



Spelthorne Local Cycling and Walking Infrastructure Plan

SURREY COUNTY COUNCIL & SPELTHORNE BOROUGH COUNCIL

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Contents

1. Executive Summary	05
2. Introduction	13
3. Previous Studies	21
4. Evidence Base / Background Data	37
5. Stakeholder Engagement	73
6. Design Interventions: Place-Based Approach.....	77
7. Cycle Network	85
8. Walking Network.....	115
9. Route Prioritisation, Costings and Funding Opportunities.....	145
10. Conclusions	157
11. Appendices	161

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1. Executive Summary

Executive Summary

Atkins has been commissioned by Surrey County Council (SCC) and Spelthorne Borough Council (SBC) 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 recent uptakes in the active travel modes of walking and cycling by delivering improved facilities for existing active users whilst also encouraging a mode shift for new users.

The SBC LCWIP has considered the full extent of the Borough of Spelthorne, with an emphasis on links between key trip attractors and destinations that will encourage a greater mode share for the active travel modes of walking and cycling.

The key outputs for an LCWIP are network plans for key walking and cycle corridors and a prioritised programme of infrastructure improvements at concept design stage. Once funding opportunities are secured, the proposed improvements can progress to preliminary and detail design phases for implementation.

Additionally, key active travel principles have been included to inform appropriate consideration and future-proofing of future schemes and developments within the Borough.

The primary objective for the LCWIP is to increase the number of people walking and cycling in the Borough. This includes aims to:

- » Make cycling a safe, attractive and convenient mode of transport for people of all ages, and confidence.
- » Expand the existing cycle network and establish an extensive, continuous travel network for the Borough.
- » Make walking a safe, attractive and convenient mode of transport for people of all ages and abilities / disabilities.
- » Increase inter mobility with improved connectivity in the areas around transport and major employment hubs such as railway stations and high streets, as well as other key destinations.
- » Make Spelthorne an area where people can have an excellent quality of life, supporting the population, social and economical aspirations.

Further, as discussed later in the report, Spelthorne is one of a number of LCWIPs being developed in Surrey, some borough 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 (see page 20) 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
- » Preliminary corridor assessments undertaken using a multi-criteria assessment framework (MCAF)
- » Site visits and formal assessments using standardised tools - Walking Route Audit Tool (WRAT) and Route Selection Tool (RST)
- » Concept design development
- » Further stakeholder engagement to review the concept designs
- » Programme prioritisation and cost estimating

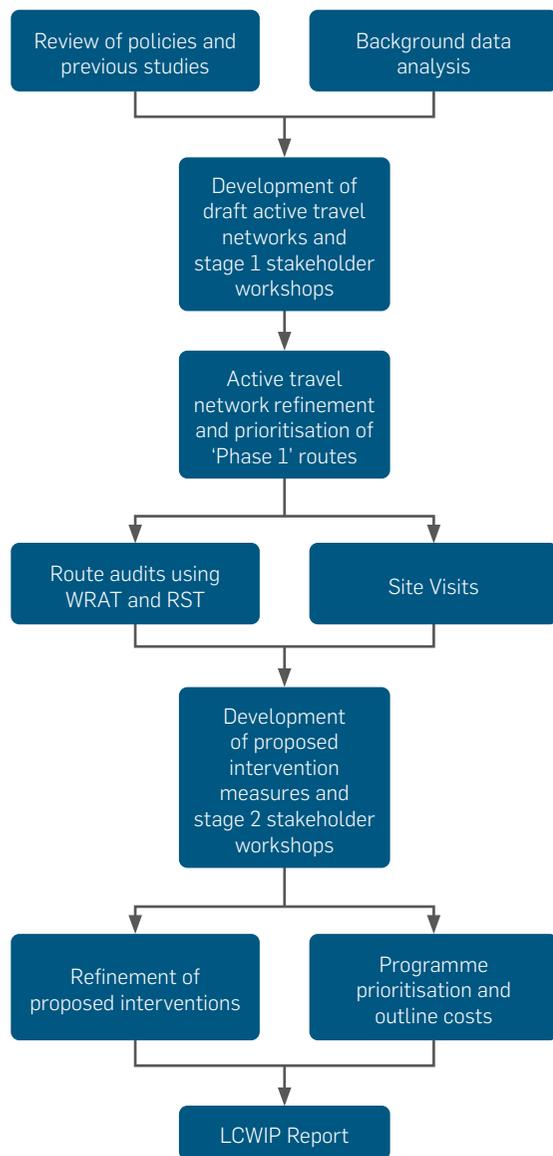


Figure 1. LCWIP process overview

Vision and Design Approach

The overarching vision behind the LCWIP development is one which supports strong and sustainable growth for Spelthorne. This is also balanced with the need to enhance the public realm where people can benefit from a high quality of life.

The concept designs seek to increase the number of people walking and cycling for short journeys or part of a longer journey, which will lead to a reduction in short car journeys. This is important to promote health and well-being, reduce congestion and pollution, provide inclusive travel options, improve the economic vitality of the Borough whilst also balancing the needs of the historic environment.

Good design is vital to the successful delivery of facilities for both people walking and cycling. It is recognised that poor design can undermine the efforts of those who seek to encourage walking and cycling and may weaken the intended benefits of a scheme.

The LCWIP design strategy aims to address these issues with the development of deliverable and attractive borough-wide walking and cycling infrastructure that prioritises people walking and cycling. To support that, a work package that incorporates design best practice through nine key elements has been developed, as follows:

- » Safety
- » Directness
- » Comfort
- » Coherence
- » Attractiveness
- » Adaptability
- » Gradient
- » Context Sensitive
- » Inclusive Design

Stakeholder Consultation

Stakeholder engagement was a key element of this study as it ensured that the views and knowledge of local people were taken into account. During the project two sets of workshops were held with representatives from SCC and SBC, local cycling and walking groups, local businesses and other local stakeholder groups as well as elected members.

The first set of workshops presented the existing issues and the identification of walking and cycle routes. The second set of workshops reviewed the proposed infrastructure interventions.

There were also interim meetings with SCC and SBC project team.

Walking and Cycle Routes Selection

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

The assessment framework involved two stages. Firstly, a 'long-list' assessment using both qualitative and quantitative criteria to reduce the number of options down to 19 cycle routes and 12 Core Walking Zones (CWZs) and respective walking routes (Figure 2).

Following, a further assessment to evaluate these options in more detail (including stakeholder consultation, audits, site visits and further engagement with SCC and SBC officers), the second stage involved developing a 'short list' of options. These routes, named Phase 1 routes, were selected for the development of infrastructure improvements:

- » Cycle routes: five routes were selected for the development of infrastructure improvements (Figure 3 and Figure 4).
- » Walking routes: three CWZs were selected for the development of infrastructure improvements (Figure 3 and Figure 5).

Routes not selected for the first set of interventions (Phase 1) are to be developed at a later stage.

As the project developed, it became more evident that there are interdependencies between the walking and cycle routes. These interdependencies are reflected in the

route prioritisation, costing and intervention approach.

Proposed Improvements

The design proposals for both walking and cycle routes reflect the aims of SCC and SBC.

In Spelthorne, there are several examples of physical severance. A lack of, or inadequate routes, can cause residents and visitors to rely on private transport, thus over stretching the already congested road network. 'Fragmented' retail areas could be better linked to foster economic and social vitality and cohesion in the area, supporting places where people would like to spend time.

Atkins' design strategy addressed these issues with the development of a local cycling and walking infrastructure plan that is innovative, future proofed, and deliverable, creating a network that truly prioritises pedestrian and cyclist movement and at the same time integrates with other adjacent areas and schemes.

To support that, Atkins have developed a work package that incorporates design best practice through nine key elements discussed previously, providing short and long term solutions that can be applied to further designs across Spelthorne and Surrey overall.

Route Prioritisation

The pedestrian and cycle routes were prioritised by quantifying a total score based on stakeholder input, potential usage, design and access. These categories intended to reflect the views of local stakeholders, in addition to the potential usage of each route, the feasibility of the proposed schemes, the potential of the improvements to encourage new walking and cycling and to what degree the selected routes will foster pedestrian and cycle access to and from the key destinations as set in the scope of work.

The categories were subsequently weighted. 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.

Integrate network proposals across other LCWIPs and key developments

There are numerous interdependencies across Surrey and potentially other counties.

LCWIPs in neighbouring boroughs, such as Elmbridge and Runnymede, were taken into consideration during the development of the Spelthorne LCWIP. This method has provided an opportunity for a joined-up approach amongst the three study areas. The sub-regional collaboration should ensure that walking and cycling networks are coherent and continuous across administrative boundaries.

Other LCWIPs are or will be under development in the near future¹ and a continuous synergy amongst all LCWIPs should be expected. Proposals from each should be reviewed together as an integrated package of strategies and interventions. This will 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.

Likewise, it is paramount that the proposed cycle and walking routes and major development in the area are connected. The River Thames Scheme (RTS) is an example. The RTS provides an opportunity to create green spaces and enhance walking and cycling facilities along the River Thames, and the potential for longer distance utility trips linking with and Spelthorne and Runnymede as well as Elmbridge.

Costing

Outline costs were estimated for the proposed design measures. These estimates are reflective of the early concept design stage and are intended to provide an indicative, rough order-of-magnitude, cost. The figures also reflect the diversity of route intervention proposals, which varied significantly in terms of size and complexity. Costs vary from 2.5 million to 11.9 million for the cycle routes and from 3.1 million to 4.6 million for the CWZ/ walking routes.

¹ Mole Vale, Waverley and Surrey Heath, Reigate and Banstead has just been completed.

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

Next Steps and Funding Opportunities

The LCWIP report should be used to support the case for further stages of design, assessment 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 will be integrated into local planning and transport policies, strategies and delivery plans, as per the DfT guidance.

The next stage of the LCWIP implementation will be to advance the design concepts for the first phase of active travel corridors to a feasibility level of design and assessment. During this process, and subsequent design phases, public 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 reviewed and updated periodically, particularly in response to significant changes in local circumstances, such as the publication of new policies or strategies. However, engagement with SCC and SBC has been undertaken during the development of the LCWIP to provide alignment and future-proofing with regards to key transport and local policies. 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.

Once funding opportunities are secured, the proposed improvements can progress to preliminary and detail design phases for implementation. There are a number of potential sources of funding available to deliver improvements identified in a LCWIP² including Integrated Transport and Maintenance Block Funding, government grants, developer funding as well as surplus parking income and Local Economic Partnership (LEP) and / or internal funding.

² Although not all the listed opportunities may be applicable to this LCWIP.

Walking and Cycle Routes

Figures 2 to 5 illustrate the walking and cycling network aspirational list and the selected routes for Phase 1 design interventions.

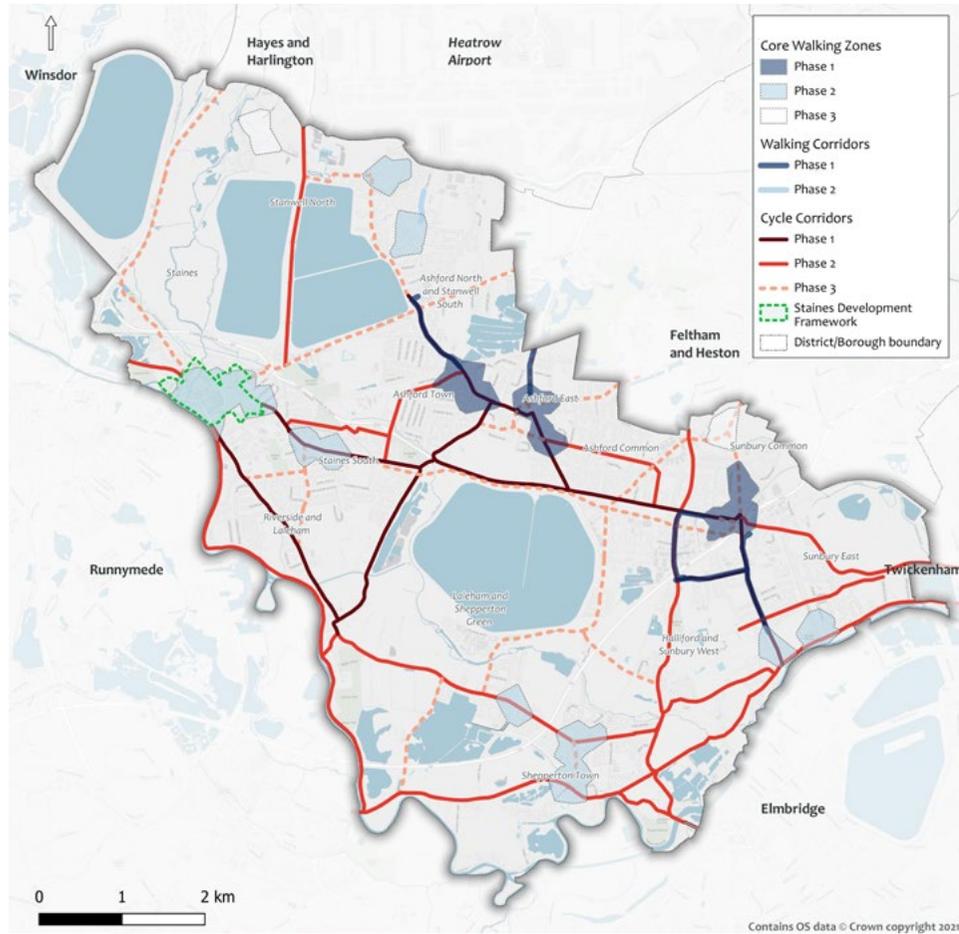


Figure 2. Cycling and walking network aspirational list

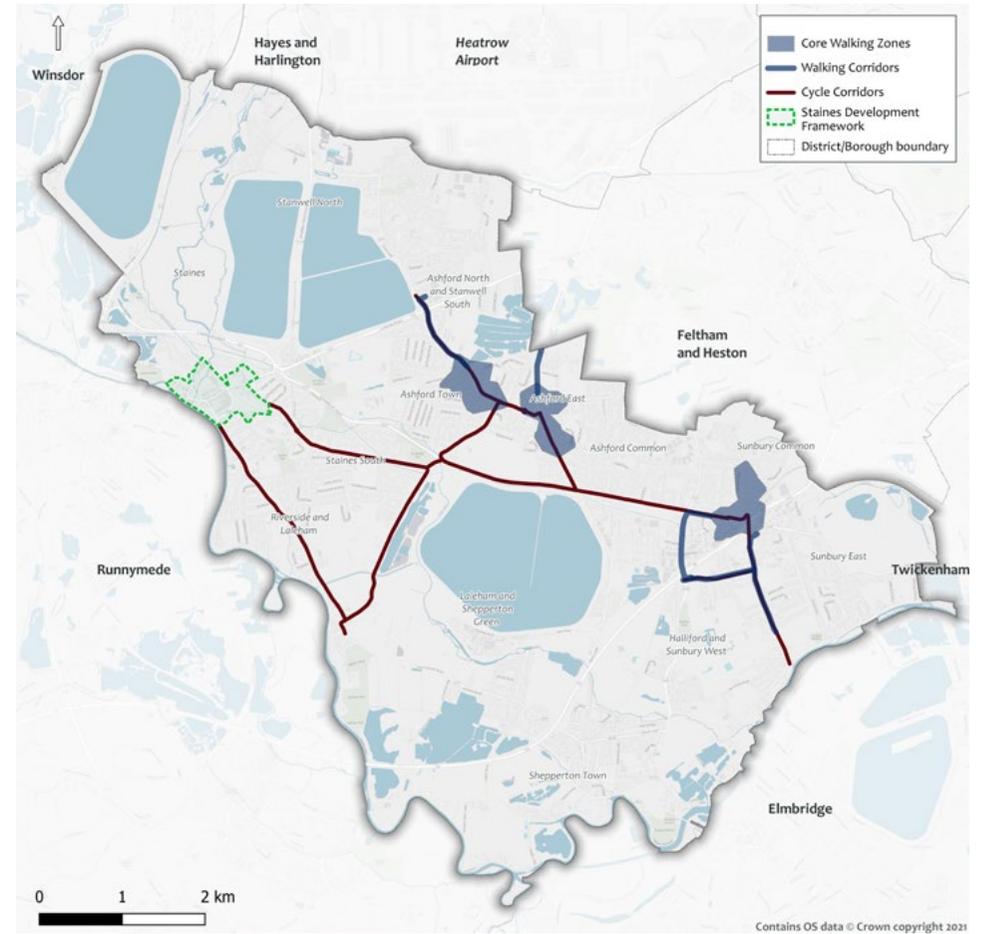


Figure 3. Phase 1 cycling and walking network

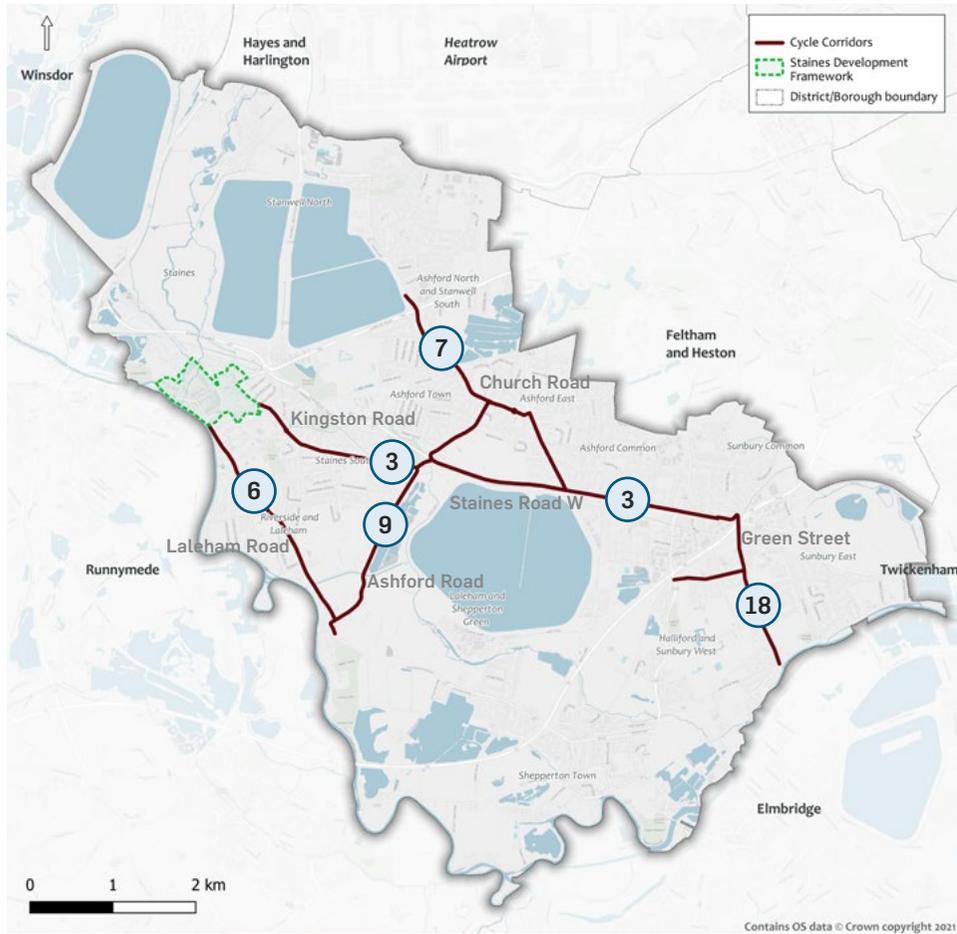


Figure 4. Phase 1 cycle network

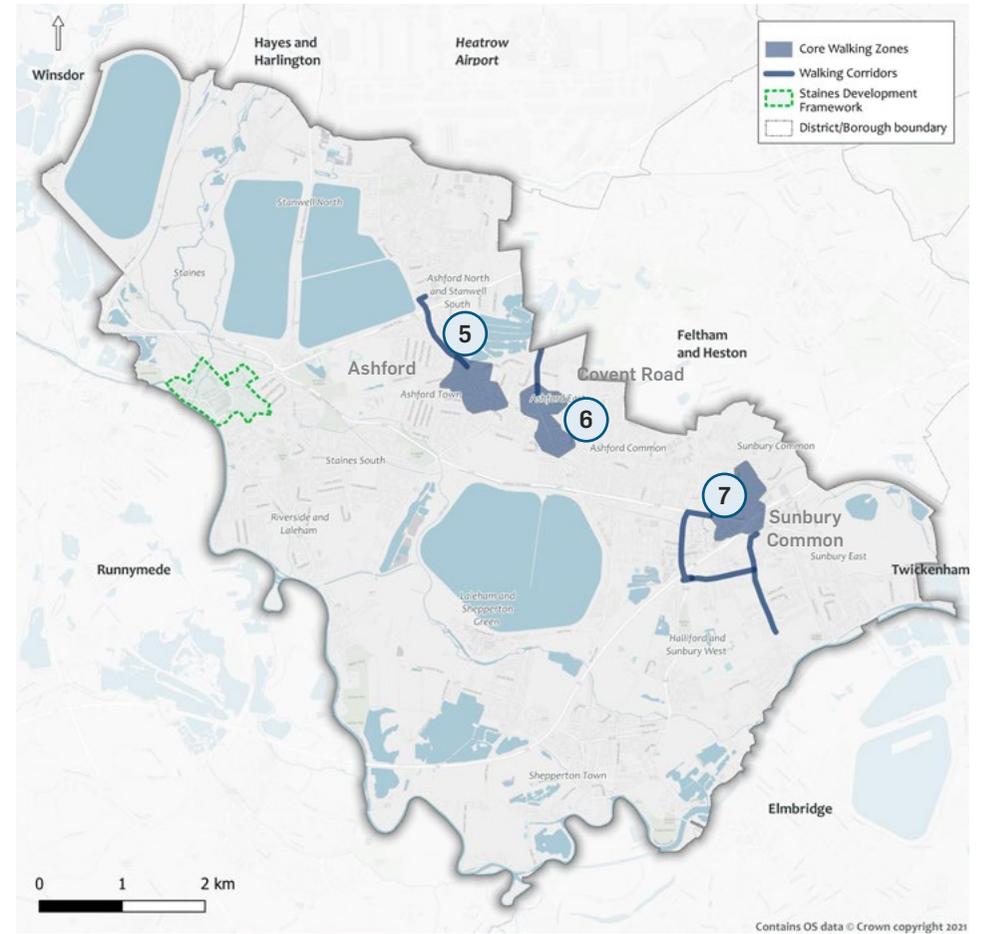


Figure 5. Phase 1 walking network



2. Introduction

Approach

Design Vision

10 Good Reasons to Invest in Active Travel

Report Structure

Approach

Atkins has been commissioned by Surrey County Council (SCC) to develop a Local Cycling and Walking Infrastructure Plan (LCWIP) for Spelthorne Borough Council (SBC). The geographic scope is the entirety of the Borough, as shown in Figure 6.

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

- » Network plans for walking and cycling which identify the preferred routes for further development.
- » Prioritised programme for 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.¹

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.

The LCWIP aims to support the following key objectives:

- » Increase the number of people walking and cycling in the Borough and support modal shift, particularly for short utilitarian journeys.
- » Make walking and cycling safe, attractive and convenient modes of transport for people of all ages, abilities and confidence levels.
- » Expand the existing cycle network and not only establish a comprehensive active travel network in Spelthorne but also in adjacent areas.
- » Enhance accessibility by walking and cycling to key destinations for all users.

Methodology

In order to meet the objectives of the LCWIP, the project was divided into the following main tasks.

1. Previous Studies Review: Atkins reviewed previous studies related to walking and cycling in Spelthorne as well as design proposals for key schemes as detailed in the scope of work.

¹ Local Cycling and Walking Infrastructure plan, Technical Guidance for Local Authorities, DfT (2017).

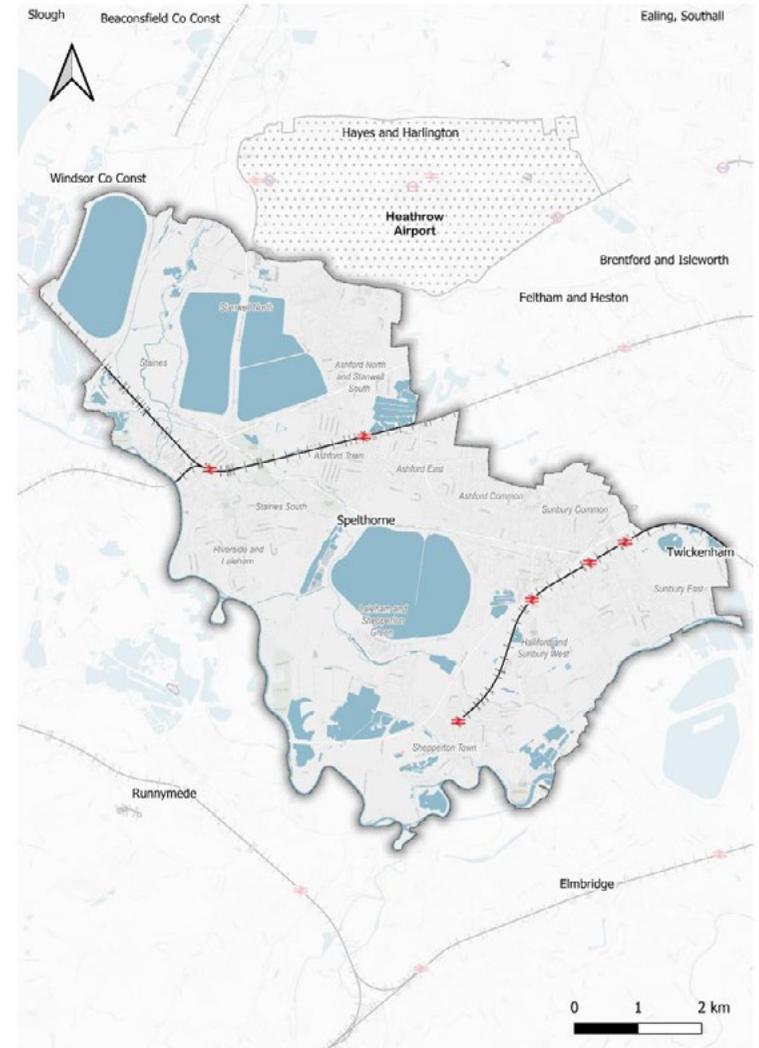


Figure 6. Study area

2. **Data Analysis:** Atkins also analysed a number of spatial and behaviour datasets such as key destinations, pedestrian and cyclist activity and local networks, traffic and collision data, key barriers and severance, online public comments, and Census data.
3. **Development of Draft Networks:** Draft network maps for key cycling routes 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 SBC officers) and external stakeholder groups, as well as local elected officials. 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 five scoring corridors for cycling and top three 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 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.
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 directness, comfort, and safety.
6. **Draft Proposed Interventions:** The route audits noted above were subsequently used to inform the development of concept proposals for each of the Phase 1 corridors and areas. 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 undertaken to review the draft concept proposals. This provided an opportunity for stakeholders to feed into the 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 the further development of the proposals in the next phase (feasibility).
7. **Concept Refinement, Costings, and Prioritisation Programme:** The feedback from the stakeholder engagement process was subsequently reviewed to identify opportunities to improve upon the draft concept proposals and also ensure that all feedback was captured for taking forward into the feasibility phase. 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 design stage were also prepared.
8. **LCWIP Report:** Outputs of the above tasks were compiled to form this LCWIP report.

Sustrans and Peer Review

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

- » Review of the approach and methodology, particularly with regards to stakeholder engagement.
- » Review of the initial proposed cycle network and walking zones including a check and review against guidance.
- » Audit of a corridor to benchmark and quality assure against Atkins own quality assurance process, refer to Appendix 6 at the end of this report.
- » Review of the first draft LCWIP report including recommendations commensurate with LTN 1/20 guidance.

Report Structure

Next Steps

The LCWIP report should be used to support the case for further stages of design, assessment and stakeholder engagement and 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 will be integrated into local planning and transport policies, strategies and delivery plans, as per the DfT guidance.

The next stage of the LCWIP implementation will be to advance the design concepts for the 'Phase 1' active travel corridors to a feasibility level of design and assessment. 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 reviewed and updated periodically (approximately every four to five years), particularly in response to significant changes in local circumstances, such as the publication of new policies or strategies.

However, engagement with SCC and SBC has been undertaken during the development of the LCWIP to provide alignment and future-proofing with regards to key transport and local policies. 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.

The report is structured into 11 sections:

- » **Executive Summary:** This section presents a summary of the study focusing on the key outputs: selected walking and cycle routes and proposed interventions.
- » **Introduction:** In this section, project aims, methodology and design approach are presented.
- » **Previous Studies:** In this section, key studies previously developed for the area are presented, including walking and cycling strategies.
- » **Evidence Base / Background Data:** Information used to support the choice of potential walking and cycle routes are introduced, such as key destinations, census data, collision data, and propensity to cycle tool (PCT) forecast flows.
- » **Stakeholder Engagement:** Meetings with stakeholders took place on six occasions: three times during the selection of routes and a further three times to receive their feedback for the proposed design interventions. This section summarises the meetings, with minutes presented in Appendices section.
- » **Design Interventions:** Place-Based Approach: this initial section presents both cycling and walking infrastructure interventions across Spelthorne. The images are organised according to CWZ.

Design Vision

- » **Cycle Network:** In this section, the optioneering process used for the selection of cycling routes is presented, followed by a description of the selected routes highlighting their infrastructure constraints and opportunities. In this section the design approach and guiding principles for cycling are also presented, accompanied by images of best practice examples, prior to an overview of concept designs for five cycle corridors.
- » **Walking Network:** As with the previous section, the optioneering process used for the selection of walking routes is presented, followed by a description of the selected routes highlighting their infrastructure constraints and opportunities. In this section the design approach and guiding principles for walking are also presented, accompanied by images of best practice examples, prior to an overview of concept designs for five walking corridors.
- » **Route Prioritisation and Costings:** Based on a multi criteria process and feedback from stakeholders, this section presents a prioritised programme of infrastructure improvements and costs for each route.
- » **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.

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 SCC and SBC, such as:

- » Strong and sustainable growth
- » Reducing short car journeys
- » Promoting health and well-being
- » Reducing congestion and pollution
- » Providing inclusive travel options
- » Achieving climate change targets
- » Improving the economic vitality of the Borough

Within the Borough there are several examples of physical severance created by infrastructure such as railway lines and heavily trafficked roads. 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 which provides spaces where people enjoy spending time, which can subsequently lead to 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 deliverable and 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 the five key design principles of effective walking and cycling infrastructure as per LTN 1/20¹:

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

The design approach went beyond LTN recommendations and added key design principles in terms of adaptability, gradient, context sensitive and inclusivity.

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

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

10 Good Reasons to Invest in Active Travel

There has been a growing demand for active travel not just in Spelthorne but throughout the country. It is the ambition of central government to capitalise on this and make walking and cycling the natural choice for shorter journeys or as part of longer journeys.

Surrey County Council has devised 'Ten Good Reasons to Invest in Active Travel' as stated in the Woking LCWIP, nevertheless relevant to Spelthorne LCWIP with key topics summarised below.

1. Quick, convenient and popular ways to get about

Approximately 50% of SBC residents commute less than 2km to work every day, a distance which can easily be walked, take a car. Additionally, approximately 30% of commuters' distance travelled to work is between 2km and 5km which can easily be cycled¹. For short distances such as these, walking and cycling can take a similar amount of time door to door as a journey by car.

2. Value for money ways to tackle the climate emergency

To take action on the Climate Emergency, Surrey County Council is working to achieve our 'Greener Future' vision of a zero carbon and resilient county by 2050. 46% of carbon

¹ Census (2011) (Table QS416EW)

generated within Surrey by residents and businesses is transport related. This is roughly twice what it is for most other areas of the UK.

Walking and cycling have very low impacts on our climate and are an important alternative to other more polluting modes such as the private car. Whilst not all journeys a typical person makes can be walked or cycled, many more could be than are at present.

The cost of walking and cycling schemes is relatively very modest, with typical schemes being a fraction of the cost of road widening or construction². Nationally, the average benefit-to-cost ratio of walking and cycling projects is 13:1 – i.e. for every £1 spent, £13 of benefits are returned to the economy³.

3. Investing in walking and cycling can tackle road congestion by (a) making the best use of finite road space, and (b) by making shorter journeys that do not require a motor vehicle more attractive.

- a. In London, new cycle lanes have helped some streets carry up to 5% more people at the busiest times⁴ - replicating this in

² Sustrans, Active travel and economic performance.

³ Transport for London, Walking and cycling: the economic benefits.

⁴ Transport for London, Walking and cycling, the economic benefits.

Spelthorne would help more people to travel during peak times.

- b. As well as making connections to town centres, this plan shows how improvements can also make it easier to walk and cycle to Spelthorne many local centres, which can help reduce traffic on the road as more can be done locally rather than requiring a longer distance trip.

4. Improve air quality

Motor vehicles are one of the leading sources of nitrogen oxide and particulate matter pollution. In recognition of its effect on public health and the environment, the Government's aim is to reduce emissions of nitrogen oxides 73% by 2030 (from 2005 baseline)⁵.

Walking and cycling have no or negligible air quality impacts: switching more trips to walking and cycling would make Spelthorne a more pleasant place to be out and about and protect local natural assets and is an important strategy for reducing tailpipe emissions.

5. A boost for high street jobs, shops and services

Investing in walking or cycling to and around a local high street has been shown to make these

⁵ Department for Environment, Food & Rural Affairs (2019) Clean Air Strategy.

centres more attractive, vibrant and social places to spend time, which helps high streets secure a niche based upon social activity and visit experience within which to compete with out-of-town retail and online shops^{6,7}. People walking and cycling make more trips to local shops and spend more money there than users of most other modes of transport⁸. The Borough's many local neighbourhood centres can also benefit from increased footfall through these investments in cycling and walking.

6. Ensures nobody is left behind

Walking and cycling are affordable ways to travel independently, and options for nearly everybody including those unable to drive. This Local Cycling & Walking Infrastructure Plan proposes to improve walking and cycling facilities so that they are suitable for use with mobility aids, including adapted bicycles and scooters and wheelchairs, creating a facility that is comfortable and convenient for everyone.

7. Important for longer journeys as well as short journeys

Staines is the busiest station in Spelthorne followed by Ashford and Shepperton. Approximately 2.7 million passengers use Staines Station, the busiest station within

the borough⁹. The station also acts as an important interchange between Runnymede and Windsor and buses' services connecting to Heathrow Airport and Thorpe Park resort. Good accessibility to the stations was one of the crucial aims of the LCWIP. More information on stations, refer to Section 5 evidence Base.

8. Saves households money

Whilst most households will want to keep a car for those journeys that need one, switching some journeys to walking and cycling can save households money on the per-mile and per-trip costs of car travel. Additionally, over the 40,000 borough households only the 15% have no car, meaning that 85% (having two or more cars¹⁰), and may be able to save money on the ownership costs of one or more of these cars if adequate walking and cycling infrastructure means more household members are walking and cycling more often.

9. Great for mental and physical health

The Government increasingly want to focus healthcare investment into the prevention of poor health, rather than curing people once they have become unwell¹¹. Over 4 in 10 women and 1 in 3 men are not active enough for good health, costing the NHS £8.17 per person annually¹². Public Health England consider the

promotion of walking and cycling as everyday activities to be one of the best ways to combat rising levels of physical inactivity, reducing risk factors for cardiovascular and respiratory diseases, some cancers and Type II diabetes, as well as having positive effects on sleep quality, mental health and the risk of dementia¹³. People who are physically active take 27% fewer sick days each year than their colleagues, and those who walk to work are found to have greater job satisfaction and overall feeling of well-being¹⁴.

10. Reduce casualties on our roads

In the five years to 2020 there were 60 serious accidents involving a person cycling (in a total of 277 collisions) and 5 fatalities involving a person walking (in a total of 190 collisions). The majority of these incidents have occurred on routes where this plan is proposing improvements be made, which will include safety improvements where these are needed. The majority of these incidents have occurred on routes where this plan is proposing improvements be made, which will include safety improvements where these are needed. More information on collisions, refer to Section 5 evidence Base.

6 Living Streets (2018) The pedestrian pound.

7 Transport for London Walking and cycling: the economic benefits.

8 F. Rajee and A. Saffrey for Department for Transport (2016) The value of cycling.

9 Office for Rail and Road, Estimates of station usage (Table 1410)

10 Census (2011)

11 Department of Health & Social Care (2018) Prevention is better than cure.

12 Public Health England (2018) Cycling and walking for individual and population health benefits.

13 Public Health England (2018) Cycling and walking for individual and population health benefits.

14 Transport for London Walking and cycling: the economic benefits.



3. Previous Studies

Introduction

Previous Studies and Policy Context

Relevant Schemes

Introduction

The Spelthorne 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

Local Cycling and Walking Infrastructure Plans Technical Guideline (2017)

The Department for Transport published the LCWIP Technical Guidance to assist local authorities in the preparation of the local plans.

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 Spelthorne LCWIP reflects the DfT guidance.

Cycling and Walking Investment Strategy (2017)

The Department for Transport published the Cycling and Walking Investment Strategy (CWIS) in 2017, which sets out the Government's ambition to make walking and cycling the natural choices for shorter journeys or as part of a longer journey. The intent is for walking and cycling to be a normal part of everyday life, and the natural choices for shorter journeys such as going to school, college or work, travelling to the station and for simple enjoyment.

The CWIS sets out the following targets to achieve by 2025:

- » To double cycling to 1.6 billion cycle stages in 2025.
- » To increase walking stages to 300 stages per person per year.
- » To increase the percentage of children that usually walk to school to 55% in 2025.

LCWIPs form a vital part of the Government's strategy to increase the number of trips made on foot or by cycle by identifying cycling and walking improvements required at the local level using an evidence based approach. The development of the Spelthorne LCWIP will support the achievement of the CWIS objectives and targets locally.

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

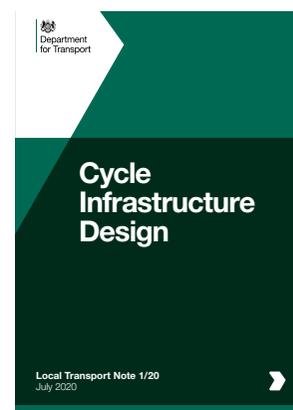
In 2020, the DfT published Gear Change and its updated Cycle Infrastructure Design (Local Transport Note 1/20). Both publications advance DfT's ambitions for a step-change in the provision of cycle infrastructure, a modal shift to cycling nationally, and establishing cycling as a form of mass transit. 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 4 key themes to achieve as 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 practice. It is intended to support the delivery of the high-quality infrastructure necessary to achieve the ambitions of the CWIS 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 CWIS, development of the Spelthorne 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.



Surrey Transport Plan (LTP3 and emerging LTP4)

The Surrey Transport Plan (STP) is the county's third Local Transport Plan (LTP). It presents a clear vision to inform transport policy to help people to meet their transport and travel needs effectively, reliably, safely and sustainably within Surrey, in order to promote economic vibrancy, protect and enhance the environment and improve the quality of life. This has helped define the objectives of the STP, as follows:

- » Effective transport: To facilitate end-to-end journeys for residents, business, and visitors by maintaining the road network, delivering public transport services and, where appropriate, providing enhancements.
- » Reliable transport: To improve the journey time reliability of travel in Surrey.
- » Safe transport: To improve road safety and the security of the travelling public in Surrey.
- » Sustainable transport: To provide an integrated transport system that protects the environment, keeps people healthy and provides for lower carbon transport choices.

The key themes of the STP are broadly aligned with the objectives of the LCWIP to increase the uptake of walking and cycling across the Borough. The Surrey Transport Plan includes the Cycle Strategy, detailed below, which is of key relevance to the Spelthorne LCWIP.

Surrey's emerging fourth Local Transport Plan (LTP4) is currently being developed (as of May 2021). It is anticipated that the emerging LTP4 will further advance strategies to support and encourage walking and cycling, particularly in the context of the climate emergency declared by SCC in July 2019 and setting a pathway towards net-zero carbon emissions by 2050.

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

- » Planning for place: supporting '20-minute neighbourhoods' which are planned so that people can meet the majority of their needs locally, within a 20-minute walk or cycle ride
- » Active travel and personal mobility: improving conditions for walking and cycling and aiming to develop facilities to LTN 1/20 guidance

Surrey Cycle Strategy (2014-2026)

The Surrey Cycling Strategy is 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.' Additionally, the strategy recognises the multitude of benefits from encouraging people to cycle more. Such benefits include improved health, resulting economic benefits from reduced absenteeism and reduced congestion, and improved air quality from fewer motor vehicles.

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 Spelthorne LCWIP will be an opportunity to build upon the previous local plan and support delivery of the cycle network.

Another core 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
- » 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 Spelthorne LCWIP.

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 and well-being of our residents."

The LCWIP is well-aligned with 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.

Right of Way Improvement Plan (ROWIP) (2014)

The Rights of Way Improvement Plan (ROWIP) is a part of the Surrey Transport Plan (LTP3). It is intended to identify the changes to be made in respect of the management 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.

Within the ROWIP five objectives are identified:

- » To improve accessibility to services, facilities and the wider countryside along rights of way.
- » To improve connectivity of rights of way and to reduce severance.
- » To improve the quality of the public right of way network.
- » To increase recreational enjoyment.
- » To secure coordinated implementation of the ROWIP with the available resources.

The ROWIP will help to facilitate improvements that can contribute to improved public health and well-being, help to reduce emissions, and reduce congestion. Improvements to the rights of way network are integrated with other Surrey plans and strategies, including the cycle strategy.

There are 3,444km of rights of way across Surrey, nearly of which 43.5km is in Spelthorne. This off-road network is a key component of the broader active travel network, and provides opportunities to improve network connectivity

and 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 Community Vision 2030

Vision for Surrey 2030 is presenting a picture of what life in Surrey is like and the challenges within the county. This informs the outcomes set out within the vision by identifying the key issues around Surrey.

Aspiration of Surrey Community Vision 2030 is that by 2030 Surrey to be a uniquely special place where everyone has a great start of life, people live healthy and fulfilling lives, are enabled to achieved their full potential and contribute to their community, and no one is left behind. It focuses to built a strong, vibrant and successful economy for the country and to make Surrey a great place to live, work and learn, where it will capitalize on its location and natural assets, and communities feel supported and people will help each other.

Surrey Community Vision, in broader aspect, ambitious for its people and place.

For its people, vision 2030 ensures:

- » Children & young people are safe and feel safe and confident.
- » Everyone gets benefit from education, skill, and employment opportunities to succeed in life.
- » Everyone lives healthy, active, and fulfilling lives and makes good choices about their well-being.
- » Everyone gets the health and social care support and information that people need at the right time and place.
- » Appropriate housing for everyone.

For its place, vision 2030 aspires to,

- » Provide a clean, safe, and green communities, where people and organizations embrace their environmental responsibilities,
- » Create easier, more predictable, and safer journey across the country,
- » Thrive business in Surrey,
- » Built well connected communities, with effective infrastructure to grow sustainably.

Surrey community vision 2030 does promotes making people's active and living healthy lives, modal shift towards cycle and walking will help, as well as it will help to built green communities. LCWIP aim and objectives can help in this aspect to fulfil the goals of 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. Fierce ambition of SCC for the vitality of our places and communities is at the heart of what defines our 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.

Good growths for Surrey:

- » 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.
- » Is supported by 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.

Surrey Infrastructure Study (SIS) presents a technical evidence base of Surrey's infrastructure needs to 2031. As such, it reflects the stage Local plan preparation had

reached at that date and relies on various data sets, assumptions, and modelling work with associated limitations. It presents an overview of growth patterns and the infrastructure projects needed to support such growth, their costs, how much funding has already been secured or is expected toward their delivery and the funding gap for the period up to 2031.

It focused upon education, health & social care, community, green infrastructure, utility, transport, flood defences and emergency services. The entire study is based on the following parameters,

- » Housing growth
- » Employment sites
- » Population forecasts
- » Infrastructure Analysis
- » Cost Analysis
- » Funding Assumptions

Surrey is currently having 152 miles of motorway, 3600 miles of Public highway & 84 railway stations. Surrey's motorways carry 80 percent more traffic than the average for the South East region and the A roads 66 percent more traffic than the national average.

Surrey has almost 3,448 kilometres (2,143 miles) of footpaths, bridleways, and byways. SCC has produced a Right of Way Improvement Plan and Cycling Strategy as part of the county's Transport Plan. High levels of bike ownership in Surrey indicate significant suppressed demand for cycling. However, there are a number of issues and challenges, including but not limited to:

SURREY

THE INFRASTRUCTURE STUDY IDENTIFIES THE FOLLOWING HEADLINES FROM 2016 TO 2031:

65,356
new homes

106,123
new people

59,000
new jobs

Total Infrastructure Costs: **£5,512,790,000**

Total Secured Funding: **£1,216,620,000**

Total Expected Funding: **£1,826,600,000**

Total Funding Gap: **£2,469,570,000***

% of Infrastructure Funded: **55%**

* Considering both secured and expected funding

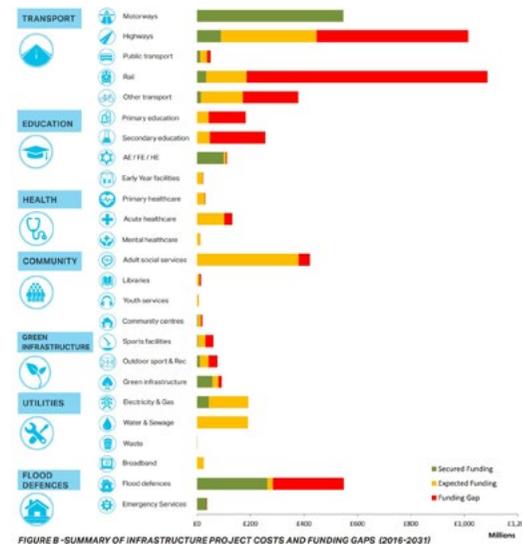


Figure 7. Summary of infrastructure project costs and funding gaps (2016-2031)

5.7 SPELTHORNE

3,916 new homes (+9%)
to 2031

3,796 new people (+4%)

INFRASTRUCTURE HIGHLIGHTS

- Heathrow Airport is located immediately to the north of the Borough with significant influence on the area and a current proposal for future expansion with a third runway
- Local growth expected to put additional increases on the Strategic Road Network through Spelthorne.
- Proximity to the River Thames means significant area is at risk from flooding, with Staines and Shepperton being the worst affected areas.
- Capacity pressures on existing early year facilities, primary schools and secondary schools.
- Capacity pressures on existing primary healthcare facilities.

Total Infrastructure Costs: **£123,530,000**

Total Secured Funding: **£5,300,000**

Total Expected Funding: **£68,980,000**

Total Funding Gap: **£49,250,000**

Funding as % of Costs: **60%**

104 | Surrey Infrastructure Study

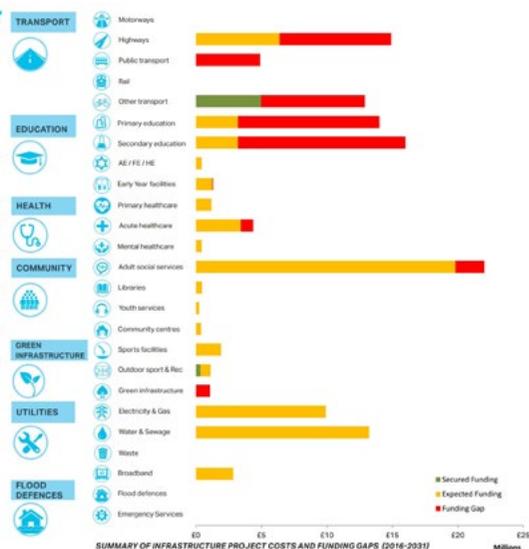


Figure 8. Summary of infrastructure project costs and funding gaps (2016-2031) in Spelthorne

- » 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, not only to enhance connections for pedestrians and cyclists but to also improve access to public transport. The Sustainable Movement Corridor in the Guildford urban area is the most ambitious bus transit, walking and cycling scheme currently planned in the county. It will provide priority pathway for pedestrians, cyclists and buses, largely along existing roads in the town.

Major transportation projects planned for Spelthorne are as follows,

- » Staines Bridge Corridor Capacity Project
- » Church Road, Ashford, public realm improvements
- » Spelthorne Cycleways (authority wide)
- » Clockhouse Lane, Ashford, footbridge

All the cycling and walking schemes considered for improvement in future are focusing on improvement of footway and improvement of accessibility. These improvements of existing network and proposed projects are aiming to increase the number of users and to provide them a safe and accessible network. LCWIP will help to fulfil these aims as objectives of both of them are aligned perfectly.

Surrey Infrastructure Study (2017)

Surrey Infrastructure Study (SIS) presents a technical evidence base of Surrey's infrastructure needs to 2031. It presents 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 levels 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, not only to enhance connections for pedestrians and people cycling but to also improve access to public transport.

Development of the LCWIP will help to address this need. Improving access to public transport, particularly rail station, will be a key factor in identifying proposed walking and cycle routes.

Surrey Rail Strategy 2021

A New Rail Strategy for Surrey was commissioned by Surrey County Council in April 2020. This new strategy sets out how rail can contribute to a greener future, growing a sustainable economy, empowering communities, and tackling health inequality.

Five strategic aims which the rail network can assist in delivering over the next 30 years:

- » Achieving transport decarbonisation
- » Responding to change in the rail sector
- » Encouraging good growth and a sustainable economy
- » Increasing access for all
- » Developing an attractive, high-quality rail network

These strategic aims, combined with an assessment of feasibility and acceptability, have been used to identify a core set of interventions which Surrey County Council can support through developing the case, influencing stakeholders, directly supporting schemes and monitoring delivery. The Strategy has identified a need for a renewed focus on improving stations to benefit local communities and utilise their potential for supporting sustainable local economic growth.

Decarbonising the transport network is the key priority for Surrey County Council; over 40% of carbon emissions in Surrey are from surface transport, significantly higher than the UK average of 22%. Surrey County Council is working with Network Rail to make

the case for electrification of the remaining network. However, this alone will not achieve decarbonisation; it is key that rail's share of local trips increases, and that it helps reduce emissions further by working with its partners in delivering the network and connectivity improvements, and delivers improvements in accessibility by walking, cycling, and public transport.

Surrey County Council (SCC) has a set of strategic priorities for the next five years which we have used to guide the rail strategy development.

- » Growing a sustainable economy so everyone can benefit
- » Enabling a greener future
- » Tackling health inequality
- » Empowering communities

The New Rail Strategy for Surrey will sit alongside other key documents related to transport and economic strategy in Surrey.

- » Local Transport Plan 4 (LTP 4), will set out how to achieve 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.
- » Surrey Infrastructure Plan (SIP), will evaluate the ability of infrastructure to meet the objectives of Surrey County Council; and develop a robust tool which assesses ability of individual projects, and packages of projects, to meet these objectives.
- » Surrey's Economic Future, sets out SCC priorities to build on these economic strengths, supporting a resilient, productive, and high-value economy that contributes to growth within the county and the UK.

To achieve the strategic aims, Surrey County Council is taking the following measures for each of the aims and they are as follow,

- » Achieving transport decarbonisation
 - Encourage modal shift
 - Decarbonising rail
 - Decarbonising access to stations
- » Responding to change in the rail sector
- » Encouraging good growth and a sustainable economy
 - Connectivity to external drivers of growth
 - Enable and influence economic growth
 - Connecting new and existing populations to jobs and opportunities
 - Integration into other networks
- » Increasing access for all
 - Ensure stations and trains are accessible to all
 - A ticketing structure that works for all
 - Enable access to the network by diverse modes
- » Developing an attractive, high-quality rail network
 - A reliable network
 - A high capacity networks
 - Improved journey times and frequencies where required

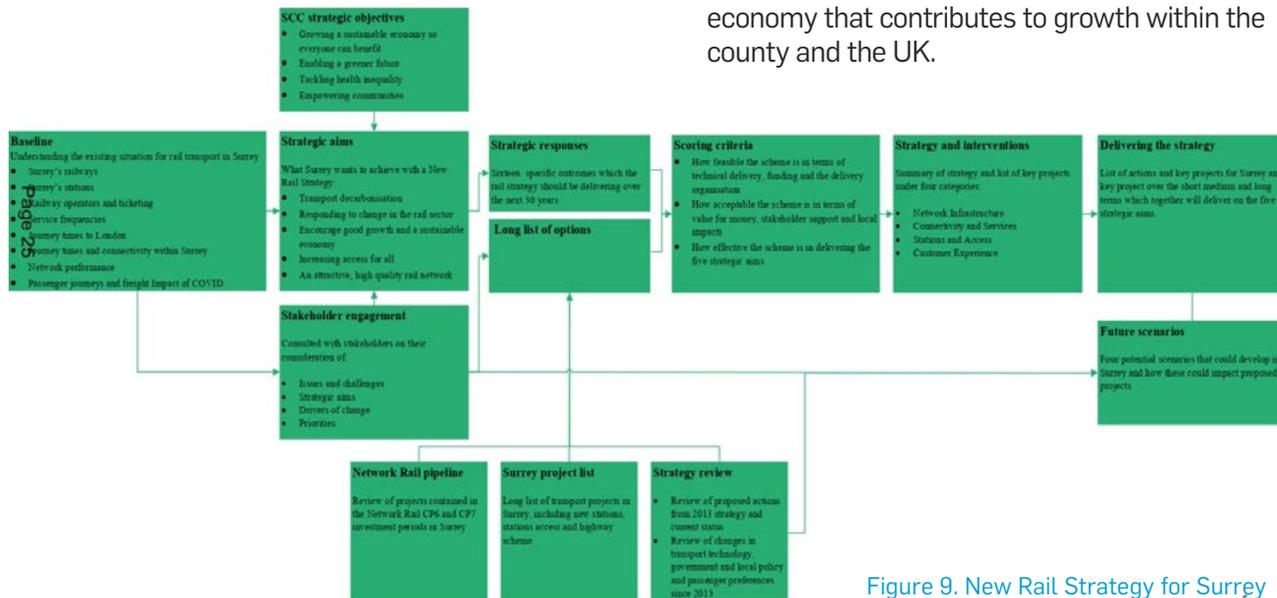


Figure 9. New Rail Strategy for Surrey

Spelthorne Local Plan: Core Strategy (2009)

Spelthorne local plan (SLP) is part of the Local Development Framework (LDF) and sets out the

Council's core strategy and detailed policies. It is a spatial plan which sets out the needs in the Borough and the needs have been identified from public consultation, the Council's research, and other plans and programmes of the Council and organisations with responsibilities in Spelthorne. SLP sets out a vision, identifies objectives which need to be met in order to achieve the vision and spatial strategy and sets out policies to deliver those objectives.

In general, vision of SLP is focusing on sustainability. To meet the visions, 21 no of objectives are set out, among which are aligned with aims of LCWIP are listed below,

- » To protect and improve the quality of the environment, including improving the landscape, promoting biodiversity, and safeguarding the Borough's cultural heritage.
- » To ensure the Borough develops in a way that minimises harmful CO2 emissions contributing to climate change and that caters for potential future climate change.
- » To secure an improvement in the Borough's air quality.
- » To ensure necessary infrastructure and services are provided.
- » To ensure new development is designed to a high standard appropriate to its setting

and contributes to an improvement in the appearance of the environment.

- » To ensure development contributes to sustainable transport choices and reduces the need to travel.
- » To encourage development of a sustainable transport system that supports the spatial strategy and provides for the needs of all sections of the community in an environmentally acceptable way and further improve Staines' role as a public transport interchange.

Seven strategic policies have been considered for tackling all the current issues across the borough.

- » General location of development,
- » Housing provision,
- » Economy and employment provision,
- » Town centres and retail development,
- » Community needs,
- » Maintaining and improving the environment,
- » Climate change and transport.

In relation to transport, the strategy covers two related aspects,

- » Reducing the need of travel by car. To achieve this, accessibility for alternate modes to be developed.
- » Promoting non-car base travel.

Under Climate change and transport strategy, SLP focuses on renewable energy, sustainable construction, sustainable travel, parking provision and non-car access. The Council will require the provision of sufficient, safe, weatherproof, convenient, and secure cycle

parking within developments to assist in promoting cycle use. Apart from that, open space and sport and recreation facilities have an important part to play in the wellbeing and quality of life of people. These facilities include pedestrian and cycle routes. The policies are seeking to maintain, improve and where appropriate expand networks of green space and pedestrian and cycle routes with a recreational role. The council will require the provision of sufficient, safe, weatherproof, convenient, and secure cycle parking within developments to assist in promoting cycle use.

As the LCWIP is aiming to improve the cycle and walking network, it will help Spelthorne to reach the aim and objectives related to cycle and walking infrastructure.

Emerging Update to Spelthorne Local Plan (2020 – 2035)

The Council is currently working on an emerging Local Plan which contains the overall vision and framework for future development in the area, addressing needs and opportunities in relation to housing, the economy, community facilities and infrastructure - as well as providing a basis for conserving and enhancing the natural and historic environment, mitigating and adapting to climate change, and achieving well designed places. The emerging Local Plan will set out how the local area will develop over at least the next 15 years and once adopted, will replace the 2009 Development Plan. It is anticipated that the consultation on Publication

Local Plan (Regulation 19) will take place in mid-2021. The consultation will take place after the Local Plan Task Group have evaluated the results of the Preferred Options consultation, finalised the Local Plan strategy and have made recommendations to the Council's Cabinet. Following this final consultation, the Local Plan will be submitted to the Planning Inspectorate for an Examination in public when those who have requested to can attend and discuss their concerns with the Inspector.

There were some key challenges for the emerging plans and those are as follows,

- » Ensure we can allocate sufficient land to meet our housing need sustainably, including the provision of affordable homes and the needs of specific communities
- » Maintain and intensify employment land, anticipating growth in the Borough, including additional growth from an expanded Heathrow Airport
- » Plan for the necessary infrastructure, such as schools, roads and healthcare, to support our future population
- » Protect our valuable open spaces, recreation and leisure facilities and biodiversity sites, including the River Thames and waterbodies
- » Preserve the Green Belt where it is performing well against the purposes it was designated for
- » Enhance the character of our towns and villages, including the vitality of our shopping areas
- » Manage further risk of flooding and prevent or mitigate harm from environmental impacts such as poor air quality and noise pollution

- » Ensure our Borough has the right amount of social, cultural and community facilities, including opportunities to support the arts.

Different studies and assessments are performed to overcome the challenges and to support the new local plan, few of them are discussed below,

- » The Sustainability Appraisal (SA), which is an integral element to the development of the new Local Plan. Its purpose is to promote sustainable development through the incorporation of social, environmental, and economic considerations into plan preparation.
- » The Strategic Highway Assessment (SHA) Report (Part 2), it provides the results and analysis of the forecasts, together with an overview of the key findings from the modelling.
- » Site selection methodology, it demonstrates the Council's approach to identifying suitable sites for development to meet the identified needs set out in the Local Plan.
- » The Strategic Land Availability Assessment (SLAA), it identifies specific sites that will help meet housing and/or employment requirements within Spelthorne and the wider Housing Market Area and Functional Economic Area.
- » The Strategic Housing Market Assessment (SHMA), this sets out the extent of the housing market area in Spelthorne and Runnymede and the number and type of homes needed to meet housing demand in that combined area over the period 2013 to 2033 based on population and economic projections.

- » The 'Draft Statement of Five-Year Housing Supply' identifies a supply of deliverable sites sufficient to provide five years' worth of housing against Spelthorne's housing requirement.
- » Gypsy and Traveller Accommodation Assessment, assesses the current and future need for Gypsy, Traveller and Travelling Showpeople accommodation in the Borough of Spelthorne to support the new Local Plan.
- » The Green Belt Assessment was produced by consultants ARUP and assesses how areas of Green Belt land in the Borough are performing against Green Belt purposes as set out in the National Planning Policy Framework (NPPF).
- » Employment land needs assessment, the study assesses the future demand and need for different types of employment land in the Borough up to 2035.

Among all of these assessment reports/studies, one of the objectives of Sustainability Appraisal (SA) report is to promote sustainable modes of travel, improve accessibility to public transport and reduce road congestion. To achieve that, report suggests providing opportunities for integrated transport and to promote travel to work/school by foot, cycle, or public transport.

Relevant Schemes

River Thames Scheme

The River Thames Scheme (RTS), led by the Environment Agency (EA), aims to reduce flood risk to communities in Surrey and South West London. The scheme involves the construction of a new river channel mainly within Spelthorne and Runnymede boroughs. While the scheme overall red line boundary primarily in Spelthorne and Runnymede areas, the RTS is also within the north west corner portion of Elmbridge at Desborough Island.

The RTS provides an opportunity to create green spaces and enhance walking and cycling facilities along the River Thames, providing leisure routes and the potential for longer distance utility trips linking with and Spelthorne and Runnymede as well as Elmbridge.

The RTS is currently in the early stages of development, with the development of proposals and concept designs for walking, cycling, and recreation facilities being conducted in parallel to the LCWIP. Collaboration between four studies (RTS, Runnymede, Spelthorne and Elmbridge LCWIPs) will ensure that appropriate connections between the RTS and the broader, borough-wide LCWIPs are considered and appropriately captured in the walking and cycling proposed networks, discussed in more detail in page 42 (Neighbouring Borough LCWIPs and Cycle Programmes).

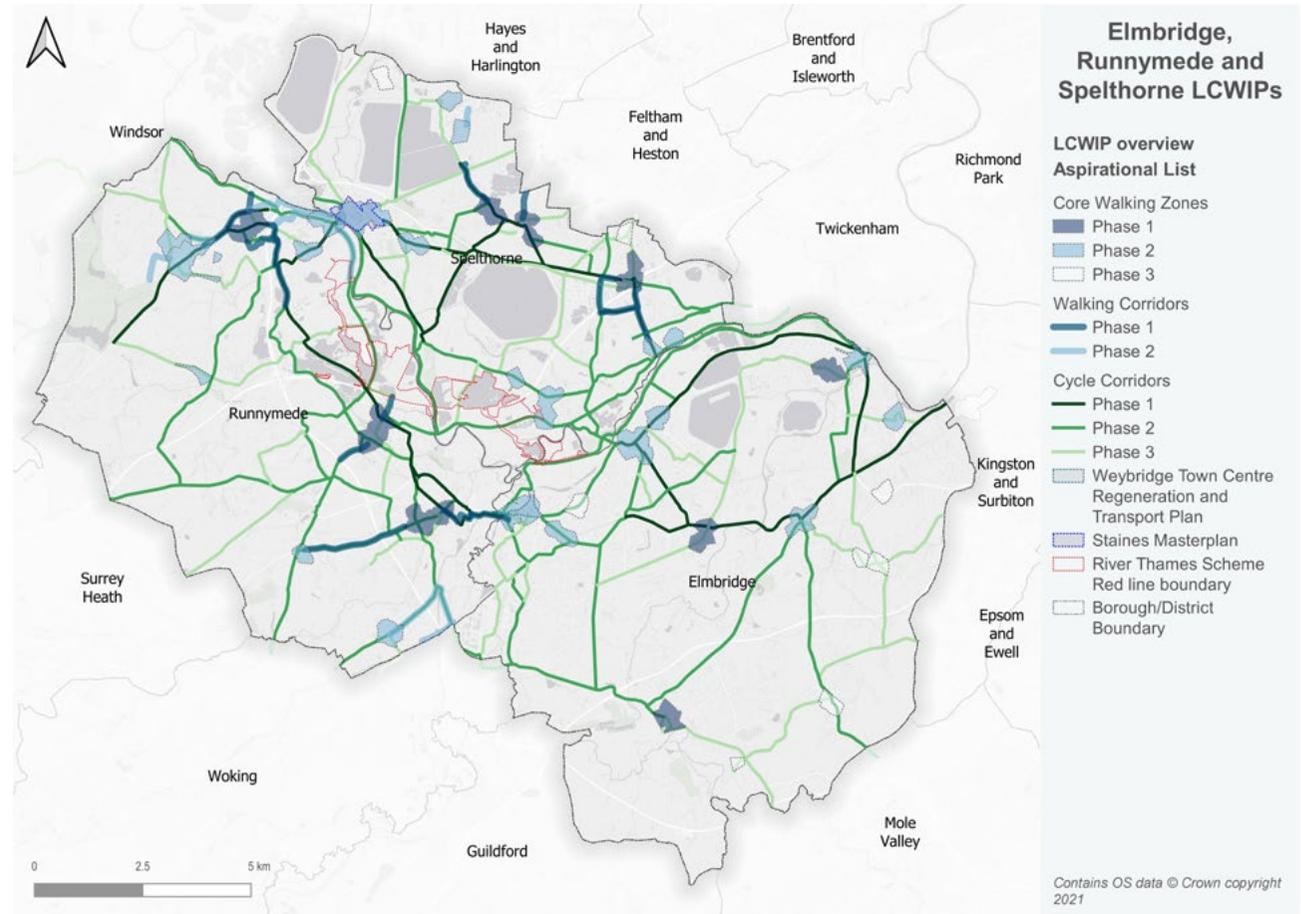


Figure 10. River Thames Scheme project area red line boundary (as of October 2021) in the context of Spelthorne, Runnymede and Elmbridge LCWIPs,

Heathrow LCWIP

Local Cycling and Walking Infrastructure Plans (LCWIP) were developed by the Department for Transport (DfT) to enable local authorities to develop cycling and walking networks over, typically, a 10-year period and provide more of a strategic approach to developing networks. This study aims to adopt an adapted approach to the DfT's LCWIP to suit the unique requirements of the Heathrow Expansion Project. The LCWIP study develops the routes that were originally proposed in the 2019 Airport Expansion Consultation, looking at the route potential, identifying possible alternative routes, and identifying potential improvements to bring the network up to a standard which will help normalise cycling and overcome barriers to cycling which the current network imposes.

The Propensity to Cycle Tool (PCT) is used to help strategically plan cycle networks though this tool does not take the large-scale changes to the road network and employment clusters associated with Heathrow Expansion into consideration when providing analysis. Therefore, a combination of measures has been taken to understand how to maximise mode shift towards cycling in the future. These includes:

- » PCT analysis
- » Sustrans Heathrow Cycling Vision document
- » GIS analysis of colleague home and work location data
- » Proposed local infrastructure cycle improvements in the area
- » Cycle Level of Service assessments

Hub and Spoke network have been developed on the basis of LCWIP cycle route which were developed using series of analysis, which includes:

- » Propensity to cycle data
- » Colleague home and work locations
- » Sustrans Heathrow Cycling Vision work undertaken in 2016

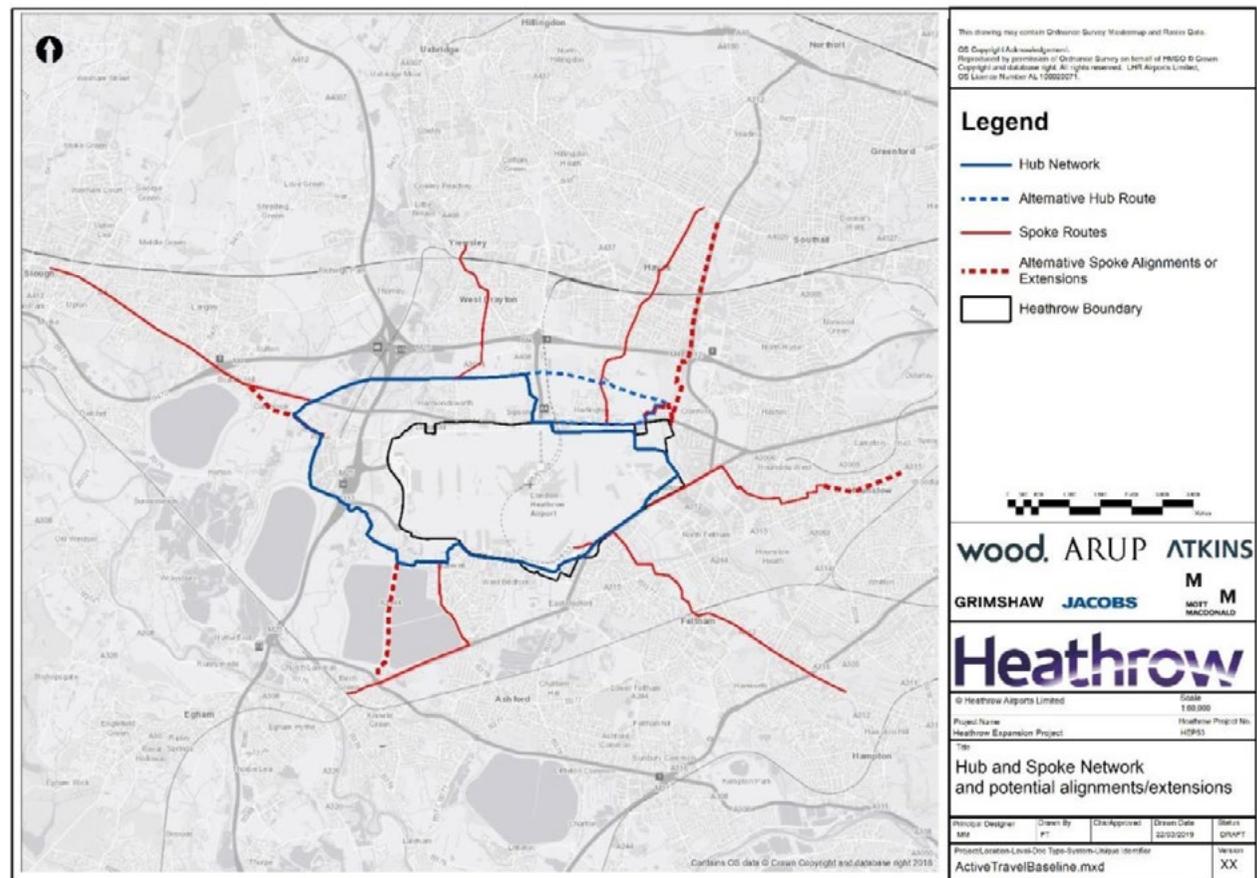


Figure 11. Hub & Spoke network

This network aims to have the maximum impact of mode shift towards cycling by targeting areas with high densities of colleague home postcode location. It also aims to provide high quality cycle routes (Spokes) to the perimeter of Heathrow (the Hub) linking employment locations around the airport with high quality cycle infrastructure.

PCT analysis is undertaken in the area surrounding Heathrow to gain an understanding of where there is a high propensity to cycle within the vicinity of Heathrow, along with high densities of colleague home locations, providing a broad indication of where Heathrow colleagues may be most inclined to cycle to work.

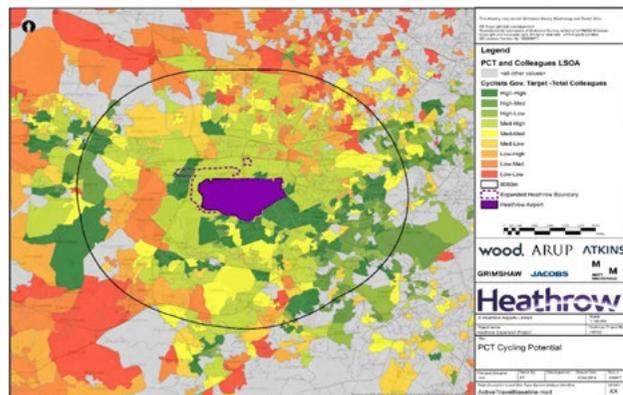


Figure 12. PCT analysis surrounding Heathrow

Each route identified was then assessed using the Route Selection Tool (RST) which is a tool developed for the LCWIP process. The RST is used to assess and compare existing and potential routes for inclusion in the cycle network. The RST uses the following criteria to assess how a route meets the core design outcomes for cycling, with scores ranging from 5 (the highest) to 0 (the lowest),

- » Directness
- » Gradient
- » Safety
- » Connectivity
- » Comfort

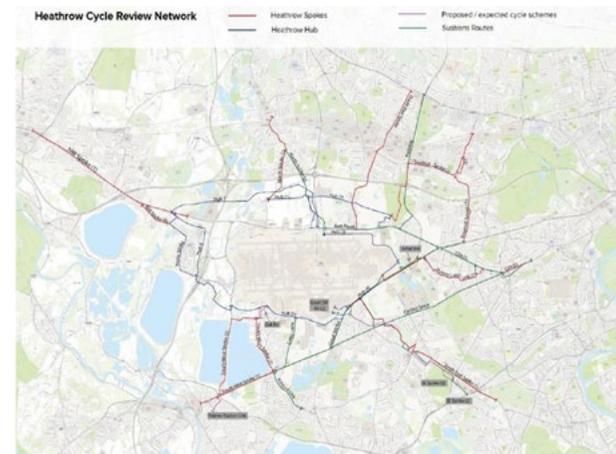


Figure 13. All cycle routes to be assessed

The proposed cycle infrastructure improvements were prioritised to develop aspects such as time scales, costs, and consideration of the delivery of schemes. This is to analyse what would provide the value in terms of the Heathrow Expansion programme.

As the existing cycling conditions surrounding Heathrow are mixed with some higher-quality cycle routes but mainly low-quality unsafe cycle routes and there is also a lack of clarity and wayfinding along these routes, a protected cycle infrastructure is important for the safety of cyclists, and to ensure cyclists are willing to cycle on these routes. There is a large amount of the network which has no cycle provision, and a very limited amount of the network having segregated cycle infrastructure.

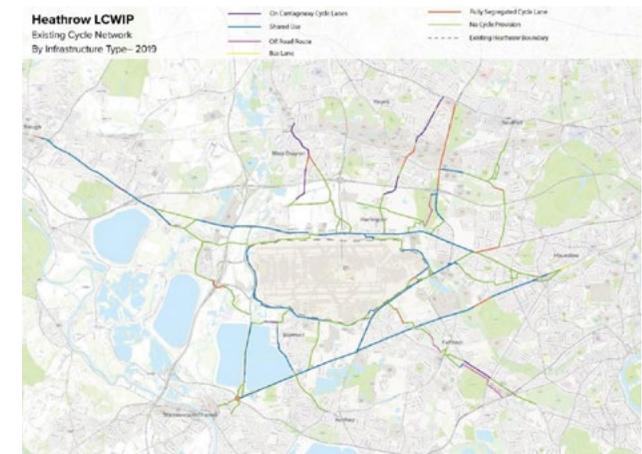


Figure 14. Existing Cycle Infrastructure

All routes are identified which require improvements recommended with the aim to improve the RST scores on each route. Infrastructure design recommendations have been identified along the network with the aim to create a cycle network which is safe and convenient for all colleagues. Figure 15 illustrates the proposed interventions to the cycle network and will provide 100km of new or upgraded routes. Segregated and shared use cycle lanes dominate the network to ensure safety from HGVS and the high volumes and speed of traffic.

The next step after identifying cycle network improvements and infrastructure design is a prioritisation process to understand which schemes are important to take place over the long, medium and short term. In route analysis, the document provides a detailed overview of the existing conditions and the potential proposals along all the routes analysed through

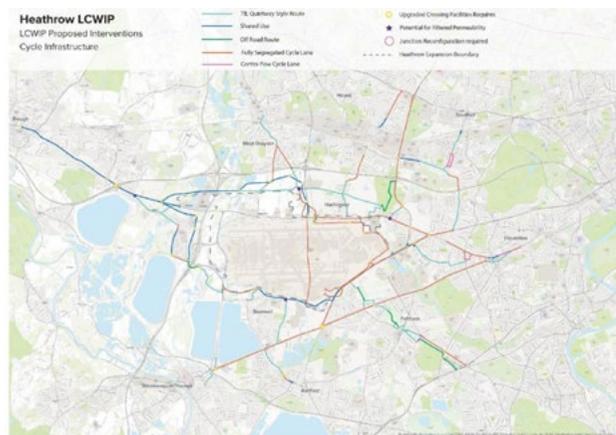


Figure 15. Proposed interventions cycle infrastructure

the LCWIP process in a series of route maps and broken down into individual sections and route alternatives, e.g., South East Spoke – Fulham (including alternative route), Hatton Cross – Hounslow, Earhart Way etc.

The outcome of the LCWIP process has created a network of proposed cycle infrastructure which will help Heathrow to achieve the desired mode shift towards cycling within the Heathrow Expansion Project. This network has been prioritised to reflect Heathrow's requirements to increase non-car colleague travel, as well

as practical considerations for implementation, and provide more clarity on where to focus routes. Different priorities have been assessed to ensure the process is flexible and adaptable should priorities change.

The proposed network has been developed from the initial Hub and Spoke network, which was included in the 2019 Airport Expansion Consultation, and since developed with reference to stakeholder feedback and the LCWIP framework.

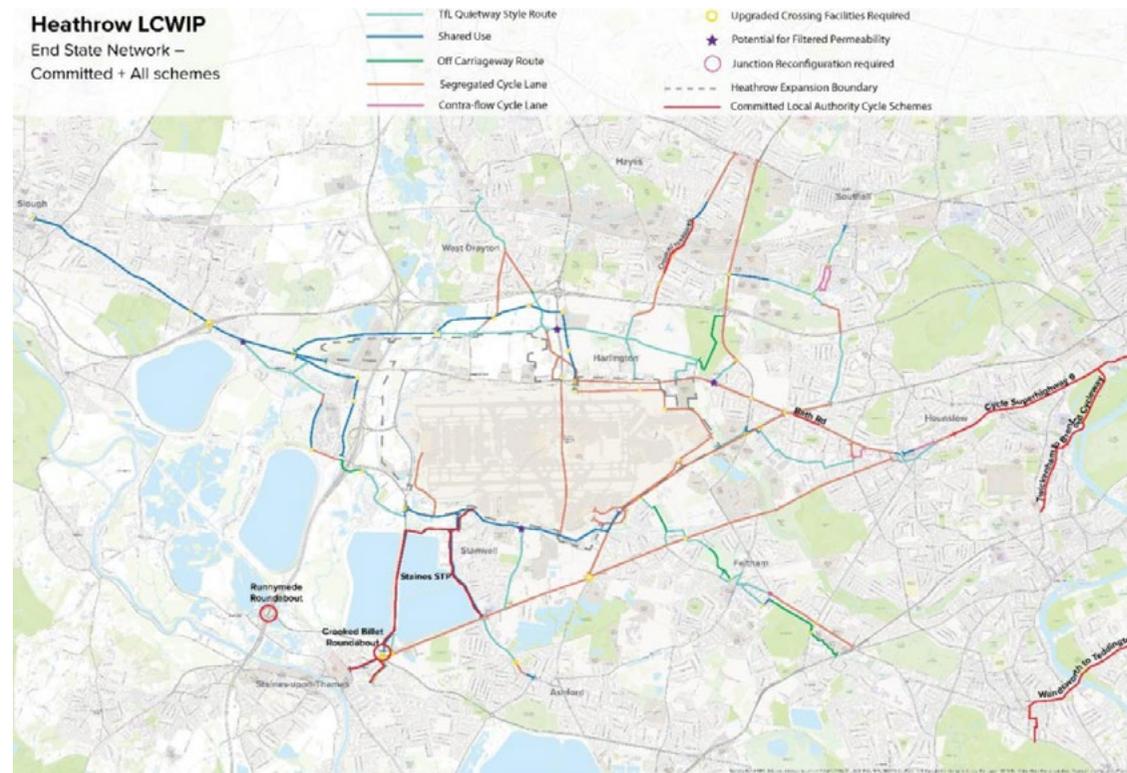


Figure 16. Proposed End State Network

Neighbouring Borough LCWIPs and Cycle Programmes

To consider broader cycle network connectivity across political boundaries, existing and on-going schemes should also be considered during development of the LCWIP.

The Spelthorne LCWIP is part of Surrey's broader LCWIP programme across the county, and is being developed concurrently with LCWIPs for neighbouring Runnymede and Elmbridge. This will provide an opportunity for a joined-up approach amongst the 3 study areas.

North of Spelthorne, Hounslow has recently implemented a Local Implementation Plan programme including cycle network improvements. Connectivity with this network, particularly through Feltham and Ashford, should be considered.

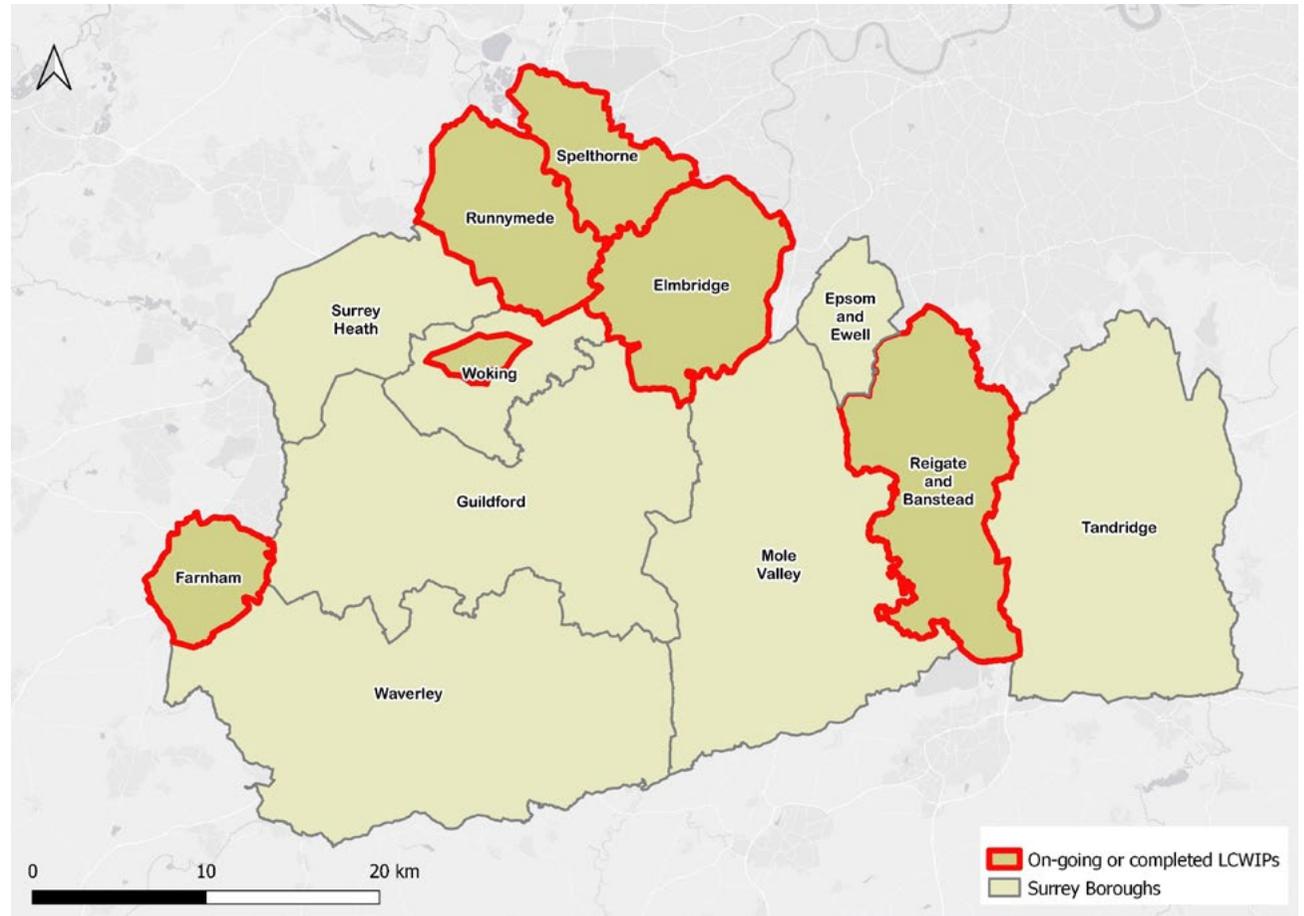


Figure 17. Concurrent or completed LCWIPs across Surrey

4. Evidence Base

Introduction

Relevant Data

Summary of Key Findings

Introduction

To develop an evidence base for the Spelthorne LCWIP, Atkins compiled and reviewed 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 destinations
- » Potential development areas
- » Existing walking and cycling infrastructure, including the Public Rights of Way network
- » Public transport networks
- » Demographics, such as resident and workplace population, and car ownership
- » Indices on multiple deprivation
- » Barriers and constraints, including topography
- » Pedestrian and cyclist collision data
- » Public suggestions for active travel provisions
- » Propensity to Cycle Tool
- » Existing Pedestrian and cycle count data
- » Strava data
- » Proposed infrastructure developments

This chapter documents and summarises the data review. This background data informed the identification of key cycling routes and core walking zones, which is discussed in Chapters 3 and 4.

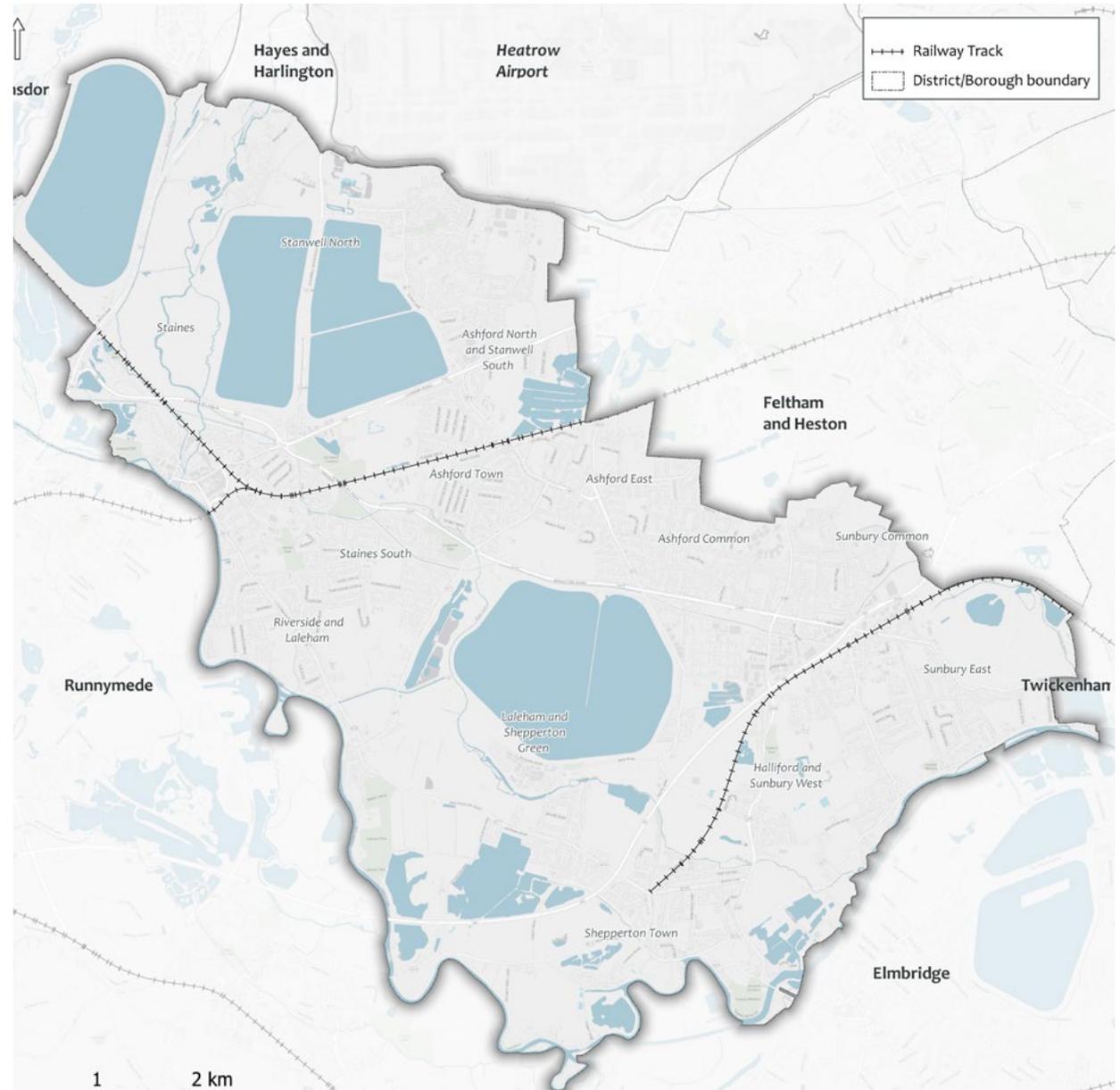


Figure 18. Study area

Relevant Data

Key Destinations

Key destinations within Spelthorne were mapped to identify locations or clusters that attract walking or cycling trips. These included:

- » High street areas (containing clusters of shops, restaurants, and other services)
- » Rail stations
- » Schools
- » Hospitals
- » Parks and public open space

Seventeen high streets areas were identified across the Borough. These are particularly important from the perspective of active travel, 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 street and convenient access to local shops, services, etc is also central to the '20-minute neighbourhood' strategy identified in the emerging Surrey Transport Plan.

Rail 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 and other regional hubs.

Attention is also drawn to Heathrow Airport, located to the north of the Borough, which is a significant regional destination.

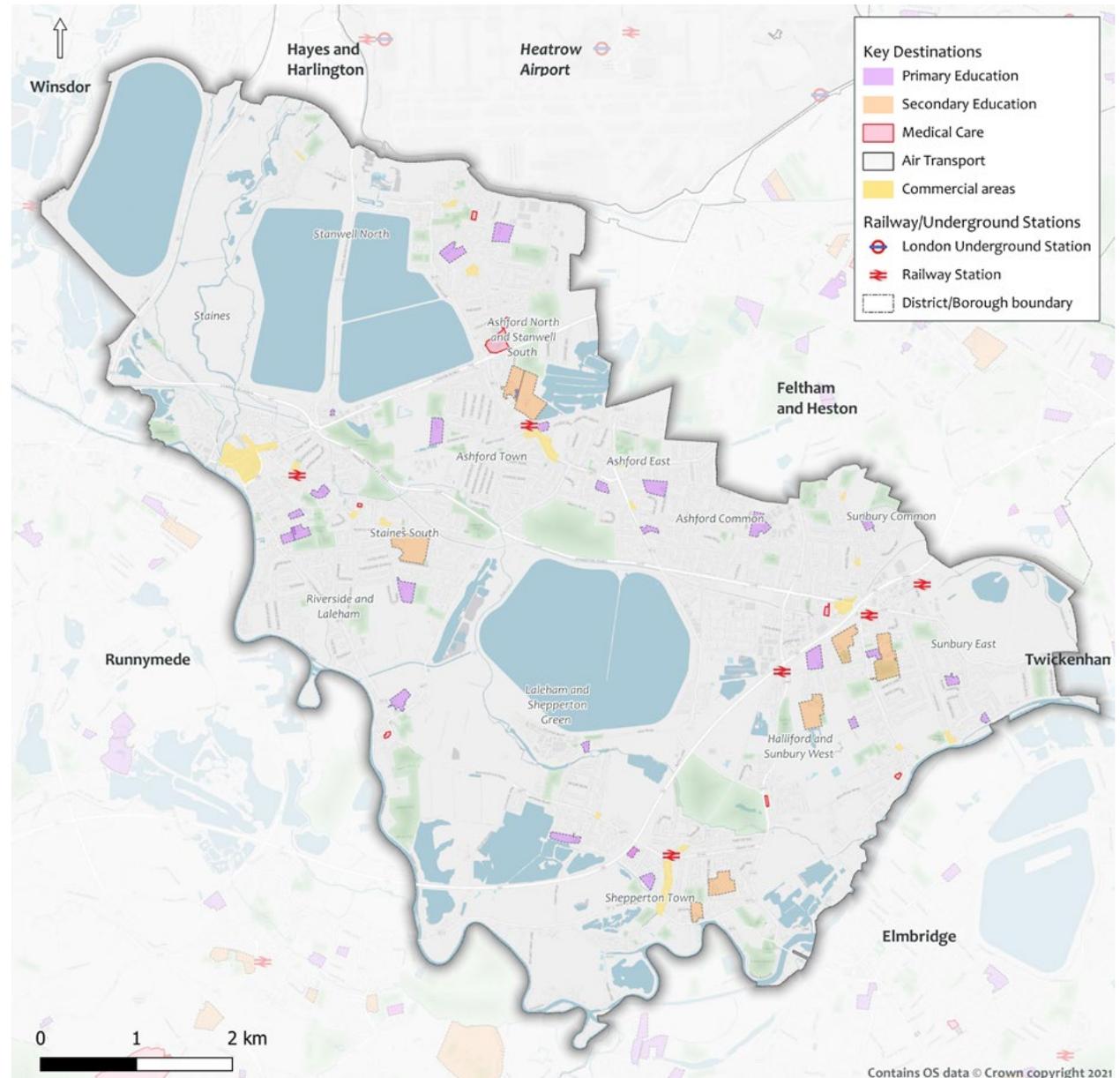


Figure 19. Key destinations

Key Destinations: Potential Development

To support future demand and local growth, opportunities for future development were also considered as part of the LCWIP.

Spelthorne Borough Council are currently working on an Emerging Local Plan (2020-2035) and have identified preferred sites for future development. These potential development sites are highlight in Figure 20.

Given the existing nature of the Borough, there are relatively few large scale development sites being proposed. Areas with notable clusters of potential development include Staines-Up-on-Thames, Ashford and Sunbury.

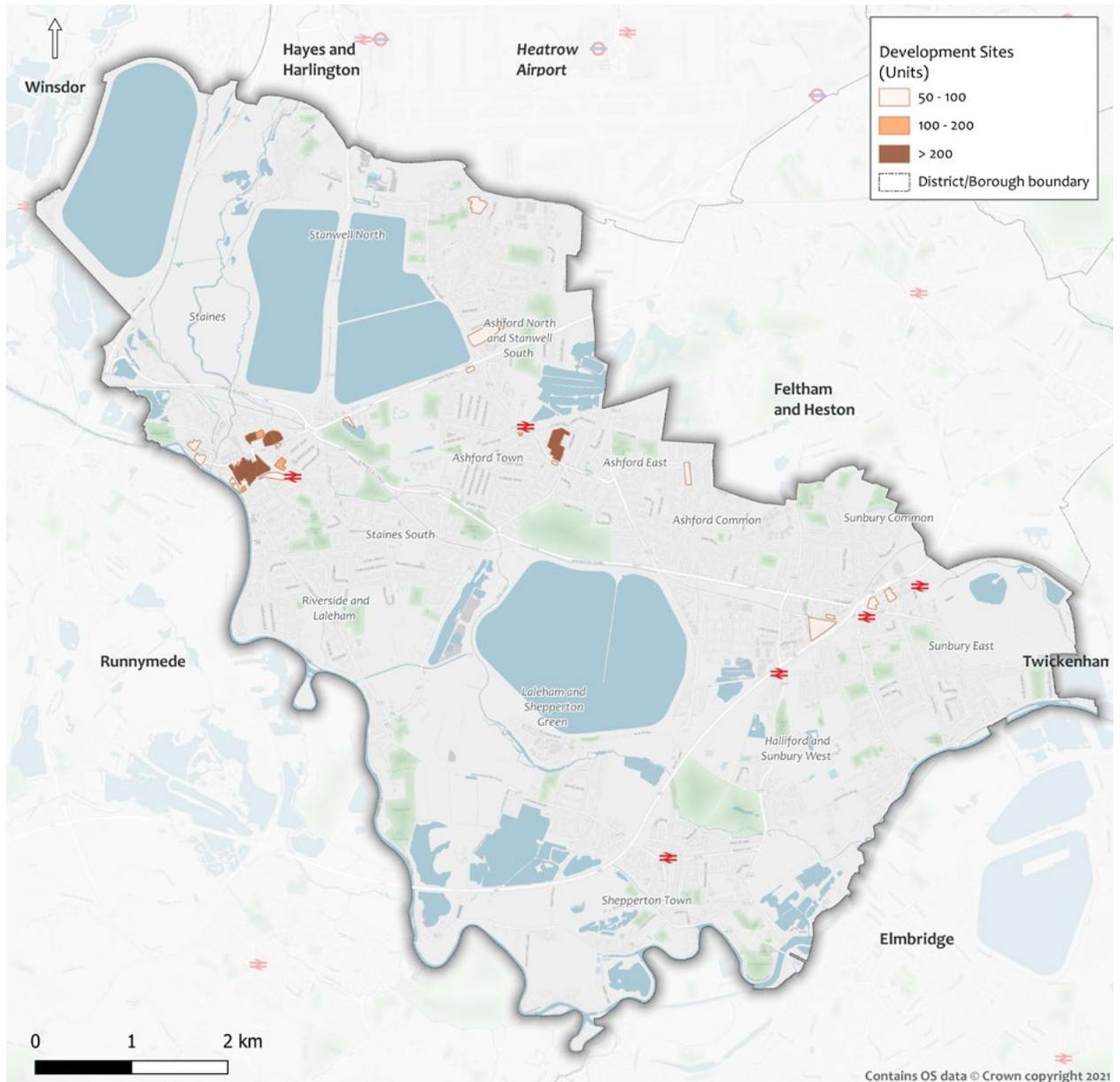


Figure 20. Future development sites in Spelthorne

Existing Walking and Cycling Infrastructure

Existing walking and cycling infrastructure within Spelthorne provides a potential foundation upon which to improve and expand the network through the LCWIP. Information on existing cycling infrastructure is provided through the online SCC Cycle Facilities Map.

There is a mix facility types and routes scattered across the Borough, though generally not providing an interconnected, borough-wide network. Several existing routes include:

- » Staines-Upon-Thames to East Bedfont, alongside the A30.
- » Staines-Upon-Thames to Stanwell, via Public Rights of Way.
- » Sunbury to Walton On Thames, alongside the A244.
- » Signed Advisory routes within built-up urban areas.
- » National Cycle Network (NCN) Route 4 passes along the Western boundary of the borough, providing regional connectivity between Staines-Upon Thames to Chertsey.
- » The Thames Path National Trail

Along the routes at key junctions and points of interest (such as schools and employment sites) SCC has implemented improvements to give priority to pedestrians and cyclists over motorised traffic and ensure their safety.

Existing cycle facilities may have been in place for a number of years therefore and may not align with recent LTN 1/20 guidance.

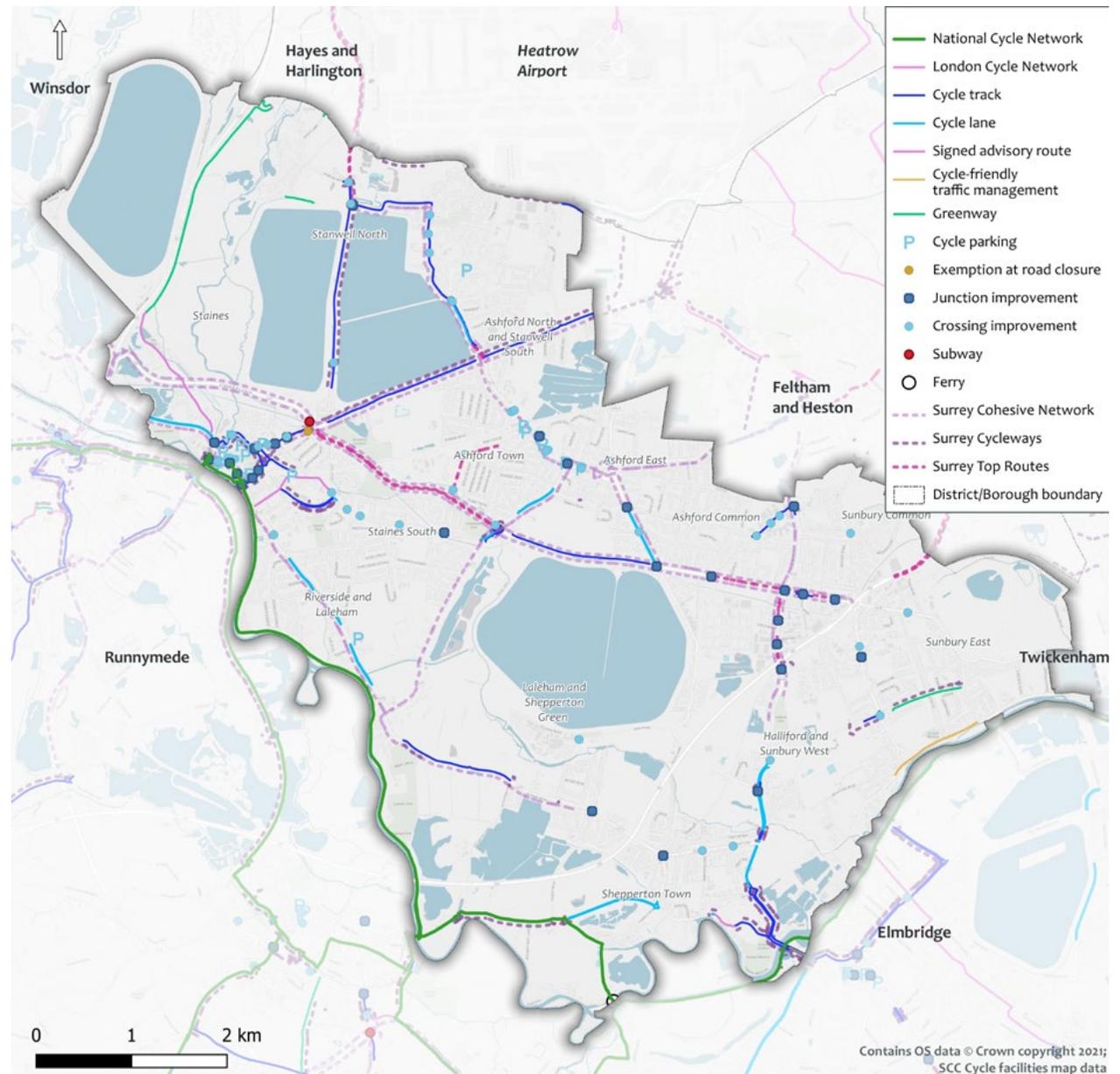


Figure 21. Existing cycling infrastructure

Public Rights of Way

In addition to the street network, Spelthorne contains nearly 45km Public Rights of Way (PROW). This network of public footpaths and bridleways provides valuable off-road opportunities for walking and cycling across the Borough, linking to the street and footway networks in urban areas.

In the urban road network, footways are typically provided. However, footway provision varies depending on the local context, and can be narrow, limited to one side of the road, discontinuous, or otherwise constrained by limited public highway width, built environment, and topography.

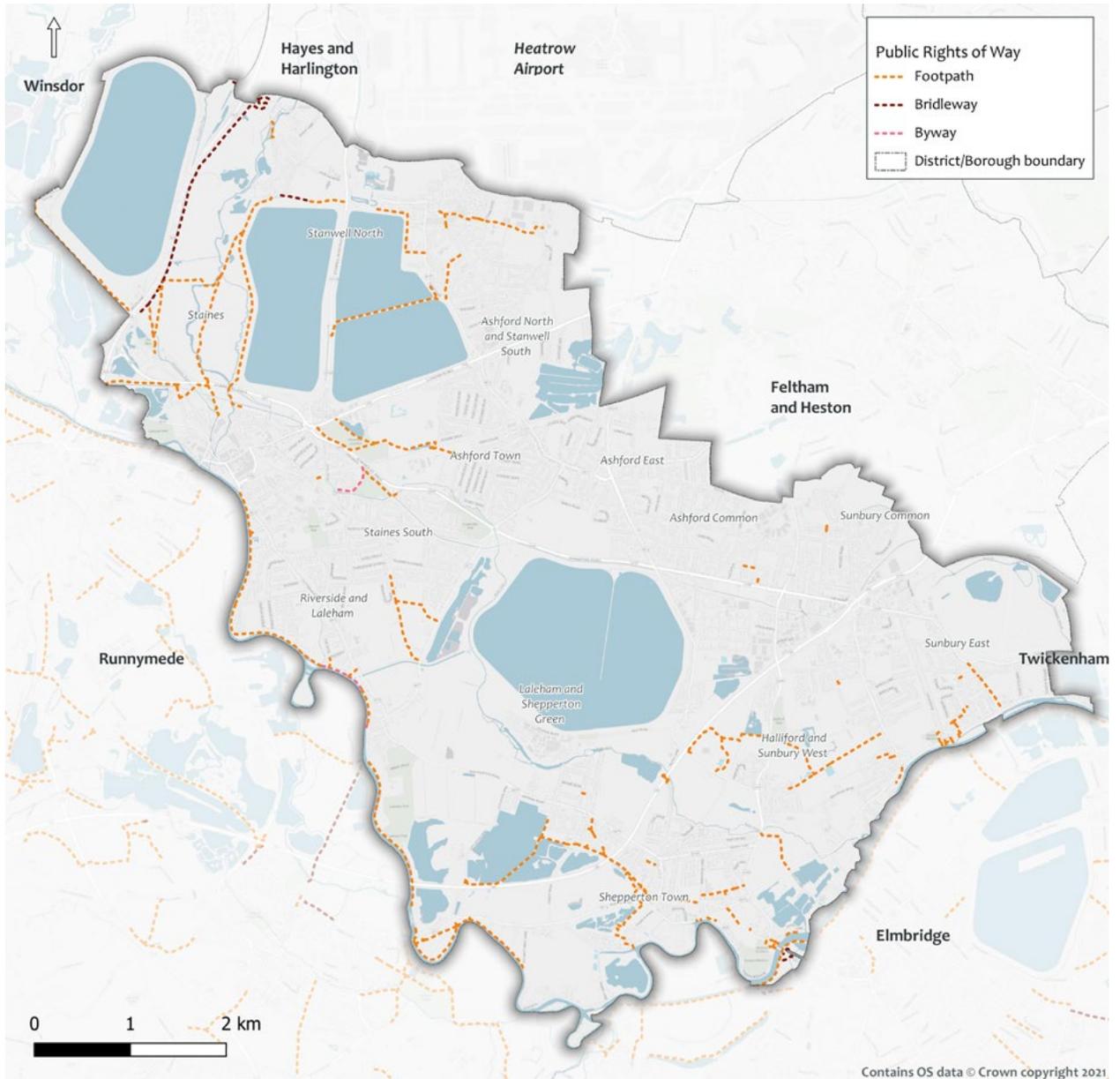


Figure 22. Public rights of way

Topography

The topography of an area has been shown to affect the choice of cycling and walking routes. Pedestrians and cyclists can be deterred from using routes with a steep gradient or declination, due to the associated difficulties of using the route. The difficulty is often experienced more significantly amongst user groups with disabilities and mobility impairments.

Located in the Thames Valley, the Borough of Spelthorne is considered to be relatively flat and low lying, as indicated by the contour lines in Figure 23. Areas in the north are slightly hillier (e.g. Stanwell), but general gradients would not be expected to pose a significant deterrent to cycling.

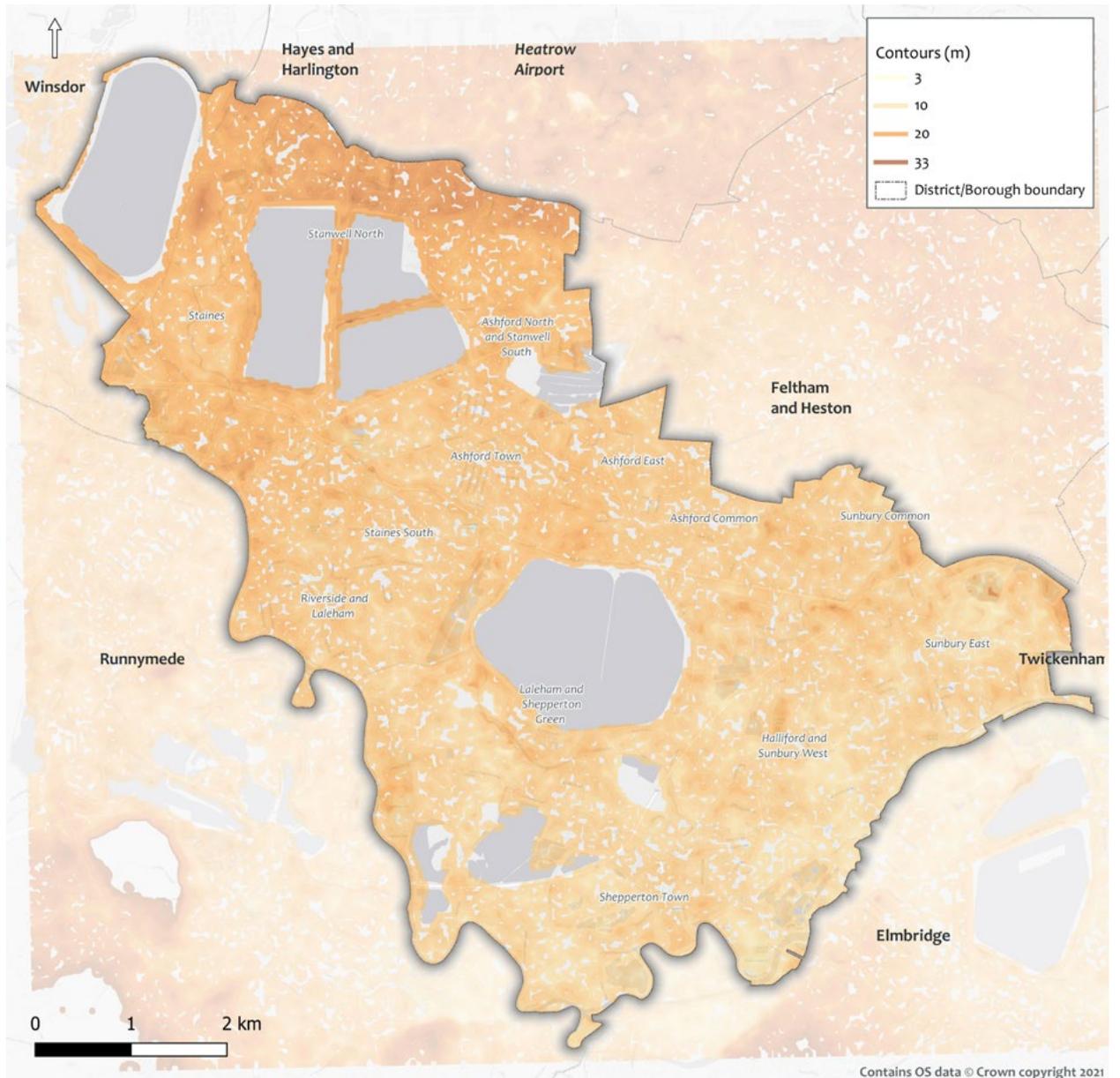


Figure 23. Topography

Railway Network

The Borough is connected to the National Rail Network and contains six railway stations that provide local residents with direct services to London (Figure 24). These railway stations are key destinations, as they provide sustainable travel opportunities that can connect with walking and cycle routes.

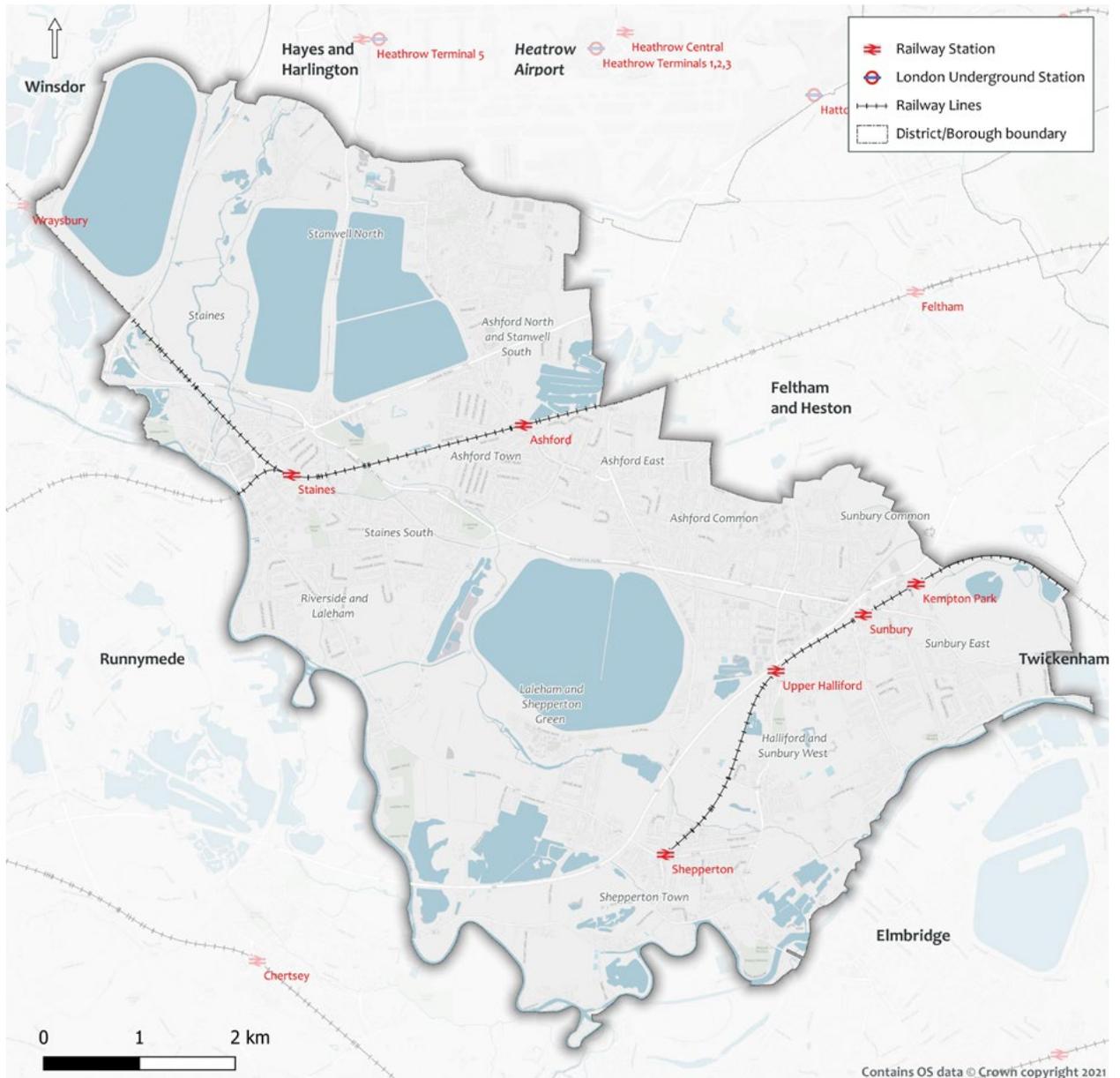


Figure 24. Railway network

Bus Network

Figure 25 illustrates the distribution of bus stops across the Borough. The bus stop locations indicate areas of demand for short walking trips, linking bus passengers with surrounding residential areas or key destinations.

The data indicates there is relatively good, widespread provision of bus stops throughout Spelthorne. Greater concentrations of bus stops are particularly notable in the urban areas of Staines-Upon-Thames, Ashford and Sunbury, where there are also higher population densities.

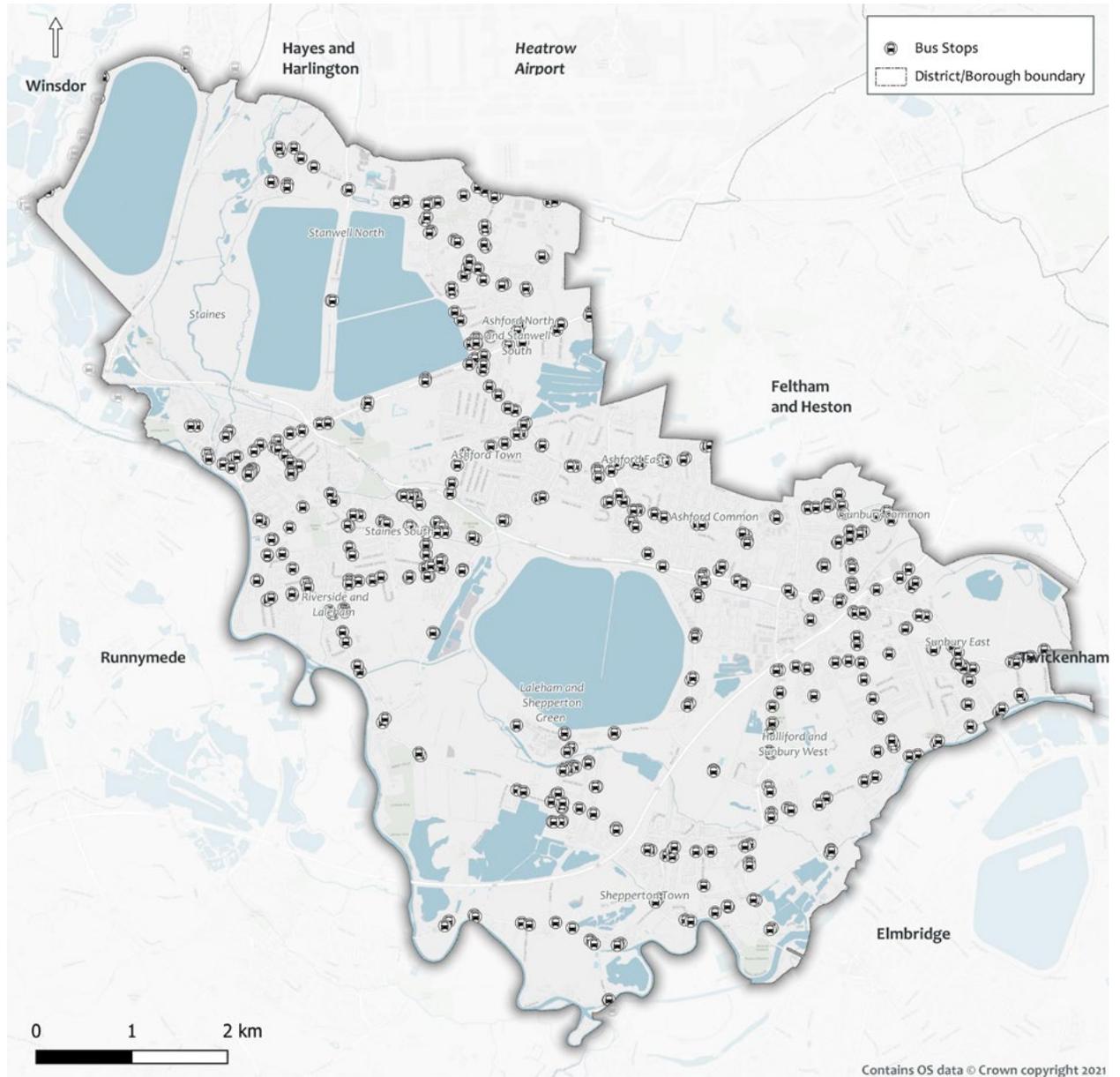


Figure 25. Bus network

Population Data

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.

As illustrated in Figure 26, the residential population of Spelthorne is largely concentrated in the central third of the Borough, in-between the reservoirs. This includes the built-up areas of Staines-Upon-Thames, Ashford and Sunbury, where the highest population densities can be observed.

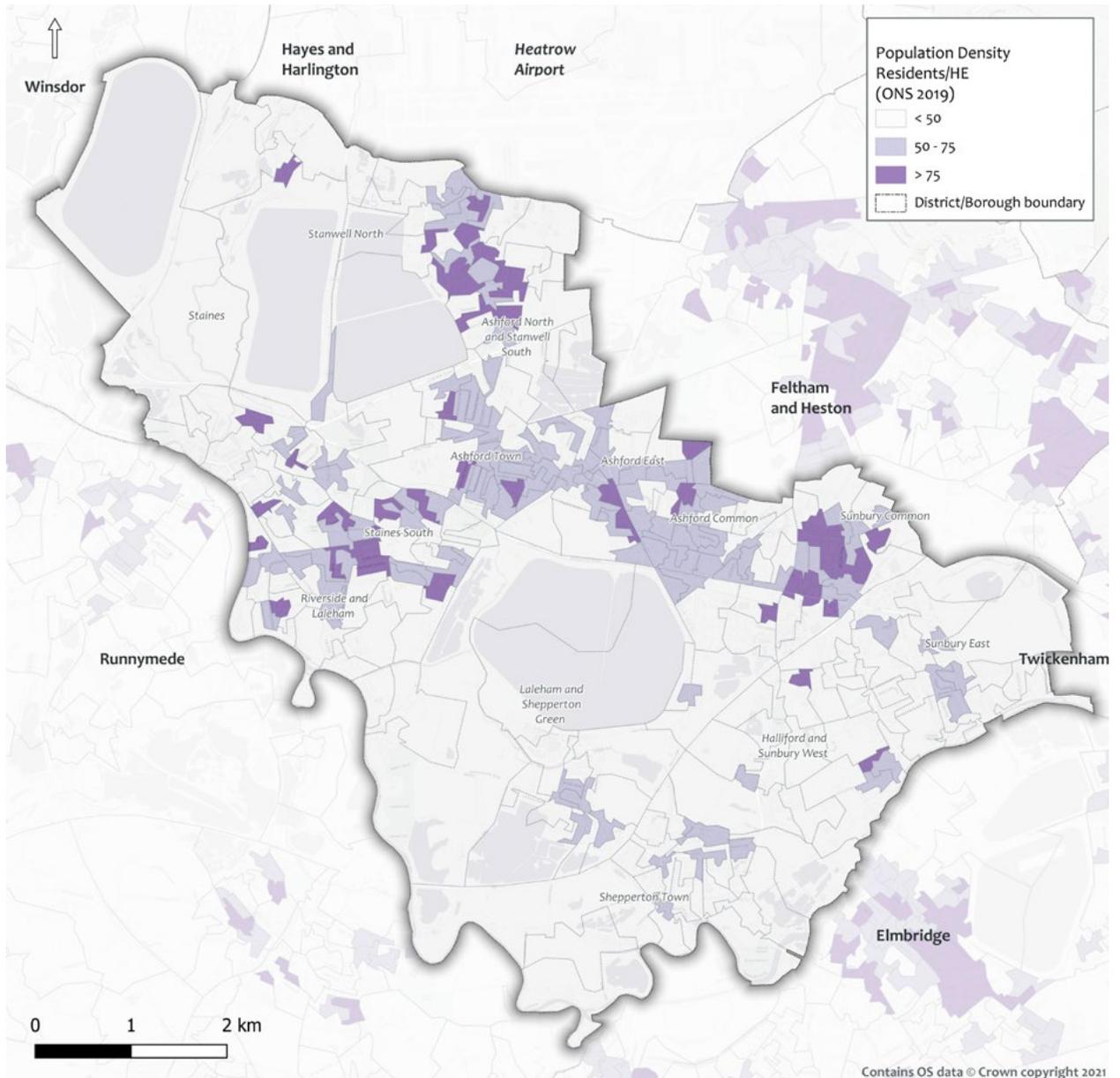


Figure 26. Resident population density

Employment

Workplace data can provide another proxy for potential demand for walking and cycling trips. Figure 27 highlights the key workplace zones within the Borough. The larger employment areas include:

- » Brooklands (west edge of the Borough)
- » Staines-Upon-Thames
- » Ashford Town
- » Ashford Common
- » Sunbury
- » Shepperton Town

Figure 27 also indicates the importance of connectivity across borough boundaries to provide linkages to neighbouring employment and population centres. In particular, Egham and Feltham, located to the west and east of the Borough, have relatively high employment and population densities. Consideration should also be given to Heathrow Airport, located north of the Borough, which is a large employment hub in the region.

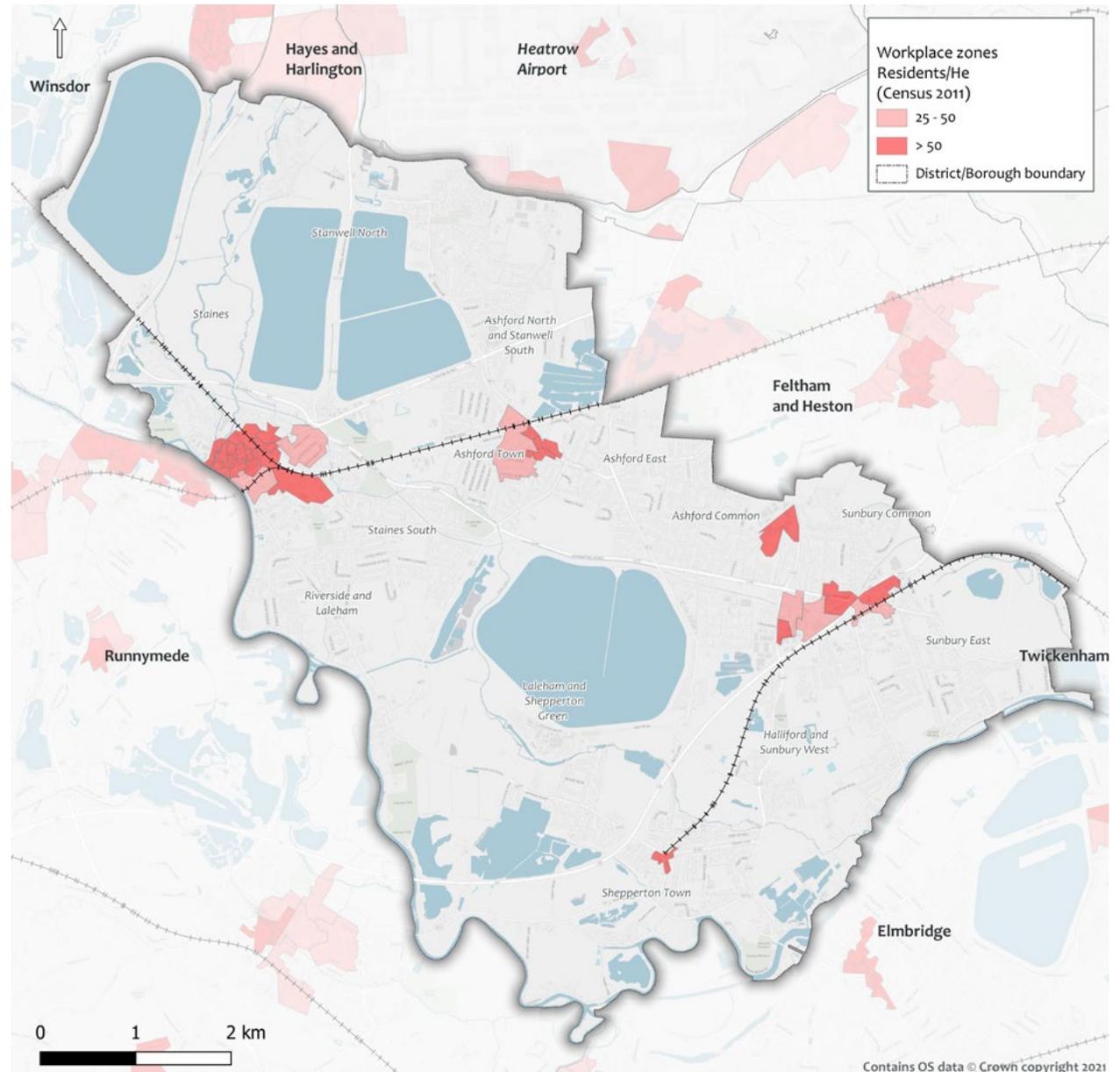


Figure 27. Workplace population density

Car Availability

Car availability is considered to be relatively high throughout Spelthorne. The areas where households have limited access to a car or van are concentrated in the built up urban areas of Staines-Upon-Thames, Ashford East and Sunbury (see Figure 28).

There is evidence that some households in these urban areas do not own a car at all, suggesting a greater reliance on walking, cycling or public transport.

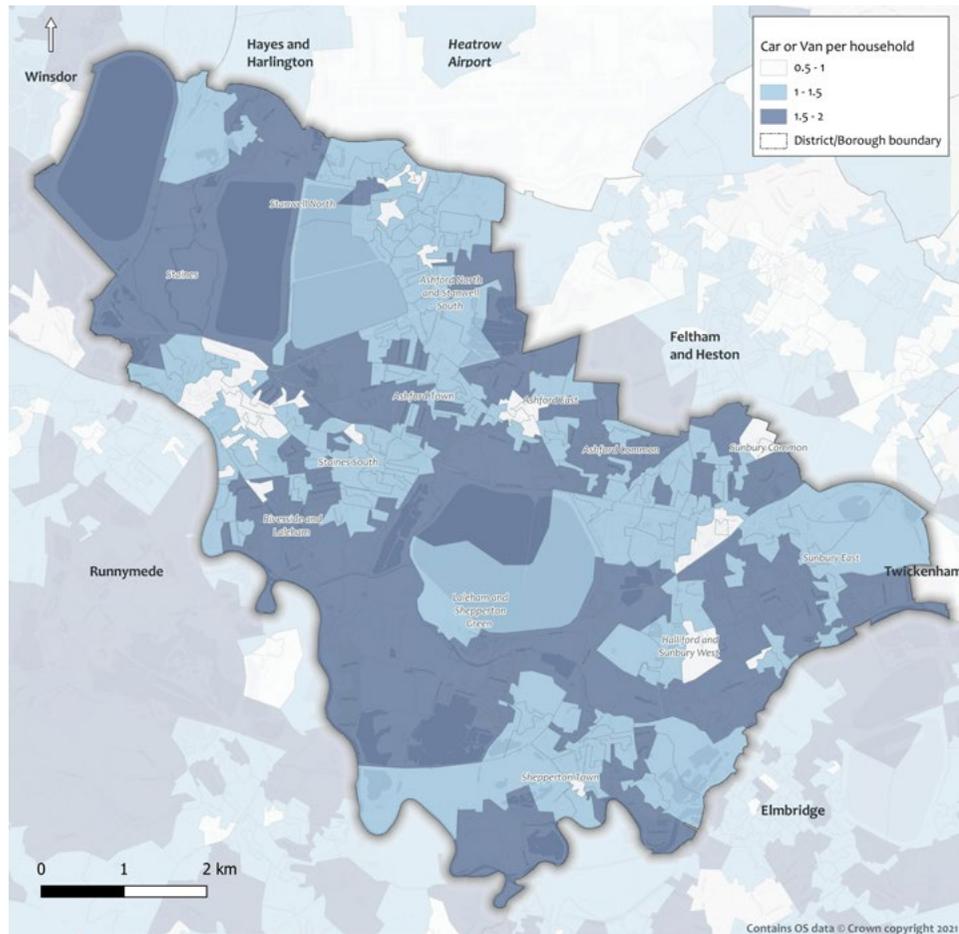


Figure 28. Car/van availability

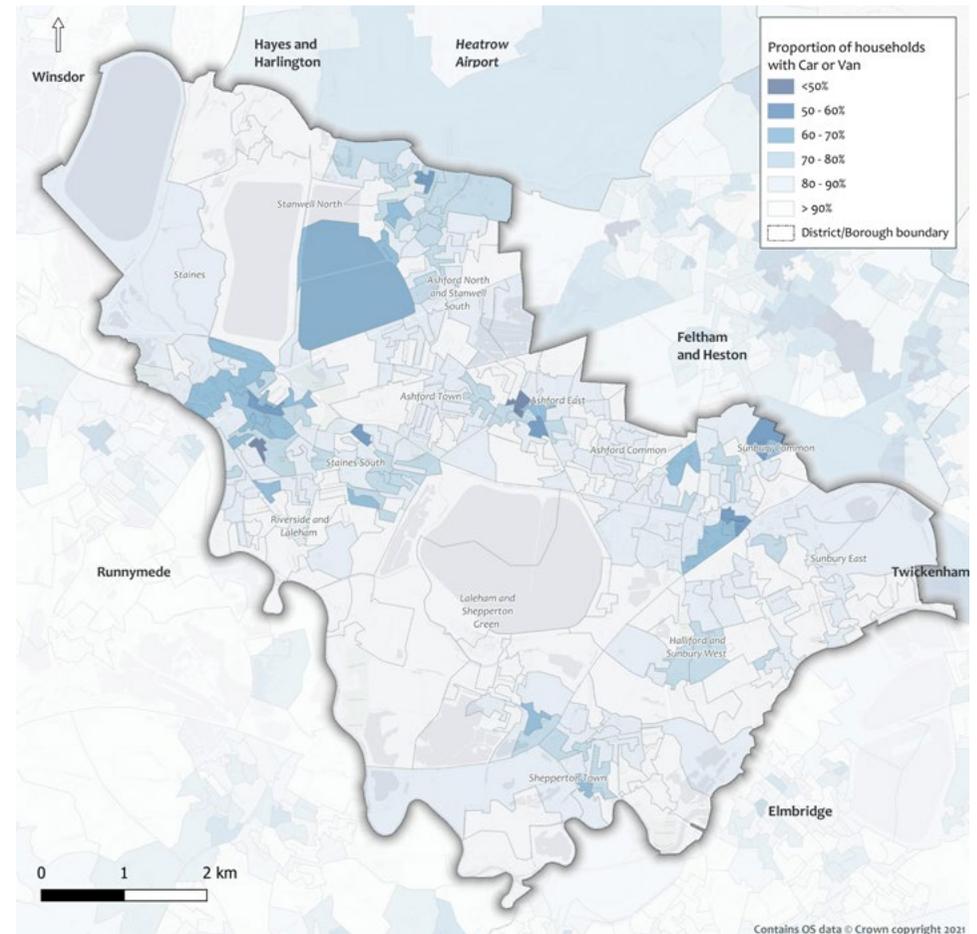


Figure 29. Proportion of car/van per household

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. Areas in the first decile represent the most deprived areas, whereas the 10th decile represents least deprived areas. The information was used for the identification of under served areas and therefore what areas would benefit the most from walking and cycle routes improvements.

Figure 30 shows the 2019 IMD. From this figure it can be seen that there are wide disparities between high and low areas of deprivation across the Borough, with three regions identified within decile 3 and four regions identified within decile 10.

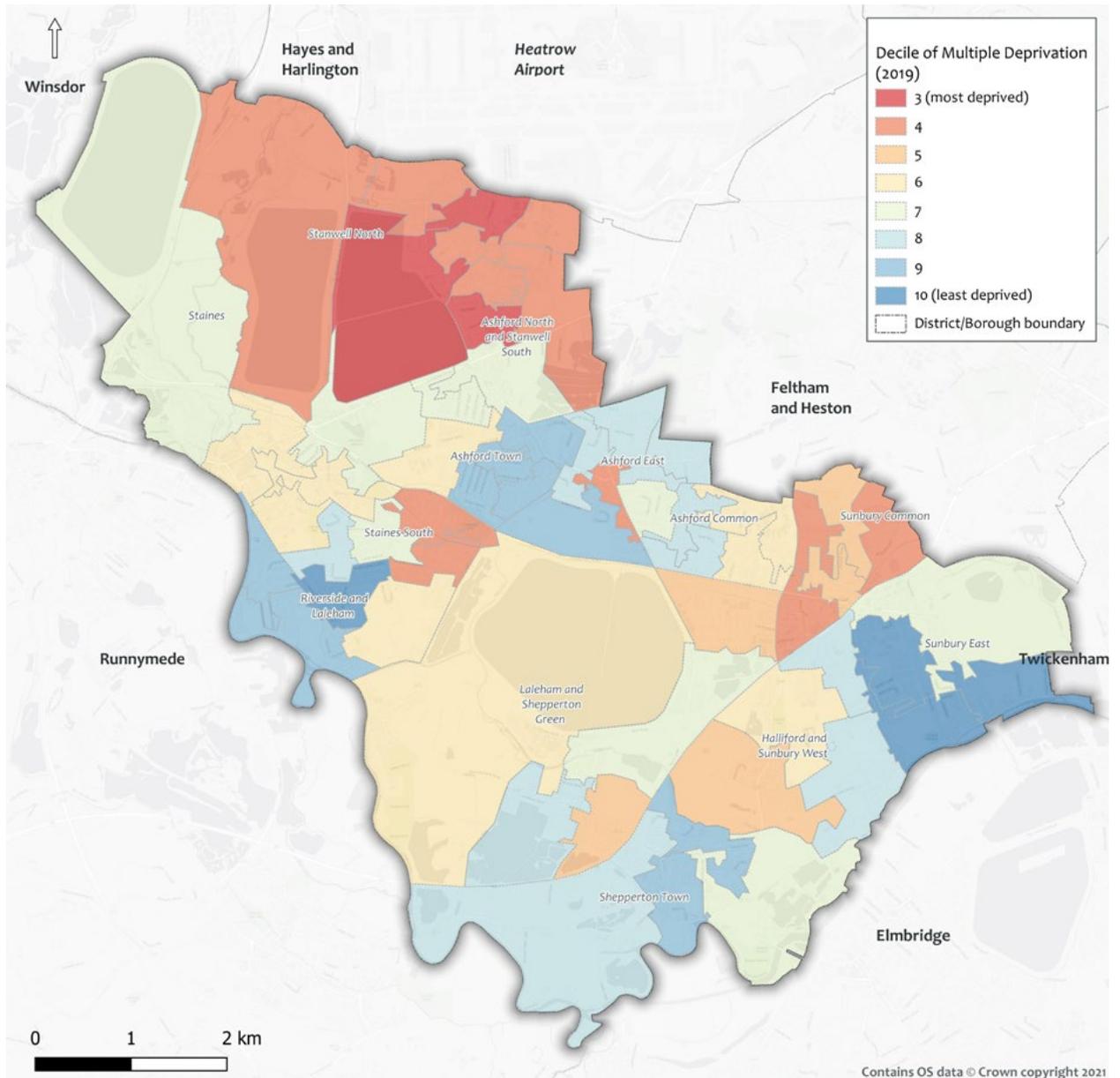


Figure 30. Index of multiple deprivation

Commuting Patterns

The Census data provides information on the main commuter inflows and outflows to/from Spelthorne, which is shown in Figure 31. The neighbouring boroughs of Hounslow, Runnymede, Hillingdon (Heathrow Airport), and Richmond upon Thames are among the top four for inflows and/or outflows.

This indicates the importance of inter-borough connectivity and inter-borough travel when developing the cycle network. It also suggests that a portion of these commuter trips are also likely a cycleable distance and would have potential for modal shift.

This also indicates the importance of providing high-quality walking and cycling links to railway stations in Spelthorne to facilitate and encourage linked active travel/public transport trips.



Figure 31. Travel to work commuter patterns for Spelthorne Borough (source: <https://www.nomisweb.co.uk/>)

Barriers and Constraints

Severance is a significant barrier to mobility in Spelthorne, particularly for active travel modes. Issues are highlighted in Figure 32 and described below:

- » Multiple railway lines traverse the Borough, which sever the local road network and funnel traffic for all modes to a limited number of crossing points.
- » Several dual carriageway roads sever local street networks and create barriers to active travel. These include the A30 and A308, which are barriers to north/south mobility;
- » The M3 motorway severs network connectivity in the southeast of the Borough.
- » The River Thames forms the western boundary of the Borough, limiting regional connectivity for all modes to the main crossing points of the Thames. The distance between crossing opportunities creates a significant barrier for all modes, particularly the viability of short trips via walking or cycling.
- » Several large reservoirs and wetland habitats are located throughout the Borough. These sites provide valuable wildlife habitat and essential clean drinking water for the region, but they also create severance issues for all modes of travel.
- » 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.

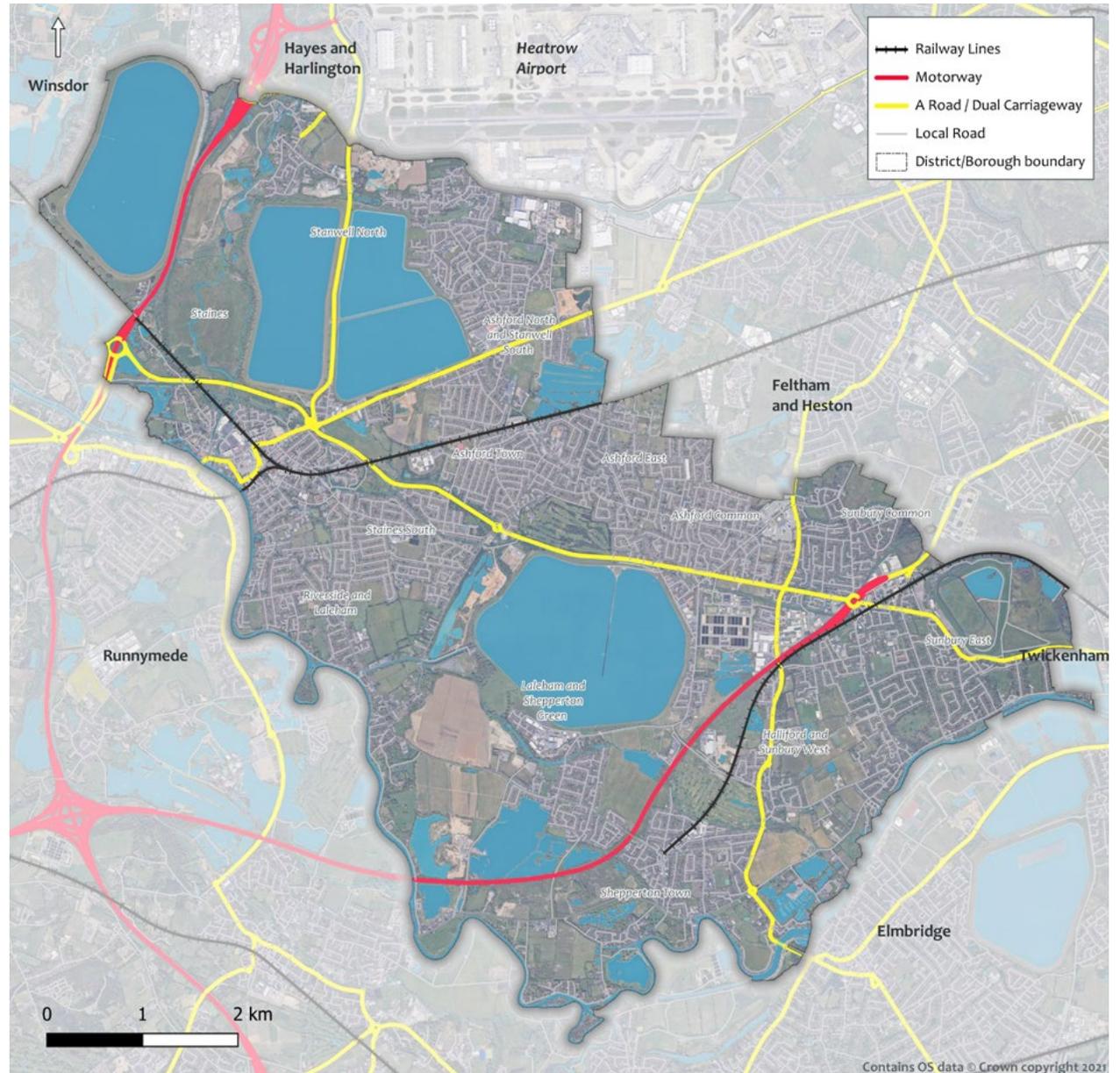


Figure 32. Severance in Spelthorne

Collision Data

As part of the LCWIP, a high-level review of recent collision data (2015-2019) involving pedestrians and people cycling was undertaken. This provided an understanding of where collisions are occurring and routes which could benefit from safety improvements as part of an LCWIP scheme.

Pedestrian Collisions

Figure 33 presents a 'heatmap' illustrating the location and relative concentration of pedestrian collisions within the Borough. Collisions were concentrated in the towns of Staines-Upon-Thames, Ashford and Sunbury. This is likely due to the higher population density and clustering of key destinations in these areas of the Borough (as summarised in previous sections), and hence greater propensity for walking and cycling activity and higher traffic in these areas. Relative 'hotspots' include:

- » Church Road, Ashford (B378)
- » Staines Road West, Sunbury (A308)
- » High Street, Staines

Severity	Total	Avg/Yr
Fatal	5	1
Serious	46	9.2
Slight	139	27.8
Total	190	38

Table 1. Pedestrian collisions, by severity

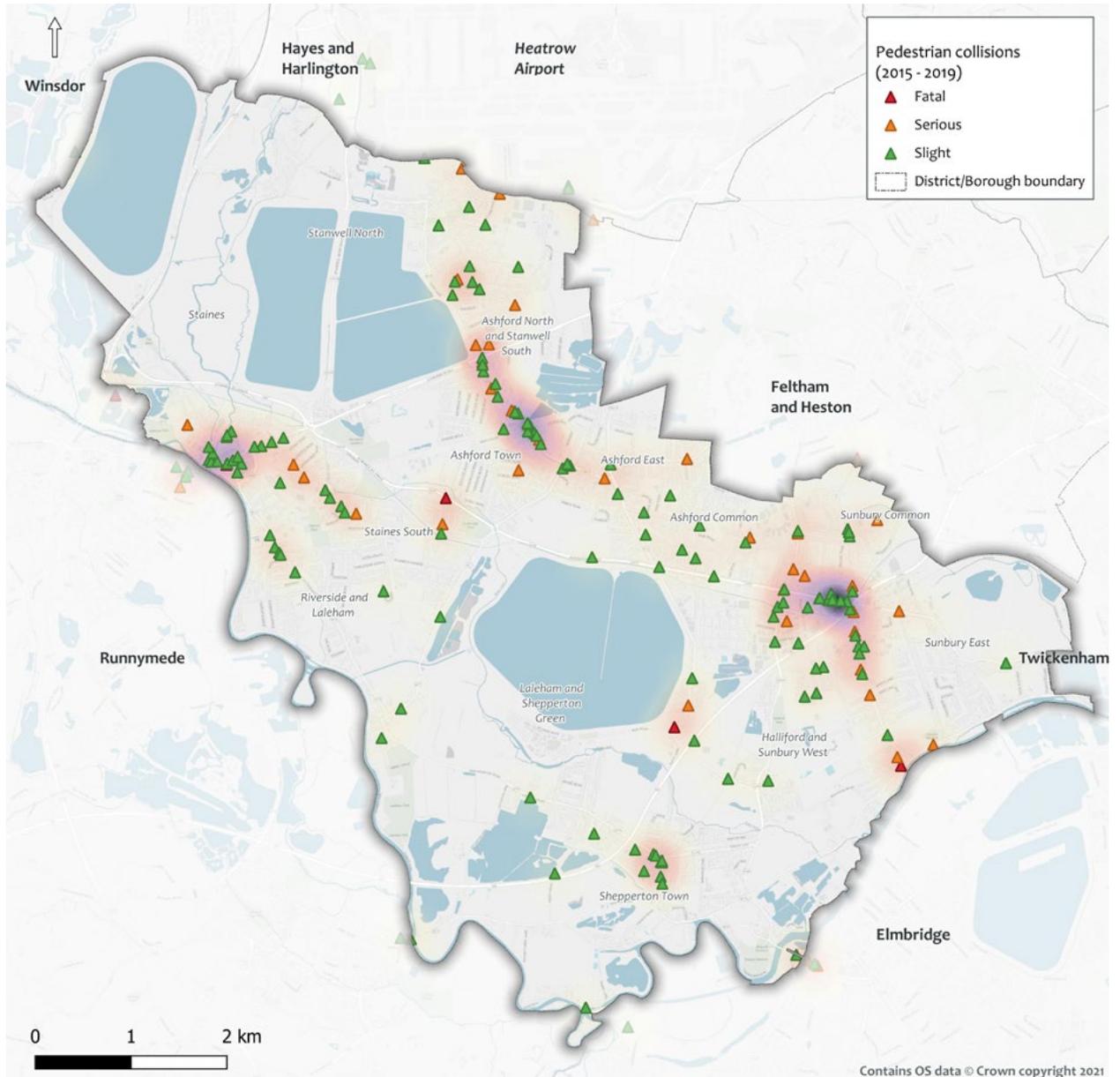


Figure 33. Pedestrian collisions

Cyclist Collisions

The locations and severity of cyclist collisions are shown in Figure 34. As with the pedestrian collisions, clustering of the cyclist collisions is apparent along the main road network. Areas found to have a higher concentration of cyclist collisions are noted below:

- » B376 in Staines-Upon-Thames
- » B378 through Ashford
- » A308 between Ashford and Sunbury
- » B375 in the south of the Borough
- » A244 through Shepperton

Severity	Total	Avg/Yr
Fatal	0	0
Serious	60	12
Slight	217	43.4
Total	277	55.4

Table 2. Cyclist collisions, by severity

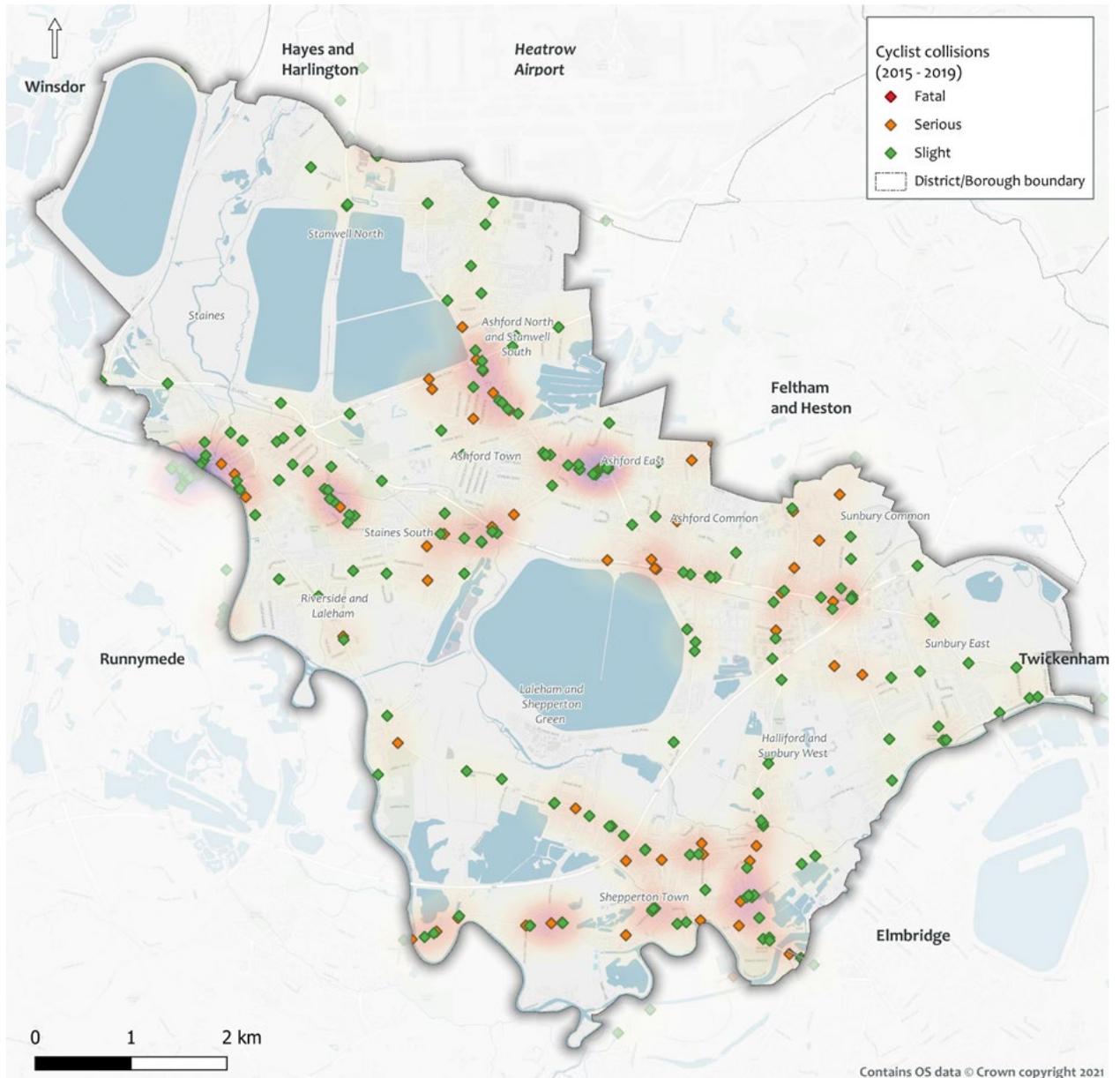


Figure 34. Cyclist collisions

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:

Commonplace

The online Commonplace website provides a platform to gather suggestions for active travel improvements. Originally launched by SCC in summer 2020, the website gathered suggestions for active travel improvements in response to the Covid-19 pandemic, which could support social distancing and encourage a mode shift. The website was subsequently adapted for the Surrey LCWIPs and re-publicised to gather comments in support of the Spelthorne LCWIP.

Widen My Path

Similar to the Surrey Covid Transport Map, '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.

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 35. This map provides a visual representation of higher priority areas for walking and cycling improvements, from the perspective of local residents.

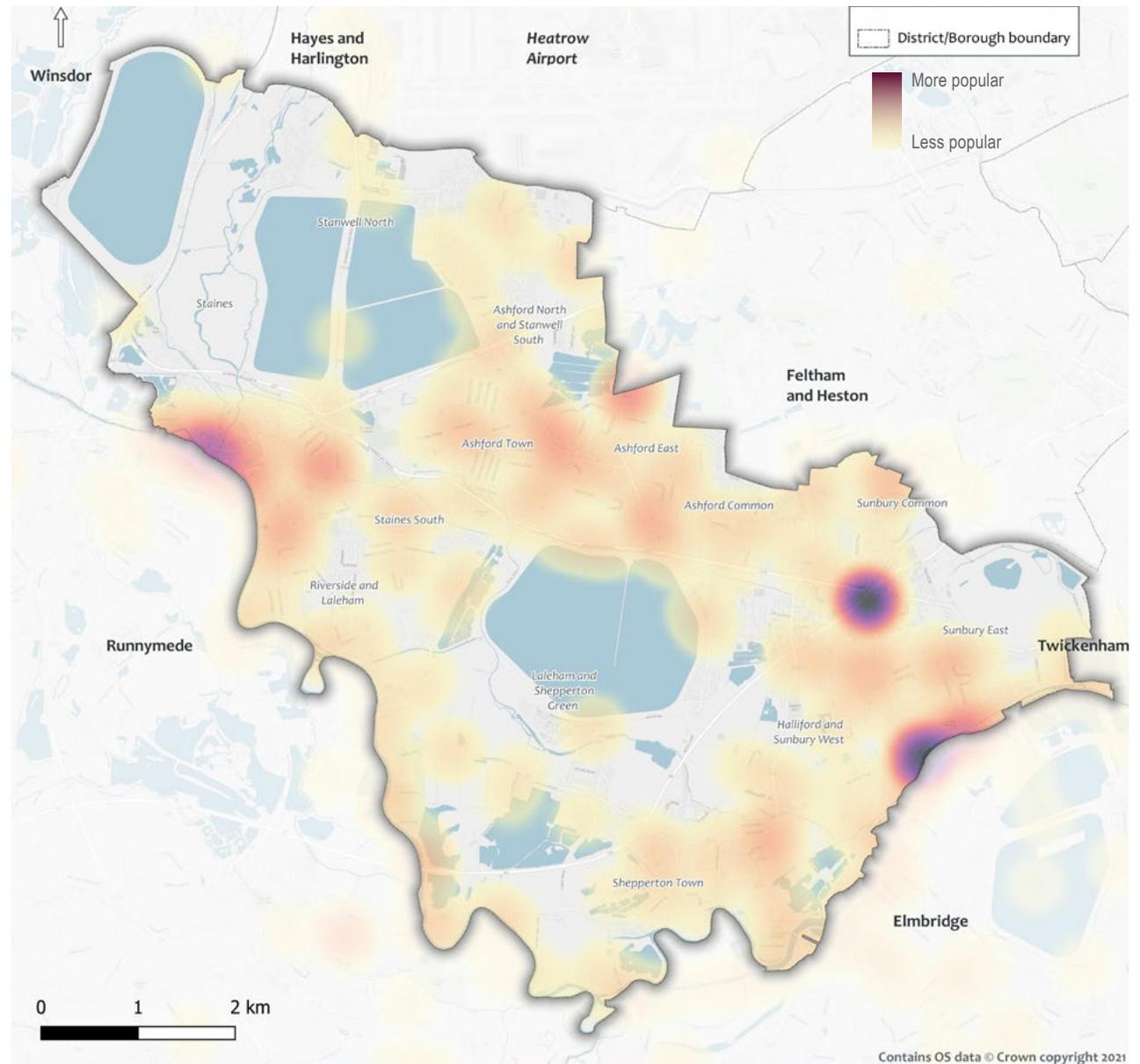


Figure 35. Heatmap of comments related to walking and cycling issues across multiple online public comment platforms

Figure 36 provides a detailed breakdown of the public suggestions for active travel improvements across Spelthorne.

In total 166 comments were logged in Commonplace platform with 251 agreements on the comments. 40% of the comments referred to cycle facilities, 18% to pedestrian facilities and 42% to both pedestrian and cycle facilities. Widen my path platform has 92 comments on the cycle facilities with 279 agreements.

Some of the more common/popular locations for walking and cycling improvements included:

- » Improvements to Staines Bridge (across the River Thames) and the surrounding approach roads
- » Pedestrian and cycle improvements in the vicinity of Sunbury Railway Station
- » Along the A308 corridor, between Staines-Upon-Thames and Sunbury
- » Sunbury-Upon-Thames
- » The Thames Path National Trail, along the western boundary of the Borough
- » Along the A244 through Shepperton

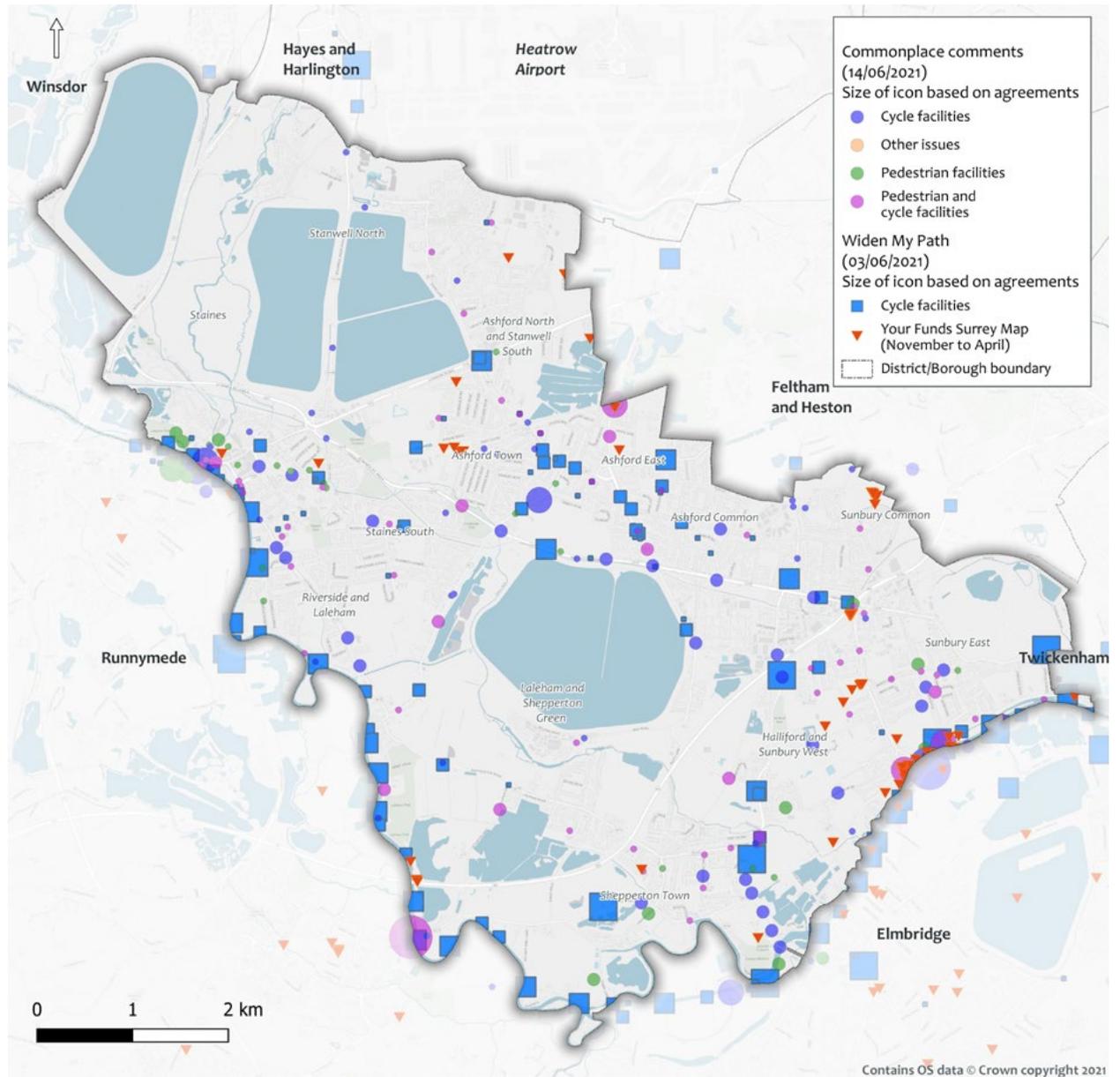


Figure 36. Comments related to walking and cycling issues across multiple online public comment platforms

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 potential cycling activity.

The Spelthorne LCWIP PCT analysis was conducted using data downloaded in May 2021. The following data categories were utilised for the analysis:

- » Geography: Lower Super Output Area (LSOA) geography was selected because it provides greater granularity of origin/destination pairs within Spelthorne and is appropriate for the scale of the study area.
- » Growth Scenario: 'Go Dutch' was selected to reflect the high aspirations of the LCWIP for a step-change in levels of cycling in the Borough. The 'Go Dutch' scenario models the increase in cycling as a function of distance and hilliness, plus a number of socio-demographic and geographical characteristics, to reflect what could happen if 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.

- » Direct Desire Lines: Direct point-to-point desire lines in the PCT (desire lines between LSOAs) 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.
- » Cycling Flows: 'Fast' routes were the primary output as they represent the most direct desire lines for cycling, which are more likely to attract new cyclists and support growth in cycling. The top 25 'quieter' routes (in terms of highest cycle flows) were also reviewed during network refinement for potential alternative route options with minimal detour.
- » 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 Spelthorne. 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.¹ Therefore, the available data is only representative of a small percentage of overall trips and potential demand for cycling.

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

PCT Commuter Mode Share

Based on the 2011 Census, cycle mode share for commuting was found to be low across the Borough, typically less than 5% (Figure 37). The only part of the Borough to register a higher level of cycle commuting was in Staines South, which was slightly higher at 5% to 10%. The

PCT, however, illustrates the high propensity for growth in cycling across Spelthorne. Under the 'Go Dutch' scenario, much of the Borough would have a cycle commuter mode share of over 20%. The propensity is relatively higher along the north east boundary of the Borough where the PCT indicates a potential

mode share of over 20%. This could be due to higher population density and proximity to employment areas along the corridor.

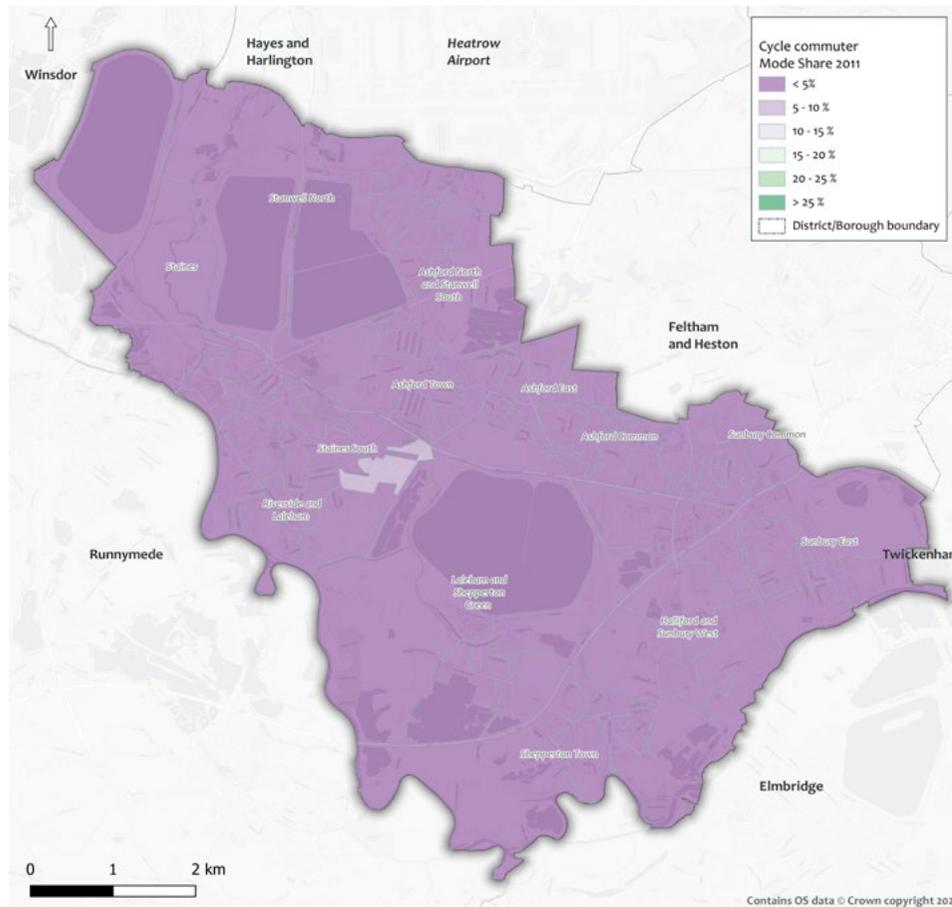


Figure 37. Journey to work cycling mode share based on 2011 Census data

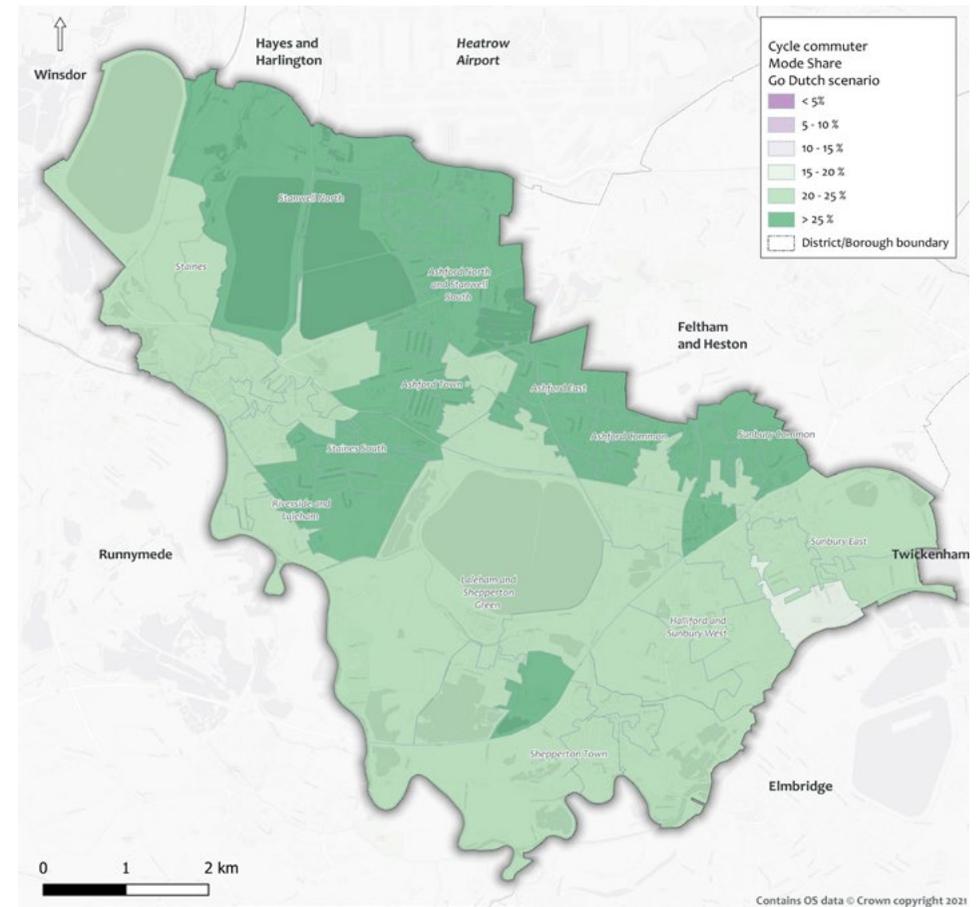


Figure 38. Journey to work cycling mode share based on the PCT 'Go Dutch' scenario

PCT - Existing Cycle Commuter Trips

The 2011 Census data provides an indication of existing cycle commuter trips being made across Spelthorne. Figure 39 shows the highest rates of commuter cycling journeys took place near the town centre of Staines-Upon Thames. A popular commuter route was also identified in the north of the borough, connecting Stanwell to Harmondsworth, with over a 100 daily trips.

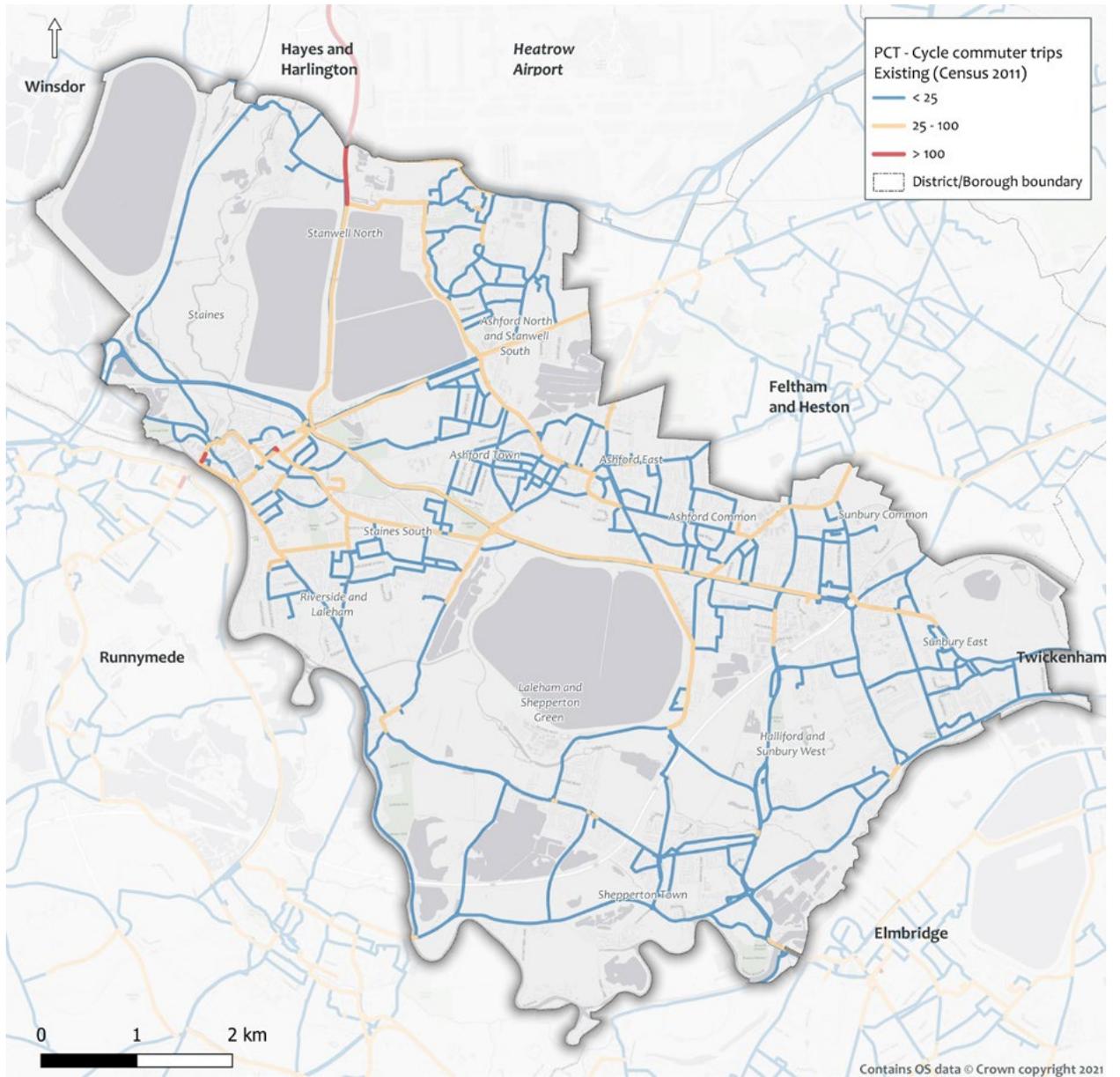


Figure 39. PCT daily commuter cycle flows - Existing

PCT - Cycle Commuter Trips - Government Targets

This scenario represents a doubling of the existing cycling levels, in line with the government's target to double the number of 'stages' (legs of a trip using a single mode) cycled by 2025. Indicative flows are illustrated by Figure 40 and include the following key routes:

- » Kingston Road (Staines)
- » A3044 (between Staines-Upon-Thames and Harmondsworth)
- » B378 (between Stanwell and Ashford)
- » A308 (between Ashford and Sunbury)
- » B376-NCN Route 4 (between Laleham and Staines-Upon-Thames)

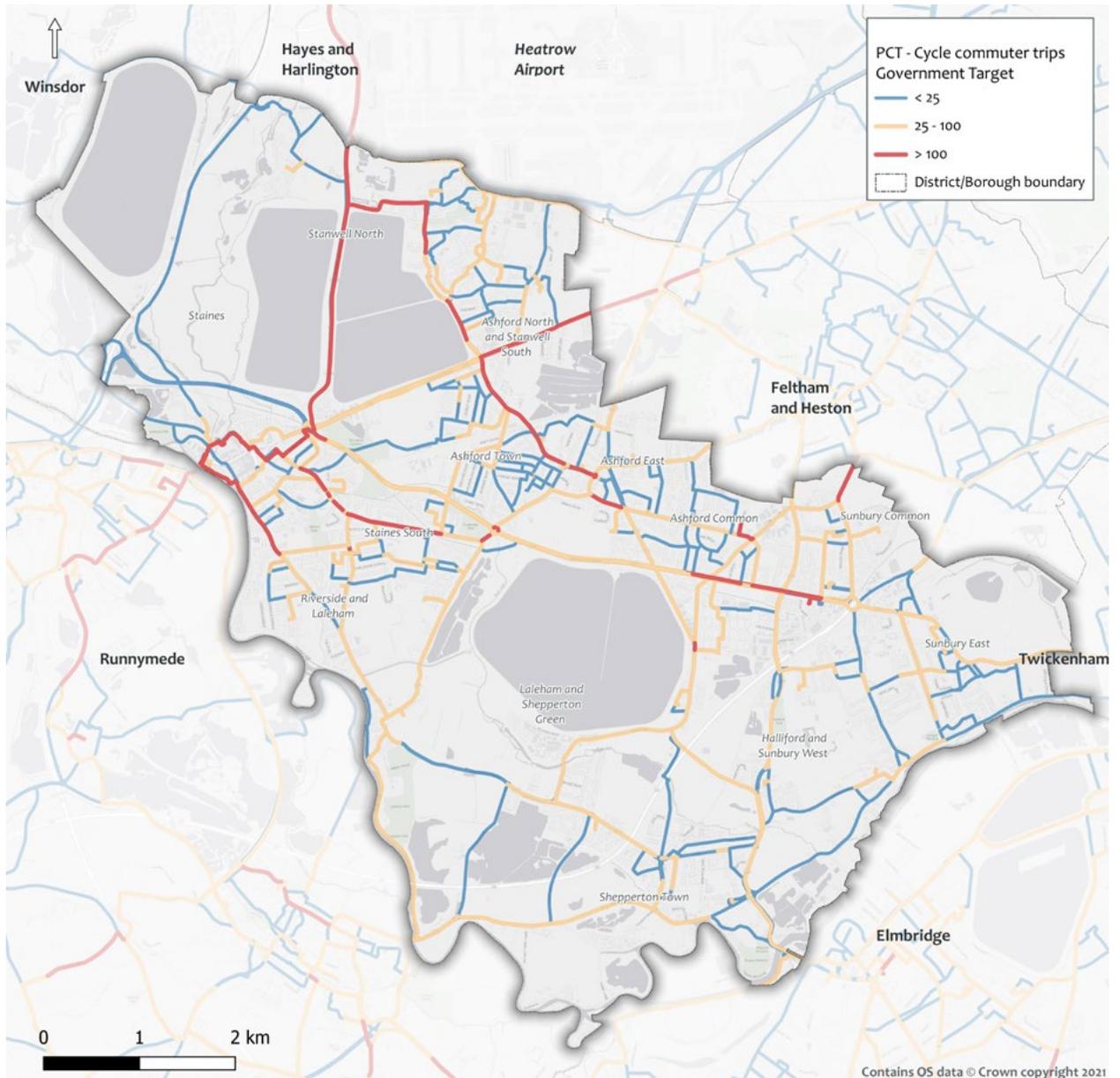


Figure 40. PCT daily commuter cycle flows - Government Target

PCT - Cycle Commuter Trips - Go Dutch

Estimated daily commuter cycle flows from the PCT Go Dutch scenario are illustrated in Figure 41. This map indicates the routes with the highest relative propensity for cycling in Spelthorne based on journey to work data.¹ Roads across the Borough are seen to have relatively high flows, within and linking any of the settlement areas.

Indicative key corridors and linkages with relatively high flows include:

- » Between Staines-Upon Thames and Stanwell
- » Between Staines-Upon Thames and Sunbury
- » Between Stanwell and Sunbury
- » Between Ashford and Sunbury
- » Between Sunbury and Shepperton

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 round trip commuting).

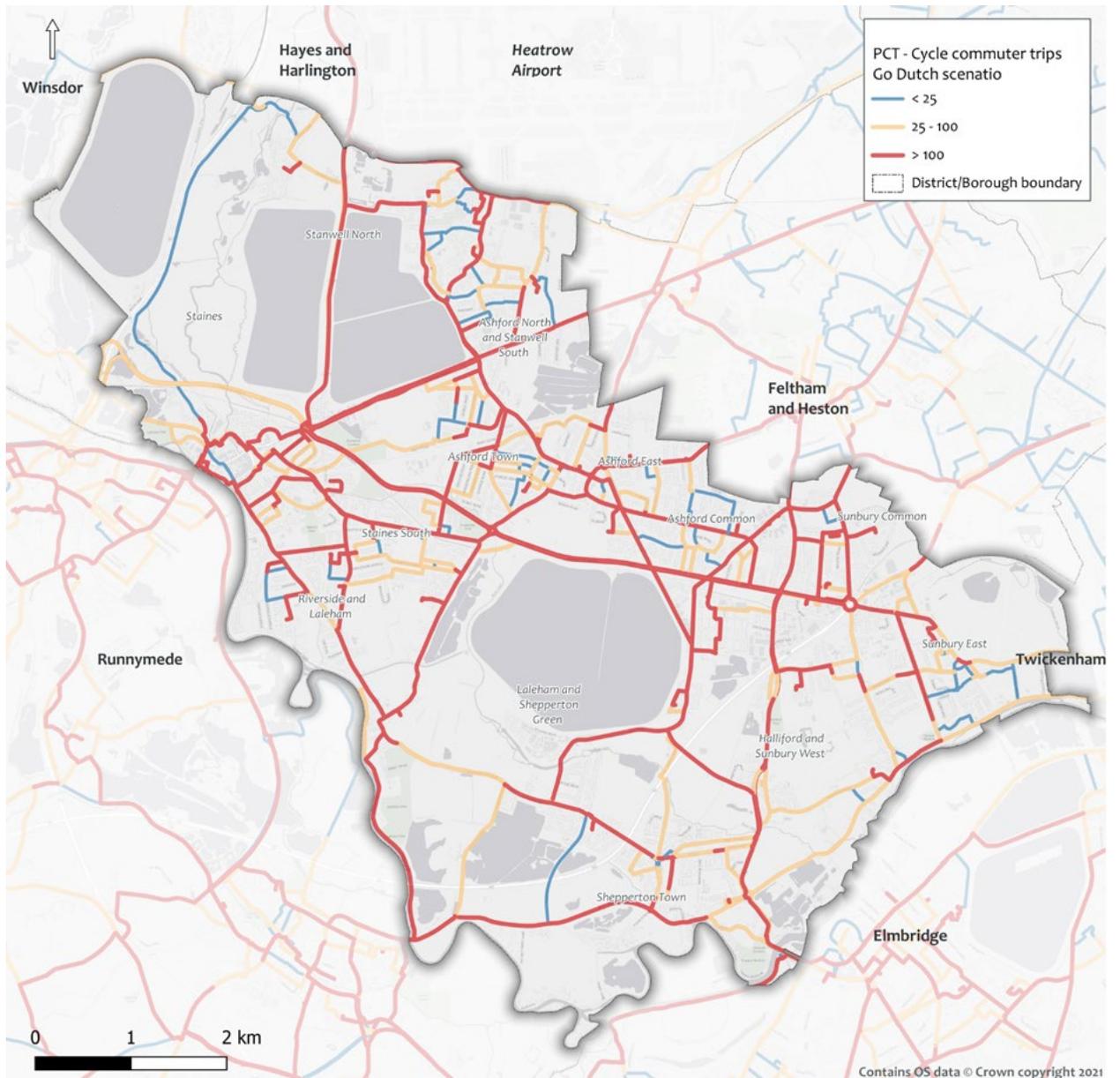


Figure 41. PCT daily commuter cycle flows, 'Go Dutch' scenario

PCT - Existing Cycle Trips to Schools

Figure 42 highlights education sites across the Borough and the number of cycling trips that are currently being made to them. In general, the number of existing cycle trips is seen to be low across the Spelthorne. The highest rates of cycling (>25 trips) can be observed in the three distinct clusters:

- » Between Ashford Town and Staines South
- » Sunbury
- » Between Upper Halliford and Shepperton Town

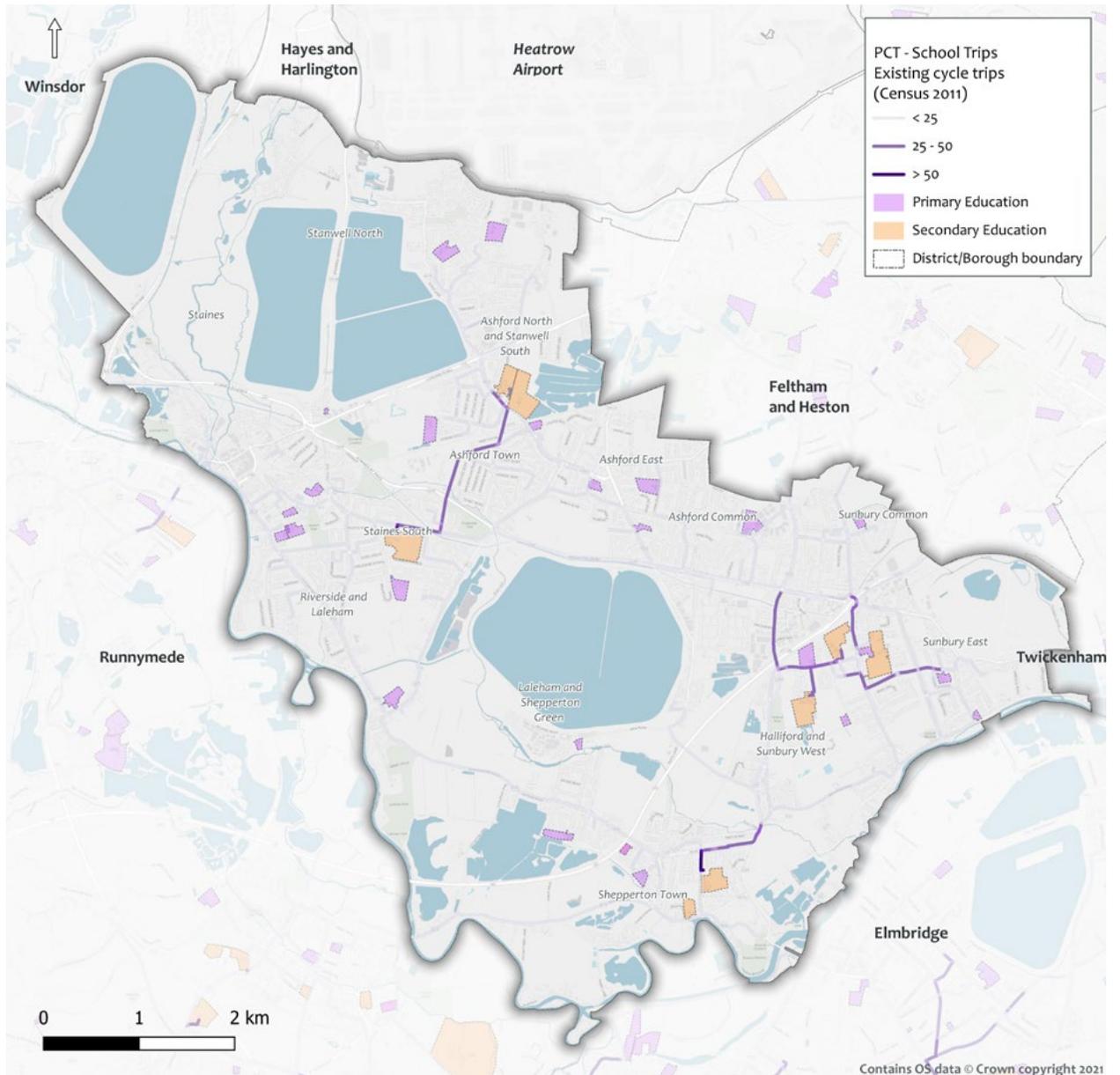


Figure 42. PCT existing school trips

PCT School Flows - Cambridge Scenario

Estimated daily journey to school cycle flows from the PCT Cambridge scenario are illustrated in Figure 43. This scenario models the rates of children who would cycle to school if they acquired the same propensity to cycle as children living in Cambridge. The data shows higher propensity for cycle trips to school (>50) are found in the following areas:

- » Routes within Staines-Up-on-Thames
- » Corridor between Stanwell, Ashford, and Sunbury
- » Routes linking Sunbury and Shepperton
- » Corridor linking Shepperton with Staines-Up-on-Thames

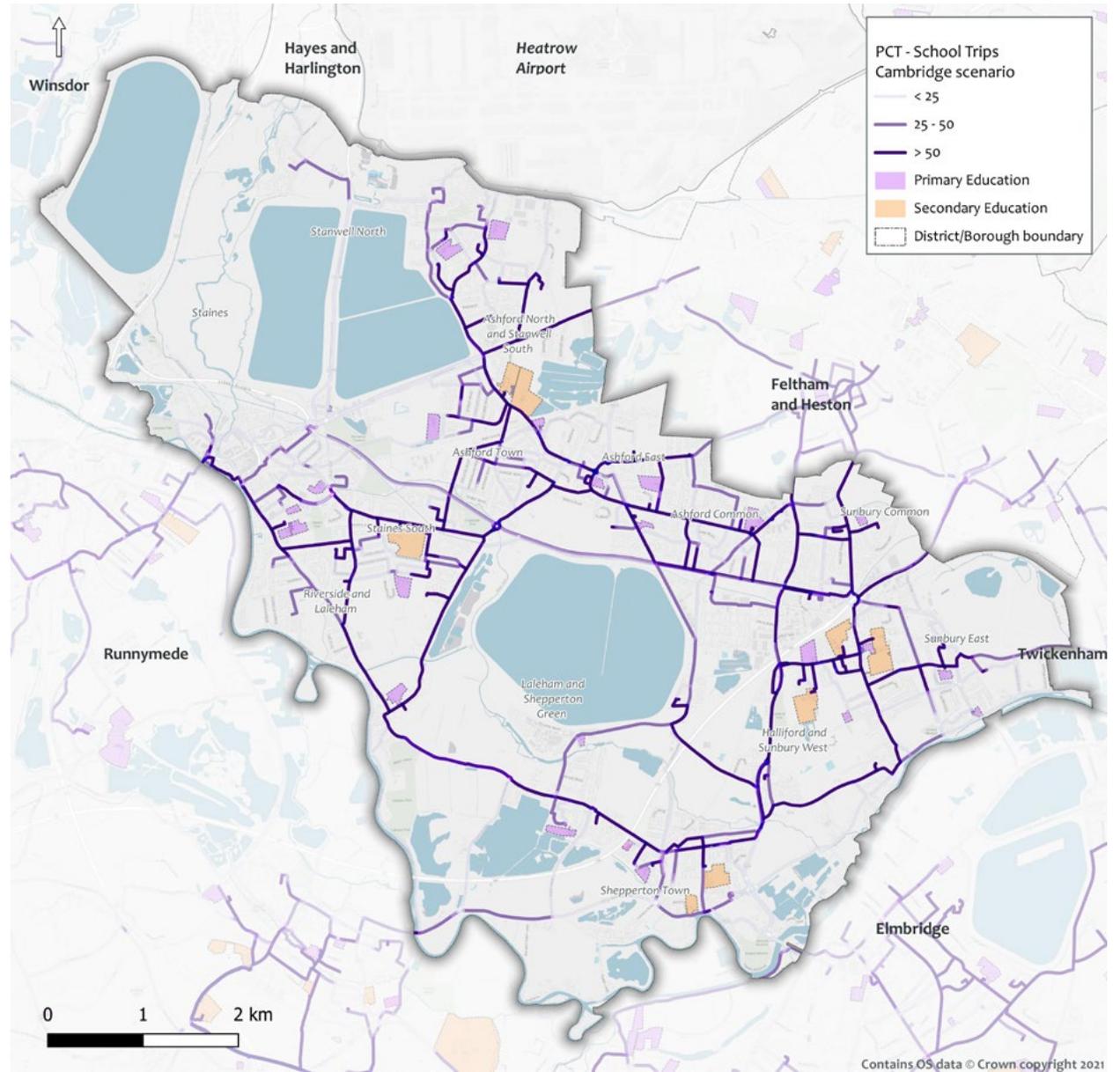


Figure 43. PCT School trips in the Cambridge scenario

PCT Short Trip Opportunities

The PCT data also identifies where short commuter trips are currently made by car (based on 2011 Census journey to work data). Two PCT assessments were conducted, one for trips less than 2km (Figure 44) and one for those trips less than 5km (Figure 45). These figures illustrate commuter trips made by private car (driver or passenger), which originate and/or end in Spelthorne.

These figures highlight trips that are within an easy cycling distance and opportunities for modal shift, by providing improved cycle infrastructure.

It is considered that trips up to 5km could be replaced by cycling and trips less than 2km could be replaced by walking or cycling. Areas with a higher number of short commuter trips made (less than 2km) can be seen in the following parts of the Borough:

- » Between Stanwell and Ashford South
- » Within Sunbury
- » Within Shepperton
- » Within Staines-Upon-Thames

Analysis of the commuter trips up to 5km, highlights a similar pattern, but with increasing numbers of trips across the east-west central corridor, connecting Staines-Upon-Thames with Ashford.

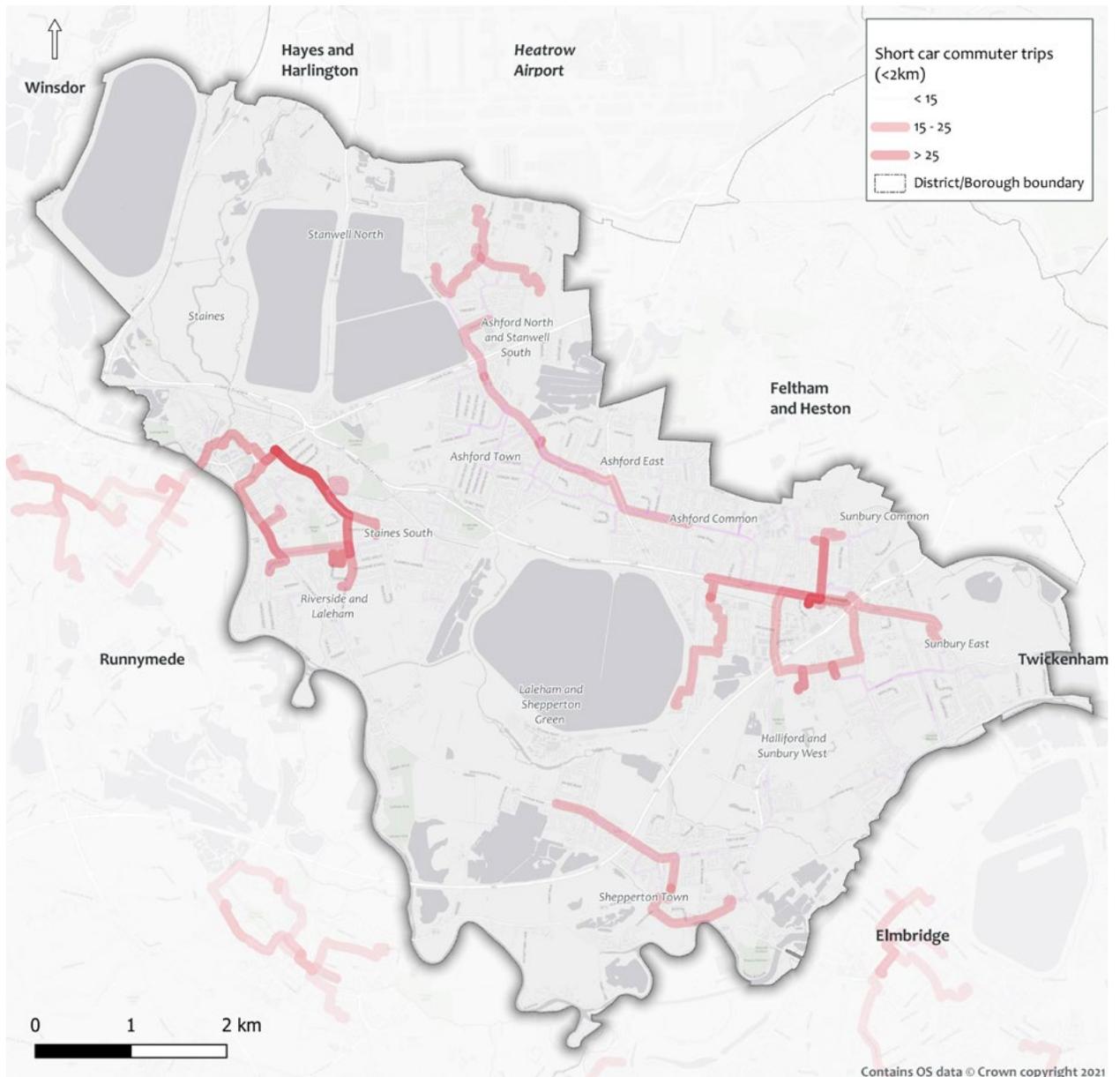


Figure 44. Short car trips (<2.5km)

PCT Short car trips

Figure 45 highlights the distribution of short car trips (less than 5km) in Spelthorne. The data illustrates the potential of creating cycle routes connecting Staines to Sunbury as one of the key 'driving' corridors in the area. The connection from Staines towards Laleham /Ashford also shows great potential.

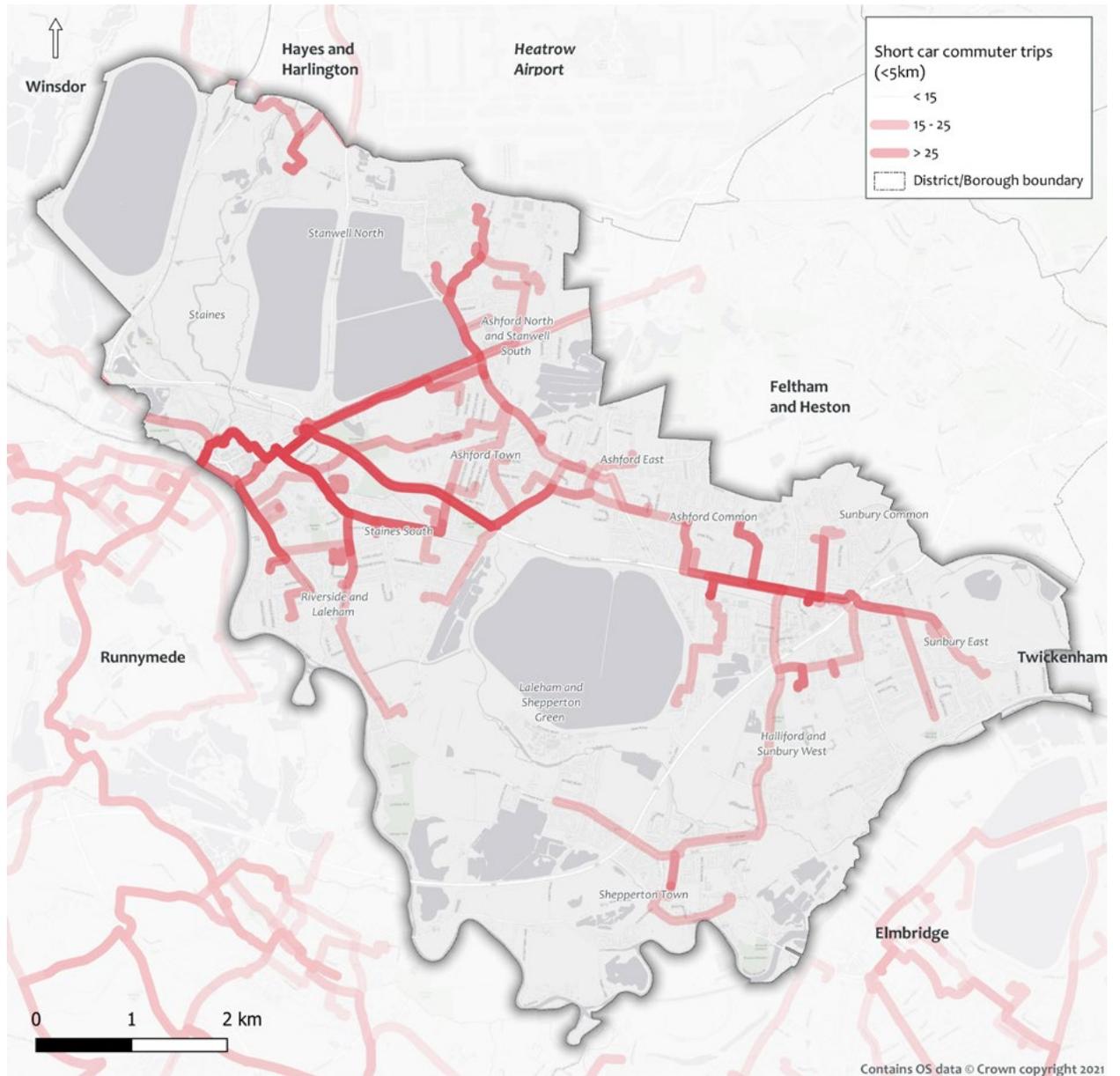


Figure 45. Short car trips (<5km)

PCT - Commuter Walking Trips

Figure 46 highlights the number of existing commuter trips that are undertaken on foot. The data shows that most of these trips are concentrated in urban areas, where the distance between residential communities and places of employment are shorter, and the option of walking as a mode of travel is more appealing for residents. The highest rates of commuter walking trips (>40) were noted in Staines-Upon-Thames.

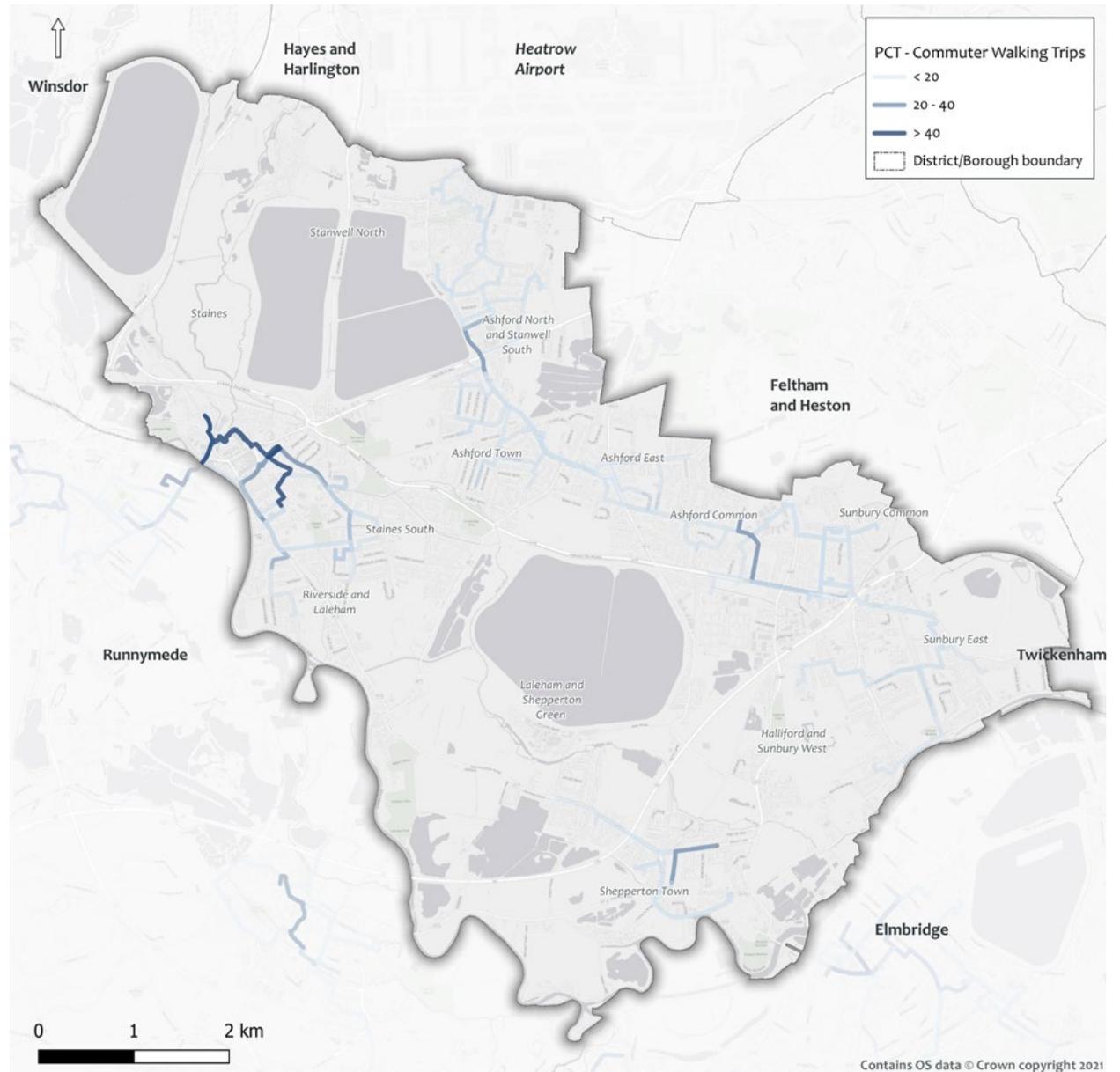


Figure 46. Walking commuter trips

Strava Data

Publicly available data for cycle trips recorded using Strava were also reviewed.¹ Strava is a mobile and internet-based application for tracking various activities (i.e., cycling, running, etc). The data presented represents cycle trips recorded by users of Strava's app. 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 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 Spelthorne is shown in Figure 47.

Routes with higher relative usage include:

- » B376 /Laleham Road (Staines)
- » Kingston Road (Staines)
- » B378/Church Road (Ashford)
- » B377/Fordbridge Road (Ashford)
- » Green Street (Sunbury)
- » Nursery Road (Sunbury)
- » B3366/Green Lane (Shepperton)
- » B376/High Street (Shepperton)

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

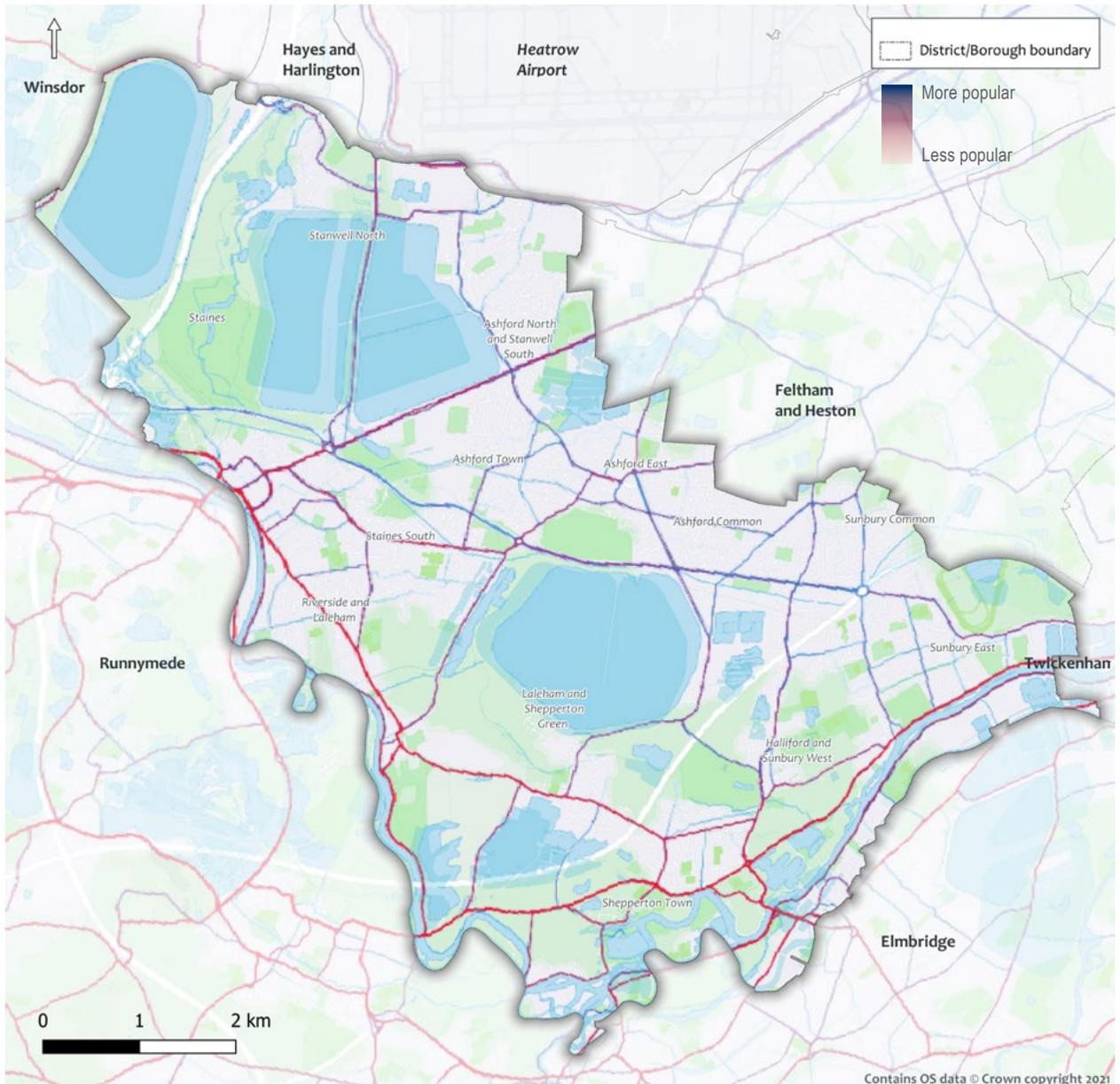


Figure 47. Indicative illustration of routes used cycle trips recorded using Strava.com (source: Strava global heatmap)

Proposed Infrastructure Developments

A range of targeted infrastructure proposals have been identified by Surrey County Council and Spelthorne Borough Council. These new facilities would provide valuable opportunities for active travel across the borough and provide realistic alternatives to short distance vehicle journeys. Figure 48 highlights the locations of these proposed walking and cycling schemes.

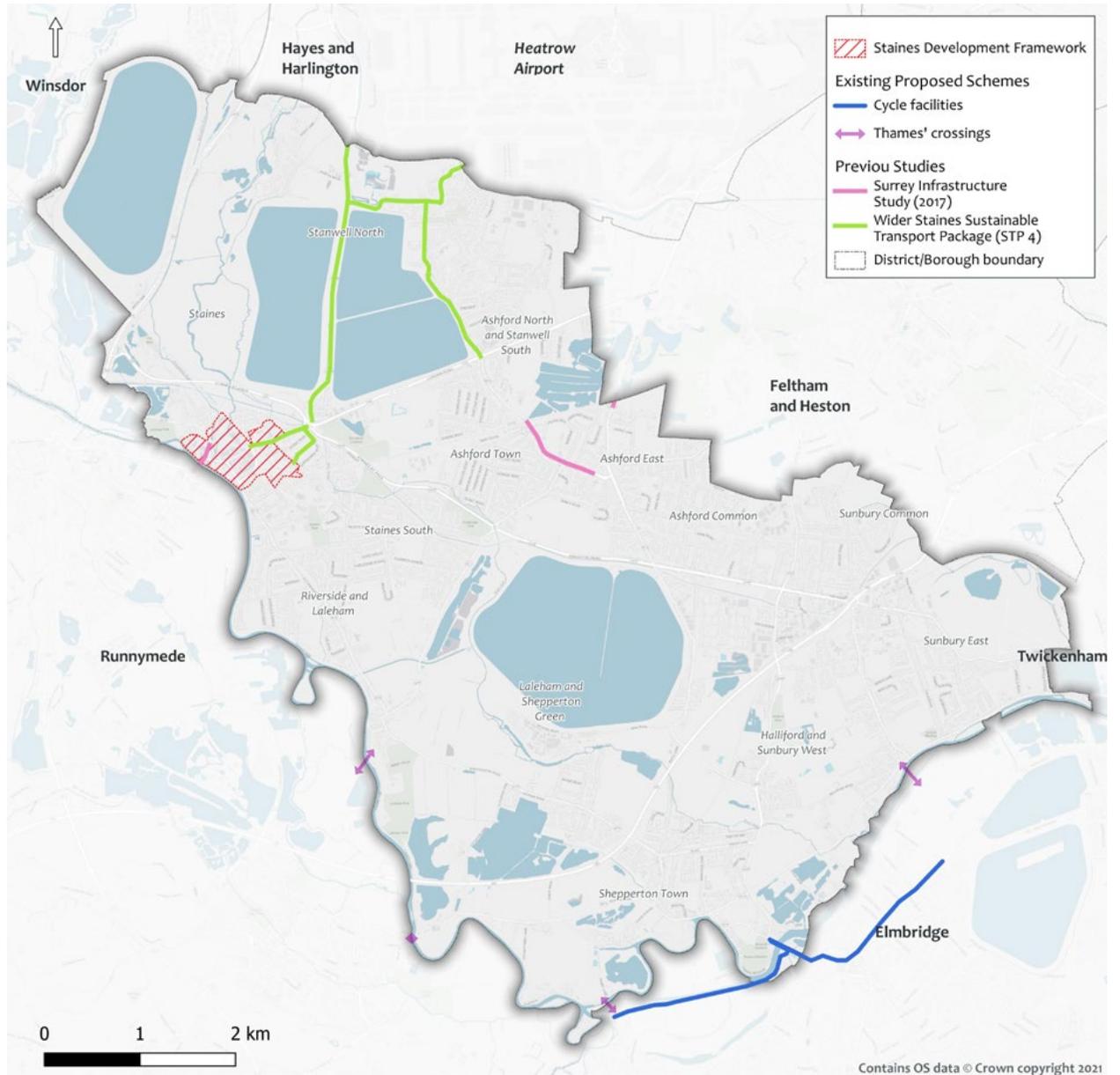


Figure 48. SCC & SBC previous, ongoing and future studies

Cycle for Health Routes

The Cycling for Health Scheme was established by Spelthorne Borough Council. The initiative aims to improve public health by encouraging local residents to cycle. The Scheme is free to join and is aimed at adults, offering guided rides of various distances throughout the Borough. In addition to the guided rides, the Borough Council produced 'Self led' cycle packs, containing eight rides. Figure 49 highlights the alignments of these promoted cycle routes.

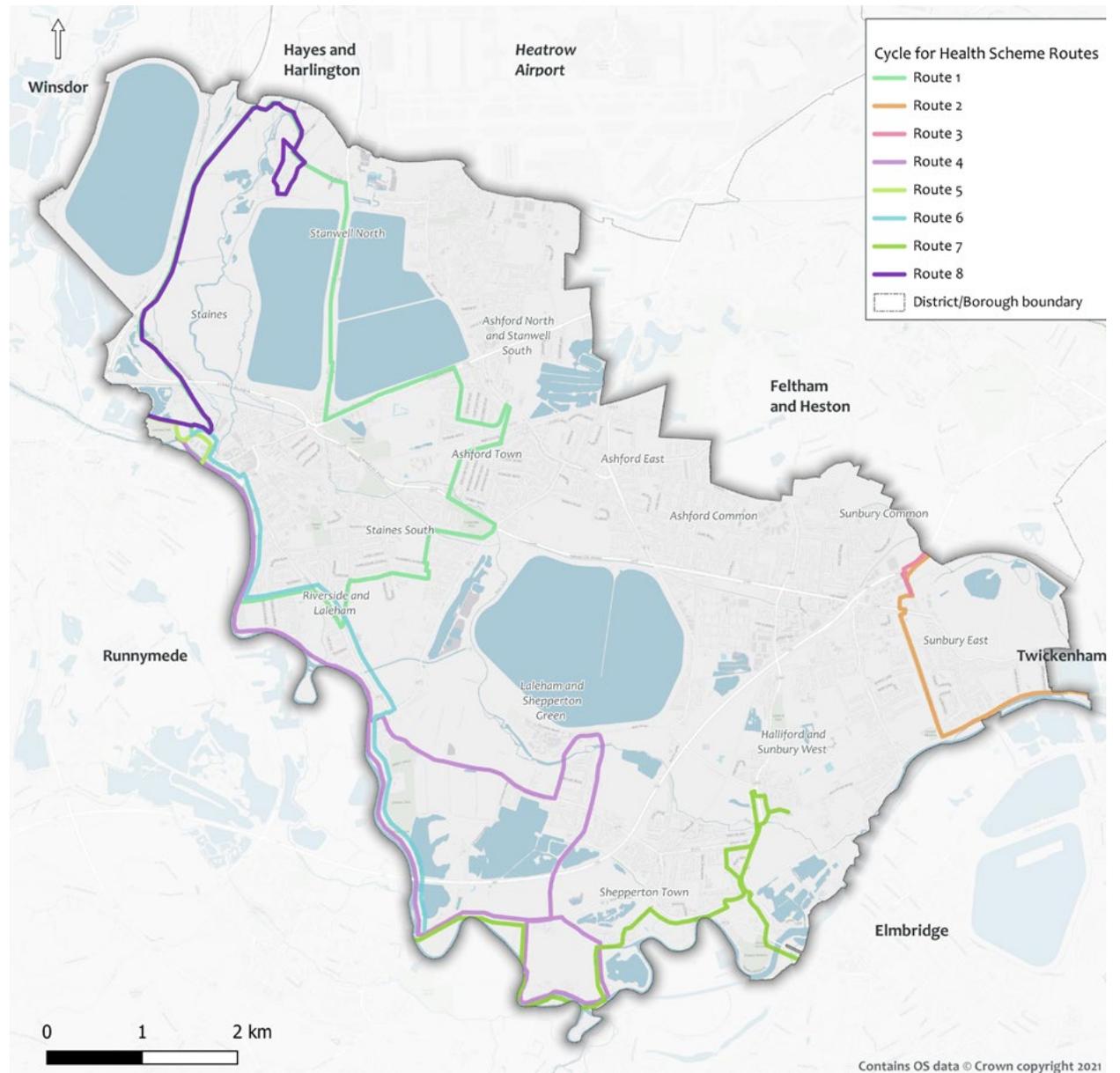


Figure 49. Cycle for health scheme routes

Heathrow LCWIP

As mentioned in the Relevant Schemes a LCWIP study was developed to suit Heathrow Expansion Project's requirements, to identify potential improvements to bring the network up to standard which will help overcome barriers for cycling and sift the mode share for people commuting to the airport.

The proposals include cycle facilities to all neighbouring boroughs around Heathrow and routes within the airport's premises.

Cycle routes are proposed to link Heathrow with:

- » Stanwell via quiet ways and shared use paths in the local network
- » Ashford via the existing link on Town Lane and new paths on Stanwell Road
- » Staines Upon-Thames via the existing facility on Stanwell Moor Road and new shared used paths that will join the existing network in the town and the proposals for the Staines Development Framework.

Additionally a new cycle facility is proposed along the A30 (London Road) which will link Staines Upon-Thames with Ashford, Heathrow Airport and Hounslow.

The proposed routes are of high importance in the network and have high propensity of cycle commuter trips since a number of Spelthorne's population is employed in Heathrow.

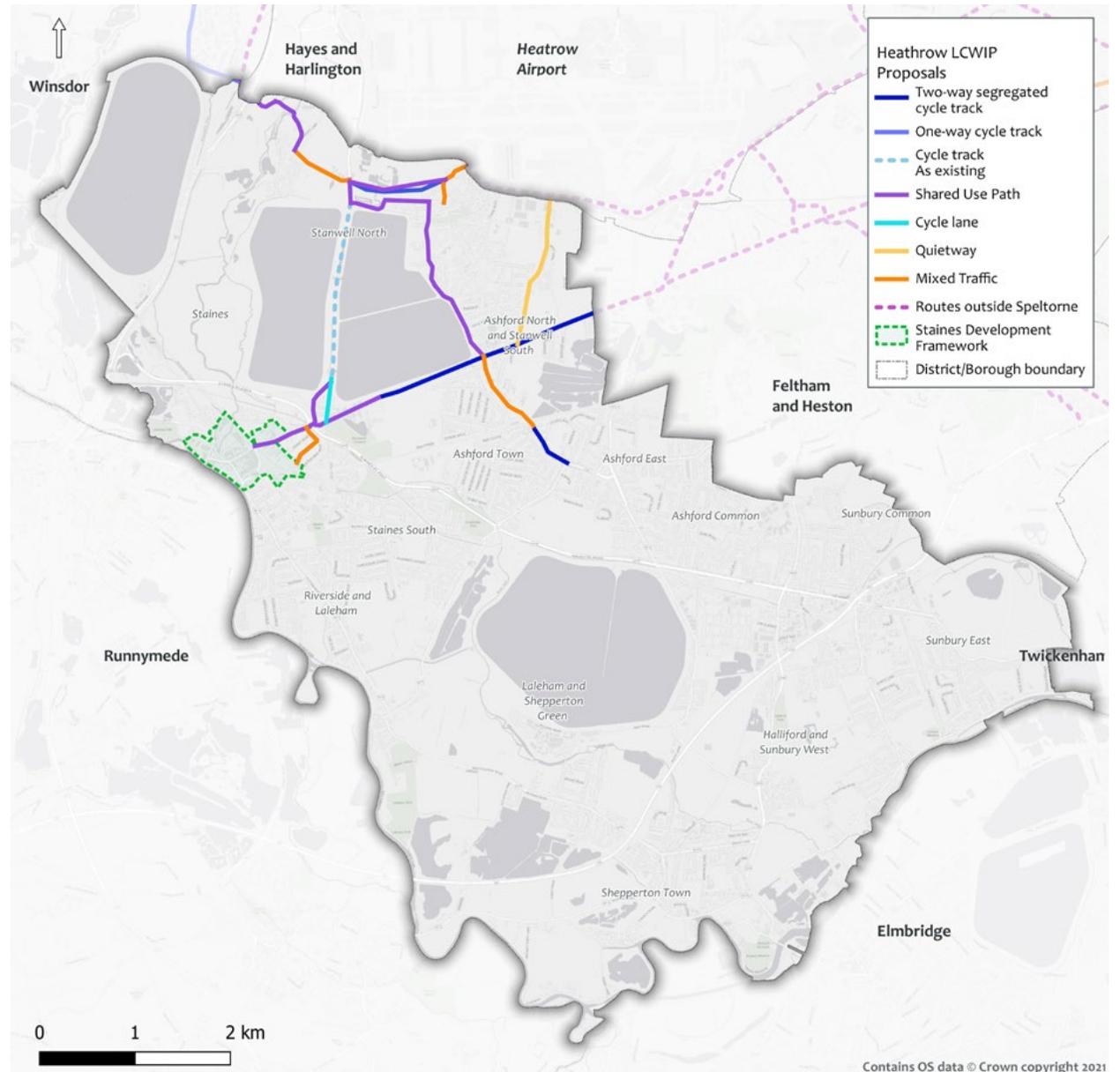


Figure 50. Heathrow's LCWIP proposed network in Spelthorne

River Thames Scheme

As mentioned in the Relevant Schemes, the River Thames Scheme aims to reduce the flood risk to communities in Surrey and South West London. The scheme extends between Runnymede, Spelthorne and Elmbridge, in the Shepperton area.

The construction of the channel provides an opportunity to create green spaces and to enhance walking and cycling through new facilities along the river.

A pre-feasibility study has been undertaken relating to active travel, biodiversity and natural capital enhancements in 6 areas in Surrey, where two of them were in Spelthorne:

HR Owen Land: located to the south of Chertsey Road and the RTS creates a new channel through the north eastern corner of the site to connect the lakes, where a new walking and cycling route is proposed along the channel to link Chertsey Road and existing pedestrian and cycle facilities on Ferry Lane.

Sheep Walk Manor Farm: located to the north of Chertsey Road south of the M3, where a new west-east walking and cycle corridor is proposed to link Sheep Walk to Shepperton.

Additional aspirational connections are proposed though the scheme with new links between Shepperton and Chertsey, Shepperton and Littleton, improved connectivity to Desborough Island, and new river crossings.

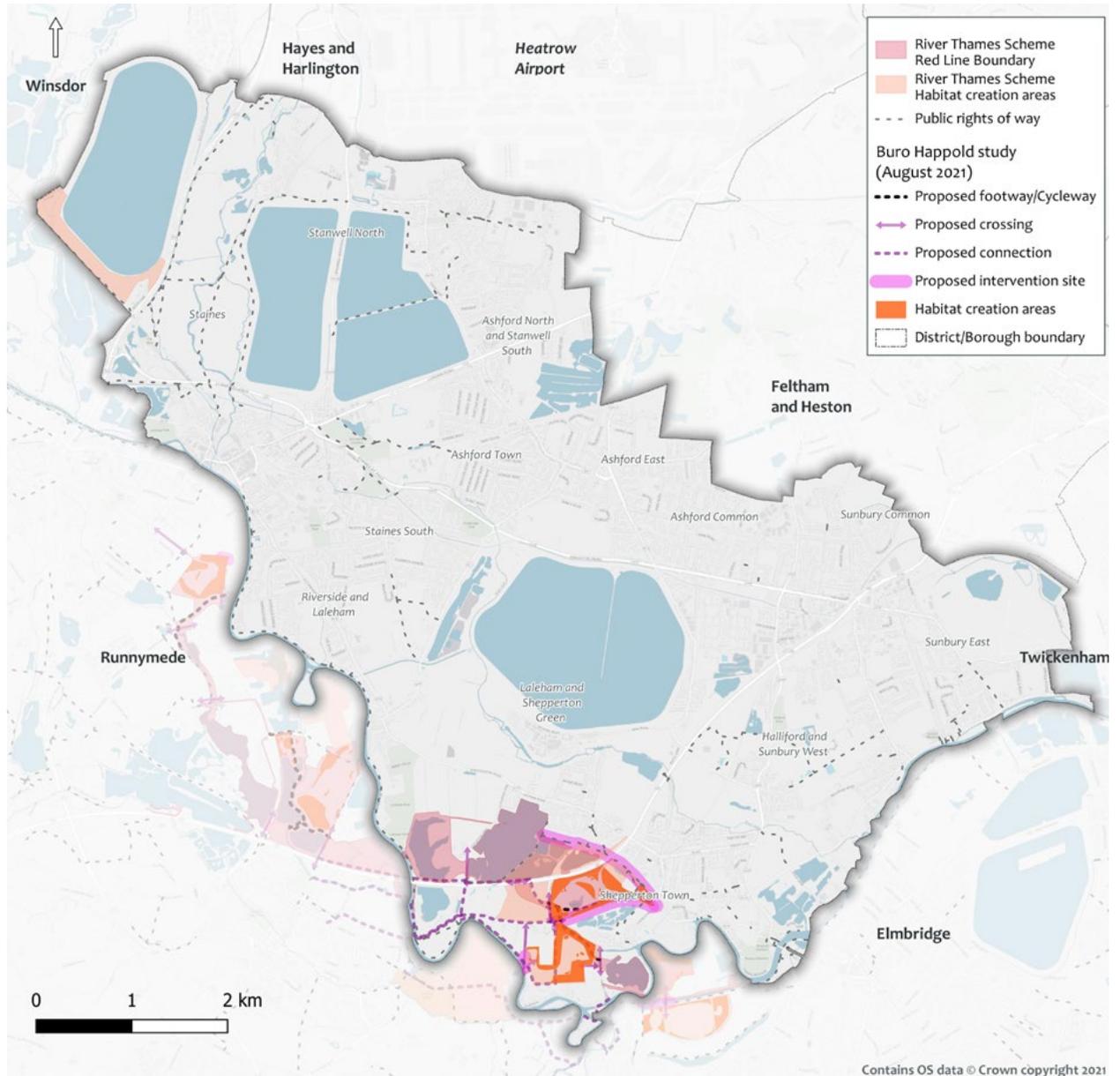


Figure 51. River Thames Scheme proposals

Summary of Key Findings

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

- » Settlement patterns in Spelthorne are heavily concentrated in the north east and a central east-west band across the Borough, 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 highlight 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 large reservoirs, railway lines, the A roads and the M3.
- » The River Thames limits regional connectivity to the west and south, respectively.
- » The collisions history is reflective of settlement patterns, with the highest occurrences of cycle and pedestrian collisions recorded across the central east-west corridor of the Borough, though Shepperton in the south also has a relatively higher concentration of collisions.
- » 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.
- » The PCT indicates a relatively high propensity for cycling in Spelthorne, both for commuter and school trips. Propensity is again highest in the built-up urban areas.
- » Strava data indicates several longer routes across the Borough with relatively high existing usage. This is also reflective of anecdotal information about high levels of leisure/sport cycling within and through Spelthorne.



5. Stakeholder Engagement

Introduction

Stakeholder Workshops

Public Engagement and Other Meetings

Introduction

Stakeholder engagement is a key element of this study as it ensures that the views and knowledge of local people are taken into account. During the project two sets of workshops were held, named Phase 1 and Phase 2 workshops.

Each Phase involved meetings with three separate audiences: internal stakeholders (such as representatives from Surrey County Council and Spelthorne Borough Council), external stakeholders (such as representatives from walking and cycle groups, as well as business groups) and elected members.

The first workshop presented the existing issues and the identification from walking and cycle routes. The second workshop reviewed the proposed infrastructure interventions.

Stakeholders' comments provided important feedback throughout each stage of the study. Comments taken on board to refine the core walking zones, walking and cycling route selection and the proposed intervention measures. The minutes of all six workshops are presented in Appendix 5 at the end of this report.

Public engagement via interactive websites and meetings with SCC and SBC also took place as part of the LCWIP development.

Stakeholder Workshops

Phase 1 Stakeholder Workshops

During the first stage of the LCWIP, stakeholders' workshops were held in July 2021¹ where representatives from various borough's organisations such as SCC and SBC, cycling and walking groups, business groups and elected members attended. In total 28 participants (excluding Atkins and SCC / SBC project teams) attended all three workshops.

The workshop was divided into three main parts. The first included a presentation of 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 core walking zones and walking routes. After the presentation of the cycle and walking networks, there was an interactive session where participants' comments were added to the relevant map (Figure 52). Participants were also asked to vote for their top five cycle routes and top 5 core walking zones / walking routes and the outcome was added to the MCAF process (refer to Walking and Cycle Network sections) in order to select the routes to be advanced to the design process.

The proposed cycle and walking networks were subsequently updated following the comments received.

¹ Internal stakeholders' workshop on 12 July, external workshop on 20 July and elected members workshop on 23 July 2021.

Phase 2 Stakeholder Workshops

During the second stage of the LCWIP, stakeholders' workshops were held in late September / early October 2021². The lists of invitees were very similar to the ones for the Phase 1 workshops, although a few names were added throughout the process. In total 30 participants (excluding Atkins and SCC / SBC project teams) attended all three workshops.

The workshop was divided into two main parts. The first included a presentation on the proposed design interventions for the cycle routes and the second part a presentation on the proposed design interventions for the selected core walking zones and walking routes. As per the Phase 1 stakeholders workshops, after the presentation of the cycle and walking networks, there was an interactive session where participants comments were added to the relevant map (Figure 52).

As before, the design interventions for both the cycle and walking selected routes were subsequently updated following the comments received.

² Internal stakeholders workshop on 30 September, external workshop and elected members workshop on 5 October 2021.

Public Engagement and Other Meetings

Public engagement

Early public engagement was carried out via a number of web based surveys conducted by SCC including Widen my Path, Your Funds Surrey, and Commonplace from the Active Travel map. The interactive sites allowed the public to leave comments about deficiencies and improvements towards walking and cycle routes.

The surveys were opened to the public following the outbreak of COVID-19 and Atkins processed the available data up to the second week of June 2021.

Other meetings and site visits

Throughout the development of the LCWIP, regular meetings took place with SCC and SBC project teams to review the cycle and walking network proposals, as well as the design interventions.

Also, an additional site visit took place on 2nd November when Atkins and SCC project team joined elected members on a visit to key sites including Church Road and Sunbury Roundabout.

Next Steps

In the next stages of the LCWIP, stakeholder engagement will be a crucial part of the study and full public consultations will be undertaken before projects are implemented.

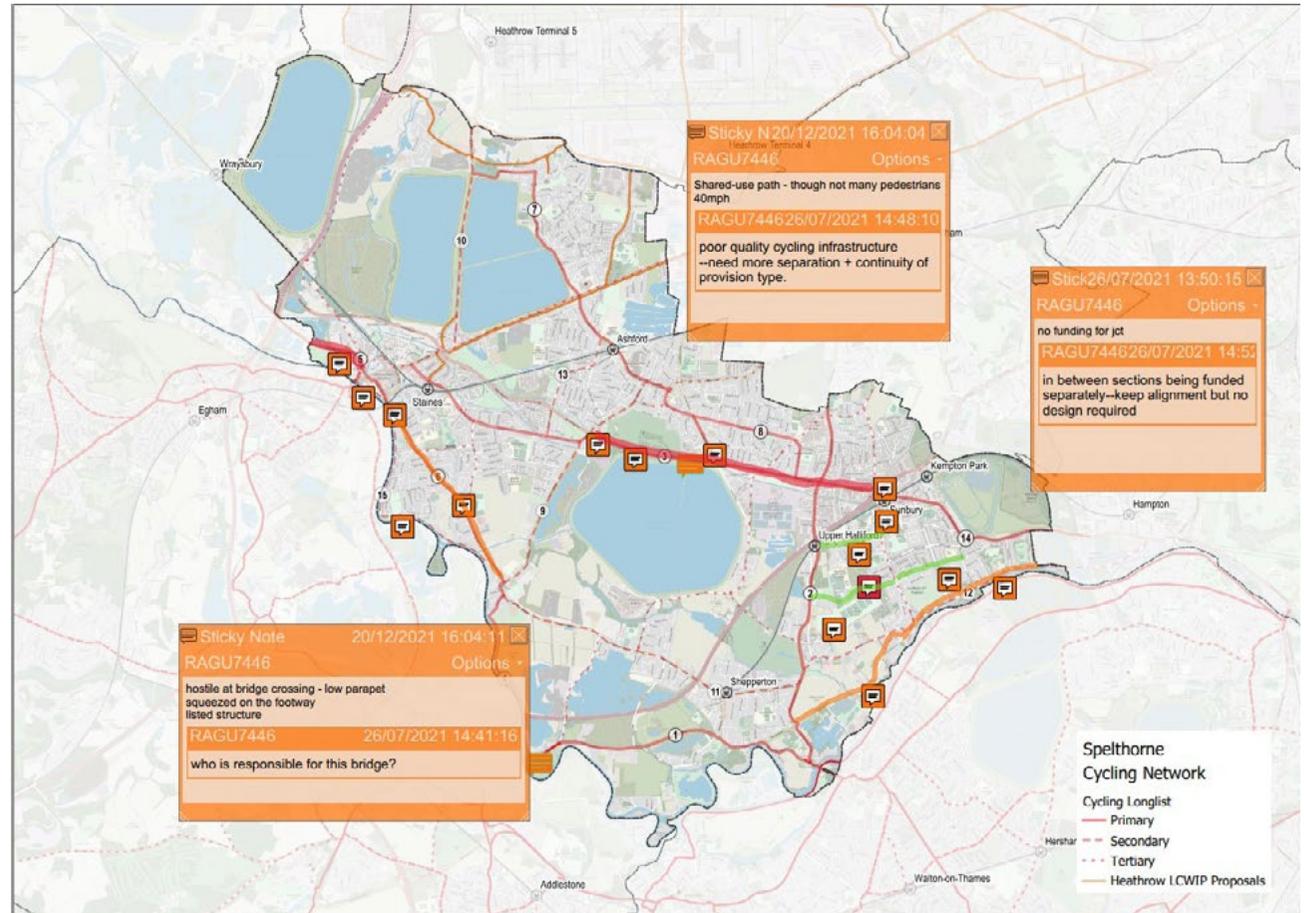


Figure 52. Stakeholders comments during stakeholder workshop



6. Design Interventions: Place-Based Approach

Introduction

Introduction

Proposed concept designs for the improvement of the cycling and walking network are presented on the following pages. Initially they are been presented grouped by areas, i.e., Ashford, Sunbury and Staines (Figures 53 to 55).

The cycle proposals aim to address gaps in Spelthorne's strategic cycling network to connect settlements, both from periphery to centre and to each other. The walking proposals are focused around the commercial areas and also aim to address deficiencies in the network maximizing the accessibility of retail and other key areas to the wider network.

In many areas the cycle and walking interventions are intertwined. By showing the interventions by area, it is possible to have a compressive view of the extent of the interventions and how both address the objectives of the LCWIP. However, based on the DfT LCWIP guidance, detail information of the proposed improvements are presented separately for cycling (Section 7) and walking (Section 8).

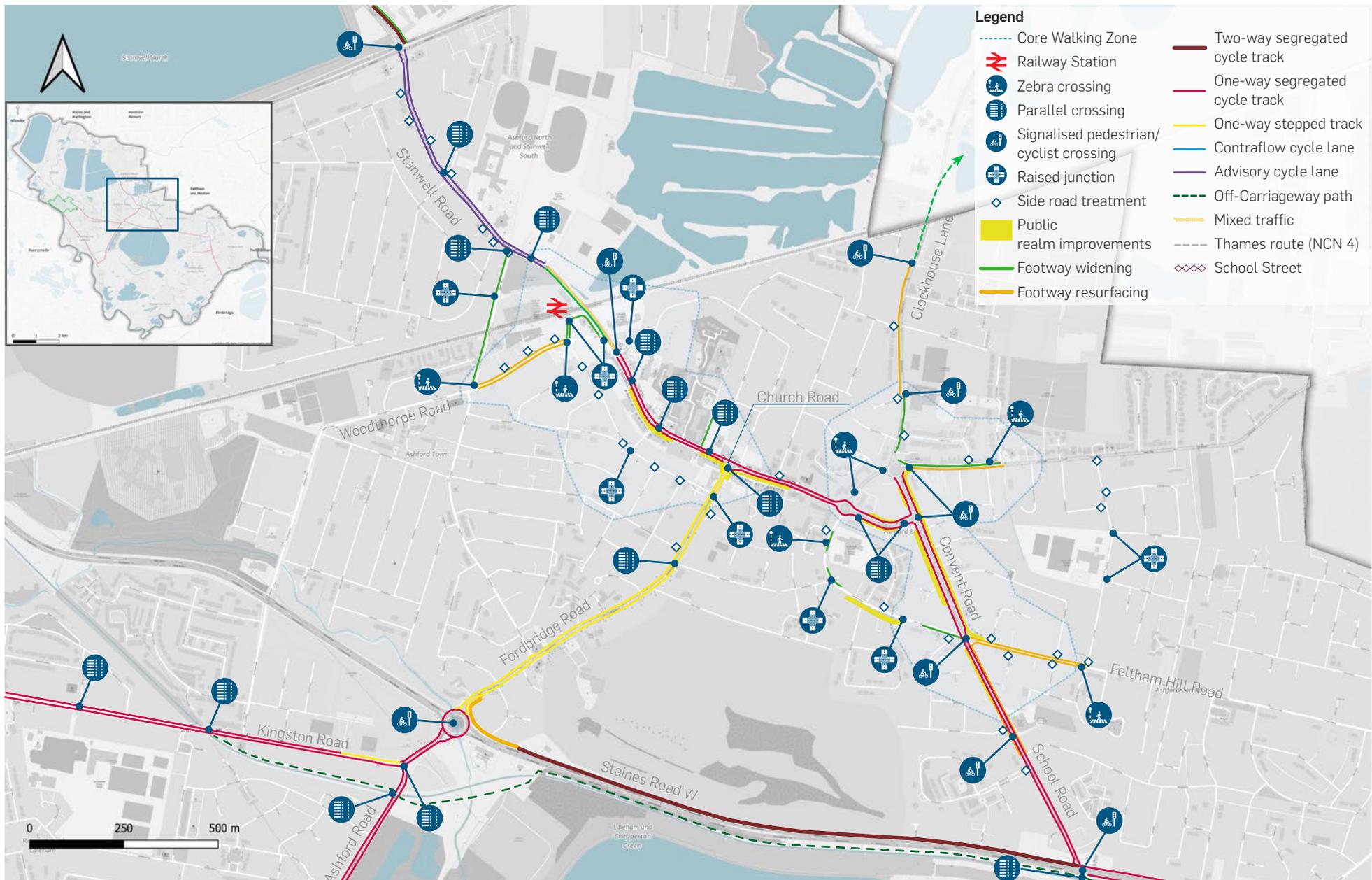


Figure 53. Ashford: Proposed cycle and walking interventions

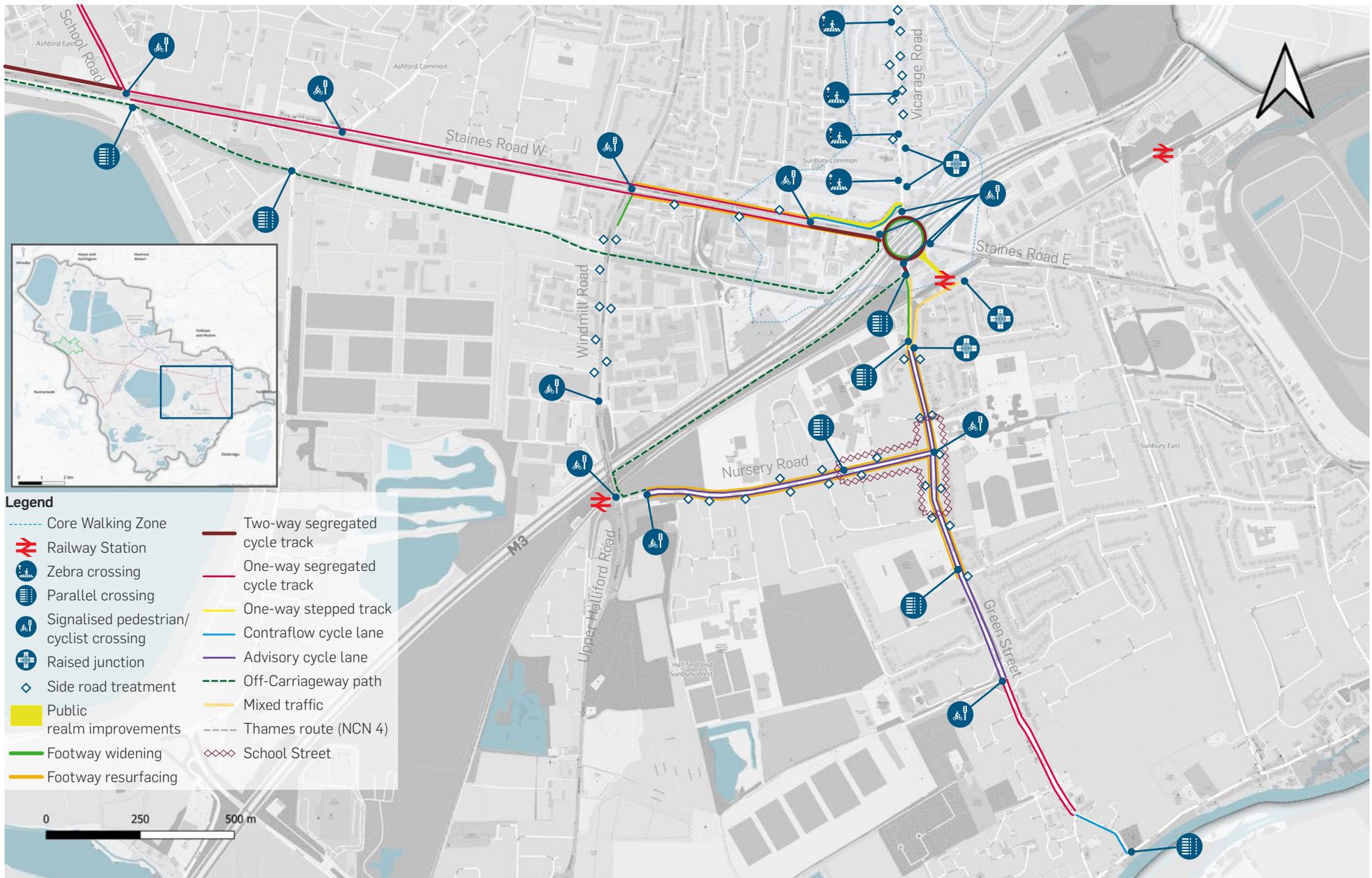


Figure 54. Sunbury: Proposed cycle and walking interventions

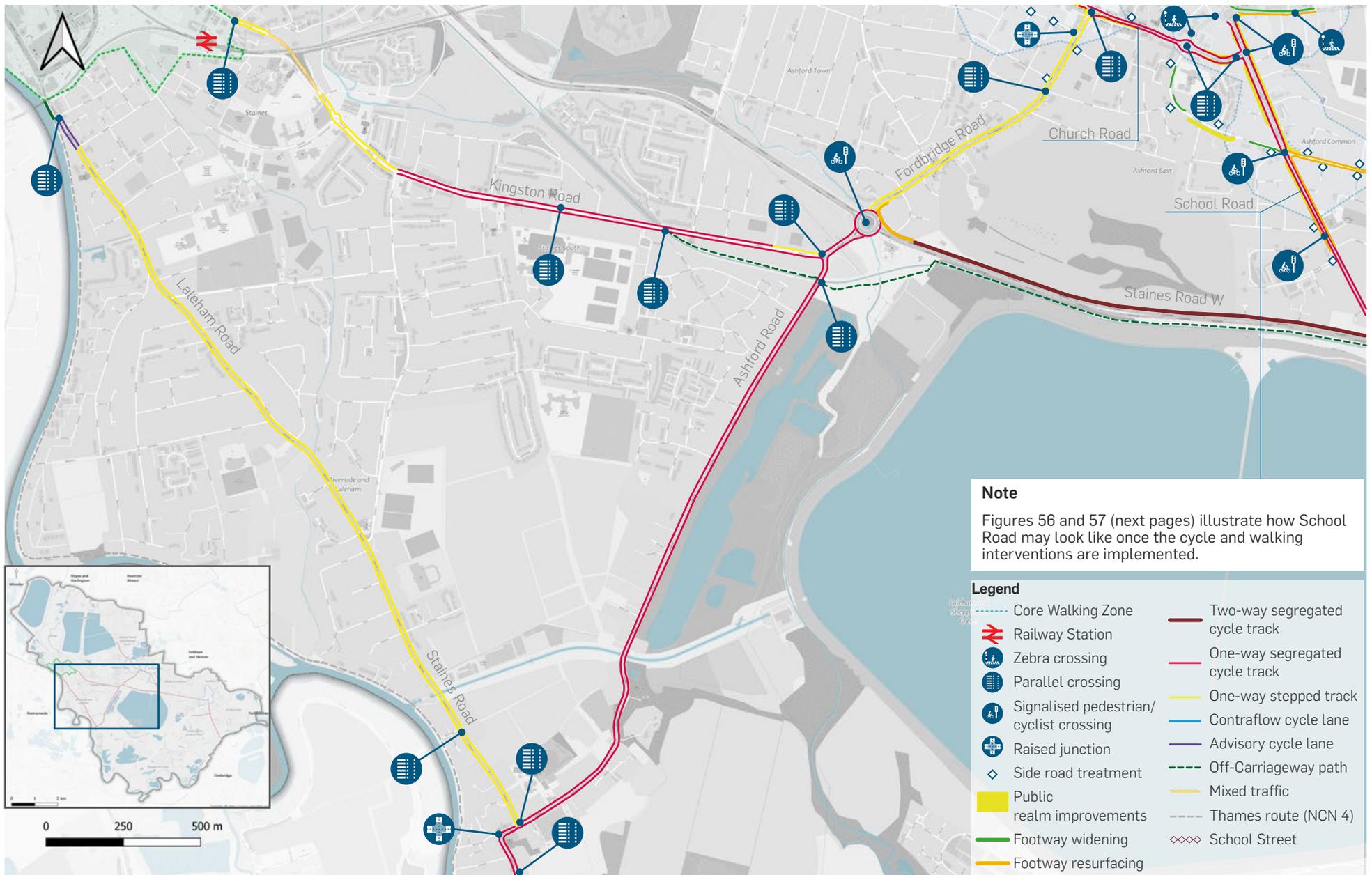


Figure 55. Staines: Proposed cycle and walking interventions

Interventions

1. New one-way cycle tracks of 1.5m width with a 0.3m buffer.
2. Public realm improvements on the service roads: Raised carriageway to the footway level, change of material for a more pedestrian friendly environment, added buildouts with planting to indicate the parking spaces.
3. New bus cage on the carriageway. The change of colour is transition from cycle track to cycle lane to mixed traffic by the bus cage at the bus stop as we don't have space for segregation.
4. Resurfacing of the footways.
5. Removal of central hatching, decreased width of the traffic lanes and reduction of the speed limit to 20mph.



Figure 56. School Road existing situation

Interventions

1. New one-way cycle tracks of 1.5m width with a 0.3m buffer.
2. Public realm improvements on the service roads: Raised carriageway to the footway level, change of material for a more pedestrian friendly environment, added buildouts with planting to indicate the parking spaces.
3. New bus cage on the carriageway. The change of colour is transition from cycle track to cycle lane to mixed traffic by the bus cage at the bus stop as we don't have space for segregation.
4. Resurfacing of the footways.
5. Removal of central hatching, decreased width of the traffic lanes and reduction of the speed limit to 20mph.



Figure 57. Proposed interventions for School Road



7. Cycle Network

Introduction

Methodology

Multi-Criteria Assessment Framework

Example Design Tools

Phase 1 Proposed Cycling Improvements

Assessment of Proposals

Introduction

Proposed concepts designs for the improvement of the cycling network for Spelthorne are presented on the following pages.

These proposals hope to address gaps in Spelthorne's strategic cycling network to connect settlements, both from periphery to centre and to each other. While the proposals are focused around these areas they also provide examples of the types of improvements that can be implemented borough-wide as needs or opportunities arise.

Development of the cycling network had two key stages:

- » Development of the 'aspirational list', which identified key cycle corridors in the Borough. In total, 19 corridors were identified and selected as 'primary' for further consideration.
- » Selection of the 'short list', which prioritised four routes as 'Phase 1' for further assessment and concept development as part of the LCWIP.

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

Methodology

Spelthorne has good growth potential for cycling. Whilst the borough's topography and the proximity of the towns to neighbouring boroughs and key destinations allows daily commuter trips to be easily be made on a bike, its cycling infrastructure does not offer enough protection for new or less confident cyclists. Consequently, short trips into town centres, rail stations, leisure assets and neighbouring areas are overwhelmingly made by private car.

A key barrier to cycling at present is the inconsistent quality and accessibility of the cycling network. Shared-use paths lead

to narrow lanes on busy and fast roads, or suffer from severance by major thoroughfares or railway lines. Facilities at footway level are narrow and offer no priority over side roads, resulting in an inconvenient and disjointed facility.

In order to identify and close the gaps, a network of preferred routes 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 allocating trips to specific routes, as well as defining potential demand for cycling across the borough.

The development of the cycling aspect of the Spelthorne LCWIP focused on identification of a Cycling Network Map detailing preferred routes for further development, as per the DfT's LCWIP technical guidance.

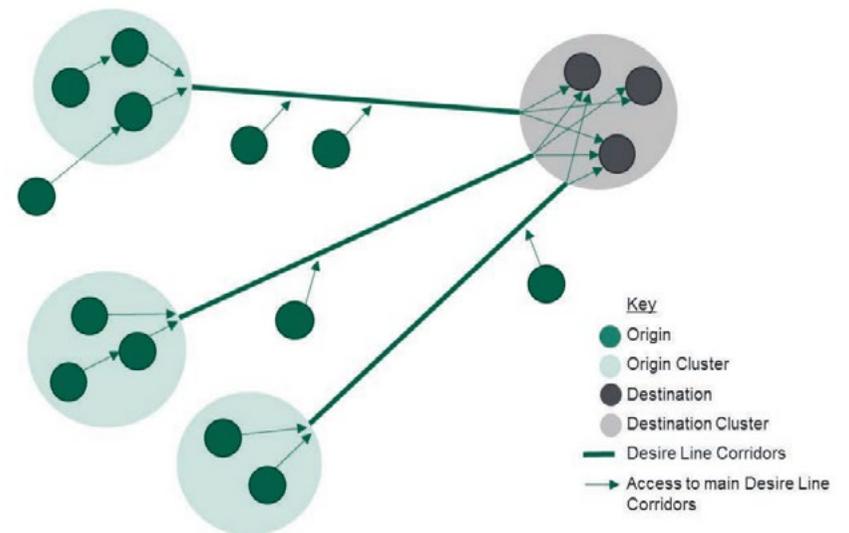


Figure 58. Clusters of trip origins and destinations and desire lines connecting them (DfT LCWIP Guidance)

Identification of Cycling Routes

In Spelthorne, 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 piece is to meet the goal of significant mode shift to more sustainable travel, targeting short trips and utility trips such as school travel and commuting, as well as access to areas of leisure that can allow active and sustainable travel habits to appeal to the residents of the borough.

The methodology used to identify key links in the study areas involved the gradual overlaying of the following information to create a 'Heat Map' (see Figure 59) where the intersection

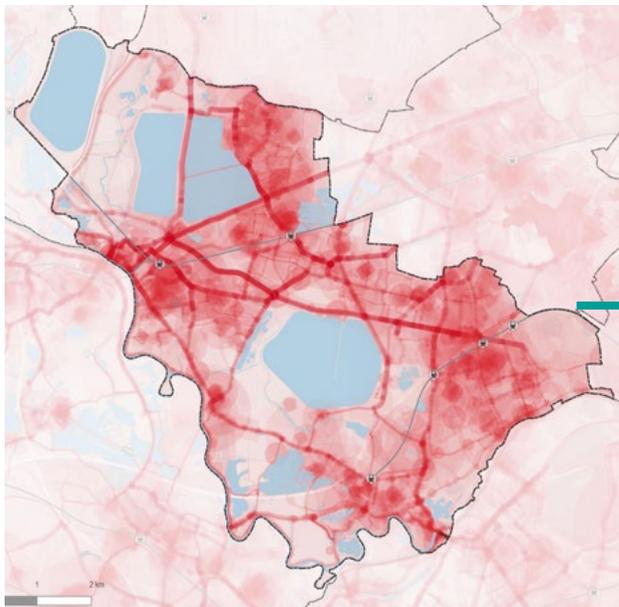


Figure 59. 'Heat Map' showing the various data elements overlaid to show concentration of issues and opportunities

of relevant criteria suggests locations where infrastructure improvements could provide the greatest level of service, connectivity, and safety benefits.

The following data were considered for the identification of preliminary cycling networks:

- » Key Trip attractors: rail station, retail centres and high streets, educational facilities, workplace areas, parks, and others, along with their catchment areas (i.e. 20-minute cycle catchment areas for the rail station, 5 minutes to schools)
- » Key Trip origins: such as denser residential areas and planned developments

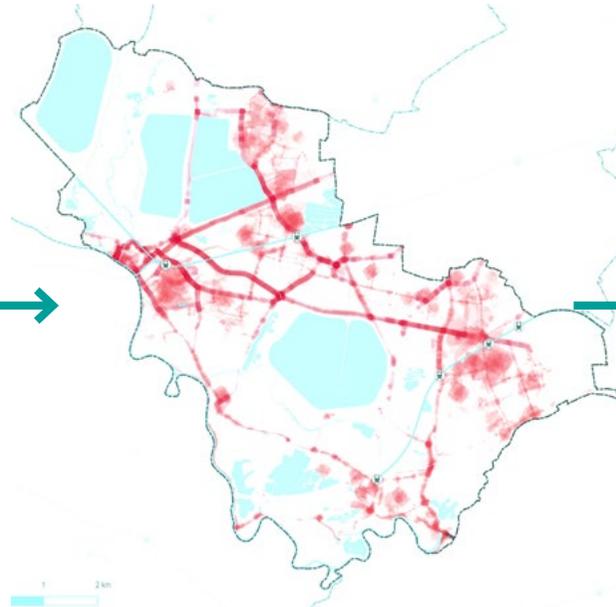


Figure 60. 'X-Ray Map' highlighting areas to consider as primary cycle corridors

- » Propensity to Cycle Tool: highlighting areas with important existing cycle commuter and school flows, 2011 Census
- » 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
- » Index of Multiple Deprivation and areas of low car-ownership (targeting areas of higher deprivation and lower car ownership, which would benefit from cycle route improvements)
- » Existing cycle facilities and recently proposed facilities, including from SCC and RTS

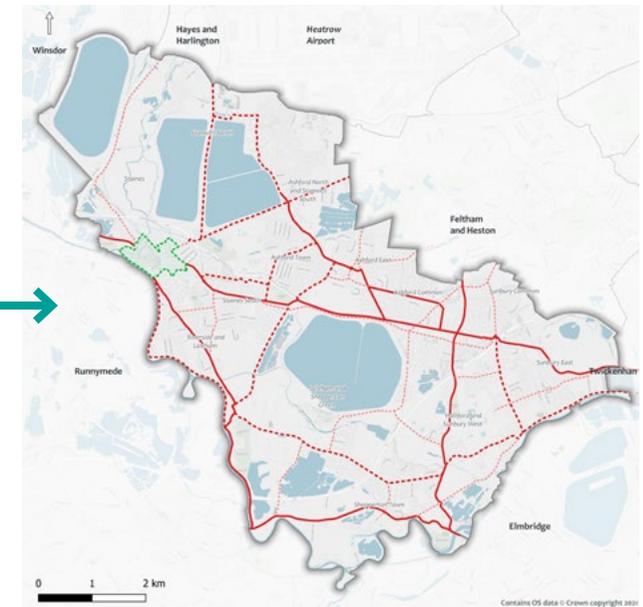


Figure 61. The initial Cycling Network Map resulting from the X-Ray analysis

- » Strava Data: a crowdsourced heat map of mainly leisure/sport trips by pedal cycle
- » Geolocated public suggestions for active travel improvements, including Widen My Path, Your Funds Surrey, and Surrey's Covid-19 Active Travel Improvements interactive map

Mapping these issues and opportunities in higher intensity colour indicates a potential higher demand for utilitarian cycling trips or where there is higher potential for mode shift or new users.

Aspirational List for cycling

The outcome of the X-Ray approach is an aspirational cycling network, where the trip demand and destinations intersect. This full network has been refined and prioritised, drawing on further data analysis, desktop investigations to create this core network of up to 19 cycle routes and links.

An analysis on the density of the cycle network was undertaken to locate the areas with gaps for cyclists (Figure 62). The selected aspirational corridors were then added and the network density was increased in the extent of the borough, linking the key town centres and

providing a dense cycle network to the areas with high population density (Ashford, Sunbury) and areas with key trip attractors.

Note that in Figure 60 (previous page), A308 is identified as a key route in the area. However, the western section, in particular, has high traffic volumes and limited connectivity to residential areas. To that end, that section was replaced by Kingston Road, which has similar potential but much better connectivity to residential areas (Figure 61).

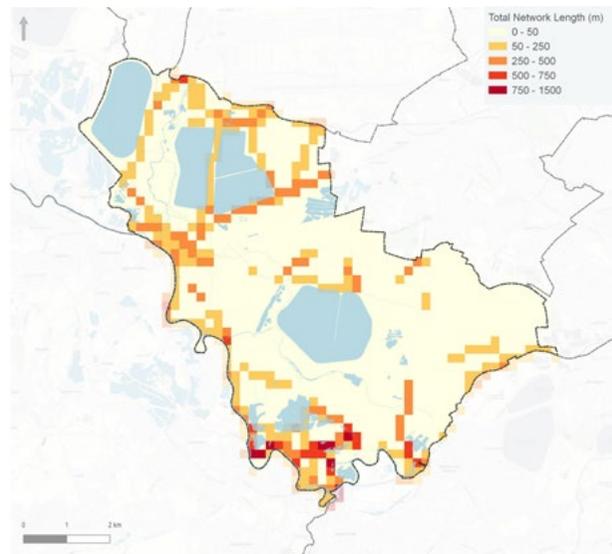


Figure 62. Density of the existing cycle network

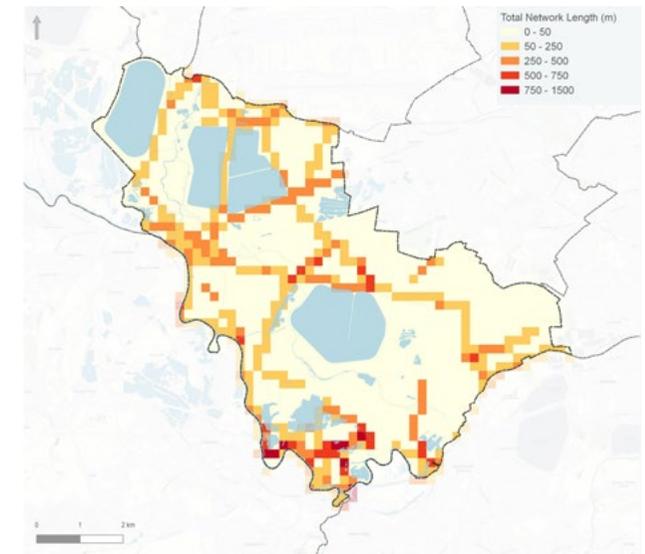


Figure 63. Density of the aspirational cycle network

The network is distributed across the study area¹ (Figure 64²):

1. Renfree Way
2. Upper Halliford / Cadbury
3. A308 / Kingston Road
4. Laleham Park / Thames Side
5. Wraysbury Rd
6. Staines / Laleham Road
7. Stanwell Road
8. Feltham Hill Road
9. Ashford / Fordbridge Roads
10. Fordbridge Road Sunbury
11. Laleham Road
12. Thames Street / Halliford Road
13. Woodthorpe Road
14. Staines Road East
15. Thames Path
16. Oakington Dr
17. Brookside Ave
18. Green Street
19. Stanwell Moor Road

1 Staines Upon-Thames area is excluded from the selection of the Aspirational list of cycle corridors, as it will be addressed by the Staines Development Framework
 2 The map shows the location of the proposed corridors along with cycle corridors proposed during the early engagement workshops (workshop #1) by local stakeholders, and alternative alignments to the proposed ones, which will not be assessed to be included in the Phase 1 cycle corridors.

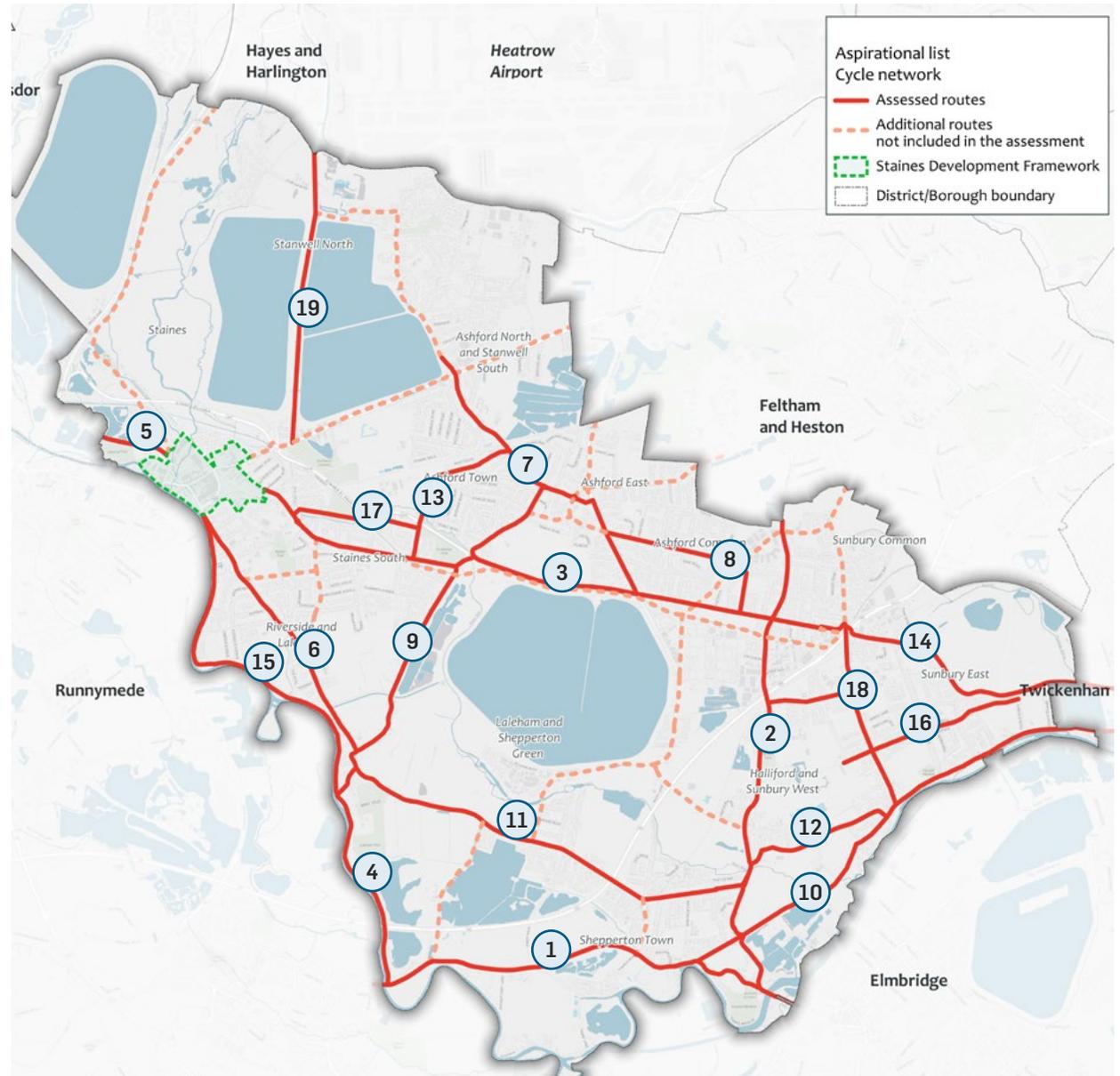


Figure 64. Aspirational cycle network

The long-list of cycle corridors has identified 19 different corridors. The key characteristics of these corridors are outlined in the subsequent section. For most corridors there is more than one possible alignment. It is intended that further assessment work will identify not just high-performing corridors but also the highest-performing route within those corridors.

Based on the results of the assessment, the routes that scored higher were selected to define a preliminary cycling network in the borough. The proposed cycling routes include sections of the existing cycling network. These sections are an important foundation of the network and may be upgraded and/or better connected to new network links. The preliminary cycle routes are presented graphically in the previous figure and numbered according to their description across the subsequent pages.

It is important to note that, as much as possible, these route will comprise of segregated cycle lanes. However, this may not be possible due to a number of constraints (such as available space, topography, and gradient) but always compliant to LTN 1/20.

1. Renfree Way

The cycle corridor is linking Shepperton to Chertsey to the west via Chertsey Bridge and to Walton On-Thames to the south via Walton Bridge. It records high traffic flows, and the propensity for cycle trips is high due to the connectivity with urban centres. The existing

cycle facility is of poor quality, with narrow lanes and faded road markings.

The corridor is proposed for improvements via the River Thames Scheme.

2. Upper Halliford / Cadbury

The north-south corridor is an A road serving not only Spelthorne, but Elmbridge and Hounslow. A high quality cycle route along the corridor would help shift the travel mode share of the 3 boroughs, by encouraging more people to travel by bike

3. A308 / Kingston Road

Is the core west-east route in Spelthorne connecting Staines Up-on Thames to Ashford area, and Sunbury, serving schools, residential areas, and industrial areas. The corridor is highly dominated by vehicular traffic, with high speeds, but there is opportunity for a high quality cycle facility, due to the available widths and the topography of the area.

4. Laleham Park / Thames Side

The corridor is part of NCN4 and records high cycle flows. This segment of the existing cycle network is parallel to River Thames on a single carriageway with poor visibility and no priority for cyclists. The route is primarily intended for recreation and leisure trips, but many commuter destinations can benefit from it.

5. Wraysbury Rd

The corridor is proposed to link Staines Up-On Thames with the neighbouring borough/district of Windsor and Maidenhead. The road is

estimated to have high traffic flows as it is an alternative route to the A30 to the north.

6. Staines / Laleham Road

This corridor passes via residential areas with moderate population density, connecting the town centre and the railway station to Laleham. It is an alternate, less isolated alignment, to the NCN 4 off carriageway path that passes along the River Thames. Today, the existing cycle facilities are substandard and the cycle lanes are blocked by parked vehicles, mainly closer to Staines.

7. Stanwell Road

The corridor links Ashford Hospital, Ashford High Street, Convent Road and the A308 (Staines Road). The road network is congested, especially at the northern extent of the route.

Along the corridor, a high number of businesses and other key trip attractors attract daily



Figure 65. Thames Side (close to Chertsey Bridge)

commuter trips. A new cycle facility will encourage more to commute by bike, and help de-congest the road network.

8. Feltham Hill Road

The corridor is a west-east alternative alignment to the A308 in the Ashford area, via residential streets.

9. Ashford / Fordbridge Roads

The north-south corridor links Laleham with Fordbridge, the A308 and Ashford commercial area. The south section of the route extends on a road with moderate traffic flows where the vehicles' speeds were recorded high. The northern section, extends through a residential area with high density and high traffic flows.

10. Fordbridge Road Sunbury

The corridor is the extension of the Renfree Way towards Lower Sunbury. It has the characteristics of a country road with no footways and poor connectivity to other destinations. It is the main link between Lower Sunbury, and as an extension, Hampton and Twickenham, with Shepperton, Chertsey, and Walton-On-Thames.

11. Laleham Road

It is the main west-east corridor between St Mary's Reservoir and Sheep Walk Lakes and links Laleham, Littleton and Shepperton.

12. Thames Street / Halliford Road

The corridor is parallel to the River Thames, linking Shepperton with Lower Sunbury and

Hampton. It is a narrow road, with significant flows, where cycling trips are primarily for leisure purposes.

13. Woodthorpe Road

Is a parallel alignment to Fordbridge Road in Ashford, connecting Ashford Railway Station, and the main commercial area with the A308 and Fordbridge area.

14. Staines Road East

The corridor extends east of Sunbury Cross roundabout, on an A road, to link the residential areas and business parks with Kempton Park, Hampton and Hampton Park.

15. Thames Path

Is the key leisure route in Spelthorne extending from Staines Upon-Thames and Staines bridge to Laleham. While the extent of the corridor is traffic free, there are some short sections along quiet residential streets. The path is part of the NCN 4, which is shared with pedestrians and has some unsurfaced sections (gravel).

16. Oakington Dr

The corridor was proposed during the early engagement workshops (workshop #1) by local stakeholders. It is an off-carriageway west-east corridor, parallel to Thames Street via a green area, and connects residential areas and schools.

17. Brookside Ave

The corridor was proposed during the early engagement workshops (workshop #1) by local

stakeholders as an alternative alignment to the A308 in the Fordbridge area, as it runs through quiet residential streets, and off-carriageway paths by River Ash.

18. Green Street

The key characteristic of this corridor is the high density of education facilities. It extends between Sunbury Cross and Lower Sunbury commercial area. It records high traffic volumes, especially during school peak hours.

19 Stanwell Moor Road

The corridor passes between the reservoirs in Stanwell Moor and is proposed to link Staines Upon-Thames with Heathrow. There is an existing segregated cycle facility along the road that can serve commuter trips.

The corridor is part of the Heathrow LCWIP.



Figure 66. River Thames and Thames Path

Multi-Criteria Assessment Framework

Once the aspirational cycling network has been identified an assessment using both qualitative and quantitative criteria to provide an initial prioritisation of the network proposals and identify a first phase of corridors to progress to concept design.

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 four main groupings:

» **Link Performance** – reflects the number of destinations within 200m of the cycle of the proposed cycle route, including high streets and commercial area, parks, hospitals, railway stations, development sites and the River Thames Scheme. A higher number of destinations would indicate a greater propensity for cycling and therefore a higher score. Another element of link performance is the number of cyclist casualties recorded along the link, which

would suggest both safety issues and high cycle usage.

- » **Potential demand** – this is based on the potential demand for school trips, including the number of education facilities along the route and the school flows on the Cambridge scenario, and on the demand for commuter trips based on the Dutch Scenario of the Propensity to Cycle Tool forecast for commuter cyclists.
- » **Cycle Network**– these criteria characterise the existing environment, including existing cycling infrastructure and the routes potential connections to the wider network, and whether significant improvements can be achieved.
- » **Deliverability**– these criteria aim to capture the potential for cycling improvements in the area. Lower scores are given to areas with significant constraints where significant improvements may not be feasible or very difficult (e.g., land constraints, railway lines underpasses etc). Scoring was based on comments from the workshops and a cursory review via StreetView imagery. As the team had not been to all sites, this category has a lower weighting than the others. Another element of deliverability is the likely response from locals on a scheme. **Stakeholders provided much of this input** – via comments and an online poll. Additionally, comments from Commonplace and Widen my Path platforms were included as the locals indicated higher demand for improvements.

The MCAF criteria for the selection of the Phase 1 cycle corridors are listed in Table 3 on the following pages.

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 MCAF criteria and weightings for each category are summarised in Table 3 on the following pages.

Table 3. Cycling network MCAF criteria

Category	Criterion	Cycle corridors Rating Rates
Link performance	Non-commuter destinations served by corridor [2]	1 = no obvious ones 2 = a small number e.g. a school or small parade of shops 3 = several e.g. a town centre
	Development Areas [1]	Number of dwellings. 1 = less than 100 housing units 2 = between 100 – 300 units 3 = over 300 units
	Rail Station Access [2]	Number of Stations within 400m of corridor 1 = none; 2 = 1 station; 3 = 2+ stations
	Pedal cycle collision rate [2]	Collisions per km 1 = less than 3/km; 2 = 3-5/km; 3 = > 5/km
Demand	Number of Schools [2]	1 = none; 2 = 1; 3=2+
	PCT school flows – Go Dutch scenario [3]	PCT School Trips (Cambridge Scenario) 1= less than 75; 2= 75-150; 3= over 150
	PCT commuter flows – Go Dutch scenario [3]	Number of daily cyclists 1 = less than 150; 2 = 150-300; 3 = over 300

Category	Criterion	Cycle corridors Rating Rates
Cycle network	Contributes to improved cycling network [2]	1 = isolated link 2 = limited links to other cycle routes or cycle-friendly roads 3 = strong links, forms important extension/ connection to other routes
	Potential to improve existing conditions (to a high and accessible standard) [2]	1 = very limited potential (e.g. narrow carriageway/ footways, no verges) 2 = moderate potential (e.g. space for a minimum width cycle track from existing wide lanes, centre hatching, verge etc.) 3 = strong potential (space for a recommended-width cycle track from existing wide lanes, centre hatching, verge etc.)
Deliverability	Ease of implementation [2]	"1 = could require major junction treatment (e.g. new signals); significant works outside highway boundary; or third party works (e.g. changes to a level crossing) 2 = could be provided with moderate junction treatments; limited works outside highway boundary; expected interface with complex environments (e.g. town centres) 3 = could be provided within the existing kerb lines, and with minimal junction treatment
	Public Comments from Commonplace [2]	Comments and agreements per km 1 = less than 3/km, 2 = 3-5/km, 3 = over 5/km
	Stakeholder feedback [2]	Number of votes 1 = less than 2, 2 = 2-4, 3 = 4+



First phase of cycle corridors

The output of the multi-criteria assessment is a first phase of four cycle corridors for further development and assessment¹. The top five, presented in Figure 67, are:

3. A308 / Kingston Road

6. Staines / Laleham Road

7. Stanwell Road

9. Ashford / Fordbridge Roads

18. Green Street

Once the corridors were identified they were assessed using the DfT's Route Selection Tool (RST²). The assessment provided a baseline for existing conditions and helped identify existing deficiencies for the selected routes. The routes were audited in August 2021 and the results are presented in Appendix 2: Route Selection Tool (RST).

¹ Cycle corridors 1. Renfree Way and 11. Laleham Road scored high in the assessment. However, the routes run through the River Thames Scheme red line boundary and will be assessed and improved via funding for the scheme.

² The RST is a framework for providing a high level assessment of a cycling route, covering the key parameters of gradient, comfort, directness, safety, and connectivity.

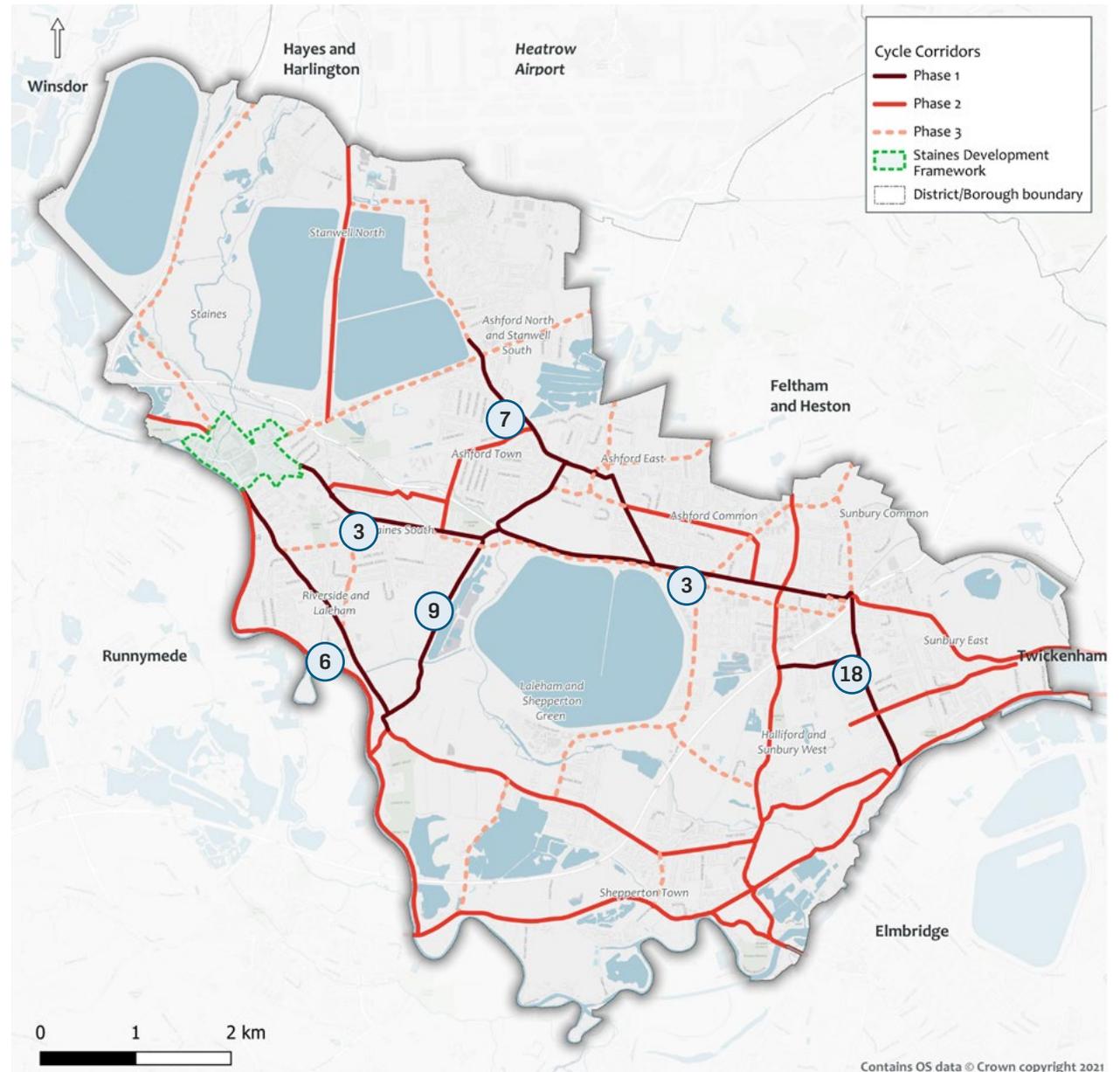


Figure 67. Phase 1 & 2 Cycle Corridors

Example Design Tools - Cycling

Design Outcomes

Potential improvements for cycling were developed following a set of desired core design outcomes, informed by LTN 1/20. These desired design outcomes have been identified to make cycling more attractive and encourage more users to make journeys within the borough by cycle.

Directness

Cycle routes which serve key origins and destinations directly - and preferably not significantly longer than the route a vehicle would take.

Comfort

Cycle routes that are comfortable to use with a surfacing that is smooth and a width that supports the expected volume of cyclists whilst also considering other road users.

Gradient

Cycle routes with a gradient that doesn't discourage cycling but makes it welcoming for cyclists of all ages and abilities.

Safety

Cycle routes that are in areas which have speeds and traffic volumes that support and encourage cycling of people of all ages and abilities.

Coherence

Cycle networks should be planned and implemented to enable users to reach their desired destinations, should be easy to navigate and be of a consistent high quality.

Attractiveness

Cycle routes should provide an environment that is welcoming for users so that cycling can be an enjoyable activity and contribute to public realm enhancements.

Context Sensitive Design

Improvements should complement and enhance the character of urban and rural environment. 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.

Adaptability

Cycle infrastructure should be developed to accommodate all types of users, and potential growth in demand. The provided facilities should be accessed and used by as many people as possible, regardless of age, gender and disability.

Inclusive Design

Facilities for cycling should provide equal access for people with disabilities and ensure that streets meet the requirements for all users.

Guiding Principles

To facilitate these cycling improvements they will 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.

- » **Cycle facility hierarchy** - 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, as a general principle, selection of an appropriate cycle facility should consider the following hierarchy: segregated facilities, quiet routes, shared-use paths/footways, mixed traffic. The hierarchy follows the cycle design principles of segregation from traffic and 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 (≤ 20 mph) and flows may provide an attractive option if the route is direct.
- » **Access to town centre** - Each area in the borough should have access to a convenient, attractive, and safe route to cycle to/from the town centre. Several primary cycling routes seek

to accomplish this, while additional secondary routes may be developed in future.

- » **Access to schools** - Safe cycling routes are essential to encourage more children to cycle to school. Several primary cycling routes seek to accomplish this, while additional secondary routes may be developed in future.
- » **Lower traffic speeds** - High vehicle speeds reduce comfort and safety for people cycling. Motor vehicle speeds of 20mph or lower are preferred to minimise speed differential with people cycling¹. 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 be considered for people cycling, such as providing cycle bypasses at kerb build-outs to manage potential conflicts with other road users. However, lower speed limits may have a negative impact, particularly relating to the slowing of roads and idling traffic, and therefore will require careful management.
- » **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 to create a more attractive cycle route.

¹ Studies shown that 20 mph zones would be beneficial to encourage cycling particularly by women

- » **Review on-street parking** - On-street parking provisions can create potential conflict points between people cycling and motor vehicles, particularly where there is a high parking turnover. Conflicts can arise from either vehicles entering/leaving a parking space or opening of vehicle doors, or when parking obstructs visibility. Reducing parking could free 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. To inform further design development, parking surveys will be undertaken to estimate the demand for parking and consider the need for alternative parking locations.
- » **Junction and crossing improvements** - Improvements should seek to improve priority for people cycling and visibility at junctions, enhancing safety and continuity of the cycle route. At uncontrolled junctions and side road crossings, improvements should seek to 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 in some areas of the borough. 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 sightlines 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.
- » **Design Standards** - 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 (LTN 1/20)
 - » London Cycle Design Standards (TfL)
 - » CD 195 - Designing for Cycle Traffic (Highways England)
 - » Greater Manchester Cycle Design Guidance and Standards (TfGM)
- » **Protected cycling facilities** - These will be best aligned to national design guidance and help to reduce collisions involving people cycling.
- » **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.

- » **Target short to medium length (1-5km) routes.**
- » **Aim to address routes/locations with a history of collisions involving people cycling.** These areas are important to concentrate on and will



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 contra flow cycling on one-way streets.

- be reflected in both the route alignment and the nature of the infrastructure proposed.
- » **Offer variety of cycle parking**
- » **Design for utility**



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).

- » **Design for priority at side roads to reduce the conflict with motorised vehicles**
- » **Consideration of heritage assets and the sensitive design of proposals.**



Shared Use Path (park / open space)

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.



Stepped cycle track

Provides raised, physical separation between people cycling, motor vehicles and pedestrians without the need of a additional horizontal segregation. It is preferred at roads with lower speeds and moderate traffic volumes.



Dutch-style facility (Advisory cycle lanes)

Provides a dedicated and segregated space for people cycling within the carriageway that seeks to prioritise people cycling over motor vehicles. As in the advisory cycle lanes, a buffer zone between the cycle facility and the parking zone should be provided for protection from the opening doors. Parking is not permitted along the cycle lanes and can be enforced with added double yellow lines along the facility.



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.



Dutch or Segregated Roundabout

Provides a segregated facility and enables priority to cyclists over vehicular traffic on all arms of the roundabout



Cyclops Junction

Cycle Optimised Protected Signals, provide separate facilities for pedestrians, cyclists, and motor vehicles. Cyclists use the junction as a signalised roundabout and motor vehicles as a typical 4-arm junction.



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.



Cycle Wayfinding

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



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.



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.

Phase 1 Proposed Cycling Improvements

This chapter proposes potential design measures to enhance the selected cycle corridors in Phase 1. The proposed measures are high level and identify design concepts for consideration in the next stage of design. They seek to address issues and deficiencies identified during the audit activities, as well as to incorporate proposals from previous studies.

For cycling the interventions intent to improve the cycle environment to a high standard following the LTN 1/20 technical guidance. All proposed measures would be subject to varying levels of additional analysis and future feasibility design¹. This would involve designs with greater detail and in which further observations and measurements would be taken to continually improve the design. This would also include confirmation of landownership boundaries as well as surveys as necessary.

Specific measures, such as traffic speed reduction and further parking restrictions will require further consultation in the next stages of the design following surveys to estimate the impact of the proposals. It is worth to mention that representatives of groups of people with disabilities and mobility issues will be further engaged in the design so the outcomes of the interventions to cater their needs in the most appropriate way.

The proposed improvements are presented by cycle corridor on the following pages. While these proposals are focused along the primary cycle corridors, they also provide examples of the types of improvements that can be implemented borough-wide as needs or opportunities arise.

It is noted that some of the desirable locations for active travel improvements are privately owned and are not within SCC's publicly maintained roads. As such, collaborative working with the respective owners will be required to explore opportunities to improve conditions for active travel.

¹ This is a concept design. All the proposed interventions are subject to topographic survey, traffic modelling, parking surveys, utilities' survey and availability of land.

Additionally, consideration will need to be given during subsequent development phases to review and co-ordinate future opportunities for integration with other active travel improvements, including those identified within the long-list network and those which may be progressed in addition to the LCWIP proposals.

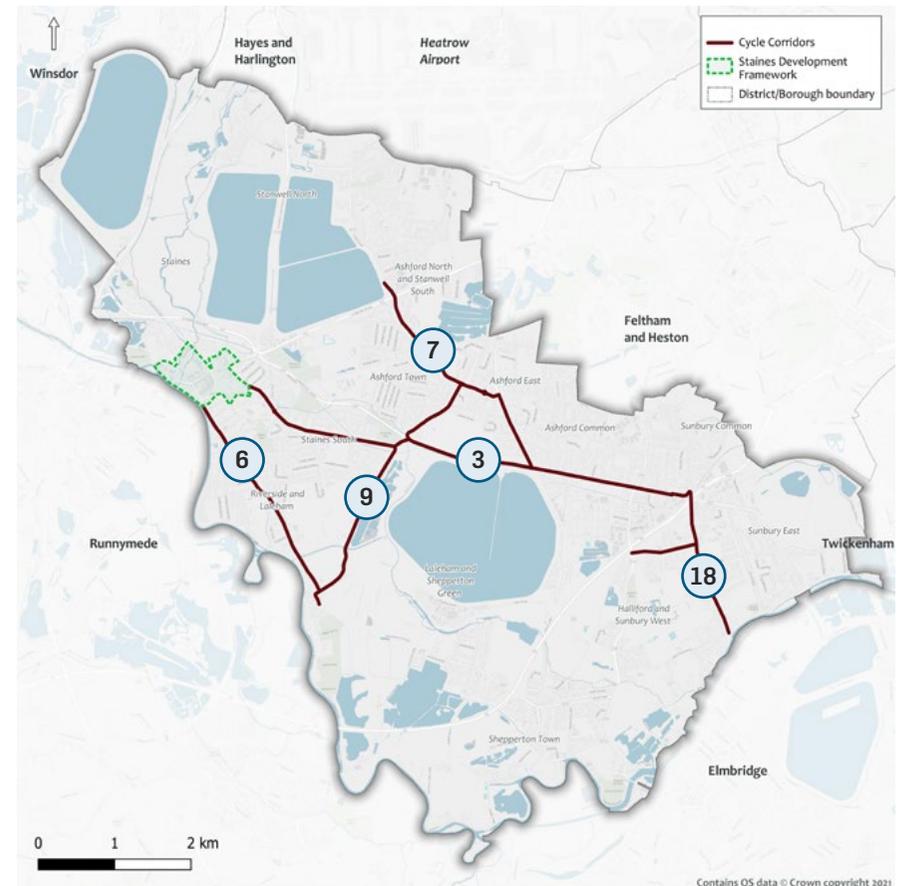


Figure 68. Phase 1 cycle corridors

Cycle network typology

The proposed cycle facility typologies across the cycle route network selected for Phase 1 are illustrated in Figure 69. 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 may be required along some routes 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 lanes 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, reducing traffic speeds¹, providing advisory cycle lanes, restricting motor vehicle access, tightening side road junctions, providing cycle markings, or redesigning streets to enhance cycle and pedestrian priority.

¹Additional measures to support the speed limit change to be proposed in the next stages, such as traffic calming measures, CCTV, reduction of carriageway width, etc.

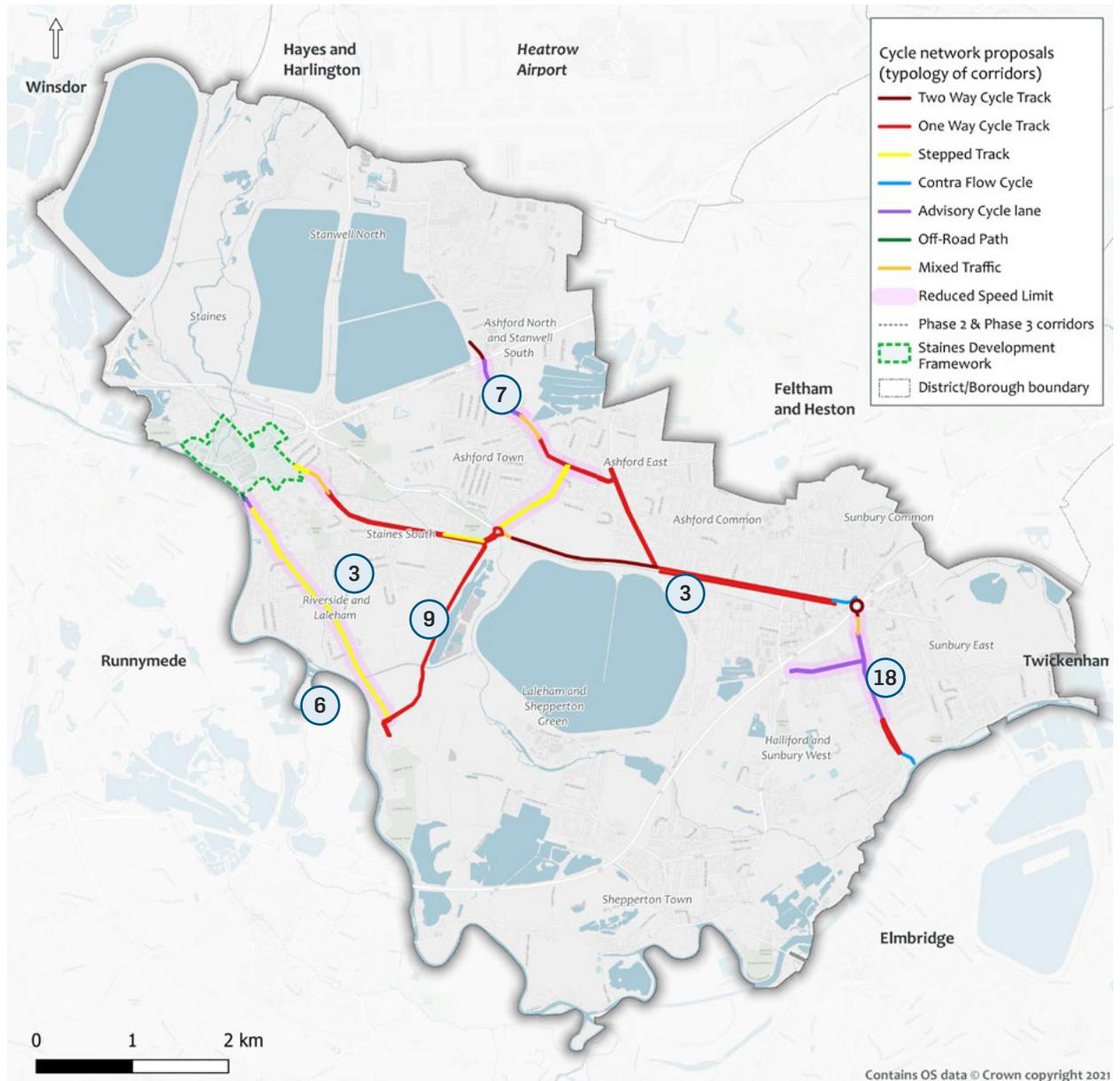


Figure 69. Phase 1 cycle corridors proposed improvements

Route 3: A308/Kingston Road

The A308 is a key east-west connector as it links a number of areas that otherwise suffer from severance. Vehicle flows are over 30,000 per day with speeds at 40mph, resulting in this corridor creating further severance issues between the northern and southern parts of Spelthorne.

Proposed Improvements

1. Mixed traffic at the railway bridge. Speed limit reduction to 20mph.
Longer term ambitious proposal to widen the bridge to accommodate new cycle facilities and footways on both sides of the carriageway.
2. Dutch-style roundabout with signalised crossings at all arms. Link to Staines Road West via Ford Close (mixed traffic).
3. Alternative off-carriageway alignment along Thames aqueduct.

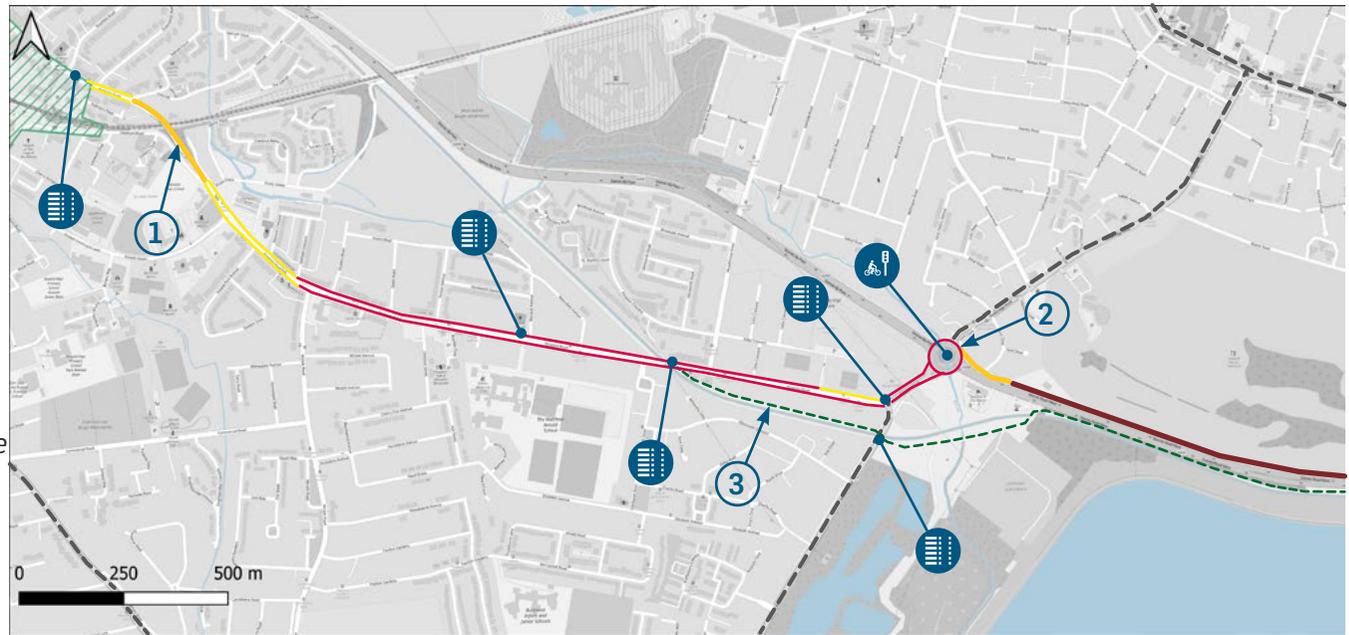


Figure 71. Route 3: A308/Kingston Road

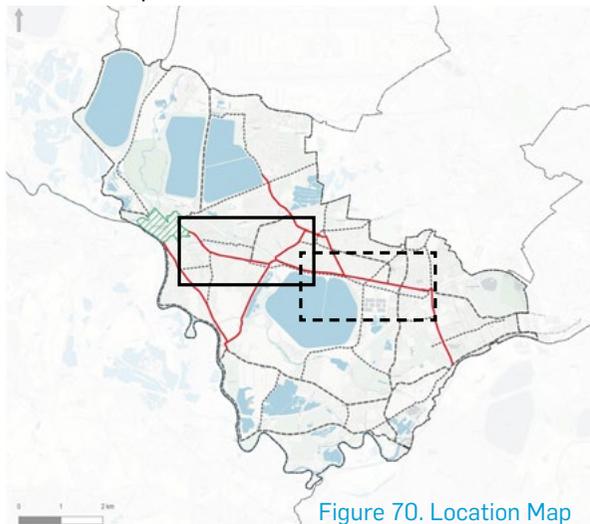


Figure 70. Location Map



Figure 72. Ample carriageway widths at Kingston Road towards Staines



Figure 73. Poor state of provision at Fordbridge Road roundabout

Legend

- Proposed Improvements*
- Parallel crossing
 - Signalised pedestrian/cyclist crossing
- Proposed Cycle Facility*
- Two-way segregated cycle track
 - One-way segregated cycle track
 - One-way stepped track
 - Contraflow cycle lane
 - Off-Carriageway path
 - Mixed traffic
 - Junction with primary cycle route

4. One-way kerb-segregated cycle tracks in each direction using residual carriageway space and central island. Investigate highway boundary or reduce to single lane in one direction.

5. Contra flow cycle lane along The Parade to increase the permeability of the network. Potential public realm improvements in the vicinity of shops, with footway widening at points to encourage activation of the street via outdoor dining. Additional secure cycle parking to be added at locations (*to be reviewed in the next stages*).

6. Proposals on Sunbury Cross Roundabout for at-grade crossings (see following section for detailed proposals).

7. Alternative off-carriageway alignment along Thames Water aqueduct. Parallel crossings to be added at the junctions with the road network. Continuous lighting to be provided.

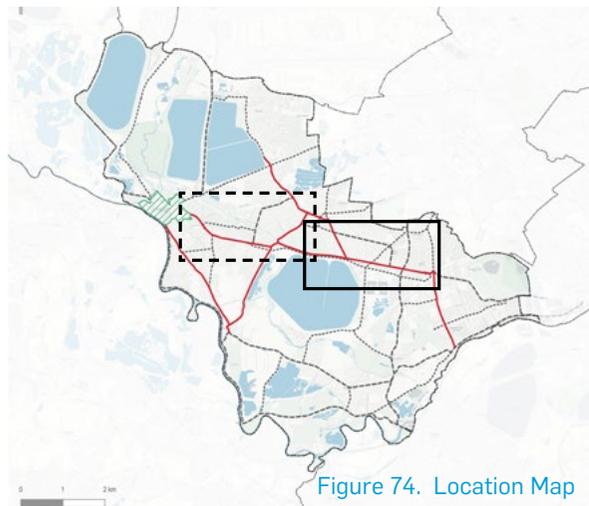


Figure 74. Location Map

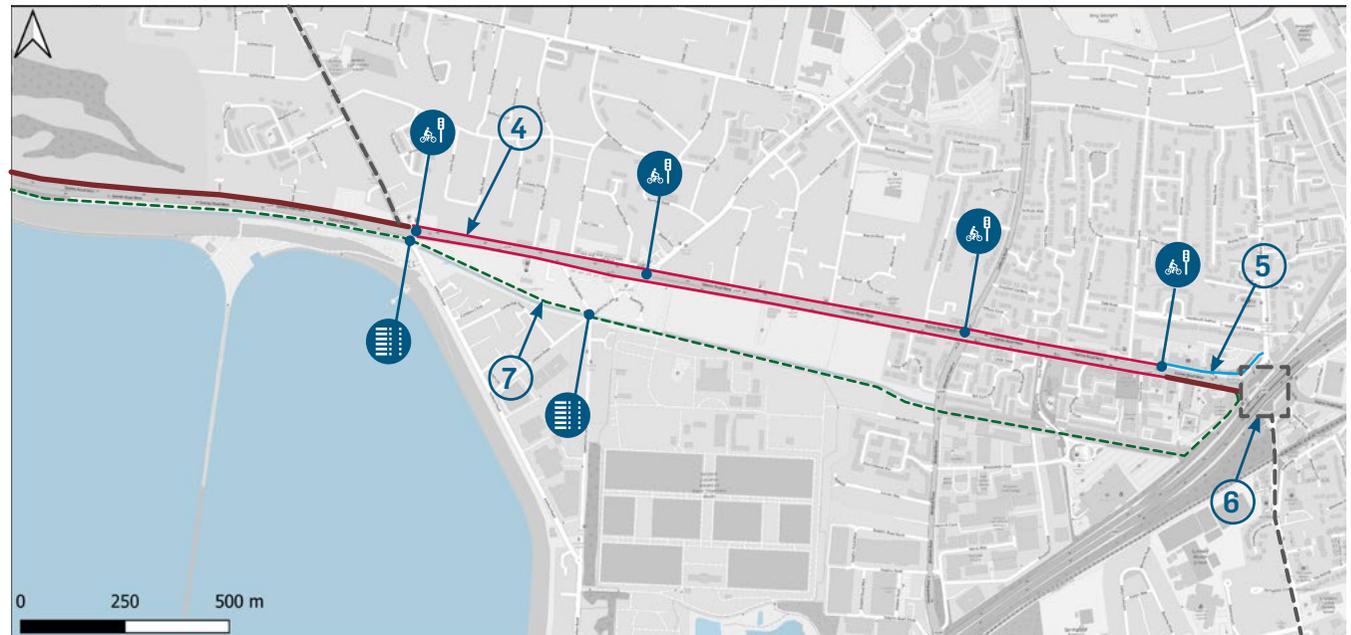


Figure 75. Route 3: A308/Kingston Road



Figure 76. Existing aqueduct alignment south of the A308.



Figure 77. The A308 has two travel lanes from which space could be reallocated for walking and cycling.

Legend

Proposed Improvements

- Parallel crossing
- Signalised pedestrian/cyclist crossing
- Junction with primary cycle route

Proposed Cycle Facility

- Two-way segregated cycle track
- One-way segregated cycle track
- One-way stepped track
- Contraflow cycle lane
- Off-Carriageway path
- Mixed traffic

Route 3: A308/Kingston Road Sunbury Cross Roundabout

Sunbury Cross as existing, is a barrier for pedestrian and cyclist movements due to deviation from desire lines, antisocial behaviour, and security concerns.

Proposed Improvements

Three options are proposed for Sunbury Cross Roundabout for improved crossings for pedestrians and cyclists:

Option 1: At-grade signalised pedestrian/cyclist crossings at the stop lines to access the proposed two-way cycle track and footpath around the roundabout. Inner cycle track to have kerb segregation from main carriageway and grade-separated from footway.

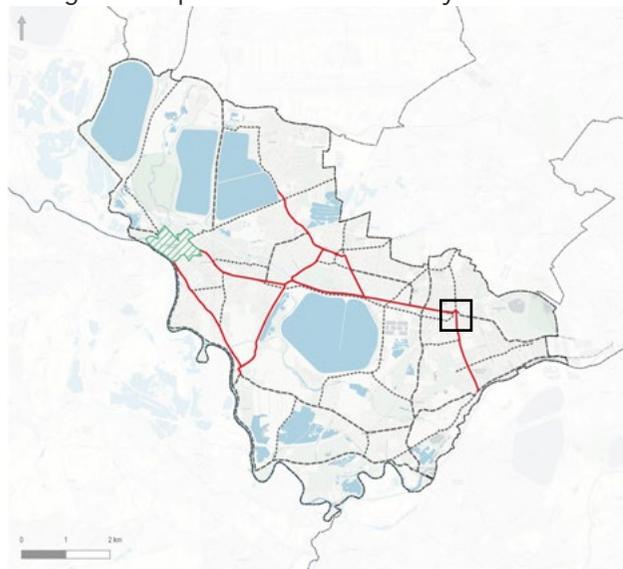


Figure 78. Location Map

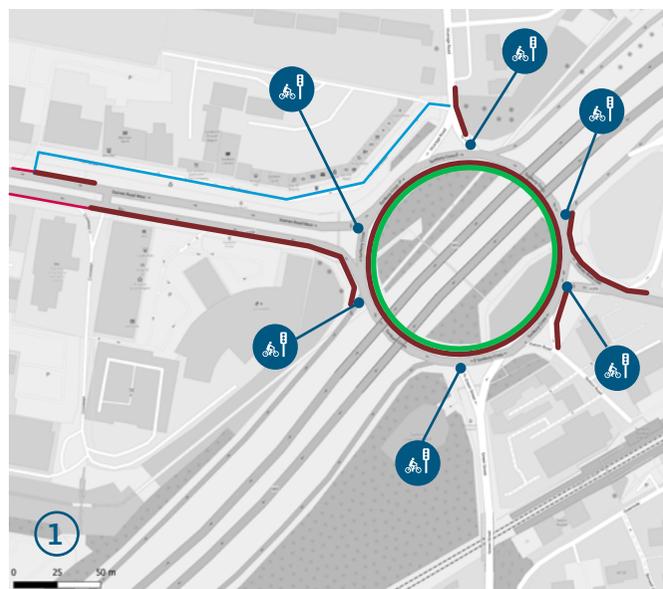


Figure 79. Sunbury Cross Roundabout - Option 1

Option 2: At-grade signalised pedestrian/cyclist crossings at Green Street and Staines Road West to access the proposed two-way cycle track and footpath in the centre of the roundabout that utilises the M3 underpass. Ramp access up to carriageway level from subway level with additional lighting, CCTV and wayfinding information. Additional signalised pedestrian/cyclist crossings at key locations to access the proposed path.

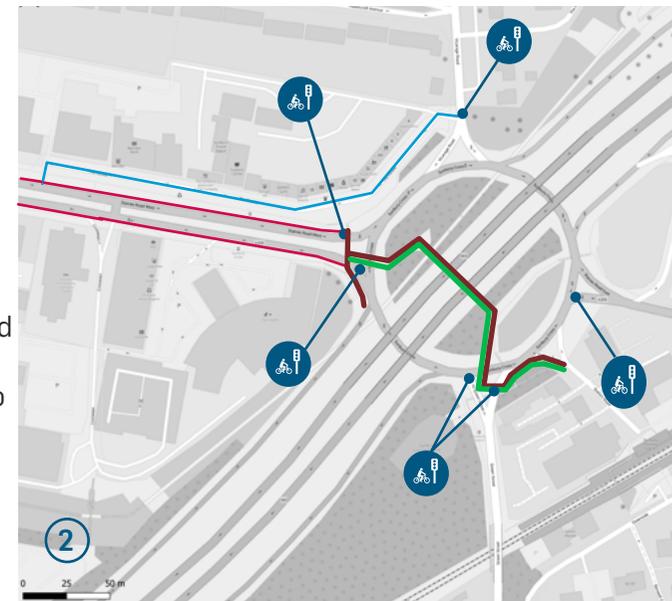
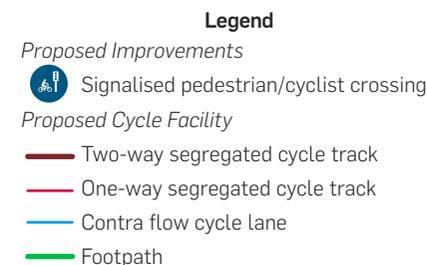
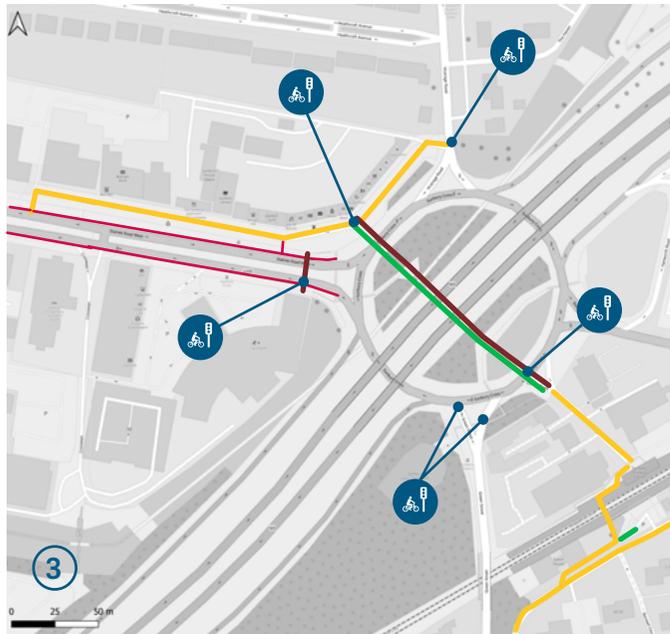


Figure 80. Sunbury Cross Roundabout - Option 2



Option 3: Improvements to the existing subway: Widening, improved lighting, added CCTV, public realm and drainage improvements. At-grade parallel crossing provision at gyratory to connect The Parade with Sunbury Railway Station through an intervisible and direct alignment using the central subway with ramped and step access to carriageway level. Potential further connections at Sunbury Station through a longer term ambitious cyclist and pedestrian bridge towards Green Street.

Legend

Proposed Improvements

 Signalised pedestrian/cyclist crossing

Proposed Cycle Facility

-  Two-way segregated cycle track
-  One-way segregated cycle track
-  Contra flow cycle lane
-  Footpath
-  Mixed Traffic

Figure 81. Sunbury Cross Roundabout - Option 3



Figure 82. Sunbury Railway Station as viewed from the Sunbury Cross central subway



Figure 83. View from the northwestern side of the subway under the M3, with the central subway on the left and The Parade at Sunbury, on the right.

Route 6: Staines/Laleham Road

Proposed Improvements

1. Cycle by-pass to link the proposed route to Thames route (NCN 4). Access to the path via a parallel crossing
2. Dutch treatment cycle lanes, including speed limit reduction, removal of road centre lines, removal of parking and inclusion of colour surfacing for cycling.
3. One-way stepped tracks. Speed limit reduction to 20mph, removal of on-street parking. Undertake parking demand surveys.
4. Raised junction and parallel crossing on Blacksmith Lane to improve safety and link to Thames route (NCN 4) and one-way cycle tracks to link to Route 9.

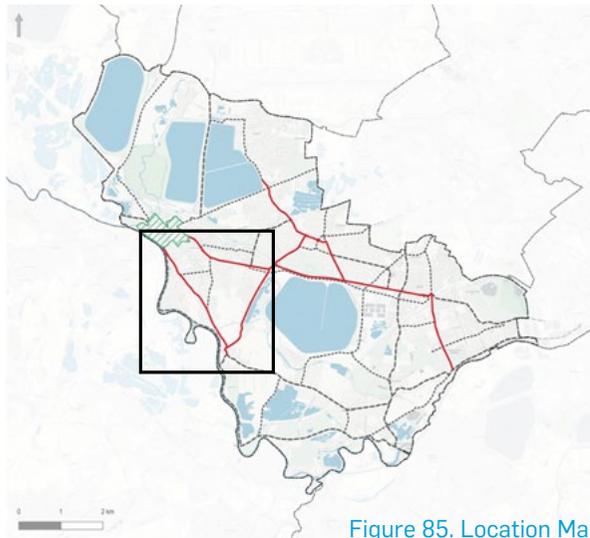


Figure 85. Location Map

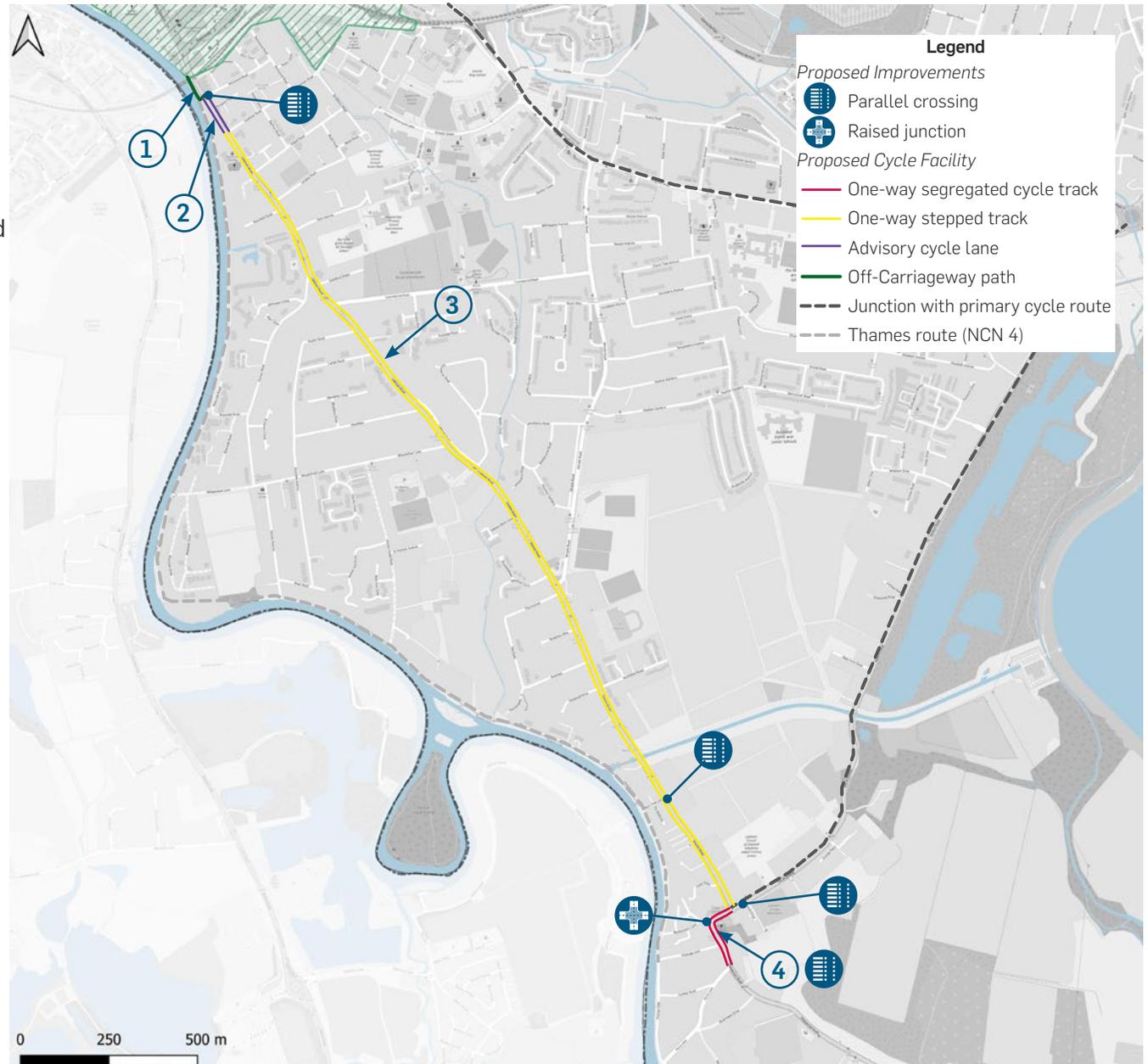


Figure 84. Route 6: Staines/Laleham Road

Route 7: Stanwell Road/Church Road and Convent Road/School Road

Stanwell Road and Church Road make up Ashford's urban core, with Ashford Hospital on its northern end, and Ashford Railway Station and retail strip running along Church Road. St James Senior School also brings an influx of school-age pedestrians and cyclists. Whilst there is potential for local activity on foot and by pedal cycle, the generous parking availability and poor pedestrian environment push short trips into private vehicles.

Proposed Improvements

1. Extend the existing two-way cycle track to the A30 and introduce signalised pedestrian/cyclist crossings at all arms of the junction.

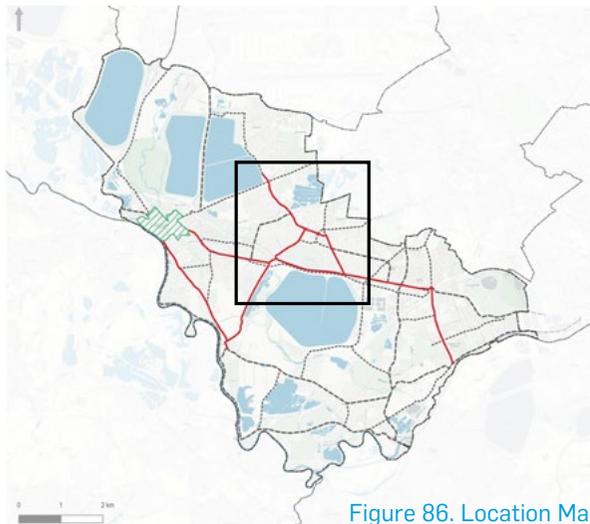


Figure 86. Location Map

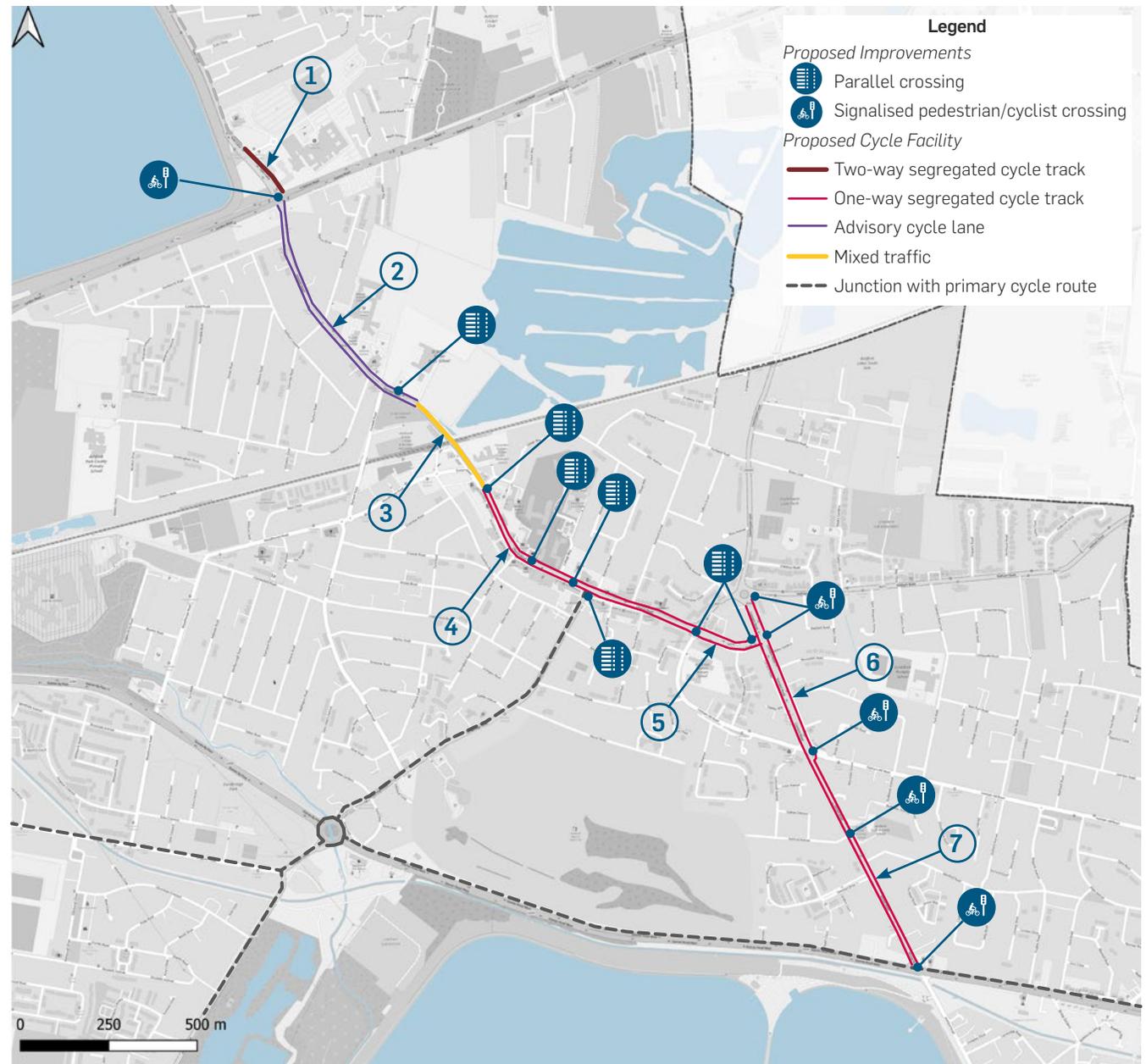


Figure 87. Route 7: Stanwell Road

2. Dutch treatment cycle lanes, including speed limit reduction, removal of road centre lines, and inclusion of colour surfacing for cycling.

Longer term ambitious proposal: stepped track cycle facilities depending on the available highway land. (Proposal to be investigated during the feasibility design stage)

3. Mixed traffic at the railway bridge. Speed limit reduction to 20mph.

Longer term ambitious proposal 1. Widen the bridge to accommodate new cycle facilities and footways on both sides of the carriageway; 2. One-way system and propose contra flow cycle lane.

4. One-way cycle tracks on Church Road, reallocating some carriageway space as well as utilising service roads for pedestrians. Reduce speeds to 20mph to provide light segregation. Organise parking study to understand parking demand and capacity around Ashford, with potential utilisation of multi-story car parks to free up carriageway space at service roads for pedestrians (if the study demonstrates that it is required). Provide parallel crossings at key locations. Additional secure cycle parking to be added at locations *(to be reviewed in the next stages)*.

5. One-way cycle tracks at Town Tree Road with added pedestrian and cyclist priority parallel crossings.

6. Convent Road--reduce main carriageway to single lane to include one-way kerb segregated cycle tracks in each direction.

7. One-way cycle tracks on School Road with added signalised pedestrian/cyclist crossings at junctions. Improve parking compliance via parking policies prohibiting footway parking.



Figure 88. Car-dominated environment along Church Road.



Figure 90. The pedestrian environment is limited by car-oriented service roads in Ashford's retail core.



Figure 89. Active frontage along Church Road despite high traffic flows and speeds creating an intimidating environment for pedestrians and cyclists.



Figure 91. Poor parking compliance along School Road prevent cyclists from using the provided cycling infrastructure.

Route 9: Ashford/Fordbridge Roads

Proposed Improvements

1. One-way stepped tracks. Speed limit reduction to 20mph, removal of on-street parking. Opportunity to connect with a quiet route via Fontmell Park to link to St Michael's Primary School via a parallel crossing.
2. Dutch style roundabout with signalised crossings at all arms. Link to Staines Road West via Ford Close.
3. One-way cycle tracks proposed with verge removal on both sides of the road.

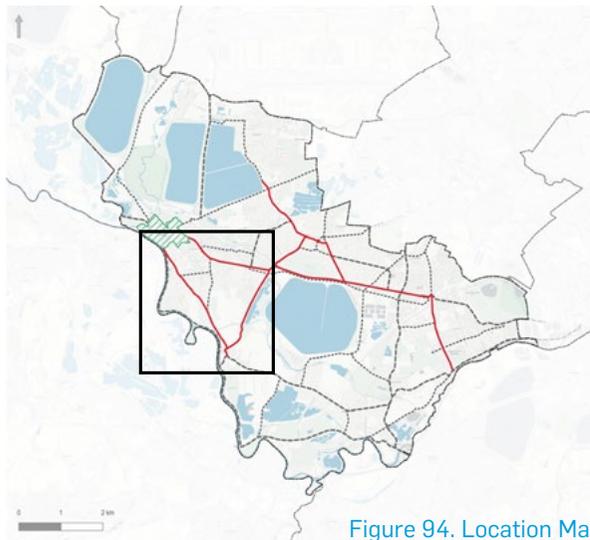


Figure 94. Location Map

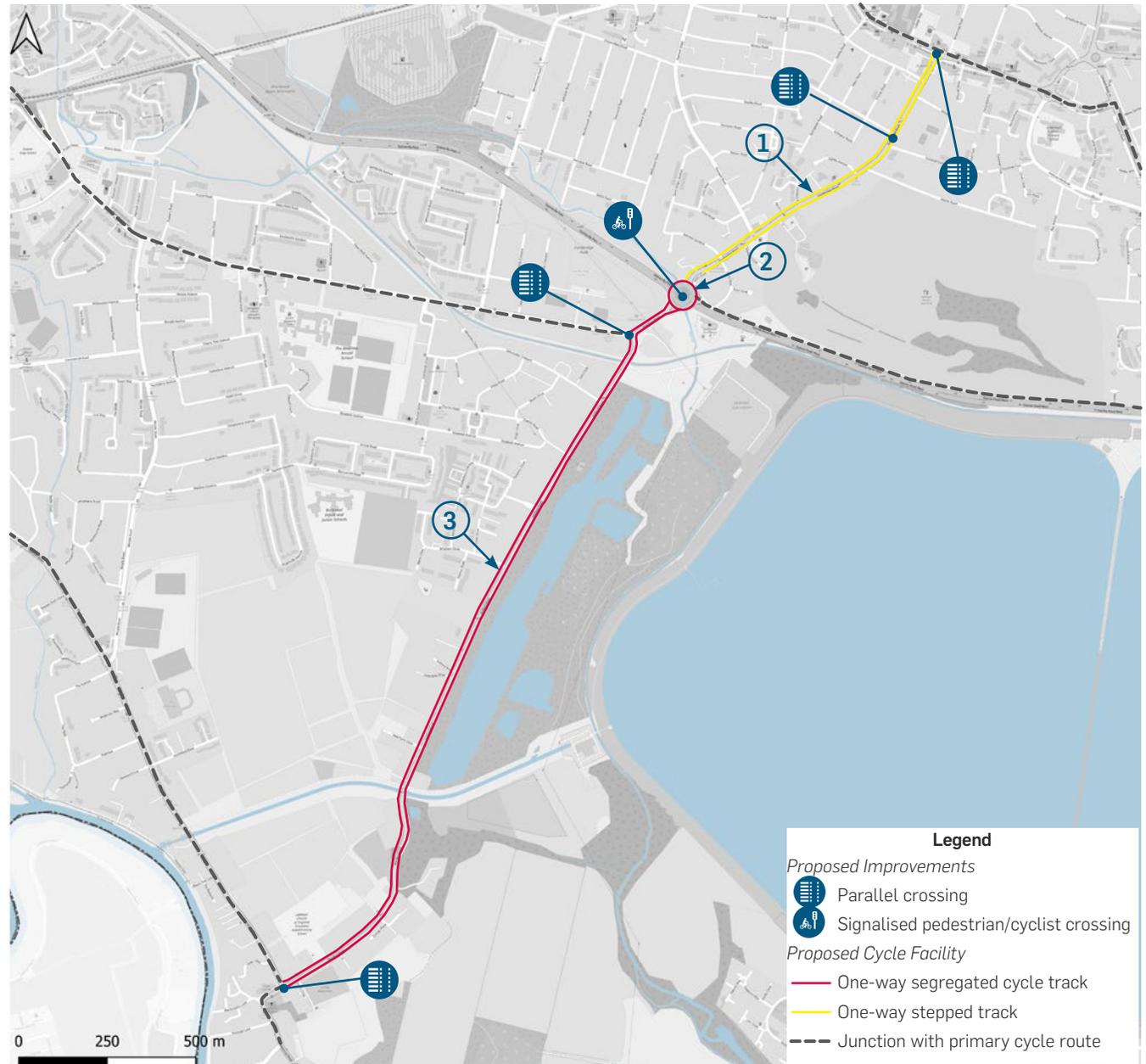


Figure 93. Route 9: Ashford/Fordbridge Roads

Route 18: Green Street

Green Street is a key north-south connector in Sunbury, as it links a significant number of primary and secondary schools, leisure facilities and the River Thames. Green Street also has three key bus routes that offer connections to Feltham and Ashford.

This is a well-use pedestrian route but is exposed to relatively high vehicle speeds (30mph) and flows, and has few formal crossing locations.

Proposed Improvements

1. Two-way cycle track between Sunbury Cross Roundabout and the railway bridge.

2. Mixed traffic at the railway bridge. Speed limit reduction to 20mph.

Longer term ambitious proposal to widen the bridge to accommodate new cycle facilities and footways on both sides of the carriageway.

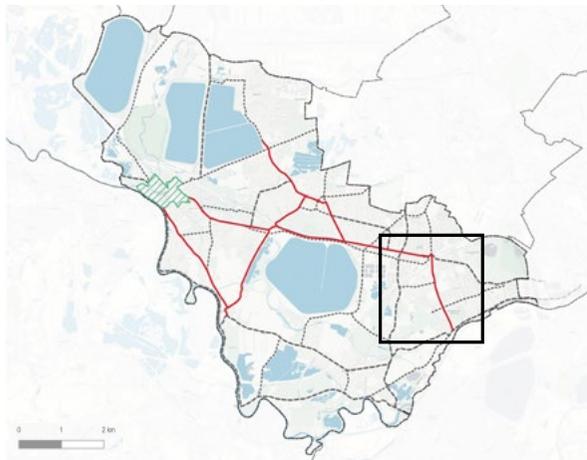


Figure 95. Location Map

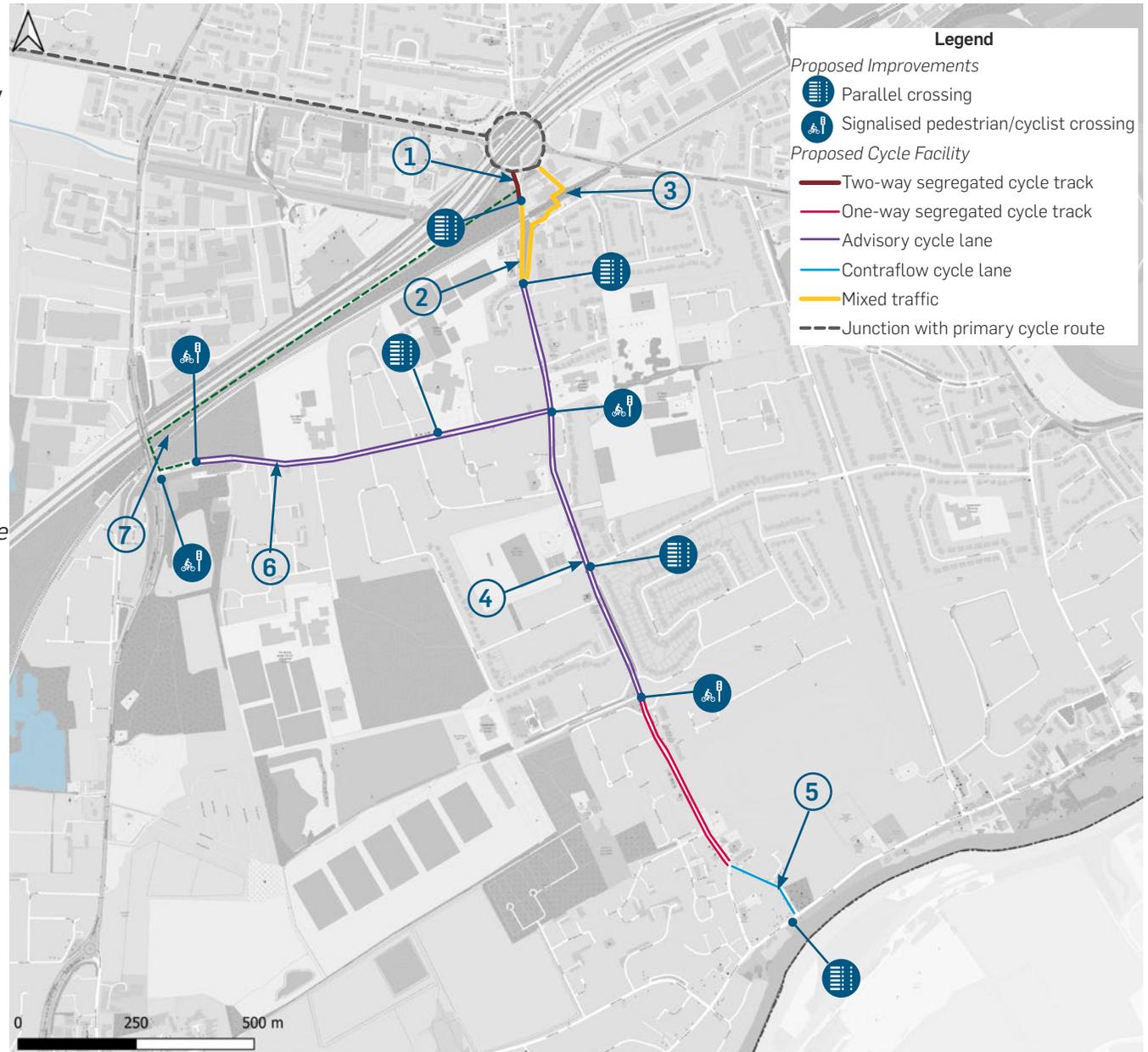


Figure 96. Route 18: Green Street

3. Together with Option 3 for Sunbury Cross, this alternative cycling route alignment crosses the railway line via a longer term ambitious walking and cycling bridge which connects into Sunbury Station facilities, across the roundabout and towards The Parade.

4. Dutch treatment cycle lanes, including speed limit reduction, removal of road centre lines, and inclusion of colour surfacing for cycling. Additional secure cycle parking to be added at locations *(to be reviewed in the next stages)*. *Longer term ambitious proposal: stepped track cycle facilities depending on the available highway land. (Proposal to be investigated during the feasibility design stage)*

5. Contra flow cycle lane on Church Street, remove on-street parking and add traffic islands to protect cycle movements. Upgrade zebra crossing on Thames Street to parallel crossing.

6. Dutch treatment cycle lanes, including speed limit reduction, removal of road centre lines, parking removal and inclusion of colour surfacing for cycling. Signalised pedestrian/cyclist crossing to link to Railway station. *Longer term ambitious proposal: stepped track cycle facilities depending on the available highway land. (Proposal to be investigated during the feasibility design stage)*

7. Potential off-road cycling alignment via Linear Park connecting Sunbury Cross to Upper Halliford Railway Station.



Figure 97. Pinch point at railway bridge on Green Street, with narrow carriageway and narrow footway on a single side.



Figure 98. Existing aqueduct alignment south of the A308.



Figure 99. Potential location for a walking and cycling bridge at Sunbury station (Longer term ambitious scheme).



Figure 100. Footway parking on Nursery Road outside Sunbury Manor School.

Assessment of Proposals

Following the concept design 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 under ≤ 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 each corridor within the first phase of proposals are presented in the following tables and each assessment is presented in Appendix 2: Route Selection Tool (RST).

By undertaking the RST it helps to show which options provide the greatest benefit when compared to a do-nothing scenario. This subsequently identifies which option should be promoted for further development. This will also help to prioritise options too (see "Prioritisation of the Routes" on page 146).

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. Gradient and connectivity are remain the same as the alignments are retained.

Table 4. RST results

	Route 3: A308/Kingston Road		Route 6: Staines/Laleham Road		Route 7: Stanwell Road/Church Road and Convent Road/School Road	
	<i>Existing</i>	<i>Potential</i>	<i>Existing</i>	<i>Potential</i>	<i>Existing</i>	<i>Potential</i>
Directness	5.00	5.00	5.00	5.00	5.00	5.00
Gradient	5.00	5.00	4.48	4.48	5.00	5.00
Safety	3.34	4.80	1.00	4.73	1.00	5.00
Connectivity	4.34	4.34	5.00	5.00	5.00	5.00
Comfort	0.07	3.50	0.00	2.73	0.00	3.81
Total	17.74	22.64	15.48	21.93	16.00	23.81
Improvement (compared to existing)		4.90 (28%)		6.45 (42%)		7.81 (48%)
	Route 9: Ashford/Fordbridge Roads		Route 18: Green Street			
	<i>Existing</i>	<i>Potential</i>	<i>Existing</i>	<i>Potential</i>		
Directness	5.00	5.00	5.00	5.00		
Gradient	4.72	4.72	4.30	4.30		
Safety	0.66	5.00	1.00	2.45		
Connectivity	4.45	4.45	5.00	5.00		
Comfort	0.16	3.00	0.00	2.38		
Total	14.99	22.17	15.30	19.13		
Improvement (compared to existing)		7.18 (48%)		3.83 (25%)		



8. Walking Network

Introduction

Methodology

Multi-Criteria Assessment Framework

Example Design Tools

Phase 1 Proposed Cycling Improvements

Assessment of Proposals

Introduction

Proposed improvement concepts for the walking network for Spelthorne are presented on the following pages. While the proposals are focused around the commercial areas and along the primary walking routes, they also provide examples of the types of improvements that can be implemented borough-wide as needs or opportunities arise.

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, 10 areas were identified and selected as 'primary' areas for further consideration.
- » Selection of the 'short list', which prioritised three areas as 'Phase 1' for further assessment and concept development as part of the LCWIP.

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

Methodology

Spelthorne has good potential for an increase in the walking mode share as evidence of a high volume of local trips being undertaken by motor vehicles and the distribution of the key destinations in relation with the residential areas allows the everyday commuter trips to be undertaken on foot.

A key barrier to walking at present is the inconsistent quality and accessibility of the walking network, along with severance on the road network due to motor vehicle dominance (dual carriageways, railway network).

A network of preferred routes has been defined drawing on the analysis from the existing data. The background information identified the local amenities that attract a significant number of pedestrian trips and the existing commuting patterns in the borough.

The development of the walking network for the Spelthorne LCWIP focused on identification of Core Walking Zones (CWZs), as per the DfT's LCWIP technical guidance (Figure 101).

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 more short, utilitarian trips to be made on foot.

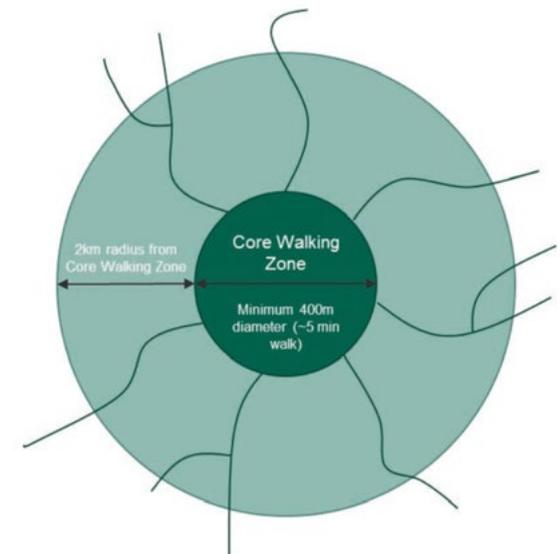


Figure 101. Core Walking Zones and Key Walking Routes (DfT LCWIP Guidance)

Identification of Core Walking Zones

For Spelthorne, high streets and areas with local commercial activity were selected as the key trip generators. The local high street areas are key hubs of pedestrian activity, with clusters of different destinations and serving multiple journey types (e.g., shopping, dining, employment, personal business, leisure/social, etc). The local high street areas tend to be located in the centre of the town/village and they are normally easily accessible from

all sides of the town/village. They usually are a more compact urban environment and have a higher population and job density, thus increasing the propensity for utilitarian walking trips. Focus on these areas also helps to support economic vitality and SCC's 20-minute neighbourhood strategy of LTP4.

The selected local high street areas were identified using Google Maps' 'areas of interest' data layer and mapped using GIS tools (Figure 102). The CWZs were created using 250m

isochrones around the high street areas (Figure 103). This was in keeping with DfT guidance that a CWZ should be a minimum diameter of 400m (approximately a 5-minute walk). The extent of each of the CWZs cover the commercial area/high street and main access corridors.

This process identified 12 core walking zones around local commercial areas within Spelthorne.

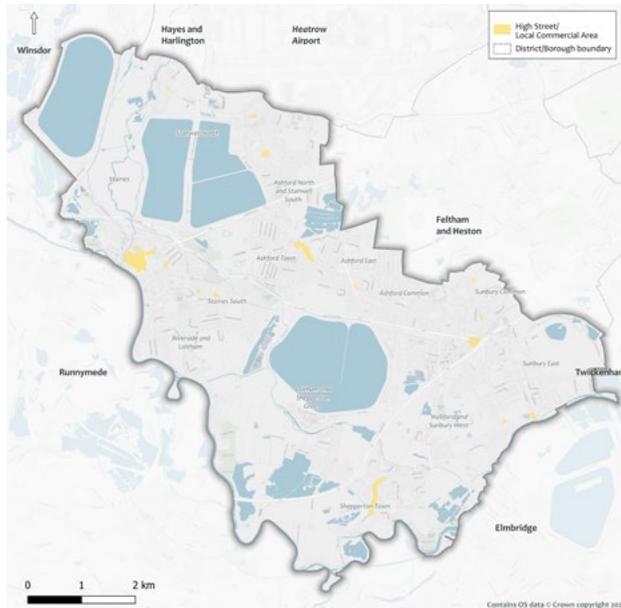


Figure 102. Identification of Local High Street Areas

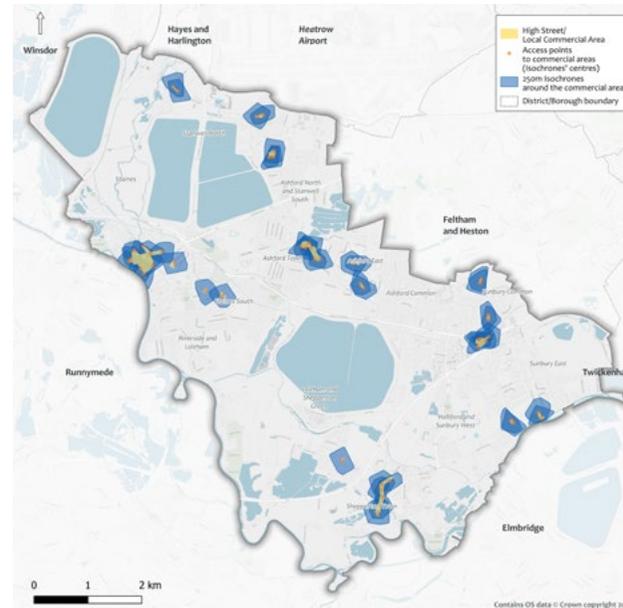


Figure 103. Identification of access points to the Local High Street Areas and generation of 250m isochrones around them

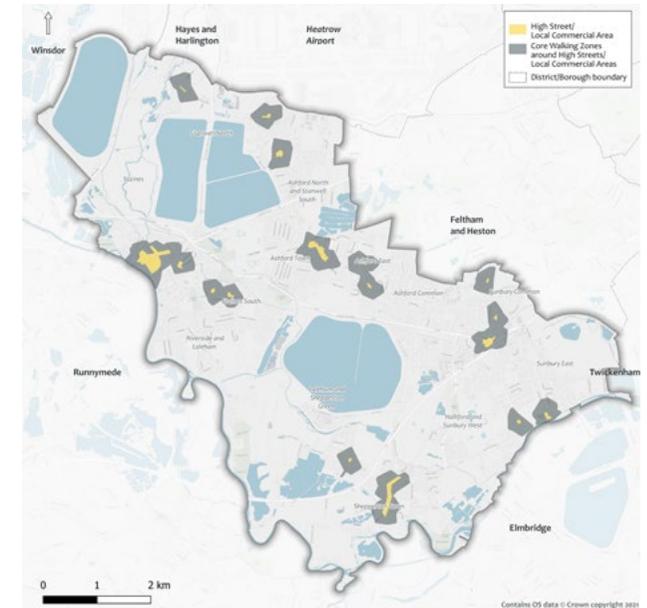


Figure 104. Core walking zones around Local High Street Areas in Spethorne

The initial list of core walking zones in Spethorne, presented in Figure 105, includes:

1. Staines-Up-On-Thames
2. Kingston Road
3. Stanwell High Street
4. Clare Road commercial area
5. Ashford
6. Convent Road commercial area
7. Sunbury Common
8. Sunbury on Thames
9. Shepperton
10. Littleton
11. Stanwell Moor
12. Felthamhill

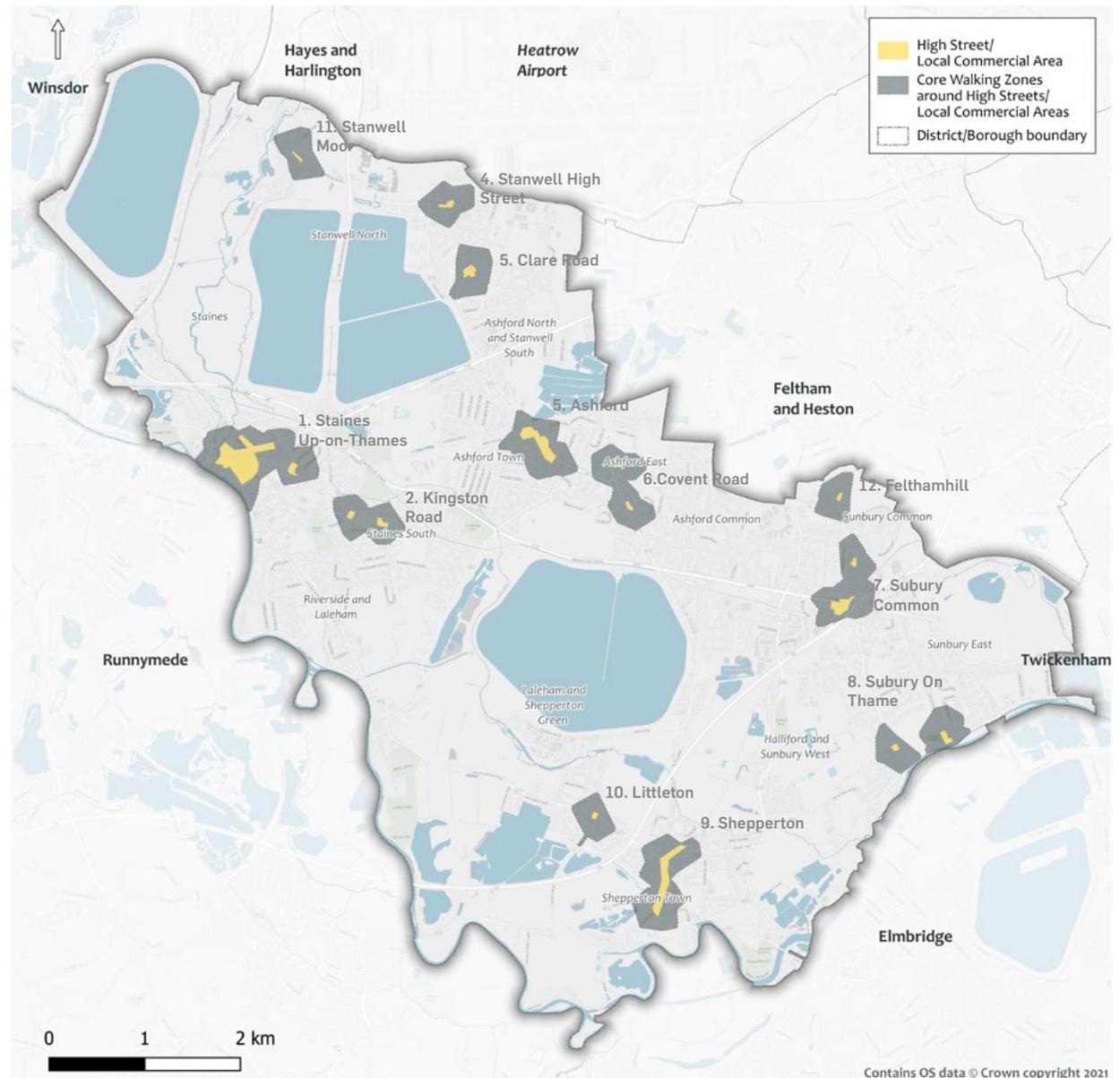


Figure 105. Core walking zones around Local High Street Areas in Runnymede

Prioritisation of Core Walking Zones and Identification of Walking Corridors

Following the identification of the core walking zones within the borough, an initial qualitative sifting process identified and prioritised the 10 core walking zones that were included in the Aspirational List of the walking network, and the remainder two were secondary core walking zones.

Additionally, important pedestrian routes that serve them from a distance of up to around 2km were located, based on the DfT's guidance. The pedestrian routes will complement the selected core walking zones and link the local high street areas to significant destinations.

The background data compiled and summarised in the previous chapter 4. Evidence Base was used to create a qualitative 'heat map' 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:

- » Key trip attractors, such as railway stations, education and sport facilities, public spaces (parks and playing fields), and functional sites (Hospitals)
- » Public transport (bus stops) and the catchment areas around the railway stations

- » High population density areas (LSOAs with >75 residents per hectare), new planned development sites and workplace zones
- » Existing walking network, such as public rights of way and pedestrianised areas
- » Origin-Destination data from PCT which highlights the routes, origins, and destinations of short motor vehicle commuter and school trips (<2km) which could be replaced by walking trips.
- » Pedestrian collision data which identified sections of the road network that are more dangerous for vulnerable users
- » Geolocated public suggestions for active travel improvements (i.e. Surrey's Covid-19 Active Travel Improvements interactive map survey platform - Commonplace)
- » Planned walking and cycling schemes within the borough
- » River Thames Scheme 2018 proposals

The outcome of the pedestrian opportunities/issues heat map was an aspirational walking network (Figure 106). The higher intensity colour indicates a potential higher demand for utilitarian walking trips or pedestrian improvements.

The selected core walking zones were overlaid on the heat map, and it was confirmed that the local high street areas were broadly aligned with the areas of highest potential benefit across the Borough (Figure 107).

Based on the data reviewed and evidence base compiled, potential demand and propensity for short, utilitarian walking trips is highest in the central areas of the Borough. The map presents high demand in Staines Upon-Thames and Sunbury areas and along Stanwell Road/Church Road in Ashford. The three towns have denser population, high workplace density and a high number of key trip attractors (such as schools), creating additional commuter trips to those areas. Collisions also tended to be clustered in these areas due to the fragmented walking network.

The connectivity to the River Thames Scheme which extends on the southern area of the borough and links Shepperton and Littleton to Runnymede and Elmbridge, was a key criterion on the identification of the pedestrian routes. The River Thames Scheme and the construction of the new channel provides an opportunity to create green spaces and enhance walking and cycling facilities along the river, providing leisure routes and the potential for longer distance utility trips linking Elmbridge, Runnymede, and Spelthorne.

The selected core walking zones in Stanwell Moor and Felthamhill do not present the levels of demand the remaining 10 areas present. For that reason these two core walking zones were omitted from the Aspirational List, but will be retained as Secondary core walking zones (Phase 3).

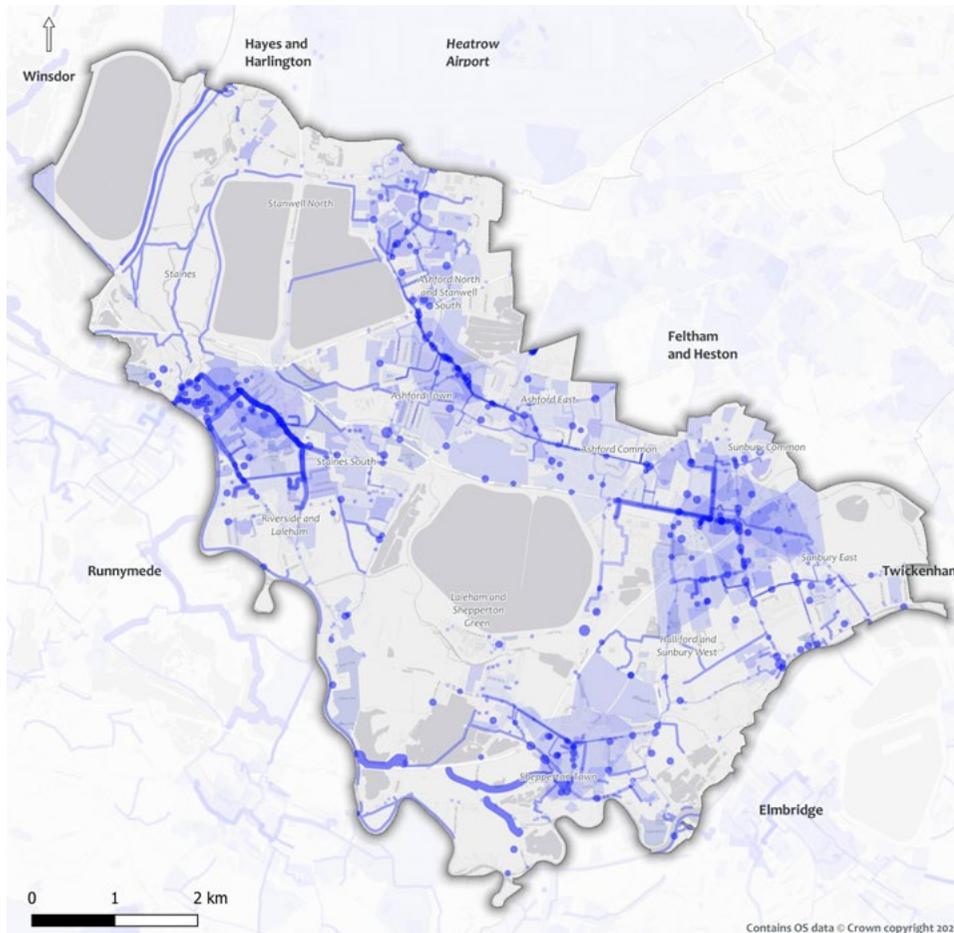


Figure 106. Background information related to walking trips was overlaid to create a heatmap for pedestrian opportunities and issues.

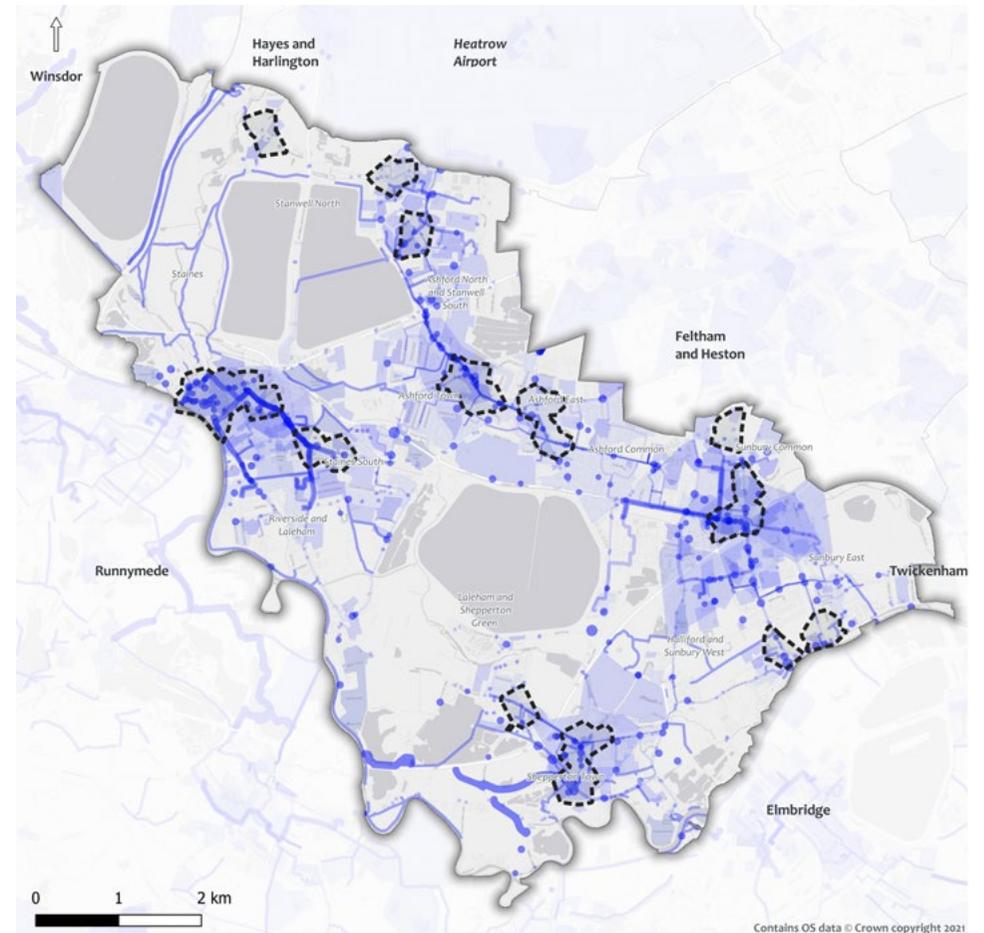


Figure 107. The selected core walking zones were overlaid on the heatmap and confirmed that the selected areas (Local High Streets) are of high demand for improvements.

The selected walking routes will supplement the list of core walking zones, presented in Figure 108, and capture the core routes at local level which funnel the main pedestrian flows between origin and destinations.

The final list of walking corridors was amended following the first round of early engagement workshops (workshop #1). Some walking corridors

were added in the 'Aspirational list' as the received feedback from the local stakeholders suggested higher demand than the one showed on the heatmap (for example Claire Road in Stanwell Area and Clockhouse Lane in Ashford Area).

Aspirational List for walking

A core network of 10 core walking zones and 6 supplementary walking corridors is defined. The network is distributed across the study area:

1. Staines-Up-On-Thames core walking zone
2. Kingston Road core walking zone
3. Stanwell High Street core walking zone
4. Clare Road commercial area core walking zone
 - » Clare Road walking corridor
5. Ashford core walking zone
 - » Stanwell Road (B378) walking corridor
6. Convent Road commercial area core walking zone
 - » Clockhouse Lane walking corridor
7. Sunbury Common core walking zone
 - » Windmill Road (A244) walking corridor
8. Sunbury on Thames core walking zone
 - » Green Street walking corridor
 - » Nursery Road walking corridor
9. Shepperton core walking zone
10. Littleton core walking zone
 - » Stanwell Moor core walking zone (secondary)
 - » Felthamhill core walking zone (secondary)

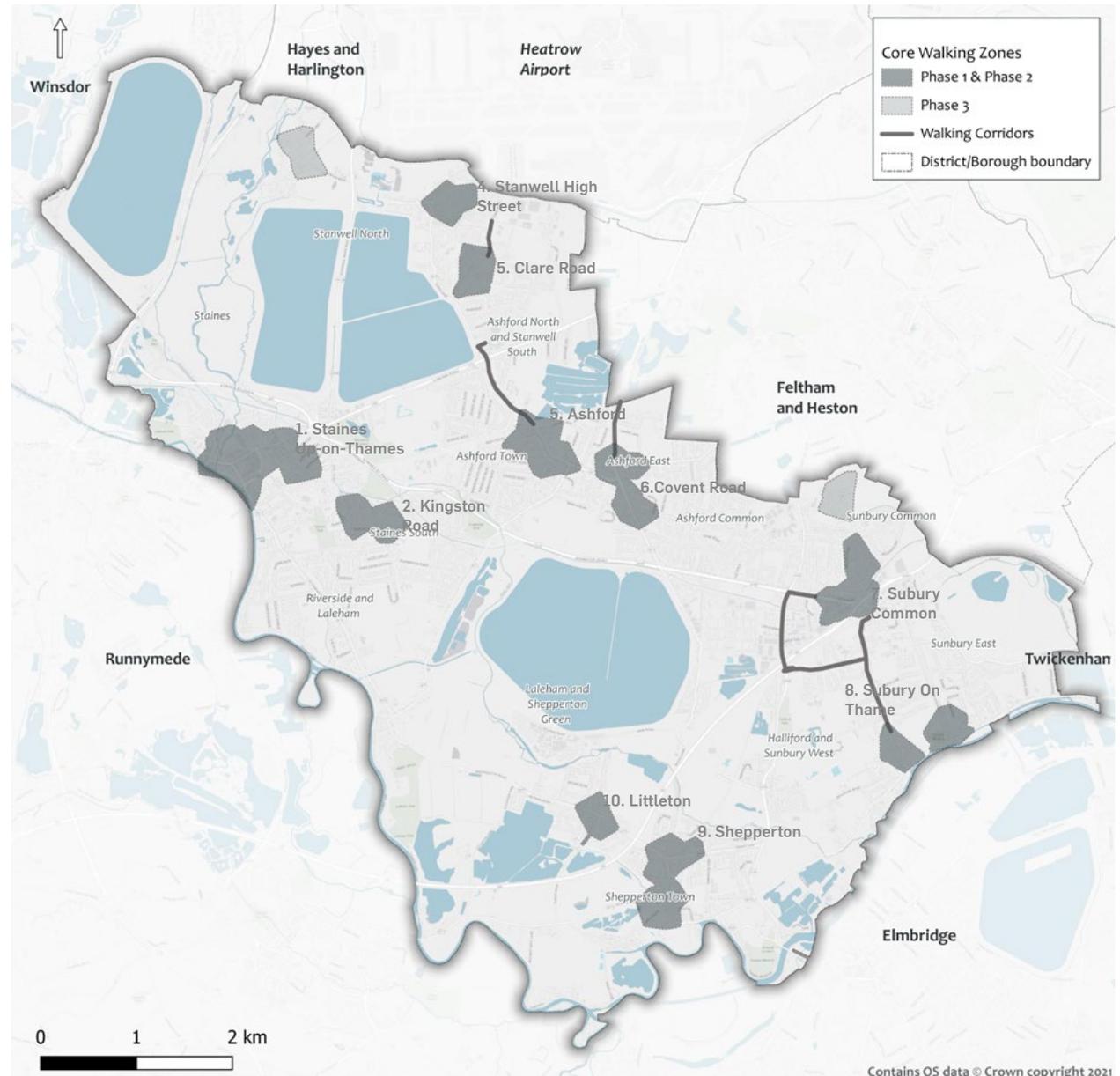


Figure 108. Aspirational list for the walking network

The key characteristics of these selected core walking zones and walking corridors are outlined in the subsequent section.

1. Staines-Up-On-Thames core walking zone

The walking zone extends around the commercial centre of Staines-Up-On-Thames and includes a number of key destinations such as the shopping centre and the railway station. The area is significantly constrained between the railway lines, the A30/A308 junction and River Thames. The town centre is pedestrianised and off-street parking is provided around the commercial centre.

Issues and opportunities for pedestrians and cyclists in the extent of the core walking zones will be addressed by the emerging Staines Development Framework.

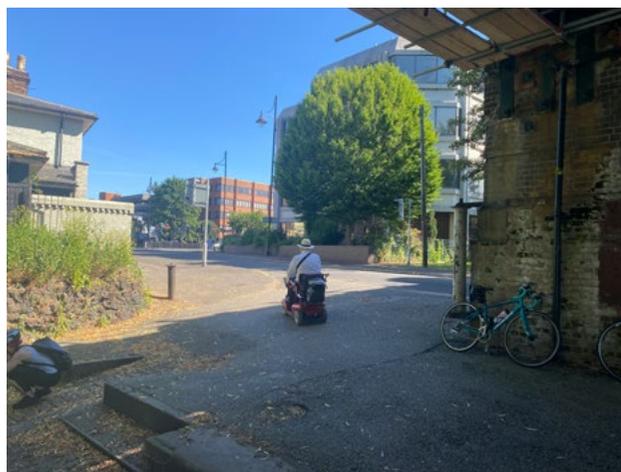


Figure 109. River Thames path under the railway bridge in Staines Up-on-Thames

2. Kingston Road core walking zone

The commercial activity on Kingston Road is extending east of Staines Railway Station. The high street records high traffic flows, and the pedestrian flows appear to be high too, due to the proximity of the area with schools.

3. Stanwell High Street core walking zone

The High Street extends on the northernmost area of the borough, linking Stanwell Moor Road and the residential area with the Southern Perimeter of Heathrow Airport.

The area has high population density due to the proximity with the airport and many commuter trips between the area and the airport are undertaken by car.



Figure 110. Pedestrianised High Street in Staines

4. Clare Road commercial area core walking zone

The local commercial area extends east of Staines Reservoirs an north of Ashford Hospital. The area has high population density and it is constrained between the A30, the reservoirs, Heathrow Airport and the industrial area.

During the early engagement workshops (workshop #1) local stakeholders noted the importance of a corridor along Clare Road to link the core walking zone with the schools north of the commercial area.

5. Ashford core walking zone

Ashford commercial area is the second busiest in the borough. It extends along Church Road, a road with high traffic flows, which has been recorded as a pedestrian collision hotspot. The core walking zone extends around a variety of land uses; schools, the railway station, and residential areas with high population density.

The commercial area connects to Ashford Hospital via Stanwell Road. Background information showed that a high number of commuter trips are undertaken by car, and Stanwell Road (B378) was selected as a supplementary walking corridor, to improve the pedestrian facilities

6. Convent Road commercial area core walking zone

The local commercial area in Convent Road extends primarily along Convent Road/Feltham Road junction. However, there are few shops southern on Convent Road at the junction with Feltham Hill Road. The core walking zone was designed around both areas and serves the residential area, and local schools.

During the early engagement workshops (workshop #1) local stakeholders noted the importance of improvements along Clockhouse Lane as it is the only direct link between Spelthorne and Bedfront Lakes.

7. Sunbury Common core walking zone

The commercial activity is located on the service roads around Sunbury Cross roundabout. The road network in the area is busy, with high traffic flows and high speeds, as Sunbury Cross roundabout is an exit to the M3. This creates a significant barrier in the urban environment.

The core walking zone seeks to improve the pedestrian environment on the commercial areas, the access to the railway station and the residential streets north of the roundabout.

South of Staines Road W extends an industrial area, with a hostile pedestrian environment, where the background information showed high demand for short commuter trips. For that reason, Windmill Road (A244) was proposed as a supplementary walking corridor, linking the core walking zone to the industrial area and Upper Halliford Railway Station.

8. Sunbury on Thames core walking zone

The local commercial activity in Lower Sunbury extends close to Thames Street on Green Street and the Avenue alongside Sunbury Park. The area is primarily residential, with a high density of education facilities close to Sunbury Cross.

The education facilities generate high pedestrian flows, which has resulted in a high number of collisions on Green Street and Nursery Road.

Both roads were selected as supplementary walking corridors to serve the schools, and link the core walking zone to the railway stations (Sunbury Railway Station and Upper Halliford Railway Station).

9. Shepperton core walking zone

The High Street extends between Shepperton Railway Station and Renfree Way. The pedestrian environment along the High Street is of good quality, with wide footways and frequent crossing facilities.

Shepperton will be directly linked to the River Thames Scheme via proposed footpaths and cycleways.

10. Littleton core walking zone

Littleton is a small settlement between Queen Mary Reservoir, the M3 and Sheep Walk Lakes. The core walking zone extends around the local commercial area and residential area.

It is proposed to serve connections to the River Thames Schemes' Sheep Walk creation site.



Figure 111. Lower Sunbury Commercial Area



Figure 112. Shepperton High Street

Multi-criteria Assessment Framework

Once the aspirational walking network has been identified an assessment using both qualitative and quantitative criteria to provide an initial prioritisation of the network proposals and identify a first phase of corridors to progress to concept design.

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 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 of the core walking zone, in addition to the local high street itself, including schools, parks, hospitals, bus stops, railway stations, development sites and the River Thames Scheme. A higher number of destinations would indicate a greater propensity for walking trips and therefore a higher score.
- » **Potential demand** – this is based on the resident and workplace populations within a 10-minute walk of the core walking zone. A higher

population would indicate greater potential demand and propensity for walking trips and therefore a higher 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 more highly 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.
- » **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 significant improvements may not be feasible or very difficult (e.g., land constraints, railway lines underpasses etc). Scoring was based on comments from the workshops and a cursory review via StreetView imagery. As the team had not been to site, this category has a lower weighting than the others.
- » **Stakeholder input** – these criteria reflect the relative priority of the different core walking zones based on public online input and LCWIP stakeholder workshop input (via the workshop

surveys). Higher scores indicate a higher number of online comments and/or workshop votes.

The MCAF criteria for the selection of the Phase 1 core walking zones are listed in Table 5 on the following pages.

The assessment of the core walking zones included a separate assessment of each walking corridor. The final score of each criterion for the core walking zones that include supplementary walking corridors is a combination of the scores (75% of core walking zone score and 25% of the average score of the walking corridors).

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. The MCAF criteria and weightings for each category are summarised in Table 5 on the following pages.

Table 5. Walking network MCAF criteria

Category	Criterion	Core Walking Zone (75% of the score) Rating Rates	Walking Corridor (25% of the score) Rating Rates
Access (Weighting 25%)	Links to key trip attractors (parks, Hospitals) (Weighting: 2-Medium)	3: >5 green spaces and/or >1 Functional Sites; 2: 4-5 green spaces and/or 1 Functional Site; 1: <4 green spaces and/or no Functional Sites	3: >1 green spaces and/or a Functional site; 2: 1 green space or Functional Site 1: no green spaces or Functional Sites
	Schools (Weighting: 3-High)	3: >=5 schools; 2: 3-4 schools; 1: <3 schools	3: 2 schools; 2: 1 school; 1: No school
	Bus Stops (# of stops) (Weighting: 1-Low)	3: >35 bus stops; 2: 25 - 35 bus stops; 1: <25 bus stops	3: >9 bus stops; 2: 5 - 9 bus stops; 1: <5 bus stops
	Links to Rail Stations (Weighting: 2-Medium)	3: Yes; 1: No	3: Yes; 1: No
	River Thames Scheme Proposals (Weighting: 2-Medium)	3: Yes - direct link; 2: Yes using a corridor; 1: No	3: Yes; 1: No
	Development Sites (Weighting: 1-Low)	3: >200 units; 2: 101-200 units; 1: <101 units	3: >200 units; 2: 101-200 units; 1: <101 units
Demand (Weighting 25%)	Total Population (Weighting: 3)	3: >12000 residents; 2: 10000 - 12000 residents; 1: <10000 residents	3: >4000 residents; 2: 3000 - 4000 residents; 1: <3000 residents
	Total Workplace Population (Weighting: 2-Medium)	3: >10000 residents; 2: 5000 - 10000 residents; 1: <5000 residents	3: >200 residents; 2: 1000 - 200 residents; 1: <200 residents

Category	Criterion	Core Walking Zone (75% of the score) Rating Rates	Walking Corridor (25% of the score) Rating Rates
Existing pedestrian quality (Weighting 20%)	Posted Speed (Weighting: 1-Low)	3: >40mph; 2: >20mph; 1: =<20mph or off-street	3: >40mph; 2: >20mph; 1: =<20mph or off-street
	Traffic Flows (Weighting: 1-Low)	3: >12000 veh AADT; 2: 6000 - 12000 veh AADT; 1: <6000 veh AADT	3: >12000 veh AADT; 2: 6000 - 12000 veh AADT; 1: <6000 veh AADT
	Collision History (Weighting: 2-Medium)	3: >10 collisions; 2: 5 - 10 collisions; 1: <5 collisions	3: >5 collisions; 2: 2 - 5 collisions; 1: <2 collisions
Potential improvements (Weighting 10%)	Potential to improve existing conditions to a high and accessible standard (Weighting: 2-Medium)	3: higher potential; 2: medium potential; 1: lower potential	3: higher potential; 2: medium potential; 1: lower potential
	Significant constraints or dependencies (Weighting: 2-Medium)	3: limited constraints; 2: constraints typical for a transport improvement; 1: significant constraints (e.g. land take, third party works)	3: limited constraints; 2: constraints typical for a transport improvement; 1: significant constraints (e.g. land take, third party works)
Stakeholder support (Weighting 20%)	Commonplace Input (Weighting: 3)	3: >10 comments; 2: 5 - 10 comments; 1: <5 comments	3: >10 comments; 2: 5 - 10 comments; 1: <5 comments
	Stakeholder support (Weighting: 3)	3: >10 votes; 2: 5 - 10 votes; 1: <5 votes	3: >10 votes; 2: 5 - 10 votes; 1: <5 votes

First phase of core walking zones

The output of the multi-criteria assessment is a first phase of three core walking zones for further development and assessment¹. The top three core walking zones with their supplementary walking corridors, presented in Figure 113, are:

1. **Ashford core walking zone**
 - » **Stanwell Road (B378) walking corridor**
2. **Convent Road commercial area core walking zone**
 - » **Clockhouse Lane walking corridor**
3. **Sunbury Common core walking zone**
 - » **Windmill Road (A244) walking corridor**
 - » **Green Street walking corridor**
 - » **Nursery Road walking corridor²**

Once the corridors were identified they were assessed using the DfT's Walking Route Assessment Tool (WRAT³). The assessment provided a baseline for existing conditions and helped identify existing deficiencies for the selected routes. The routes were audited in August 2021 and the results are presented in Appendix 2: Walking Route Audit Tool (WRAT).

- 1 Staines Up-On-Thames core walking zones scored high in the MCAF. However the area will be addressed by Staines Development Framework and the core walking zone was not in the Phase 1 for the LCWIP.
- 2 Green Street and Nursery Road walking corridors were initially supplementing Sunbury on Thames core walking zone. Due to the importance of the two walking corridors and their proximity to Sunbury core walking zone it was decided to prioritise them and include them in Phase 1.
- 3 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.

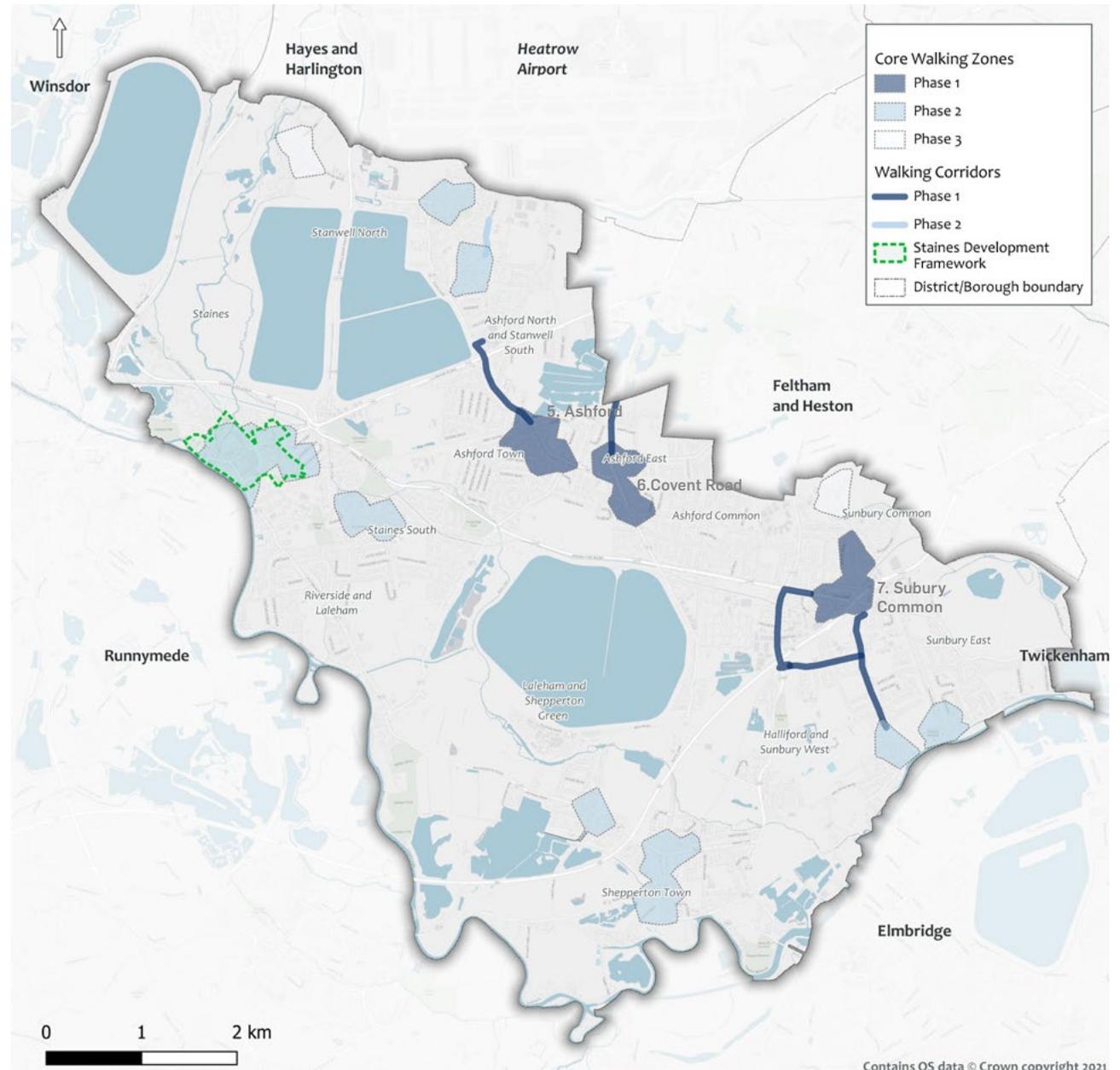


Figure 113. Phase 1 & 2 core walking zones and walking corridors

Example Design Tools - Walking

The purpose of this section is to present the design guidelines followed for the infrastructure improvements for walking.

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 Spelthorne by foot. These are applicable not only to the primary walking networks of the LCWIP, but can be applied on projects borough-wide as opportunities arise to improve conditions for walking.

Safety

Specifically targeted infrastructure should improve safety for people walking, as well as improve perceptions of safety, particularly related to interactions with motorised traffic, and in personal safety to encourage more trips by foot.

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 preserve the historic environment and setting of listed buildings.

Adaptability

Walking improvements should be developed to accommodate all types of users, and potential growth in the numbers of people walking. The provided facilities should be accessed and used by as many people as possible, regardless of age, gender and disability. The design should keep the diversity and uniqueness of each individual in mind.

Context Sensitive Design

Improvements should complement and enhance the character of urban and rural environment. 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 and historical buildings.

Inclusive Design

Walking facilities should provide equal access for people with disabilities and ensure that streets meet the requirements for all users.

Gradient

Not as critical as in cycling, but the walking network should provide routes with gentle gradients that will make walking trips easier for people of all ages and abilities. When the topography of the area is difficult, the provided facilities should be wide and have features to encourage people to choose walking and make them feel welcome.

Guiding Principles

To support the desired design outcomes, the walking improvements follow several general principles, which can be applied throughout Spelthorne 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 town centre - Safe walking routes are essential to encourage active travel to key trip attractors: schools and important public areas, such as green areas, commercial areas, business parks, public buildings 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. 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. However, lower speed limits may have a negative impact, particularly relating to the slowing of roads and idling traffic, and therefore will require careful management.

Pedestrian crossings - Appropriate crossings 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, 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 network. Design tools such as side road entry treatments (raised tables, continuous footways), raised carriageway, or use of different materials to highlight pedestrian crossings or delineate space for different users may be considered.

Wayfinding - Good sight lines and visibility of destinations and of walking routes are important elements that affect how easy a route 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 the 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 town.

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 re-imagined and reallocated to different road users, and help build public support for improvement schemes. Low cost, temporary materials such as paint, planters, or bollards can be used to widen footways, tighten side road junctions.

Design Standards - As proposed walking improvements are advanced, design stages should utilise the latest best practice design guidance and standards available at the time, such as:

- Streetscape Guidance (Transport for London)
- Manual for Streets / Manual for Streets 2 (Chartered Institution of Highways & Transportation)¹
- Inclusive Mobility (Department for Transport)
- Local Transport Note 1/20 Cycle Infrastructure Design (Department for Transport)

¹ Design standards to be updated following Manual for Streets' update in late 2021.

Example Design Tools - Walking



Uncontrolled crossing

Added tactile paving and dropped kerbs at the side roads and at points following the desire lines where the visibility is good, the speed limits and the traffic flows are low. Additional refuge island can be provided if the carriageway width allow it.



Zebra or Parallel crossing

Provide priority for people walking and cycling at a crossing location, minimising the delay and improving the directness of the route.



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.



Raised table (Side Road Entry Treatment)

Encourages motorists to reduce speeds, indicates pedestrian activity, and encourages more driver attention and care when turning. Also enhances priority for people walking and makes the side road crossing easier and more convenient for people walking by maintaining the continuity of the route at footway level.



Raised junction

Similarly to the raised table a raised junction encourages motorists to reduce speeds at a junction. Also provides crossings to all arms of a junction and facilitates uncontrolled pedestrian crossings.

Source: Google Street View



Wayfinding system

Improves the coherence of the walking network, making it easier for people navigate through the town and encouraging more trips to be taken by foot. A consistent system should be applied town-wide.

Example Design Tools - Walking



Lower speed limits

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. A town-wide policy could also be considered rather than changes on a street by street basis.



Raised loading/Parking pad

Reallocates carriageway space to the footway, providing a wider, more comfortable pedestrian environment. The pads may be used for servicing or parking as needed, but allows a more flexible use of space to better accommodate pedestrians. *Source: Google Street View*



Review on-street parking

Create a more attractive and safer walking environment and allow safer and easier informal crossings, improved visibility and provide wider footways. This will be informed by parking utilisation surveys during feasibility design.



Pedestrian/Cyclist Priority Street

Reduces vehicle dominance of the street and prioritises people walking and cycling. Elements may include a shared space environment, raised carriageway and removal of kerbs to provide a more flexible space for all users, materials to delineate space for different users, and low traffic speeds (e.g. 10mph).



One-way system

Reallocates space from the carriageway to footways and parking. Reduces conflicts at junctions.



Chicane

Traffic calming measure to create pinch points at residential streets to reduce vehicular speeds and improve pedestrian environment. The buildouts for the chicanes can be used as uncontrolled crossings with reduced crossing distance.

Example Design Tools - Walking



Public realm improvements

Redesign of a street to create a more vibrant and attractive street environment. Key aspects include footway widening, and resurfaced footways with blocked paving, street trees, and raising the carriageway to the footway level. Parking spaces can be provided on the footway level using different materials to delineate different users.

Source: Urb-i, Google Street View

Phase 1 Proposed Walking Improvements

This chapter proposes potential design measures to enhance the walking network in the core walking zones in Phase 1. The proposed measures are high level and identify design concepts for consideration in the next stage of design. They seek to address issues and deficiencies identified during the audit activities, as well as to incorporate proposals from previous studies.

For walking, this includes a range of strategies from relatively minor interventions (e.g., improved dropped kerbs and tactile paving) to new crossings, footway widening, public realm improvements and reconfiguration of the public highway. All proposed measures would be subject to varying levels of additional analysis and future feasibility design¹.

Specific measures, such as traffic speed reduction and further parking restrictions will require further consultation in the next stages of the design following surveys to estimate the impact of the proposals. Representatives of groups of people with disabilities and mobility issues will be further engaged in the design so that interventions cater their needs in the most appropriate way.

The proposed improvements are presented by core walking zone on the following pages. While these proposals are focused along the primary walking routes within the core walking zones, they also provide examples of the types of improvements that can be implemented borough-wide as needs or opportunities arise.

It is noted that some of the desirable locations for active travel improvements are privately owned and are not within SCC's publicly maintained roads. As such, collaborative working with the respective owners will be required to explore opportunities to improve conditions for active travel.

¹ This is a concept design. All the proposed interventions are subject to topographic survey, traffic modelling, parking surveys, utilities' survey and availability of land.

Additionally, consideration will need to be given during subsequent development phases to review and co-ordinate future opportunities for integration with other active travel improvements, including those identified within the long-list network and those which may be progressed in addition to the LCWIP proposals.

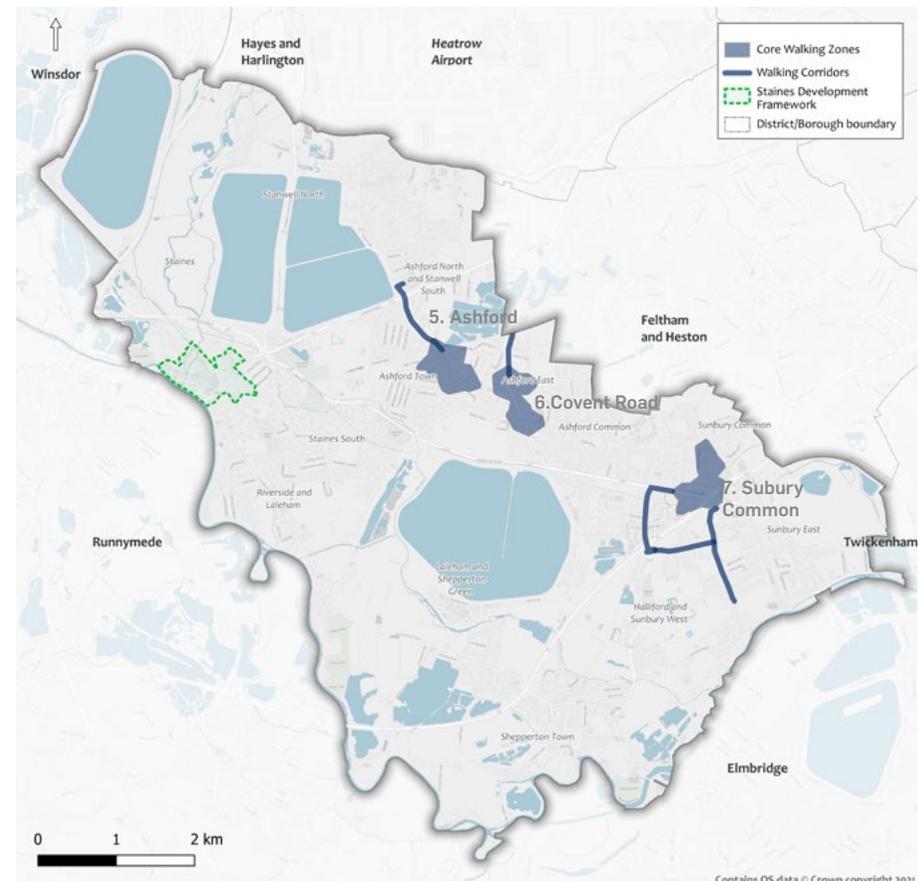


Figure 114. Phase 1 core walking zones and walking corridors

Core Walking Zone 5: Ashford

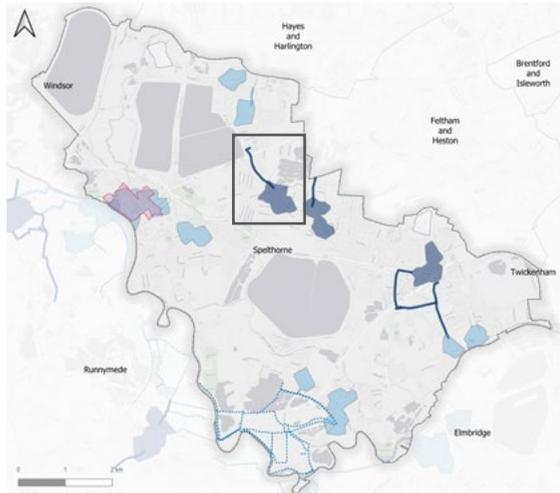


Figure 116. Location Map

Legend

- Core Walking Zone
- Affected walking corridor
- Zebra crossing
- Parallel crossing
- Signalised pedestrian/cyclist crossing
- Raised junction
- Side road treatment
- Public realm improvements
- Footway widening
- Footway resurfacing
- Cycle proposals
- Proposed cycle route
- Railway Station
- Bus Stop

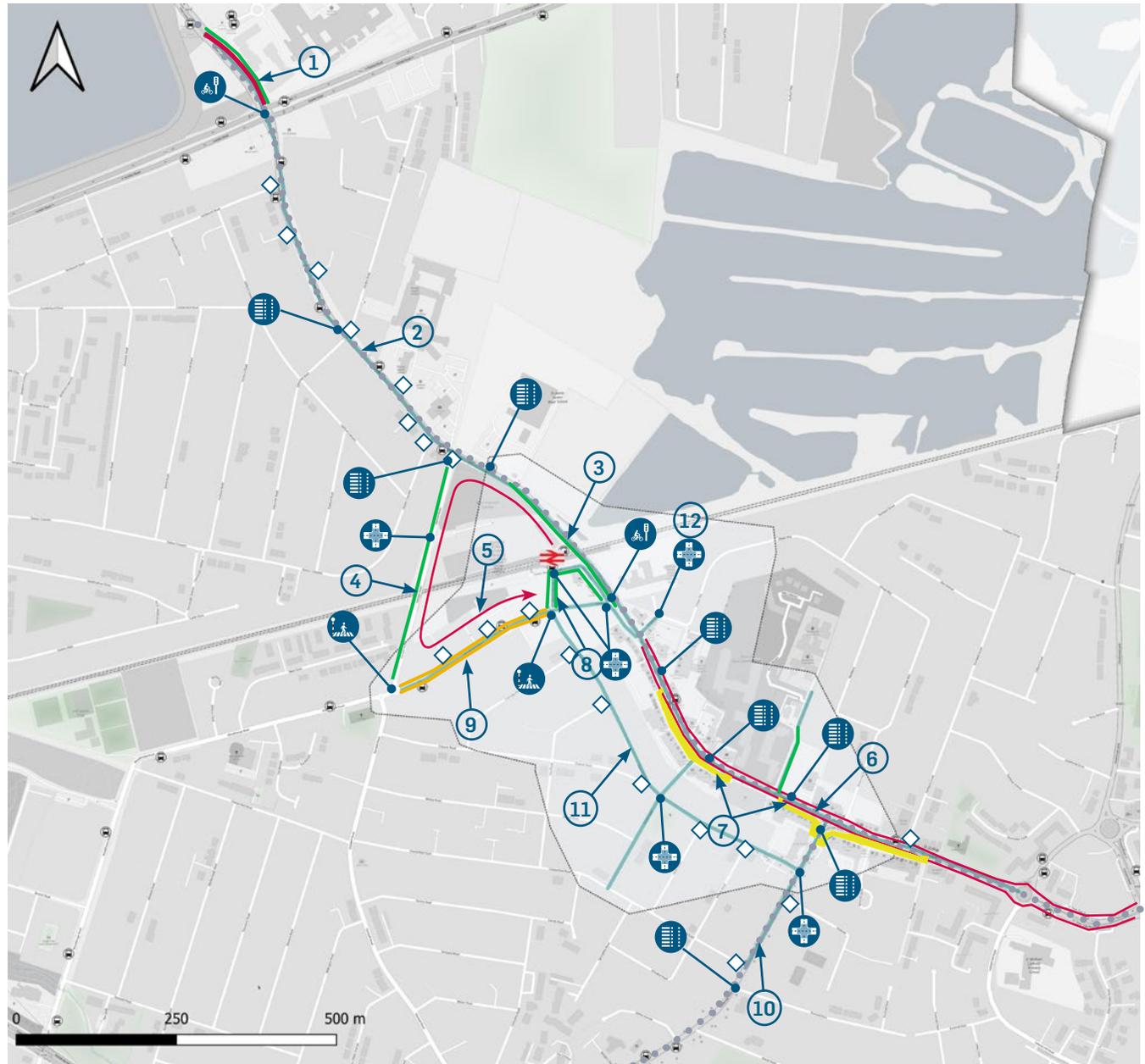


Figure 115. Core Walking Zone 5: Ashford

Key Improvements:

① Town Lane: Widen the footway and extend the existing cycle facilities along the road up to the A30 to improve the access to the hospital. Signalised pedestrian/cyclist crossings at all arms on the A30/Town Lane/Stanwell Road junction to be added, with reduced waiting times and extended green man time to provide access to Core Walking Zone 5 and Heathrow LCWIP proposed facilities. Opportunity for single stage crossings to be reviewed in the next stages of design following traffic modelling study.

② Stanwell Road: Reduce the speed limit to 20mph. Propose additional traffic calming measures to physically slow the traffic down. Raised side road entry treatments with reduced radii to reduce the speed of motorised vehicles and decrease pedestrians' crossing distance. Upgrade the uncontrolled crossing and the zebra crossing to parallel crossings. Additional proposals as in *Cycle Route 7*.

③ Church Road - railway bridge: Reduce speed limit to 20mph. Investigate the impact of removing the old wall on the bridge to join the footbridge with the footway on the railway bridge to improve the pedestrian environment and personal safety.

Longer term ambitious proposal: widen the bridge to accommodate footways on both sides of the carriageway and new cycle facilities.

④ Stanwell Road - railway bridge: Reduce speed limit to 20mph. Introduce parallel crossing at the northern end of the road for pedestrians and cyclists to safely cross the road to join the footway on the west side. Propose zebra crossings on the approach to the roundabout on the southern side.

Longer term ambitious proposals: 1. Widen the bridge to accommodate footways on both sides of the carriageway, 2. Propose section of Stanwell Road as one-way northbound for opportunity to reallocate space from the carriageway for new pedestrian and cycle facilities.



Figure 117. Footbridge on Church Road isolates pedestrians' movements and reduces personal safety

⑤ *Longer term ambitious proposal: Propose one-way system (counter-clockwise) along Church Road - Stanwell Road - Woodthorpe Road for opportunity to reallocate space from the carriageway for new footways on both sides of the road and opportunity for new cycle facilities. The new cycle facilities will permit movements on both directions. Proposal to be reviewed in the next stages of design following traffic modelling study.*



Case Study:

One-way system to reallocate space for pedestrians in St Augustines St, Norwich UK. Top 2008, Bottom 2021

Source: Google Street View

- ⑥ Church Road: Reduce the speed limit to 20mph. Propose additional traffic calming measures to physically slow the traffic down. Raised side road entry treatments with reduced radii to reduce the speed of motorised vehicles and decrease pedestrians' crossing distance. Upgrade existing (uncontrolled and pelican) crossings to parallel crossings. Review needs for on-street parking and propose recessed parking on the level of footway where the available footway width is >4m. Liaise with Spelthorne Borough Council to consider whether there is scope to provide off-street parking at the development site for visitors with a low cost, if the parking study demonstrates that spaces in required. Additional proposals as in *Cycle Route 7*.
- ⑦ Church Road service roads: Propose as pedestrian and cycle priority street. Retain the one-way direction of the road. Raise the carriageway to footway level to provide a continuous pedestrian environment and lay sets on the surface. Use different materials to delineate space for different users and add tactile paving for visually impaired people. Introduce parking bays with a fee and time restrictions for visitors, using buildouts with planting and seating. Provide parking for blue badge holders.

- ⑧ Station Approach - Station Road: Widen the footways on the approach to the railway station. Review the needs of on-street parking on Station Approach for opportunity to rotate the parking bays and propose drop off locations for the station. Raise the junction on the approach to the entrance to the railway station. Restrict parking along Station Road.
- ⑨ Woodthorpe Road: Extend the public realm on Woodthorpe Road to the west. Fill in the bus stops' lay-bys, introduce buildouts at locations where parking is not permitted to control on-street parking and reduce the crossing distance for pedestrians. Reduce the speed limit to 20mph. Propose additional traffic calming measures to physically slow the traffic down. Raised side road entry treatments with reduced radii to reduce the speed of motorised vehicles and decrease pedestrians' crossing distance. Propose zebra crossings on the approach to the railway station and east of the roundabout.



Case Study:

Public realm improvements on a service road in Cranleigh, UK that can be used as an example for Church Road.
Source: Google Street View

- ⑩ Fordbridge Road: Reduce the speed limit to 20mph. Propose additional traffic calming measures to physically slow the traffic down. Raised side road entry treatments with reduced radii to reduce the speed of motorised vehicles and decrease pedestrians' crossing distance. Additional proposals as in *Cycle Route 9*.
- ⑪ Clarendon Road: Reduce the speed limit to 20mph. Indicate parking bays on both sides of the road with added buildouts that will allow shorter crossings for pedestrians and create a chicane to lower traffic speeds. Raised side road entry treatments with reduced radii to reduce the speed of motorised vehicles and decrease pedestrians' crossing distance. Raise Dudley Road/Clarendon Road junction to reduce speeds.
- ⑫ Village Way: Upgrade the pelican crossings to parallel crossings. Raise the junction to Clarendon Primary School to reduce traffic speeds. Make existing parking bays on the northern side the road as drop-off areas for students during school peak hours.

Additional proposals throughout the town:

- Ⓐ Add wayfinding along the walking routes. Provide information on key trip attractors, such as, Ashford Railway Station, Ashford Hospital, schools, car park etc. Proposed wayfinding posts to be accessible to all.
- Ⓑ Opportunity for 20mph zone in Ashford to be reviewed in the next stages of design following traffic modelling study.

Core Walking Zone 6: Convent Road

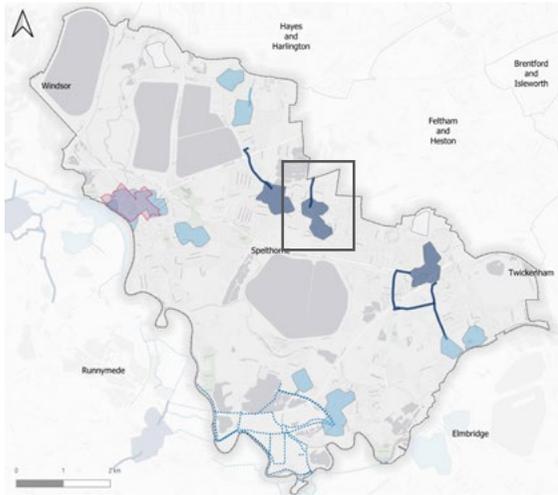


Figure 118. Location Map

- Legend**
- Core Walking Zone
 - Affected walking corridor
 - 🚶 Zebra crossing
 - 🚶 Parallel crossing
 - 🚶🚲 Signalled pedestrian/cyclist crossing
 - 🚶 Raised junction
 - ◊ Side road treatment
 - 🟡 Public realm improvements
 - 🟢 Footway widening
 - 🟠 Footway resurfacing
 - 🔴 Cycle proposals
 - Proposed cycle route
 - 🚌 Bus Stop



Figure 119. Core Walking Zone 6: Convent Road

Key Improvements:

- ① **Feltham Road:** Add zebra crossings on the approach to both of the roundabouts. *Longer term ambitious proposal: one-way southbound to reallocate space from carriageway to widen the footways.*
- ② **Feltham Hill Road:** Add buildout to propose single file traffic along the school entrance and reduce the speed limit. Propose cycle by-pass at the buildout to allow cyclists' movements. Add a pedestrian crossing on the buildout to allow students to safely cross the road. Widen the footways where feasible. Reduce the speed limit to 20mph. Propose additional traffic calming measures to physically slow the traffic down. Raised side road entry treatments with reduced radii to reduce the speed of motorised vehicles and decrease pedestrians' crossing distance. *Longer term ambitious proposal: one-way southbound to reallocate space from carriageway to widen the footways.*
- ③ **Service roads:** Public realm improvements to improve pedestrian environment. Raise the carriageway to footway level to provide a continuous pedestrian environment and lay setts on the surface. Use different materials to delineate space for different users and add tactile paving for visually impaired people. Introduce parking bays using buildouts with planting and seating. Add planting and seating.



Figure 120. School's entrance where the buildout is proposed

- ④ **Covent Road east service road:** Propose as one-way southbound pedestrian and cycle priority street. Reduce speed limit to 20mph. Raise the junctions with the side roads and reduce the radii to provide a continuous environment for pedestrians and physically slow down the traffic. Widen the central island and close the opening to the B378 to reduce the traffic on the service road. Resurface the footways. Introduce parking bays using buildouts with added planting, on one side of the road. Widen the central island and improve the bus stop facilities. Introduce seating and sheltered areas in the vicinity of the shops. Additional proposals as in *Cycle Route 7*.

- ⑤ **Convent Road:** Upgrade the crossings at the signalised junctions to signalised pedestrian/cyclist crossings. Reduce waiting times and extend crossing times. Add a signalised pedestrian/cyclist crossing at Town Tree Road/ Convent Road junction. Additional proposals as in *Cycle Route 7*.
- ⑥ **School Road:** Reduce speed limit to 20mph. Resurface the footways to improve access to the school. Provide a school drop-off point at the service road. Raised side road entry treatment at Ashford Ave and Denman Drive with reduced radii to reduce the speed of motorised vehicles and decrease pedestrians' crossing distance. Upgrade the pelican crossing to signalised pedestrian/cyclist. Additional proposals as in *Cycle Route 7*.



Figure 121. Covent Road east service road: poor footway surface quality, wide carriageway, narrow waiting area at the bus stop, and vehicles exiting on the main road at several locations increasing the risk of collision.

- ⑦ Park Road - Chalmers Road: Reduce speed limit to 20mph. Indicate parking bays on both sides of the road that create a chicane to lower traffic speeds. Raise the junctions on the approach of the schools to provide a continuous environment for pedestrians and physically slow down the traffic. Raised side road entry treatments with reduced radii to reduce the speed of motorised vehicles and decrease pedestrians' crossing distance. Propose a zebra crossing on Feltham Hill Road to improve the access to Park Road.
- ⑧ Feltham Road: Reallocate space from hatched median to widen northern footway to improve the access to the shops. Resurface southern footway at the extent of the road. Upgrade the uncontrolled crossing to a zebra crossing.
- ⑨ Clockhouse Lane: Reallocate space from the carriageway to widen the eastern footway between the shops and Ashford Recreation Ground. Resurface the western footway and improve the side road crossings with raised tables and reduced radii. Upgrade existing uncontrolled crossing to a signalised pedestrian/cyclist crossing and provide an additional signalised pedestrian/cyclist crossing at the southern end of the railway bridge.

- ⑩ Improve access to Bedfont Lakes Country Park via Clockhouse Lane:
 - Option 1:** New footbridge on the east side of the existing railway bridge. Option will require land acquisition.
 - Option 2:** Single file traffic with traffic signals on the railway bridge to reallocate space from the carriageway for new footways. Option will have a significant impact on the traffic flows.
 - Option 3:** One-way system southbound to reallocate space from the carriageway for new footways (northbound direction to use Bedfont Road). Traffic modelling is required to estimate the impact of the proposal.
 - Option 4:** New railway lines' underpass east of Clockhouse lanes. Pedestrians will have access from Feltham Road

Additional proposals throughout the town:

- Ⓐ Add wayfinding along the walking routes. Provide information on key trip attractors, such as, Ashford Railway Station, Bedford Lakes, Ashford Recreation Ground, schools etc. Proposed wayfinding posts to be accessible to all.
- Ⓑ Opportunity for 20mph zone in Ashford to be reviewed in the next stages of design following traffic modelling study.



Figure 122. Clockhouse Lane on the approach to the railway bridge. No footways are provided on the bridge and the speed limit increases from 30mph to 40mph on the bridge moving southbound. The bridge is narrow and due to the high traffic flows, there is no opportunity for a footway in the existing widths.

Core Walking Zone 7: Sunbury

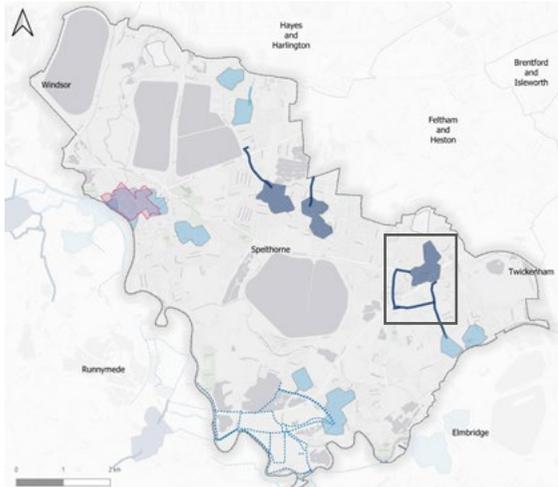


Figure 123. Location Map

Legend

- Core Walking Zone
- Affected walking corridor
- Zebra crossing
- Parallel crossing
- Signalised pedestrian/cyclist crossing
- Raised junction
- Side road treatment
- Public realm improvements
- Footway widening
- Footway resurfacing
- School Street
- Cycle proposals
- Proposed cycle route
- Railway Station
- Bus Stop

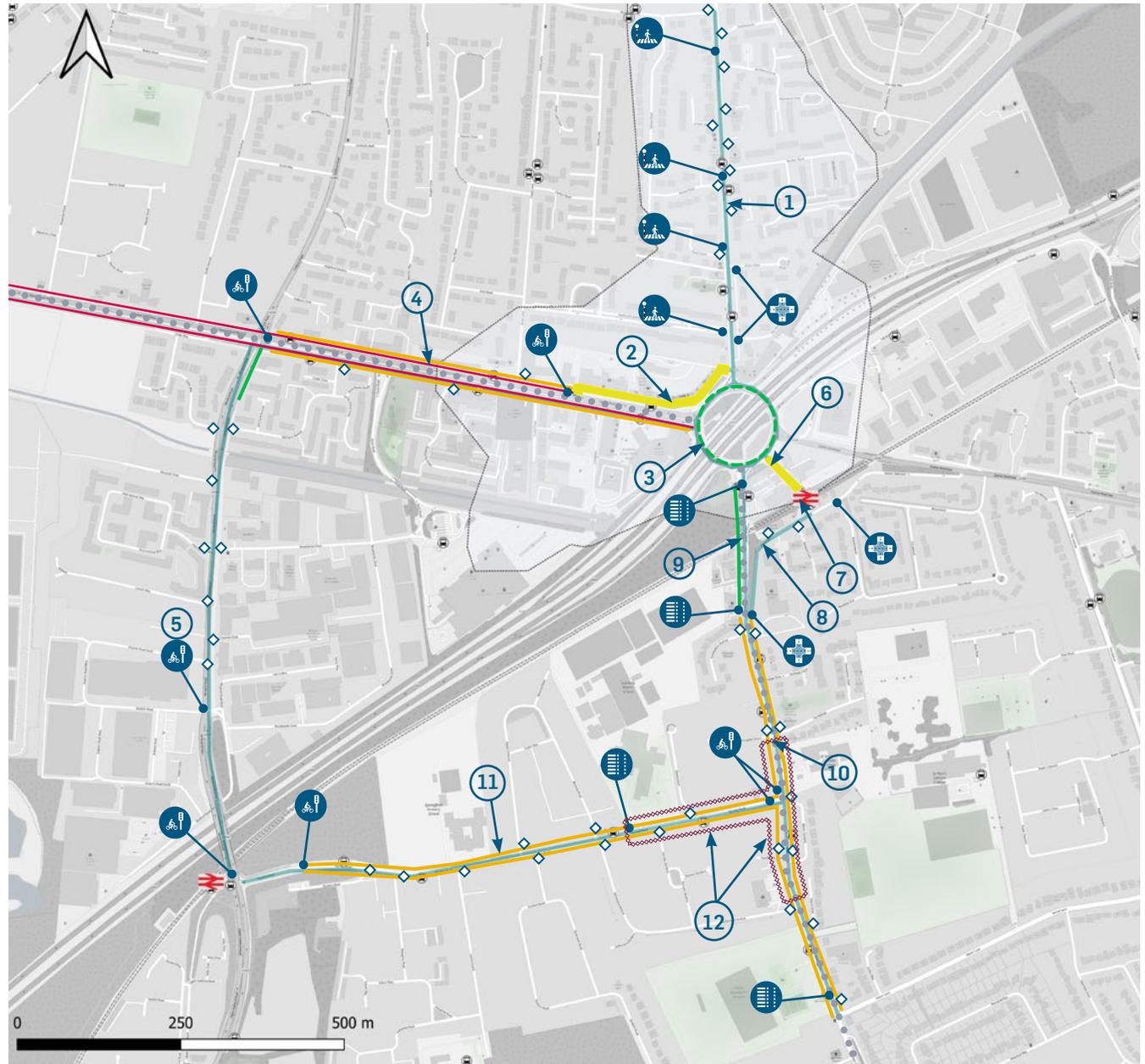
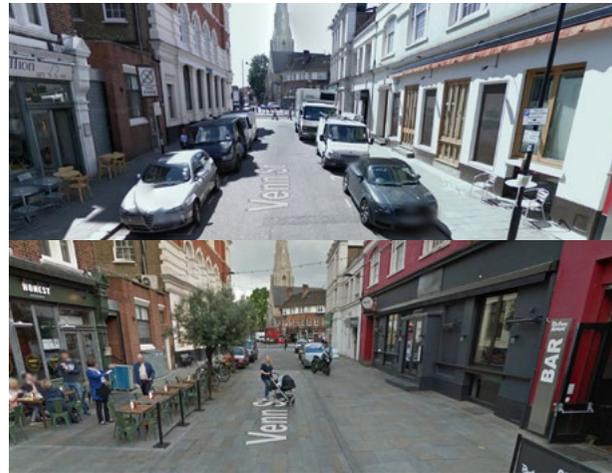


Figure 124. Core Walking Zone 7: Addlestone

Key Improvements:

- ① **Vicarage Road:** Reduce the speed limit to 20mph. Indicate parking bays on both sides of the road that create a chicane to lower traffic speeds and propose additional traffic calming measures to physically slow the traffic down. Raised side road entry treatments with reduced radii to reduce the speed of motorised vehicles and decrease pedestrians' crossing distance. Upgrade uncontrolled crossings to zebra crossings and propose additional zebra crossings on the approach of Wolsey Road bus stops and on Heathcroft Ave. Propose raised junctions at the service road to reduce traffic speeds and provide a continuous pedestrian environment.
- ② **The Parade:** Propose as pedestrian and cycle priority street. Raise the carriageway to footway level to provide a continuous pedestrian environment and lay setts on the surface. Use different materials to delineate space for different users and add tactile paving for visually impaired people. Introduce parking bays with a fee and time restrictions using buildouts with planting and seating. Provide parking for blue badge holders. Retain one-way direction and introduce a contra flow cycle lane. Additional proposals as in *Cycle Route 3*.



Case Study:

Pedestrian and cyclists priority street on Venn Street in London UK, including public realm improvements, parking bays and planting. Source: Google Street View

- ③ **Sunbury Cross Roundabout:** Propose at-grade crossings for pedestrian and cyclists. See cycle proposals at *Route 3: A308/Kingston Road - Sunbury Cross Roundabout*
- ④ **Staines Road W:** Resurface footways and propose cycle facilities. Add raised tables at side roads with crossings for pedestrians and cyclists. Additional proposals as in *Cycle Route 3*.

- ⑤ **Windmill Road - Upper Halliford Road:** Reallocate space from the carriageway to widen the footway on the approach to Staines Road W. Propose raised side road entry treatments with reduced radii to reduce the speed of motorised vehicles and decrease pedestrians' crossing distance. Add signalised pedestrian/cyclist crossings at the signalised junctions
- ⑥ **Station Road:** Propose as pedestrian and cycle priority street. Raise the carriageway to footway level to provide a continuous pedestrian environment and lay setts on the surface. Introduce parking bays with time restrictions for drop-off/pick up only.



Case Study:

Public realm improvements on the approach to the railway station, including raised carriageway, parking restrictions and limited pick up / drop off areas. Eastbourne Railway Station, Eastbourne UK. Source: Urb-i & Google Street View

- ⑦ *Longer term ambitious proposal: Propose new pedestrian and cycle bridge over the rail lines at Sunbury Railway Station. Proposed bridge to be accessible to all.*
- ⑧ **Station Approach:** Reduce the speed limit to 20mph. Propose raised junction to physically reduce the traffic speed. Widen the footway on the approach to the railway station. Propose raised side road entry treatments with reduced radii to reduce the speed of motorised vehicles and decrease pedestrians' crossing distance.
- ⑨ **Green Street - rail bridge:** Reduce speed limit to 20mph. Provide parallel crossings at both ends of the bridge for pedestrians and cyclists to access the footway on the west side.
Longer term ambitious proposal: widen the bridge to accommodate footways on both sides of the carriageway and new cycle facilities.
- ⑩ **Green Street:** Reduce the speed limit to 20mph. Propose additional traffic calming measures to physically slow the traffic down. Raised side road entry treatments with reduced radii to reduce the speed of motorised vehicles and decrease pedestrians' crossing distance. Upgrade the pedestrian crossing at the traffic lights to signalised pedestrian/cyclist crossing and the uncontrolled crossing on the approach to Cedars Recreational Ground to parallel crossing. Resurface footways at the extent of the road. Additional proposals as in *Cycle Route 18*.

- ⑪ **Nursery Road:** Reduce the speed limit to 20mph. Indicate parking bays on both sides of the road that create a chicane to lower traffic speeds and propose additional traffic calming measures to physically slow the traffic down. Raised side road entry treatments with reduced radii to reduce the speed of motorised vehicles and decrease pedestrians' crossing distance with added pedestrian crossings. Upgrade the pedestrian crossing at the traffic lights to signalised pedestrian/cyclist crossing, the uncontrolled crossing on the approach to the Leisure Centre to parallel crossing, and propose a signalised pedestrian/cyclist crossing on the approach to the off-street path to Upper Halliford Railway Station. Resurface footways at the extent of the road. Propose a dedicated pick up/drop off area on a vacant land on Upper Halliford Railway Station for the education facilities on Nursery Road (to be investigated during the feasibility design stage) Additional proposals as in *Cycle Route 18*.

- ⑫ *Longer term ambitious proposal: Propose sections of Green Street (between The Ridings and Sutherland Ave) and Nursery Road (between Nursery Gardens and Green Street) as school streets during school drop off/pick up peak hours (7.30-9am and 2.30-4pm) to improve the safety for the students. Buses and cycle to be permitted. Traffic will be diverted via The Avenue and via Sutherland Ave. On Nursery Road the northern footway will be indicated as drop off/pick up area.*

Additional proposals throughout the area:

- Ⓐ Add wayfinding along the walking routes. Provide information on key trip attractors, such as, railway stations, Sunbury Retail Park, schools, crossing points at Sunbury Cross etc. Proposed wayfinding posts to be accessible to all.
- Ⓑ Opportunity for 20mph zone in Lower Sunbury to be reviewed in the next stages of design following traffic modelling study.



Case Study:

Example of school street in Merton London UK.

Source: Google

Assessment of proposals

Following the concept design the proposed interventions were assessed using the Walking Route Assessment Tool (WRAT) with the same criteria used for the assessment of the existing situation of the walking corridors within the core walking zones.

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 within the core walking zone are presented in detail in Appendix 3: Walking Route Audit Tool (WRAT), for both the existing situation and the proposals. Table 6 presents the total scores of each category in the existing situation and Table 7 the score if the interventions were implemented¹, and the improvement of the score on each category.

By undertaking the WRAT it helps to show which options provide the greatest benefit when compared to a do-nothing scenario. This subsequently identifies which option should be promoted for further development.

¹ No 'longer term ambitious' proposals were included in the WRAT

Table 6. WRAT results - Existing situation

	Ashford	Convent Road	Sunbury
Attractiveness	65%	49%	52%
Comfort	64%	50%	53%
Directness	70%	64%	68%
Safety	64%	35%	51%
Coherence	36%	24%	42%
Total	63%	49%	55%

Table 7. WRAT results - Proposed interventions

	Ashford		Convent Road		Sunbury	
	Score	Improvement from existing	Score	Improvement from existing	Score	Improvement from existing
Attractiveness	75%	10%	70%	21%	62%	11%
Comfort	84%	20%	82%	32%	78%	24%
Directness	90%	21%	79%	14%	87%	19%
Safety	81%	17%	43%	9%	54%	2%
Coherence	85%	48%	80%	56%	84%	42%
Total	84%	21%	74%	25%	75%	20%

Coherence of the network seems to have the greatest improvement with the added priority features at the junctions for pedestrians.

Safety on the other hand is not as improved since the traffic flows through the town centres remain at high levels.



9. Route Prioritisation, Costings and Funding Opportunities

Introduction

Prioritisation of Routes

Indicative Cost Estimates

Funding Opportunities

Introduction

This section summarises the prioritisation of the implementation of the selected core walking zones and cycle routes and indicative scheme costs for each of the walking and cycle schemes.

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 SBC with which routes should be developed first. At this stage of the assessment, the route prioritisation is independent of cost.

Prioritisation of the Routes

Prioritisation of the long-list of routes

As mentioned in the previous sections a multi criteria framework was used to evaluate the options of the proposed corridors (see page 124 for core walking zones and on page 92 for cycle corridors). The framework identified the Phase 1 core walking zones and cycle corridors from the aspirational list of options, the three core walking zones and the five cycle corridors that performed better in the assessment.

The framework is used to determine the time-scales for delivery of improvements categorising the core walking zones and the cycle corridors into:

- » Short Term (2 year plan implementation) - Phase 1
- » Medium and Long Term (10 year plan implementation) - Phase 2

Phase 2 core walking zones and cycle corridors will be classified into two categories (Medium Term and Long Term) to suggest an order of the implementation of the remaining 7 core walking zones and 13 cycle corridors, that will have the greater benefit for users.

Secondary core walking zones (that were not included in the assessment) are categorised as Phase 3 core walking zones.

For cycling, during the early engagement workshops (workshop #1) local stakeholders noted the importance of several links in the borough, which during the analysis of the background information do not seem to have an immediate benefit for the users, have lower propensity for cycle commuter trips, or significant constraints for the implementation. These routes are included in the aspirational list of the cycle network and categorised as Phase 3 cycle corridors. These corridors were not included in the multi criteria assessment.

The time-scales for the implementation for Phase 3 core walking zones and cycle corridors are longer (20 year plan).

Table 8. Prioritisation table for the aspirational list of core walking zones

Core Walking Zone	Priority / Timescale
7. Sunbury Common	High/Short Term
1. Staines-Up-On-Thames ¹	High/Short Term
5. Ashford	High/Short Term
6. Convent Road commercial area	High/Short Term
9. Shepperton	Medium/Med. Term
2. Kingston Road	Medium/Med. Term
8. Sunbury on Thames	Medium/Med. Term
5. Clare Road commercial area	Low/Long Term
10. Littleton	Low/Long Term
4. Stanwell High Street	Low/Long Term
Stanwell Moor	Phase 3
Felthamhill	Phase 3

¹ Staines Up-On Thames scored high in the MCAF, but it was not included in the Phase 1, since the Staines Development Framework is addressing the issues in the area, however it is considered of high priority in the borough

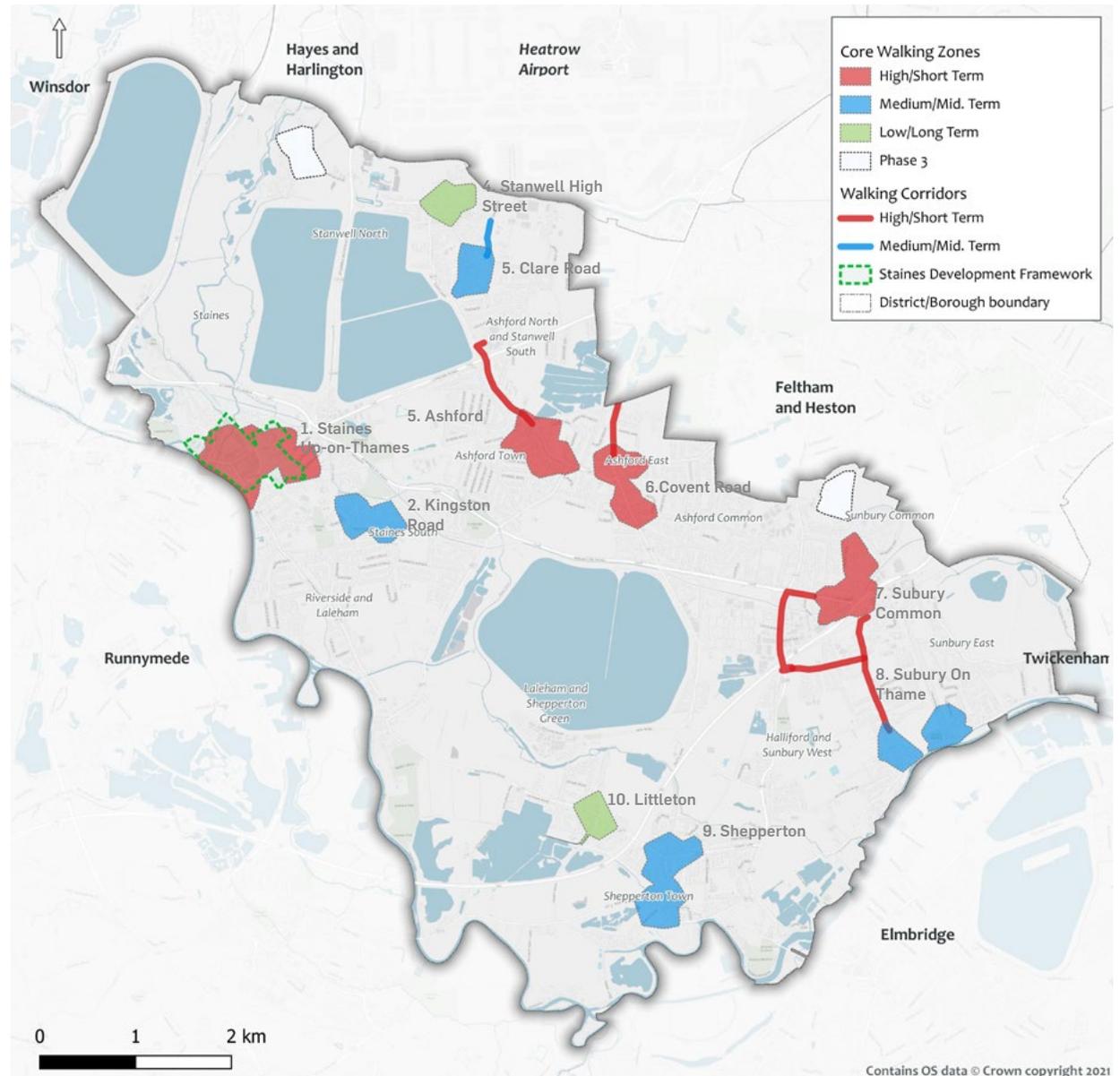


Figure 125. Prioritisation for the aspirational list of core walking zones

Table 9. Prioritisation table for the aspirational list of Cycle Corridors

Cycle Corridor	Priority / Timescale
3. A308 / Kingston Road	High/Short Term
18. Green Street	High/Short Term
7. Stanwell Road	High/Short Term
11. Laleham Road ¹	High/Short Term
9. Ashford / Fordbridge Roads	High/Short Term
1. Renfree Way ¹	High/Short Term
6. Staines / Laleham Road	Medium/Med. Term
2. Upper Halliford / Cadbury	Medium/Med. Term
8. Feltham Hill Road	Medium/Med. Term
14. Staines Road East	Medium/Med. Term
4. Laleham Park / Thames Side	Medium/Med. Term
12. Thames Street/Halliford Road	Medium/Med. Term
16. Oakington Dr	Medium/Med. Term
13. Woodthorpe Road	Low/Long Term
19 Stanwell Moor Road	Low/Long Term
10. Fordbridge Road Sunbury	Low/Long Term
15. Thames Path	Low/Long Term
17. Brookside Ave	Low/Long Term
5. Wraysbury Rd	Low/Long Term

¹ Corridors 11 and 1 scored high in the MCAF, but they were not included in the Phase 1 corridors as they are part of River Thames Scheme proposals, however they are considered of high priority in the borough

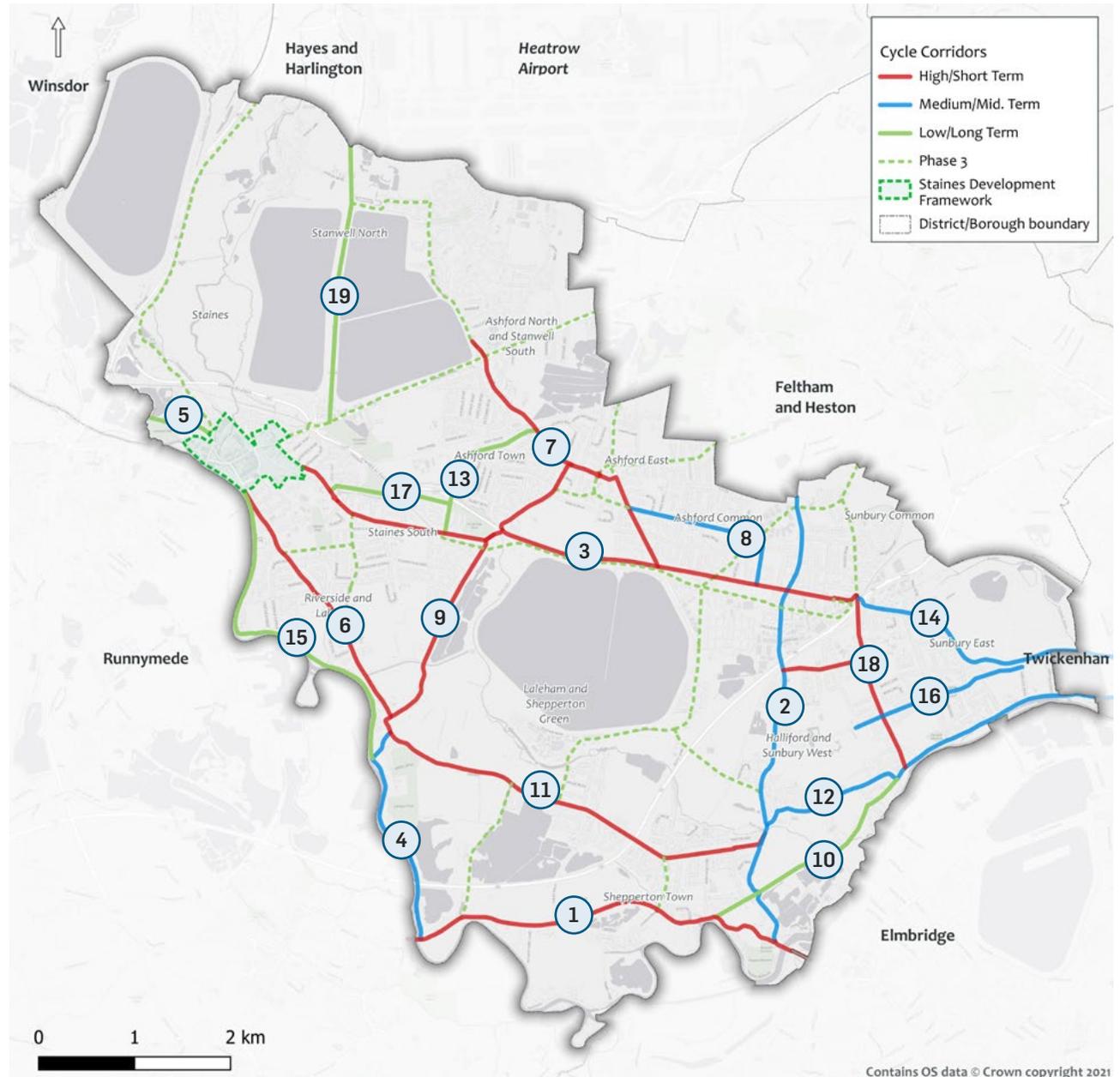


Figure 126. Prioritisation for the aspirational list of Cycle Corridors

Assessment of the Phase 1 routes

The core walking zones and cycle routes included in Phase 1 were assessed using the criteria summarised below. The further assessment of the routes will assist SCC and SBC to understand which walking routes within the Phase 1 core walking zones¹ and which cycling routes have the greater benefits for users. A further assessment was undertaken using additional criteria to the previous prioritisation. Criteria were rated on a scale from 1 to 3 (low to high) and include assessment of the proposed interventions.

Scoring Criteria

Demand Criteria

- » Residents' demand: Based on Surrey's Covid-19 Active Travel Improvements interactive map that includes geolocated public suggestions for active travel improvements were used to estimate the demand from active users for improvements.
- » Collision data: historic collisions along the routes referenced per km of the route.
- » Potential flows: a score was derived based on the highest existing pedestrian flows along each route, as estimated from the Propensity to Cycle Tool (PCT) data. For cycling an estimation on the increase of the users for each route was calculated from PCT data using the Go Dutch scenario.

¹ 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 has generally consistent characteristics (e.g., geometry, land use, etc.) and the LCWIP proposals have a similar approach along each link.

- » Cycle Network Connectivity [cycling only]: based on the existing Route Selection Tool (RST) connectivity metric. Routes with a higher score have a greater number of links with the existing cycle network, and would therefore be expected to have a greater impact on overall network connectivity.

Quality of Improvements Criteria

The criteria intended to capture the potential of the improvements to encourage new walking and cycling trips.

- » Quality of design safety: based on the before/after RST and WRAT scoring. 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: based on the before/after RST and WRAT scoring. 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]: based on the before/after WRAT scoring. 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.

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 [walking only]
- » Other key destination (Green areas, Leisure centre, Business parks, etc.) [walking only]

Deliverability Criteria

Intended to reflect the deliverability/feasibility of the proposed schemes along the routes.

- » 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, or traffic changes
- » Dependency of other improvements [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 links.

- » Potential to improve existing conditions to a high and accessible standard [cycling only]: scores the compliance of the proposed interventions to the LTN 1/20 standards

Other criteria

- » Overall quality of the proposed route [walking only]: presents the total score of the WRAT assessment of the proposed interventions of the route
- » Contributes to improved cycling network [cycling only]: scores the connectivity of the proposed corridor with other cycle links in the area

Total Score and Factor Weighting

A score for each of the five criteria categories was calculated by averaging the sub-criteria within the category. To calculate a total score for each route, the main categories were then weighted as follows:

- » Demand - 15%
- » Quality of improvements - 25%
- » Access - 15%
- » Deliverability - 25%
- » Other - 20%

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 - Walking

The walking assessment table (Table 10) and the map presents the relative assessments of the walking routes in each core walking zone and their associated package of proposed interventions. Full details of the assessment can be found in Appendix 4: First phase assessments.

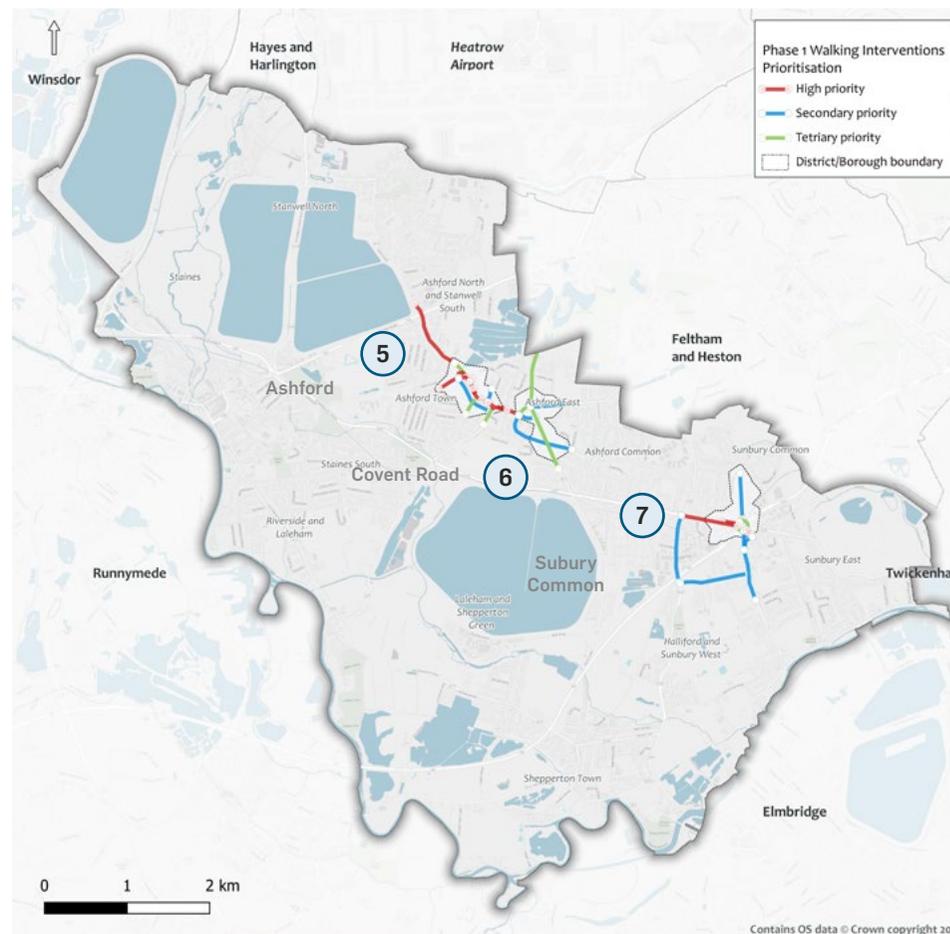


Figure 127. Prioritisation for the Phase 1 Walking links

Table 10. Prioritisation table for the Phase 1 Walking links

Core Walking Zone	Walking route	From	To	Score	Rank
5. Ashford	5.1 Stanwell Road	Ashford Hospital	St James Senior Boys School	80.4%	1
5. Ashford	5.6 Woodthorpe Road	Stanwell Road	Church Road	79.6%	2
5. Ashford	5.12 Church Road Service Road	Church Road	Church Road	78.8%	3
7. Sunbury	7.2 The Parade	Staines Road W	Vicarage Road	77.1%	4
5. Ashford	5.4 Station Road	Woodthorpe Road	Station Road	76.7%	5
5. Ashford	5.11 Village Way	Church Road	Clarendon Rprimary School	76.7%	5
5. Ashford	5.3 Church Road	Village Way	Felthamhill Road	76.3%	7
5. Ashford	5.9 Church Road Service Road	Church Road	Church Road	73.8%	8
7. Sunbury	7.8 Station Road	Railway Station	Sunbury Cros	70.0%	9
7. Sunbury	7.4 Staines Road W	Windmill Road	Sunbury Cros	69.6%	10
6. Convent Road	6.1 Feltham Hill Road	Church Road	Park Road	68.8%	11
5. Ashford	5.10 College Way	Church Road	Pike Cres	68.3%	12
7. Sunbury	7.6 Nursery Road	Windmill Road	Green Street	67.1%	13

Core Walking Zone	Walking route	From	To	Score	Rank
7. Sunbury	7.9 Station Approach	Green Street	Railway Station	65.8%	14
6. Convent Road	6.2 Town Tree Road	Feltham Hill Road	Convent Road	65.4%	15
6. Convent Road	6.5 Feltham Road	Convent Road	Park Road	65.4%	15
5. Ashford	5.5 Clarendon Road	Woodthorpe Road	Fordbridge Road	65.0%	17
7. Sunbury	7.1 Vicarage Road	Burgoyne Road	Sunbury Cros	64.6%	18
7. Sunbury	7.5 Windmill Road	Staines Road W	Nursery Road	63.8%	19
7. Sunbury	7.7 Green Street	Manor Lane	Sunbury Cros	63.8%	19
6. Convent Road	6.3 Convent Road	Feltham Road	Glenfield Road	62.9%	21
5. Ashford	5.2 Church Road	St James Senior Boys School	Village Way	59.2%	22
6. Convent Road	6.6 Clockhouse Lane	Feltham Road	Bedfont Lanes	57.5%	23
6. Convent Road	6.4 Feltham Road	Church Road	Convent Road	56.3%	24
5. Ashford	5.7 Fordbridge Road	Church Road	Casterfield Road	55.8%	25
5. Ashford	5.8 Dudley Road	Church Road	Casterfield Road	53.3%	26
7. Sunbury	7.3 Sunbury Cros - subways		Roundabout	51.7%	27

Assessment Results - cycling

The cycling assessment table presents the relative assessment of the cycling routes and their associated package of proposed interventions. Full details of the assessment can be found within Appendix 4: First phase assessments.

Table 11. Prioritisation table for the Phase 1 cycle corridors

Cycle corridor	Length (km)	Score	Rank
Route 7: Stanwell Road/Church Road and Convent Road/School Road	3.227	11.25	1
Route 9: Ashford/Fordbridge Roads	2.609	11.05	2
Route 3: A308/Kingston Road	6.186	9.85	3
Route 6: Staines/Laleham Road	3.021	8.8	4
Route 18: Green Street	2.717	8.6	5

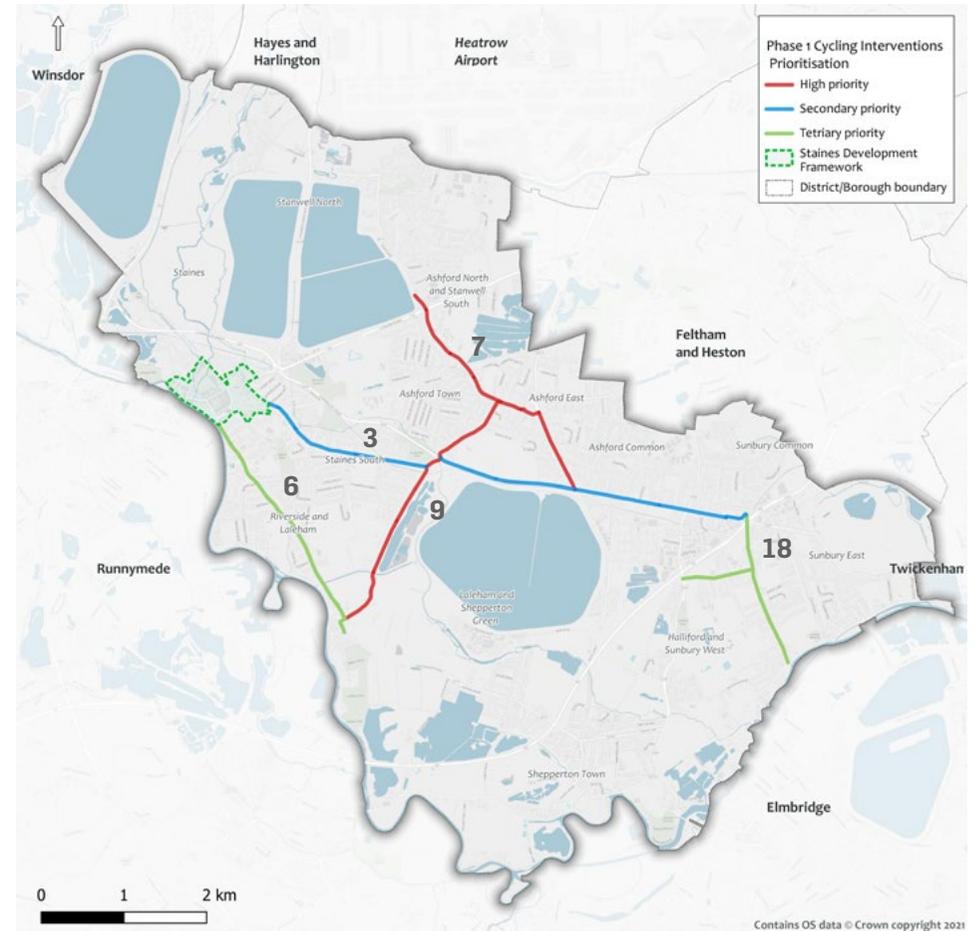


Figure 128. Prioritisation for the Phase 1 cycle corridors links

Indicative Cost Estimates

Methodology

Outline costs were estimated for the proposed design measures. 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.

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 DfT¹, Wiltshire Council², and Greater Manchester³ (e.g. type of crossing, type of cycle facility). Cost estimates were then calculated based on the approximate quantity of facilities proposed (e.g., 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 costs, the high cost was used to provide a more conservative estimate at this early concept stage.

1 Typical costs of cycling interventions, Interim analysis of Cycle City Ambition schemes, January 2017.

2 Costs of highway works, Wiltshire Council.

3 Greater Manchester Cycling design guidance, March 2014.

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. These will include what would be, at a later design stage, covered by multiple items in a bill of quantities⁴):

- » 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).

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).
- » Allowance for statutory undertakers diversions (15% of quantified costs).

4 An example would be length of Kerbing or area of new carriageway: Kerbing will be a single rate but in later stages this would include the kerb, kerb bed and kerb backing and for carriageway the later stages would separately identify, formation, capping, sub-base, road base, and surfacing.

Other assumptions:

- » Each option is delivered individually and so no estimate of the efficiency from a combined delivery is applied.
- » Price base year is 2017 and a 12% inflation increase was added on the sub total cost of the items.
- » 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.
- » The subtotals include costs for the short term proposals. Where alternative options are noted in the initial concepts, only the indicative cost of the main proposal is included (they do not include any long term ambitious proposals, such as full pedestrianisation, or one-way system).
- » The subtotals do not include consultation fees.
- » Does not include additional 'soft costs', such as design, traffic modelling, maintenance actions (e.g., trimming vegetation), lighting review, legal (e.g., traffic regulation orders), interim/pilot interventions, etc.
- » Does not include a provision for contingency
- » Does not include optimism bias

Estimated costs were tabulated by core walking zone and cycle route. Therefore, each core walking zone/cycle route and each mode (walking and cycling) were evaluated separately. This method provided a stand alone cost for each core walking zone and cycle route so they may be considered independently. However, if viewed as a network-wide package of improvements, there is opportunity for savings associated with a combined delivery programme.

The indicative cost estimates for the package of improvements along each cycle route and core walking zone are presented in Table 13 and Table 12, respectively. The unit cost references are summarised in “Appendix 5: Indicative Cost Estimates” on page 170

Table 12. Indicative high level costs for the cycling improvements

Route	Costs Subtotal
Cycle Corridors	
3. A308/Kingston Road	£11,850,000 ¹
6. Staines/Laleham Road	£6,905,000
7. Stanwell Road/Church Road and Convent Road/School Road	£5,360,000
9. Ashford/Fordbridge Roads	£6,485,000
18. Green Street	£2,465,000

¹ Proposal includes two-way cycle tracks on Sunbury Cross roundabout and new toucan crossings. Does not include closing of the subways (Estimated cost £1-1.5M)

Table 13. Indicative high level costs for the walking improvements

Route	Cost Subtotal
Core Walking Zones	
5. Ashford	£3,135,000
6. Convent Road	£4,025,000 ¹
7. Sunbury	£4,645,000

Funding Opportunities

There are a number of potential sources of funding available to deliver improvements identified in a LCWIP.

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: 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 such as Emergency Active Travel Fund and the Active Travel Fund. Government funding can also be made available for active travel improvements such as the cycle rail fund to improve cycle facilities at railway stations.

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 (Section 106) agreement or works can be agreed that the developer fully pays for.

Other sources may include surplus parking income and Local Economic Partnership (LEP) funding (Brighton LCWIP) and / or internal funding.

¹ Proposal does not include **Intervention 10: Link to Bedford Lakes**. There are 4 options proposed for the improvement to the access to the green area:

Option 1: New footbridge along the existing bridge: Estimated cost £2.5 - 4M

Option 2: Single file traffic with use of traffic lights: Estimated cost £750k - £1M

Option 3: One - way system: Estimated cost £1M - 1.5M

Option 4: New railway lines underpass: £2 - 3M



10. Conclusions

Interdependencies

Next Steps

Interdependencies

Synergy with other LCWIPs

There are numerous interdependencies across Surrey County Council and potentially other counties.

The development of Spelthorne LCWIP took into account other LCWIPs in adjacent areas, such as the borough wide Elmbridge and Runnymede LCWIPs, to ensure that the cycle network, in particular, is continuous and across boundaries. This has provided an opportunity for a joined-up approach amongst the three study areas.

Other LCWIPs are or will be under development in the near future¹ and a continuous synergy amongst all LCWIPs should be expected. Proposals from each should be reviewed together as an integrated package of strategies and interventions. This will 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.

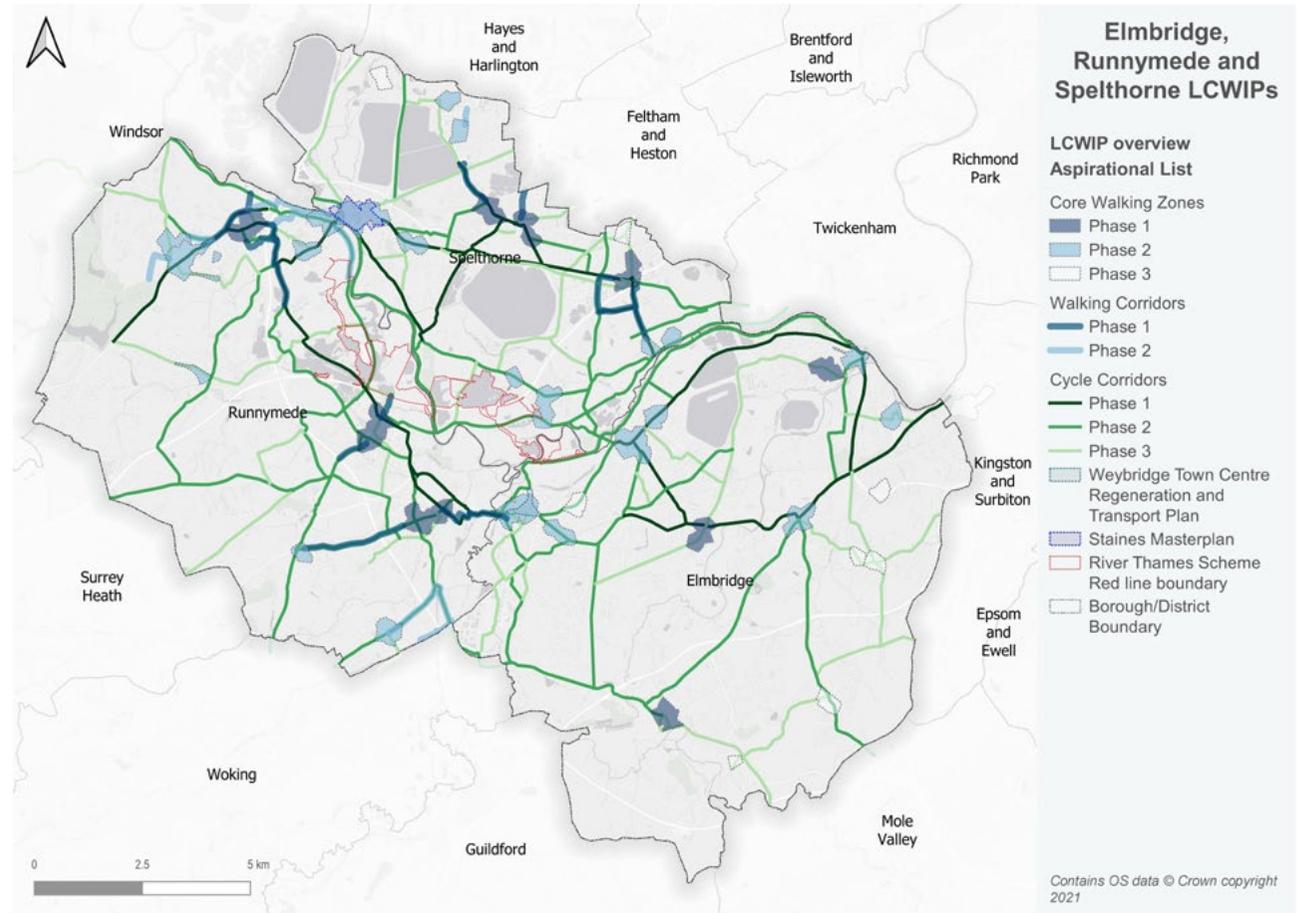


Figure 129. Spelthorne Borough Council and neighbouring boroughs LCWIPs with the River Thames Scheme red boundary

¹ Mole Vale, Waverley and Surrey Heath. Reigate and Banstead has just been completed.

Next Steps

The LCWIP report should be used to support the case for further stages of design, assessment and stakeholder engagement and 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 to progress to concept design at an appropriate time in the life of the LCWIP implementation. Whilst Phase 1 corridors have been progressed to concept designs the ultimate aim is to also deliver Phase 2 corridors too. New 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 mesh density.

Feasibility Design

The next stage of LCWIP implementation will be to advance the design concepts to feasibility design. This will allow a more detailed review of individual routes or interventions, evaluation of constraints, and refinement of the proposed design measures. There are several potential approaches to prioritising work in the next stage, such as:

Option 1: Advance Priority Routes in Full

This approach would seek to advance the routes identified as highest priority, including the full package of proposed interventions.

Option 2: Prioritise / Advance Individual Interventions

This approach would break down the routes 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 priority routes or identify potential quick wins across the entire LCWIP network.

Beyond concept design

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 reviewed and updated periodically, particularly in response to significant changes in local circumstances, such as the publication of new policies or strategies. However, engagement with SCC and SBC has been undertaken during the development of the LCWIP to provide alignment and future-proofing with regards to key transport and local policies.

The LCWIP outputs will be integrated into local planning and transport policies, strategies and delivery plans, as per the DfT guidance. 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.

The key outputs for an LCWIP are network plans for key walking and cycle corridors and a prioritised programme of infrastructure improvements at concept design stage. Once funding opportunities are secured, the proposed improvements can progress to preliminary and detail design phases for implementation.

Liveable Neighbourhoods

SCC are currently in the preliminary stages of identifying suitable neighbourhoods within the county to trial liveable neighbourhoods (LNs). LNs will be groups of residential streets, bordered by main or “distributor” roads, where “through” motor vehicle traffic is discouraged or removed. Not only will this help residential streets build a sense of place, but it will increase the walkability of streets and improve cycling conditions on these streets.

The work on LNs 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.



11. Appendices

Appendix 1: Multi-Criteria Assessment Framework (MCAF)

Appendix 2: Route Selection Tool (RST)

Appendix 3: Walking Route Audit Tool (WRAT)

Appendix 4: First phase assessments

Appendix 5: Indicative Cost Estimates

Appendix 6: Stakeholder meeting minutes

Appendix 7: Sustrans report

Appendix 1: Multi-Criteria Assessment Framework (MCAF)

CORE WALKING ZONES SCORE 75% & WALKING CORRIDORS 25%																	Total Score	% Score										
Category	Access						Demand		Existing pedestrian quality			Potential improvements		Stakeholder support				Network Priority	Rank	Access Score	Demand Score	Existing Quality Score	Potential Score	Stakeholder Score	Total Weighted Score	Network Priority	Rank	
Description	Links to key trip attractors (parks, Hospitals) (within 10min walk)	Schools (within 10min walk)	Bus Stops (# of stops) (within 10min walk)	Links to Rail Stations (within 10min walk)	River Thames Scheme Proposals (within 10min walk)	Development Sites (within 10min walk)	Total Population (within 10min walk)	Total Workplace Population (within 10min walk)	Posted Speed (for main CWZ corridor)	Traffic Flows (for main CWZ corridor)	Collision History (within the CWZ)	Potential to improve existing conditions to a high and accessible standard (along main CWZ corridor only)	Significant constraints or dependencies (along main CWZ corridor only)	Commonplace input (within CWZ)	Stakeholder support (workshop survey)													
Weighting	2	3	1	2	3	1	2	2	1	1	3	2	2	2	2													
Max Score	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3													
Scoring																												
1. Staines-Up-On-Thames CWZ	3	3	3	3	2	3	3	3	2	3	3	2	1	3	2	75	86%	High	1	92%	100%	93%	50%	83%	88%	High	2	
2. Kingston Road CWZ	2	3	3	3	1	2	3	2	2	2	1	3	3	1	1	60	69%	Med	5	75%	83%	47%	100%	33%	66%	Med	6	
3. Stanwell High Street CWZ	3	1	1	1	1	2	1	1	2	1	1	2	1	1	1	37	43%	Low	11	47%	33%	40%	50%	33%	40%	Low	10	
4. Stanwell local area CWZ	2	1	2	1	1	2	2	1	2	1	2	2	3	1	1	45	52%	Low	9	44%	50%	60%	83%	33%	51%	Low	8	
5. Ashford CWZ	2	2	2	3	1	3	3	2	2	2	3	2	2	1	3	63	72%	High	4	67%	83%	87%	67%	67%	75%	High	3	
6. Ashford local area CWZ	2	1	2	1	1	3	3	2	2	3	2	3	3	2	2	58	67%	Med	6	47%	83%	73%	100%	67%	71%	High	4	
7. Sunbury Commons CWZ	3	2	3	3	1	3	3	3	3	3	3	2	2	3	74	85%	High	2	75%	100%	100%	83%	83%	89%	High	1		
8. Sunbury on Thames CWZ	1	2	1	3	1	1	1	1	2	2	1	3	2	3	2	50	57%	Med	7	53%	33%	47%	83%	83%	56%	Med	7	
9. Shepperton CWZ	3	2	1	3	3	1	1	2	3	3	2	3	3	2	1	65	75%	High	3	81%	50%	80%	100%	50%	69%	Med	5	
10. Littleton CWZ	1	1	2	1	3	1	1	1	2	2	1	3	3	1	1	46	53%	Med	8	53%	33%	47%	100%	33%	48%	Low	9	
Feltham III CWZ	2	1	1	1	1	1	2	2	2	2	1	3	2	1	1	43	49%	Low	10									
Stanwell Moors CWZ	1	1	1	1	1	1	1	2	2	2	1	2	1	1	1	35	40%	Low	12									

Table 14. MCAF table for walking aspirational list

Cycle Corridors															Total Score	% Score	Rank (ascending)
Criterion	Link performance				Schools		Demand	Cycle Network		Deliverability							
Description		Non-commuter destinations served by corridor	Development Areas (number of dwellings)	Rail Station access (number of stations within 400m of route)	Public cycle collision rate (cycle collisions per km)	Number of Schools along corridor	School PCT (Go Dutch, number of daily school trips)	PCT Tool (Go Dutch, number of daily commuters)	Contributes to improved cycling network	Potential to improve existing conditions (to a high and accessible standard)	Ease of implementation	Commonplace Comments (comments per km)	Stakeholder feedback - Workshops (number of Stakeholder votes)				
Rating Rules	Length (km)	1 : no obvious ones 2 : a small number e.g. small parade of shops 3 : several e.g. a town centre	1: < 100 2: > 300 3: > 300	1: < 1 2: < 2 3: > 2	1: < 2 2: < 4 3: > 4	1: < 1 2: < 3 3: > 3	1: < 75 2: > 150 3: > 150	1: < 150 2: > 300 3: > 300	1: isolated link 2: limited links to other cycle routes or cycle-friendly roads 3: strong links, forms important extension/connection to other routes	1: very limited potential (e.g. narrow carriageway/footways, no verges) 2: moderate potential (e.g. space for a minimum width cycle track from existing wide lanes, centre hatching, verge etc.) 3: strong potential (space for a recommended-width cycle track, from existing wide lanes, centre hatching, verge etc.)	1: could require major junction treatment (e.g. new signals); significant works outside highway boundary or third party works (e.g. changes to a level crossing) 2: could be provided with moderate junction treatments; limited works outside highway boundary; expected interface with complex environments (e.g. town centres) 3: could be provided within the existing kerb lines, and with minimal junction treatment	1: < 3 2: > 5 3: > 5	1: < 2 2: < 4 3: > 4				
Weighting		2	1	2	2	2	3	3	2	2	2	3	3				
Max Score		3	3	3	3	3	3	3	3	3	3	3	3	78	100%		
1. Renfree Way	4.345	2	1	1	3	3	2	2	2	3	3	2	2	57	73%	6	3
2. Upper Halliford / Cadbury	4.892	1	2	2	3	1	2	2	3	2	2	2	3	55	71%	8	2
3. A308 / Kingston Road	6.2	3	3	3	3	3	3	3	3	2	1	2	3	70	90%	1	3
4. Laleham Park / Thames Side	2.394	2	1	1	1	2	2	2	2	2	3	1	2	47	60%	11	4
5. Wraysbury Rd	0.652	1	2	1	1	1	1	1	1	1	2	3	3	39	50%	19	5
6. Staines / Laleham Road	3.022	2	3	1	2	3	2	3	2	1	2	2	3	57	73%	6	6
7. Stanwell Road	3.135	1	3	2	3	3	2	3	2	1	3	2	3	61	78%	3	7
8. Feltham Hill Road	1.88	1	2	1	1	3	3	3	3	1	2	1	3	55	71%	8	6
9. Ashford / Fordbridge Roads	3.298	3	3	1	2	2	3	3	3	2	1	2	2	59	76%	5	5
10. Fordbridge Road Sunbury	2.457	1	2	1	3	2	1	1	2	2	3	2	1	43	55%	16	3
11. Laleham Road	4.33	2	1	2	3	3	3	2	2	2	2	2	3	61	78%	3	3
12. Thames Street / Halliford Road	5.088	2	1	1	1	2	3	1	1	1	3	2	2	45	58%	12	3
13. Woodthorpe Road	1.64	1	2	2	2	3	1	2	1	1	3	2	1	44	56%	14	3
14. Staines Road East	3.005	2	3	3	2	2	2	3	2	2	1	1	2	54	69%	10	3
15. Thames Path	3.766	3	3	1	1	2	2	1	2	2	1	2	1	43	55%	16	3
16. Oakington Dr	1.861	2	1	1	1	3	1	1	1	3	2	3	2	45	58%	12	3
17. Brookside Ave	1.339	2	2	1	2	2	1	1	1	3	2	3	1	43	55%	16	3
18. Green Street	2.717	3	1	2	1	3	3	3	3	2	3	3	3	66	85%	2	3
19. Stanwell Moor Road	2.867	2	1	1	1	1	1	2	2	3	3	1	2	44	56%	14	3

Table 15. MCAF table for cycling aspirational list

Appendix 2: Route Selection Tool (RST)

Local Cycling and Walking Infrastructure Plan: Route Selection Tool
ROUTE SUMMARY

Route Name	Route 3: A308/Kingston Road	
Overall Length	6.19	
Name of Assessor(s)		
Date of Assessment		
Performance Scores		
Criterion	Existing	Potential
Directness	5.00	5.00
Gradient	5.00	5.00
Safety	3.34	4.80
Connectivity	4.34	4.34
Comfort	0.07	3.50
Total	17.74	22.64

Route 3: A308/Kingston Road		
Directness	5	
Gradient	5	
Safety	3	
Connectivity	4	
Comfort	0	

Number of Existing Critical Junctions/Crossings	26
Number of Potential Critical Junctions/Crossings	0

Table 16. RST summary for Route 3

Local Cycling and Walking Infrastructure Plan: Route Selection Tool
ROUTE SUMMARY

Route Name	Route 6: Staines/Laleham Road	
Overall Length	3.02	
Name of Assessor(s)		
Date of Assessment		
Performance Scores		
Criterion	Existing	Potential
Directness	5.00	5.00
Gradient	4.48	4.48
Safety	1.00	4.73
Connectivity	5.00	5.00
Comfort	0.00	2.73
Total	15.48	21.93

Route 6: Staines/Laleham Road		
Directness	5	
Gradient	4	
Safety	1	
Connectivity	5	
Comfort	0	

Number of Existing Critical Junctions/Crossings	10
Number of Potential Critical Junctions/Crossings	0

Table 17. RST summary for Route 6

Local Cycling and Walking Infrastructure Plan: Route Selection Tool
ROUTE SUMMARY

Route Name	Route 7: Stanwell Road/Church Road and Convent Road/School Road	
Overall Length	3.23	
Name of Assessor(s)		
Date of Assessment		
Performance Scores		
Criterion	Existing	Potential
Directness	5.00	5.00
Gradient	5.00	5.00
Safety	1.00	5.00
Connectivity	5.00	5.00
Comfort	0.00	3.81
Total	16.00	23.81

Route 7: Stanwell Road/Church Road and Convent Road/School Road		
Directness	5	
Gradient	5	
Safety	1	
Connectivity	5	
Comfort	0	

Number of Existing Critical Junctions/Crossings	22
Number of Potential Critical Junctions/Crossings	0

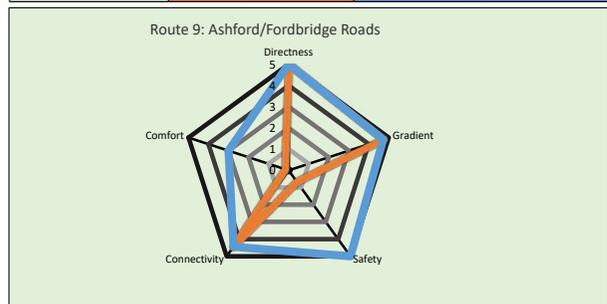
Table 18. RST summary for Route 7

Local Cycling and Walking Infrastructure Plan: Route Selection Tool

ROUTE SUMMARY

Route Name	Route 9: Ashford/Fordbridge Roads
Overall Length	2.61
Name of Assessor(s)	
Date of Assessment	

Criterion	Performance Scores	
	Existing	Potential
Directness	5.00	5.00
Gradient	4.72	4.72
Safety	0.66	5.00
Connectivity	4.45	4.45
Comfort	0.16	3.00
Total	14.99	22.17



Number of Existing Critical Junctions/Crossings	17
Number of Potential Critical Junctions/Crossings	0

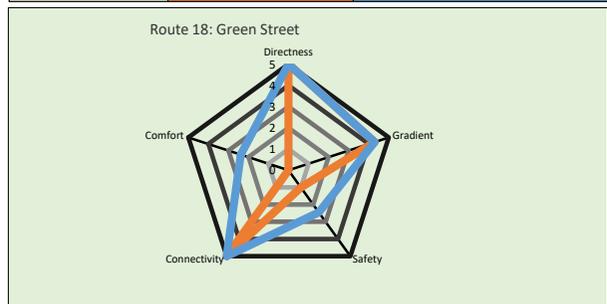
Table 19. RST summary for Route 9

Local Cycling and Walking Infrastructure Plan: Route Selection Tool

ROUTE SUMMARY

Route Name	Route 18: Green Street
Overall Length	2.72
Name of Assessor(s)	
Date of Assessment	

Criterion	Performance Scores	
	Existing	Potential
Directness	5.00	5.00
Gradient	4.30	4.30
Safety	1.00	2.45
Connectivity	5.00	5.00
Comfort	0.00	2.38



Number of Existing Critical Junctions/Crossings	13
Number of Potential Critical Junctions/Crossings	0

Table 20. RST summary for Route 18

Appendix 3: Walking Route Audit Tool (WRAT)

link	road_name	Start	End	length (m)	WRAT - SCORES					WRAT - PERCENTILE					WRAT - SCORES - PROPOSALS					WRAT - PERCENTILE - PROPOSALS					Improvement									
					Attractiveness	Comfort	Directness	Safety	Coherence	Total	Attractiveness	Comfort	Directness	Safety	Coherence	Total	Attractiveness	Comfort	Directness	Safety	Coherence	Total	Attractiveness	Comfort	Directness	Safety	Coherence	Total						
5.1	Stanwell Road	Ashford Hospital	St James Senior	896	9	14	9	4	3	39	75%	70%	64%	67%	50%	67%	9	18	13	5	5	50	75%	90%	83%	83%	86%	0	4	4	1	2	11	
5.2	Church Road	St James Senior	Village Way	288	4	11	9	3	3	30	33%	55%	64%	50%	50%	52%	8	16	11	4	6	45	67%	80%	79%	67%	100%	78%	4	5	2	1	3	15
5.3	Church Road	Village Way	Feltham Hill Road	752	8	14	8	2	2	34	67%	70%	57%	33%	33%	59%	11	20	12	4	5	52	92%	100%	86%	67%	83%	90%	3	6	4	2	3	18
5.4	Station Road	Woodthorpe Roa	Station Road	171	5	8	8	5	1	27	42%	40%	57%	83%	17%	47%	7	17	11	5	5	45	58%	85%	79%	83%	83%	76%	2	9	3	0	4	18
5.5	Claredon Roac	Woodthorpe Roa	Fordbridge Road	577	8	11	11	5	1	36	67%	55%	79%	83%	17%	62%	8	12	14	5	5	44	67%	60%	100%	83%	83%	76%	0	1	3	0	4	8
5.6	Woodthorpe R	Stanwell Road	Church Road	428	7	15	10	3	2	37	58%	75%	71%	50%	33%	64%	8	19	12	4	5	48	67%	95%	86%	67%	83%	83%	1	4	2	1	3	11
5.7	Fordbridge Ro	Church Road	Casterfield Road	266	10	14	14	4	4	46	83%	70%	100%	67%	67%	79%	10	17	14	5	5	51	83%	85%	100%	83%	83%	88%	0	3	0	1	1	5
5.8	Dudley Road	Church Road	Casterfield Road	256	8	12	12	6	2	40	67%	60%	86%	100%	33%	69%	9	12	14	6	5	46	75%	60%	100%	100%	83%	79%	1	0	2	0	3	6
5.9	Church Road	Church Road	Church Road	190	8	13	9	4	2	36	67%	65%	64%	67%	33%	62%	10	17	12	6	5	50	83%	85%	86%	100%	83%	86%	2	4	3	2	3	14
5.10	College Way	Church Road	Pike Cross	166	5	8	10	5	1	29	42%	40%	71%	83%	17%	50%	6	16	13	6	5	46	50%	80%	93%	100%	83%	79%	1	8	3	1	4	17
5.11	Village Way	Church Road	Clarendon Rima	40	8	15	13	5	0	41	67%	75%	93%	83%	0%	71%	9	17	13	5	6	50	75%	85%	83%	83%	100%	86%	1	2	0	0	6	9
5.12	Church Road	Church Road	Church Road	294	9	13	10	4	2	38	75%	65%	71%	67%	33%	66%	10	17	12	6	5	50	83%	85%	86%	100%	83%	86%	1	4	2	2	3	12
6.1	Feltham Hill R	Church Road	Park Road	926	7	11	12	3	2	35	58%	55%	86%	50%	33%	60%	8	15	13	4	5	45	67%	75%	93%	67%	83%	78%	1	4	1	1	3	10
6.2	Town Tree Ro	Feltham Hill Roac	Convent Road	216	5	12	8	3	2	30	42%	60%	57%	50%	33%	52%	9	17	12	3	5	46	75%	85%	86%	50%	83%	79%	4	5	4	0	3	16
6.3	Convent Road	Feltham Road	Glensfield Road	821	5	10	7	1	2	25	42%	50%	50%	17%	33%	43%	9	18	10	2	5	44	75%	90%	71%	33%	83%	76%	4	8	3	1	3	19
6.4	Feltham Road	Church Road	Convent Road	186	10	10	9	2	2	33	83%	50%	64%	33%	33%	57%	10	12	11	2	5	40	83%	60%	79%	33%	83%	69%	0	2	2	0	3	7
6.5	Feltham Road	Convent Road	Park Road	530	7	12	10	2	1	32	58%	60%	71%	33%	17%	55%	8	18	10	2	5	43	67%	90%	71%	33%	83%	74%	1	6	0	0	4	11
6.6	Clockhouse La	Feltham Road	Bedfont Lanes	733	4	7	7	2	0	20	33%	35%	50%	33%	0%	34%	8	16	10	2	4	40	67%	80%	71%	33%	67%	69%	4	9	3	0	4	20
7.1	Vicarage Road	Burgoyne Road	Sunbury Cros	564	10	11	9	3	2	35	83%	55%	64%	50%	33%	60%	10	15	12	4	5	46	83%	75%	86%	67%	83%	79%	0	4	3	1	3	11
7.2	The Parade	Staines Road W	Vicarage Road	279	8	11	11	4	2	36	67%	55%	79%	67%	33%	62%	9	17	14	4	5	49	75%	85%	100%	67%	83%	84%	1	6	3	0	3	13
7.3	Sunbury Cros	roundabout	roundabout	393	0	11	8	5	3	27	0%	55%	57%	83%	50%	47%	7	18	10	1	6	42	58%	90%	71%	17%	100%	72%	7	7	2	4	3	15
7.4	Staines Road W	Windmill Road	Sunbury Cros	686	5	10	7	1	3	26	42%	50%	50%	17%	50%	45%	8	16	11	1	5	41	67%	80%	79%	17%	83%	71%	3	6	4	0	2	15
7.5	Windmill Road	Staines Road W	Nursery Road	814	1	7	8	1	2	19	8%	35%	57%	17%	33%	33%	1	10	12	1	5	29	8%	50%	86%	17%	83%	50%	0	3	4	0	3	10
7.6	Nursery Road	Windmill Road	Green Street	842	8	11	13	5	2	39	67%	55%	93%	83%	33%	67%	9	18	14	6	5	52	75%	90%	100%	100%	83%	90%	1	7	1	1	3	13
7.7	Green Street	Manor Lane	Sunbury Cros	852	9	14	10	3	4	40	75%	70%	71%	50%	67%	69%	9	17	12	4	5	47	75%	85%	86%	67%	83%	81%	0	3	2	1	1	7
7.8	Station Road	Railway Station	Sunbury Cros	82	8	10	12	6	2	38	67%	50%	86%	100%	33%	66%	10	18	14	6	4	52	83%	90%	100%	100%	67%	90%	2	8	2	0	2	14
7.9	Station Appra	Green Street	Railway Station	204	10	10	9	5	1	35	83%	50%	64%	83%	17%	60%	10	13	10	5	5	43	83%	65%	71%	83%	83%	74%	0	3	1	0	4	8

Table 21. WRAT results for walking links - existing & proposals



Figure 130. WRAT Results - Existing, CWZ 5



Figure 131. WRAT Results - Proposals, CWZ 5



Figure 132. WRAT Results - Existing, CWZ 6



Figure 133. WRAT Results - Proposals, CWZ 6



Figure 134. WRAT Results - Existing, CWZ 7

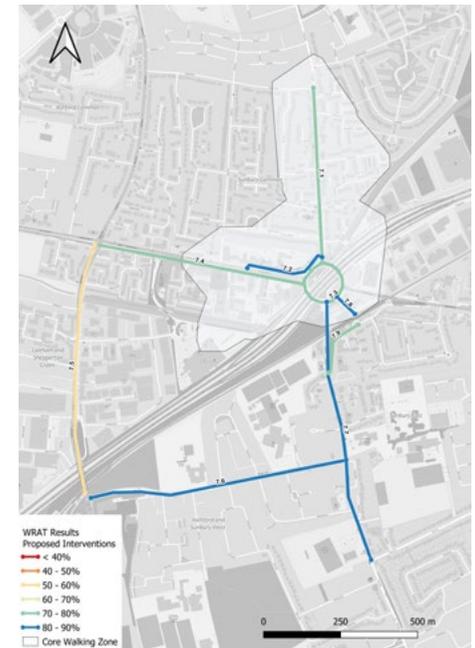


Figure 135. WRAT Results - Proposals, CWZ 7

Appendix 4: First phase assessments

CWZ link	road_name	Start	End	Quality of Improvements					Deliverability		Demand for improvements			Access				Total	%	Ranking	
				Attractiveness	Comfort	Directness	Safety	Coherece	Ease of implementation	Dependency to other improvements	Residents' comments / trips	PCT flows (trips on foot)	Collisions	Rail / Bus Station	High Street / Commercial Area	Schools/Other education	Other key destination				
				3: >80% 2: 0-20% 1: <70%	3: >20% 2: 0-20% 1: 0%	3: >30% 2: 20-30% 1: <20%	3: >20% 2: 15-20% 1: <15%	3: >20% 2: 0-20% 1: 0%	3: >60% 2: 40-60% 1: <40%	3: No significant constraints 2: Implementation will require further studies and engagement 1: Constraints to delay the implementation	3: No dependency 1: Dependent	3: >10 comments /km trips 2: <10 comments /km trips 1: No comments	3: >160 daily collisions /km trips 2: 80-160 daily 1: <80 daily trips	3: >15 collisions /km trips 2: 5-15 collisions /km trips 1: <5 collisions	3: bus stops & railway station 2: bus stops 1: no connection	3: Links to commercial area 1: No link to commercial area	3: Links to education facility 1: No link to education facility				3: Links to other key destination 1: No link to other key destination
5	5.1 Stanwell Road	Ashford Hospital School	St James Senior Boys School	3	1	2	3	2	1	3	3	2	3	2	2	1	1	3	53	74%	6
5	5.2 Church Road	School	St James Senior Boys School	2	3	2	2	2	2	1	1	2	2	3	3	1	1	4	45	63%	19
5	5.3 Church Road	Village Way	Village Way	3	3	2	3	2	2	1	0	3	2	3	3	3	3	3	57	79%	1
5	5.4 Station Road	Woodthorpe Road	Woodthorpe Road	2	2	3	3	1	3	2	3	0	3	3	3	3	3	1	56	78%	2
5	5.5 Clarendon Road	Woodthorpe Road	Woodthorpe Road	2	1	1	3	1	3	3	3	2	1	1	1	1	1	1	44	61%	20
5	5.6 Road	Stanwell Road	Church Road	3	2	2	2	2	2	3	3	0	2	2	2	3	3	1	54	75%	4
5	5.7 Fordbridge Road	Church Road	Church Road	3	1	1	1	1	2	1	2	2	2	1	1	1	1	1	36	50%	26
5	5.8 Dudley Road	Church Road	Casterfield Road	2	2	1	1	1	2	3	1	1	2	1	1	1	1	1	36	50%	26
5	5.9 Service Road	Church Road	Church Road	2	2	2	3	3	2	2	3	2	3	1	2	3	3	4	54	75%	4
5	5.10	College Way	Church Road	2	2	3	3	2	3	2	3	1	1	1	1	1	1	3	51	71%	8
5	5.11	Village Way	Church Road	3	2	1	1	1	3	3	3	3	2	3	1	1	1	1	49	68%	11
5	5.12	Service Road	Church Road	3	2	2	2	3	2	2	3	1	2	2	2	3	3	1	55	76%	3
6	6.1 Feltham Hill Road	Church Road	Park Road	2	2	2	1	2	2	2	3	2	2	1	2	3	3	1	48	67%	12
6	6.2 Town Tree Road	Feltham Hill Road	Convent Road	2	3	2	3	1	2	2	3	1	2	1	2	1	1	1	47	65%	15
6	6.3 Convent Road	Feltham Road	Glenfield Road	2	3	3	3	2	2	1	1	2	2	1	2	3	3	1	50	69%	10
6	6.4 Feltham Road	Church Road	Convent Road	1	1	1	2	1	2	3	3	1	2	1	2	3	3	1	38	53%	24
6	6.5 Feltham Road	Convent Road	Park Road	2	2	2	2	1	3	2	1	1	1	1	2	3	3	1	46	64%	17
6	6.6 Clockhouse Lane	Feltham Road	Bedford Lanes	1	3	3	3	1	3	1	1	3	1	1	1	3	3	3	48	67%	12
7	7.1 Vicarage Road	Burgoyne Road	Sunbury Cross	2	1	2	3	2	2	1	3	1	2	1	2	3	3	2	47	65%	15
7	7.2 The Parade	Staines Road W	Vicarage Road	3	2	2	3	1	2	2	3	1	1	3	2	3	3	1	53	74%	6
7	7.3 subways	roundabout	roundabout	2	3	3	1	0	2	1	1	3	1	2	1	1	1	1	38	53%	24
7	7.4 Staines Road W	Windmill Road	Sunbury Cross	2	3	2	3	1	1	2	1	2	1	2	1	3	3	3	51	71%	8
7	7.5 Windmill Road	Nurses Road W	Nurses Road W	1	1	1	3	1	2	3	3	2	3	1	2	1	1	3	44	61%	20
7	7.6 Nursery Road	Windmill Road	Green Street	3	2	3	1	2	2	2	1	2	1	1	2	3	3	1	48	67%	12
7	7.7 Green Street	Manor Lane	Sunbury Cross	3	1	1	2	1	1	2	1	2	1	2	2	3	3	1	43	60%	22
7	7.8 Station Road	Railway Station	Sunbury Cross	3	2	3	1	1	2	3	3	1	1	1	2	1	1	1	46	64%	17
7	7.9 Station Approach	Green Street	Railway Station	2	1	1	1	1	3	3	3	3	1	1	3	1	1	1	43	60%	22

CWZ link	road_name	Start	End	Quality of improvements score					Deliverability score				Demand for improvements score				Access score				Priority for		Priority for		
				Total	%	Rank	Total	%	Rank	Total	%	Rank	Total	%	Rank	Total	%	Rank	Total	%	Rank	Total	Rank	Total	Rank
				9	0.2		30	0.25		12	0.25		9	0.15		12	0.15		12	0.15		12	0.15		12
5	5.1 Stanwell Road	Ashford Hospital School	St James Senior Boys School	9	100%	1	18	60%	15	12	100%	1	7	78%	3	7	58%	15	53	6	11.4	6		7	
5	5.2 Church Road	School	St James Senior Boys School	6	67%	11	22	73%	7	4	33%	24	7	78%	3	6	50%	17	45	19	8.65	19		20	
5	5.3 Church Road	Village Way	Village Way	6	100%	1	26	73%	7	6	50%	19	6	56%	8	11	92%	17	57	19	12.2	11		2	
5	5.4 Station Road	Woodthorpe Road	Woodthorpe Road	6	67%	11	24	83%	5	10	83%	8	7	83%	5	10	83%	3	56	2	12.1	2		2	
5	5.5 Clarendon Road	Woodthorpe Road	Woodthorpe Road	6	67%	11	18	60%	15	12	100%	1	4	44%	19	4	33%	23	44	20	9.9	20		19	
5	5.6 Road	Stanwell Road	Church Road	9	100%	1	20	67%	10	12	100%	1	4	44%	19	4	33%	5	54	4	11.75	5		5	
5	5.7 Fordbridge Road	Church Road	Church Road	9	100%	1	12	40%	27	6	50%	19	5	56%	8	4	33%	23	36	26	7.65	27		27	
5	5.8 Dudley Road	Church Road	Casterfield Road	6	67%	11	14	47%	23	8	67%	17	4	44%	19	4	33%	23	36	26	7.9	26		26	
5	5.9 Service Road	Church Road	Church Road	6	67%	11	24	80%	5	10	83%	8	5	56%	8	9	75%	5	54	4	11.8	4		4	
5	5.10	College Way	Church Road	6	67%	11	26	87%	1	10	83%	8	3	33%	26	6	50%	17	51	6	11.55	6		6	
5	5.11	Village Way	Church Road	9	100%	1	16	53%	20	12	100%	1	8	89%	1	4	33%	23	49	8	10.8	10		10	
5	5.12	Service Road	Church Road	9	100%	1	22	73%	7	10	83%	8	5	56%	8	9	75%	5	55	3	11.9	3		3	
6	6.1 Feltham Hill Road	Church Road	Park Road	6	67%	11	18	60%	15	10	83%	8	5	56%	8	9	75%	5	48	12	10.3	14		14	
6	6.2 Town Tree Road	Feltham Hill Road	Convent Road	6	67%	11	22	73%	7	10	83%	8	5	56%	8	9	75%	21	47	15	10.65	15		15	
6	6.3 Convent Road	Feltham Road	Glenfield Road	6	67%	11	26	87%	1	4	33%	24	5	56%	8	9	75%	5	50	10	10.8	9		9	
6	6.4 Feltham Road	Church Road	Convent Road	3	33%	25	14	47%	23	12	100%	1	4	44%	19	5	42%	21	38	24	8.45	24		24	
6	6.5 Feltham Road	Convent Road	Park Road	6	67%	11	18	60%	15	10	83%	8	3	33%	26	9	75%	3	46	17	10	17		17	
6	6.6 Clockhouse Lane	Feltham Road	Bedford Lanes	3	33%	25	26	87%	1	4	33%	24	5	56%	8	10	83%	3	48	12	10.35	13		13	
7	7.1 Vicarage Road	Burgoyne Road	Sunbury Cross	6	67%	11	20	67%	10	8	67%	17	4	44%	19	9	75%	5	47	15	10.15	16		16	
7	7.2 The Parade	Staines Road W	Vicarage Road	9	100%	1	20	67%	10	10	83%	8	5	56%	8	9	75%	5	53	6	11.4	7		7	
7	7.3 subways	roundabout	roundabout	6	67%	11	18	60%	15	4	33%	24	6	67%	5	4	33%	23	38	24	8.2	25		25	
7	7.4 Staines Road W	Windmill Road	Sunbury Cross	6	67%	11	20	67%	10	6	50%	19	6	56%	8	11	92%	1	51	89%	10.55	8		8	
7	7.5 Windmill Road	Nurses Road W	Nurses Road W	3	33%	25	16	53%	20	12	100%	1	6	67%	5	7	58%	15	44	20	9.55	21		21	
7	7.6 Nursery Road	Windmill Road	Green Street	9	100%	1	20	67%	10	6	50%	19	4	44%	19	9	75%	5	48	12	10.25	15		15	
7	7.7 Green Street	Manor Lane	Sunbury Cross	9	100%	1	14	47%	23	6	50%	19	5	56%	8	9	75%	5	43	22	9.9	23		23	
7	7.8 Station Road	Railway Station	Sunbury Cross	9	100%	1	16	53%	20	10	83%	8	5	56%	8	6	50%	17	46	17	9.85	18		18	
7	7.9 Station Approach	Green Street	Railway Station	6	67%	11	14	47%	23	12	100%	1	5	56%	8	6	50%	17	43	22	9.35	22		22	

Table 22. Phase 1 walking links prioritisation table

Per Cycle link	Length	Other			Quality of improvements			Deliverability			Demand for improvements			Access					Total	%	Ranking
		Contributes to improved cycling network			Quality of design - safety		Quality of design - comfort	Ease of implementation		Potential to improve existing conditions (to a high and accessible standard)	Pedal cycle collision rate	PCT Tool	Indicative demand on Commonplace	Enhances network connectivity (RST)	Access to education	Access to transport facilities	Other key destination	High Street / Commercial Area			
		1 = isolated link 2 = limited links to other cycle routes or cycle-friendly roads 3 = strong links, forms important extension/connection to other routes	Safety as scored by the RST 3 = RST score = 5 2 = RST score 4-5.99 1 = RST score <4	Comfort as scored by the RST 3 = RST score > 3.99 2 = RST score 2.5-3.99 1 = RST score <2.5	1 = could require major junction treatment (e.g. new signals); significant works outside highway boundary; or third party works (e.g. changes to a level crossing) 2 = could be provided with moderate junction treatments; limited works outside highway boundary; expected interface with complex environments (e.g. town centres) 3 = could be provided within the existing kerb lines, and with minimal junction treatment	1 = very limited potential (e.g. narrow carriageway/footways, no verges) 2 = moderate potential with moderate junction treatments (e.g. space for a minimum width cycle track from existing wide lanes, centre hatching, verge etc.) 3 = strong potential (space for a recommended-width cycle track from existing wide lanes, centre hatching, verge etc.)	It is envisaged that the proposed route will create an accident saving. Therefore those high number of accidents involving cyclists will generate the biggest accident savings. 1 = <3/km 2 = 3-6/km 3 = > 6/km	1 = up to 8 times increase 2 = 8 to 10 times increase 3 = over 10 times increase	3 = >8 comments per km 2 = 4-8 comments per km 1 = <4 comments per km	The potential to improve the cycling environment based on the RST scores: 3 = RST score =5 2 = RST score 4- 5.99 1 = RST score <4	Access to education e.g. school, college, library etc 3 = yes, direct access within 400m 2 = yes, within 400m 1 = no / further than 400m	Serves transport interchange e.g. train station, bus station 3 = yes, more than one within 400m 2 = yes, within 400m 1 = no / further than 400m	Access to sports, recreation or outdoor space 3 = yes, direct access within 400m 2 = yes, within 400m 1 = no / further than 400m	Access to sports, recreation or outdoor space 3 = yes, direct access within 400m 2 = yes, within 400m 1 = no / further than 400m							
Weighting	Max Score	2	3	3	2	2	2	3	2	1	1	1	1	1	1	1	72	100%			
		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3					
Route 3: A308/Kingston Road	6.186		2	2	2	1	3	2	2	2	2	3	3	3	2	3	51	71%	3		
Route 6: Staines/Laleham Road	3.021		3	2	1	3	2	1	1	1	3	3	2	2	2	2	44	61%	5		
Route 7: Stanwell Road/Church Road and Convent Road/School Road	3.227		3	3	2	2	1	3	3	1	3	3	3	3	3	3	59	82%	1		
Route 9: Ashford/Fordbridge Roads	2.609		1	3	2	3	3	1	3	3	2	3	1	1	2	2	55	76%	2		
Route 18: Green Street	2.717		3	1	1	3	1	1	2	2	3	3	3	2	3	3	46	64%	4		

Per Cycle link	Length	Other Score			Quality of improvements score			Deliverability score			Demand for improvements score			Access score			Priority for improvements		Priority for improvements	
		Total	%	Rank	Total	%	Rank	Total	%	Rank	Total	%	Rank	Total	%	Rank	Total whole borough	rank (ascending) whole borough	Total whole borough	rank (ascending) whole borough
Route 3: A308/Kingston Road	6.186	6	0.2		18	0.25		12	0.25		24	0.15		12	0.15		51	3	9.85	3
Route 6: Staines/Laleham Road	3.021	4	67%		4	67%		3	8	67%	3	16	67%	3	11	92%	44	5	8.8	4
Route 7: Stanwell Road/Church Road and Convent Road/School Road	3.227	6	100%		1	15	83%		1	6	50%	5	20	83%	1	100%	59	1	11.25	1
Route 9: Ashford/Fordbridge Roads	2.609	2	33%		5	15	83%		1	12	100%	1	19	79%	2	58%	55	2	11.05	2
Route 18: Green Street	2.717	6	100%		1	6	33%		5	8	67%	3	15	63%	4	92%	46	4	8.6	5

Table 23. Phase 1 walking corridors prioritisation table

Appendix 5: Indicative Cost Estimates

Table 24. Cost estimates for proposed interventions

Intervention	Cost	
Zebra crossing	£34,000 per item	<i>New crossing including road markings, dropped kerbs, belisha beacons and high friction surfacing on approaches</i>
Parallel crossing	£34,000 per item	
Signalised Pedestrian and Cyclist Crossing	£70,000 per item	<i>New crossing including traffic signals, road markings, dropped kerbs, and high friction surfacing on approaches</i>
Upgrade Signal Crossing	£43,800 per item	<i>Added traffic signals for pedestrians/cyclists and road markings on existing crossings</i>
Side Road Treatment	£14,600 per item	<i>Raised carriageway with tactile information and associated works such as street lighting, signing and lining</i>
Raised Junction	£35,000 per item	<i>Raised junction with crossing point and associated works such as coloured surfacing, street lighting, signing and lining costs</i>
New speed limit	£15,000 per km	<i>New signs, road markings and traffic calming measures</i>
Widened footway	£700,000 per km	<i>Widened footway, new kerbs and resurfacing of the full extent of the footway (3.0m)</i>
Resurfaced footway	£300,000 per km	<i>Resurfacing of the full extent of the footway</i>
Public realm improvements	£2,400,000 per km	<i>Includes widened and resurfaced footways, raised carriageway to the footway level and new surfacing (does not include drainage)</i>

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	
Two-way cycle track	£1,332,000 per km	<i>2.5m (minimum width) on the carriageway level with kerb segregation</i>
One-way cycle track	£721,500 per km	<i>1.5m (minimum width) on the carriageway level with kerb segregation</i>
Stepped cycle track	£1,055,000 per km	<i>One way cycle track on a level between the footway and the carriageway without other segregation</i>
Contra flow cycle lane	£555,000 per km	<i>One-way cycle lane with light segregation and additional features for segregation at junctions</i>
Advisory cycle lane (Dutch style)	£294,000 per km	<i>1.5m (minimum width) painted lanes including resurfacing of the carriageway</i>
Mixed traffic	£755,000 per km	<i>Speed limit reduction, road markings and traffic calming measures</i>
Off-carriageway path	£1,000,000 per km for cycling	<i>New cycle path of 3.5m width including vegetation clearance, surfacing and new street lights</i>

Appendix 6: Stakeholder meeting minutes

Phase 1 Internal stakeholder meeting 26 July 21

ATKINS
Member of the SNC-Landis Group

Meeting Notes

Project: Spelthorne LCWIP	
Subject: Spelthorne Workshop 1A	
Meeting place: Online (MS Teams)	Meeting no: 01
Date and time: 26 July 2021 14:00	Minutes by: Giovanni Sanna
Attendees: Neil McClure (NC) Dug Tremellen (DT) Hannah Bridges (HB) Nick Healey (NH) Amelia Hatfield (AH) Funke Adekun (FA) Katie Ludvigsen (KL) Sandy Muirhead (SM) Lee Bessent (LB) Beatriz Campos (BC) Georgia Christodoulou (GC) Ariana Ragusa (AR) Simon Jay (SJ) Giovanni Sanna (GS)	Representing: SCC (Transport Policy) SCC (Transport Policy) SSC (Transport Policy) SCC (Transport Policy) SCC (Major Projects) SCC (Transformative Projects) Active Surrey Atkins Atkins Atkins Atkins
Apologies: Ann Biggs Danna Selby Alison Houghton Roger Williams Caroline Smith Duncan Knox (DK)	Representing: SBC SCC SCC SCC SCC

Next meeting: Attendees and Apologies	
Distribution: 15 August 21	File Ref: 5206264

NOTE TO RECIPIENTS:
These meeting notes record Atkins understanding of the meeting and intended editors arising therefrom. Your agreement that the notes form a true record of the discussion will be assumed unless adverse comments are received in writing within two days of receipt.

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Spelthorne Workshop 1A

ATKINS
Member of the SNC-Landis Group

ITEM	DESCRIPTION AND ACTION	RESPONSIBLE
1.	<p>Introductions Beatriz provided introductions about the purpose of the workshop and explained the process involved in the development of the 'longlist' and shortlist. All attendees introduced themselves and what they wanted to gain from the session.</p> <p>AH noted the opportunity to integrate the LCWIP in the new Local Transport Plan for local journeys for walking and cycling.</p> <p>HB wants to see how the LCWIP fits with the LTP.</p> <p>DT said that the goal for Surrey is by 2025 to double the numbers of cyclists and by 2030 half of the journeys in the county to be by foot or cycling, and the LCWIP is one of the tools for this goal.</p> <p>FA is working on the A328 improvements and said there is an opportunity for collaboration with the LCWIP proposals.</p> <p>KL stated he intends to gain experience from the LCWIP processes. LB works with local schools and has experience on the school trips which can feed into the LCWIP.</p> <p>SM noted that the LCWIP along with the RTS scheme will provide decent cycle routes to the borough. It is an opportunity to link to the adjusted boroughs.</p> <p>NH is interested to see the highway improvements or the LCWIP.</p> <p>NM reminded the attendees of the strategic objectives of the LCWIP and informed of the rollout of the program in Surrey.</p>	BC
2.	<p>Study Background/ Objectives of the LCWIP BC explained the purpose of the meeting (gaining feedback on the 'longlist') and explained what an LCWIP is and its related methodology. She explained that this is the internal stakeholder workshop and that there will be a further two workshops (with external stakeholders and elected members). She reiterated the purpose of the workshop today. <i>(See presentation slides p1-c9 shared on the 22nd July 2021)</i></p>	BC
3.	<p>Proposed Cycle Corridors & Discussion AR explained the evidence base used to develop the 'longlist'. She explained there is a mixture of SCC data and data collected by Atkins to inform the extent and location of the cycle corridors. AR began by displaying the 'Dutch Soenano' PCT and existing PCT. She then showed a series of maps including: 'Households with no car or van availability', 'Cyclist Collisions 2015-2019' and public comments captured through the 'Surrey COVID Transport Map' for the Spelthorne area. She went onto showing an assessment of the amount of commuter inflows/outflows in Spelthorne. This showed that there was a net 'outward' flow of trips of around 9,000 per day. AR explained that there was a case for overlaying this data which helped to start to demonstrate an outline of cycle corridors where improvements need to be made. She described that eventually a heatmap was created from this and a preliminary network was then developed by removing the 'noise' to create a skeleton network. She highlighted the importance of</p>	AR

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Spelthorne Workshop 1A

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ITEM	DESCRIPTION AND ACTION	RESPONSIBLE
	<p>connecting with Heathrow and then showed how the 'timeline' eventually creates a preliminary cycling network.</p> <p>AR explained that a before and after can be developed from the cycling network and explained that the cycling network is currently in poor condition. She also explained the 'longlist' of cycling routes and provided a brief description of a few corridors. <i>(See presentation slides p10-p18 shared on the 22nd July 2021)</i></p> <p>NH commented on the methodology that identifies the A and B roads and mentioned that the network that is presented makes sense. NH referred to the proposals on corridor #3 (A308/ Kingston Road) and noted that the existing provision is very poor. AR explained that it is a very direct route and asked whether attendees could provide feedback to look at an alternative for the A308. NH explained that a scheme from Forthbridge Road to Sunbury (not including the roundabouts or Sunbury) a £5million CL and £5million match funding to develop a cycle route. He added that school Road is already under construction and the junction will follow. AR acknowledged and then opened up for discussion on the routes.</p> <p>NH asked if route #1 (Renfree Way) included Chertsey bridge. He explained that the parapets are very low, and the approach gradient is also low and unless you are a confident cyclist, vehicles will become impatient as they would need to wait behind the cyclists. He also highlighted that walking across the bridge is quite challenging too.</p> <p>LB stated that he had cycled along the A308 using backstreets and stated it was very hostile and found that currently it is very unpleasant. He explained that school children would probably cycle to some of the main secondary schools in Sunbury.</p> <p>NH stated that the speed limit has been reduced near Sunbury Cross from 50mph to 40mph. He explained that there were a very high number of casualties in this area. NH stated there are snippets of cycle routes along the road but explained they are not very pleasant, and this means it is essentially not usable. NH added that there is poor lane allocation along the corridor which means there are traffic issues and speeds which limit the quality of what can be provided.</p> <p>DT asked if there is a design process for the section of the A308. NH stated that there would be overlap between the two to help complement one another.</p> <p>NH stated that there are several designs for the junctions along the A308.</p> <p>DT explained that the corridors are as expected but sought to explore some sections such as corridor #5 (Staines Town Centre) would have roughly the same level of demand for cyclists. MS stated that it is also unpleasant to walk and hard to cycle. NM agreed.</p> <p>Corridor #8 (Staines / Lakeham Road) NH stated that this is on the radar for the road safety team, and they are seeking improvements for NMUs. NH stated there are some constraints such as the railway bridge.</p>	

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ITEM	DESCRIPTION AND ACTION	RESPONSIBLE
	<p>NH also outlined that there could be some improvements via the River Thames Scheme (RTS) proposals for corridor #13 (Thames Path).</p> <p>DT stated that it may be a better route which considers lower Sunbury between corridor #14 (Staines Road East) which covers the distance between Hurst Park. SM agreed. BC asked if it is a utilised route. NH stated it is and is established in parts. He explained that it ends at Green Street.</p> <p>NH also highlighted a pinch point issue near the railway bridge at Sunbury. NH stated that there is a concern if further cyclist provision is provided along corridor #12 (Thames Street / Hallford Road).</p> <p>HB stated that the local plan suggests there is cycle access to a local school there. HB stated there has not been much discussion with site owners regarding this.</p> <p>BC asked if the route between corridor #14 (Staines Road East) and #2 (Upper Hallford / Cadbury) has a small stretch which means a connection can be made between Hazelwood Drive through the mobile homes site to the A244.</p>	
4.	<p>Proposed Core Walking Zones & Discussion</p> <p>GC began by explaining the CWZ methodology the purpose of the CWZs. GC stated that for Spelthorne a number of commercial areas and trip attractors had been considered. She explained how the CWZs were produced including the Isochrones. She explained that a link between the CWZs and areas around them are issued to then develop the network within them. She presented some of the background information including Public Transport, Public Rights of Way and Short Car Trips <2.5km (PCT). She went on to explain that the River Thames Scheme (RTS) proposals, Pedestrian Collisions and Public Suggestions in "Commonplace". She then began to overlay the data step-by-step to highlight the key trip attractors including schools and development sites. She then explained the Public Transport + Isochrones surrounding these areas. She explained that the River Thames Scheme proposals are also included as well as Short Car Trips <2.5km are also considered.</p> <p>The overlaying of the CWZs are not within the areas of high demand, she explained that some of the key corridors which connect to the individual walking zones are important for the identification of the walking corridors.</p> <p>GC then presented the 'longlist' of CWZs drawing out a brief description to explain each CWZ.</p> <p>She then finished her presentation showing the 'longlist' across the three boroughs highlighting the synergy that the CWZs have. She then went on to open up the discussion to attendees for feedback on the proposals. (See presentation slides p19-p28 shared on the 22nd July 2021)</p> <p>NH stated that there is a pinch point on Green Street which may require improvement. NH mentioned that there are school children which are crossing at grade along the Sunbury Road as there are issues with the subway to help connect the local area.</p>	GC

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4

ITEM	DESCRIPTION AND ACTION	RESPONSIBLE
	<p>DT stated the Stanwell CWZ may not be capturing nearby schools which are just outside of the CWZ. GC acknowledged and noted.</p> <p>HB mentioned that there could be some improvements to the pedestrian area in Ashford as currently provision is poor. This was acknowledged by GC.</p> <p>HB further highlighted that the A308 can act as a barrier within the Staines CWZ as well as the River Thames. GC acknowledged.</p>	
5.	<p>Next Steps</p> <p>BC explained that a survey link will be shared again after the meeting to get input on the CWZs and any other potential routes. BC stated that there is an opportunity to then consider being compliant with LTN 1-20. She went on to explain that after the completion of the workshops, the network will be refined and a 'shortlist' prioritised. Site visits will be undertaken to assess the short list, followed by improvement concepts, further engagement and refinement of concepts before compiling the LCWIP report.</p> <p>She asked if there were any further comments from then attendees that they wanted to provide before closing the meeting. No further comments were noted.</p>	BC
6.	<p>AOB</p> <p>BC thanked everyone for attending. DT and NH thanked Atkins for running today's workshop.</p>	BC
7.	<p>End of meeting</p> <p>BC and DT thanked all for attending and felt the workshop was a useful exchange in the ongoing LCWIP process.</p>	BC

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Spelthorne Workshop 1A

5

ITEM	DESCRIPTION AND ACTION	RESPONSIBLE
8.	<p>Post Meeting Note – Survey Results</p> <p>During and following the workshop, an online survey form was shared with attendees to get their input on which cycle routes and walking areas from the 'longlist' they felt were a higher priority. The results from this workshop are shown below. The input will be considered in identifying the 'short list' for further study in the LCWIP, along with input from other stakeholder workshops and data/information from the evidence base review.</p> <p>1. Select the 5 proposed cycle routes that you feel are the highest priority for further study in Phase 1 of the Spelthorne LCWIP.</p> <p>2. Select the 3 proposed Core Walking Zones that you feel are the highest priority for further study through Phase 1 of the Spelthorne LCWIP.</p>	

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Spelthorne Workshop 1A

8

Phase 1 External stakeholder meeting 03 August 21

ATKINS
Member of the SNC-Landis Group



Meeting Notes

Project:	Spelthorne LCWIP		
Subject:	Spelthorne Workshop 1B		
Meeting place:	Online (MS Teams)	Meeting no.:	02
Date and time:	02 August 2021 14:00	Minutes by:	Giovanni Sanna
Attendees:	Chris Hyde (CH) Dug Thremlan (DT) Charlie Cruise (CC) Sam Goddard (SG) Hannah Bridgus (HB) Lisa Stonehouse (LS) Sandy Muirhead (SM) Kathy Sanders (KSanders) Maryn Bevan (MB) Lynn Seyon (LE) Kath Stones (KS) Martin Richardson (MR) Ken Saunders (KS) Timothy Wells (TW) Zahra Ali (ZA) Christopher Deakins (CDeakins) Melissa Viero (MV) Chris Durban (CDurban) Beatriz Campos (BC) Georgia Christodoulidou (GC) Ariana Ragusa (AR) Giovanni Sanna (GS)	Representing:	SCC (Chair) SCC (Transport Policy) SCC (Transport Development Planning) SCC SSC (Transport Policy) SSC (Leisure Services Manager) SSC Cycling UK (Local Rep) Walking & Cycling for Health (Staines) Walking & Cycling for Health (Staines) Local Resident South Ascot Village Primary School Local Resident Spelthorne Heathrow Airport Hounslow Borough Council Hounslow Borough Council Project Centre (RBWM LCWIP) Project Centre (RBWM LCWIP) Atkins Atkins Atkins Atkins

Next meeting:	Attendees and Apologies
Distribution:	Attendees and Apologies
Date issued:	16 August 21
File Ref:	5206294

NOTE TO RECIPIENTS:
These meeting notes record Atkins understanding of the meeting and intended actions arising therefrom. Your agreement that the notes form a true record of the discussion will be assumed unless adverse comments are received in writing within five days of receipt.

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210203_Spelthorne Workshop 1B meeting notesB Minutes 2021-08-02

ATKINS
Member of the SNC-Landis Group



ITEM	DESCRIPTION AND ACTION	RESPONSIBLE
1.	<p>Introductions</p> <p>BC opened the meeting by presenting to the attendees the purpose of the workshop and explaining the process involved in the development of the 'longlist' and 'shortlist'. She asked the attendees when introducing themselves to add what they want to gain from the session.</p> <p>HB said she wants to see how the LCWIP aligns with the local plan.</p> <p>CC said he want to see the influences of the LCWIP in the developments.</p> <p>CDurban works on a similar project in Windsor and is attending to see the interfaces.</p> <p>CH is interested in the project and the proposals as a resident in Sunbury and will provide local knowledge.</p> <p>CDeakins is interested in the cross-boundary route.</p> <p>DT as a representative of Surrey wants to hear everyone's ideas.</p> <p>KG wants to see how the prioritisation of the new cycle routes will work when the existing infrastructures are poor.</p> <p>MR is interested in the links to Chertsey and Windsor.</p> <p>MB is very interested to hear about funding and how much can be done. He noted that it is important to improve the existing facilities.</p> <p>KS is interested in the school streets in the borough and particularly in the Sunbury area.</p> <p>MV wants to see the opportunities to link Spelthorne LCWIP to the RBWM LCWIP</p> <p>SG is interested in the connections with Elmbridge.</p> <p>LS sees the LCWIP as an opportunity to get more people active.</p> <p>TW referred to Heathrow employees that live in Spelthorne and new connections will help them.</p>	
2.	<p>ZA is interested in the links to Hounslow</p> <p>Study Background/ Objectives of the LCWIP</p> <p>BC explained the purpose of the meeting (gaining feedback on the 'longlist' and explained what an LCWIP is and its related methodology. She explained that this is the external stakeholders' workshop and that there are a further two workshops (with internal stakeholders and elected members). She reiterated the purpose of the workshop today.</p>	BC
3.	<p>Proposed Cycle Corridors & Discussion</p> <p>AR explained the run through of her presentation, she showed some examples of the evidence base used to develop the 'longlist'. She explained there is a mixture of SCC data and data collected by Atkins to inform the extent and location of the cycle corridors. AR began by displaying the 'Duck & Stinsons' PCT and existing PCT. She then showed a series of maps including 'households with no car or van availability', 'Cyclist Collisions 2015-2019' and public comments</p>	AR

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210203_Spelthorne Workshop 1B meeting notesB

ATKINS
Member of the SNC-Landis Group



ITEM	DESCRIPTION AND ACTION	RESPONSIBLE
	<p>AR continued with the presentation of the 'longlist' of cycle corridors and explained that if there are any infrastructural needs that need to be changed then any new routes will be considered/changed. She finished her presentation by describing the 'longlist' of cycle corridors. (See presentation slides 9 – 17 shared at 02/08/2021)</p> <p>AR then opened up the discussion to allow the interactive mapping session to begin.</p> <p>KS mentioned travel smart plans which use specific routes which are useful. AR mentioned that existing cycle facilities are being used and are related to this. KS also asked about the NCN route 4 and how the proposals will be linked to the corridor. AR stated that the LCWIP is targeting predominantly utility trips as well as leisure trips. She stated NCN 4 is an important and safe route and is mainly included in the 'Longlist' but cautioned it may not reach the 'Shortlist'. CH added to the discussion and asked about the connection with neighbouring boroughs. AR highlighted that Atkins is working on the neighbouring LCWIPs (Elmbridge and Runnymede) and the LCWIP for Heathrow has been taken into account as well as existing facilities in the neighbouring areas such as Kingston and Hounslow. BC added that we are working closely with the River Thames Scheme Proposals team too.</p> <p>KS asked if Renfree Way was created as a Bypass to link with Shepperton. KS asked whether the shortest or the safest connections are being prioritised when selecting cycle corridors. AR responded by stating that as an approach, the most direct routes are generally being selected as infrastructure can be implemented to ensure that routes are safe.</p> <p>KS stated that an alternative route could be considered here along Church Road instead of along Renfree Way – KS stated that it has a high-speed limit of 50mph. MR raised that there is a large amount of space on either side of the carriageway to enable a safer routing. KS noted AR's point that we need to make routes as safe and direct as possible.</p> <p>CH followed on from KS's point about safe and direct routes. CH stated that he would like to have a direct route and look to make it safe. AR agreed. He made a second point about leisure trips giving the example of corridor #12 (Thames Street / Halford Road) stating that he has used this corridor to access Walton Station to commute into central London. He highlighted that as Shepperton and Walton are on separate railway branches, it offers an alternative link to a rail station in case there are issues with services on one of the railway branches. He summarised</p>	

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210203_Spelthorne Workshop 1B meeting notesB



ITEM	DESCRIPTION AND ACTION	RESPONSIBLE
	<p>That corridor #12 (Thames Street / Halford Road) may have a higher potential than is being indicated on the map.</p> <p>KS corrected the alignment along Halford Road that CH stated. KSanders questioned the possibility of a reduction in speed limit along Halford Road which changes frequently. CH added in the chat "Halford Road could be an alternative safer route from Lower Sunbury as an alternative to Fordbridge Rd, though its less direct to Walton."</p> <p>KS stated that along Fordbridge Road in Ashford from Fordbridge Roundabout into Ashford centre there is a narrow cycle lane which is in poor surface condition. KS stated that Kingston Road is also in poor condition from a cyclist's point of view.</p> <p>MB expressed that he sensed public sentiment from parents who are unwilling to cycle with their children because they feel unsafe. AR acknowledged.</p> <p>TM asked that attention was focused on Stanwell Moor in the north and expressed that for corridors #10 (Stanwell Moor Road) and #7 (Stanwell Road) there are several Heathrow colleagues who live in this area. TW stated he would look to share the postcode data on colleagues who are commuting to Heathrow. TW explained they are looking to improve the ability of workers to access the airport for walking and cycling.</p> <p>KS stated that a significant number of corridors #10 (Stanwell Moor Road) already have existing cycling facilities. TW echoed this and explained there should be a stronger connection with the roundabout itself. AR acknowledged.</p> <p>KS raised that along #9 (Ashford/ Fordbridge Rd) the quality of the road and footpath are in poor condition. AR noted this.</p> <p>KS asked about the degradation of cycleways. DT explained how surfacing is applied and that high friction layering is applied over the carriageway surface which can degrade quickly. He explained there is a research facility in Surrey which explores new surfacing materials. KS stated he was reassured by knowledge of a research facility in Surrey. MB highlighted the recent changes to the highway code proposed by the DT recently and referenced cycling design practices in Holland as a standard.</p> <p>CH added to MB's point about trying to consider a holistic approach to providing cycling infrastructure by ensuring safe cycling infrastructure and locations to keep cycles that are also safe. He concluded the effectiveness of lowering speed limits to reduce the danger to cyclists from high vehicle speeds. CH explained that there could be additional benefit from more time. CH asked how further comments can be provided and what is the best way. BC explained that the comments do not stop here, in fact this is the starting point and if people want to share more comments, email is the best way.</p> <p>CD asked about the balance between providing main routes and allowing cyclists to use secondary routes to enable a joined-up route. He also asked if we had a target/aspirational figure to encourage further cycling. She explained that the cycle-superhighway route has been successful as it follows the main corridors and is therefore direct. She</p>	



ITEM	DESCRIPTION AND ACTION	RESPONSIBLE
	<p>explained that main corridors with a critical mass can ensure a higher quality of cycling infrastructure.</p> <p>AR added that at this stage we should be as ambitious as possible when providing cycling infrastructure</p> <p>Chat Pane Comments during interval:</p> <p>MV wrote: "keen to look at further investigations into route 5 with regards to RBWM border"</p> <p>KSanders wrote "I think route 3 between Sunbury and Staines (A308/Kingston Rd) is key. I understand some work is already underway at several junctions, but I wondered if following Staines Aqueduct could be looked at for at least part of the route"</p> <p>CD wrote "For the links with Windsor and Maidenhead I agree that these are not a top 15 priority. Datchet is within cycling distance and it is worth co-ordinating with the Heathrow LCWIP to confirm any potential trips to the west and the preferred routes for these"</p> <p>BC thanked all for their comments in the chat pane.</p>	
4.	<p>Proposed Core Walking Zones & Discussion</p> <p>GC began by explaining that the CWZ methodology by explaining the purpose of the CWZs. She described the methodology on how the CWZs were produced, including the isochrones. She explained that a link between the CWZs and areas around them are used to then develop the network within them. She presented some of the background information including: Public Transport, Public Rights of Way (PROW) and Short Car Trips <2.5km (PCT). She went on to explain that the River Thames Scheme (RTS) proposals and Pedestrian Collisions and Public Suggestions "concomitant". She then began to overlay the data step-by-step to show a heatmap to demonstrate an opportunity and issues map which highlights potential areas where improvements should be made. She explained that the data allowed an initial sift which excluded Stanwell Moor and Feltham Hill to then develop the 'longlist' of CWZs and corridors connected to these CWZs which consider gaps raised by the data overlay analysis.</p> <p>She then provided a demonstrative example of how the network within the CWZ would be identified. GC concluded by presenting and describing the walking 'longlist' and how they connect with the nearby boroughs before opening up the discussion to the interactive map session on the CWZ.</p> <p>(See presentation slides 18 – 27 shared at 02/08/2021)</p> <p>CH stated that he felt the 5-minute walking zone catchment area is constrained. He raised a second point about the consideration of transport interchanges in the development of the CWZs and corridors, that was covered in the methodology of the prioritisation. Finally, he asked about linking together activity centres and areas with high walking potential. He provided an example of two shopping centres and asked whether the data presents a connection between the attractors when trips may not actually be occurring. GC responded that the CWZs are indicative and may extend further at the 'shortlist' development stage and therefore may the design will to schools, key trips attractors, etc. She went on to explain that within the MCAF other considerations will be made. She added that proposed corridors will follow the demand for</p>	GC



ITEM	DESCRIPTION AND ACTION	RESPONSIBLE
	<p>pedestrian movements, and in some cases (as an example Staines and Kingston Road) a link will be provided as different zones will offer different services.</p> <p>CH added in the chat "I understand the source for the 5 mins walk catchment is DT, but that seems a very short distance and essentially limits the potential for walking". BC responded "we will review our core walking zones; however, as GC said, we won't limit to 5 minutes. The 5' is almost a starting point and if a particular route extends further, that will be covered."</p> <p>LS stated that the pathway that leads to Bedford's lakes from Ashford high street would be useful. KS clarified that a bid had gone in for funding to improve this route. She added in the chat "I think the linked document from the Joint Committee in March 2021 talks about the Clockhouse Lane project to improve access across the railway bridge https://mycouncil.surrey.gov.uk/documents/g8158/Public%20reports%20back%20to%202006-Mar-2021%2014.00%20Spalthorne%20Joint%20Committee.pdf?T=0"</p> <p>KS stated a few general points about the quality of pathways. GC acknowledged. MR asked if there is an overlap between CWZs and cycle corridors to explore mutual benefits. GC explained that there would be a coordinated approach at the next stage at a micro level to ensure these are improved harmoniously.</p> <p>KS mentioned the topic of collisions in Ashford and asked if there are a high number of collisions in the Ashford area. GC confirmed the collision rate is high along the high street north towards the hospital.</p> <p>KS asked what type of interventions would be considered at concept design. GC explained these would include footway, crossing and pavement widening amongst other interventions.</p> <p>MR asked if other initiatives had been considered to promote walking. BC responded that the LCWIP is focusing on the plans and the infrastructures and DT added that there are actions that can introduced.</p> <p>LB asked if consideration had been made to encourage parents to walk their children to school. She gave the example of walking trains. BC explained the purpose of this LCWIP are for hard measures to be implemented but soft measures would be complementary to the scheme but explained that this would come under a separate study. DT expanded on this point and provided some examples of initiatives to encourage walking to school and also encouraged members of the public to reach out to local schools to ask what they are doing to encourage more walking to school.</p> <p>KSanders added in the chat "On active travel for schools, there has been success from identifying 'active travel champions' at schools."</p> <p>Chat Pane Comments during interval: KSanders "have you considered the pedestrian and cycling bridge from Sunbury across to Walton or is that covered by the 'Your Fund Surrey project'?" KSanders "Sunbury Cross desperately needs reviewing for cyclists and pedestrian" CH agreed and added "Agree on Sunbury Cross - it</p>	

Phase 1 Elected Members stakeholder meeting 06 August 21



Member of the SNC Loxley Group



Meeting Notes

Project:	Spelthorne LCWIP		
Subject:	Spelthorne Workshop 1C		
Meeting place:	Online (MS Teams)	Meeting no:	03
Date and time:	06 August 2021 14:00	Minutes by:	Georgia Christodouloupoulou
Attendees:	Cllr Kathleen Grant Cllr Budini Weerasinghe Cllr Robert Evans Cllr Dennis Turner-Stewart Dug Trimmell (DT) Donna Selby (DS) Sandy Muirhead (SM) Beatriz Campos (BC) Georgia Christodouloupoulou (GC) Ariana Ragusa (AR) Giovanni Sanna (GS)	Representing:	SSC SCC SCC SCC SCC SSC Atkins Atkins Atkins Atkins

ITEM	DESCRIPTION AND ACTION	RESPONSIBLE
1.	Introductions BC opened the meeting by presenting to the attendees the purpose of the workshop and explaining the process involved in the development of the 'longlist' and 'shortlist'. Then she continued with the introductions.	
2.	Study Background/ Objectives of the LCWIP BC explained the purpose of the meeting (gaining feedback on the 'longlist') and explained what an LCWIP is and its related methodology. She explained that this is the 3 rd stakeholders' workshop with the elected members and that a further two workshops (with internal and external stakeholders) took place the week before. She reiterated the purpose of the workshop today.	BC

Next meeting:	
Distribution:	Attendees and Apologies
Date issued:	16 August 21
File Ref:	5205264

NOTE TO RECIPIENTS:
These meeting notes record Atkins understanding of the meeting and it is not intended as a verbatim record. Your agreement that the notes form a true record of the discussion will be assumed unless adverse comments are received in writing within five days of receipt.

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Spelthorne Workshop 1C



Member of the SNC Loxley Group



ITEM	DESCRIPTION AND ACTION	RESPONSIBLE
	<p>Cllr Evans noted that the stakeholder engagement is important but discussions with ordinary people that will use/ or not use the proposed facilities is required as there are a number of complaints when money is spent on infrastructure that is not required. He added that people do not often know where the funding is coming from.</p> <p>BC responded that SCC promoted the Commorplace and Your Funds Surrey platforms and that residents can add their own ideas for infrastructure improvements.</p> <p>DT added that at this stage of design we need to speak with people that will use the facilities (cycling and walking groups' representatives) to discuss the optimal alignments of the proposed network. In the next stages of design, on more specific routes, there will be an open discussion.</p> <p>Cllr Grant agreed with Cllr Evans and noted that SCC tried to introduce a cycle scheme in the summer of 2020 which did not go ahead. She added that she is in favour of cycle facilities but most people in Lower Sunbury, (where she is more familiar with) walk and cyclists obstruct pedestrians.</p> <p>BC responded that the aim of the LCWIP is to encourage a mode shift from the private vehicle, for users' health, and the environment which follows the government's policy. Following that the study will try to provide the most appropriate proposals for each user, that will try to address any issues between them.</p> <p>Cllr Weerasinghe agreed that cycling should be promoted but there are issues with cyclists today coming from Kingston and the Richmond boroughs (primarily along Thames Road).</p> <p>BC asked him to make a note when AR will present the interactive map.</p>	
3.	Proposed Cycle Corridors & Discussion AR showed some examples of the evidence base used to develop the 'longlist'. She explained there is a mixture of SCC data and data collected by Atkins to inform the extent and location of the cycle corridors. AR began by displaying the 'Dutch Scenario' PCT and existing PCT. She then showed a series of maps including: 'Households with no car or van availability'; 'Cyclist Collisions 2015-2019' and public comments captured in Commorplace for the Spelthorne area. She went onto showing an assessment of the amount of commuter inflows/outflows in Spelthorne. AR explained that there was a case for overlaying this data which helped to start to demonstrate an outline of cycle corridors where improvements need to be made. She described that eventually a heatmap was created from this and a preliminary network was then developed by removing the 'noise' to create a skeleton network. She highlighted the importance of connecting with Heathrow and adjusting boroughs. <p>AR continued with the presentation of the 'longlist' of cycle corridors and explained that if there are any infrastructural needs that need to be changed then any new routes will be considered' changed. She finished her presentation by describing the 'longlist' of cycle corridors. (See presentation slides 9 – 17 shared at 02/06/2021)</p>	AR

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Spelthorne Workshop 1C



Member of the SNC Loxley Group



ITEM	DESCRIPTION AND ACTION	RESPONSIBLE
	<p>AR then opened up the discussion to allow the interactive mapping session to begin.</p> <p>Cllr Evans said he supports the idea of the proposed network but he is also very sceptical as money will be spent on facilities that are not required. He added that he wants to see school trip numbers to understand the need for some of the proposals. He offered the example of Town Lane in Stanwell where a shared facility has been implemented but pedestrians are obstructing cyclists with supermarket trolleys. AR responded that in the older guidelines for cycling there was a lot of support for shared infrastructures as they would serve both types of users. Now with the Local Transport Note (LTN) 1/20 the shared facilities are avoided, unless it is absolutely required, and segregation will be provided between pedestrians and cyclists, where feasible.</p> <p>Cllr Grant said, referring to Route 14, that it is a horrible busy main road and not recommended for cyclists, even though it is overused by cyclists. She suggested a parallel route along off-street paths, between French Street and Green Street, where people are already walking and cycling, and it has been a successful route. She also added that the main route to Hampton Road will link to SW London, not Surrey.</p> <p>AR agreed and added the suggested route in the interactive map. She asked Cllr Grant to clarify the use of the route, as it is not direct. Short trips or school trips? Cllr Grant responded that it will be used for short trips and that residents of Lower Sunbury prefer to do their shopping at Kingston instead of Staines.</p> <p>DS added that Oakington Dr is well used by cyclists, even though there is no cycle facility, and the route has been identified by residents as the most direct to Hampton.</p> <p>Cllr Turner-Stewart suggested a route close to the council's offices instead of Kingston Road, following Boundary Road to Priory Green. She mentioned that it could work as a shortcut and it is pleasant as it is away from traffic. She added that the A30B is critical but rural and off-road routes will offer safer alternatives to schools. She concluded that overall, she agrees with the proposed network.</p> <p>AR added the suggested route and responded that we will visit the short-listed routes and we will try to find the safer routes. She added that for Spelthorne a long-distance route is crucial and other smaller routes will 'feed into the main corridor, for the last mile destination. She added that the design is for a variety of cyclists to use the proposed network.</p> <p>Cllr Evans commented on Route 7, stating that it is a lovely route but it is green as pedestrians are using the cyclists' side of the facility. Additionally, there are not many cyclists in the area, so residents are resenting the money spent on the facility.</p> <p>Cllr Turner-Stewart commented on Thames Path side that runs from Staines to Shepperton, but it is not shown on the map at the full extent and asked whether the whole route will be considered for improvements. AR responded that the route is very important for the area but there are issues with the surfacing.</p>	

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Spelthorne Workshop 1C



ITEM	DESCRIPTION AND ACTION	RESPONSIBLE
4.	<p>Proposed Core Walking Zones & Discussion</p> <p>GS began by describing the CWZ methodology, including the isochrones around the key trip attractors. He explained that a link between the CWZs and areas around them are used to then develop the network within them. He presented some of the background information including: Public Transport, Public Rights of Way (PROW) and Short Car Trips <2.5km (PCT), the River Thames Scheme (RTS) proposals, Pedestrian Collisions and Public Suggestions 'Commorplaces'. He then began to overlay the data step-by-step to show a heatmap to demonstrate an opportunity and issues map that highlights potential areas where improvements should be made. She explained that the data allowed an initial em which excluded Stanwell Moor and Fetham Hill CWZs so then develop the 'longlist' of CWZs and corridors connected to these CWZs which consider gaps raised by the data overlay analysis.</p> <p>He then provided a demonstrative example of how the network within the CWZ would be identified and concluded by presenting and describing the walking 'longlist' and how they connect with the nearby boroughs before opening up the discussion to the interactive map session on the CWZ.</p> <p>(See presentation slides 16 – 27 shared at 02/06/2021)</p> <p>Clr Grant mentioned a few issues in the Sunbury area. The Avenue, that has some shops has not been included in the zone and is a long route to Staines Road without buses and is not connected with Green Street that has buses. She added that to access Sunbury Common, residents must cross Sunbury Cross Roundabout, residents have to use the subways that are not in a good state, people feel unsafe, especially during dark hours, and results to people taking the bus for even one bus stop to avoid using the crossing. She noted the importance of new crossings in the area.</p> <p>GS acknowledged the difficulties of the crossing and added The Avenue in the interactive map.</p> <p>GC asked the attendees which routes are residents in the Stanwell area taking to get to Heathrow Airport.</p> <p>Clr Evans responded that Heathrow doesn't encourage people to walk, and there are no pathalink to the premises, so residents do not walk.</p> <p>Clr Weerasinghe expressed his concerns on the crossing on Halford Road and Nursery Road junction. He noted he would like to see a safe signalled crossing introduced for both pedestrians and cyclists.</p> <p>GS confirmed the location and noted this on the interactive map.</p>	GS
5.	<p>Next Steps</p> <p>BC explained that a survey link will be shared again after the meeting to get input on the CWZs and cycle corridors.</p> <p>She went on to explain the next steps which included: network refinement & prioritising the 'short list', route assessments, improvement concepts, further engagement and refinement of concepts before compiling the LCWIP report.</p>	BC



ITEM	DESCRIPTION AND ACTION	RESPONSIBLE
6.	<p>End of meeting</p> <p>BC thanked everyone for attending and their feedback. She reiterated access to the survey link and encouraged attendees to provide further comments via email.</p>	BC
7.	<p>Post meeting notes</p> <p>During and following the workshop, an online survey form was shared with attendees to get their input on which cycle routes and walking areas from the 'longlist' they felt were a higher priority. The results from this workshop are shown below. The input will be considered in identifying the 'short list' for further study in the LCWIP, along with input from other stakeholder workshops and data/information from the evidence base review.</p> <p>1. Select the 5 proposed cycle routes that you feel are the highest priority for further study in Phase 1 of the Spelthorne LCWIP.</p> <p>Shortlist</p> <ul style="list-style-type: none"> <input type="radio"/> 01 North Way <input type="radio"/> 02 Upper Moorland Gateway <input type="radio"/> 03 A509 - Kingsley Road <input type="radio"/> 04 London Road - Thames Valley <input type="radio"/> 05 Stone Road - Limes <input type="radio"/> 06 Stone / Limes Road <input type="radio"/> 07 Stone Hill Road <input type="radio"/> 08 London Hill Road <input type="radio"/> 09 London Woodstock Road <input type="radio"/> 10 London Hill Road <input type="radio"/> 11 Limes Road <input type="radio"/> 12 Thames Street - Heathrow <input type="radio"/> 13 London Woodstock <input type="radio"/> 14 Stone Road East <input type="radio"/> 15 Thames Path <input type="radio"/> 16 Other <p>2. Select the 3 proposed Core Walking Zones that you feel are the highest priority for further study through Phase 1 of the Spelthorne LCWIP.</p> <p>Shortlist</p> <ul style="list-style-type: none"> <input type="radio"/> 01 Stone Hill - Stone Hill <input type="radio"/> 02 Kingsley Road - Stone Hill <input type="radio"/> 03 Stone Hill - Stone Hill <input type="radio"/> 04 Stone Hill - Stone Hill <input type="radio"/> 05 Stone Hill - Stone Hill <input type="radio"/> 06 Stone Hill - Stone Hill <input type="radio"/> 07 Stone Hill - Stone Hill <input type="radio"/> 08 Stone Hill - Stone Hill <input type="radio"/> 09 Stone Hill - Stone Hill <input type="radio"/> 10 Stone Hill - Stone Hill <input type="radio"/> 11 Stone Hill - Stone Hill <input type="radio"/> 12 Stone Hill - Stone Hill <input type="radio"/> 13 Stone Hill - Stone Hill <input type="radio"/> 14 Stone Hill - Stone Hill <input type="radio"/> 15 Stone Hill - Stone Hill <input type="radio"/> 16 Other 	

Phase 2 Internal stakeholder meeting 15 October 21

ATKINS
Member of the SNC-Landis Group



Meeting Notes

Project:	Spelthorne LCWIP		
Subject:	Spelthorne Workshop 2A – Internal Stakeholders		
Meeting place:	Online (MS Teams)	Meeting no.:	04
Date and time:	15 October 2021 14:00	Minutes by:	Georgia Christodouloupoulou
Attendees:	<p>Amelia Hatfield (AmH) Hannah Bridges (HB) Sandy Muirhead (SM) Donna Salby (DS) Nick Healey (NH) Alison Houghton (AH) Fanka Adielokun (FA) Jamie Daly (JD) Duncan Knox (DK) Dug Tremellan (DT) Gregory Yeaman (GY) Marylin Bevan (MB) Ken Saunders (KS) Simon Jay (SJ) Beatriz Campos (BC) Georgia Christodouloupoulou (GC) Arlana Ragusa (AR)</p>	Representing:	<p>SCC SBC SBC SCC SCC SCC SCC SCC SCC Cycling group/stakeholder rep Cycling group/stakeholder rep Atkins Atkins Atkins Atkins</p>
Apologies:	<p>Nell McClure Charlie Cruise Ann Biggs Heather Morgan Roger Williams Caroline Smith</p>	Representing:	<p>SCC SCC SBC SBC SCC SCC</p>

Next meeting:	Attendees and Apologies		
Distribution:	Attendees and Apologies		
Date issued:	5th November 2021	File Ref:	5206264

NOTE TO RECIPIENTS:
These meeting notes record Atkins understanding of the meeting and intended actions arising therefrom. Your agreement that the notes form a true record of the discussion will be assumed unless adverse comments are received in writing within five days of receipt.

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Spelthorne Workshop 2A – Internal Stakeholders

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Member of the SNC-Landis Group



Helen Johnson	SCC
Zoe Chick	SCC
Lee Besant	SCC
Katie Ludvigsen	SCC
Helen Tindall	SCC
M Holdaway	SBC
Rebecca Harrison	SCC
Tim Brown	SCC
Claire Saunders	SCC
Hannah Gutteridge	SCC
Doug Hill	SCC
Sue Janota	SCC

ITEM	DESCRIPTION AND ACTION
1.	<p>Introductions BC introduced the objectives of the workshop which intends to gain stakeholders' feedback on the walking and cycling proposals.</p> <p>Study Background/ Objectives of the LCWIP BC gave an overview of the LCWIP including the activities undertaken so far. <i>(See presentation slides p3-p6 shared on the 13th October 2021)</i></p>
3.	<p>Proposed Design for the Core Walking Zones & Discussion GC described the methodology of selecting the Core Walking Zones (CWZs) and presented the long list for the walking network. She then proceeded to describe the prioritisation process of the CWZs and Walking Corridors using the Multicriteria Assessment Framework which assessed the walking network in 5 categories (Access, Demand, Existing pedestrian quality, Potential improvements, and Stakeholder support) and the prioritised CWZs and Walking Corridors. GC then presented the combined walking and cycling network map for the borough and explained that the proposals for walking and cycling will be in tandem in the overlapping areas. Then she presented the DIT's Walking Route Assessment Tool that helps to identify the issues on the walking network using 20 criteria, following the site visits and presented the results for the Phase 1 CWZs and Walking Corridors. Following that she presented the proposals for each Core Walking Zone</p> <ul style="list-style-type: none"> > CWZ 5 – Ashford (see presentation slide p.12 shared on the 13th October 2021) <p>DK commented on the speed limit reduction proposals and referred to the council's policy to the changes of the speed limit: if existing speeds are over 24mph there need to be traffic calming in addition to changes in signage which requires additional studies in order to propose 20mph speed limit. He added that in the area on Church Road there is opportunity for 'blank slate' redesign, using the entire highway boundary to radically reimagine the area. There are opportunities to opportunities to provide enhanced public transport bus stops along with the active travel proposals. AH mentioned that it would be helpful to show the bus stops as well as the primary bus corridors and added that there shouldn't be any detriment for bus journey times through the schemes.</p> <ul style="list-style-type: none"> > CWZ 6 – Convent Road (see presentation slide p.13 shared on the 13th October 2021) <p>SM estimated that the proposals for the bridge will have an astronomical cost to scheme</p>

Confirms sensitive information
Spelthorne Workshop 2A – Internal Stakeholders

ATKINS
Member of the SNC-Landis Group



ITEM	DESCRIPTION AND ACTION
	<p>NH informed that the bridge has been looked at previously, but there are land issues on the Surrey side. The traffic signals proposal will have a major impact on the traffic since the distance between the traffic lights will be 300m. However, proposals for a one-way system northbound are under consultation. DK commented that the Feltham Hill Road/Church Road roundabout has poor pedestrian provision on northern and southern arms of the junction. GC responded that parallel crossings on northern and southern arm are proposed and additional crossing can be added. DK added that a zebra crossing outside the school where the bulldozer is proposed is necessary.</p> <ul style="list-style-type: none"> > CWZ 7 – Sunbury Common (see presentation slide p.14 shared on the 13th October 2021) <p>DK commented on the proposed speed limits that existing speeds are closer to 30mph, and there will need substantial traffic calming measures to be 20mph. However, on Nursery Road the 20mph speed limit will be easier to implement. NH asked about the footway widening proposals on item #7 (railway bridge). GC responded that this is an aspirational proposal for widening the bridge for pedestrian and cycle facilities, as there are significant constraints. NH then commented that even though all of the proposed interventions are great and make sense, they would be very expensive, and we should manage expectations for the council members.</p>
4.	<p>Proposed Design for the Cycle Corridors & Discussion AR provided an overview of the proposed long list of cycle corridors and the prioritisation process using the multicriteria assessment framework. She then presented different cycle facilities and how these can be implemented in each type of road network using LTN 1/23 tables as a guideline and the constraints the road network has in terms of geometry, traffic speeds and traffic volumes. GC then presented the proposed interventions for the Phase 1 cycle corridors</p> <ul style="list-style-type: none"> > A308/Kingston Road – Route 3 (see presentation slide p.19 shared on the 13th October 2021) <p>GY asked on the proposals east of Fordridge roundabout on Staines Road W, where the pedestrians are proposed to be in relation to cyclists. GC responded that all proposed pedestrian and cycle facilities will be segregated. The existing footway will be widened using space from the wide traffic lanes and central reservation. GY commented that the route along Thames aqueduct is an interesting idea, but what is the provision plan for the cycle track. Lighting is required, how would the surface be maintained, in the Autumn there are falling leaves, rubbish, etc.? GC responded that lighting is proposed along the route to improve personal safety and the maintenance is a council's responsibility, the same as for all cycle facilities. She then added that there should be further discussions with Thames Water for the proposals. NH responded in the chat pane: "The aqueduct belongs to Thames Water - unlikely to be a priority for them to maintain a cycle route... unless there is some benefit to them in their maintenance of the aqueduct in sort of itself." DK commented that there is a good opportunity for a high-quality facility on the A308, but it is not possible to reduce the speed limit. KS commented that the aqueduct is an interesting idea. He then asked if there is any provision for a safe cycle facility over the railway bridge on Kingston Road, except from mixed traffic. GC explained the constraints on the bridge, and that a segregated facility can be provided only through bridge widening. DT asked why toucan crossings are proposed instead of parallel crossings. GC responded that the toucan crossings are proposed at locations where signalised crossings should be proposed, and in the next stages can be reviewed to provide segregation between cyclists and pedestrians, and the parallel crossings are not signalised.</p>

Confirms sensitive information
Spelthorne Workshop 2A – Internal Stakeholders

Phase 2 External stakeholder meeting 19 October 21

ATKINS

Member of the SNC Lend Lease Group

ITEM	DESCRIPTION AND ACTION
	<p>> A308/Kingston Road Sunbury Cross Roundabout – Route 3 (see presentation slide p.20 shared on the 13th October 2021)</p> <p>NH said he is reluctant to keep the subways along roundabout arms. The central subway is relatively pleasant, but subways under gullyways are narrow and have sharp bends.</p> <p>> Staines/Laleham Road – Route 6 (see presentation slide p.21 shared on the 13th October 2021)</p> <p>KS asked more information on the stepped track facilities. GC showed an example and explained that the facility is proposed without a buffer between the traffic and the cyclists, and there is level difference between the users (pedestrians, cyclists, motorists)</p> <p>GY commented that Laleham Road has wide carriageway and wide footways – but cars park on road and on the footways. There are advisory cycle lanes but there are not useful, there are too narrow, they do not avoid drain covers and have poor surface. He then asked about the parking in the area. AR responded that during the site visit we noted that most of the properties has available off-street parking, however in the next stages of design there will be parking surveys to estimate the need for parking in the area. DK in response to GY shared a Google Street View image of a cycle facility between the parking bays and the footway and suggested that this can be an option for Laleham Road. GY responded that cyclists should not be placed in the 'car door' area but leave some space to make cyclists safer from opening car doors. He then added that different types of cyclists have different preferences, sports cyclists are unlikely to use a stepped track, so expect some users to go on the dedicated facility but others avoiding it.</p> <p>MB suggested to make the road 20mph and add sleeping policeman to enable mixed traffic cycling. DK responded that 20mph is a good idea but traffic calming measures will be required and still the road will not be suitable for everyone. GC agreed and added that due to the traffic flows the road requires segregation.</p> <p>MB added that on Laleham Church an additional crossing should be provided on Staines Road T junction at Laleham School</p> <p>> Stanwell Road – Route 7 (see presentation slide p.22 shared on the 13th October 2021)</p> <p>DK mentioned that in the Ashford Cres. area there is a tranche 3 bid for Low traffic Neighbourhood, so LCWIP proposals would complement this scheme</p> <p>GY raised his concerns regarding location #5, on the railway bridge, on the transition between the segregated cycle tracks and the mixed traffic section, for the westbound direction. GC replied that there are design tools to be used to resolve the conflicts and to provide a safe transition, that will be reviewed in the next stage of design.</p> <p>NH referred to Stanwell Road section #2 that is very busy, especially in the northbound direction, as on the approach to the A50 the road is occupied by queues, so it is not suitable for Dutch treatment. He suggested that the footway is relatively wide to provide something nearly LTN 1/20 compliant.</p> <p>NH commented that the railway bridge is hostile even if it is 20mph, and that the one-way system proposals is an interesting one.</p> <p>> Ashford/Fordbridge Road – Route 9 (see presentation slide p.23 shared on the 13th October 2021)</p> <p>KS mentioned that the existing cycle route on Fordbridge Road is poorly maintained, and the section through the Broadway is narrow.</p> <p>DK mentioned that they have received complaints regarding the speeds on Ashford Road. The 50mph is a viable option. The road has wide traffic lanes of 3.6m and can be reduced to 3m to reduce the speeds too.</p>

Contains sensitive information
Spelthorne Workshop 2A – Internal Stakeholders

ATKINS

Member of the SNC Lend Lease Group

ITEM	DESCRIPTION AND ACTION
	<p>> Green Street – Route 18 (see presentation slide p.24 shared on the 13th October 2021)</p> <p>MB commented that the Dutch style treatment in Datchet was not successful as it caused a negative effect on traffic.</p> <p>DK mentioned that Nursery Road is busy at school times. There is opportunity for a traffic calming scheme with parking spaces on both sides of the road that create chicanes.</p> <p>AH the proposed changes will have an impact on bus journey times on Green Street. Which tool will you use for modelling? SJ responded that it is too detailed to decide now. GC confirmed that the bus journey times will be estimated in the traffic model.</p> <p>NH said that the proposals and the needs in the area is challenging to balance. There is need to remove on-street parking and need to provide safe infrastructures, are we trying for behaviour change? What is the balance between benefit to cyclists and impact on other road users? He then added that a toucan crossing is required to link the paths in the green areas, and the route on Nursery Road should continue to A244 to link to a future route.</p> <p>MB added that maintenance is a key for the use of the facilities. SJ agreed</p> <p>KS suggested the use of brideways for cycling.</p>
5.	<p>Next Steps</p> <p>BC went on to explain what the next steps will entail. This included: Refinement of the design proposals, high level costs for the proposals and LCWIP report completion.</p>
6.	<p>AOB</p> <p>BC asked the attendees to send any additional comments on the proposed interventions by Friday 25th October.</p>
7.	<p>End of meeting</p> <p>BC thanked all for attending and felt the workshop was a useful exchange in the ongoing LCWIP process</p>

Contains sensitive information
Spelthorne Workshop 2A – Internal Stakeholders

ATKINS

Member of the SNC Lend Lease Group

Meeting Notes

Project: Spelthorne LCWIP	
Subject: Spelthorne Workshop 2B – External Stakeholders_R1	
Meeting place: Online (MS Teams)	Meeting no: 05
Date and time: 19 October 2021 14:00	Minutes by: Georgia Christodouloupoulou
Attendees: Dug Tremellan (DT) Nick Healey (NH) Hannah Bridges (HB) Chris Hyde (CH) Kath Sanders (KS) Marin Richardson (MR) Yasmin Broome (YB) Sam Maloney (SM) Daniel Aldridge (DA) J Stead (JS) Anne Dornwell (AD) Paul Linton (PL) A Alder (AA) Simon Jay (SJ) Beatriz Campos (BC) Georgia Christodouloupoulou (GC) Ariana Ragusa (AR)	Representing: SCC SCC SBC Local resident Local resident South Ascot Village Primary School Surrey Coalition of Disabled People Sustrans The Bishop Wand Church of England School St Paul's Catholic College Spelthorne Town Society Cycling UK The Matthew Arnold School Atkins Atkins Atkins
Apologies: Neil McClure Amelia Hatfield Duncan Knox Charlie Cruise Ann Biggs Muirhead, Sandy Heather Morgan Stephanie Zarkis	Representing: SCC SCC SCC SCC SBC SBC Sustrans

Next meeting:

Distribution: Attendees and Apologies

Date issued: 9th November 21

File Ref: S208294

NOTE TO RECIPIENTS:
These meeting notes record Atkins understanding of the meeting and intended actions arising therefrom. Your agreement that the notes form a true record of this discussion will be assumed unless adverse comments are received in writing within five days of receipt.

Contains sensitive information
Spelthorne Workshop 2B – External Stakeholders

Phase 2 Elected Members stakeholder meeting 21 October 21

ITEM	DESCRIPTION AND ACTION
	<p>KS commented that the extend of the route is on Church Road and Stanwell Road is only along a small section and the name of the route should change. She then added that an additional link should be proposed along Stanwell Road to the south as it has high use, and it is dangerous.</p> <p>> Ashford/Fordbridge Road - Route 9 (see presentation slide p.23 shared on the 15th October 2021)</p> <p>PL commented that today people are parking on the cycle lane, so the proposed stepped track would help. He added that in terms of connectivity of the network that Foinisell Park has a modal filter, and it can be a great opportunity to link the route with School Road.</p> <p>CI commented in the chat "Parking in cycle lane - an enforcement issue again. We should think of a package, which includes capital investment for the new facilities plus enforcement plus maintenance."</p> <p>> Green Street - Route 18 (see presentation slide p.24 shared on the 15th October 2021)</p> <p>PL suggested a bus gate on Green Street to help reduce the traffic. AR replied that this could be an interesting idea and could work, as long as there is support from the residents. NH responded that there were proposals for a Low Traffic Neighbourhood, but they were rejected by the residents and the schools. PL suggested alternative routes to Green Street. NH responded that this was the case with the LTN, and the push back from the community was overwhelming. DA added in the conversation that the residents were worried about the diversion of the traffic, and there was the issue with the parking. AR responded that parents would keep driving their kids to school if there no other alternative.</p>
5.	<p>Next Steps</p> <p>BC went on to explain what the next steps will entail. This included: Refinement of the design proposals, high level costs for the proposals and LCWIP report completion.</p>
6.	<p>AOB</p> <p>BC asked the attendees to send any additional comments on the proposed interventions by Monday 29th October.</p>
7.	<p>End of meeting</p> <p>BC thanked all for attending and felt the workshop was a useful exchange in the ongoing LCWIP process</p>

Meeting Notes

Project: Spelthorne LCWIP	
Subject: Spelthorne Workshop 26 - Elected Members_R1	
Meeting place: Online (MS Teams)	Meeting no: 09
Date and time: 21 October 2021 14:00	Minutes by: Giovanni Sanna
Attendees: Dug Tremellen (DT) Amelia Hatfield (AH) Nick Healey (NH) Hannah Bridges (HB) Cllr Alison Griffiths Cllr Budsith Weerasinghe Cllr Joanne Sexton Cllr Maureen Attewell Cllr Kathleen Grant Cllr Robert Noble Beatriz Campos (BC) Georgia Christodoulou (GC) Ariana Ragusa (AR) Giovanni Sanna (GS)	Representing: SCC SCC SCC SBC SCC SCC SBC SCC SBC SBC Atkins Atkins Atkins Atkins

ITEM	DESCRIPTION AND ACTION
1.	<p>Introductions</p> <p>BC introduced the objectives of the workshop which intends to gain stakeholders' feedback on the walking and cycling proposals.</p>
2.	<p>Study Background/ Objectives of the LCWIP</p> <p>BC gave an overview of the LCWIP including the activities undertaken so far.</p> <p>(See presentation slides p3-p6 shared on the 19th October 2021)</p>

Next meeting:	
Distribution: Attendees and Apologies	
Date issued: 5th November 21	File Ref: 5206264

NOTE TO RECIPIENTS:
These meeting notes record Atkins' understanding of the meeting and intended actions arising therefrom. Your agreement that the notes form a true record of the discussion will be assumed unless adverse comments are received in writing within five days of receipt.

ITEM	DESCRIPTION AND ACTION
3.	<p>Proposed Design for the Core Walking Zones & Discussion</p> <p>GC described the methodology of selecting the Core Walking Zones (CWZs) and presented the long list for the walking network. She then proceeded to describe the prioritisation process of the CWZs and Walking Corridors using the Multicriteria Assessment Framework which assessed the walking network in 5 categories (Access, Demand, Existing pedestrian quality, Potential improvements, and Stakeholder support) and the promised CWZs and Walking Corridors.</p> <p>GC then presented the combined walking and cycling network map for the borough and explained that the proposals for walking and cycling will be in tandem in the overlapping areas.</p> <p>Then she presented the DT's Walking Route Assessment Tool that helps to identify the issues on the walking network using 29 criteria, following the site visits and presented the results for the Phase 1 CWZs and Walking Corridors.</p> <p>Following that she presented the proposals for each Core Walking Zone</p> <p>> CWZ 5 - Ashford CWZ (see presentation slides p.12 shared on the 18th October 2021)</p> <p>Cllr Noble clarified whether there would be a reduction of car parking in Ashford Common. He stated that there will be already some parking reductions in Ashford through changes on the multi-storey car park and raises a concern that there will be further issues. BC asked for further information and Cllr Noble stated that nothing is formalised, and stated apartments would be built on the space and some of this will be allocated to residents and local businesses.</p> <p>Cllr Sexton reiterated the concern regarding reduction in parking and stated that there should be more collaboration with David Ourl, Jack Roberts at SCC Jackie Taylor & Bruno Barbosa at SBC to explore what can be achieved through the review of parking.</p> <p>Cllr Sexton asked about the plans for improvement along Stanwell Road where the footbridge is. She raised there are issues with anti-social behaviour here. GC explained that the proposals will include opening the bridge to the side of the carriageway and improved lighting for the personal safety and the potential proposals would be explored further at the next stage.</p> <p>Cllr Griffiths raised issues regarding the high streets and raised concerns about removal of parking and the ability to deliver these proposals without proper engagement with the public. BC responded that parking on commercial areas and especially the high streets is always an issue, and in the next stages it will be further engagement. Cllr Griffiths then suggested a shared space on the high streets/commercial areas.</p> <p>Cllr Noble added in the chat: "Wholeheartedly agree with Councillor Griffiths on her comments."</p> <p>Cllr Weerasinghe provided a previous example where EVs were not delivered due to limited engagement with the public. He reiterated the concern about deliverability.</p> <p>DT agreed on the importance to engage with local residents to deliver these proposals, and added that we will do extensive consultation in the next stages using digital platforms as well.</p> <p>Cllr Griffiths as an example that Active Surrey added a cycle lane without consultation and it was not used which resulted to be taken up. She added in the chat "we also had to remove the bike lane for active travel in lower Sunbury due to not engaging"</p>



ITEM | DESCRIPTION AND ACTION

Clr Sexton stated she welcomes these proposals however she is disappointed about the limited engagement with councillors early on. She then added to the chat: "Why have you not engaged with the businesses and residents now before coming up with a plan"

Clr Noble explained that he feels the proposals are competing with the high vehicular flows on the main arteries in Spelthorne and provided an example of the quiet ways, that use back roads in London which have been implemented more effectively.

BC commented in the chat: "Clrx, following Dug's comments, extensive consultation will take place any plans are finalized."

- > **CWZ 6 – Convent Road** (see presentation slides p.12 shared on the 18th October 2021)

Clr Noble stated that there will be new bottlenecks of traffic due to demand from schools. He explained that although he supports the proposals he has concerns regarding congestion and the associated air pollution this will cause. GC responded stating that traffic modelling surveys will be undertaken at the next stage to see how these proposals will affect traffic flows. Clr Griffiths agreed with Clr Noble's comments in the chat: "I support this too but comms are key, great point bob"

Clr Sexton added that there was a petition for a pedestrian crossing in Feltham Road. She then added that they want to connect to the lakes and suggested an additional meeting with the design team to discuss the options.

Clr Griffiths stated that a crossing proposal had been suggested outside St. Michaels school. She then added to this stating there should be more collaboration between residents and councillors to deliver these proposals. She suggested to meet on site with Atkins to discuss the alternative routes. She added in the chat: "Could we do walk-throughs with you in our areas please? That conversation would be very helpful, we have alot to add"

Clr Noble stated that providing alternative routes which avoid traffic for walking would be more effective.

- > **CWZ 7 – Sunbury Common** (see presentation slides p.12 shared on the 18th October 2021)

Clr Griffiths stated she was pleased to see there are proposals for Sunbury Cross and suggested to extend the proposals to include the Avenue.

Clr Grant explained that the passageways are unpleasant and avoiding it is often what people do. Clr Griffiths responded explaining that the subway attracts a lot of crime and you will have to contact Highways England.

Clr Weerasinghe explained that a crossing along Upper Halford Road/Windmill Road to then access Nursery Road is required.

Clr Noble stated he agreed with the Nursery Road 20mph zone and Vicarage Road. He stated that he was supportive of people parking their vehicles either side of Nursery Road which is creating visual hazards for pedestrians. He then raised a concern about ensuring vehicles to not park on the footway. GC explained that parking bays can be built to limit the areas where vehicles can park and minimise the chances of drivers parking on the footway. BC added that in a previous stakeholder engagement a representative of the schools suggested a drop off-pick up area at Tesco which will be looked at.

4. Proposed Design for the Cycle Corridors & Discussion



ITEM | DESCRIPTION AND ACTION

AR provided an overview of the proposed long list of cycle corridors and the prioritisation process using the multicriteria assessment framework. She then presented different cycle facilities and how these can be implemented in each type of road network using LTN 1/20 tables as a guideline and the constraints the road network has in terms of geometry, traffic speeds and traffic volumes.

AR then presented the proposed interventions for the Phase 1 cycle corridors

- > **Route 3 – A308/ Kingston Road** (see presentation slides p.12 shared on the 18th October 2021)

Clr Griffiths stated that the traffic is too high for there to be an on-road cycle track due to pollution from the road. She stated that the level of traffic is too high to be able to deliver a cycle lane which would be acceptable and that was pleased with the alignment of item #5. AR explained that there is an alternative type of alignment with a buffer from the traffic and the exact proposal will be determined by the highway boundary. AR explained that for item #5 (Thames aqueduct) there is limited amount of surveillance compared to providing a route along the A308. BC added that the section along the aqueduct may be more challenging to deliver because of the private ownership of the area near the aqueduct, and the route along the A308 could be easier to implement as a short term option. Clr Sexton agreed with this point and added the challenges of delivering here.

Clr Noble explained that there are multiple purposes for cycling. He raised concern about the purpose of delivering cycle lanes and the concerns about who this is going to be delivered for. AR explained the remit of this study and what this can achieve from a policy side. DT explained that the purpose of this study is to encourage those who could replace their everyday trips with more walking and cycling. Clr Noble stated that this is not what was expected in any type of form.

- > **A308/ Kingston Road Sunbury Cross Roundabout** (see presentation slides p.12 shared on the 18th October 2021)

Clr Griffiths stated she would support "Option 1" or "Option 2". GC added that Option 2 would not create additional delay to traffic flow as the traffic stop lines would remain in place and the crossings would operate with the existing traffic lights.

Clr Grant asked whether it is possible to repurpose the subways for leisure activities, e.g. markets or a theatre. She added whether it is possible to provide a cycle/pedestrian bridge over the M3. From empirical analysis AR stated she thinks this would not be feasible due to the minimal clearance.

Clr Noble referenced examples from Germany and Singapore which are interesting in solving the issue similar to Sunbury Cross Roundabout. AR added people feel safe when there is supervision and explained the configuration is not conducive to a safe environment.

- > **Route 6 – Staines/Laleham Road** (see presentation slides p.12 shared on the 18th October 2021)

No comments

- > **Route 7 – Stanwell Road** (see presentation slides p.12 shared on the 18th October 2021)

Clr Noble commented on the proposals at the junction with the A30 that the route has significant issues, such as flooding, and requires serious infrastructure.

Clr Sexton raised her concerns about School Road which has a high number of vehicles, HGVs, that go very fast. She added that there are a variety of improvements



ITEM | DESCRIPTION AND ACTION

which can be made to encourage slower movements such as SRETs. She explained that the service roads can provide space to reallocate space for cycling.

- > **Route 9 – Ashford/Fordbridge Road** (see presentation slides p.12 shared on the 18th October 2021)

No comments

- > **Route 18 – Green Street** (see presentation slides p.12 shared on the 18th October 2021)

Clr Grant stated that Green Street is very busy, with a lot of buses.

Clr Noble stated there could be high speeds encouraged by having Green Street as being a wide road and reiterated the point about the shifting of traffic is the design slow down traffic or create bottlenecks. AR explained that an alternative alignment along Green Street which be helpful to be able to create a more pleasant environment for cyclists such as introducing traffic calming as well as adding crossings in the area. Clr Noble stated that there could be a traffic impact as there is a reduction in speed from Sunbury Cross roundabout. He then asked if the Avenue was considered as a cycle route. AR responded that the Avenue was considered and was assessed along with Green Street and Nursery Road/Upper Halford Road, and the assessment showed greater benefit along Green Street.

5. Next Steps

BC went on to explain what the next steps will entail. This included:

Refinement of the design proposals, high level costs for the proposals and LOWIP report completion.

6. AOB

BC asked the attendees to send any additional comments on the proposed interventions by Wednesday 27th October.

7. End of meeting

BC thanked all for attending and felt the workshop was a useful exchange in the ongoing LOWIP process.

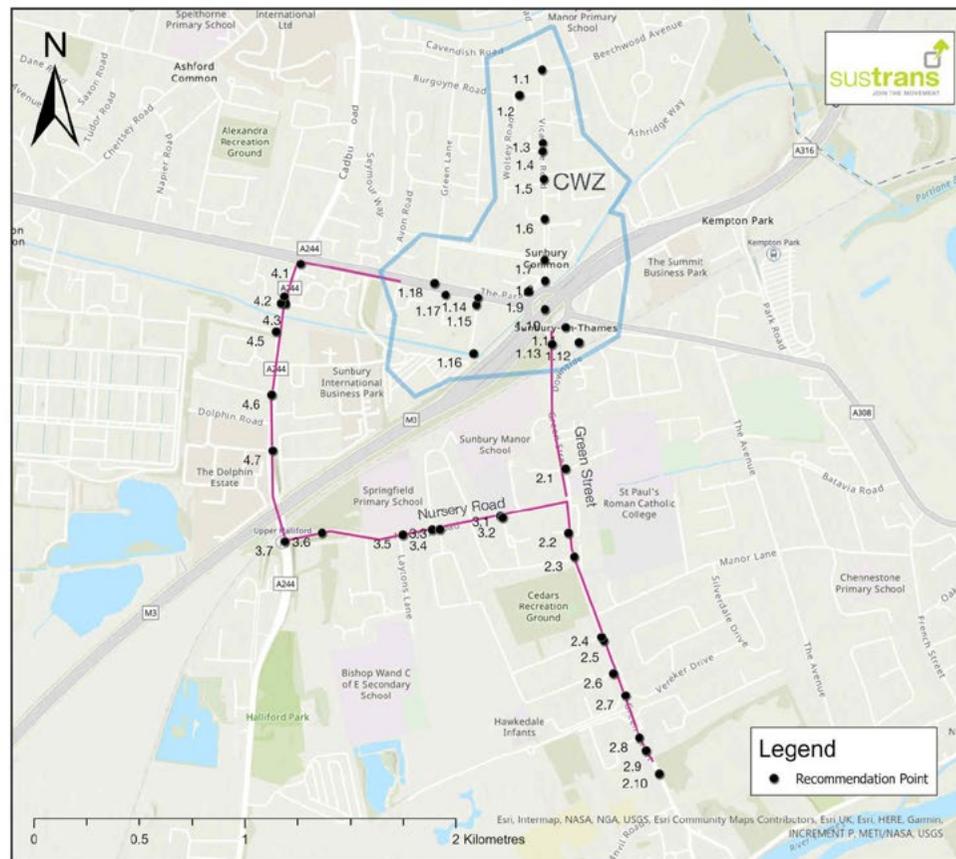
Appendix 7: Sustrans Report



Spelthorne LCWIP

Spelthorne Core Walking Zone + Walking Corridors

1. Sunbury CWZ
2. Green Street Walking Corridor
3. Nursery Road Walking Corridor
4. Upper Halliford Road and Staines Rd/A244/A308 Walking Corridor



Spelthorne LCWIP

1.1

Add dropped kerbs and tactile paving at Beechwood Ave. Investigate provision of continuous footway on all side road junctions of Vicarage Rd.

1.2

Regulate or remove pavement parking on Burgoyne Rd

1.3

Regulate or remove pavement parking on Vicarage Rd

1.4

Provide rest points/seating in the wide verge areas on Vicarage Rd. Add seating and shelter at bus stops.

1.5

Add crossing of Vicarage Rd near Juniper Gardens junction

1.6

Investigate upgrading uncontrolled crossing to zebra crossing on Vicarage Rd north of Heath Grove.



Figure 1.1 Beechwood Ave (Sustrans)



Figure 1.2 Burgoyne Rd (Sustrans)



Figure 1.3 Vicarage Rd (Sustrans)



Figure 1.4 Vicarage Rd (Sustrans)



Figure 1.5 Vicarage Rd (Sustrans)



Figure 1.6 Vicarage Rd (Sustrans)

1.7

Wide crossing distance for pedestrians. Tighten curb radii and add continuous footway at Heathcroft Avenue

1.8

Add dropped kerb and tactile paving, consider raised or continuous crossing across The Parade

1.9

Pavement parking reduces footway width along the length of The Parade. Regulate or remove pavement parking

1.10

Investigate replacing the A308 pedestrian underpass with an at-grade crossing for a more direct crossing and improved safety.

1.11

Add dropped kerbs and Zebra Crossing across Station Rd, consider raised table.

1.12

Consider redesigning Sunbury Station entry plaza with pedestrian priority, including raised, coloured or textured pavement to indicate pedestrian zone. Provide seating and shelter outside of the station.



Figure 1.7 Heathcroft Sustrans



Figure 1.8 The Parade Sustrans



Figure 1.9 The Parade (Sustrans)



Figure 1.10 A308 (Sustrans)



Figure 1.11 Station Rd (Sustrans)



Figure 1.12 Sunbury station (Sustrans)

Spelthorne LCWIP 1

1.13

Widen footway to at least 2m along Green St bridge. Relocate obstructions at pinch points.



Figure 1.13 Green St (Sustrans)

1.14

Expand refuge island, add pedestrian countdown signals, tighten curb radii, add tactile paving at Crossways and A308 junction



Figure 1.14 Crossways (Sustrans)

1.15

Widen footway to at least 2m on Crossways



Figure 1.15 Crossways (Sustrans)

1.16

Install accessible ramp on bridge between Crossways and Tesco. Current slope is not suitable for wheelchair users.



Figure 1.16 Reservoir bridge (Sustrans)

1.17

Widen footway to 2m if possible on Forest Dr.



Figure 1.17 Forest Dr (Google)

1.18

Improve crossing, add tactile paving, tighten radii, consider raised table and continuous footway across Green Lane



Figure 1.18 Green Lane (Sustrans)

2.1

Add pedestrian priority/continuous footways on the side roads from Homewaters Ave to The Ridings



Figure 1.19 The Ridings (Sustrans)

2.2

Add shelter and rest points within green verges, such as in the verge near Sunbury Health Centre. Also consider adding crossing point across Green Rd at Sunbury Health Centre



Figure 1.20 Green St (Google)

2.3

Investigate implementing 20mph speed limit and traffic calming near Sunbury Health Centre and St Ignatius Roman Catholic Primary School



Figure 1.21 Green St (Sustrans)

2.4

Insufficient clearance for wheelchair users. Expand footway on Green St at Rooksmead Rd junction. Relocate crossing point onto pedestrian desire line. Consider continuous footway



Figure 1.22 Green St/Rooksmead(Sustrans)

2.5

Investigate upgrading uncontrolled crossing to Zebra crossing on Green St near Rooksmead Rd



Figure 1.23 Green St (Sustrans)

2.6

Widen footways on Sunmead Rd to improve clearance for wheelchair users. Relocate crossing point onto pedestrian desire line. Consider continuous footway. Widen footway to a minimum of 2m on Green St south of junction



Figure 1.24 Sunmead Rd (Sustrans)

2.7

Reduce curb radii, tighten junction to shorten pedestrian crossing distance at Vereker Dr



Figure 1.25 Vereker Dr (Sustrans)

2.8

Add dropped kerbs and tactile paving at Lyndhurst Ave. Consider continuous footway



Figure 1.26 Lyndhurst Ave (Sustrans)

2.9

Regulate or eliminate Pavement Parking on Green St. Install pedestrian crossing point across Green Street within the vicinity of the shops and pub.



Figure 1.27 Green St (Sustrans)

2.10

Consider widening footway or removing bollards which reduce width below 2m for wheelchairs and other users



Figure 1.28 Green St (Sustrans)

3.1

Add tactile paving at Nursery Gardens. Consider continuous footway
Implement 20mph speed limit on Nursery Road.



Figure 1.29 Nursery Gardens (Sustrans)

3.2

Upgrade existing uncontrolled crossing opposite Sunbury Manor School to Zebra crossing



Figure 1.30 UncontrolledCrossing(Sustrans)

3.3

Add tactile paving and tighten radii at Stratton Rd junction. Provide continuous footways across all small side road junctions on Nursery Rd.



Figure 1.31 Stratton Rd (Sustrans)

3.4

Add tactile paving at Evelyn Crescent, consider continuous footway



Figure 1.32 Evelyn Crescent (Google)

3.5

Regulate or remove pavement parking, where there are wide footways along Nursery Rd add rest points and cycle parking, there is an opportunity for public realm enhancements near the frontage of Springfield Primary School



Figure 1.33 Nursery Rd (Sustrans)

3.6

Relocate existing uncontrolled crossing to the west to better align with shared use path to railway station. Consider upgrading existing crossing to zebra crossing. Add wayfinding signage for railway station



Figure 1.34 Railway station path (Sustrans)

3.7

Add pedestrian signals and crossings to all arms of signalised junction of Nursery Rd and Upper Halliford Rd



Figure 1.35 Upper Halliford (Sustrans)

4.1

Add pedestrian signals on southern arm of A308/A244 junction.



Figure 1.36 A308 junction (Sustrans)
Spelthorne LCWP 3

4.2

Regulate or remove pavement parking on Upper Halliford Rd north of Cedar Way



Figure 1.37 Upper Halliford Rd (Google)

4.3

Tighten radii and add continuous footway at Mill Farm Ave



Figure 1.38 Mill Farm Ave (Google)

4.4

Tighten radii and add continuous footway at Cedar Way



Figure 1.39 Cedar Way (Sustrans)

4.5

Add tactile paving and dropped kerbs at Lincoln Way. Align crossing point onto pedestrian desire line



Figure 1.40 Lincoln Way (Google)

4.6

Add pedestrian signals at Windmill Rd W



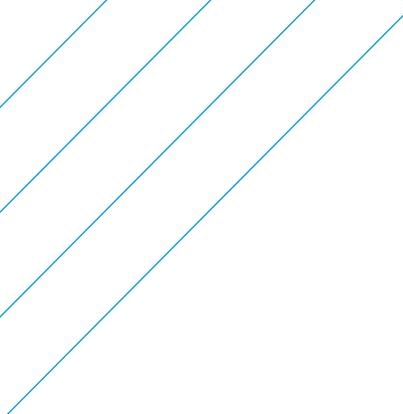
Figure 1.41 Windmill Rd W (Sustrans)

4.7

Add tactile paving at Windmill Close and consider continuous footways



Figure 1.42 Windmill Cl (Google)



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Member of the SNC-Lavalin Group

OFFICE

Nova North
11 Bressenden Place
London - SW1E 5BY



www.snclavalin.com | www.atkinsglobal.com