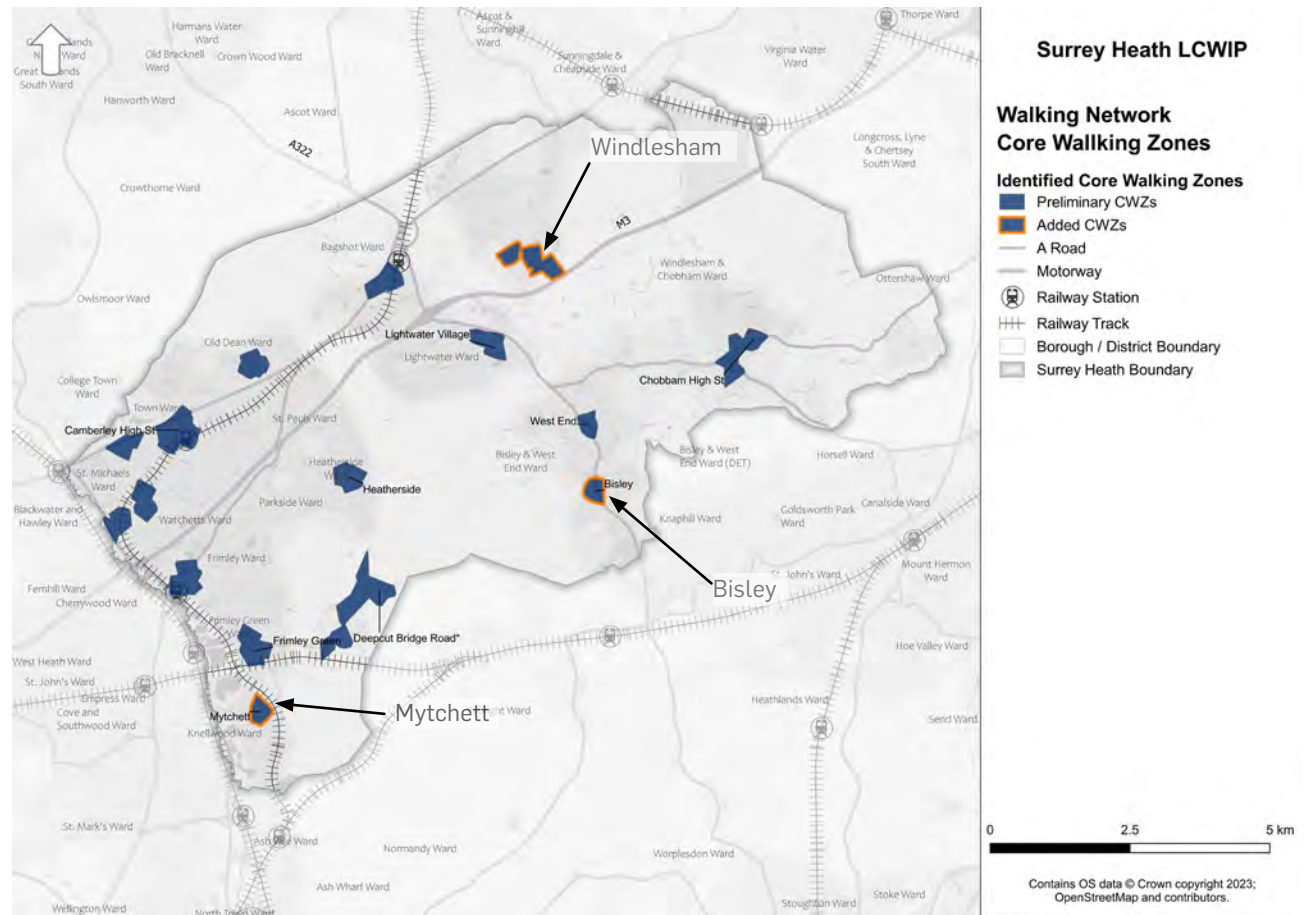


Figure 98. Preliminary 'Aspirational List' of core walking zones in Surrey Heath

Based on the data and evidence base compiled, potential demand and propensity for short, utilitarian walking trips are highest towards the west and northwest of the Borough, which tends to have a denser population and more compact, urban development patterns. Public comments also tended to be clustered in these areas.

The aspirational list for walking comprises of 11 Phase 1/Phase 2 CWZs that will be taken forward for further analysis and five Phase 3 CWZs. The prioritised CWZs are listed below (by ID number) and shown in Figure 99:

1. Camberley London Road
2. Camberley Town Centre
3. Frimley Road
4. Frimley High Street
5. Frimley Green
6. Old Dean
7. Lightwater Village
8. Chobham Village
9. Bagshot High Street
10. West End
11. Windlesham Village

Table 10 on the following page provides a summary of each of the Phase 1 / Phase 2 CWZs.

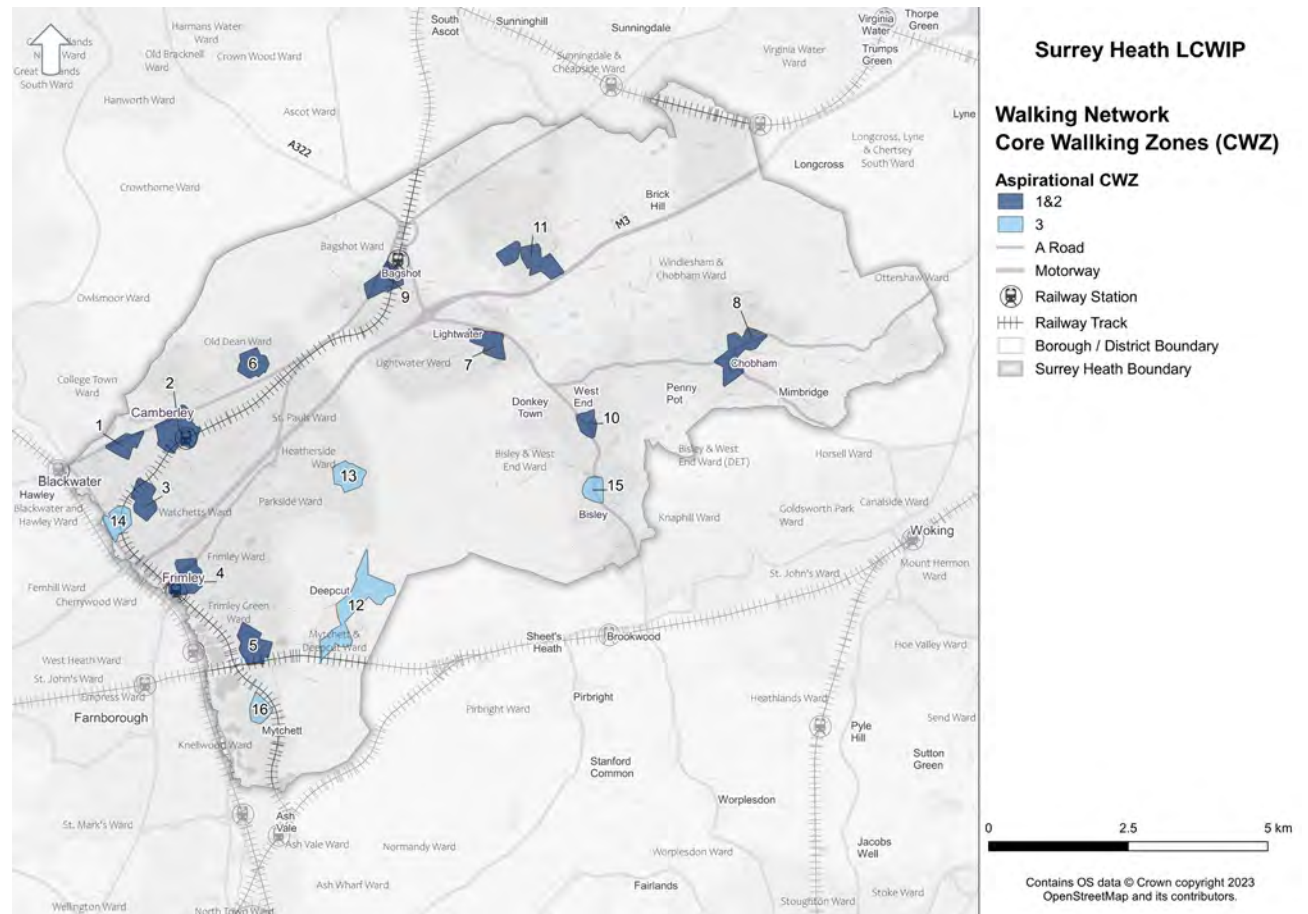


Figure 99. 'Aspirational List' of core walking zones in Surrey Heath (Phase 1 / Phase 2 CWZ ID# labelled)



Table 10. Summary of Candidate Phase 1 / Phase 2 core walking zones

(ID) Core walking zone	Description	(ID) Core walking zone	Description
1. Camberley London Road	<p>Focused around Camberley's local shopping/dining/commercial area along A30 London Road and B3411 Frimley Road. Within the retail area it also includes the post office. A30 London Road constitutes a key barrier for walking due to its 40mph speed limit.</p> <p>The total population within a 10-minute walk of the CWZ is approximately 8000 residents while proposed housing units in the Local Plan add to c.750 dwellings.</p>	4. Frimley High Street	<p>Focused around Frimley's town centre, main shopping/dining/commercial area along Frimley High Street/ B3411 Chruch Road and B3411 Frimley High Street. It includes Frimley Railway Station, an employment site, a GP surgery and a pharmacy. Key barriers are found along A325 Farnborough Rd (40mph speed limit) and by the severance caused by the railway line.</p> <p>The total population within a 10-minute walk of the CWZ is approximately 12,000 residents while proposed housing in the Local Plan units add to c.200 dwellings.</p>
2. Camberley Town Centre	<p>Focused around Camberley's town centre, main shopping/dining/commercial area along A30 London Road, High Street and Pembroke Broadway. The CWZ includes Camberley Railway Station, a GP surgery, two pharmacies and the post office. Key barriers are found along A30 London Road (40mph speed limit) and by the severance caused by the railway line.</p> <p>The total population within a 10-minute walk of the CWZ is approximately 13,000 residents while proposed housing units in the Local Plan add to c.1200 dwellings.</p>	5. Frimley Green	<p>Focused around Frimley Green local retail area along B3411 Frimley Green Road and Wharf Road. It includes a GP surgery and a pharmacy.</p> <p>The total population within a 10-minute walk of the CWZ is approximately 8900 residents while proposed housing units in the Local Plan add to c.160 dwellings</p>
3. Frimley Road	<p>Focused around Frimley's local retail area along B3411 Frimley Road and Park Road. It includes two large employment centres, a GP surgery and a pharmacy. Severance caused by the railway line constitutes a key barrier for walking.</p> <p>The total population within a 10-minute walk of the CWZ is approximately 11,000 residents while proposed housing units in the Local Plan add to c.120 dwellings.</p>	6. Old Dean	<p>Focused around the local retail areas along Upper College Ride. It includes an educational establishment, a GP surgery, a pharmacy and the post office. The zone links to three adjacent schools.</p> <p>The total population within a 10-minute walk of the CWZ is approximately 9000 residents while proposed housing units in the Local Plan add to c.50 dwellings.</p>
		7. Lightwater Village	<p>Focused around the local retail area along Guildford Road in the eastern end of the village. The CWZ includes one GP surgery, one pharmacy and one post office.</p> <p>The total population within a 10-minute walk of the CWZ is approximately 5000 residents while proposed housing units in the Local Plan add to c.30 dwellings.</p>

(ID) Core walking zone	Description
8. Chobham Village	<p>Focused around the main retail areas along A319 High Street/Windsor Road, A319 Bagshot Road and A3046 Station Road in the centre of the village. It includes two retail areas, two educational establishments, a GP surgery, a pharmacy and the post office.</p> <p>The total population within a 10-minute walk of the CWZ is approximately 3000 residents while proposed housing units in the Local Plan add to c.150 dwellings.</p>
9. Bagshot High Street	<p>Focused around the local retail areas along B3029 High Street and B3029 Guildford Road in Bagshot Village Centre. The CWZ includes Bagshot Railway Station, a GP surgery, a pharmacy and the post office.</p> <p>The total population within a 10-minute walk of the CWZ is approximately 4500 residents while proposed housing units in the Local Plan consist of c.115 dwellings.</p>
10. West End	<p>Focused around the local retail area along A322 Guildford Road in the centre of the village. It includes a GP surgery and a pharmacy.</p> <p>The total population within a 10-minute walk of the CWZ is approximately 3700 residents while proposed housing units in the Local Plan consist of c.50 dwellings.</p>
11. Windlesham Village	<p>Focused along B386 Updown Hill and Woodlands Lane in the centre of the village. It includes a GP surgery and a pharmacy.</p> <p>The total population within a 10-minute walk of the CWZ is approximately 3000 residents while proposed housing units in the Local Plan add up to c.170 dwellings.</p>



# Identification of Phase 1 CWZs

## Multi-Criteria Assessment Framework

A multi-criteria assessment framework (MCAF) was developed to identify the Phase 1 ('short list') core walking zones, utilising various data inputs from the evidence base previously gathered. In combination, the chosen MCAF criteria are intended to help identify and prioritise areas with both a higher relative propensity for walking trips and areas with a greater relative potential to benefit from improvements (i.e. areas 'in need' or with lower quality existing pedestrian environment).

The criteria were categorised in five main groupings:

- » **Access** – reflects the number of destinations within a 10-minute walk outside of the CWZ, in addition to the local high street itself, including schools, parks, hospitals, bus stops, and railway stations. A higher number of destinations would indicate a greater propensity for walking trips and therefore a higher score. This criteria had a weighting of 30% in the overall score.
- » **Potential demand** – this is based on the resident and workplace populations within a 10-minute walk of the CWZ. Additional criterion includes future demand based on the size of the development areas serving the CWZs. A higher population would indicate greater potential demand and propensity for walking trips and

therefore a higher score. This criteria had a weighting of 30% in the overall score.

- » **Existing pedestrian quality** – these criteria characterise the existing environment, including speed limit, traffic volumes, and number of collisions involving pedestrians. A 'poorer' environment (e.g. higher speed, higher flows, higher number of collisions) was scored higher to prioritise areas that may be 'car-centric' and/or have potential severance and safety issues, which may therefore have a greater opportunity for or benefit from improvements. This criteria had a weighting of 15% in the overall score.
- » **Potential for improvements** – these criteria aim to capture the potential for pedestrian improvements in the area. Lower scores are given to areas in relatively good condition, and which therefore may be a lower priority for improvements. Lower scores are also given to areas with significant constraints where improvements may not be feasible or very difficult. Scoring was based on comments from the workshops and a cursory review via StreetView imagery. As the team has not been to site, this category has a lower weighting than the others, of 10%.
- » **Stakeholder input** – these criteria reflect the relative priority of the different CWZs based on public online input (LCWIP Commonplace survey) and LCWIP stakeholder workshop input (via the workshop surveys). Higher scores

indicate a higher number of online comments and/or workshop votes. This criteria had a weighting of 15% in the overall score.

The MCAF criteria for the selection of the Phase 1 CWZs are listed in the table on the following page. Each criterion was scored on a scale from 1 (low) to 3 (high). Within each category, the criteria were also given a relative weighting of 1 (low) to 3 (high), allowing some criteria to be weighted more heavily (e.g. access to schools weighted more heavily than other 'access' criteria). The total score for each category was also given a weighting. As with the cycling MCAF, the intent of this weighting was to give a higher significance to factors related to Access and Demand (60% of the total), which utilised more quantitative data and suggest the relative potential usage of each proposed CWZ. A lower weighting was given to the more qualitative criteria. Where applicable, the break-points within each criterion were adjusted to achieve a relatively even scoring distribution.



Table 11. Multi-criteria assessment framework criteria for prioritisation of core walking zone aspiration list

Category	Criterion	CWZ Rating	Category	Criterion	CWZ Rating
<b>Access<sup>1</sup></b> <b>(30%)</b>	Key destinations	1 = < 6 2 = < 9 3 = ≥ 9	<b>Existing pedestrian quality (15%)</b>	Posted Speed	1 = ≤ 20 mph or off-street 2 = > 30 mph 3 = ≥ 30 mph (for main CWZ corridors)
	School	1 = < 2 schools 2 = < 3 schools 3 ≥ 3 schools		Traffic Flows	1 = < 5000 vehicles 2 = < 15000 vehicles 3 = ≥ 15000 vehicles (for main CWZ corridors)
	Bus Stops	1 = < 20 2 = < 30 3 = ≥ 30		Collision History	1 = < 1 collisions 2 = < 3 collisions 3 = ≥ 3 collisions
	Railway Station	0 = none 2 = 1 station within 10min-walk 3 = 1 station within the CWZ		<b>Potential for Improvement (10%)</b>	Potential to improve to a high and accessible standard, relative to existing condition
Total Resident Population	1 = < 10000 residents 2 = < 15000 residents 3 = ≥ 15000 residents	Significant constraints or dependencies	1 = significant constraints (e.g. land take, third party works) 2 = constraints typical for a transport improvement 3 = limited constraints		
Total Workplace Population	1 = < 2500 people 2 = < 9000 people 3 = ≥ 9000 people	<b>Stakeholder input (15%)</b>	LCWIP Commonplace Input <sup>3</sup>		0 = none 1 = < 2 comments 2 = < 8 comments 3 = ≥ 8 comments
Development Sites	1 = < 100 potential residential units 2 = < 150 potential residential units 3 = ≥ 150 potential residential units (# dwelling units)		Stakeholder feedback (early engagement workshop 1) <sup>4</sup>	1 = < 1 votes 2 = < 2 votes 3 = ≥ 2 votes	

1 Access criteria were assessed using a 10-minute buffer around the core walking zone.  
2 Population within 10-minute buffer around the core walking zone.

3 Number of items and 'agreements' within the core walking zone.  
4 Number of votes from workshop surveys.



## Phase 1 Walking Zones

The MCAF outlined in the methodology above was applied to the aspirational list (Phase 1/2 CWZs). The MCAF scoring and output is provided in Appendix 1 for reference. The selected Phase 1 CWZs are illustrated in Figure 100 and listed below by ranking order (highest score to the lowest score):

- » **4. Frimley High Street**
- » **2. Camberley Town Centre**
- » **9. Bagshot High Street**
- » **8. Chobham Village**

The highest ranked core walking zones in the Borough are located in the west and north of the Borough, as there is a higher concentration of key destinations and a denser urban environment which generates higher propensity for walking trips. Additionally, the highest scoring core walking zones provide connections to the railway stations, as there is demand for the first/last-mile connections on foot.

In order to distribute the prioritised network and the proposed interventions in the whole Borough a core walking zone (village centre) was selected to be included as Phase 1. This will also act as an example of the type of interventions in the rural areas which can be taken as a case study for the remaining villages in the Borough. Therefore, the highest-ranking core walking zone in the rural area, Chobham Village CWZ, is progressed as Phase 1, to develop high level infrastructure improvements for CWZ development.

The four Phase 1 CWZs were advanced through the remainder of the Surrey Heath LCWIP activities, including review of existing conditions and development of initial concept proposals.

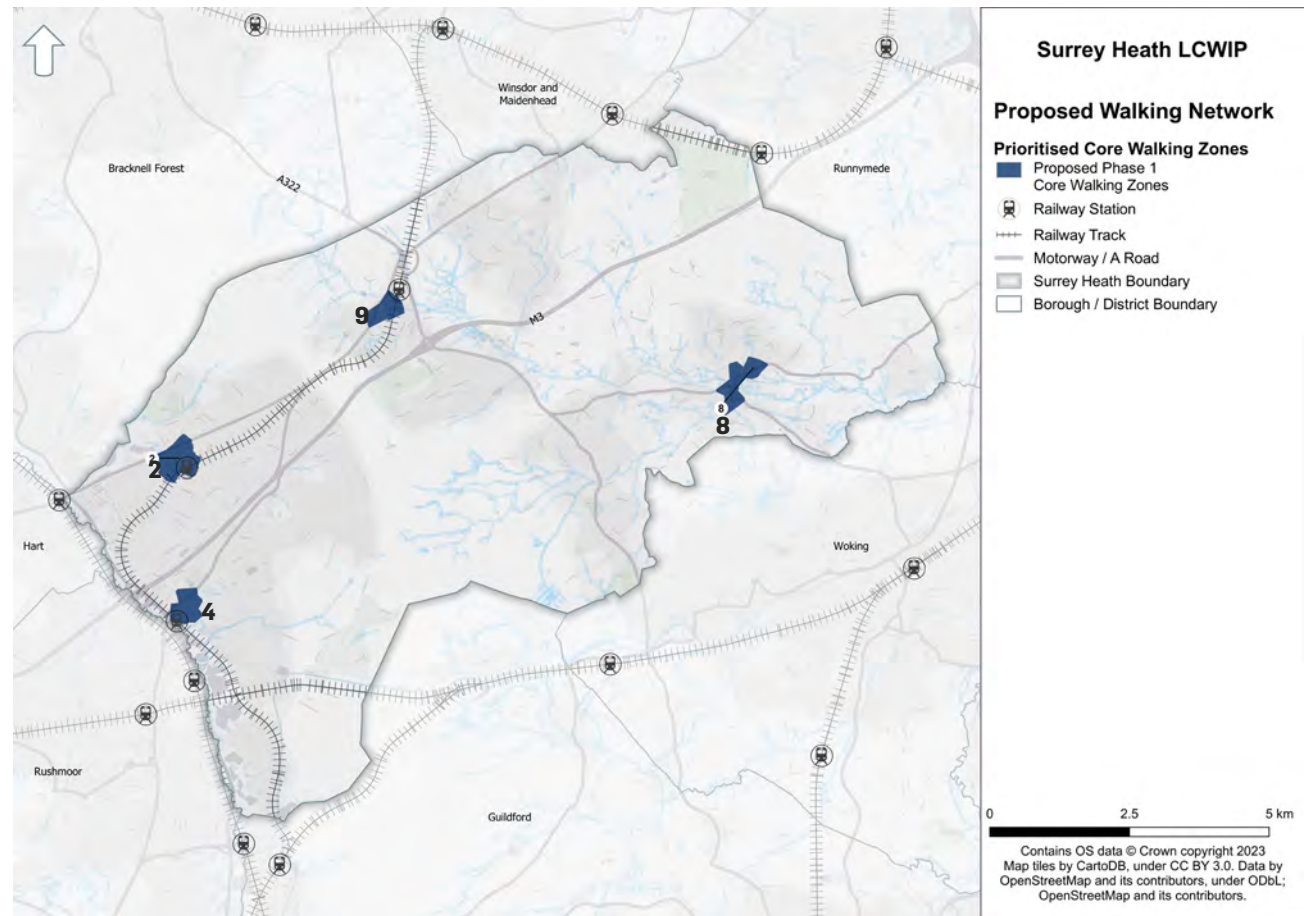


Figure 100. Core Walking Zones – Phase 1 Short List

## Walking Corridors Identification

For each Phase 1 CWZ, key corridors up to 2km long were identified. These were intended to capture primary pedestrian routes within the CWZs and routes connecting the CWZs to key or popular destinations/origins, e.g. schools, recreational grounds, retail centres, railway stations or larger residential areas. Identification of the key walking routes utilised output from the qualitative heat map (Figure 58) and stakeholder input. Where necessary, they were amended during site visits to provide better connections to the centre of a respective CWZ.

The completed plan of Phase 1 Core Walking Zones and their respective walking routes is presented in Figure 101. All four CWZs along with their walking routes were audited using the DfT's Walking Route Assessment Tool (WRAT)<sup>1</sup>. The assessment provided a baseline for existing conditions and helped identify existing deficiencies and key issues in the area. The CWZs were audited in late June / early July 2023 and the results are presented in Appendix 2.

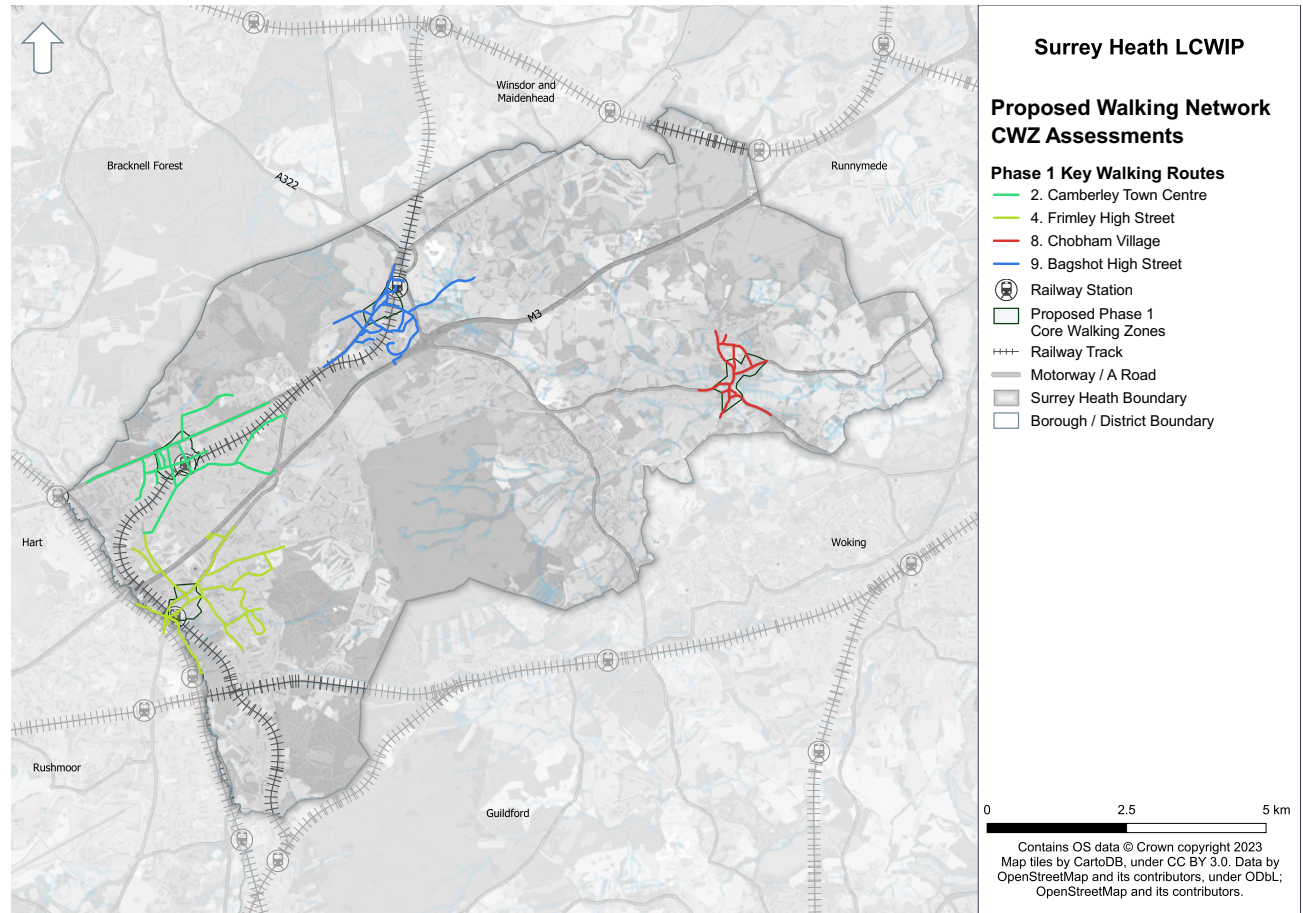


Figure 101. Core Walking Zones – Phase 1 updated walking routes network

<sup>1</sup> The WRAT is a framework for providing a high level assessment of a walking route, covering the key parameters of attractiveness, comfort, directness, safety, and coherence.



# 8. Walking Network Proposals

Introduction

Design Tools / Best Practice Examples

Phase 1 Proposals

# Introduction

This chapter outlines potential design measures to enhance the Phase 1 core walking zones identified in the previous chapter. The following sections summarise design guidelines considered during the development of the proposed infrastructure improvements for CWZ development.

## Design Outcomes

Potential improvements for walking were developed following a set of desired core design outcomes (adapted from LTN 1/20) to encourage more people to make local journeys in Surrey Heath by foot. These are applicable not only to the Phase 1 CWZs but can also be applied Borough-wide as opportunities arise to improve conditions for walking.

- » **Safety** - Infrastructure should be safe and improve perceptions of safety for people walking to encourage more trips on foot. Safety applies both to interactions with motorised traffic as well as concerns related to personal safety and security.
- » **Directness** - Walking improvements should seek to accommodate movements along desire lines, provide continuous routes, eliminate unnecessary obstacles, and minimise delay.
- » **Comfort** - Walking facilities should be fit for purpose, well constructed, and well maintained. It should support a comfortable environment for walking for people of all ages and abilities.

- » **Coherence** - Infrastructure should be legible, intuitive, inclusive, and routes interconnected. It should be easy to navigate and understandable for all users.
- » **Attractiveness** - Walking infrastructure should enhance the public realm. It should foster a welcoming environment for people walking that encourages more trips on foot and is reflective of the local setting, for example, one which preserves the historic environment.

## Guiding Principles

To support the desired design outcomes, the walking improvements follow several general principles, which can be applied throughout the Borough. Examples of design elements that support these principles are shown on the following pages.

- » **Desire lines** - People walking tend to follow the shortest path to a destination, and are likely to bypass or not use facilities that require a notable deviation to the length of their journey. Therefore, improvements should seek to accommodate and enhance movements along preferred desire lines as closely as possible.
- » **Access to key destinations** - Safe, attractive walking routes are essential to encourage active travel to key local trip attractors, such as local commercial areas, schools, parks, etc.
- » **Footway width** - The minimum unobstructed footway width for people walking should

generally be 2.0m, which facilitates two people in wheelchairs to pass each other comfortably. Additional width should be considered in areas with higher pedestrian activity (Inclusive Mobility / Manual for Streets).

- » **Lower traffic speeds** - High vehicle speeds can reduce the attractiveness of a route for people walking and make them feel unsafe. Vehicle speeds of 20mph or lower are preferred in key pedestrian areas. Design elements such as vertical deflection (e.g. speed cushions, raised tables/raised junctions) or horizontal deflection (e.g. kerb build-outs, tight kerb radii, priority working) may be used, as appropriate, to support the desired vehicle speeds and create an environment where the speed limit is self-regulating.
- » **Pedestrian crossings** - Appropriate crossing facilities should be provided along pedestrian desire lines to maintain the continuity of a walking route, improve safety, and reduce severance. The type of facility will depend on the context of the crossing. At a minimum, crossings should have appropriate tactile paving and dropped kerbs. Additional provisions for uncontrolled crossings could include raised tables, refuge islands, and/or reduced kerb radii to shorten a crossing and reduce vehicle speed. At locations requiring greater priority for people walking (e.g. locations with higher traffic volumes and/or speeds, or higher pedestrian flows) zebra or signal-controlled crossings may be appropriate.

- » **Pedestrian priority** - Design measures should seek to enhance pedestrian priority, improving the continuity, directness, and coherence of the primary walking routes. Design tools such as side road entry treatments (raised tables, continuous footways), raised carriageway, vehicle access restrictions, or use of different materials to highlight pedestrian crossings or delineate space for different users may be considered.
- » **Place function of the street** - Streets have both a place and movement function, and interventions should seek to balance these purposes appropriately. As the CWZs are focused around high street areas, they are likely to have a relatively high place function. Walking-related interventions should consider measures that enhance the place function and thereby encourage pedestrian activity in the area, such as expanding the public realm, providing places to rest and plantings, and/or reallocating carriageway space to other uses.
- » **Wayfinding** - Good sight lines and visibility of destinations and of walking routes are important elements that affect how easy a route or area is to navigate, how many people walking use the route, and perceived personal security. Wayfinding signage should be used to aid navigation and encourage use of designated routes. Appropriate signage can improve confidence in using the route and encourage more walking trips, particularly for those unfamiliar with the area. A consistent wayfinding system should be applied on walking routes throughout the study area.

- » **Context sensitive design** - Improvements should complement and enhance the character of urban and rural environments. The high-level concepts developed in the LCWIP should be suitable for the setting, and design guidance should be adapted to fit the local context and space constraints. Particular attention should be paid to the treatment of heritage assets.
- » **Inclusive design** - Walking facilities should provide equal access for people with disabilities and ensure that streets meet the requirements for all users, regardless of age, gender and ability.
- » **Adaptability** - Improvements should be developed to accommodate all types of users, and potential growth in the numbers of people walking.
- » **Tactical urbanism** - During implementation, consider temporary, low cost measures as demonstration projects to test concepts and experiment with different designs. Temporary measures can be a valuable tool to illustrate how the public highway space can be reimaged and reallocated to different road users, and help build public support. Low cost, temporary materials such as paint, planters, or bollards can be used to widen footways, tighten side road junctions, or introduce modal filters.

- » **Healthy Streets** - Improvements should consider a Healthy Streets approach, which puts people at the centre of how streets and public spaces are designed, managed, and used. Healthy Streets targets ten indicators which should be prioritised and balanced to improve social, economic and environmental sustainability.
- » **Design guidance** - As proposed walking improvements are advanced, design stages should utilise the latest best practice design guidance and standards available at the time, such as:

- Inclusive Mobility (Department for Transport)
- Manual for Streets / Manual for Streets 2 (Chartered Institution of Highways & Transportation)
- Streetscape Guidance (Transport for London)
- Healthy Streets (Transport for London, DfT)
- Healthy Streets for Surrey
- Local Transport Note 1/20 Cycle Infrastructure Design (Department for Transport).



Figure 102. Healthy Street indicators (source: [healthystreets.com](http://healthystreets.com))

## Example Design Tools - Walking



### Uncontrolled Crossing

Provides accessible crossing opportunities along walking routes, including tactile paving and dropped kerbs at side roads and at desire lines where visibility is good and traffic speeds and flows are low. If the carriageway width allows, a refuge island can also be provided to facilitate the crossing, particularly where traffic flows are higher.



### Zebra Crossing

Provides priority for people walking at a crossing location, minimising the delay and improving the directness of the route. A parallel crossing can also accommodate both people walking and cycling.



### Signalised Crossing (Puffin/Pelican/Toucan)

Provides a controlled crossing at busy streets and/or where vehicle speeds are high, thus improving user comfort and safety, and reducing delay at crossings of busy streets where there are limited gaps in traffic. A toucan crossing can be implemented where cyclists also use the crossing, linking off-carriageway cycle facilities.



### Raised Table (Side Road Entry Treatment)

Reinforces the Highway Code 2022 update by enhancing priority for people walking and making the side road crossing easier and more convenient by maintaining the continuity of the route at footway level. It indicates pedestrian activity, encourages lower traffic speeds, and more driver attention and care when turning.



### Continuous Footway (Side Road Entry Treatment)

Similar to a raised table, but also maintains continuity of the footway surfacing across the side road and locates the stop line at the rear of the footway. Thus, it further emphasises to drivers pedestrian priority and continuity of the pedestrian space.



### Raised Junction

Similar to the raised table, a raised junction encourages motorists to reduce speeds at a junction. It also provides uncontrolled crossings at all arms of a junction and facilitates pedestrian crossings at footway level. (image: Google Street View)



## Example Design Tools - Walking



### Review On-Street Parking

Manages and/or relocates on-street parking to support a more attractive and accessible walking environment, allow safer and easier informal crossings, improve visibility, and/or provide wider footways and public realm.



### Raised Parking / Loading Bays

Reallocates carriageway space to the footway, providing a wider, more comfortable pedestrian environment. The bays may be used for servicing or parking as needed, but allows a more flexible use of space to better accommodate pedestrians. Ensures that the carriageway remains 'narrow' to reinforce low speeds.



### Lower Traffic Speeds

Improves safety for all road users and fosters a more comfortable environment for cycling and walking. Should be supported by traffic calming measures, as needed, to make the speed limit self-enforcing. An area-wide policy could also be considered rather than changes on a street by street basis. (image: WestLeedsDispatch.com)



### Low Traffic Environment

Primarily residential areas with features that increase the comfort, safety and accessibility of walking and cycling; create space for community facilities; and reduce the dominance of cars resulting in improved safety, air quality and noise pollution to encourage more walking, cycling and social interactions. (image: TfL Liveable Neighbourhood Programme)



### School Street

Implements timed vehicle access restrictions during school arrival/dismissal times to encourage more pupils to walk and cycle to school and improve the safety, comfort, and attractiveness of these modes. School streets may be configured to permit access by certain vehicles. (image: wandsworth.gov.uk)



### Wayfinding

Improves the coherence of the walking network, making it easier for people to navigate through the area and encouraging more trips to be taken on foot. A consistent system should be applied area-wide.

## Example Design Tools - Walking



### Public realm improvements

Redesign of a street to create a more vibrant and attractive environment. Key aspects may include footway widening, resurfaced footways with high quality and durable materials, street trees, or raising the carriageway to footway level. Interventions would also tighten junctions to reduce turning vehicle speeds and the crossing distance for pedestrians. Parking spaces can be provided at footway level using distinct materials to delineate different users (*images: Urb-i, Google Street View*).



### Modal Filter

Supports a safer, more attractive environment for walking and cycling by reducing motor vehicle traffic and permitting more direct, convenient access by foot or by cycle. Modal filters may be configured to permit access by certain vehicles (e.g., emergency vehicles, buses, blue badge holders).

### Places to Rest

A component of Inclusive Mobility and 'Healthy Streets' principles are localised public realm improvements providing a pedestrian friendly environment. This could include seating to rest (e.g. benches), shelter, planters and planting offering shade and enhanced public realm. May be particularly applicable to bus stops and places with a significant gradient to improve the accessibility and comfort of walking for everyone.



# Phase 1 Proposed Walking Interventions

The following sections present potential measures to enhance the Phase 1 core walking zones identified in the previous chapter. The proposed interventions are high level and identify initial concepts for further consideration in the next stage of scheme development. They seek to address issues and deficiencies identified during the audit activities, incorporate comments and issues noted during early stakeholder engagement (workshop #2), as well as to incorporate proposals from previous studies. They aim to be aspirational, ambitious, and reflect the long-term timescales of the LCWIP, seeking to support a step-change in active travel and incorporate recent best practice guidance.

For walking improvements, this includes a range of strategies from relatively minor interventions (e.g. improved dropped kerbs and tactile paving) to new crossings, footway widening, or reconfiguration of the public highway. All proposed measures would be subject to varying levels of future additional analysis, feasibility assessment, and design.<sup>1</sup>

<sup>1</sup> The design stage of the LCWIP proposals is initial concept development. All the proposed interventions are subject to further assessment during feasibility planning and design, such as topographic survey, traffic modelling, vehicle swept path analysis, utility survey, traffic/speed survey, availability of land, kerbside activity survey, ecology/arboricultural survey, further stakeholder input, etc., as applicable.

The next stages of scheme development would develop the concepts in greater detail. Further observations, data, and information would be obtained to continually refine and improve the initial proposals. Stakeholder engagement would also continue to be a critical component of the next stage of scheme development.

The proposed interventions are presented by core walking zone on the following pages. While these proposals are focused on the Phase 1 CWZs, they also provide examples of the types of interventions that can be implemented Borough-wide as needs or opportunities arise, for urban areas and rural areas.

It is noted that some of the desirable locations for active travel improvements may be privately owned and are not within SCC's publicly maintained roads. As such, collaborative working with the respective owners would be required to explore opportunities to improve conditions for active travel.

Additionally, consideration should be given during subsequent development phases to review and coordinate future opportunities for integration with other workstreams (e.g. SCC schemes, development activity), or other active travel improvements, including those identified within the aspirational list LCWIP network for walking and/or cycling, and measures which may be progressed in addition to the LCWIP proposals.



## Core Walking Zone 2: Camberley Town Centre

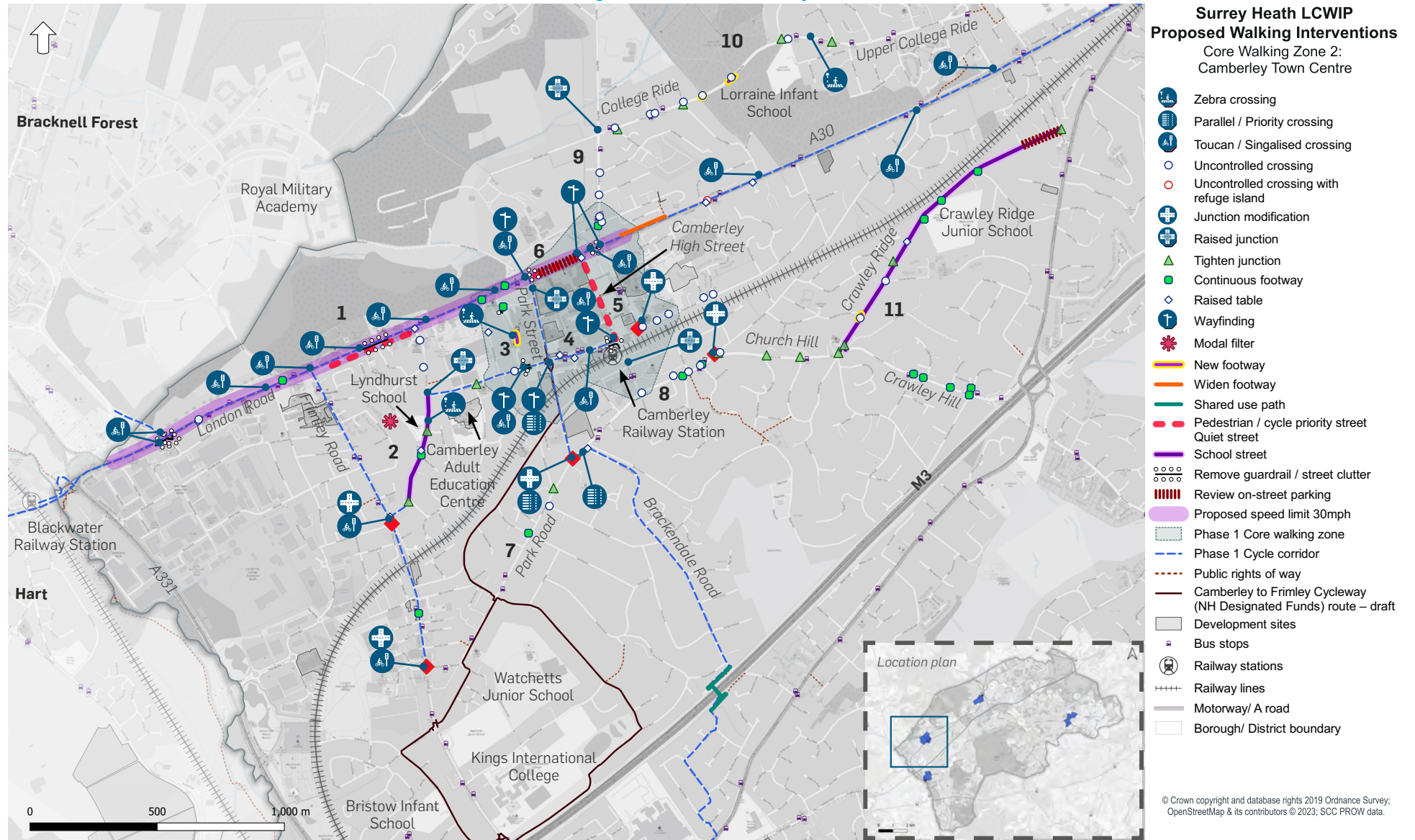


Figure 103. Core Walking Zone 2 - Camberley Town Centre

## Core Walking Zone 2: Camberley Town Centre

This core walking zone covers the town centre between the train station in the south and London Road (A30) in the north. The associated walking route network extends towards the M3 where it connects with the Frimley High Street CWZ network, and towards Old Dean area in the north.

The LCWIP proposals aim to work in synergy with existing Camberley to Frimley Cycleway (National Highways Designated Funds), as well as the LCWIP cycle network. See Cycle Corridors 2, 3, 4 and 6 proposals for this area too.

### Proposed Interventions:

- 1** London Road (A30): It is proposed to reduce the speed limit to 30mph in the section between The Meadows Roundabout and Knoll Road junction<sup>1</sup>. A reduced speed limit will support a wide array of localised interventions along this corridor. To improve cycle connectivity between the A30 cycle corridor and Camberley town centre, toucan crossings are proposed in numerous locations along with the proposals for segregated cycle facilities on the A30 as part of Cycle Corridor 2 and Cycle Corridor 3. Additionally, pedestrian crossings are proposed to be added to existing signalised junctions in the following locations; Frimley Road junction, Lower Charles Street junction, Park Street

<sup>1</sup> Speed reduction measures along the A30 between Camberley and Bagshot are also part of a separate works package.



Figure 104. London Road existing signal controlled crossing near Victoria Avenue junction.

junction, Knoll Road junction, and Staff College Road junction. Additionally raised table treatment in multiple sites at the side roads along London Road to improve the pedestrian environment.

It is also proposed to limit motor-vehicle access to Osnaburgh Hill which runs parallel to London Road, and investigate opportunity of reducing parking in the section between High Street and Park Street.

To improve quality of the pedestrian environment, it is proposed to remove existing guardrail in a number of locations along the link, while footway widening is recommended for the eastern section of London Road, east of King's Ride junction. Opportunities to improve pedestrian/motor vehicle segregation will be explored in the next phase.

- 2** The Avenue: Aspirational proposal of a school street in the section between Southwell Park Road and Forest Hills to promote active travel for trips to



Figure 105. Minimal pedestrian provision at Frimley Road junction with Moorlands Road and Oakley Road.

schools. A zebra crossing is proposed near Lyndhurst School<sup>2</sup>, and localised interventions such as junction tightening, provision of uncontrolled crossings, continuous footways and raised tables along the street. It is also proposed to upgrade existing signalised crossing at the junction with Frimley Road to a toucan crossing, and provide raised junctions at the intersections with Southwell Park Road and Frimley Road.

As part of the school street proposal a modal filter is proposed to deter rat running in the area on Woodway, between Heatherley Road and Woodlands Road. Additionally, a junction modification is proposed for the intersection of Frimley Road with Moorlands Road and Oakley Road, to reduce carriageway dominance and provide improved pedestrian environment.

<sup>2</sup> An uncontrolled crossing with buildout is proposed in this area as part of a separate works package.

- 3 Charles Street: A new footway on the western side, north of the existing bus stop, by reallocating space from the verge, and a zebra crossing outside the shopping centre entrance are proposed. They will serve the existing desire line and provide direct link between the bus stop and the commercial centre.
- 4 Pembroke Broadway and Southwell Park Road: Upgrade the existing signal controlled crossings to toucans to support proposed cycle corridor, remove guard rail along the link and provide wayfinding in key locations. Additional proposal to include traffic calming measures, such as horizontal and vertical deflections and side road crossing treatments.
- 5 High Street: Investigate possibility of pedestrianising the whole length of High Street, along with London Road service road which runs between High Street and Park Street. This will create opportunity



Figure 106. Pembroke Broadway signal controlled crossing near the railway station to be upgraded to a toucan with removed guard railing.



Figure 107. One-way operation on Camberley High Street

for public realm improvement, including additional seating, places to rest, planting, bicycle parking, etc.

- 6 Park Street / Park Road roundabout: Aspirational interventions to improve the operation of Park Road roundabout, along with parallel crossings to improve pedestrian provision near the nearby nursing home as well as cycle connectivity in the area. Details of improvements will be subject to traffic surveys and assessments.



Figure 108. Existing roundabout at the junction of Park Road with Park Street. (image: Google StreetView)

- 7 Park Road: This road connects with the Camberley to Frimley Cycleway (NH Designated Funds). A parking review is recommended for the section south of Parkway junction to eliminate footway parking. Localised interventions for side road treatments include continuous footway provision and junction tightening.
- 8 Upper Park Road: Localised interventions such as continuous footway treatment, provision of dropped kerbs with tactile paving, and tightening junctions are proposed along the link. Additionally, it is proposed to modify the junction with Church Hill to provide wider footways and safer pedestrian crossings.
- 9 Kings Ride: Localised interventions include provision of dropped kerbs and tactile paving at the side roads to improve pedestrian accessibility. Upgrading the existing Kings Ride north arm crossing to a toucan.
- 10 College Ride and Upper College Ride: Raised junction treatment is proposed at the intersection with Kings Ride. Dropped kerbs with tactile paving at the junctions and localised tightening. To improve access to local bus stops and Lorraine Infant School, a zebra crossing is proposed near the junction with Wishmoor Road.



Figure 109. Upper College Ride junction with Wishmoore Road, potential location of a new zebra crossing. (image: Google StreetView)

**11** Crawley Ridge: Aspirational proposal for this street includes the introduction of a school street between Crawley Hill junction in the south and Gilbert Lane in the north to promote active travel for trips to schools. A parking review is also suggested for the northernmost section to deter footway parking. Continuous footways are proposed along the road, primarily near the schools.

#### *General Items (area-wide measures)*

- » Reducing the speed limit to 20mph in areas and introducing traffic calming measures which will support the aspirations for a safer and more attractive walking network in the area.
- » Accessibility: Install improved dropped kerbs and tactile paving at side road crossings/ junctions where they are currently missing.
- » Wayfinding: Review and update area-wide wayfinding system. Consider measures such as wayfinding totems at key locations (e.g. railway station, High Street/town centre) to help pedestrians navigate the area and illustrate the locations of local destinations and potential walking routes between them.
- » Planting, seating, and shelter: As part of footway and public realm improvements, consider opportunities for additional planting, street trees, seating, and/or shelter as part of a Healthy Streets approach to pedestrian improvements and improve the accessibility of walking to a wider range of the population. In areas where guardrails are removed, these can be replaced with planters (or similar) to still provide a separation or shielding effect, but with something more pleasant and permeable.
- » Cycle parking: As part of footway and public realm improvements, consider opportunities to integrate additional secure cycle parking near local destinations.

## Core Walking Zone 4: Frimley High Street

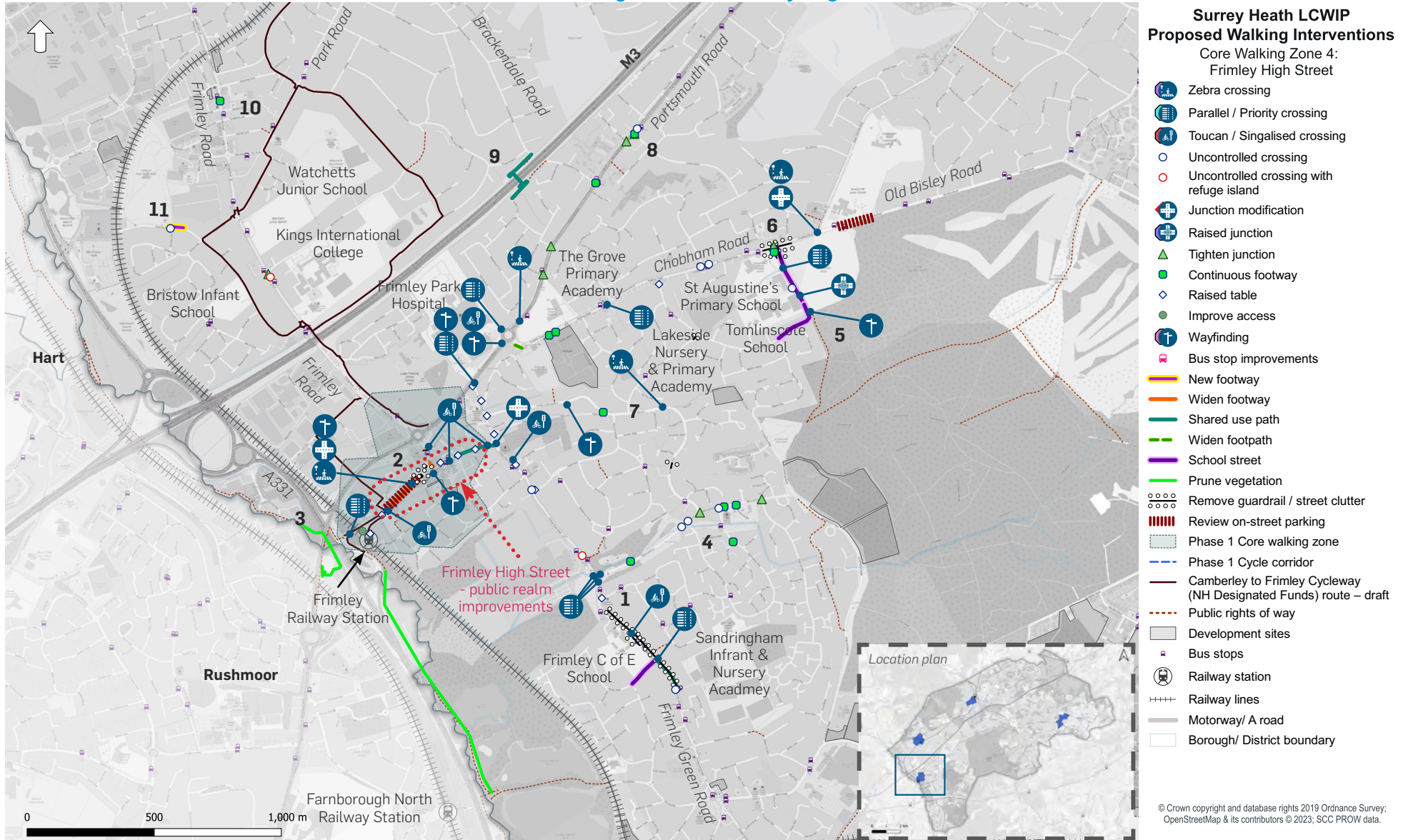


Figure 110. Core Walking Zone 4 - Frimley High Street



## Core Walking Zone 4: Frimley High Street

This core walking zone covers Frimley town centre and also provides connections to the railway station, a local retail area, and Frimley Park Hospital. The network of walking routes radiates from the town centre towards Frimley Green Core Walking Zone in the south, Camberley Town Centre Core Walking Zone in the north, and towards Frith Hill in the east. Additionally, connections are provided towards Rushmoor and the LCWIP proposals. The walking network is constrained by the hard barriers of the railway line, the A331 and the M3, which significantly reduce permeability of the area.

The LCWIP proposals aim to work in synergy with existing National Highways proposals for Camberley to Frimley Cycleway (National Highways Designated Funds), as well as Cycle Corridors 6 and 8.

### Proposed Interventions:

- 1** Frimley Green Road: Removal of existing bollards on the eastern footway in the southern section of the route to accommodate two-way cycle track and footway. Introduction of a School Street in the eastern part of Henley Drive, between Frimley Green Road and Kingsmead. Parallel and toucan crossings are also proposed along the route and at the junction with Balmoral Drive to improve pedestrian and cyclist accessibility, especially to the school. Localised interventions to include side road treatments with raised junctions to provide



Figure 111. Existing bollards along Frimley Green Road eastern footway.

continuous pedestrian environment. It is also proposed to modify the Church Road junction and improve the crossing provision.

- 2** Frimley High Street: Proposed Hale Way roundabout removal and junction modification to provide High Street gateway with a new zebra or signal controlled crossing. Along High Street shops footway widening and parking review is proposed, with possibility of introducing footway level parking and loading bays. Removal of short central reservation in the eastern section, general public realm improvements, and introduction of wayfinding in strategic locations, especially near the junction with Church Road to improve pedestrian environment. Two-way cycle track and shared use path on the south side of the High Street are also proposed. Convert the existing taxi rank in front of Ye Olde White Hart pub to footway with public realm improvements, including seating, planting,



Figure 112. Frimley High Street / Hale Way / Cedar Lane junction. Roundabout provides access to Waitrose car park. Car dominance with guardrail, convoluted and constrained pedestrian crossings.

etc. A toucan crossing at the western end, and a raised table treatment in vicinity of Station Approach are proposed to improve access for pedestrians and cyclists to the railway station. Additionally, upgrading existing signal controlled crossing outside Waitrose to a toucan is proposed to improve cycle route continuity. Existing uncontrolled crossing at Frimley High Street bend near A331 could be upgraded to a parallel crossing, subject to visibility in that location.

- 3** Blackwater Valley Path: Localised interventions focused on vegetation clearance to reduce the overgrowth and provide sufficient width for users.
- 4** Balmoral Drive and Sandringham Way: Improvements include junction tightening, provision of continuous footway arrangement, and uncontrolled crossings with dropped kerbs and tactile paving to improve overall accessibility of the area.



Figure 113. Tomlinscote Way junction with Chobham Road has wide junction bellmouth with multiple exit lanes. (image: Google StreetView)

**5** Tomlinscote Way: An aspirational School Street is proposed along the road, to also include the easternmost section of Alphington Avenue. This would seek to include Tomlinscote School and St. Augustine's School. Tighten Tomlinscote Way/ Chobham Road junction and introduce raised table treatment which would extend between the two existing zebra crossings. Raised junction treatment is also proposed for the school entrance. Additionally, upgrading existing uncontrolled crossing south of the car park entrance to parallel, introduction of wayfinding and continuous footways along the link are proposed. Existing guardrail at the junction and along Chobham Road is proposed to be reviewed and potentially removed. Consideration to be given to improved bus services to the schools.

**6** Chobham Road / Old Bisley Road: Localised interventions along the road to include provision of continuous footways and/or raised tables at side roads, alongside dropped kerbs with tactile



Figure 114. Tomlins Avenue junction with Chobham Road - Existing full set back layout to be enhanced by raised table and provide priority for pedestrians and cyclists. (image: Google StreetView)

paving to improve accessibility to bus stops. A raised table is proposed at the junction with Tomlins Avenue to offer design priority for pedestrians and cyclists. Additionally, it is proposed to introduce a parallel crossing near the junction with Bicknell Road to provide continuity to existing cycle route. Potential junction modification of Chobham Road intersection with Upper Chobham Road and Old Bisley Road, to improve crossings provision in this area to complement the new pelican crossing on Upper Chobham Road. Parking review along the east arm on Old Bisley Road near the bus stops.

**7** Frimley Grove Gardens and Field Lane: Localised interventions along this route include wayfinding, continuous footway treatment, and a new zebra crossing in vicinity of Lakeside School<sup>1</sup>.

<sup>1</sup> Although the school had moved the aspiration for the site remains as a SEND school and therefore pedestrian environment improvements are still desirable.



Figure 115. Frimley Park Hospital access is a car dominated environment, difficult to navigate for pedestrians specifically with lack of priority crossings.

**8** Portsmouth Road: A parallel crossing is proposed on Grove Cross Road to the island to improve access to existing toucan crossing. At Frimley Park Hospital roundabout, a toucan crossing is proposed on the west arm, and a parallel crossing on the north arm (hospital access). Along the eastern section of Portsmouth Road a number of localised interventions is proposed, including junctions tightening, continuous footways, and dropped kerbs with tactile paving to improve access to the bus stops. Wayfinding improvements are also proposed outside the hospital.



Figure 116. No cycling sign placed on the approach to the M3 footbridge

**9** M3 footbridge: Proposed shared use path on the footbridge. Permit cyclists along the paths and the footbridge. Improvements to the existing path to include vegetation clearance to increase the effective width and improve natural surveillance, widening of the path where feasible and new lighting to improve personal safety<sup>2</sup>. Improvements on the approaches to the paths to include resurfacing of the carriageway and the path, widening of the dropped kerbs and introducing double yellow lines to keep the access points clear of parked vehicles. This will require agreement with National Highways as the landowner of the paths either side and owner of the bridge. Aspirational proposal: widening of the existing footbridge and footpath to accommodate wider pedestrian and cycle

<sup>2</sup> Added lighting along with further vegetation clearance will help improve personal safety as the path will be more overlooked. Proposed interventions to be investigated further following environmental and arboricultural surveys



Figure 117. Frimley Road junction with Park Road. Potential junction redesign to improve pedestrian and cycle movements in this location. (image: Google StreetView)



Figure 118. Crabtree Park entrance lacks footway provision and safe crossing point. (image: Google StreetView)

facilities with potential for segregation between users.

The area north of the M3 towards Frimley Road Core Walking Zone also included in the Frimley High Street to improve access from the north:

**10** Frimley Road: Key connector route between Frimley and Camberley. The link is partly covered by National Highways Camberley to Frimley Cycleway (NH Designated Funds). Additional interventions include junctions tightening and provision of uncontrolled crossing, potentially with refuge island, at the junction with Watchetts Drive which leads to Kings International College. Junction modification is proposed for existing roundabout with Park Road, which will include improved crossing points on all four arms.

**11** Crabtree Road: Localised improvements near Crabtree Park entrance to include provision of a new footway on the north

side and uncontrolled crossing to improve park's accessibility. Review of existing guard railing near the park entrance and its potential removal.

*General Items (area-wide measures)*

- » Reducing the speed limit to 20mph in areas and introducing traffic calming measures which will support the aspirations for a safer and more attractive walking network in the area.
- » Accessibility: Install improved dropped kerbs and tactile paving at side road crossings/junctions where they are currently missing.
- » Wayfinding: Review and update area-wide wayfinding system. Consider measures such as wayfinding totems at key locations (e.g. railway station, High Street/town centre) to help pedestrians navigate the area and illustrate the locations of local destinations and potential walking routes between them.
- » Planting, seating, and shelter: As part of footway and public realm improvements, consider opportunities for additional planting, street trees, seating, and/or shelter as part of a Healthy Streets approach to pedestrian improvements and improve the accessibility of walking to a wider range of the population. In areas where guardrails are removed, these can be replaced with planters (or similar) to still provide a separation or shielding effect, but with something more pleasant and permeable.
- » Cycle parking: As part of footway and public realm improvements, consider opportunities to integrate additional secure cycle parking near local destinations.



## Core Walking Zone 8: Chobham Village

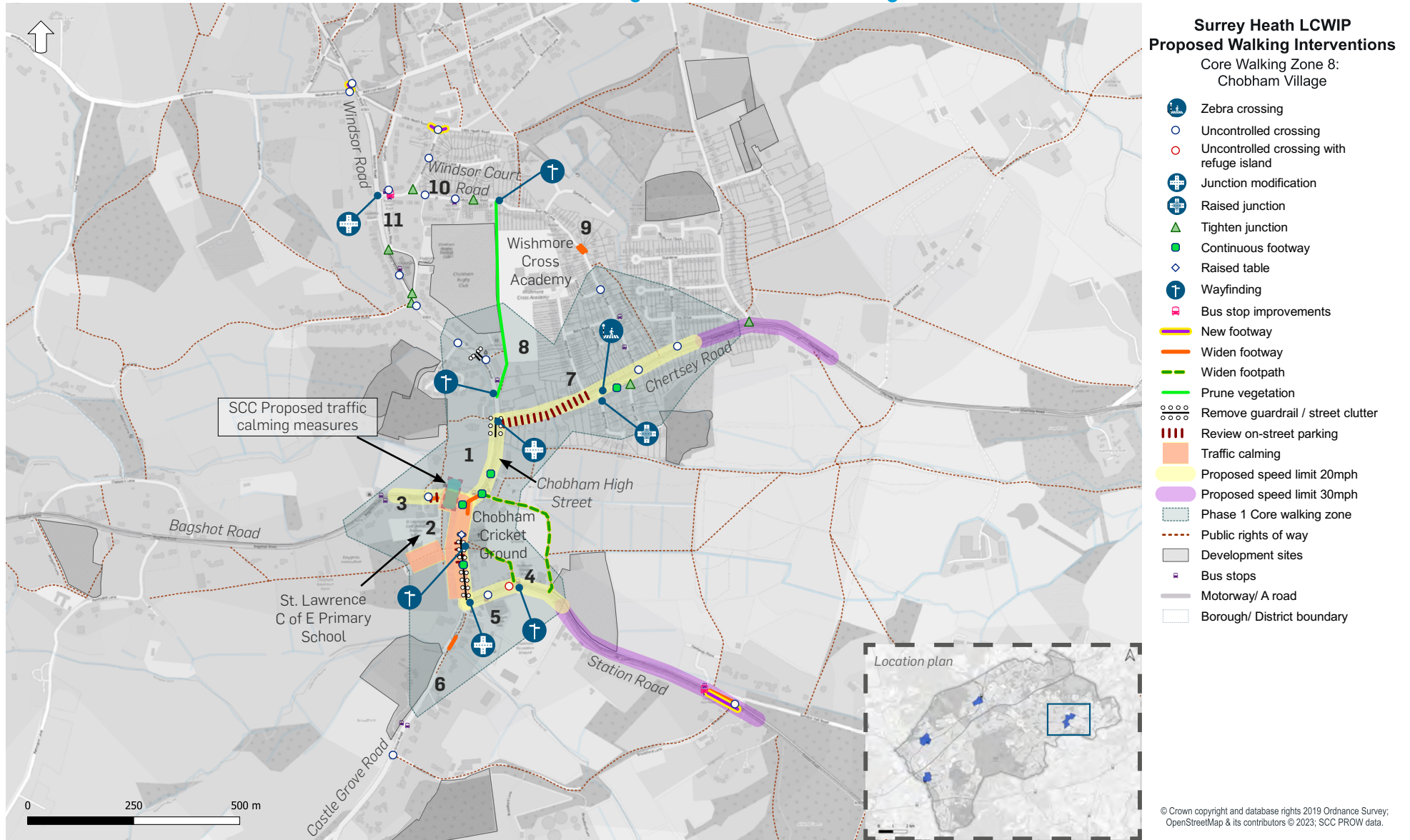


Figure 119. Core Walking Zone 8 - Chobham Village

## Core Walking Zone 8: Chobham Village

This core walking zone extends throughout the Chobham village core road network whilst also serving local commercial, leisure and residential areas. The area also includes interventions proposed as part of SCC Road Safety Outside Schools programme: a zebra crossing and speed cushions on Bagshot Road on the approach to High Street roundabout.

### Proposed Interventions:

- 1 Speed limit reduction:** A 20mph speed limit is proposed through Chobham village centre<sup>1</sup> along sections of Chertsey Road, Bagshot Road, Station Road, and High Street. Additionally, 30mph speed limit on Chertsey Road and Station Road on the approach to Chobham is suggested to support lower speeds in the village centre.
- 2 High Street:** Traffic calming measures are proposed for High Street, including

<sup>1</sup> Synergy with SCC TRO to impose 20mph and 30mph speed limit on various roads in Chobham.



Figure 120. Bollards along east side of Chobham High Street.



Figure 121. Existing Chobham High Street zebra crossing, potential for raised table treatment as part of traffic calming.

introduction of a raised table at the existing zebra crossing, as well as continuous footway arrangement along the street and clutter removal on the footways. In the southern section, outside The Sun Inn, it is proposed to review on-street parking needs for an opportunity to provide a wider footway. Introduction of footway level parking and loading bays to be investigated. Potential traffic calming features to be considered along the path leading to Chobham Cemetery.

- 3 Bagshot Road:** Near the junction with High Street the LCWIP proposal interacts with a separate works package which includes a zebra crossing and speed cushions in this area<sup>2</sup>. As part of LCWIP it is proposed to remove an existing parking bay on the southern side, opposite Co-op, to widen the footway, as well as to provide an

<sup>2</sup> High Street / Bagshot Road Chobham interventions as part of SCC Road Safety Outside Schools works package.

informal crossing point to improve access to the shop.

- 4 Chobham Cricket Ground paths:** It is recommended to prune vegetation along the paths to improve comfort and accessibility of this route. Potential widening of the paths and improvements to the access points should be investigated in the next stage of design.
- 5 Station Road:** Potential junction modification which would present an opportunity to improve crossing points on all three arms. It is also proposed to provide additional crossing points on the approach to the bus stops. Introduce a crossing with a refuge island at Chobham Village Hall, which would be placed within existing central hatched markings. Bus stop accessibility improvements is also suggested in the eastern section of the link, near Sandpit Hall Road junction, with footway widening on the northern side and new footway on the southern side.



Figure 122. Existing bay on Bagshot Road opposite Co-op.

- 6** Castle Grove Road: Localised interventions include footway widening on the eastern side and accessibility improvements to Broadford Lane junction.
- 7** Chertsey Road: Aspirational proposal includes Chertsey Road / High Street junction modification and the introduction of a signal controlled intersection, which would also include pedestrian crossings on all arms. Parking review and restrictions are proposed along the western section of the road to improve the approach to the main junction. Additionally, a zebra crossing and junction tightening outside Chobham Pharmacy are also suggested, along with junction tightening and the introduction of dropped kerbs with tactile paving to improve accessibility of the area and slow down traffic.
- 8** Chobham Rugby Club path: It is proposed to provide wayfinding information at either end of the path, improve accessibility by removing or rearranging the railing at the

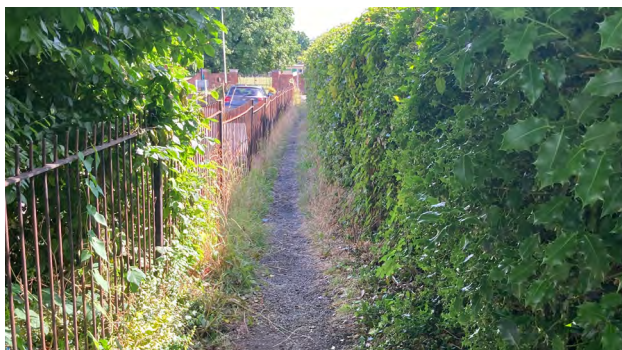


Figure 123. Narrow footpath adjacent to Chobham Cricket Ground and lined with holly bush plants.

entry points, and ensure that vegetation overgrowth is kept to a minimum along the link.

- 9** Delta Road: It is proposed to remove a circular section of the carriageway (Delta Road intersection with Burr Hill Lane) to provide wider footways which will follow the desire lines. Access to local properties will be retained.
- 10** Windsor Court Road and Bowling Green Road: Proposed interventions include the introduction of dropped kerbs and tactile paving to improve safety, specifically to local bus stops, as well as tightening of junctions. A new footway is also proposed following the desire line near the junction with Little Heath Road.
- 11** Windsor Road: Localised interventions include junction tightening, provision of dropped kerbs and tactile paving and guard rail removal near the existing signal controlled crossing. The proposal



Figure 124. Chobham Rugby Club path south entry point shows barriers to accessibility

also includes improvements at the junction with Bowling Green Road which involve potential roundabout removal/ junction modification. It also comprises Windlesham Road junction where a short section of new footway and improved informal crossing points are also proposed.

*General Items (area-wide measures)*

- » Accessibility: Install dropped kerbs and tactile paving at side road crossings/junctions where they are currently missing.
- » Planting, seating, and shelter: As part of footway and public realm improvements, consider opportunities for additional planting, street trees, seating, and/or shelter as part of a Healthy Streets approach to pedestrian improvements and improve the accessibility of walking to a wider range of the population. In areas where guardrails are removed, these can be replaced with planters (or similar) to still provide a separation or shielding effect, but with something more pleasant and permeable.
- » Cycle parking: As part of footway and public realm improvements, consider opportunities to integrate additional secure cycle parking near local destinations.

### Core Walking Zone 9: Bagshot High Street

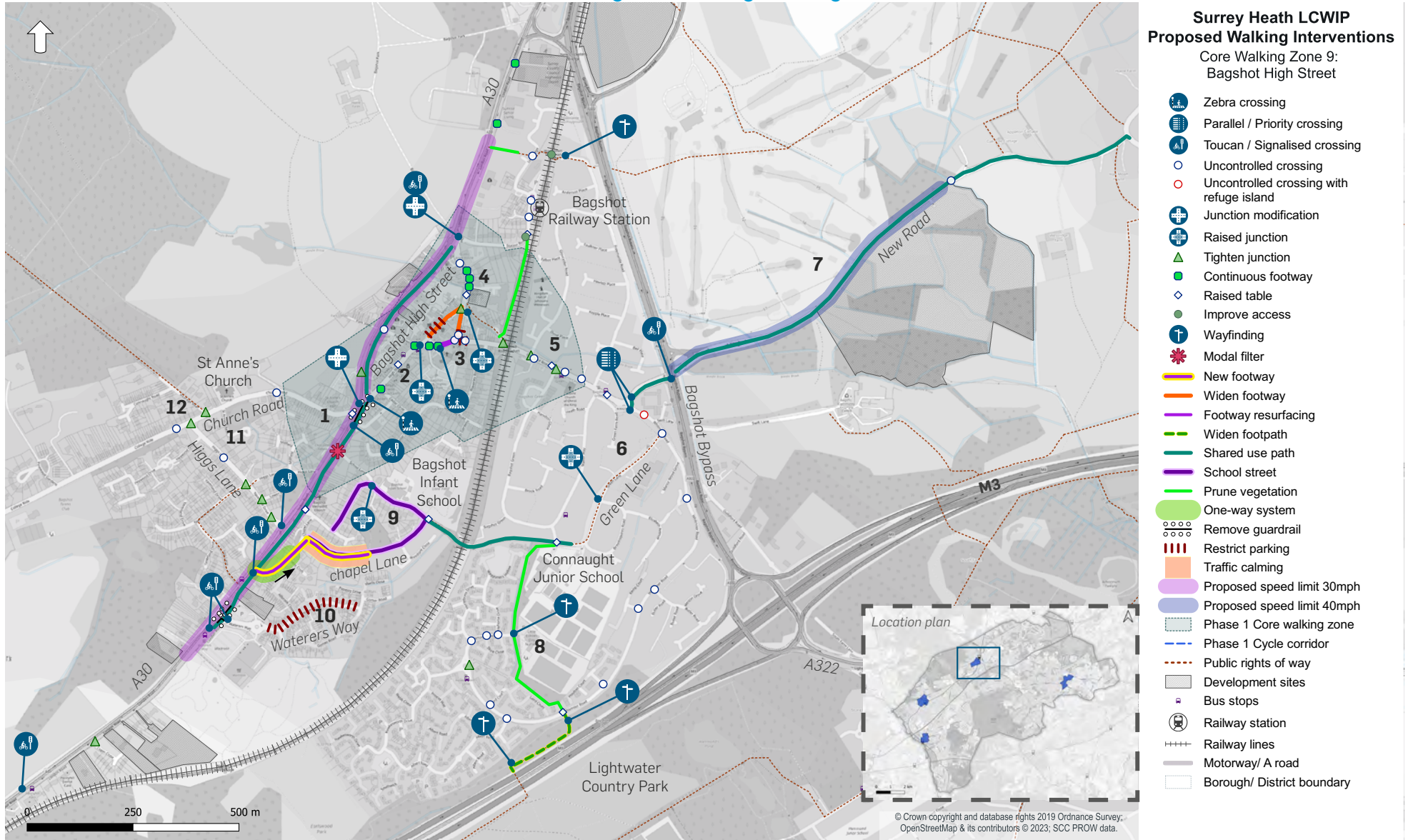


Figure 125. Core Walking Zone 9 - Bagshot High Street



## Core Walking Zone 9: Bagshot High Street

This core walking zone includes the local commercial area and provides walking links to Bagshot Railway Station, local schools and residential areas. See also Cycle Corridors 2 and 16 proposals for this area too.

### Proposed Interventions:

- 1 London Road (A30): It is proposed to reduce the speed limit along London Road to 30mph in order to support improvements to the pedestrian environment along the link<sup>1</sup>. A shared-use path is proposed along the eastern side of the link, as well as guard rail removal near the Waterers Way and High Street junctions. Existing signal controlled crossings at Waterers Way<sup>2</sup> are suggested to be upgraded to toucans,

- 1 Speed reduction measures along the A30 between Camberley and Bagshot are also part of a separate works package.
- 2 Proposal to be developed and funded by the development site south of the A30.



Figure 126. London Road (A30) signalised junction with Bridge Road and Station Road lacks crossings and offers environment which is not pedestrian friendly.

and at Yaverland Drive intersection to be improved with the introduction of a new signal controlled crossing on the west arm. A new signal controlled crossing is also proposed near Chapel Lane junction. Modification of the A30 intersection with Bridge Road and Station Road is proposed to improve traffic flows and upgrade the existing pedestrian environment.



Figure 127. London Road (A30) signalised junction with Yaverland Drive lacks dedicated pedestrian phase on the minor road arm. (image: Google StreetView)

- 2 High Street: Review of on-street parking on the northern side of the street with potential footway widening at multiple locations along the link which will also provide an opportunity for public realm improvements. Raised junction treatment is proposed at the intersection with The Square with the possibility of introducing a zebra crossing near Co-op to improve shop and car park accessibility. Junction tightening with a raised table at the intersection with Bridge Street is proposed.



Figure 128. Wide and difficult to cross section of Bagshot High Street at the intersection with Bridge Road.



Figure 129. Narrow footway, approx. 1m, along Bagshot High Street north side.



Figure 130. Narrow and uneven footway along The Square south side



- 3 The Square: Due to limited carriageway and footway space available along the Square, it is proposed to resurface the footway in this location to improve the quality of the walking corridor.
- 4 Bridge Road: Continuous footway arrangement and raised tables at side roads are proposed in multiple locations along the street. Additionally, it is recommended to review on-street parking provision at the roundabout with Guildford Road to improve visibility on the approach to the junction.
- 5 Guildford Road: Proposed interventions include junction tightening in multiple locations and the introduction of dropped kerbs and tactile paving.
- 6 Green Lane: A raised junction treatment is proposed for the intersection with Broomsquires Road to improve safety on the approach to Connaught Junior School

as well as along Cycle Corridor 16. An aspirational proposal exists to introduce a school street to improve safety and encourage active travel modes for daily trips to Connaught Junior School

- 7 New Road: Provide parallel crossings at the roundabout to improve pedestrian and cycle movements. A toucan crossing is proposed at the southern arm of Bagshot Bypass junction and a signal controlled crossing to be added to the north arm. A shared-use path is proposed along the south side by reallocating space from the verge and the carriageway. Introduce shuttle working at the canal bridge to reallocate space for the shared facilities at the pinch point. It is suggested to reduce the speed limit along New Road to 40mph and introduce street lighting which will also support the proposed shared-use path.

- 8 Curley Park: The off-road footpath which runs immediately to the west of Connaught Junior School and the sports grounds requires vegetation pruning to maximise the available width as well as the introduction of wayfinding in key locations along the path, including directional signage towards Lighwater Country Park.



Figure 131. New Road junction with Bagshot Bypass, potential for signal controlled pedestrian crossing.



Figure 132. Curley Park path requires regular maintenance and vegetation clearance.



Figure 133. Waterers Way: Informal footway parking along the street reduces available effective width for pedestrians.

**9** Chantry Road / School Lane / Chapel Lane: A school street is proposed to include the three roads due to their proximity to Bagshot Infant School in the area to promote active travel for trips to schools. Additional traffic calming measures (e.g. horizontal and vertical deflections and side road crossing treatments) along the section are proposed to support the school street. It is also proposed to provide a footway on the southern section of Chapel Lane, as well as it introduce a one-way system northbound between the London Road junction in the south and the triangular island in the north. A raised table treatment is proposed for School Lane junction with Chantry Road, and improvements to the existing modal filter at the junction with London Road to increase the effective width for pedestrians and cyclists.

Waterers Way: In order to free up footway space along the street it is proposed to provide parking restrictions to eradicate partly on footway and partly on carriageway parking as seen in Figure 133.

**10** Higgs Lane / Yaverland Drive: Localised improvements to include junction bellmouth reduction in multiple locations along the link, as well as improvements to the existing signalised junction with London Road which will include a dedicated pedestrian phase on the north arm (see London Road improvements). Potentially the introduction of a signal

controlled pedestrian and cycle crossing on the western arm can also be investigated to improve permeability of the area.

**11** Church Road: Localised interventions along this link involve the reduction of junctions' bellmouths, provision of dropped kerbs with tactile paving, and a new footway on the southern side of the street between Higgs Lane junction and St Anne's Church which will provide continuity to the existing network and improve accessibility.

A potential aspirational intervention can also include improvements to Station Alley such as surface improvements and vegetation clearance.

#### *General Items (area-wide measures)*

- » Reducing the speed limit to 20mph in areas and introducing traffic calming measures which will support the aspirations for a safer and more attractive walking network in the area.
- » Accessibility: Install improved dropped kerbs and tactile paving at side road crossings/ junctions where they are currently missing.
- » Wayfinding: Review and update area-wide wayfinding system. Consider measures such as wayfinding totems at key locations (e.g. railway station, High Street/town centre, local footpaths) to help pedestrians navigate the area and illustrate the locations of local destinations and potential walking routes between them.
- » Planting, seating, and shelter: As part of footway and public realm improvements, consider opportunities for additional planting, street trees, seating, and/or shelter as part of a Healthy Streets approach to pedestrian improvements and improve the accessibility of walking to a wider range of the population. In areas where guardrails are removed, these can be replaced with planters (or similar) to still provide a separation or shielding effect, but with something more pleasant and permeable.

## Summary of Phase 1 Core Walking Zones

Table 12. Summary of Phase 1 CWZs

CWZ	Public Benefit	Stakeholder Support	Link to SCC Climate Emergency Policy	Protected Group Benefit (Equality & Diversity)	Other Benefit	Potential Issues*
1. Frimley High Street (CWZ #4)	Links residential areas with the local high street and railway station; improves accessibility across the area, provides reduced traffic near schools, and offers onward connectivity to Camberley.	Stakeholder groups provided input during the LCWIP process.	Supports the policy by providing an improved pedestrian environment and encouraging mode shift from car to active travel for short journeys and school access; 20mph zone and speed limit support emissions reduction.	Aims to improve accessibility for people of all ages and abilities through the provision of wider or new facilities where feasible, new and improved crossings, wayfinding, and improved pedestrian environment near education facilities.	High number of residents would benefit from the improvements; Public realm improvements would support local businesses and reflect the setting of historic environment <sup>1</sup> ; Connection to Frimley Railway Stations. Safety benefits.	Potential opposition to some proposals due to impact on on-street parking, introduction of school streets /restricted motor vehicles access, reallocation of road space. Constrained public highway space in some areas. Listed building in the area to be taken into consideration during construction works <sup>1</sup> .
2. Camberley Town Centre (CWZ #2)	Links residential areas and future development sites with the local high street, railway station, improves accessibility across the area, provides reduced traffic near schools, and offers onward connectivity to Frimley.	Stakeholder groups provided input during the LCWIP process.	Supports the policy by providing an improved pedestrian environment and encouraging mode shift from car to active travel for short journeys; 20mph zone supports emissions reduction.	Aims to improve accessibility for people of all ages and abilities through the provision of wider or new facilities where feasible, new and improved crossings, wayfinding, and improved pedestrian environment near education facilities.	High number of residents would benefit from the improvements; Public realm improvements would support local businesses; Connections to Camberley Railway Station. Safety benefits.	Potential opposition to some proposals due to impact on on-street parking, reduced speed limit on London Road, modal filter /restricted motor vehicles access, and / or reallocation of road space. Constrained public highway space in some areas.

<sup>1</sup> Ye Olde White Hart is a Grade II listed building.



CWZ	Public Benefit	Stakeholder Support	Link to SCC Climate Emergency Policy	Protected Group Benefit (Equality & Diversity)	Other Benefit	Potential Issues*
3. Bagshot High Street (CWZ #9)	Links residential areas with the local high street and railway station; improves accessibility across the area, provides safer streets near schools.	Stakeholder groups provided input during the LCWIP process.	Supports the policy by providing an improved pedestrian environment and encouraging mode shift from car to active travel for short journeys and school access; 20mph zone and speed limit support emissions reduction.	Aims to improve accessibility for people of all ages and abilities through the provision of wider or new facilities where feasible, and prioritising walking and cycling over car access to local destinations including education and retail facilities.	Public realm improvements would support local residents and businesses; Connection to Bagshot Railway Station; Safety benefits.	Potential opposition to some proposals due to impact on on-street parking, or reallocation of road space. Constrained public highway space in some areas. The centre of the village is a conservation area.
4. Chobham Village (CWZ #8)	Links residential areas with local school, commercial areas, employment areas, and future development sites.	Stakeholder groups provided input during the LCWIP process.	Supports the policy by providing an improved pedestrian environment and encouraging mode shift from car to active travel for short journeys and school access; 20mph speed limit supports reduced emissions.	Aims to improve accessibility for people of all ages and abilities through the provision of wider or new facilities where feasible, new and improved crossings, and improved links to education and retail facilities.	Public realm improvements would support local residents and businesses;	Potential opposition to some proposals due to impact on on-street parking, or reallocation of road space. Constrained public highway space in some areas. The centre of the village is a conservation area.



# Assessment of Proposals

Following the identification of initial concepts, the proposed interventions were assessed using the Walking Route Audit Tool (WRAT) with the same criteria used for the assessment of the existing situation of the walking corridors within the CWZs.

The WRAT facilitates a high-level, comprehensive review of existing conditions for people walking along a route based on the key metrics of attractiveness, comfort, directness, safety and coherence. Lower scores suggest a poorer quality route, which may benefit from infrastructure interventions (i.e., to improve safety or comfort).

The results of each walking route are presented in detail in the appendices (Appendix 2: Walking Route Assessment Tool (WRAT) on page 200) for both the existing situation and the proposals. Table 13 presents the total scores of each category in the existing situation and the estimated score if the interventions were implemented, along with the relative change of the score in each category for each CWZ<sup>1</sup>.

The WRAT results of the existing situation demonstrate that all selected CWZs have an overall score below the 'minimum level of provision' (i.e. 70%), according to the LCWIP Technical Guidance for Local Authorities. This indicates the potential opportunity for and benefit of improvements along routes within these CWZs. The WRAT results of the proposed interventions have shown increases in every criteria for each CWZ, taking the overall CWZ scores to 76% or above.

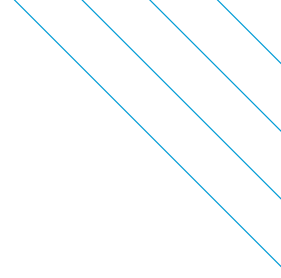
<sup>1</sup> A score of 70% should normally be regarded as a minimum level of provision overall. Routes which score below should be used to identify where improvements are required (Source: Annex C: Walking Route Audit Tool, LCWIP Technical Guidance for Local Authorities, DfT, 2017).



Table 13. WRAT results - Phase 1 Core Walking Zones

	4. Frimley High Street			2. Camberley Town Centre			9. Bagshot High Street		
	<i>Existing</i>	<i>Proposal</i>	<i>%Improvement from existing</i>	<i>Existing</i>	<i>Proposal</i>	<i>%Improvement from existing</i>	<i>Existing</i>	<i>Proposal</i>	<i>%Improvement from existing</i>
Attractiveness	65.2%	73.4%	8.2%	62.9%	76.5%	13.6%	60.2%	73.5%	13.4%
Comfort	66.9%	85.4%	18.5%	67.9%	96.1%	28.2%	67.2%	96.2%	28.9%
Directness	86.8%	92.3%	5.4%	72.0%	94.7%	22.7%	65.9%	98.9%	33.0%
Safety	78.7%	82.8%	4.1%	58.4%	73.7%	15.3%	55.4%	69.6%	14.2%
Coherence	41.5%	75.9%	34.4%	33.8%	98.2%	64.4%	36.5%	92.2%	55.7%
<b>Total</b>	<b>69.9%</b>	<b>83.3%</b>	<b>13.4%</b>	<b>63.3%</b>	<b>89.6%</b>	<b>26.3%</b>	<b>61.0%</b>	<b>89.0%</b>	<b>28.0%</b>

	8. Chobham Village		
	<i>Existing</i>	<i>Proposal</i>	<i>%Improvement from existing</i>
Attractiveness	56.1%	73.7%	17.6%
Comfort	67.7%	96.4%	28.7%
Directness	68.9%	95.4%	26.5%
Safety	58.3%	74.2%	15.9%
Coherence	29.5%	97.1%	67.6%
<b>Total</b>	<b>60.6%</b>	<b>89.2%</b>	<b>28.6%</b>



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# 9. Prioritisation and Costings

Introduction

Cycle Corridor and Core Walking Zone Prioritisation

Indicative Costs

# Introduction

This chapter summarises the prioritisation of the implementation of the Phase 1 core walking zones and cycle corridors as well as indicative scheme costs for the Phase 1 walking and cycle proposals.

The prioritisation is high-level and indicates the relative importance of the selected routes and their package of proposed interventions, based on the methodology described in the following section. The purpose of the prioritisation is to assist SCC and SHBC with which routes should be developed first. At this stage of the assessment, the route prioritisation is independent of cost.

Further development for all schemes would be subject to funding availability. Opportunities for efficiencies through collaboration with other schemes or workstreams may also influence timescales for further development.

# Prioritisation of the Routes

## Prioritisation of the Aspirational Networks

As mentioned in the previous sections, a multi-criteria assessment framework (MCAF) was used to evaluate the aspirational list of cycle corridors and core walking zones (see page 97 for the cycle corridors and page 145 for the CWZs). The framework identified the Phase 1 cycle corridors and core walking zones from their respective aspirational list.

The framework was used to suggest potential relative time scales for the development of improvements, categorising the cycle corridors and CWZs into:

- » Phase 1 - high priority / short term (2 year scheme development)
- » Phase 2 - medium priority / medium term (10 year scheme development)

Additional cycle corridors and CWZs have been identified through the selection process that have been classified as Phase 3 - longer term ambitions. These corridors were not included in the multi-criteria assessment. The timescales for scheme development of the Phase 3 CWZs and cycle corridors are longer (> 10 year plan).

The prioritisation of the aspirational lists is summarised in the following tables and figures.

Table 14. Prioritisation table for the aspirational list of cycle corridors

Cycle Corridor	Priority / Timescale
1. Camberley to Frimley	Phase 1 - high priority / short-term
6. Camberley to Rushmoor via Frimley Park Hospital	Phase 1 - high priority / short-term
2. A30 - Camberley to Bagshot Railway Station	Phase 1 - high priority / short-term
4. Frimley Road to Camberley High Street	Phase 1 - high priority / short-term
8. Frimley to Frimley Green	Phase 1 - high priority / short-term
3. A30 - Camberley to Blackwater	Phase 1 - high priority / short-term
16. Bagshot to Windlesham	Phase 1 - high priority / short-term
12. A30 to Basingstoke Canal via Deepcut	Phase 2 - medium priority / medium-term
14. Basingstoke Canal	Phase 2 - medium priority / medium-term
9. Frimley to Heatherside loop	Phase 2 - medium priority / medium-term
13. Blackwater Valley Path	Phase 2 - medium priority / medium-term
5. Camberley to Old Dean	Phase 2 - medium priority / medium-term



Cycle Corridor	Priority / Timescale
7. Camberley to Heatherside and Old Dean	Phase 2 - medium priority / medium-term
10. Frimley to Deepcut	Phase 2 - medium priority / medium-term
11. Frimley Green to Mytchett and Ash Vale	Phase 2 - medium priority / medium-term
18. Lightwater to Knaphill via West End	Phase 2 - medium priority / medium-term
17. Bagshot to Lightwater	Phase 2 - medium priority / medium-term
15. Lightwater to Heatherside	Phase 2 - medium priority / medium-term
Phase 3 - low priority / long-term	

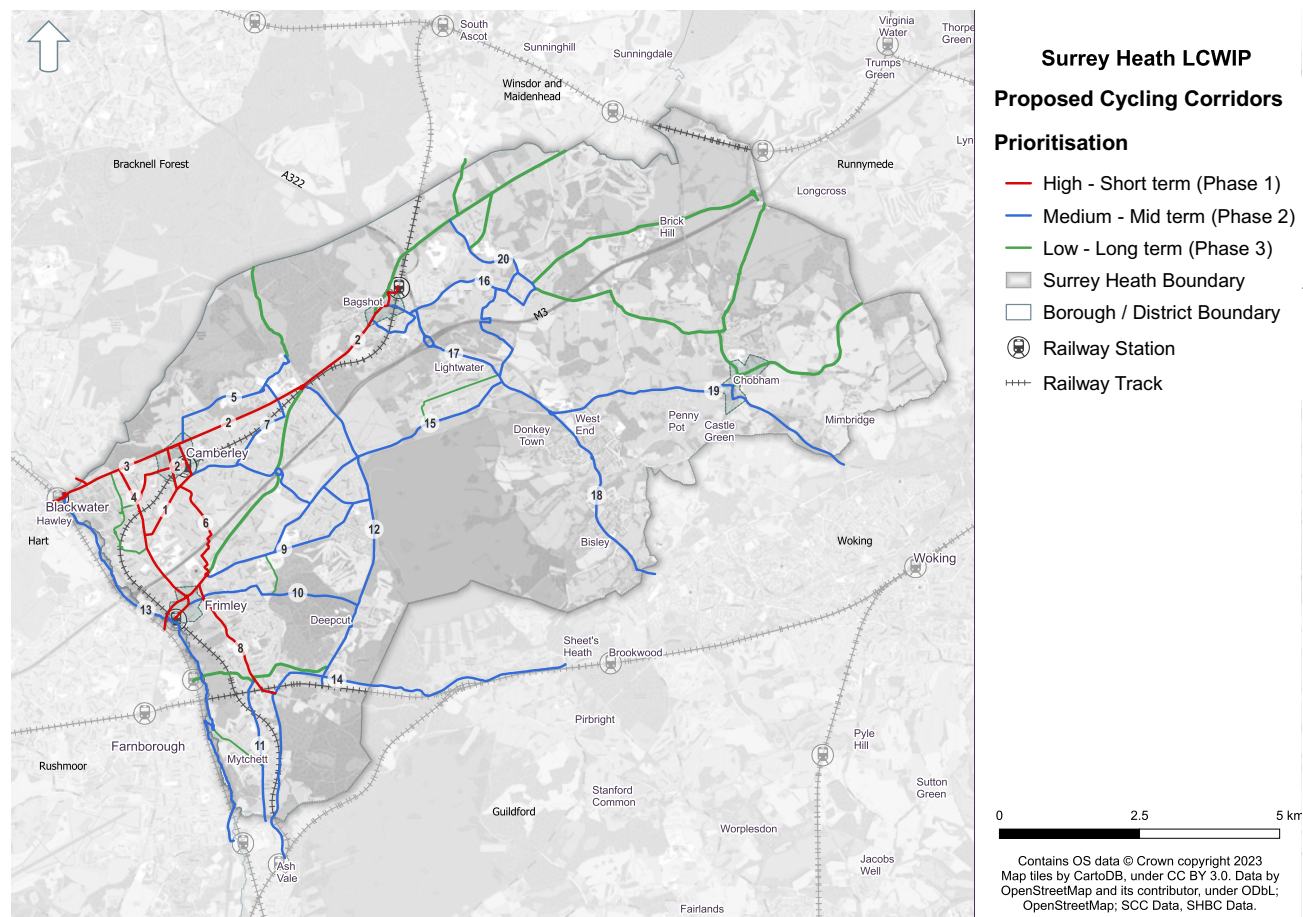


Figure 134. Suggested prioritisation of the identified cycle corridors in the aspirational network



Table 15. Prioritisation table for the aspirational list of core walking zones

Core walking zone	Priority / Timescale
4. Frimley High Street	Phase 1 - high priority / short-term
2. Camberley Town Centre	Phase 1 - high priority / short-term
9. Bagshot High Street	Phase 1 - high priority / short-term
8. Chobham Village	Phase 1 - high priority / short-term
3. Frimley Road	Phase 2 - medium priority / medium-term
5. Frimley Green	Phase 2 - medium priority / medium-term
1. Camberley London Road	Phase 2 - medium priority / medium-term
6. Old Dean	Phase 2 - medium priority / medium-term
11. Windlesham	Phase 2 - medium priority / medium-term
10. West End	Phase 2 - medium priority / medium-term
Phase 3 - low priority / long-term	

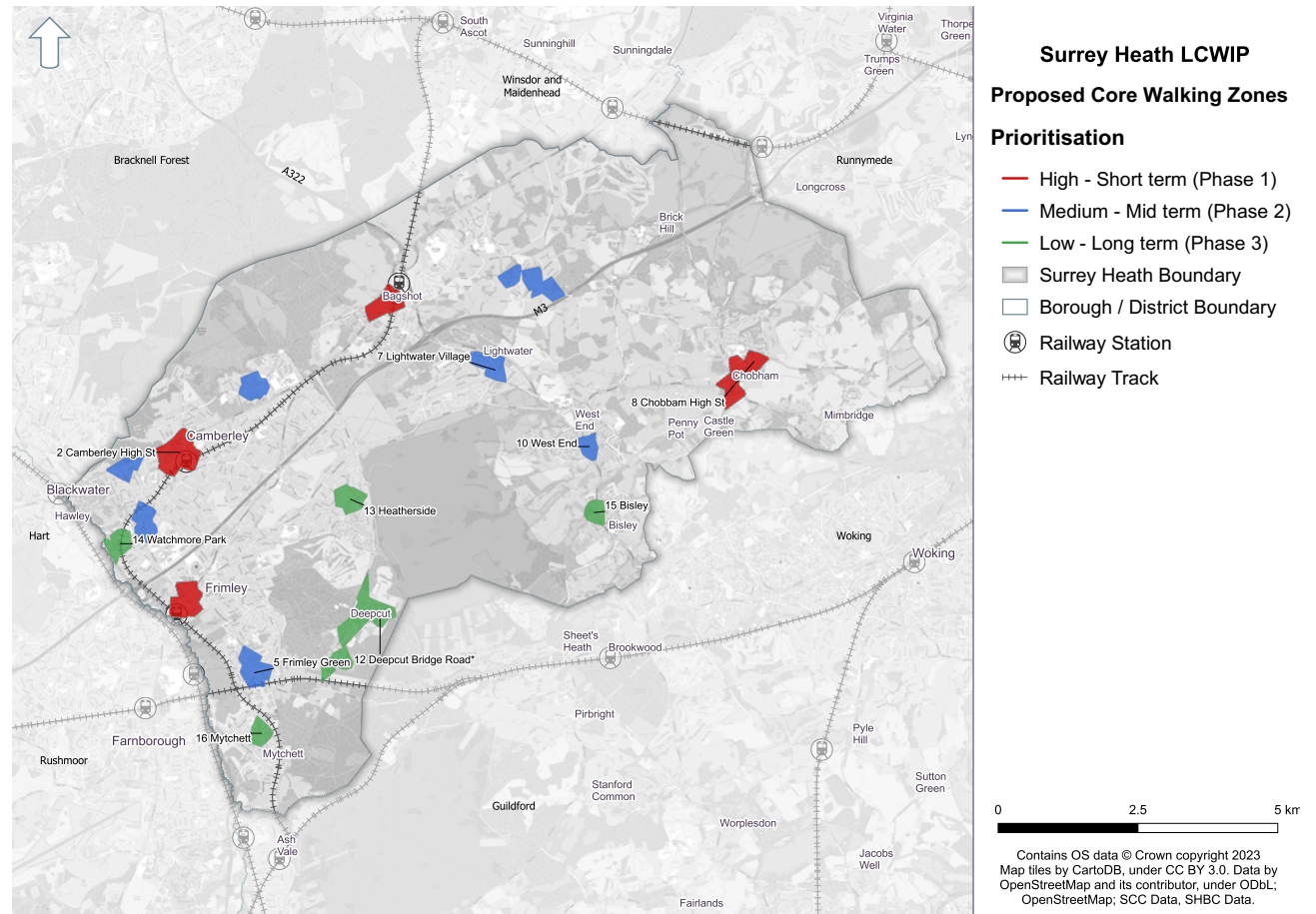


Figure 135. Suggested prioritisation of the identified core walking zones in the aspirational list

## Assessment of the Phase 1 schemes

The Phase 1 cycle corridors and the core walking zones were assessed using the criteria summarised below. This further assessment of the cycling and walking<sup>1</sup> corridors is intended to assist SCC and SHBC in understanding which proposed Phase 1 schemes may have greater benefits for users. The Phase 1 prioritisation incorporated additional criteria to the previous prioritisation of the aspirational lists. Criteria were rated on a scale from 1 to 3 (low to high) and include assessment of the proposed interventions.

### Scoring Criteria

#### *Demand Criteria*

- » Public input: Public comments obtained via Surrey's LCWIP interactive map was used to estimate the demand from active users for improvements.
- » Collision data: recorded collisions along the corridors and links (per km of the corridor/link) indicating the demand for improvements along the corridor/link.
- » Potential flows: a score was derived based on the highest existing pedestrian flows along each walking link, as estimated from the Propensity to Cycle Tool (PCT) data. For cycling, an estimation of the potential increase in the number of people cycling for each route was calculated from PCT

<sup>1</sup> For the walking network the assessment was undertaken for each walking link within the core walking zone, as this was selected during the WRAT assessment. Each link generally has consistent characteristics along it (e.g., geometry, land use, etc.) and the LCWIP proposals have a similar approach along each link.

data using the E-Bike scenario for commuter flows and Dutch scenario for school flows.

#### *Quality of Improvements Criteria*

The criteria were intended to capture the potential of the improvements to encourage new walking and cycling trips and are based on the before/after RST and WRAT scoring.

- » Quality of design - safety: The criterion reflects the expected change for the RST and WRAT safety metric. Proposed changes that result in a more significant increase in the safety metric would be expected to have a higher net benefit than a route that scores relatively well in the current condition.
- » Quality of design - comfort: The criterion reflects the expected change for the RST and WRAT comfort metric. Proposed changes that result in a more significant increase in the comfort metric would be expected to have a higher net benefit than a route that scores relatively well in the current condition.
- » Quality of design - attractiveness, directness and coherence [walking only]: The three criteria reflect the expected change for the WRAT attractiveness, directness and coherence metrics. Proposed changes that result in a more significant increase in all the metrics would be expected to have a higher net benefit than a route that scores relatively well in the current condition.
- » Contributes to improved cycling network (cycling only): scores the connectivity of the proposed corridor with the rest of the aspirational cycle network.

#### *Access Criteria*

Access criteria are intended to capture whether the routes help improve pedestrian and cycle access to several key destinations. Criteria were generally scored as 'yes' (3) if at least one destination is identified, or 'no' (1), unless otherwise noted. For the cycle routes additional destinations within 400m from the route were assessed and scored with (2).

- » Education (e.g. school, college, library, etc)
- » Transport facilities (railway station or bus stop)
- » High Street/commercial area
- » Other key destination (parks, leisure centre, business parks, etc) (walking only).

#### *Deliverability Criteria*

Intended to reflect the potential deliverability of the proposals at this very early concept stage.

- » Ease of implementation: qualitative score that seeks to capture major constraints that may make implementation more difficult, such as potential need for third party land, major junction schemes, etc.
- » Dependency on other schemes (walking only): as the walking routes were assessed separately, this criterion is intended to assess the dependency of the proposals on other workstreams or proposed interventions on neighbouring walking route links.
- » Potential to achieve LTN 1/20 guidance (cycling only): reflects the potential constraints along the route and ability to achieve compliance with LTN 1/20 standards.



### Total Score and Factor Weighting

A score for each of the five criteria categories was calculated by averaging the results from the sub-criteria within the category. To calculate a total score for each route, the main categories were then weighted as follows:

- » Demand - 20%
- » Quality of improvements - 30%
- » Access - 20%
- » Deliverability - 30%

The weightings were intended to give a slightly higher input to the design factors, as proposed interventions with a greater anticipated impact over the existing condition could support a more substantial uplift in walking and cycling. Additionally, factors related to stakeholder input, usage, and access were previously incorporated into the route selection methodology at the start of the LCWIP process.

### Assessment Results

Table 16 and Table 17 and the maps in Figure 136 and Figure 137 present the outputs of the assessment process and the relative prioritisation of the Phase 1 cycle corridors and walking routes and their associated package of proposed interventions. The prioritisation categories were based on the relative rankings across the Phase 1 corridors (primary; secondary; tertiary).

The prioritisation tables are presented in Appendix 4.

Cycle Corridor 8 is prioritised as it provides direct connection to schools and two local

centres, enabling the shift from motorised traffic to active travel for short trips in the urban area. Similarly the more urban corridors appear to have higher relative priority to the routes via the A30 and the rural corridors as they provide immediate access to active travel links to larger number of population and areas of interest.

The prioritisation process identified walking corridors to the schools as links of highest priority, as well as the A30 corridor in Camberley area as the links that will have the greatest improvements in the pedestrian environment. The centres of the zones (local high streets) have relatively high priority too, as the proposed interventions will complement the existing good quality of the pedestrian facilities.

Cycle Corridor 1 is scored the highest as part of the prioritisation exercise. However, it is recognised that a scheme to improve cycling infrastructure is already underway. For this reason, it is therefore excluded from further development as part of the LCWIP process.

Table 16. Prioritisation table for the aspirational list of Cycle Corridors

Cycle Corridors	Score	Rank
8. Frimley to Frimley Green	78.3%	1
3. Camberley to Blackwater	73.9%	2
4. Frimley Road to Camberley High Street	72.8%	3
2. A30 – Camberley to Bagshot Railway Station	69.4%	4
6. A30 – Camberley to Rushmoor via Frimley Park	69.4%	4
16. Bagshot to Windlesham	58.3%	6

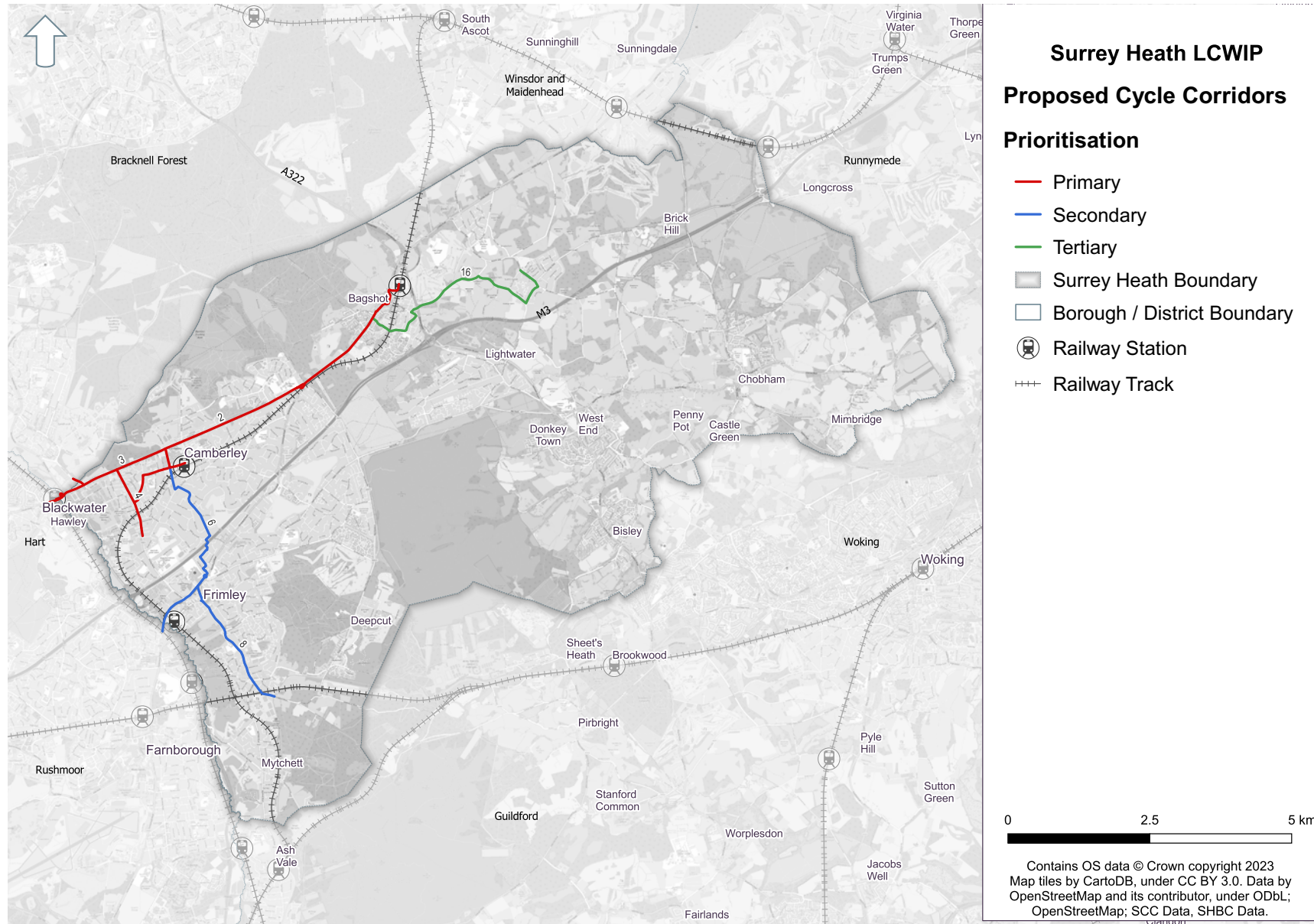


Figure 136. Suggested prioritisation of the Phase 1 cycle corridors



Table 17. Prioritisation table for the Phase 1 Walking links

Core walking zone	Link	Road Name	Score	Rank
8. Chobham Village	7.1	Walking path	83.67%	1
2. Camberley Town Centre	7.1	The Avenue	76.67%	2
4. Frimley High Street	10.1	Porsmouth Rd	76.67%	2
4. Frimley High Street	14.1	James Road	75.33%	4
4. Frimley High Street	1.4	Station approach	75.00%	5
2. Camberley Town Centre	8.2	London Rd	73.33%	6
8. Chobham Village	9.1	Delta Rd	73.33%	7
9. Bagshot High Street	16.1	Church Rd	72.33%	8
2. Camberley Town Centre	6.1	Portesbery Rd	72.00%	9
8. Chobham Village	2.1	Walking path - Chobham Cricket Ground	72.00%	9
2. Camberley Town Centre	5.1	Grand Avenue	71.00%	11
4. Frimley High Street	15.2	Frimley Bridge path - south	70.33%	12
4. Frimley High Street	15.3	River Blackwater path - east	70.33%	12
4. Frimley High Street	13.1	Frimley Road	70.00%	14
9. Bagshot High Street	6.1	Guildford Rd	70.00%	15
9. Bagshot High Street	13.1	Chapel Lane	70.00%	15
2. Camberley Town Centre	8.3	London Rd	69.33%	17
4. Frimley High Street	1.5	High Street	69.33%	17
9. Bagshot High Street	11.1	Walking path	69.33%	17

Core walking zone	Link	Road Name	Score	Rank
2. Camberley Town Centre	10.1	Crawley Ridge	67.33%	20
4. Frimley High Street	15.4	Frimley Bridge path - south east	67.00%	21
2. Camberley Town Centre	8.1	London Rd	66.67%	22
4. Frimley High Street	6.1	Sandringham Way	66.00%	23
4. Frimley High Street	7.1	Frimley Grove Gardens - Field Lane	66.00%	23
4. Frimley High Street	9.1	Porsmouth Rd	65.67%	25
4. Frimley High Street	11.1	Brackendale Close	65.33%	26
4. Frimley High Street	12.1	Frimley Road	65.00%	27
9. Bagshot High Street	8.1	Manor Way	65.00%	27
8. Chobham Village	1.1	Bagshot Rd	65.00%	29
4. Frimley High Street	15.1	River Blackwater path - west	64.67%	30
2. Camberley Town Centre	2.1	Heathcote Rd	64.33%	31
4. Frimley High Street	2.1	Frimley Bypass	63.33%	32
9. Bagshot High Street	9.1	Green Lane	63.33%	32
9. Bagshot High Street	1.2	London Rd	63.00%	34
9. Bagshot High Street	7.1	New Rd	63.00%	34
8. Chobham Village	6.1	Chertsey Rd	63.00%	34
2. Camberley Town Centre	2.2	High Street	62.67%	37
9. Bagshot High Street	3.1	Bridge Rd	62.67%	37





Core walking zone	Link	Road Name	Score	Rank
9. Bagshot High Street	4.1	High Street	62.67%	37
4. Frimley High Street	3.1	Church Rd	62.33%	40
9. Bagshot High Street	2.1	Station Road	62.00%	41
9. Bagshot High Street	5.1	High Street	62.00%	41
9. Bagshot High Street	1.1	London Rd	61.67%	43
8. Chobham Village	4.2	High Street	61.33%	44
4. Frimley High Street	1.1	High Street	60.67%	45
4. Frimley High Street	4.2	Frimley Green Road	60.67%	45
4. Frimley High Street	5.2	Balmoral Drive	60.33%	47
9. Bagshot High Street	17.2	Townpath 2	60.33%	47
8. Chobham Village	5.1	Station Rd	60.00%	49
2. Camberley Town Centre	9.1	Kings Ride	59.67%	50
9. Bagshot High Street	17.1	Townpath	58.67%	51
4. Frimley High Street	1.3	High Street	58.33%	52
8. Chobham Village	5.2	Station Rd	58.00%	53
9. Bagshot High Street	1.3	London Rd	58.00%	54
4. Frimley High Street	8.1	Alphington Avenue	57.67%	55
8. Chobham Village	4.1	Castle Grove Rd	57.67%	55
4. Frimley High Street	8.2	Tomlingston Way	57.00%	57
9. Bagshot High Street	17.3	Townpath 3	57.00%	57
2. Camberley Town Centre	4.1	Charles Street	56.67%	59

Core walking zone	Link	Road Name	Score	Rank
8. Chobham Village	4.4	Windsor Rd	56.67%	59
2. Camberley Town Centre	9.2	College Ride	56.33%	61
2. Camberley Town Centre	1.2	Park Road	56.00%	62
8. Chobham Village	3.1	School Lane	55.67%	63
8. Chobham Village	4.3	High Street	55.67%	63
9. Bagshot High Street	12.1	School Lane	55.33%	65
4. Frimley High Street	4.1	Frimley Green Road	54.67%	66
2. Camberley Town Centre	3.1	Park Street	54.33%	67
4. Frimley High Street	1.2	High Street	54.33%	67
9. Bagshot High Street	12.2	School Lane	54.00%	69
2. Camberley Town Centre	1.3	Church Hill	52.67%	70
2. Camberley Town Centre	3.2	Park Street	52.33%	71
4. Frimley High Street	5.1	Balmoral Drive	51.67%	72
2. Camberley Town Centre	1.1	Park Road	51.33%	73
9. Bagshot High Street	14.1	Waterers Way	51.33%	74
9. Bagshot High Street	10.1	Whitmoor Rd	49.67%	75
8. Chobham Village	8.1	Bowling Green Rd	46.00%	76
9. Bagshot High Street	15.1	Higgs Lane	43.67%	77



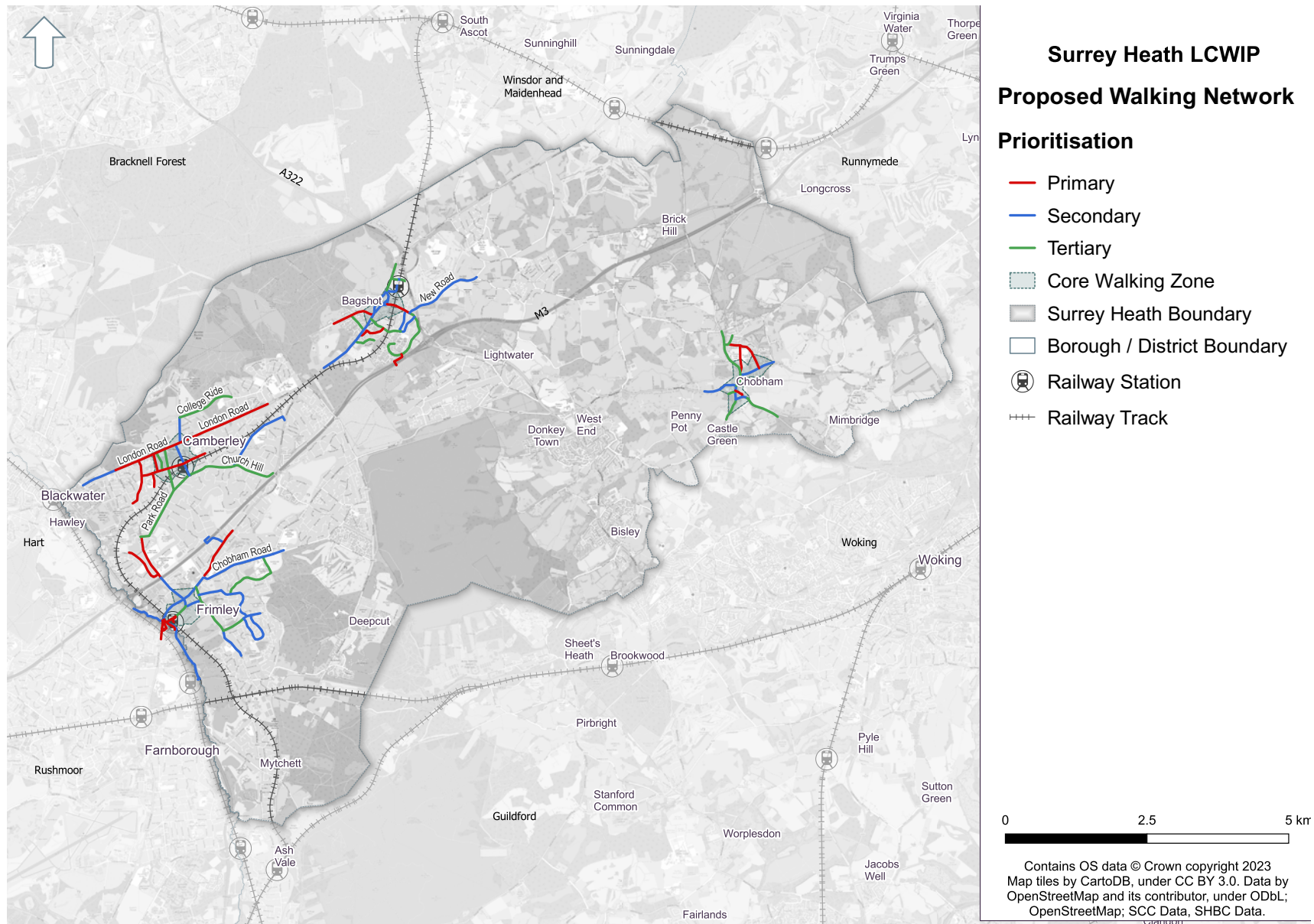


Figure 137. Suggested prioritisation of the Phase 1 walking network

# Indicative Cost Estimates

## Methodology

Outline costs were estimated for the concept proposals. The estimates are reflective of the early concept stage and intended to provide an indicative, rough order-of-magnitude cost only. Costs can vary significantly depending on local site conditions<sup>1</sup>.

Depending on the type of intervention, costs were estimated by two methods:

### Readily Available Unit Cost Information

Where available, unit cost information for common types of infrastructure improvements were obtained from data from DfT<sup>2</sup>, Wiltshire Council<sup>3</sup>, and Greater Manchester<sup>4</sup> (e.g. type of crossing, type of cycle facility). Cost estimates were then calculated based on the approximate quantity of facilities proposed (e.g. the number of toucan crossings, kilometres of cycle track). For these costs, it was assumed that the indicative unit cost available included all aspects of installation, such as allowances for preliminaries, risk, costs associated with the need for utility diversions, etc. Where the data source provided a range of

1 High level costs applicable to this study only, review of costs required as design progresses to feasibility /preliminary design phases.

2 Typical costs of cycling interventions, Interim analysis of Cycle City Ambition schemes, January 2017.

3 Costs of highway works, Wiltshire Council (<https://www.wiltshire.gov.uk/highways-works-cost>).

4 Greater Manchester Cycling design guidance, March 2014.

costs, the high cost was used to provide a more conservative estimate at this early concept stage.

### Costing for Bespoke Elements

For scheme elements where unit cost information was not readily available, more bespoke estimates were developed. These cost estimates include allowances for items which can currently be quantified (at initial concept design level), unknown or unquantifiable items, and risk. The estimates included the following assumptions:

*Quantifiable items (the basic costs of a scheme before allowing for risks):*

- » Engineering judgement was used to estimate material quantities (what would be covered by multiple items in a standard bill of quantities developed in detailed design<sup>5</sup>).

*Unknown or unquantifiable items:*

- » Allowance for those items which have not or cannot be quantified at this stage of design (25% of quantified costs).
- » Allowance for preliminaries and traffic management (15% of quantified costs).
- » Allowance for risk (20% of quantified costs).

5 An example would be length of kerbing or area of new carriageway. Kerbing was estimated as a combined single rate but in later stages this would be broken down to include the kerb, kerb bed, and kerb backing. For carriageway, the later stages would separately identify formation, capping, sub-base, road base, and surfacing.

- » Allowance for statutory undertakers diversions (15% of quantified costs).

### Other assumptions:

- » Each option is delivered individually and so no estimate of the efficiency from a combined delivery is applied.
- » Prices from different sources were adjusted to a 2023 (Q2) base year for all costs using inflation rates from the Consumer Price Index (CPI).
- » Does not include costs associated with the need for third party land acquisition (if required).
- » Assumes a standard material palette. Higher specification or a heritage materials palette may be preferred in some areas, which would be considered in detailed design and may require additional cost.
- » Where alternative options are noted in the initial concepts, only the indicative cost of the main proposal is included.
- » Area-wide proposals (e.g. wayfinding review/ upgrades, dropped kerb/tactile paving review/ improvements, off-street path lighting review/ improvements, etc.) cannot be quantified at this stage and not included in cost estimates.
- » A contingency of 40% is included to provide allowance for unknowns at this early stage of optioneering.
- » Design/consultancy fees are assumed to be 18% of capital costs.



- » Site supervision fees are assumed to be 12% of capital costs.
- » Potential programme for delivery is unknown at this stage. Therefore, total estimated costs are in 2023 prices. Once potential timescales for delivery are known, an adjustment for inflation should be applied.
- » Optimism bias is not included. This would typically be applied during outline business case<sup>6</sup>.

Estimated costs were tabulated by CWZ and cycle corridor. Therefore, each core walking zone/cycle corridor and each mode (walking and cycling) were evaluated separately. This method provided a stand alone cost for each CWZ and cycle corridor so they may be considered independently. However, if viewed as a network-wide package of improvements, there is opportunity for potentially significant savings associated with a combined delivery programme.

The indicative cost estimates for the package of improvements along each CWZ and cycle corridor are presented in Table 18 and Table 19, respectively. The unit cost references are summarised in Appendix 5.

Cost estimates will be revised in future stages as the schemes are developed, the proposals are more defined and more information is known.

Table 18. Indicative high level costs for the proposed walking improvements

		CWZ 2 - Camberley Town Centre	CWZ 4 - Frimley High Street	CWZ 6 - Bagshot High Street	CWZ 11 - Chobham Village
Link Cost		£573,000	£577,000	£3,699,000	£1,272,000
Junction Cost		£4,029,000	£2,520,000	£2,579,000	£1,050,000
<b>Total Base Capital Cost (2023 Prices)</b>		<b>£4,819,000</b>	<b>£3,243,000</b>	<b>£6,574,000</b>	<b>£2,432,000</b>
Contingency	40%	£1,927,600	£1,297,200	£2,629,600	£972,800
Design / consultancy fees	18%	£867,500	£583,800	£1,183,400	£437,800
Site supervision	12%	£578,300	£389,200	£788,900	£4,135,000
Land (not included)		£-	£-	£-	£-
<b>Total Estimated Cost (2023 Prices, rounded)</b>		<b>£13,505,000</b>	<b>£9,090,000</b>	<b>£18,425,000</b>	<b>£6,815,000</b>

<sup>6</sup> An optimism bias of 44% would typically be applied during the business case for early stage civil engineering projects, as per UK Treasury guidance (HM Treasury, Guide to Development of the Project Business Case).

Table 19. Indicative high level costs for the proposed cycle interventions

		<b>CC2 : A30 – Camberley to Bagshot Railway Station</b>	<b>CC3 : Camberley to Blackwater</b>	<b>CC4 : Frimley Road to Camberley High Street</b>	<b>CC6 : A30 – Camberley to Ryshmoor via Frimley Park</b>	<b>CC8 : Frimley to Frimley Green</b>	<b>CC16 : Bagshot to Windlesham</b>
Link Cost		£7,755,000	£3,215,000	£2,204,000	£4,058,000	£2,960,000	£2,799,000
Junction Cost		£1,356,000	£689,000	£960,000	£1,242,000	£964,000	£704,000
<b>Total Base Capital Cost (2023 Prices)</b>		<b>£9,540,000</b>	<b>£4,088,000</b>	<b>£3,313,000</b>	<b>£5,550,000</b>	<b>£4,109,000</b>	<b>£3,668,000</b>
Contingency	40%	£3,816,000	£1,635,200	£1,325,200	£2,220,000	£1,643,600	£1,467,200
Design / consultancy fees	18%	£1,717,200	£735,900	£596,400	£999,000	£739,700	£660,300
Site supervision	12%	£1,144,800	£490,600	£397,600	£666,000	£493,100	£440,200
Land (not included)		£-	£-	£-	£-	£-	£-
<b>Total Estimated Cost (2023 Prices, rounded)</b>		<b>£26,725,000</b>	<b>£11,455,000</b>	<b>£9,295,000</b>	<b>£15,555,000</b>	<b>£11,520,000</b>	<b>£10,285,000</b>





## 10. Next Steps

# Next Steps

The Surrey Heath LCWIP sets out a long-term strategy of potential infrastructure improvements to improve conditions for active travel in the Borough and support a shift from car journeys to sustainable modes. Whilst some concepts are ambitious and would require more detailed analysis of issues and constraints, they identify how sustainable growth and modal shift could be achieved.

The LCWIP report is the first stage in the process for investment in active travel in the Borough and Surrey more broadly. The end-to-end process is outlined below:

- » **Stage 1 - Plan (LCWIP Report)**
- » Stage 2 - Feasibility
- » Stage 3 - Business case / secure funding
- » Stage 4 - Delivery

The LCWIP report should be used to support the case for further stages of design, assessment and stakeholder engagement and secure funding to progress interventions for the corridors and areas identified.

As an LCWIP is intended to facilitate a long-term approach to developing active travel proposals over a period of approximately 10+ years, all of the corridors identified within the active travel network maps are recommended to progress to concept development at an appropriate time in the life of the LCWIP implementation. Whilst Phase 1 corridors/CWZs have been progressed to initial concepts, the ultimate aim is to also advance Phase 2 and Phase 3 corridors/CWZs.

Future opportunities to further expand the proposed network should also be considered, including corridors not identified within the current LCWIP, with the aim to deliver a high-quality network which reflects an appropriate density of routes.

## Feasibility Design

The next stage of LCWIP implementation will be to advance the Phase 1 high-level concepts to Stage 2 - feasibility design. This will allow a more detailed review of individual routes or interventions, evaluation of constraints, and refinement of the proposed measures. The ability to achieve LTN 1/20-compliant facilities has been noted as a potential issue along several of the proposed cycle corridors and would be examined in more detail (e.g. measures to mitigate high traffic flows). The feasibility stage would include a broader

stakeholder and public consultation process, enabling local input to help further shape the proposals.

There are several potential approaches to prioritising work in the next stage, such as:

### Option 1: Advance Phase 1 Interventions in Full

This approach would seek to advance the corridors / CWZs identified as highest priority, including the full package of proposed Phase 1 interventions.

### Option 2: Prioritise / Advance Individual Interventions

This approach would break down the corridors or walking zones into smaller segments or individual interventions. This would allow a more refined prioritisation process to target areas of highest need or the weakest links of the network. Implementation would therefore be targeted where it is expected to deliver the most significant overall improvement and deliver the highest value for money.

### Option 3: Quick Wins

This approach would review individual proposed interventions and identify potential 'quick wins' which could be implemented in the short term relatively easily. As with Option 2, this approach could focus on the Phase 1 routes or identify potential quick wins across the entire LCWIP network.



## Beyond Feasibility Design

Throughout the scheme development process, stakeholder engagement will continue to be a key element of developing high-quality and attractive active travel facilities for local users. The progression of these schemes, either as a work package or individual schemes, will likely be subject to external factors such as funding applications or potential interdependencies with other proposals within the local area.

The LCWIP should be viewed as a 'living document' and reviewed and updated periodically to reflect evolving needs and opportunities. This could be in response to significant changes in local circumstances, such as the publication of new policies or strategies. Engagement with SCC and SHDC has been undertaken during the development of the LCWIP to provide alignment and future-proofing with regards to key transport and local policies.

In future, additional active travel opportunities may also be identified and incorporated into the LCWIP in response to major new development sites, and as walking and cycling networks mature and expand.

Finally, to facilitate implementation, the LCWIP outputs should also be integrated into local planning and transport policies, strategies and delivery plans, as per DfT guidance.

## Funding

There are a number of potential sources of funding available to support delivery of active travel infrastructure identified in an LCWIP, with a key one being government grants through the Active Travel Fund. Once funding opportunities are secured, the proposed improvements can progress to preliminary and detailed design phases for implementation.

Several potential sources are summarised below<sup>1</sup>.

**Integrated Transport and Maintenance Block funding:** This is provided annually to the council by the Government's Department for Transport (DfT) to enable investment in various transport and highway projects and programmes.

**Government grants:** Central government frequently provides opportunities for local authorities to bid competitively for funding opportunities, with differing themes and objectives depending on the focus of the funding stream, such as the Active Travel Fund (ATF). The ATF is DfT's main funding stream to encourage uptake of walking and cycling and support Gear Change and the Cycling and Walking Investment Strategy 2. Government funding can also be made available for active travel improvements through other sources, such as the cycle rail fund to improve cycle facilities at railway stations.

Other Government grant sources may include Capability and Ambition Funds, Levelling Up

Funds and agency funding such as National Highways (e.g. Designated Funds).

**Developer funding:** Through the Planning process, the council as Local Planning Authority will negotiate with developers in order to mitigate any potential impacts of new development or accommodate the expected increased travel demand, especially walking, cycling and public transport. Developers are asked to pay for, or contribute towards, the cost of the additional infrastructure required. The level of contribution will be related to the scale of the new development and its impact on the local area. For transport, these specific funds can be secured via a legal agreement (Section 106 or Section 278) or works can be agreed that the developer fully pays for. However, the use of S106 planning obligations is mainly limited to site-specific mitigation measures.

There is also the Community Infrastructure Levy (CIL), which is a charge levied on new development by local authorities to help deliver infrastructure needed to support development in the area. Bids for strategic CIL allocations can be used to support delivery of active travel schemes.

**Other sources:** Other sources may include surplus parking income, Local Economic Partnership (LEP) funding, and / or internal funding.

<sup>1</sup> Not all the listed opportunities may be applicable to this LCWIP.

## Coordination with other workstreams

There are opportunities for coordination and collaboration with other active travel-related schemes to support implementation. This includes neighbouring LCWIPs to ensure cross-boundary continuity of walking and cycling networks such as with Hampshire County Council. Proposals from neighbouring areas should be reviewed together as an integrated package of strategies and interventions. This would allow potential synergies and interdependencies to be identified, potential competing needs to be resolved, and design proposals to be refined to ensure a cohesive overarching strategy.

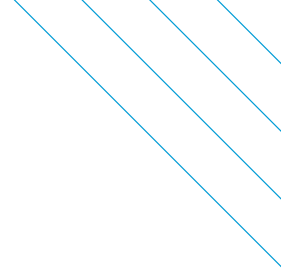
As noted in the review of previous studies (chapter 2), there is also an overlap of the LCWIP networks with several on-going or proposed studies, such as the Camberley to Frimley Cycleway (National Highways Designated Funds), and development proposals for site allocations in the local plan. Integration of the LCWIP networks and proposals with these schemes (and others) would provide another opportunity to facilitate implementation.

More broadly, the LCWIP is also a key strategy to support implementation of SCC's LTP4. Advancement of the LCWIP and active travel measures should be considered alongside other aspects of delivery of LTP4, such as public transport improvements or place-based strategies, to identify and resolve any potential competing needs amongst different modes and

ensure a comprehensive approach to scheme development.

Finally, SCC is in the preliminary stages of undertaking work to identify zones and progress designs for Local Street Improvements (LSIs) across the county. LSIs are being planned across Surrey in defined areas to ensure streets recognise their importance as places for people, and not just their importance for the movement of vehicles. They aim to increase the walkability of streets and improve cycling conditions on streets.

The work on LSIs will be complementary to LCWIP work, as it will provide more localised walking and cycling route connections and improve the permeability of Surrey's walking and cycling network, whilst delivering additional benefits such as a reduction in air and noise pollution, collision rates, increased community activity and increased physical activity of residents.



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# Appendices

Appendix 1: Multi-Criteria Assessment Framework (MCAF)

Appendix 2: Walking Route Assessment Tool (WRAT)

Appendix 3: Route Selection Tool (RST)

Appendix 4: First Phase Assessments

Appendix 5: Indicative Unit Cost Estimates

Appendix 6: Stakeholder Comments on Concepts

Appendix 7: Sustrans Cycle Corridor 5 Review

# Appendix 1: Multi-Criteria Assessment Framework (MCAF)

Cycle Corridors		Access (within 400m)			Demand			Cycle Network			Deliverability	Stakeholder Input		Performance Metrics								
Criterion		Access (within 400m)			Demand			Cycle Network			Deliverability	Stakeholder Input		Access (within 400m)	Demand	Cycle Network	Deliverability	Stakeholder Input	Total Unweighted score	Total Weighted Score	Rank	
Description		Commercial areas served by corridor (within 400m of corridor)	Railway Station access (number of stations within 400m of route)	Number of Schools along corridor*	School PCT (On Dutch, number of daily school trips)	PCT Tool (E bike, number of daily commuters)	Development Areas (number of dwellings)	Contributes to improved cycling network - number of links to other segments of proposed CCWP network	Contributes to improved cycling network - Existing cycle facilities and bridleways	Pedal cycle collision rate (cycle collisions per km)	Ease of implementation	Commonplace Comments + WiderMyPath (comments & agreements per km)	Stakeholder feedback - Workshop (number of Stakeholder votes)									
Rating Rules	Length (km)	1: > 2 2: < 3 3: > 3	1: > 2 2: < 3 3: > 3	1: < 1 2: < 2 3: > 2	1: < 150 2: < 300 3: > 300	1: < 300 2: < 700 3: > 700	1: < 150 2: < 1000 3: > 1000	1: < 1 2: < 1.5 3: > 1.5	1: > 0.25 2: < 0.25 3: < 0.1	1: < 0.5 2: < 1.5 3: > 1.5	1: likely major constraints, such as limited public highway, bridges, steep gradient 2: significant constraints, narrow country lanes with no significant traffic flows 3: use of footpath, bridleways and sections of country lanes with no traffic	1: < 4.5 2: < 7 3: > 7	1: < 2 2: < 3 3: > 3	30%	30%	15%	10%	15%	100%			
Weighting		2	3	3	2	2	2	1	1	3	1	2	1	30%	30%	15%	10%	15%	100%			
Max Score		3	3	3	3	3	3	3	3	3	3	3	3									
1. Camberley to Frimley	4.17	3	2	3	3	3	3	3	3	3	2	3	3	88%	100%	100%	67%	100%	91%	92.93%	1	
2. A30 - Camberley to Bagshot Railway Station	6.164	3	2	3	3	2	3	3	3	2	1	3	3	88%	89%	80%	33%	78%	74%	79.92%	3	
3. A30 - Camberley to Blackwater	2.725	2	2	2	1	2	3	2	2	3	3	3	3	67%	67%	87%	100%	78%	80%	74.67%	6	
4. Frimley Road to Camberley High Street	2.293	3	1	2	2	3	2	3	3	3	3	3	3	63%	78%	100%	100%	78%	84%	78.75%	4	
5. Camberley to Old Dean	2.997	2	1	3	3	1	3	2	2	2	2	2	2	67%	78%	67%	67%	44%	64%	66.67%	11	
6. Camberley to Rushmoor via Frimley Park H	4.063	2	2	3	2	3	2	3	3	3	1	3	3	79%	78%	100%	33%	100%	78%	80.42%	2	
7. Camberley to Heatherside and Old Dean	4.778	2	1	3	3	3	2	2	2	2	1	2	2	67%	89%	67%	33%	44%	60%	66.67%	11	
8. Frimley to Frimley Green	2.562	2	1	3	2	3	2	3	3	3	2	3	3	67%	78%	100%	67%	78%	78%	76.67%	5	
9. Frimley to Heatherside loop	5.477	2	0	3	1	3	2	1	1	2	3	3	3	54%	67%	53%	100%	100%	75%	69.25%	9	
10. Frimley to Deepcut	3.231	2	1	3	1	2	3	2	2	2	3	2	2	67%	67%	67%	100%	44%	69%	66.67%	11	
11. Frimley Green to Mytchett and Ash Vale	2.624	2	2	2	2	2	1	2	2	3	1	3	3	67%	56%	87%	33%	78%	64%	64.67%	14	
12. A30 to Basinstoke Canal via Deepcut	6.113	2	0	3	3	2	3	2	2	2	3	2	2	54%	89%	67%	100%	67%	75%	72.92%	7	
13. Blackwater Valley Path	8.536	2	3	3	1	3	2	1	1	1	2	2	2	92%	67%	33%	67%	67%	65%	69.17%	10	
14. Basinstoke Canal	8.809	3	3	2	1	1	3	1	1	1	3	3	2	88%	56%	33%	100%	89%	73%	71.25%	8	
15. Lightwater to Heatherside	3.774	2	0	1	3	2	1	2	2	2	2	3	3	29%	67%	67%	67%	56%	57%	53.75%	18	
16. Bagshot to Windlesham	4.282	2	1	2	2	1	1	3	3	2	1	3	3	54%	44%	60%	67%	100%	65%	60.25%	15	
17. Bagshot to Lightwater	3.121	2	1	3	1	1	1	3	3	1	2	3	3	67%	33%	60%	67%	78%	61%	57.33%	17	
18. Lightwater to Knaphill via West End	5.124	3	0	3	3	2	1	1	1	2	1	3	3	63%	67%	53%	33%	56%	54%	58.42%	16	
19. West End to Woking via Chobham	6.011	1	0	2	1	1	1	1	1	2	2	3	3	33%	33%	53%	67%	56%	48%	43.00%	20	
20. Lightwater to Windlesham	4.75	2	0	2	1	1	1	3	3	1	2	3	3	42%	33%	60%	67%	56%	51%	46.50%	19	

Table 20. MCAF output table for cycling aspirational list



Criterion	Access				Demand			Existing pedestrian quality			Deliverability		Stakeholder Input								
	Other key destinations (Retail areas, parks, Hospitals; within 10min walk)	Number of Schools (within 10min walk)	Bus Stops (# of stops) (within 10min walk)	Rail Station access (within 10min walk)	Development Sites - No of dwellings (within 10min walk)	Total Population (within 10min walk)	Total Workplace Population (within 10min walk)	Posted Speed (Highest speed within CWZ)	Traffic Flows (highest flows within CWZ)	Pedestrian Collision History (within CWZ)	Potential to improve to a high and accessible standard, relative to existing condition (along main CWZ corridor only)	Significant constraints or dependencies (along main CWZ corridor only)	Commonplace Comments (within CWZ)	Stakeholder feedback - Workshop (number of Stakeholder votes)							
Rating Rules	1: < 6 2: < 9 3: ≥ 9	1: < 2 2: < 3 3: ≥ 3	1: < 20 2: < 30 3: ≥ 30	No of stations Score: 0: No railway Station 1: 1 RS within 10min walk 3: 1 RS within CWZ	1: < 100 2: < 150 3: ≥ 150	1: < 10000 2: < 15000 3: ≥ 15000	1: < 2500 2: < 9000 3: ≥ 9000	1: ≤ 20 2: = 30 3: > 30	1: < 5000 2: > 15000 3: > 15000	1: < 1 2: < 3 3: ≥ 3	1: lower potential 2: medium potential 3: higher potential	1: significant constraints (e.g. land take, third party works) 2: constraints typical for a transport improvement 3: limited constraints	1: < 2 2: < 8 3: ≥ 8	1: < 1 2: < 2 3: ≥ 2	Access	Demand	Existing pedestrian quality	Deliverability	Stakeholder Input	Weighted Score	Rank
2. Camberley Town Centre	3	2	3	3	3	3	3	3	3	3	1	3	2	3	90%	100%	100%	67%	78%	90.33%	2
3. Frimley Road	3	3	2	0	2	3	3	2	3	3	3	3	0	3	63%	89%	93%	100%	33%	74.67%	4
4. Frimley High Street	2	3	3	3	3	3	3	3	3	3	3	1	3	3	93%	100%	100%	67%	100%	94.67%	1
5. Frimley Green	2	3	2	2	3	2	2	2	3	3	2	2	0	3	77%	78%	93%	67%	33%	72.00%	5
6. Old Dean	1	3	3	0	1	2	1	2	1	3	3	2	2	1	57%	44%	80%	83%	56%	59.00%	7
7. Lightwater Village	2	2	2	0	1	1	1	2	1	1	3	2	2	3	47%	33%	40%	83%	78%	50.00%	11
8. Chobham Village	3	2	2	0	2	1	1	2	2	2	2	3	2	2	53%	44%	67%	83%	67%	57.67%	8
9. Bagshot High Street	2	2	1	3	2	1	2	3	3	3	2	3	3	3	70%	56%	100%	83%	100%	76.00%	3
10. West End	1	2	1	0	1	1	1	3	3	2	3	2	3	2	33%	33%	80%	83%	89%	53.67%	10
11. Windlesham	1	1	1	0	3	1	1	2	1	2	2	2	3	3	23%	56%	60%	67%	100%	54.33%	9

Table 21. MCAF output table for core walking zone aspirational list



# Appendix 2: Walking Route Assessment Tool (WRAT)

Table 22. WRAT results for walking links: CWZ4 Frimley High Street - existing & proposals

CWZ	Link	Road name	length (m)	WRAT - PERCENTILE - EXISTING						WRAT - PERCENTILE - PROPOSALS					
				Attractiveness	Comfort	Directness	Safety	Coherence	Total	Attractiveness	Comfort	Directness	Safety	Coherence	Total
4. Frimley High Street	1.1	High Street	116	67%	55%	50%	67%	33%	55%	75%	100%	67%	100%	91%	
4. Frimley High Street	1.2	High Street	42	83%	85%	71%	67%	67%	78%	83%	100%	71%	67%	86%	
4. Frimley High Street	1.3	High Street	207	83%	70%	86%	67%	17%	71%	83%	100%	67%	67%	90%	
4. Frimley High Street	1.4	Station approach	125	50%	70%	100%	100%	33%	72%	58%	90%	100%	100%	84%	
4. Frimley High Street	1.5	High Street	400	50%	65%	57%	17%	33%	52%	58%	65%	100%	17%	64%	
4. Frimley High Street	2.1	Frimley Bypass	520	0%	0%	14%	0%	33%	7%	0%	0%	14%	0%	7%	
4. Frimley High Street	3.1	Church Rd	282	67%	85%	79%	67%	67%	76%	75%	100%	83%	100%	93%	
4. Frimley High Street	4.1	Frimley Green Road	917	67%	75%	100%	83%	33%	76%	75%	85%	100%	83%	84%	
4. Frimley High Street	4.2	Frimley Green Road	564	83%	75%	79%	83%	50%	76%	92%	95%	100%	83%	95%	
4. Frimley High Street	5.1	Balmoral Drive	418	58%	85%	64%	83%	67%	72%	67%	85%	93%	83%	84%	
4. Frimley High Street	5.2	Balmoral Drive	315	100%	90%	100%	100%	50%	91%	100%	90%	100%	67%	93%	
4. Frimley High Street	6.1	Sandringham Way	1030	100%	60%	100%	100%	33%	79%	100%	95%	100%	50%	93%	
4. Frimley High Street	7.1	Frimley Grove Gardens - Field Lane	1269	92%	80%	100%	100%	17%	83%	92%	95%	100%	83%	95%	
4. Frimley High Street	8.1	Alphington Avenue	910	100%	75%	100%	100%	33%	84%	100%	95%	100%	100%	98%	
4. Frimley High Street	8.2	Tomlingston Way	315	75%	70%	100%	100%	33%	78%	100%	100%	100%	100%	100%	

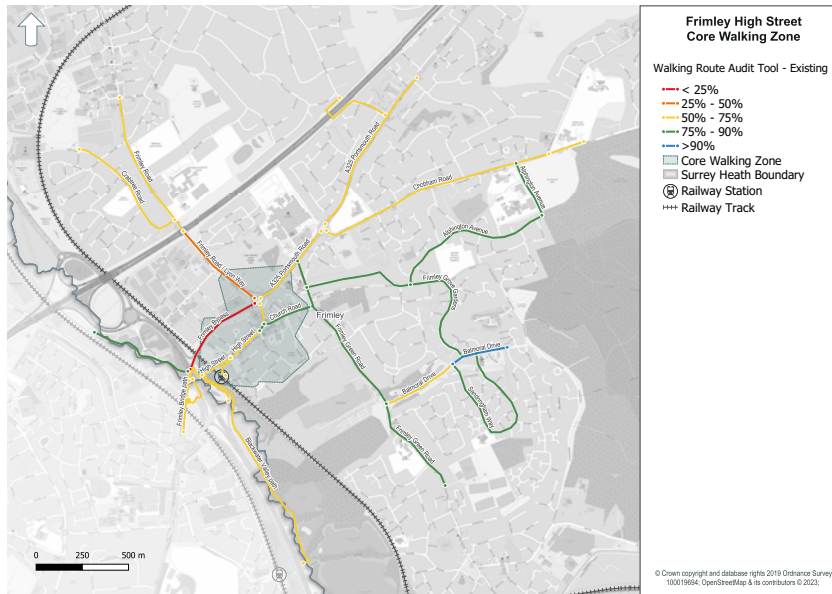


Figure 138. CWZ4 Frimley High Street - existing WRAT results

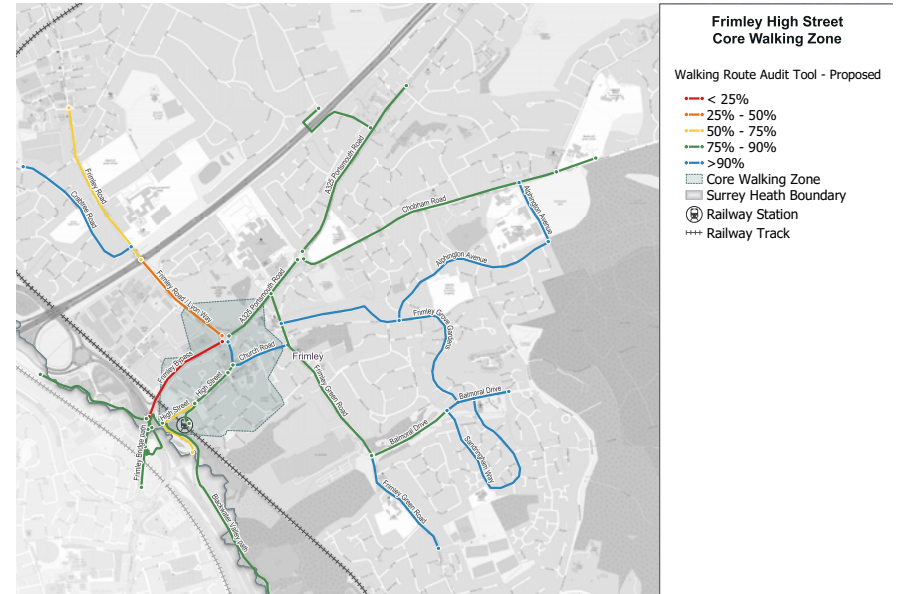


Figure 139. CWZ4 Frimley High Street - proposed WRAT results



Table 23. WRAT results for walking links: CWZ2 Camberley Town Centre - existing & proposals

CWZ	Link	Road name	length (m)	WRAT - PERCENTILE - EXISTING					WRAT - PERCENTILE - PROPOSALS						
				Attractiveness	Comfort	Directness	Safety	Coherence	Total	Attractiveness	Comfort	Directness	Safety	Coherence	Total
2. Camberley Town Centre	1.1	Park Road	1064	83%	80%	93%	67%	33%	78%	83%	95%	100%	67%	100%	91%
2. Camberley Town Centre	1.2	Park Road	715	75%	75%	86%	50%	33%	71%	75%	95%	86%	50%	67%	81%
2. Camberley Town Centre	1.3	Church Hill	1254	42%	45%	43%	17%	33%	40%	58%	95%	57%	33%	100%	72%
2. Camberley Town Centre	2.1	Heathcote Rd	226	75%	85%	100%	100%	33%	83%	75%	100%	100%	100%	100%	95%
2. Camberley Town Centre	2.2	High Street	359	92%	95%	100%	100%	67%	93%	92%	100%	100%	100%	100%	98%
2. Camberley Town Centre	3.1	Park Street	402	67%	70%	93%	50%	33%	69%	67%	70%	100%	50%	100%	78%
2. Camberley Town Centre	3.2	Park Street	347	92%	100%	100%	100%	67%	95%	92%	100%	100%	100%	100%	98%
2. Camberley Town Centre	4.1	Charles Street	328	50%	90%	93%	100%	83%	83%	67%	100%	100%	100%	100%	93%
2. Camberley Town Centre	5.1	Grand Avenue	313	100%	85%	100%	100%	33%	88%	100%	100%	100%	100%	100%	100%
2. Camberley Town Centre	6.1	Portesbery Rd	1213	83%	45%	100%	100%	33%	71%	100%	100%	100%	100%	100%	100%
2. Camberley Town Centre	7.1	The Avenue	811	75%	65%	64%	50%	33%	62%	92%	100%	100%	100%	100%	98%
2. Camberley Town Centre	8.1	London Rd	628	42%	40%	36%	50%	50%	41%	58%	95%	100%	83%	100%	88%

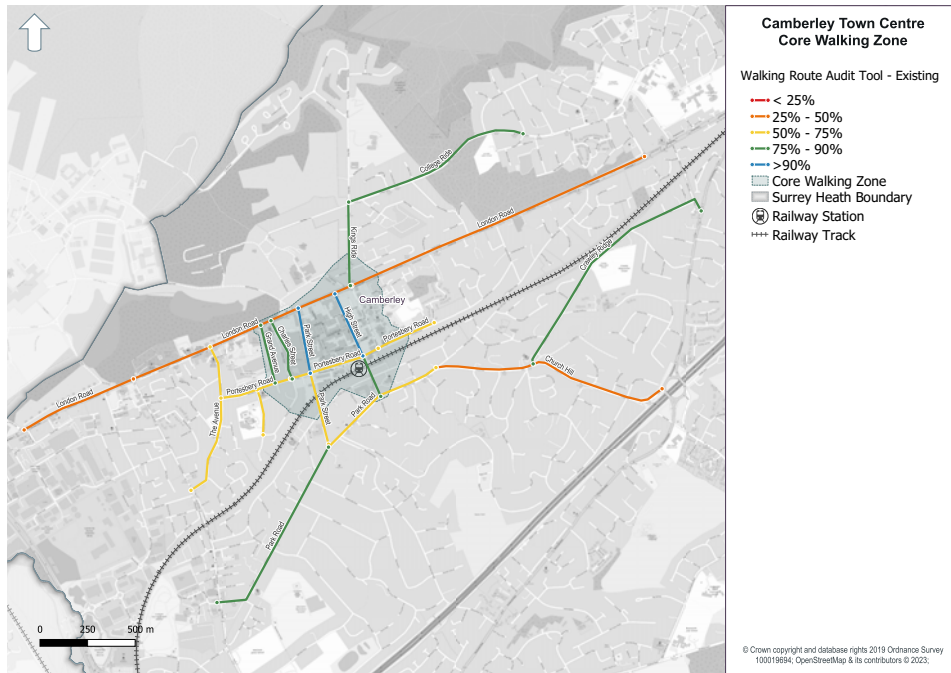


Figure 140. CWZ2 Camberley Town Centre - existing WRAT results

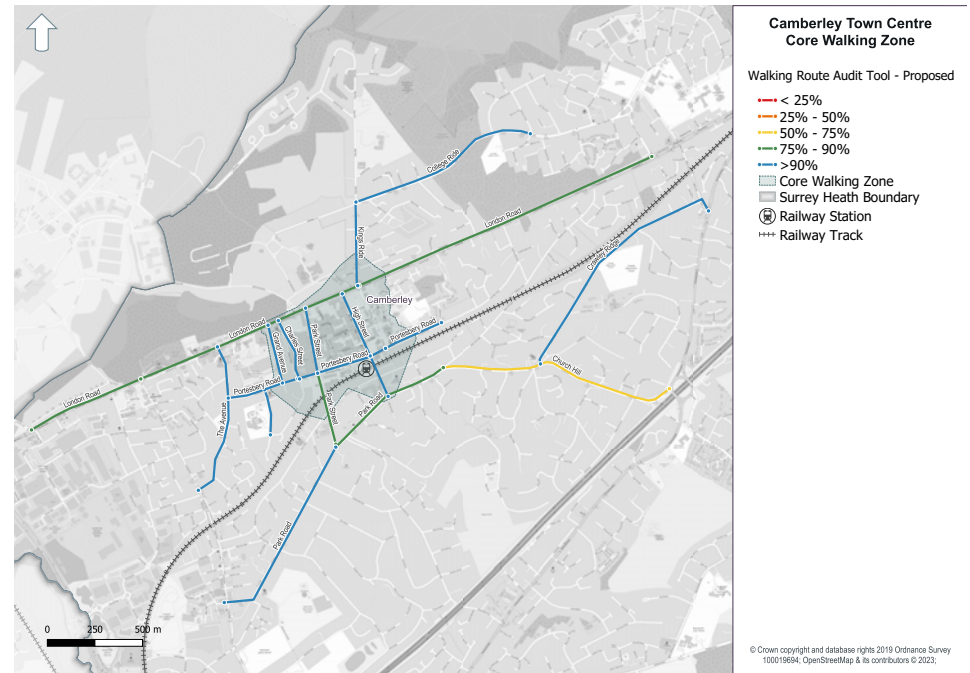


Figure 141. CWZ2 Camberley Town Centre- proposed WRAT results



Table 24. WRAT results for walking links: CWZ 9 Bagshot High Street- existing & proposals

CWZ	Link	Road name	length (m)	WRAT - PERCENTILE - EXISTING						WRAT - PERCENTILE - PROPOSALS					
				Attractiveness	Comfort	Directness	Safety	Coherence	Total	Attractiveness	Comfort	Directness	Safety	Coherence	Total
9. Bagshot High Street	1.1	London Rd	737	58%	75%	57%	33%	50%	60%	67%	95%	100%	33%	67%	81%
9. Bagshot High Street	1.2	London Rd	1109	42%	60%	36%	33%	33%	45%	58%	100%	100%	50%	100%	86%
9. Bagshot High Street	1.3	London Rd	495	42%	55%	21%	17%	17%	36%	58%	95%	100%	33%	100%	83%
9. Bagshot High Street	2.1	Station Road	270	83%	75%	86%	83%	67%	79%	92%	95%	93%	100%	100%	95%
9. Bagshot High Street	3.1	Bridge Rd	240	67%	55%	83%	50%	17%	59%	83%	95%	100%	67%	100%	91%
9. Bagshot High Street	4.1	High Street	132	67%	50%	100%	67%	0%	62%	83%	100%	100%	100%	100%	97%
9. Bagshot High Street	5.1	High Street	276	67%	85%	71%	50%	33%	69%	67%	100%	100%	67%	100%	90%
9. Bagshot High Street	6.1	Guildford Rd	430	67%	90%	57%	67%	50%	71%	67%	100%	100%	67%	100%	90%
9. Bagshot High Street	7.1	New Rd	1395	42%	55%	7%	17%	17%	33%	67%	100%	100%	33%	100%	86%
9. Bagshot High Street	8.1	Manor Way	383	83%	70%	100%	83%	17%	76%	83%	70%	100%	83%	17%	76%
9. Bagshot High Street	9.1	Green Lane	351	83%	90%	100%	83%	17%	83%	92%	100%	100%	100%	100%	98%
9. Bagshot High Street	10.1	Whitmoor Rd	1377	67%	85%	100%	83%	50%	81%	75%	100%	100%	83%	100%	93%
9. Bagshot High Street	11.1	Walking path	282	33%	45%	93%	67%	67%	59%	67%	95%	93%	100%	100%	90%

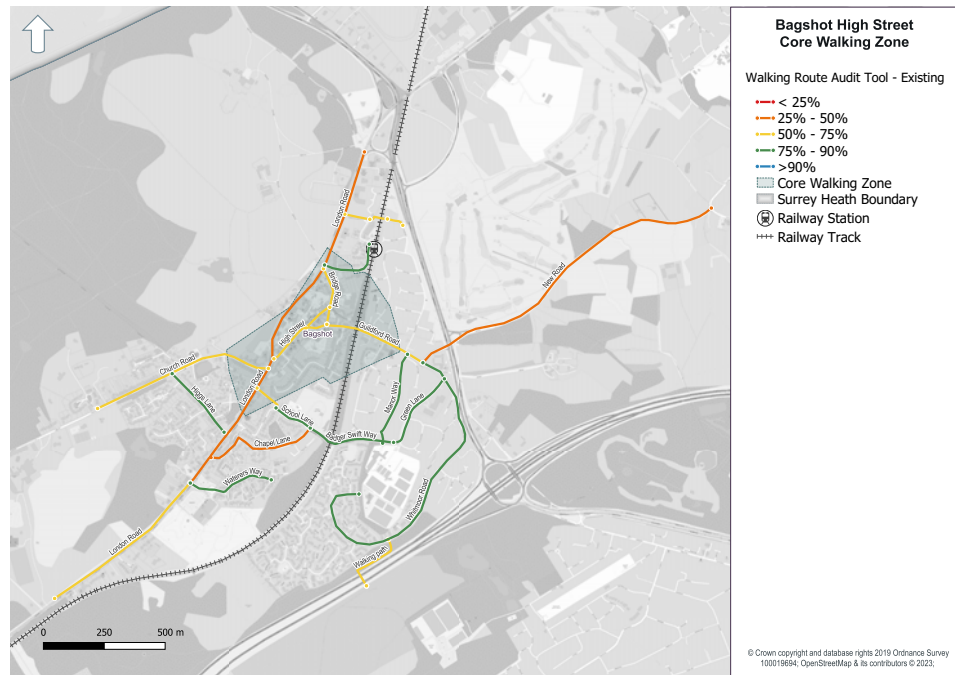


Figure 142. CWZ 9 Bagshot High Street - existing WRAT results

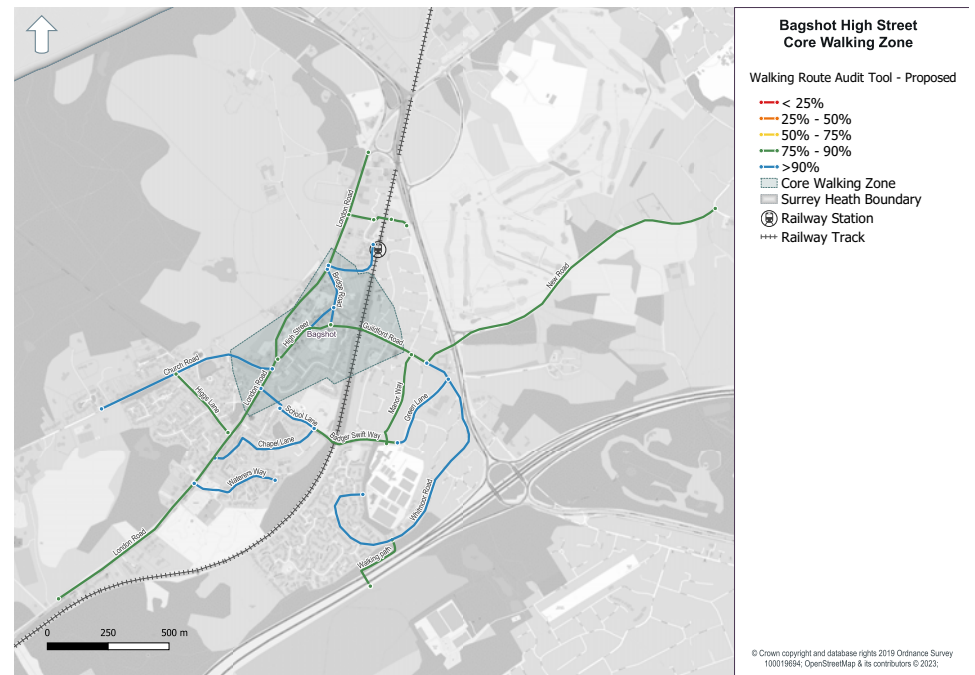


Figure 143. CWZ 9 Bagshot High Street - proposed WRAT results

Table 25. WRAT results for walking links: CWZ8 Chobham Village - existing & proposals

CWZ	Link	Road name	length (m)	WRAT - PERCENTILE - EXISTING						WRAT - PERCENTILE - PROPOSALS					
				Attractiveness	Comfort	Directness	Safety	Coherence	Total	Attractiveness	Comfort	Directness	Safety	Coherence	Total
8. Chobham Village	1.1	Bagshot Rd	620	42%	65%	57%	50%	17%	52%	75%	100%	100%	100%	100%	95%
8. Chobham Village	2.1	Walking path - Chobham Cricket Ground	182	50%	45%	100%	83%	67%	66%	75%	95%	100%	83%	100%	91%
8. Chobham Village	3.1	School Lane	123	92%	85%	100%	100%	67%	90%	100%	95%	100%	100%	67%	95%
8. Chobham Village	4.1	Castle Grove Rd	396	42%	25%	43%	33%	0%	31%	67%	90%	71%	33%	100%	76%
8. Chobham Village	4.2	High Street	240	67%	75%	57%	33%	33%	60%	100%	100%	71%	100%	100%	93%
8. Chobham Village	4.3	High Street	220	67%	70%	43%	33%	33%	55%	75%	95%	64%	33%	100%	78%
8. Chobham Village	4.4	Windsor Rd	884	67%	75%	57%	33%	50%	62%	67%	95%	100%	33%	100%	84%
8. Chobham Village	5.1	Station Rd	211	58%	60%	50%	50%	17%	52%	75%	100%	100%	100%	95%	
8. Chobham Village	5.2	Station Rd	645	42%	60%	57%	50%	33%	52%	58%	100%	100%	67%	100%	88%

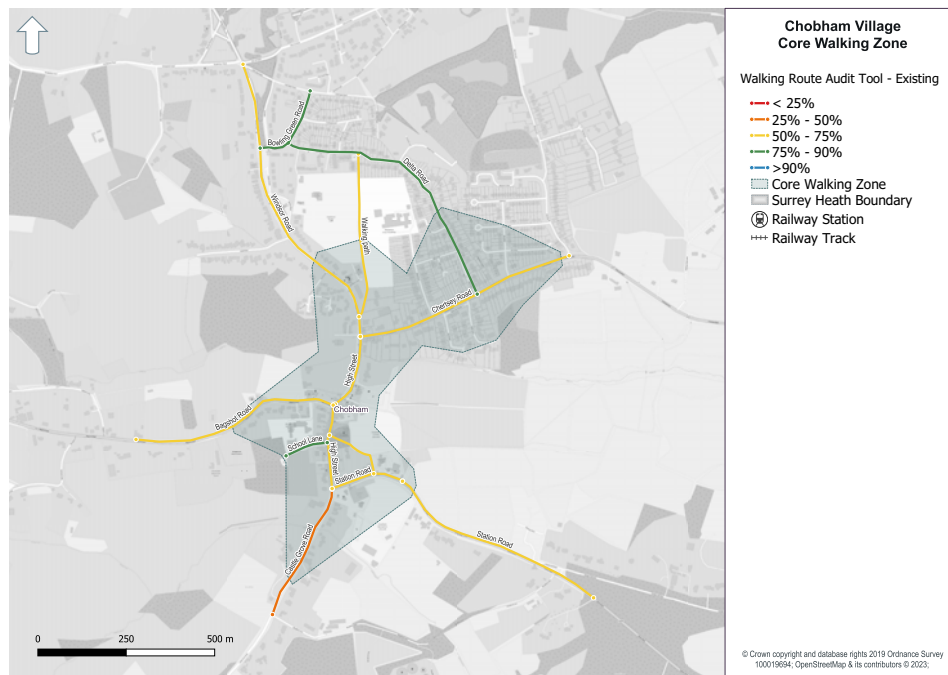


Figure 144. CWZ8 Chobham Village - existing WRAT results

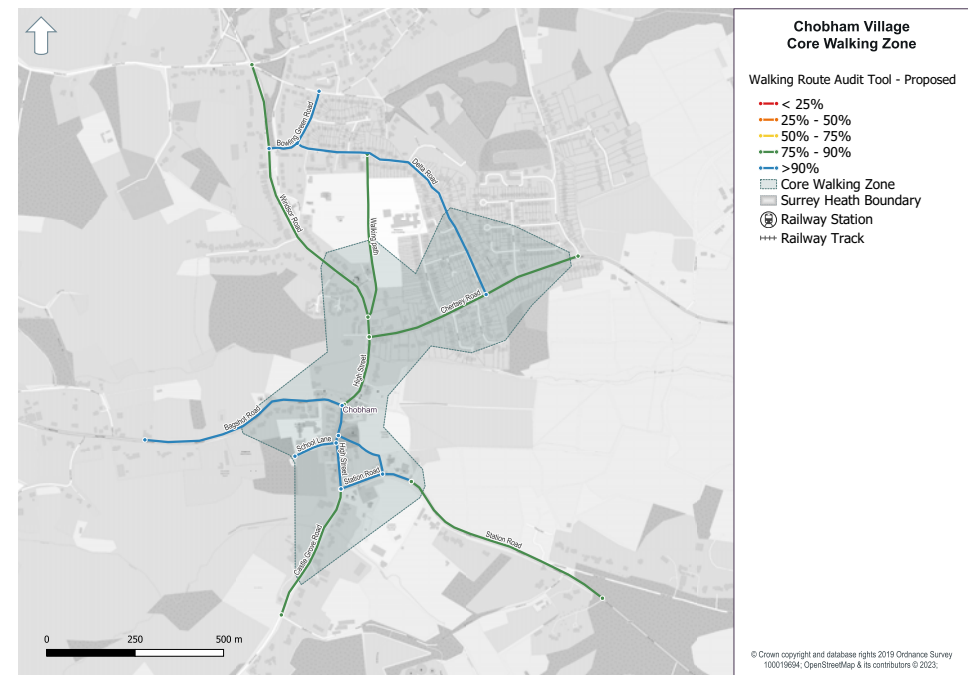


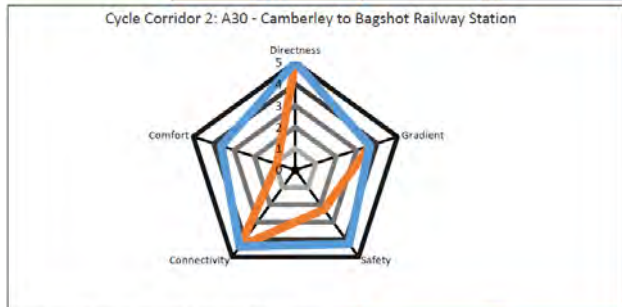
Figure 145. CWZ8 Chobham Village - proposed WRAT results



# Appendix 3: Route Selection Tool (RST)

Table 26. RST summary for Cycle Corridor 2

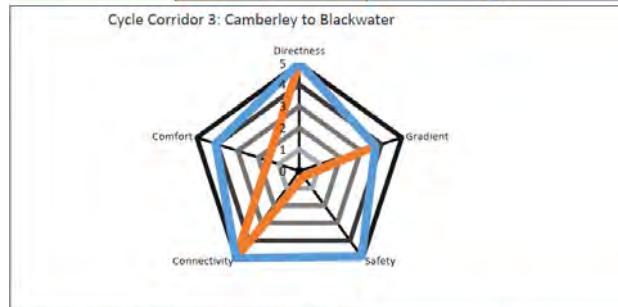
Route Name	Cycle Corridor 2: A30 - Camberley to Bagshot Railway Station	
Overall Length	5.65	
Name of Assessor(s)		
Date of Assessment		
Performance Scores		
Criterion	Existing	Potential
Directness	5.00	5.00
Gradient	3.64	3.64
Safety	2.27	4.25
Connectivity	4.41	4.41
Comfort	0.90	3.62
	<b>16.22</b>	<b>20.93</b>



Number of Existing Critical Junctions/Crossings	15
Number of Potential Critical Junctions/Crossings	3

Table 27. RST summary for Cycle Corridor 3

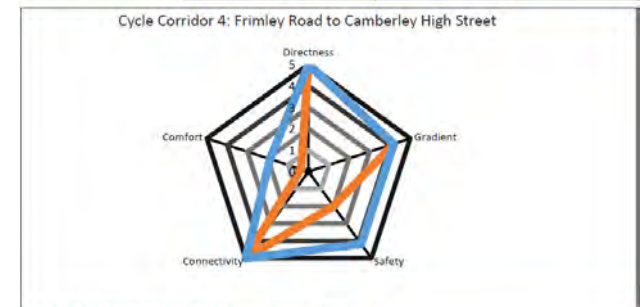
Route Name	Cycle Corridor 3: Camberley to Blackwater	
Overall Length	2.44	
Name of Assessor(s)		
Date of Assessment		
Performance Scores		
Criterion	Existing	Potential
Directness	5.00	5.00
Gradient	3.71	3.71
Safety	0.33	4.92
Connectivity	5.00	5.00
Comfort	1.53	4.08
	<b>15.57</b>	<b>22.71</b>



Number of Existing Critical Junctions/Crossings	13
Number of Potential Critical Junctions/Crossings	0

Table 28. RST summary for Cycle Corridor 4

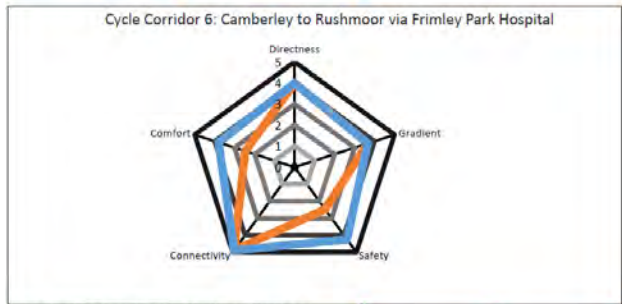
Route Name	Cycle Corridor 4: Frimley Road to Camberley High Street	
Overall Length	2.54	
Name of Assessor(s)		
Date of Assessment		
Performance Scores		
Criterion	Existing	Potential
Directness	5.00	5.00
Gradient	4.19	4.19
Safety	1.99	4.19
Connectivity	5.00	5.00
Comfort	0.37	1.89
	<b>16.54</b>	<b>20.27</b>



Number of Existing Critical Junctions/Crossings	0
Number of Potential Critical Junctions/Crossings	1

Table 29. RST summary for Cycle Corridor 6

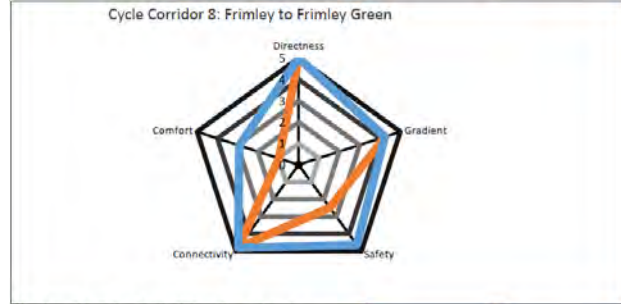
Route Name	Cycle Corridor 6: Camberley to Rushmoor via Frimley Park Hospital	
Overall Length	4.35	
Name of Assessor(s)		
Date of Assessment		
<b>Performance Scores</b>		
Criterion	Existing	Potential
Directness	4.00	4.00
Gradient	3.05	3.05
Safety	2.47	4.24
Connectivity	4.89	4.89
Comfort	2.47	3.80
	<b>17.48</b>	<b>20.68</b>



Number of Existing Critical Junctions/Crossings	21
Number of Potential Critical Junctions/Crossings	2

Table 30. RST summary for Cycle Corridor 8

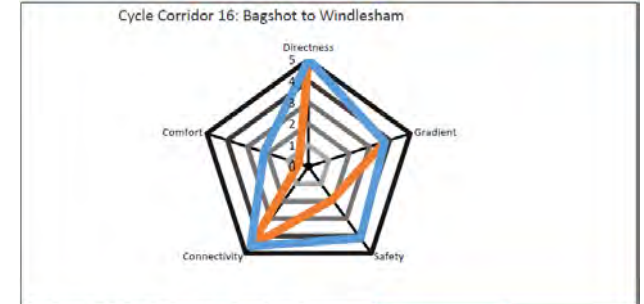
Route Name	Cycle Corridor 8: Frimley to Frimley Green	
Overall Length	2.48	
Name of Assessor(s)		
Date of Assessment		
<b>Performance Scores</b>		
Criterion	Existing	Potential
Directness	5.00	5.00
Gradient	4.24	4.24
Safety	2.48	4.62
Connectivity	4.81	4.81
Comfort	0.97	2.92
	<b>17.50</b>	<b>21.59</b>



Number of Existing Critical Junctions/Crossings	11
Number of Potential Critical Junctions/Crossings	0

Table 31. RST summary for Cycle Corridor 16

Route Name	Cycle Corridor 16: Bagshot to Windlesham	
Overall Length	3.96	
Name of Assessor(s)		
Date of Assessment		
<b>Performance Scores</b>		
Criterion	Existing	Potential
Directness	5.00	5.00
Gradient	3.74	3.74
Safety	1.89	4.13
Connectivity	4.00	4.00
Comfort	0.48	2.19
	<b>15.71</b>	<b>19.66</b>



Number of Existing Critical Junctions/Crossings	7
Number of Potential Critical Junctions/Crossings	1



# Appendix 4: First Phase Assessments

Table 32. Prioritisation table and scoring of the Phase 1 cycle corridors

ID	Corridor	Weighting	Quality of Improvements			Deliverability			Pedal cycle collisions per km
			Contributes to improved cycling network (links/km - 'Aspirational' cycle network)	Quality of design - safety improvement (RST)	Quality of design - comfort improvement (RST)	Ease of implementation	Gradient score (RST)	Potential to achieve LTN 1/20 guidance	
			1: < 1.75 2: < 2 3: ≥ 2	1: < 2 2: < 2.25 3: ≥ 2.25	1: < 1.75 2: < 2 3: ≥ 2	Potential constraints: 1: significant 2: moderate 3: slight	1: < 3.7 2: < 4 3: ≥ 4	3 = likely achieve LTN 1/20 guidance (<15% of the route not/partially compliant with LTN) 2 = some compromise with LTN 1/20 (<30% of the route not/partially compliant with LTN) 1 = unlikely to meeting LTN 1/20 guidance (> 30% of the route not/partially compliant with LTN)	1: < 3 2: < 4 3: ≥ 4
		Max Score	3	3	3	3	3	3	3
2	Corridor 2 - A30 – Camberley to Bagshot Railway Station	7.21	2	1	3	3	1	2	1
3	Corridor 3 - Camberley to Blackwater	3.37	1	3	3	2	2	3	2
4	Corridor 4 - Frimley Road to Camberley High Street	3.32	2	2	1	2	3	2	3
6	Corridor 6 - A30 – Camberley to Ryshmoor via Frimley Park	5.26	3	1	1	2	1	2	3
8	Corridor 8 - Frimley to Frimley Green	2.78	3	2	2	2	3	3	3
16	Corridor 16 - Bagshot to Windlesham	5.42	1	2	1	3	2	1	1

ID	Corridor	Demand			Access			Total	%	Ranking	Quality	Deliverability	Demand	Access	Total	Rank
		PCT Growth (increase in commuter flows)	PCT Growth (increase in school flows)	Commonplace Comments per km	Access to education	Access to transport facilities	Town Centre									
		1: < 300 2: < 600 3: ≥ 600	1: < 150 2: < 200 3: ≥ 200	1: < 5 2: < 7 3: ≥ 7	1: < 1 2: < 3 3: ≥ 3	Links to railway station 3 = yes 0 = no	1: < 0 2: < 2 3: ≥ 2				100%	30%	20%	20%		
		3	3	3	3	3	3	39	100%							
2	Corridor 2 - A30 – Camberley to Bagshot Railway Station	1	3	2	2	3	3	27	69%	5	66.7%	66.7%	58.3%	88.9%	69.4%	4
3	Corridor 3 - Camberley to Blackwater	2	1	2	1	3	3	28	72%	4	77.8%	77.8%	58.3%	77.8%	73.9%	2
4	Corridor 4 - Frimley Road to Camberley High Street	3	2	1	3	2	3	29	74%	2	55.6%	77.8%	75.0%	88.9%	72.8%	3
6	Corridor 6 - A30 – Camberley to Ryshmoor via Frimley Park	3	2	3	2	3	3	29	74%	2	55.6%	55.6%	91.7%	88.9%	69.4%	4
8	Corridor 8 - Frimley to Frimley Green	3	1	2	2	1	3	30	77%	1	77.8%	88.9%	75.0%	66.7%	78.3%	1
16	Corridor 16 - Bagshot to Windlesham	1	2	3	2	1	3	23	59%	6	44.4%	66.7%	58.3%	66.7%	58.3%	6



Table 33. Prioritisation table and scoring of the Phase 1 walking links

CWZ	Link	Road name	Start	End	Quality of improvements			Deliverability score			Demand for improvements			Access score			Priority for improvements		Priority for improvements	
					Total	%	Rank	Total	%	Rank	Total	%	Rank	Total	%	Rank	Total whole borough	Rank (ascending) whole Borough	Total whole borough	Rank (ascending) whole Borough
					30	0.3		12	0.3		12	0.2		12	0.2					
2. Camberley Town Centre	1.1	Park Road	Park Road - Frimley Road - Roundabout	Park St - Park Road - Roundabout	18	60%	50	4	33%	39	7	58%	44	7	58%	19	36	69	51.33%	73
2. Camberley Town Centre	1.2	Park Road	Park St - Park Road - Roundabout	Upper Park Road - Church Hill Junction	16	53%	57	4	33%	39	11	92%	2	7	58%	19	38	60	56.00%	62
2. Camberley Town Centre	1.3	Church Hill	Upper Park Road - Church Hill Junction	Roundabout	26	87%	13	4	33%	39	5	42%	64	5	42%	54	40	49	52.67%	70
2. Camberley Town Centre	2.1	Heathcote Road	Roundabout	Portesbery Road - Heathcote Road - Roundabout	16	53%	57	6	50%	36	12	100%	1	8	67%	12	42	38	64.33%	31
2. Camberley Town Centre	2.2	High Street	Roundabout	London Road	16	53%	57	4	33%	39	11	92%	2	11	92%	1	42	38	62.67%	37
2. Camberley Town Centre	3.1	Park Street	Park St - Park Road - Roundabout	Park St - Pembroke Broadway - Roundabout	16	53%	57	4	33%	39	11	92%	2	6	50%	43	37	62	54.33%	67
2. Camberley Town Centre	3.2	Park Street	Park St - Pembroke Broadway - Roadabout	Park St - London Road - Junction	14	47%	67	4	33%	39	11	92%	2	6	50%	43	35	73	52.33%	71
2. Camberley Town Centre	4.1	Charles Street	Southwell Park Road - Charles St - Junction	Lower Charles St - London Road - Junction	20	67%	41	4	33%	39	9	75%	14	7	58%	19	40	49	56.67%	59
2. Camberley Town Centre	5.1	Grand Avenue	Junction	Grand Avenue - London Road - Junction	16	53%	57	12	100%	1	9	75%	14	6	50%	43	43	34	71.00%	11
2. Camberley Town Centre	6.1	Portesbery Road	Langley Drive - Portesbery Road - Junction	Knoll Road - Portesbury Road - Junction	22	73%	27	10	83%	18	9	75%	14	6	50%	43	47	10	72.00%	9
2. Camberley Town Centre	7.1	The Avenue	The Avenue - London Road - Junction	The Avenue - Frimley Road - Junction	30	100%	1	8	67%	20	9	75%	14	7	58%	19	54	1	76.67%	2
2. Camberley Town Centre	8.1	London Road	Laundry Lane - London Road - Junction	London Road - Frimley Road Junction	30	100%	1	4	33%	39	8	67%	25	8	67%	12	50	4	66.67%	22
2. Camberley Town Centre	8.2	London Road	London Road - Frimley Road Junction	KNOLL Road - London Road - Kings Ride - Junction	30	100%	1	4	33%	39	11	92%	2	9	75%	5	54	1	73.33%	6
2. Camberley Town Centre	8.3	London Road	Knoll Road - London Road - Kings Ride - Junction	Caesar's Camp Road - London Road	26	87%	13	8	67%	20	7	58%	44	7	58%	19	48	7	69.33%	17
2. Camberley Town Centre	9.1	Kings Ride	Knoll Road - London Road - Kings Ride - Junction	Kings Ride - College Ride - Junction	18	60%	50	8	67%	20	8	67%	25	5	42%	54	39	58	59.67%	50
2. Camberley Town Centre	9.2	College Ride	Kings Ride - College Ride - Junction	Upper College Ride - Highland Road	18	60%	50	8	67%	20	4	33%	72	7	58%	19	37	62	56.33%	61
2. Camberley Town Centre	10.1	Crawley Ridge	Crawley Hill - Crawley Ridge - Junction	Crawley Hill - Gibbet Lane	24	80%	19	8	67%	20	7	58%	44	7	58%	19	46	18	67.33%	20
4. Frimley High Street	1.1	High Street	Toshiba Roundabout	Church Road - High St - Roundabout	24	80%	19	4	33%	39	9	75%	14	7	58%	19	44	30	60.67%	45
4. Frimley High Street	1.2	High Street	Church Road - High St - Roundabout	Cedar Lane - High St - Roundabout	16	53%	57	4	33%	39	9	75%	14	8	67%	12	37	62	54.33%	67
4. Frimley High Street	1.3	High Street	Cedar Lane - High St - Roundabout	High St - Station Approach - Junction	20	67%	41	4	33%	39	8	67%	25	9	75%	5	41	44	58.33%	52
4. Frimley High Street	1.4	Station approach	High Street	Station	20	67%	41	12	100%	1	8	67%	25	7	58%	19	47	10	75.00%	5
4. Frimley High Street	1.5	High Street	High St - Station Approach - Junction	High St - A331 Roundabout	16	53%	57	12	100%	1	8	67%	25	6	50%	43	42	38	69.33%	17
4. Frimley High Street	2.1	Frimley Bypass	Frimley Bypass - High St - Roundabout	Farnborough Road	10	33%	71	12	100%	1	8	67%	25	6	50%	43	36	69	63.33%	32
4. Frimley High Street	3.1	Church Road	Church Road - Grove Cross Road - Junction	Church Road - High St - Roundabout	24	80%	19	4	33%	39	10	83%	10	7	58%	19	45	26	62.33%	40
4. Frimley High Street	4.1	Frimley Green Road	Junction	Balmoral Drive - Frimley Green Road - Roundabout	18	60%	50	4	33%	39	9	75%	14	7	58%	19	38	60	54.67%	66
4. Frimley High Street	4.2	Frimley Green Road	Roundabout	Frimley Green Football club	24	80%	19	4	33%	39	9	75%	14	7	58%	19	44	30	60.67%	45
4. Frimley High Street	5.1	Balmoral Drive	Roundabout	Balmoral Drive - Sandringham Way Roundabout	20	67%	41	4	33%	39	9	75%	14	4	33%	58	37	62	51.67%	72
4. Frimley High Street	5.2	Balmoral Drive	Roundabout	Balmoral Drive - Pevensey Way Junction	12	40%	69	12	100%	1	5	42%	64	6	50%	43	35	73	60.33%	47
4. Frimley High Street	6.1	Sandringham Way	Roundabout	Junction - Frimley Baptist Church	16	53%	57	12	100%	1	5	42%	64	7	58%	19	40	49	66.00%	23
4. Frimley High Street	7.1	GaRoadens - Field	Grove Cross Road Junction	Balmoral Drive - Buckingham Way Junction	16	53%	57	8	67%	20	11	92%	2	7	58%	19	42	38	66.00%	23
4. Frimley High Street	8.1	Alphington Avenue	Field Lane - Alphington Avenue - Junction	Alphington Avenue - Tomlingston Way Junction	16	53%	57	8	67%	20	6	50%	55	7	58%	19	37	62	57.67%	55
4. Frimley High Street	8.2	Tomlingston Way	Junction	Tomlingston Way - Chobham Road Junction	22	73%	27	4	33%	39	7	58%	44	8	67%	12	41	44	57.00%	57
4. Frimley High Street	9.1	Porsmouth Road	Roundabout	Frimley Road - High St - Roundabout	24	80%	19	4	33%	39	8	67%	25	11	92%	1	47	10	65.67%	25
4. Frimley High Street	10.1	Porsmouth Road	Longmeadow - Portsmouth Road - Junction	Chobham Road - Portsmouth Road Roundabout	20	67%	41	12	100%	1	7	58%	44	9	75%	5	48	7	76.67%	2
4. Frimley High Street	11.1	Brackendale Close	Junction	Russet Gardens	22	73%	27	4	33%	39	11	92%	2	9	75%	5	46	18	65.33%	26
4. Frimley High Street	12.1	Frimley Road	Toshiba Roundabout	M3	10	33%	71	12	100%	1	8	67%	25	7	58%	19	37	62	65.00%	27
4. Frimley High Street	13.1	Frimley Road	M3	Park Road - Frimley Road Roundabout	10	33%	71	12	100%	1	7	58%	44	11	92%	1	40	49	70.00%	14
4. Frimley High Street	14.1	James Road	Frimley Road - James Road - Junction	Crabtree Road - Bramley Road - Junction	22	73%	27	12	100%	1	6	50%	55	8	67%	12	48	7	75.33%	4



CWZ	Link	Road name	Start	End	Quality of improvements			Deliverability score			Demand for improvements			Access score			Priority for improvements		Priority for improvements	
					Total	%	Rank	Total	%	Rank	Total	%	Rank	Total	%	Rank	Total whole borough	Rank (ascending) whole Borough	Total whole borough	Rank (ascending) whole Borough
					30	0.3		12	0.3		12	0.2		12	0.2					
4.	Frimley High Street	15.1 path - west	Frimley Bypass	Rushmoor	18	60%	50	12	100%	1	6	50%	55	4	33%	58	40	49	64.67%	30
4.	Frimley High Street	15.2 south	Frimley Bypass	Farnborough Road Roundabout	22	73%	27	12	100%	1	7	58%	44	4	33%	58	45	26	70.33%	12
4.	Frimley High Street	15.3 path - east	Frimley High Street	Farnborough Road	22	73%	27	12	100%	1	7	58%	44	4	33%	58	45	26	70.33%	12
4.	Frimley High Street	15.4 south east	Frimley High Street	Frimley Hatches	22	73%	27	12	100%	1	5	42%	64	4	33%	58	43	34	67.00%	21
9.	Bagshot High Street	1.1 London Road	London Road	London Road - Waterers Way Junction	20	67%	41	8	67%	20	8	67%	25	5	42%	54	41	44	61.67%	43
9.	Bagshot High Street	1.2 London Road	London Road - Waterers Way Junction	Station Road Junction	28	93%	7	4	33%	39	8	67%	25	7	58%	19	47	10	63.00%	34
9.	Bagshot High Street	1.3 London Road	Station Road Junction	Bagshot Park	28	93%	7	4	33%	39	8	67%	25	4	33%	58	44	30	58.00%	54
9.	Bagshot High Street	2.1 Station Road	London Road	Station	22	73%	27	8	67%	20	8	67%	25	4	33%	58	42	38	62.00%	41
9.	Bagshot High Street	3.1 Bridge Road	London Road	Bridge Road - Guildford Road Roundabout	26	87%	13	4	33%	39	10	83%	10	6	50%	43	46	18	62.67%	37
9.	Bagshot High Street	4.1 High Street	Bridge Road Junction	The Square Junction	26	87%	13	4	33%	39	10	83%	10	6	50%	43	46	18	62.67%	37
9.	Bagshot High Street	5.1 High Street	Bridge Road - Guildford Road Roundabout	London Road Junction	22	73%	27	4	33%	39	9	75%	14	9	75%	5	44	30	62.00%	41
9.	Bagshot High Street	6.1 Guildford Road	Bridge Road - Guildford Road Roundabout	New Road - Guildford Road Roundabout	20	67%	41	8	67%	20	11	92%	2	7	58%	19	46	18	70.00%	15
9.	Bagshot High Street	7.1 New Road	New Road - Guildford Road Roundabout	New Road - Church Road Junction	28	93%	7	8	67%	20	5	42%	64	4	33%	58	45	26	63.00%	34
9.	Bagshot High Street	8.1 Manor Way	Guildford Road - Manor Way Junction	Bagshot Green - Green Lane Junction	10	33%	71	12	100%	1	8	67%	25	7	58%	19	37	62	65.00%	27
9.	Bagshot High Street	9.1 Green Lane	Bagshot Green	Whitmoor Road Junction	20	67%	41	8	67%	20	8	67%	25	6	50%	43	42	38	63.33%	32
9.	Bagshot High Street	10.1 Whitmoor Road	New Road - Guildford Road Roundabout	Connought Junior School	18	60%	50	4	33%	39	6	50%	55	7	58%	19	35	73	49.67%	75
9.	Bagshot High Street	11.1 Walking path	Whitmoor Road	Across M3	26	87%	13	12	100%	1	4	33%	72	4	33%	58	46	18	69.33%	17
9.	Bagshot High Street	12.1 School Lane	Badget Swift Way Junction	Chantry Road Junction	22	73%	27	4	33%	39	8	67%	25	6	50%	43	40	49	55.33%	65
9.	Bagshot High Street	12.2 School Lane	Chantry Road Junction	London Road	24	80%	19	4	33%	39	8	67%	25	4	33%	58	40	49	54.00%	69
9.	Bagshot High Street	13.1 Chapel Lane	Badget Swift Way Junction	London Road	30	100%	1	8	67%	20	8	67%	25	4	33%	58	50	4	70.00%	15
9.	Bagshot High Street	14.1 Waterers Way	Gomer Road Junction	London Road	18	60%	50	4	33%	39	10	83%	10	4	33%	58	36	69	51.33%	74
9.	Bagshot High Street	15.1 Higgs Lane	London Road	College Ride	12	40%	69	4	33%	39	9	75%	14	4	33%	58	29	77	43.67%	77
9.	Bagshot High Street	16.1 Church Road	London Road	Bagshot Tennis club	24	80%	19	12	100%	1	7	58%	44	4	33%	58	47	10	72.33%	8
9.	Bagshot High Street	17.1 Townpath 1	London Road	Freemantle Road	22	73%	27	8	67%	20	6	50%	55	4	33%	58	40	49	58.67%	51
9.	Bagshot High Street	17.2 Townpath 2	London Road	Freemantle Road	22	73%	27	8	67%	20	7	58%	44	4	33%	58	41	44	60.33%	47
9.	Bagshot High Street	17.3 Townpath 3	London Road	Freemantle Road	22	73%	27	8	67%	20	5	42%	64	4	33%	58	39	58	57.00%	57
8.	Chobham Village	1.1 Bagshot Road	Chobham High St	Bagshot Road	30	100%	1	4	33%	39	6	50%	55	9	75%	5	49	6	65.00%	29
8.	Chobham Village	2.1 Walking path -	Station Road Junction	High Street	22	73%	27	10	83%	18	8	67%	25	7	58%	19	47	10	72.00%	9
8.	Chobham Village	3.1 School Lane	High Street	St Lawrence primary school	14	47%	67	6	50%	36	8	67%	25	8	67%	12	36	69	55.67%	63
8.	Chobham Village	4.1 Castle Grove Road	High Street - Station Road Junction	Broadford Lane Junction	26	87%	13	4	33%	39	6	50%	55	7	58%	19	43	34	57.67%	55
8.	Chobham Village	4.2 High Street	High Street - Station Road Junction	High St - Bagshot Road Roundabout	28	93%	7	4	33%	39	6	50%	55	8	67%	12	46	18	61.33%	44
8.	Chobham Village	4.3 High Street	High Street - Bagshot Road Roundabout	Chertsey Road Junction	24	80%	19	4	33%	39	6	50%	55	7	58%	19	41	44	55.67%	63
8.	Chobham Village	4.4 Windsor Road	Chertsey Road Junction	Red Lion Road Junction	20	67%	41	4	33%	39	7	58%	44	9	75%	5	40	49	56.67%	59
8.	Chobham Village	5.1 Station Road	High Street - Station Road Junction	Station Road	30	100%	1	4	33%	39	5	42%	64	7	58%	19	46	18	60.00%	49
8.	Chobham Village	5.2 Station Road	Station Road	Milford Green	28	93%	7	6	50%	36	4	33%	72	5	42%	54	43	34	58.00%	53
8.	Chobham Village	6.1 Chertsey Road	Windsor Road - Chertsey Road Junction	Chertsey Road - Mincing Lane Junction	28	93%	7	4	33%	39	5	42%	64	10	83%	4	47	10	63.00%	34
8.	Chobham Village	7.1 Walking path	Windsor Road	Burr Hill lane	22	73%	27	12	100%	1	8	67%	25	11	92%	1	53	3	83.67%	1
8.	Chobham Village	8.1 Bowling Green Road	Windsor Road	Little Heath Road	16	53%	57	4	33%	39	7	58%	44	5	42%	54	32	76	46.00%	76
8.	Chobham Village	9.1 Delta Road	Bowling Green Road Junction	Chertsey Road Junction	20	67%	41	10	83%	18	8	67%	25	9	75%	5	47	10	73.33%	7





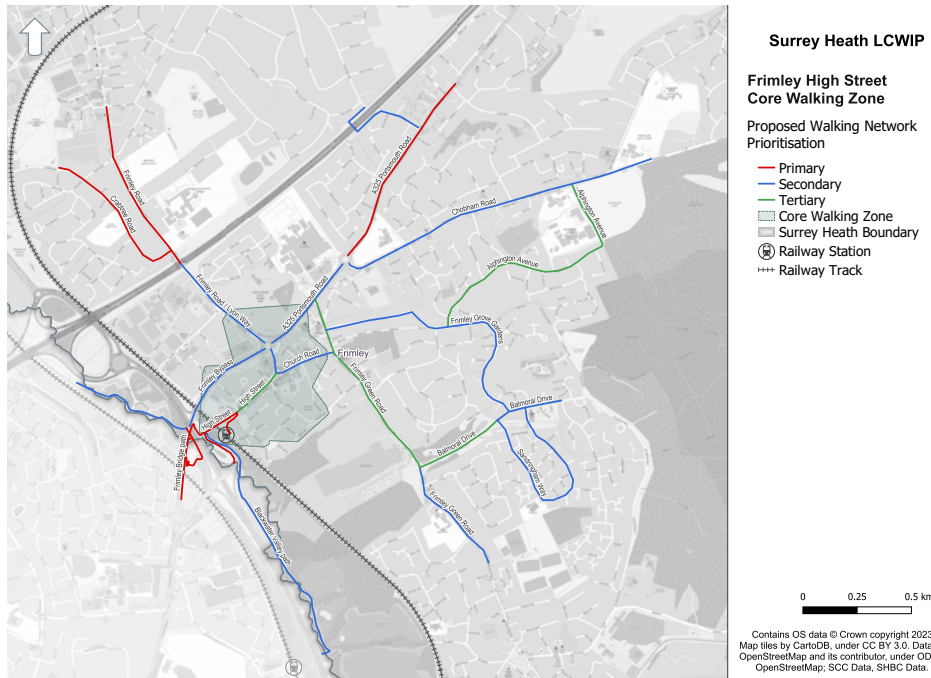


Figure 146. CWZ4 Frimley High Street - Prioritisation results

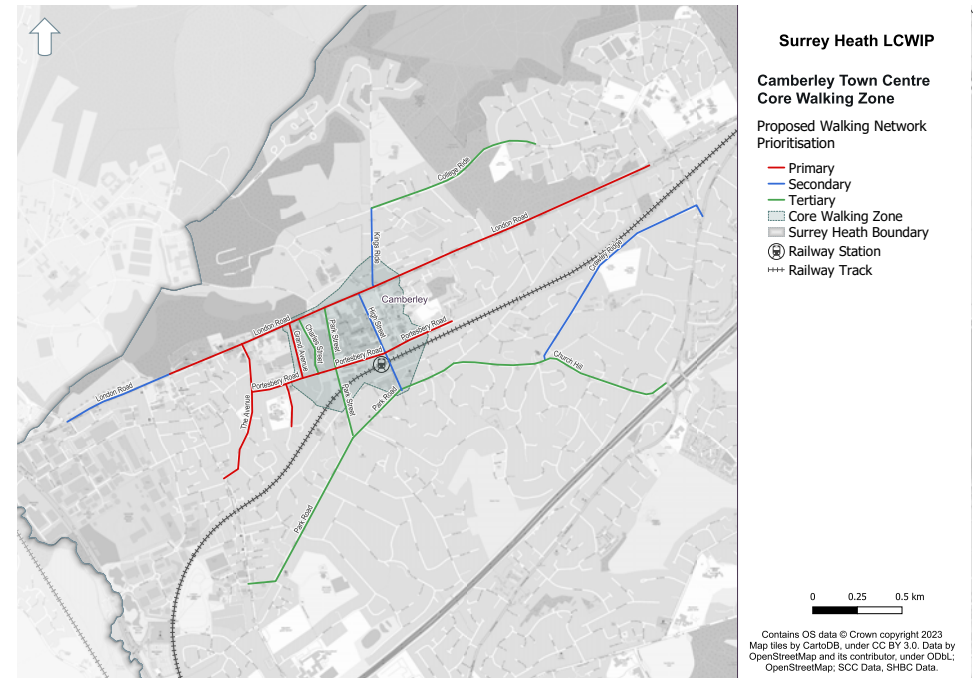


Figure 147. CWZ2 Camberley Town Centre- Prioritisation results



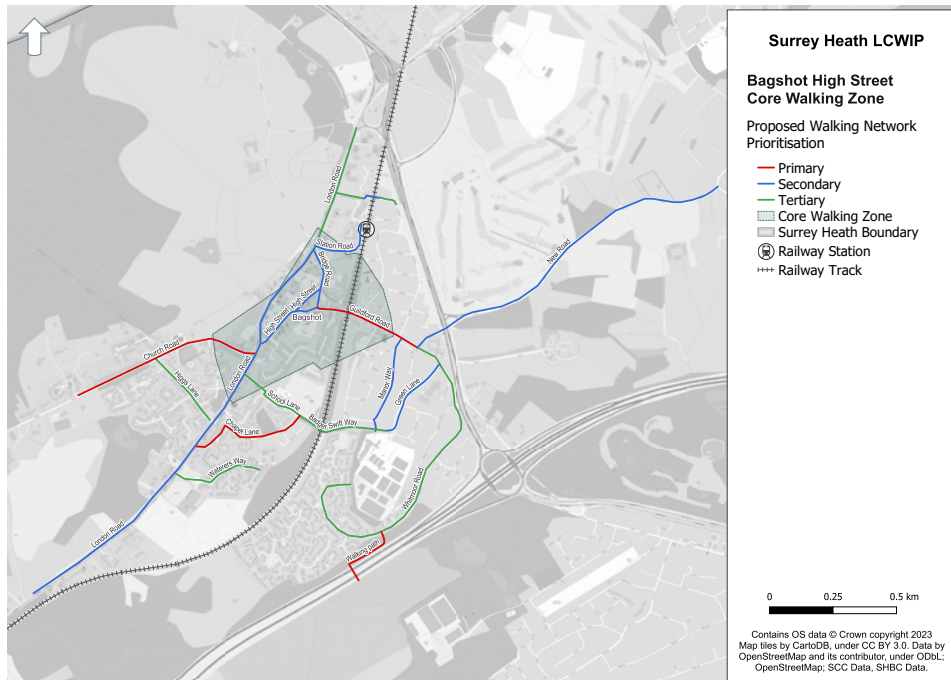


Figure 148. CWZ 9 Bagshot High Street - Prioritisation results

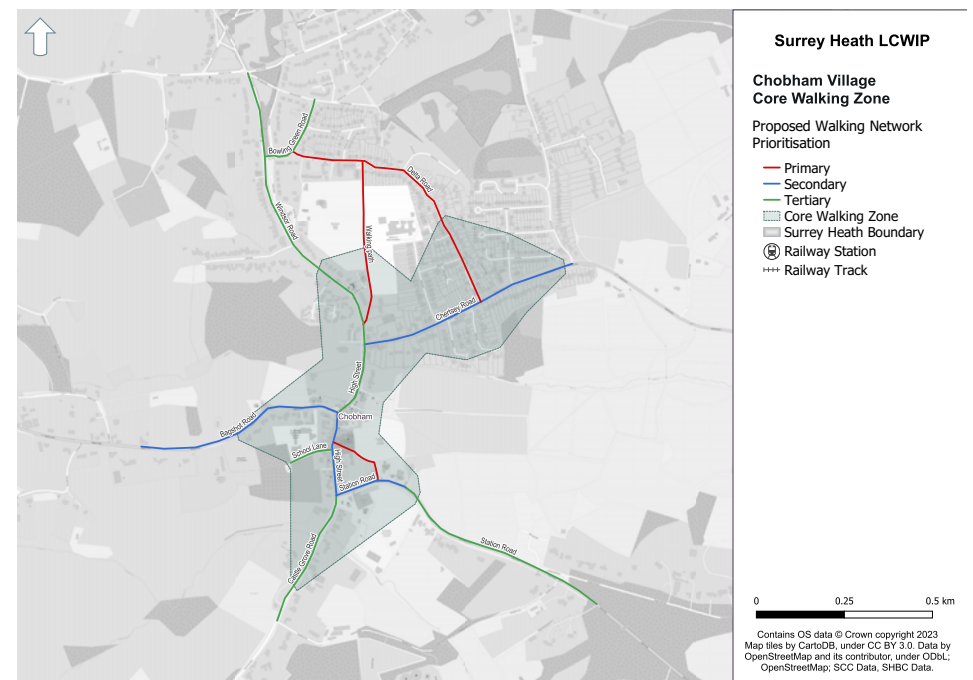


Figure 149. CWZ8 Chobham Village - Prioritisation results

# Appendix 5: Indicative Unit Cost Estimates

Table 34. Indicative base unit costs for proposed interventions<sup>1</sup>

Intervention	Cost (2022 £) <sup>1</sup>	Description
Zebra crossing / parallel crossing	£38,700 per item	New crossing including road markings, dropped kerbs, belisha beacons and high friction surfacing on approaches
Signalised Pedestrian and Cyclist Crossing (Toucan crossing)	£79,700 per item	New crossing including traffic signals, road markings, dropped kerbs, and high friction surfacing on approaches
Crossings at traffic lights	£53,000 per item	Re-phasing of the traffic signals to introduce a pedestrian phase
	£106,000 per item	Re-phasing of the traffic signals to introduce a pedestrian phase and crossing facilities
Junction signalisation	£315,000 per location	Introducing traffic signals and pedestrian crossings, junction tightening and associated road marking works
Side road treatment	£16,600 per item	Raised table crossing and associated works such as tactile paving, street lighting, signing and lining
Junction modification	£40,300 per item	Raised junction with crossing points and associated works such as tactile paving, coloured surfacing, street lighting, signing and lining
	£70,500 per item	Tighten junction widening the existing footways with crossing points and associated works such as tactile paving, drainage and lining
20mph zone	£18,120 per km	New signs, road markings and traffic calming measures
Reduced speed limit	£3,620 per km	20mph: introduce signs and road markings
	£38,620 per km	30mph: introduce signs, road markings and street lighting
Improve access to the bus stop	£5,600 per item	Localised footway widening, dropped kerbs, tactile paving, surfacing

<sup>1</sup> Costs are indicative only and can vary significantly depending on local site conditions. Based on indicative base unit costs available from DfT (Typical costs of cycling interventions, Interim analysis of Cycle City Ambition schemes, January 2017), Greater Manchester Cycling Design Guidance and Standards, and Wiltshire Council (<https://www.wiltshire.gov.uk/highways-works-cost>). Where a cost range was given, the higher value is shown to provide a more conservative estimate and reflect a potential higher degree of engineering interventions required. For more bespoke elements, engineering judgement was used to estimate material quantities (what would be covered by multiple items in a standard bill of quantities developed in detailed design) and make allowances for unknowns at this early concept stage.



Intervention	Cost (2022 £) <sup>1</sup>	Description
Widened footway	£800,000 per km	Widened footway, new kerbs and resurfacing of the full extent of the footway (2.5m)
New footway	£700,000 per km	Site/vegetation clearance and provide kerbing and new footway (2.5m)
Prune vegetation	£50,000 per km	Trim overgrown vegetation along existing paths (average of 1.0m width)
Two-way cycle track	£1,466,000 per km	3.0m (desired minimum width) on the carriageway level with kerb segregation
	£1,400,000 per km	3.0m (desired minimum width) off-carriageway though green areas
One-way cycle track	£794,000 per km	2.0m (desired minimum width) on the carriageway level with kerb segregation (assumes cycle facility on one side of the road)
'Dutch facility' / Pedestrian & cycle priority street	£831,000 per km	based on Greater Manchester Cycling Design Guidance and Standards cost for 'quiet street' with full civil works
Mixed traffic	£611,000 per km	based on Greater Manchester Cycling Design Guidance and Standards cost for 'quiet street' with limited civil works
Shared-use path	£843,000 per km	3.5 shared-use path
	£1,000,000 per km	3.5m (desired minimum width) off-carriageway though green areas
Advisory cycle lane	£324,000 per km	2.0m lane on the carriageway including road markings and resurfacing (assumes cycle facility on one side of the road)
School street	£46,000 per access point	CCTV system to monitor access point
Modal filter	£3,000 per location	Includes buildout, signs with associated road markings

# Appendix 6: Stakeholder Comments on Concepts

Table 35. Stakeholder Comments - Stage 1

ID	Source	Response	LCWIP Referen	Route	AtkinsRealis Response	Status
						No action required Item updated
						Rejected/ No change
1	Mail	Portsmouth Road is a direct access route to many locations for young people, many residential areas feeding in as well. Many youngsters have reported they had to cycle through narrow pavements and near misses with pedestrians have been reported. Have this been included in the long list.	Cycling	Portsmouth Road	Portsmouth Road was initially considered to be included in the aspirational list to connect Frimley and Camberley on the east towards Bagshot to the A30, however due to key constraints along the corridor other alternative alignments were prioritised (CC6 and CC7) via quieter roads. Portsmouth Road will be included as Phase 3 Corridor.	
2	Mail	is this route included in the 5 routes on the shortlist	Cycling	CC 1	Frimley - Camberley proposal was identified through compilation of long list in the early stages. Once shortlist is established, concept designs will be completed.	
3	Workshop 1a	corridors 18 and 19 look to extend to Woking but not connect to any other facilities	Cycling	CC 18 / CC 19	the Woking Borough LCWIP has not yet started and is in the pipeline. Potential connections are presented to Woking Town LCWIP proposals.	
4	Workshop 1a	asked if the location of the mosque in Camberley has been considered and whether it links into any of these routes?	Cycling	CC 3	It was covered by corridor no. 3 (alongside the A30).	
5	Workshop 1a	people tend to use Red Road in Lightwater (referring to Corridor 15) and that's a heavily used route for both walking and cycling, including those going to Gordon's School.	Cycling	CC 15	Cycle Corridor 15 to be diverted via Red Road towards the local commercial centre and connect to CCs 17, 18 and 20. Section of original CC 15 via Ambleside road to be included in the aspirational network as local connection	
6	Workshop 1a	there are private roads currently along Corridor 6 which need to be considered.	Cycling	CC 6	Further details to be investigated in the next stages of the LCWIP	
7	Workshop 1a	The bridge along Corridor 6 is a footbridge, and the parapet is low so not suitable for cyclists.	Cycling	CC 6	Acknowledged	
8	Workshop 1a	SCC have funding to develop detailed design for a corridor linking Frimley to Camberley (similar to Corridor 1) and it should be considered how it will overlap with the aspirational network.	Cycling	Frimley - Camberley proposal	Frimley - Camberley proposal was identified through compilation of long list in the early stages. Once shortlist is established, concept designs will be completed.	
9	Workshop 1a	the connectivity between Windlesham and Bagshot that seems poor, there is demand for access to the railway station, there is currently no direct connection to the village centre and there are developments planned in the area.	Cycling	CC 16	CCs 16 and 20 to be amended to provide improved connectivity between Bagshot and Windlesham.	
10	Workshop 1a	They like how the CWZs have considered the location of bus stops although she added that bus routes would be useful too.	Walking	General	confirmed that the bus routes have been checked but only the bus stops with the catchment areas have been included in the issues and opportunities heatmap.	
11	Workshop 1a	Are any design guides followed?	General	General	DfT technical guidance for the development of LCWIPs for the identification of the CWZs, and LTN 1/20 and inclusive Mobility Design will also be followed to drive the proposed interventions	
12	Workshop 1a	Healthy Streets tools will be used to inform the designs	General	General	No Healthy Streets assessment will be undertaken as part of the LCWIP but the principles will be used alongside other guidance.	
13	Workshop 1c	Enquired if all areas were given equal priority at this stage and referenced a gap in Mytchett area	General	Mytchett	reassured that all areas within the borough have been given equal priority and that no area has been excluded	
14	Workshop 1c	Enquired if bridleways were considered as she was conscious of the potential for conflict between users as well as the needs of different users too. Added that the British Horse Society (BHS) are very vocal too and would want this considered.	Engagement	General	confirmed that the need to reduce conflict between users was important and not just constrained to equestrians. BHS will be invited to the next phase of engagement in the summer.	
15	Workshop 1c	Enquired if deprivation was considered as part of the early data analysis exercise, as cycling is more likely to be the key means of transport in more deprived areas	Background data	General	the indices of multiple deprivation (IMD) were considered as part of this task.	
16	Workshop 1c	asked if car or van ownership was also accounted for	Background data	General	Confirmed that this is reflected in car or van access which is also part of updated Office for National Statistics (ONS) reporting.	
17	Workshop 1c	Blackwater path (between Rushmoor and Frimley Green) is only accessible for parts of the year, due to flooding and overgrown vegetation.	Cycling	CC 13	Acknowledged. To be investigated further in the next stages of the LCWIP	
18	Workshop 1c	a cycling corridor that goes over Chobham Common and highlighted that this is a SSSI amongst other classifications. Considering this, she thought this was not a feasible route and required further consideration.	Cycling	Phase 3	Acknowledged. To be investigated further in the next stages of the LCWIP	
19	Workshop 1c	asked if private or unadopted roads were considered as part of this exercise.	General	General	Highway boundary information has not been provided in this stage of the LCWIP. During the design process further information will be assessed.	
20	Workshop 1c	Examples were given including Camberley to Old Dean, Middleton Road, Knightsbridge Road	General	General	information will be assessed.	
21	Workshop 1c	gave an example of Brackendale Road as a good route people use to move north - south	Cycling	CC 6	Acknowledged - alignment added	
22	Workshop 1c	Portsmouth Road was often a dangerous road to walk or cycle on.	Cycling	Portsmouth Road	Acknowledged. To be investigated further in the next stages of the LCWIP	
23	Workshop 1c	importance of retaining access to the hospital and suggested the route south of the M3 to use the quiet roads on the east of the footbridge and provide direct access to the hospital.	Cycling	CC 6	Cycle Corridor 6 to be amended and provide connection through the residential area west of the footbridge	
24	Workshop 1c	asked the team about the gap between Mimbridge and Woking and also added that	Cycling	General	the scope of focused on Surrey Heath but acknowledged the advantages of cross-border connections. SCC will develop the Woking Borough LCWIP and connections to Surrey Heath identified aspirational corridors will be considered	
25	Workshop 1c	a lot of children travel to Addlestone for school	Cycling	General	Phase 3 corridors are proposed towards Addlestone	
26	Workshop 1c	cycle corridor 16 around Windlesham, particularly on the section between the A30 and Kenell Lane where there are no footpaths, high degree of vegetation and lots of HGVs.	Cycling	CC 16	Acknowledged. To be investigated further in the next stages of the LCWIP	



ID	Source	Response	LCWIP Referen	Route	AtkinsRealis Response	Status
						No action required
						Item updated
						Rejected/ No change
25	Workshop 1c	Highlighted that Valley End School has an arrangement where they have to park away from the school and walk and that there is a walking bus along Chertsey Road.	Walking	Windlesham	Acknowledged	
26	Workshop 1c	The footpaths in Windlesham are narrow – and in some cases there are no footpaths.	Walking	Windlesham	Acknowledged. To be investigated further in the next stages of the LCWIP	
27	Workshop 1c	Windlesham has a lot of walkers to a number of local destinations and there is high demand for improved footways in the centre of the area.	Walking	Windlesham	Acknowledged. To be investigated further in the next stages of the LCWIP	
28	Workshop 1c	Many children are within the catchment area for Charter School and live close to the A30 although the condition of the footpaths are poor.	Walking	Windlesham	Acknowledged. To be investigated further in the next stages of the LCWIP	
29	Workshop 1c	There are challenges in walking to Bagshot and that there was a lack of suitable crossings on the A322, with fast moving traffic and lack of adequate footways/footpaths.	Walking	Windlesham	Acknowledged. To be investigated further in the next stages of the LCWIP	
30	Workshop 1c	CIL funding could be used to deliver improvements in this area.	Walking	Windlesham	SCC responsibility for funding opportunities	
31	Workshop 1c	In Mytchett area, if there were walking routes they would be used more/the residents would appreciate the upgrade and asked to add a core walking zone in the area even if it is included in the Phase 3 He added there are two schools in the area.	Walking	Mytchett area	An additional CWZ to be included in Mytchett	
32	Workshop 1c	Sturt Road underpass also flooded regularly and so was important to consider.	Walking	Frimley Green	Acknowledged. To be investigated further in the next stages of the LCWIP	
33	Workshop 1c	Basingstoke Canal was suggested as a possible alternative to Sturt Road.	Walking	Frimley Green	Acknowledged. To be investigated further in the next stages of the LCWIP	
34	Workshop 1c	Bisley didn't feature and considered if there needs to be a connection between Bisley and West End	Walking	Bisley and West End	An additional CWZ to be included in Bisley	
35	Workshop 1c	Enquired if the size of the CWZs need to increase from their current 250m.	Walking	General	the zones follow the DfT's technical guidance and cover the key destinations within the village and walking corridors outside the core walking zone will be introduced in the next stages of the design to provide connections to the schools and other key destinations.	
36	Workshop 1c	Enquired what kind of interventions will be proposed in the design	General	General	the improvements for pedestrians could include widening of footways to higher standards, public realm improvements, new crossings, improved paths, pedestrianisations and school streets to name some examples. Subsequent work will define what these interventions are.	
37	Workshop 1c	the pedestrianisation of Chobham High Street and the centre of Windlesham would be appreciated.	Walking	Windlesham	Acknowledged. To be investigated further in the next stages of the LCWIP	
38	Workshop 1c	proposals.	Walking	Frimley Green	Acknowledged. To be investigated further in the next stages of the LCWIP	
39	Workshop 1c	Suggested engaging one-to-one with County and Borough Councillors due to the concern with the use of Google Street view. Gave examples of the A30 which has recently had crossing delivered which aren't reflected on Google Street view.	Engagement	General	next phase of the LCWIP will be focused in the different areas once the sifting exercise is done and proposals are considered in more detail. Further engagement to be undertaken in the next stages	
40	Workshop 1c	emphasised the importance of having those detailed discussions at this stage to avoid abortive work later on.	Engagement	General	next phase of the LCWIP will be focused in the different areas once the sifting exercise is done and proposals are considered in more detail. Further engagement to be undertaken in the next stages	
41	Workshop 1d	Rushmoor LCWIP Route 140 to Farnborough North station is close by and presents the opportunity to tie into it.	Cycling	Neighbouring	Connections are provided. Connectivity to future links will be part of the sifting exercise	
42	Workshop 1d	added that the Phase 3 bridleway route from Frimley Green to Farnborough North RS is very good for connectivity.	Cycling	Phase 3	Acknowledged	
43	Workshop 1d	Corridor 3 – London Road as an opportunity for them to tie into the Hart LCWIP proposals.	Cycling	CC 3	Acknowledged	
44	Workshop 1d	HCC have not included Blackwater Valley path (cycle corridor 13) as part of the Rushmoor LCWIP but are happy to discuss with the Surrey Heath team on the corridor and how their LCWIP will tie in with the proposals.	Cycling	CC 13	Acknowledged	
45	Workshop 1d	routes into Guildford are reasonable and will likely contribute to a future Guildford LCWIP network.	Cycling	CC 11 / CC 14	Acknowledged	
46	Workshop 1d	keen to see how Cycle corridor 14 will rank in the overall network, and when the Guildford LCWIP is progressed, they will work to provide links to the Surrey Heath LCWIP proposals. She added that they are conscious that the cycle network will likely focus on the town of Guildford.	Cycling	CC 14	Acknowledged	
47	Workshop 1d	link with the A30 towards Sunningdale and Virginia Water will be a good connection between the boroughs and complimented their plans albeit longer term (>10-years plan).	Cycling	Phase 3	Acknowledged	
48	Workshop 1d	Corridor 3 ties in with their LCWIP on Laundry Lane and invited the team to collaborate further about that link.	Cycling	CC 3	Acknowledged	
49	Workshop 1d	Enquired if there is an opportunity to provide a cycle corridor north of the A30 (London Road) through the green space primarily for leisure activities and potentially connections towards Bracknell Forest	Cycling	Phase 3	the large woodland west of the Borough was associated with Sandhurst Military Academy. It would therefore be difficult to deliver a corridor through.	
50	Workshop 1d	In the past the Sandhurst Military Academy was open for active travel users to pass through. She added that the key access point is opposite Park Street in Camberley although there are military restrictions and the proposals will link to the entrance. Added that this was a combination of Crown Estate, Military and common land – notwithstanding SPA too.	Cycling	General	Military boundary will be identifiable on the OS.	
51	Workshop 1d	A331 on the western side can be a barrier particularly to vulnerable road users where crossings are difficult and limited.	Walking	Frimley Road	Acknowledged. To be investigated further in the next stages of the LCWIP	
52	Workshop 1d	CWZ 3 (Frimley Road) would be beneficial for connections to Rushmoor.	Walking	Frimley Road	Acknowledged. To be investigated further in the next stages of the LCWIP	



ID	Source	Response	LCWIP Referen	Route	AtkinsRealis Response	Status
						No action required
						Item updated
						Rejected/ No change
						√
53	Workshop 1d	CWZ 3 which will complement the Hart LCWIP.	Walking	Frimley Road	Acknowledged. To be investigated further in the next stages of the LCWIP	
54	Workshop 1d	the consultation for the Hart LCWIP flagged that resident of Blackwater travel more often to Camberley rather than to somewhere within their own district. Core walking zones in the area and cycle corridor 3 (A30 London Road) will be critical for the residents.	Cycling	CC 3	Acknowledged	
54	Workshop 1d	the consultation for the Hart LCWIP flagged that resident of Blackwater travel more often to Camberley rather than to somewhere within their own district. Core walking zones in the area and cycle corridor 3 (A30 London Road) will be critical for the residents.	Walking	Camberley London Rd	Acknowledged	
55	Workshop 1d	Sections of Basingstoke Canal route east of Deepcut to Brookwood is planned to be improved as it is included in a S106 agreement.	Cycling	CC 14	Acknowledged	
56	Mail	Linking route 3 into Blackwater - connecting SH LCWIP with Hart LCWIP.	Cycling	CC 3	Acknowledged	
57	Mail	A walking zone is proposed for Blackwater with a cycle route along the A30. Many Blackwater residents look to Camberley for key services so we view this as a key link.	Walking	Camberley London Rd	Acknowledged	
58	Mail	welcome route linking into Frimley station and beyond into Rushmoor	Cycling	CC 1	Acknowledged	
59	Mail	A section of identified route in SH LCWIP within Hampshire (also in Rushmoor LCWIP) along the A325 between Bradfords Roundabout and Clockhouse roundabout is in our top ten prioritised routes for delivery for Rushmoor.	Cycling	CC 6	Acknowledged	
60	Mail	Route 140 (Rushmoor LCWIP) connects in to Farnborough North station. Phase 3 route (SH LCWIP) alongside the brideway leads into Frimley Green. This is likely to be a good onward connection and enhance links to the station.	Cycling	CC 6	Acknowledged	
61	Mail	Haven't identified anything on route 13 (SH LCWIP) for improvement as part of either of the Hampshire LCWIP. Potential to discuss and take forward.	Cycling	CC 13	Acknowledged	
62	Mail	Important to include links to Blackwater Station from Core Walking Zones 1, 2, 8 and 14	Walking	DW2 1, 2, 8 and 14	Acknowledged	
63	Mail	It may have been helpful to go through select routes and walking zones individually, highlighting only a single route/zone per slide, and asking for targeted feedback on alignment options, or inviting comments on potential barriers and constraints at specific locations.	General	General	Acknowledged	
64	Mail	Core walking zones if too small in size may miss out key barriers to walking in the wider area leading to the zones	Walking	General	Wider connections to be provided in the next stages to the LCWIP, proposing supplementary walking corridors up to 2km using the heatmap, and provide connections to key destinations	
65	Mail	Support for inclusion in LCWIP. Design work is currently being progressed by SCC for a route between Camberley and Frimley, broadly along the alignment of the corridor 1 shown. Although design work is funded, there is no funding commitment for construction, therefore it needs to be considered for inclusion in the LCWIP.	Cycling	CC 1	Frimley - Camberley proposal was identified through compilation of long list in the early stages. Once shortlist is established, concept designs will be completed.	
66	Mail	Support inclusion of this corridor, although there are legal issues, as well as issues with the existing infrastructure which would need to be overcome.	Cycling	CC 6	Acknowledged. To be investigated further in the next stages of the LCWIP	
67	Mail	Attachment with the email shows - the extent of publicly maintainable highway in the Camberley-Frimley area which includes most of this route.	Cycling	CC 6	Cycle Corridor 6 to be amended and provide connection through the residential area west of the footbridge	
68	Mail	Brackendale Road and Brackendale Close are considered to be non-maintainable public highways. Highway rights then exist. Legal advice would be required on signing a route along a non-maintainable public highway.	Cycling	CC 6	Acknowledged. To be investigated further in the next stages of the LCWIP	
69	Mail	The bridge across the M3 and the paths from the NE and SE leading to it currently only have footpath status. Under this status cyclists have no rights to use the bridge and paths. The paths from the NW and SW of the bridge do not have PROW status currently even though signed and used, the landowner is National Highways.	Cycling	CC 6	Acknowledged. To be investigated further in the next stages of the LCWIP	
70	Mail	The footbridge does not have a sufficient parapet height for cycling - see photo attached.	Cycling	CC 6	Acknowledged. To be investigated further in the next stages of the LCWIP	
71	Mail	The route could be particularly useful for accessing Frimley Park Hospital. After crossing the footbridge the most direct route would be via: Wilders Close, Blythwood Drive, Badgerwood Drive, Denton Way, cut through to A325 near A325/Chobham Rd roundabout.	Cycling	CC 6	Cycle Corridor 6 to be amended and provide connection through the residential area west of the footbridge	
72	Votes	An "extension" of 5 Bagshot High Street, along the A30 to Longacres Garden Centre - working out of Bagshot Depot, a reasonable number of people are seen walking along the A30 but ped provision across the A322 on / off slips and pinch point over the A322 and rail bridge do not make it an attractive route to walk or for anyone with mobility issues to use	Walking	Bagshot High St	Acknowledged. To be investigated further in the next stages of the LCWIP	
	Workshop 1e	Use of Bridleways - Horses being sentient creatures and considerably stronger than humans may easily be startled by the appearance from behind by a cyclist and that people have had serious accidents as a result	Bridleways		Acknowledged	



Table 36. Stakeholder Comments - Stage 2

ID	Source	Requested Amendments	LCWIP Reference	Route	AtkinsRealis Response	Status
1	Workshop 2a	Noted that Lakeside School has moved to Deepcut.	Cycling	Frimley	That although the school had moved the aspiration for the site would remain as a (SEND) school and therefore any improvements in its vicinity would still be desirable.	No action required
2	Workshop 2a	An application is expected for 200+ dwellings on Chobham Road, near Frimley Park Hospital and the proposed interventions for the LCWIP should tie in with the developers' plans.	Cycling	Camberley to Rushmoor via Frimley Park Hospital (ID #6)	Acknowledged - reference in the report made.	Item updated
3	Workshop 2a	Highlighted that many businesses through Park Street had pavement licenses and asked if this had been considered.	Cycling	Frimley - Park street	There were little constraints as there was plenty of available space to make it accessible to cyclists. Additionally, she noted that further engagement and assessments would be undertaken as the scheme progressed.	Rejected/ No change
4	Workshop 2a	Acknowledged the number of proposed crossings along the A30 and asked if modelling would be undertaken to understand better the impact on traffic flows, including delays on the existing bus lane on the A30.	General	A30 - Camberley to Blackwater Cycle Corridor (ID #3)	That traffic modelling will be undertaken in the next phase of design to determine the impact on traffic flows.	No action required
5	Workshop 2a	Commented that at Chapel Lane (where the proposed school street) a shared use path was being implemented as part of a recent development. This had possibly been implemented following the team's site visits. He asked if further details were available with regards to the school street.	General	Bagshot - Chapel Lane	That details were yet to be developed however a typical school street would involve restrictions on when and who could access the street during school pick up and drop off times, and therefore limit the time when non-residents can enter the area.	No action required
6	Workshop 2a	The proposal to widen the footpath near the cricket ground and if space would be required from the highway.	Walking	Chobham High Street Core Walking Zone (ID #9)	That there was a path alongside the cricket ground which required improvement and therefore it was unlikely that highway land would be required but further checks were to be made during the next design phase.	Item updated
7	Workshop 2a	The location of the crossing on Chertsey Road and if this would generate more traffic delays.	Walking	Chobham High Street Core Walking Zone (ID #9)	That the reason for this was to serve the shops better, including the post office, it could also be seen as a traffic calming measure. He added that no traffic surveys had been undertaken although further assessments and surveys would take place in the next design phase.	No action required
8	Workshop 2a	If there would be any public consultation and if so when.	Engagement	General	That this would be undertaken during the next design phase, once the schemes have been developed further and more information is available on the proposed interventions.	No action required
9	Workshop 2a	How the engagement had gone so far.	Engagement	General	That feedback had been positive, with further engagement with neighbouring authorities and members scheduled over the next few weeks.	No action required
10	Workshop 2a	If there would be further engagement with members.	Engagement	General	That besides from the current phase of engagement, the adoption process would be the next time when members review the LCWIP report. During the next design phase there would be further engagement with all key stakeholders and those affected by the scheme, including local members.	No action required
11	Workshop 2b	Whether the proposals sought to achieve a wider network throughout the county.	General	General	Due to typical walking distances developing a wider cohesive network was more associated with the cycle network proposals than the walking routes.	No action required
12	Workshop 2b	Asked about the Designated Funds (National Highways) scheme connecting Camberley and Frimley.	General	Connecting Camberley and Frimley	TV clarified that this was a cycleway connecting the two town centres and that it had been identified as a high scoring cycle corridor within the LCWIP. He added that the route was delivered through a different mechanism with the design proposals already well advanced.	No action required
13	Workshop 2b	If cycle parking was an example of a typical intervention.	Cycling	General	This would be developed further in the next design phases, following the adoption of LCWIP.	No action required
14	Workshop 2b	What a 'two-way cycle track' was	Cycling	General	This would be an off-road and segregated provision.	No action required





ID	Source	Requested Amendments	LCWIP Reference	Route	AtkinsRealis Response	Status
					No action required	
					Item updated	
					Rejected/ No change	
15	Workshop 2b	What parking provision was proposed on High Street (Frimley).	General	Frimley High street	That parking and loading would be provided in form of footway level bays, which when not in use would offer wider footways. More details would be developed in the next design phase.	
16	Workshop 2b	What the proposed 'wayfinding' meant.	General	General	This comprised of improved signage, finger posts, totems, etc.	
17	Workshop 2b	Drop-offs outside Ravenscote School were often troublesome.	General	Frimley - Ravenscote School	That location was beyond the 2km mark from the centre of the CWZ and therefore was not included in the CWZ network proposals.	
18	Workshop 2b	Acknowledged that the M3 footbridge was very narrow and questioned its suitability for a future shared-use path being proposed as part of the LCWIP	General	Frimley - M3 footbridge	Acknowledged - Retained as a quick win to allow cyclists and aspirational proposal for new bridge	
19	Workshop 2b	Often heard of complaints associated with excess speed along Brackendale Road. He was keen to see interventions to better protect both pedestrians and cyclists along the road and in the area.	General	Frimley - Brackendale Road	Additional traffic calming measures proposed	
20	Workshop 2b	What a 'quite way' on Brackendale Road would involve.	General	Frimley - Brackendale Road	That interventions would be fairly limited considering that it was already fairly quiet environment. The details of said interventions would be developed further in subsequent design phases.	
21	Workshop 2b	Concerned about the safety of cyclists on the blind bend on Brackendale Road where advisory cycle lanes were proposed, as visibility was already poor there.	Cycling	Frimley - Brackendale Road	Additional traffic calming measures could be included, such as speed humps, or localised carriageway narrowing, and added that speed surveys would be commissioned in next design stage to better assess existing environment and potential interventions. The proposed interventions were developed based on the existing geometry of the road and the traffic flows. There may be risks in some of the proposals, however this will be reviewed in the next stages of the design.	
22	Workshop 2b	That some people used Heatherdale Road although felt that Brackendale Road was possibly more direct.	General	Frimley - Brackendale Road and Heatherdale Road	Noted	
23	Workshop 2b	The delivery of interventions on Brackendale Road and who would be responsible for future maintenance once interventions have been delivered, as the road was privately owned.	General	Frimley - Brackendale Road	Noted - proposals to be reviewed in the next stage	
24	Workshop 2b	Uncertainty around the delivery of improvements along Brackendale Road, particularly the duty of consult.	General	Frimley - Brackendale Road	Noted - proposals to be reviewed in the next stage	
25	Workshop 2b	What 'mixed traffic' was	General	General	This would be where cyclists shared the carriageway with motor vehicles.	
26	Workshop 2b	How Park Street would operate as shared facility, and whether any dedicated cycle lane would be provided	Cycling	Camberley Area - Park Street	Park Street would be a pedestrian street where cyclists were permitted but had to give priority to pedestrians.	
27	Workshop 2b	Concerned about the impact on the shops in the town centre if parking restrictions were introduced along High Street and London Road (service road).	General	Camberley Area - High Street and London Road	That this was aspirational and would be subject of consultation with local businesses and other stakeholders as the scheme developed. This had been originally proposed to be pedestrianised when the town centre improvements were developed, and further development is planned in the block between the A30, High Street, Obelisk Way and Park Street	
28	Workshop 2b	The need for somewhere to allow people to drop off/pick up within the town centre.	General	Camberley Area - Town Centre	Off-street locations provided	
29	Workshop 2b	The proposed interventions on Charles Street and how they would improve pedestrian provision.	Walking	Camberley Area - Charles Street	A short section of new footway was proposed on the west side to improve pedestrian accessibility of the shopping centre from the existing northbound bus stop.	
30	Workshop 2b	Onward connectivity past Meadows Roundabout was also required	General	Camberley Area - Meadows Roundabout	proposal to link with Hart LCWIP	
31	Workshop 2b	Many drivers cut through Bagshot High Street to access the M3 via the A30.	General	Bagshot Area - High Street	Noted - Aspirational proposals to investigate restrictions to stop rat running	
32	Workshop 2b	Proposed crossing points on the Bagshot Bypass to link with New Road, as there was no pedestrian movement along New Road.	Walking	Bagshot Area - Bagshot Bypass	Providing safe crossings would increase permeability of the area and possibly encourage more pedestrians and cyclists.	
33	Workshop 2b	Commented on the existing network of hiking paths in Lightwater Country Park and the M3 footbridge	Walking	Bagshot Area - Lightwater Country Park and the M3 footbridge	Wayfinding was proposed in the woodland north of the M3 to improve accessibility of the park.	
34	Workshop 2b	Concerned that the High Street was often congested and acknowledged that it does present challenges. He agreed with the need for a parking review in the village centre.	General	Chobham High Street Core Walking Zone (ID #9)	Noted	
35	Workshop 2b	How stakeholders were identified	Engagement	General	The distribution list was a snapshot of the key stakeholders who represented the wider community and that further engagement and consultation would be undertaken in subsequent design phases.	
36	Workshop 2c	Asked about the interventions on Cycle Corridor 16: Bagshot to Windlesham, as the available space was limited	Cycling	CC 16	The proposals for that location would be presented in the following slides.	



						No action required
						Item updated
						Rejected/ No change
ID	Source	Requested Amendments	LCWIP Reference	Route	AtkinsRealis Response	Status
37	Workshop 2c	If Cycle Corridor 6 acknowledged that Frimley Park Hospital would be moving.	Cycling	CC 6	The route would serve a number of different key destinations in the area, including residential areas, not just the hospital.	
38	Workshop 2c	Commented about Frimley Green regarding future works to the roundabout at Frimley Green which provided a link to Farnborough North Railway Station via the Hatches. The link was a popular commuter route. He added that Network Rail were proposing changes to the route to the railway station and asked if this had been considered.	General	Frimley - Frimley Green	SHBC had informed the team on these plans and it seemed like the LCWIP proposals largely aligned with the planned interventions.	
39	Workshop 2c	Commented about the proposed changes to two mini-roundabouts in the centre of Frimley Green and added that there had previously been many roadworks in the area. He asked whether the LCWIP proposals would be implemented together with the changes to the roundabouts and proposed that there should be no duplications on the works to prevent disruption.	General	Frimley - Frimley Green	The junction modification scheme was more developed than the LCWIP, which at that stage was very high level. She added that the LCWIP scheme did not have funding yet, and therefore the junction works were likely to be implemented before the LCWIP cycle scheme. However, since the proposals were being aligned, the LCWIP was going to tie into the new junction when built with no re-work required.	
40	Workshop 2c	Queried the speed limit changes on Guildford Road.	General	Frimley - Guildford Road	It was proposed as a 20mph speed limit, and traffic surveys would be undertaken in the next design stage and any requirement for additional traffic calming measures investigated further.	
41	Workshop 2c	Asked for clarification around the proposed School Street.	General	Frimley - School Street	School Streets did not necessarily require physical changes, but traffic was restricted to residents only during school drop off and pick up times. She added that enforcement was usually undertaken via gates operated by school staff or cameras, and that the purpose was to improve safety for children outside schools.	
42	Workshop 2c	Asked for greater detail around the placement of the School Street.	General	Frimley - School Street	This would be on Henley Drive and access would be unrestricted for local residents.	
43	Workshop 2c	Commented that on Tomlinscote School the majority of students who walked use the rear entrance along Alphington Avenue and the proposed extent of the school street was likely to push the traffic in that direction.	General	Frimley High Street Core Walking Zone (ID #4)	Acknowledged	
44	Workshop 2c	There had previously been a number of traffic issues and expressed concerns about the conflict with motor vehicles.	General	Frimley High Street Core Walking Zone (ID #4)	The aspiration was that with improved active travel infrastructure more students would be travelling by sustainable means.	
45	Workshop 2c	The catchment for the school was very large and that it was unlikely that many students would walk or cycle. He recommended to reinstate the bus services to the school which had been stopped.	General	Frimley High Street Core Walking Zone (ID #4)	Noted - proposal added	
46	Workshop 2c	Believed that James Road and Crabtree Road would not be used (roads where the National Highways cycle scheme was developed) and cyclists would follow the most direct route along Frimley Road.	Cycling	Frimley High Street Core Walking Zone (ID #4)	Noted	
47	Workshop 2c	Concerned that there was no sufficient space to accommodate proposed pedestrian island on Watchetts Drive, although he acknowledged that it would be very useful.	Walking	Frimley High Street Core Walking Zone (ID #4)	Noted - proposals to be reviewed in the next stage	
48	Workshop 2c	Also raised concerns about the removal of pedestrian guard railings on Crabtree Road.	Walking	Frimley High Street Core Walking Zone (ID #4)	The removal of pedestrian guard railing has been shown to be unsafe for cyclists who are prone to being squeezed between traffic and the guardrail, however, road safety audits would be undertaken in the next stages of the design and the requirement of the guardrail would be reviewed.	
49	Workshop 2c	Commented about how improvements to the ambulance entrance at the hospital would affect their access.	General	Frimley High Street Core Walking Zone (ID #4)	No changes were proposed to the Hospital ambulance access.	
50	Workshop 2c	Welcomed improvements around South Camberley Primary School where there had previously been a number of traffic incidents involving children.	General	Frimley High Street Core Walking Zone (ID #4)	Noted	
51	Workshop 2c	Believed that Watchetts Drive was very dangerous for those going to Kings International School.	General	Frimley High Street Core Walking Zone (ID #4)	Acknowledged	
52	Workshop 2c	Asked if the bridge over the M3 would be widened, and as National Highways owned the bridge that would result in delays to the implementation of the proposal.	General	Camberley to Rushmoor via Frimley Park Hospital (ID #6)	The aspiration was that it would be widened, however, it was acknowledged that this would come with a big cost, and currently the bridge could accommodate both pedestrians and cyclists.	
53	Workshop 2c	Suggested that despite being narrow the bridge was very useful and simpler improvements such as moving or removing railing at the entrance and exit along with regular maintenance would drastically improve the environment and cycle accessibility.	Cycling	Camberley to Rushmoor via Frimley Park Hospital (ID #6)	Noted	
54	Workshop 2c	Commented the Brackendale Road was a private road with steep gradient. He recommended resurfacing of the road to help cyclists.	Cycling	Camberley to Rushmoor via Frimley Park Hospital (ID #6)	Noted - proposal added	



ID	Source	Requested Amendments	LCWIP Reference	Route	AtkinsRealis Response	Status
						No action required
						Item updated
						Rejected/ No change
55	Workshop 2c	Commented that the A30 (in both directions) adjacent to the Diamond Ridge junction was prone to poor drainage and thus often presented problems for pedestrians.	Walking	Camberley High Street Core Walking Zone (ID #2)	Noted - proposals to be reviewed in the next stage.	
56	Workshop 2c	Changing delivery and servicing arrangements/provision in the city centre would be very challenging.	General	Camberley High Street Core Walking Zone (ID #2)	Noted	
57	Workshop 2c	The team engage with the BID. He also commented that the service road could provide delivery provision, however there was existing access to the businesses from a back road.	General	Camberley High Street Core Walking Zone (ID #2)	Noted - further engagement in the next stage	
58	Workshop 2c	Commented that connectivity along London Road (towards Blackwater) – was required as existing routes were not joined up, and suggested that even a shared facility was preferred over cycling on a busy road.	General	Camberley High Street Core Walking Zone (ID #2)	Acknowledged and referenced the cycle proposals.	
59	Workshop 2c	Believed that using Park Street was not suitable / there were better alternatives.	General	Camberley High Street Core Walking Zone (ID #2)	Noted - proposal removed. Alternative routes recommended	
60	Workshop 2c	Queried on the connection to the Hart LCWIP.	General	A30 – Camberley to Blackwater Cycle Corridor (ID #3)	Responded that the proposed facilities would link with the railway station via mixed traffic on Station Road, and at London Road via the existing crossings.	
61	Workshop 2c	That waiting times at the roundabout were currently long for pedestrians and cyclists.	General	A30 – Camberley to Blackwater Cycle Corridor (ID #3)	Noted	
62	Workshop 2c	Commented that the A30 was very narrow adjacent to Waitrose and reported an accident spot near a car wash, which required careful design to protect cyclists. He added that there might be the need to engage and work with Network Rail to enable improvements at Bagshot Railway Station for a crossing of the railway line. He suggested a cycle channel at the existing footbridge as a quick win.	Cycling	A30 – Bagshot to Frimley Railway Station Cycle Corridor (ID #2)	Noted	
63	Workshop 2c	There was often traffic congestion on the A30 along Bagshot and that there was a lot of informal parking along yellow dashed lines near Mogul restaurant. He added that something had to be done to improve the traffic signals.	General	A30 – Bagshot to Frimley Railway Station Cycle Corridor (ID #2)	Noted - reference made in the report.	
64	Workshop 2c	Commented that the dashed lines were a disused bus stop which had no parking restrictions and therefore people would park there. She also acknowledged that there was poor parking provision within Bagshot and such changes would likely receive opposition from local residents.	General	A30 – Bagshot to Frimley Railway Station Cycle Corridor (ID #2)	Noted - reference made in the report.	
65	Workshop 2c	Improvements were required at Church Road for pedestrian facilities and traffic management. She also mentioned that there was the need to widen paths along Guildford Road and that improvements along Chapel Lane should have been considered during the planning and construction of the nearby development, but a one-way system had not been approved by the County then.	Walking	Bagshot High Street Core Walking Zone (ID #9)	Noted - reference made in the report.	
66	Workshop 2c	Was glad for the proposed crossing facility to New Road and that the existing footway was very narrow, extending only on one side of the road and that vegetation clearance was required.	Walking	Bagshot High Street Core Walking Zone (ID #9)	Noted	
67	Workshop 2c	Commented about the condition of the footpath behind Connaught Junior School and recognised the value it could provide through simple improvements without necessarily a tarmac or similar surface. He agreed with vegetation clearance to ensure path's usability throughout the year.	Walking	Bagshot High Street Core Walking Zone (ID #9)	Noted - reference made in the report.	
68	Workshop 2c	There was an uncontrolled crossing on Bagshot Bypass to the golf course that linked to the railway station, it was a route that some people used for leisure walks (dog walkers), however the fast-moving traffic along Bagshot Bypass was a barrier and recognised the constraints faced on it for further improvements.	Walking	Bagshot High Street Core Walking Zone (ID #9)	Responded that the crossing was reviewed during the site visit, but the high volumes of fast moving traffic and proximity of large junction made a formal crossing unlikely to be feasible, therefore it had been removed from the proposals.	
69	Workshop 2c	Church Road in Windlesham was often used as a rat run due to the traffic delays on the M3 junction and Bagshot Bypass and supported the switch to 20mph through the village. He added that as Windlesham resident he supported presented proposals.	General	Bagshot to Windlesham Cycle Corridor (ID #16)	Noted - Aspirational proposals to investigate restrictions to stop rat running	
70	Workshop 2c	Commented about a recent footbridge closure restricting access to Lightwater Country Park. The footbridge was planned to be closed for 2 years.	Walking	Bagshot to Windlesham Cycle Corridor (ID #16)	Noted	



ID	Source	Requested Amendments	LCWIP Reference	Route	AtkinsRealis Response	Status
						No action required
						Item updated
						Rejected/ No change
71	Workshop 2c	Commented that often parents picked up and dropped off children along Green Lane, creating traffic and making it difficult to navigate.	General	Bagshot to Windlesham Cycle Corridor (ID #16)	Commented that surveys in the future would determine the demand for added infrastructure to improve road safety for students. She added that a School Street could be potentially investigated.	
72	Workshop 2c	Asked about connections between Station Road and Woking via the Woking Borough LCWIP. He added his surprise that was not progressed as part of the shortlist.	General	Chobham High Street Core Walking Zone (ID #9)	A cycle corridor was being proposed as part of the aspirational network and could be progressed if any funding opportunities became available in the future.	
73	Workshop 2c	Asked about the timing of engagement with residents and the public.	Engagement	General	This would be undertaken during the next design phase (subject to funding).	
74	Workshop 2d	Commented that she would have liked to have seen better links across the A331 into Rushmoor although appreciated the constraints that the railway line poses.	General	General	Noted - Blackwater Valley Path is included in the aspirational list - improvements for crossings to the path to be considered in the future as more aspirational proposals	
75	Workshop 2d	The railway station west of Frimley is Farnborough North	General	General	Noted - amended	
76	Workshop 2d	She supported the connection with Frimley Bypass for cycle corridor 6.	General	CC 6	Noted	
77	Workshop 2d	Expressed interest in the school streets proposals and acknowledged that they would be challenging to deliver.	General	School streets	The school street proposals were yet to be developed and that further engagement would be undertaken during the next stage of design.	
78	Workshop 2d	Pleased to see a direct connection to Hart along the A30 with speed limit reduction to 30mph, as many local residents travel towards Camberley. She also suggested introduction of landscaping between the carriageway and the proposed active travel corridor where possible and space permitting.	General	General	Landscaping and public realm proposals would be part of the LCWIP to be reviewed in the next stages of the design.	
79	Workshop 2d	HCC to share the proposed interventions with officers from Hart and Rushmoor.	Engagement	General	Confirmed they would share the proposals and forward comments/feedback if any.	
80	Mail	The junction of the The Avenue and southwell park road has a blind bend on the approach, also, why not have the cycleway down the alleyway (opposite 20/22 the Avenue) and via the recreation ground?	Cycling	The cycle link from Frimley to Camberley via the Avenue	They have considered a number of factors including those associated with the principles of Cycle Infrastructure Design guidance (LTN 1/20) to be Coherent, Direct, Safe, Comfortable and Attractive – particularly in this case directness but also considers access to key origins and destinations. It also looks to achieve a wider more cohesive network too as per DfT LCWIP guidance.	
81	Mail	Chobham High street pedestrian zone- the footpath to the left of the village hall to the high street- you are suggesting widening it – one side is privately owned and the other side is the cricket ground- so difficult/ impossible to widen. At the end of this pathway there is a traditional 'kissing gate' which is important but would make the route less accessible for buggies.	Walking	Chobham High street pedestrian zone	At this early stage of network development engagement hasn't extended to landowners, local residents or businesses – however this will be done as part of the next stage of design (subject to funding) as part of further design development.	
82	Mail	Raised areas at junction of Chertsey Road and the high street/ Windsor road – there are listed buildings and a listed wall, the pavement is so narrow that a double buggy has to go into the road, there is the leat and water on the opposite side of this junction, HGVs turning left or right into Chertsey road have demolished the wall on that junction several times, bollards installed to protect them have already been demolished by lorries turning.	Walking	Chobham High street pedestrian zone	At this early stage of network development we also haven't reviewed any heritage or environmental constraints, this will also be undertaken during the next design phase (subject to funding). Additionally, during this phase we will also review accident history in more detail and engage more widely to understand the history and background to the area.	
83	Mail	Concerned about the relationship of the improvements with the conservation area and this needs to be carefully considered so that the improvements don't have an urbanising effect.	General	General	During this phase we will also review accident history in more detail and engage more widely to understand the history and background to the area.	
84	Mail	Question investment in widening the pavement and improvement the bus stop further down station road- there is a bus once an hour (or less) – doesn't seem money well spent.	Walking	Station road	Proposals seek to achieve accessibility to the entirety of core walking zones and further engagement will be undertaken with operators, council officers and members as proposals develop further.	
85	Mail	Surprised that the cycleway from westend to woking isn't in the first tranche as this is an absolute priority for residents to have employment- there is nothing local and connectivity to woking is essential.	Cycling	Westend to Woking	In terms of access to Woking there are three proposed cycle corridors which connect to Woking Borough although not part of the Phase 1 routes. The Woking Borough LCWIP will follow the same DfT guidance which might reveal proposals close to / connecting to Surrey Heath although this work has not started yet.	
86	Mail	Recommend ensuring that motor traffic flows in this area are low enough to support mixed traffic use effectively. According to the road traffic statistics website from DfT, there is an Average Annual Daily Flow (AADF) of 3289 vehicles on Guilford Road. This figure suggests that additional measures may be necessary to reduce motor traffic flow in that specific section.	Cycling	CC 8	Intention next week to send you the draft concepts including supporting text for review. They may not change significantly from what you have seen already but with the text will add more depth and background/context as well as reflect comments from stakeholders which are still coming through.	
87	Mail	There is an obligation on the developer to fund improvements to the traffic signals on the junction of A30/Waters Way.	Cycling	CC2	Since this is already being progressed, this will not be included in the LCWIP but acknowledge it in the report	

ID	Source	Requested Amendments	LCWIP Reference	Route	AtkinsRealis Response	Status
						No action required
						Item updated
						Rejected/ No change
88	Mail	It was acknowledged that there was little support from members for a cycle route via Park Street.	Walking	CWZ 2	The proposals would be updated to reflect Southern Road being the primary route with the secondary route being Knoll Road	
89	Mail	Acknowledged the development at Deepcut and shared drawings for improvements to the roundabout	Cycling	CC 8	As these are already proposed as part of this scheme the LCWIP will not propose them on the assumption they will be delivered by the Deepcut development, particularly as it appears designs are relatively well progressed.	
90	Mail	Suggestion to rename Camberley High Street to Camberley Town Centre	Walking	CWZ 2	Agreed to update	
91	Mail	Suggestion to rename Chobham High Street to Chobham Village	Walking	CWZ 8	Agreed to update	
92	Mail	Identified the opportunity to propose walking improvements along the footpath east of the cricket ground which ties into PRowS	Walking	CWZ 8	Agreed to incorporate	
93	Mail	Highlighted that there are currently proposed bus stop improvements along Windsor Road including 3m footway and improvements to crossings	Walking	CWZ 8	No action required	
94	Sustrans comments on draft report	It is assumed that corridors 2, 3, 6, 8 and 16 are part of Phase 1, however, in the symbology there is a dashed line indicated as "Phase 1 Cycle corridor" that is not shown clearly on the map and could create confusion. Also, are corridors 1, 5, 7, 9... not shown on the map because they are part of the Phase 2?	Cycling	General	Noted - map updated	
95	Sustrans comments on draft report	There is a single pink line on Park Street and another near Bagshot High Street that is not in the symbology- is it meant to represent an advisory cycle lane? It is similar in colour to the line labelled "Advisory Cycle Lane" that is a double pink line. This is true also in figures 71, page 11 & figure 74, page 114.	Cycling	General	Symbol for ACLs	
96	Sustrans comments on draft report	the text indicates "introduce a green buffer where space allows". The absolute minimum buffer recommended for 40mph speed limit is 90 cm.	Cycling	General	acknowledged	
97	Sustrans comments on draft report	if the traffic flows along the section are above the recommended threshold for on-carriageway facilities, consider proposing measures or further studies to reduce motorised traffic volumes.	Cycling	General	Noted	
98	Sustrans comments on draft report	Suggestion: Describe the corridors sections in the same order i.e. left to right or north to south.	Cycling	General	Presentation of corridors follow the name of the scheme - it was selected that the larger town centres will be the starting point of the schemes	
99	Sustrans comments on draft report	Last sentence makes reference to footnote 4, is that ok? if so, expand on how reducing cycle waiting times at the toucan crossings is related to estimated pedestrian flows.	Cycling	General	Noted	
100	Sustrans comments on draft report	if the traffic flows along the section are above the recommended threshold for on-carriageway facilities, consider proposing measures or further studies to reduce motorised traffic volumes.	Cycling	General	Noted	
101	Sustrans comments on draft report	Make sure the horizontal segregation complies with LTN 1/20 recommendation i.e. 30cm minimum buffer for 40mph traffic speed limit.	Cycling	General	Noted	
102	Sustrans comments on draft report	add full stop point at the end of the paragraph.	Cycling	General	Agreed to update	
103	Sustrans comments on draft report	It would be good to present a map showing all the core walking zones for reference (similar to figure 63 Phase 1 Proposed Cycling Interventions).	Walking	General	Agreed to update	
104	Sustrans comments on draft report	Figure 106 is presented before figure 105.	Walking	General	Report is work in progress, the figures and pages will be updated.	
105	Sustrans comments on draft report	It says, "Bridge Road and Station Road s proposed" add the i to "is proposed".	Walking	General	Agreed to update	



# Appendix 7: Sustrans Cycle Corridor 5 Review



## Surrey Heath Local Cycling and Walking Infrastructure Plan (LCWIP)

### Critical Friend: Corridor 8 Recommendations

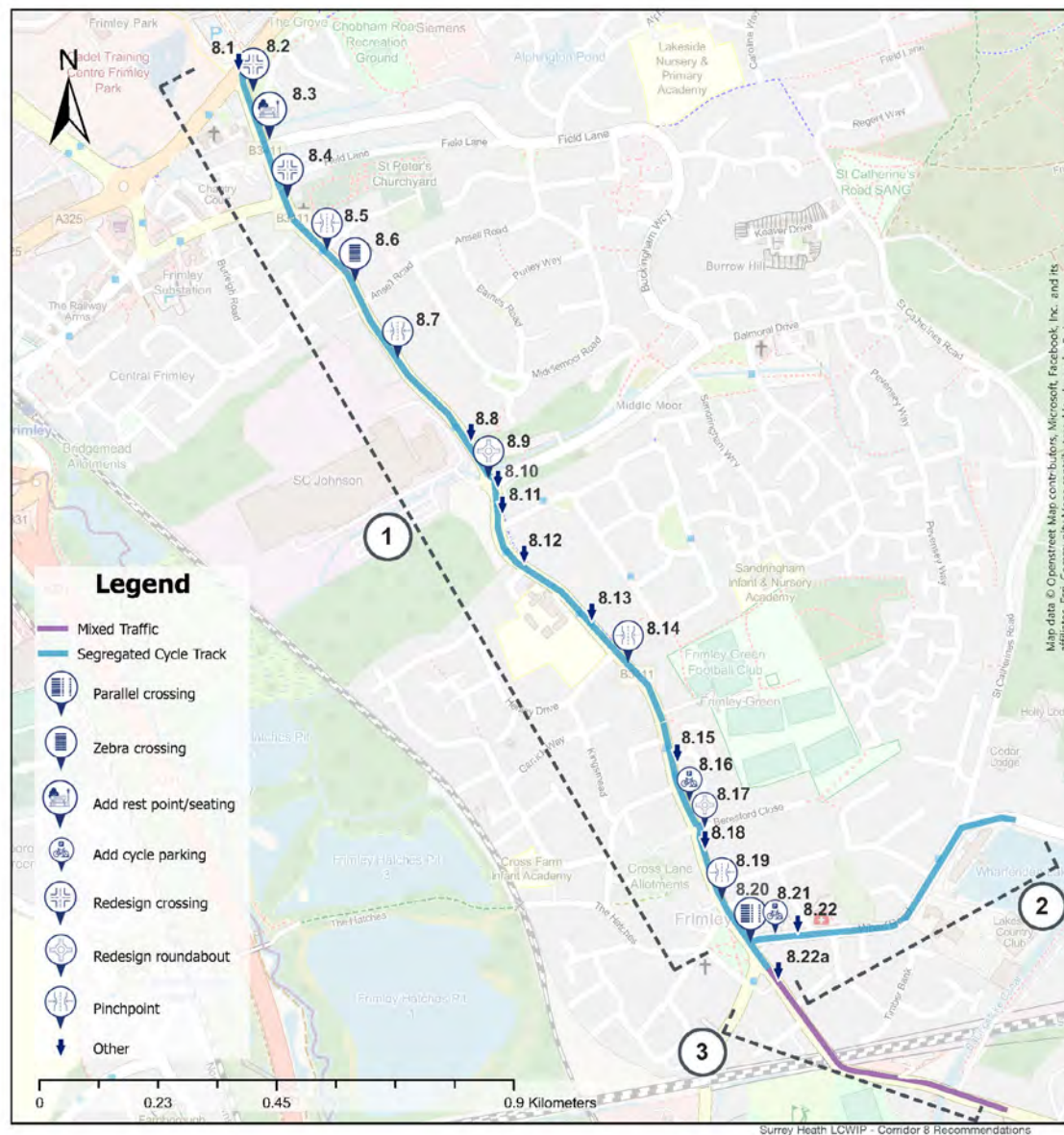
July 2023



## Route 8- Frimley Green Road

From Portsmouth Road to Guildford Road

1. Frimley Green Road from Grove Cross Road to Wharf Road roundabout: **Bidirectional segregated cycle track**
2. (Option 1) Wharf Road from Frimley Road to Lake Road: **Bidirectional segregated cycle track**
3. (Option 2) Guildford Road from Sturt Road junction to the Hinn Museum: **Mixed traffic**



### 8.1

Install bidirectional segregated cycling facilities on the eastern side of Grove Cross Road and Frimley Green Road, up to Wharf Road roundabout, by possibly reducing carriageway lane widths, re-allocating space from on-road parking and using the verge of carriageway. Ensure side road treatments along roads where the cycle lane crosses by prioritising cyclists and pedestrians.



Figure 8.1: Grove Cross Road

### 8.2

Upgrade uncontrolled crossing to controlled crossing on the eastern arm of the Portsmouth Road and Grove Cross Road junction.



Figure 8.2: Grove Cross Road junction

### 8.3

Consider installing seating and resting facilities along Grove Cross Road, particularly at the adjacent field (The Grove).



Figure 8.3: The Grove

### 8.4

Consider redesigning Grove Cross Road / Church Road junction by re-allocating extra carriageway space to promote segregated cycling facilities. Also, consider upgrading current uncontrolled crossings to controlled crossings on the eastern and western junction arms.



Figure 8.4: Extra carriageway space on Grove Cross Road

### 8.5

Narrow section of carriageway present north and south of Parsonage Way. Consider reducing the width of the horizontal segregation between the carriageway and cycle track if needed.



Figure 8.5: Frimley Green Road

### 8.6

Consider upgrading current uncontrolled crossing over Frimley Green Road (north of Ansell Road and others along the road) to a zebra crossing or other controlled crossing depending on traffic counts.



Figure 8.6: Uncontrolled crossing over Frimley Green Road

### 8.7

Narrow section of carriageway present along Frimley Green Road (south of Ansell Road). If there is not enough space for a segregated cycle track, consider reducing horizontal segregation between carriageway and cycle track or providing a shared use path only in the narrow area.



Figure 8.7: Narrow section on Frimley Green Road

### 8.8

Install a raised table to reduce cycle speed and provide a pedestrian step free access to buses, at the bus stop located north of the Balmoral Drive roundabout.

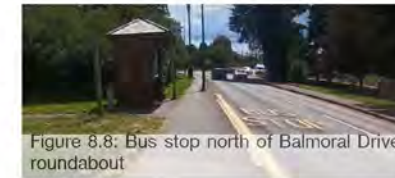


Figure 8.8: Bus stop north of Balmoral Drive roundabout

### 8.9

Redesign the Balmoral Drive roundabout to provide controlled crossing facilities on all arms. In particular, consider providing parallel crossing facilities - or other controlled crossing depending on traffic counts - on the eastern roundabout arm (across Balmoral Drive).



Figure 8.9: Uncontrolled crossings at Balmoral Drive roundabout

### 8.10

Consider upgrading the current shared use path along Frimley Green Road to provide segregated cycling facilities on the eastern side of the road.



Figure 8.10: Current shared use path along Frimley Green Road

### 8.11

Install a bus stop bypass or raised table to reduce cycle speed and provide a pedestrian step free access to buses (subject to width availability), at the bus stop south of Balmoral Drive roundabout.



Figure 8.11: Current bus stop on Frimley Green Road

### 8.12

Consider removing all the bollards and 'shared use path' signs on Frimley Green Road (from Bowling Green Court to Frimley Green Recreation Ground entrance).



Figure 8.12: Bollards on the shared use path on Frimley Green Road

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### 8.13

Install a bus stop bypass or raised table to reduce cycle speed and provide a pedestrian step free access to buses (subject to width availability) at the Frimley Church of England School bus stop, north of Henley Drive.



Figure 8.13: Bus stop north of Henley Drive

### 8.14

Narrow section of carriageway present along Frimley Green Road (south of Henley Drive). If there is not enough space for a segregated cycle track, consider providing a shared use path in this area, and in other areas where there are width constraints.



Figure 8.14: Narrow section on Frimley Green Road

### 8.15

Install a bus stop bypass or raised table to reduce cycle speed and provide a pedestrian step free access to buses (subject to width availability) at the bus stop north of the Beresford Close roundabout.



Figure 8.15: Bus stop north of the Beresford Close roundabout

### 8.16

Consider installing cycle parking facilities north of the Beresford Close roundabout (in front of The Nook). If car park bay is kept, consider installing the cycle track between the car park and footway.



Figure 8.16: Area with shops where cycle parking facilities are needed

### 8.17

Consider upgrading the current uncontrolled crossings at the Beresford Close roundabout to controlled crossing depending on traffic counts.



Figure 8.17: Beresford Close roundabout

### 8.18

If car park bay is kept, consider installing the cycle track between the car park and footway, south of the Beresford Close roundabout.



Figure 8.18: Car park south of Beresford Close roundabout

### 8.19

Narrow section of carriageway present along Frimley Green Road (north of Buckhurst Road). Consider reducing the horizontal segregation between the carriageway and cycle track if needed.



Figure 8.19: Narrow section of Frimley Green Road

### 8.20

Install cycle parking facilities in front of the shops, north of the Wharf Road Roundabout.



Figure 8.20: Wharf Road Roundabout

### 8.21

Consider installing a parallel crossing or other controlled crossing facility depending on traffic counts at the Wharf Road Roundabout.



Figure 8.21: Wharf Road Roundabout

### 8.22 Option 1:

Due to insufficient carriageway widths on Guildford Road to permit segregated cycling facilities, consider re-routing corridor 8 down Wharf Road. Cyclists will then have access to St Catherines Road and Wharfenden Lake.



Figure 8.22: Wharf Roundabout

### 8.22a Option 2

Subject to a detailed traffic study, option 2 is to install a bus gate or modal filter at or near Hinn Museum. Reduce speed limit to 20mph. With substantial reduction in traffic and reduced speeds, this section of the carriageway (from Sturt Road junction to Hinn Museum) could become suitable for mixed traffic cycling. Motorists wanting to access Frimley Green Road from the south east of this location would use Deepcut Bridge Road, Lake Road and Wharf Road - a parallel route with similar travel times.



Figure 8.22a: Insufficient widths on Guildford Road



Figure 8.22a: Guildford Road



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