Runnymede Local Cycling and Walking Infrastructure Plan

SURREY COUNTY COUNCIL & RUNNYMEDE BOROUGH COUNCIL

1 June 2022

SURREY COUNTY COUNCIL

Runnymede BOROUGH COUNCIL

Agenda Item 7

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ATKINS
Member of the SNC-Lavalin Group

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01	For client review	AR/GC	BC/TK	BC	SJ	17/12/2021
02	Updated per client comments	AR/GC	BC	BC	SJ	04/02/2022
03	Other updates, routes numbering	AR/GC	BC	BC	SJ	28/02/2022
04	Minor text edits, reordering of chapter 3	AR/GC	BC	BC	SJ	08/03/2022
05	Minor mapping edits	AR/GC	BC	BC	SJ	14/03/2022
06	Concept design for new cycle and walking route added	GC	BC	BC	SJ	01/06/2022

Contents

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1. Executive Summary

Executive Summary

Atkins has been commissioned by Surrey County Council (SCC) and Runnymede Borough Council (RBC) 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 RBC LCWIP has considered the full extent of the Borough of Runnymede, 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. 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 a continuous travel network for the Borough.
- 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.
- To make Runnymede an area where people can have an excellent quality of life supporting the population's social and economic aspirations.

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 17) and the structure of the study 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.

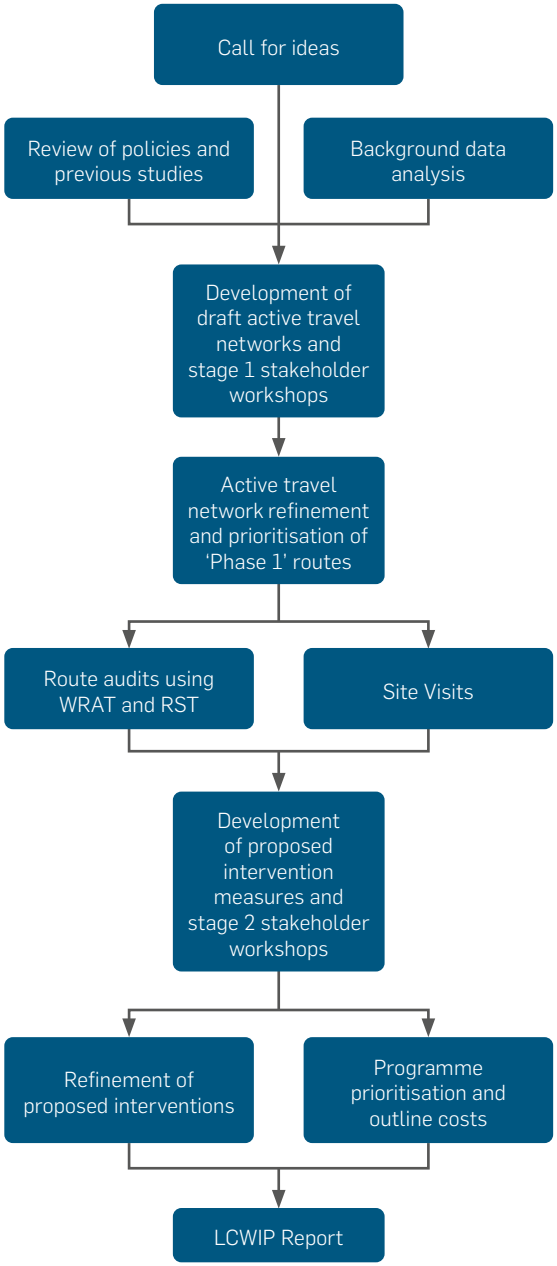


Figure 1. LCWIP process overview

Vision and Design Approach

The overarching vision behind the LCWIP development is one which supports strong and sustainable growth for Runnymede. 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

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

Stakeholder Consultation

Targeted stakeholder engagement was a key element of this study as it ensured that the views and knowledge of key stakeholders were taken into account.

Before the start of the project, a "Call for Ideas" was conducted via Commonplace, an interactive mapping tool where members of the public could identify issues and opportunities within Surrey's active travel network.

During the project two sets of workshops were held with representatives from SCC and RBC, 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 RBC project team.

Walking and Cycle Routes Selection

Working with SCC and RBC, 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 10 Core Walking Zones (CWZs) and respective walking routes and 19 cycle routes[1] (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 RBC 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: four 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 as part of the first set of interventions (Phase 1), may be developed at a later stage.

As the project developed, interdependencies became more evident between the walking and cycle routes. These interdependencies are reflected in the route prioritisation, costing and intervention approach.

Proposed Improvements: Vision and Design Approach

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

In Runnymede, 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 congested road network. Retail areas could be better linked to their Runnymede catchments to foster economic and social vitality and cohesion, supporting places where people would like to spend time.

Atkins' design strategy addresses these issues with the development of a local walking and cycling 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 as well as long term solutions that can be applied to further designs across Runnymede and Surrey.

Figure 6, Figure 7 and Figure 8 provide an area based approach of the proposed improvements for the cycle and walking routes. Figure 104 and Figure 105 are visualisations on how the interventions may look.

Route Prioritisation

The aspirational network for walking and cycling was assessed by quantifying stakeholder input, potential usage, design and access, in order to prioritise routes for the next steps of the LCWIP. Not only did the categories intend to reflect the views of local stakeholders but also the potential usage of each route, the

1 Phase 1 and Phase 2 combined.

feasibility of the proposed schemes as well as 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 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.

Costing

Outline costs were estimated for the proposed design measures. The estimates are reflective of the early concept design stage and intended to provide an indicative, rough order-of-magnitude cost. Routes vary significantly in size and complexity of interventions, which is reflected in the costs. Costs vary from 1.6 million to 5 million for the cycle routes and from 3.5 million to 6.7 million for the walking routes.

As costs were tabulated by route, each route and each mode (walking and cycling) were evaluated separately. This method provided a stand alone cost for each route so they may be considered independently. However, if viewed as a network-wide package of improvements, there is opportunity for considerable savings.

Next Steps

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 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 RBC 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.

Integrate network proposals across other LCWIPs

There are numerous interdependencies across Surrey and potentially other counties.

LCWIPs in neighbouring boroughs, such as Elmbridge and Spelthorne, were taken into consideration during the development of the Runnymede LCWIP. This method has provided an opportunity for a joined-up approach amongst the 3 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 future[1] 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.

1 Mole Valley, Waverley and Surrey Heath are in Surrey's pipeline. Reigate and Banstead has just been completed.

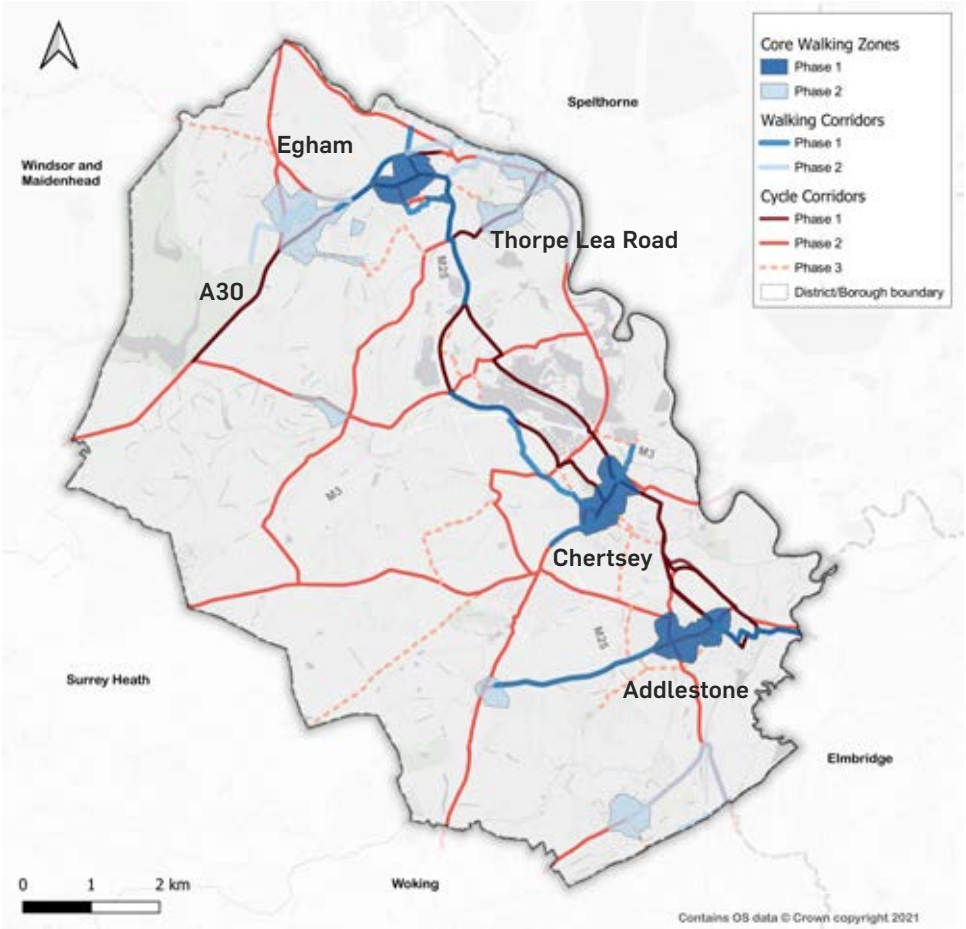


Figure 2. Walking and cycling aspirational list, showing the initial "long list" of routes and walking zones that were individually assessed and prioritised to produce a 'Phase 1' network

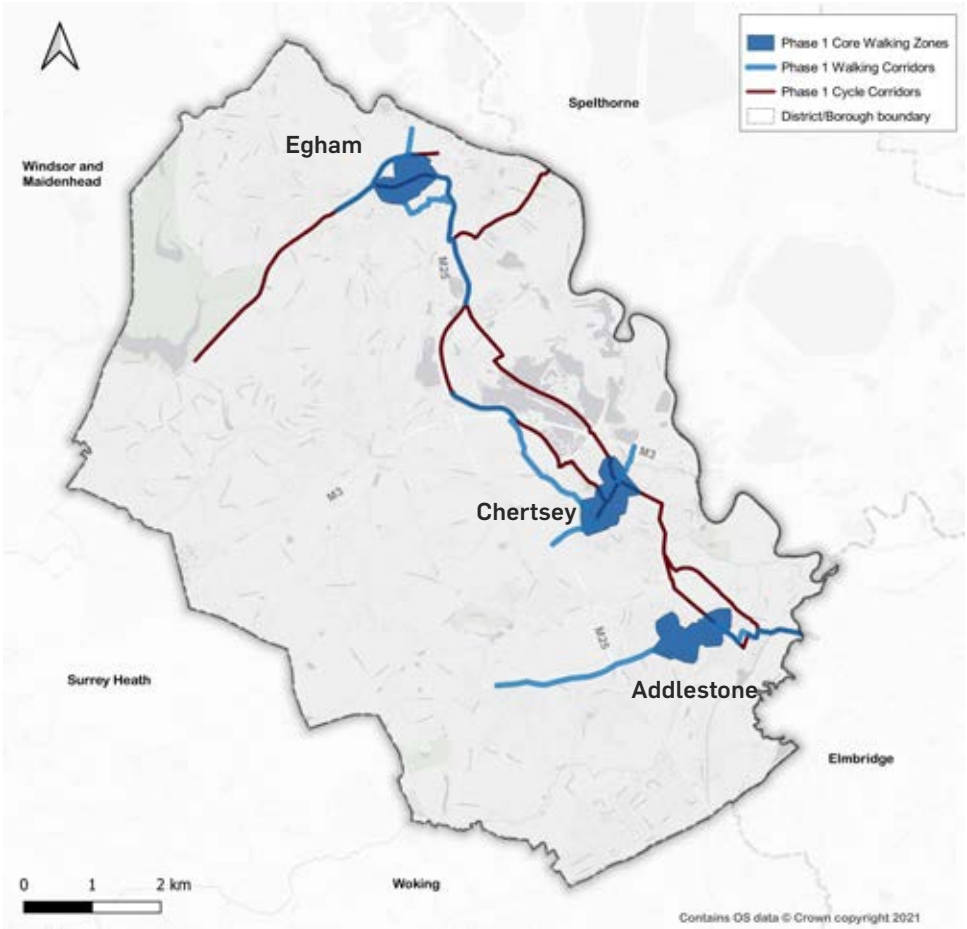


Figure 3. Phase 1 walking and cycling network

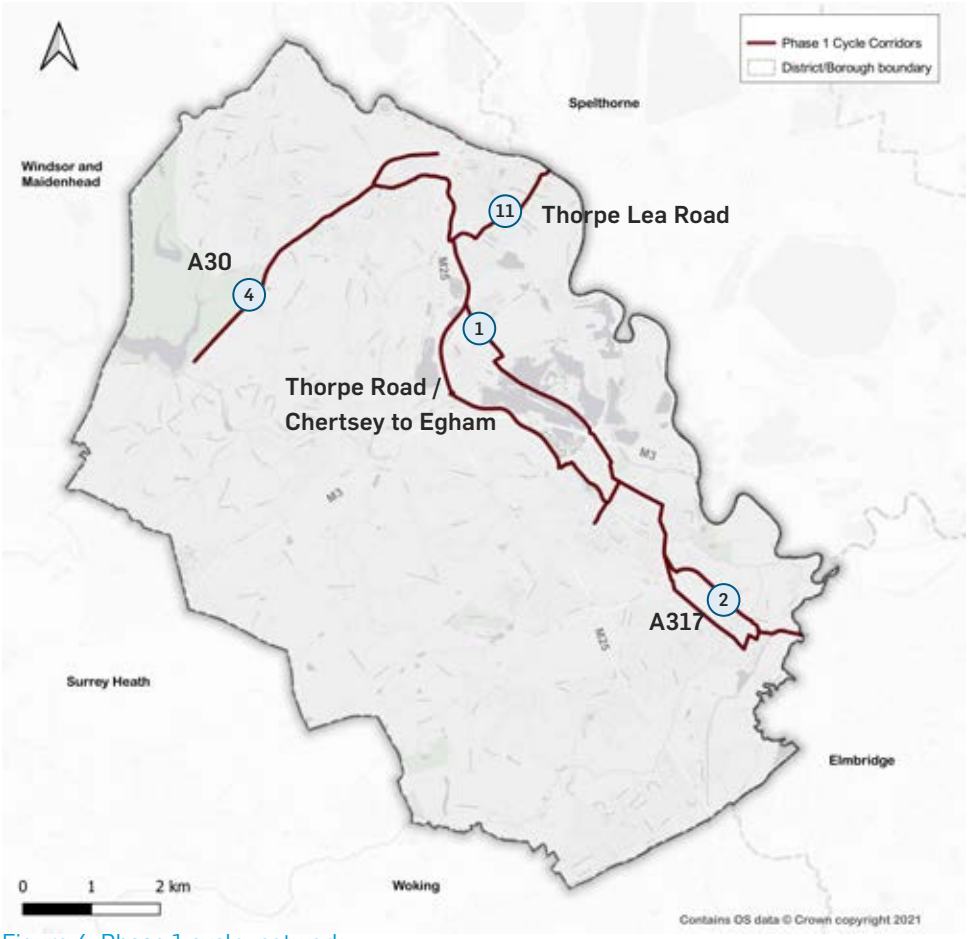


Figure 4. Phase 1 cycle network

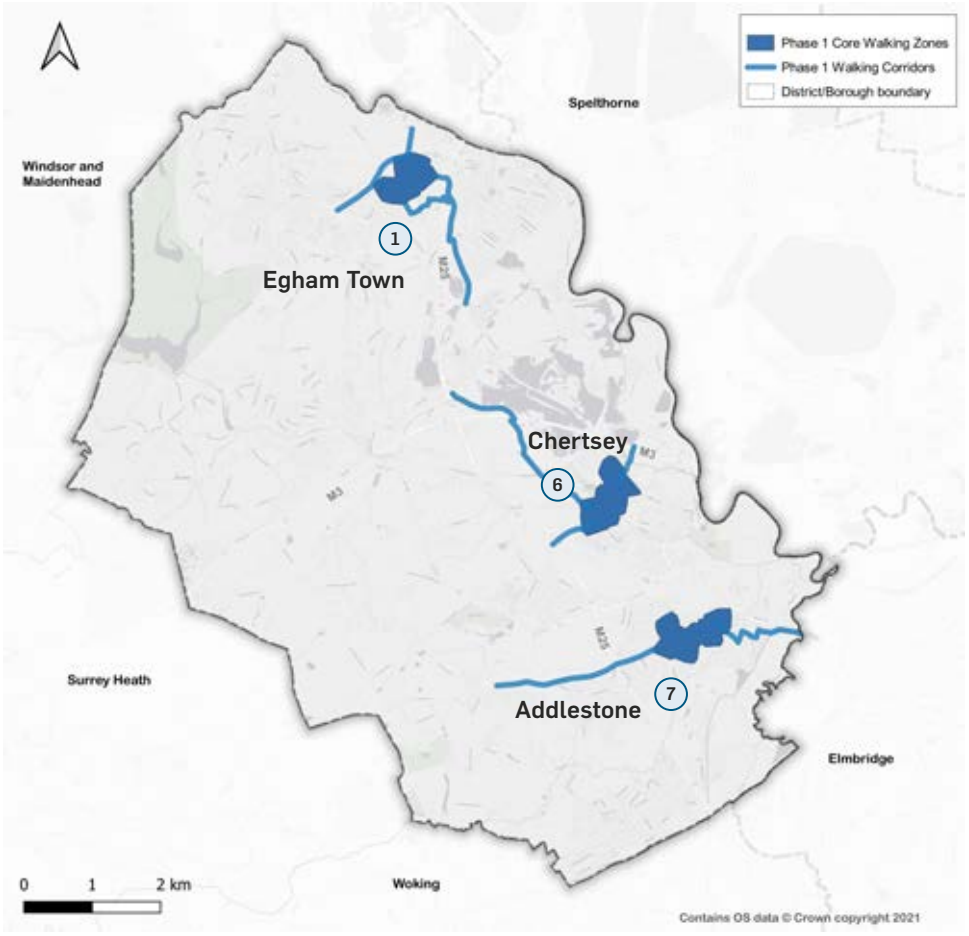


Figure 5. Phase 1 walking network

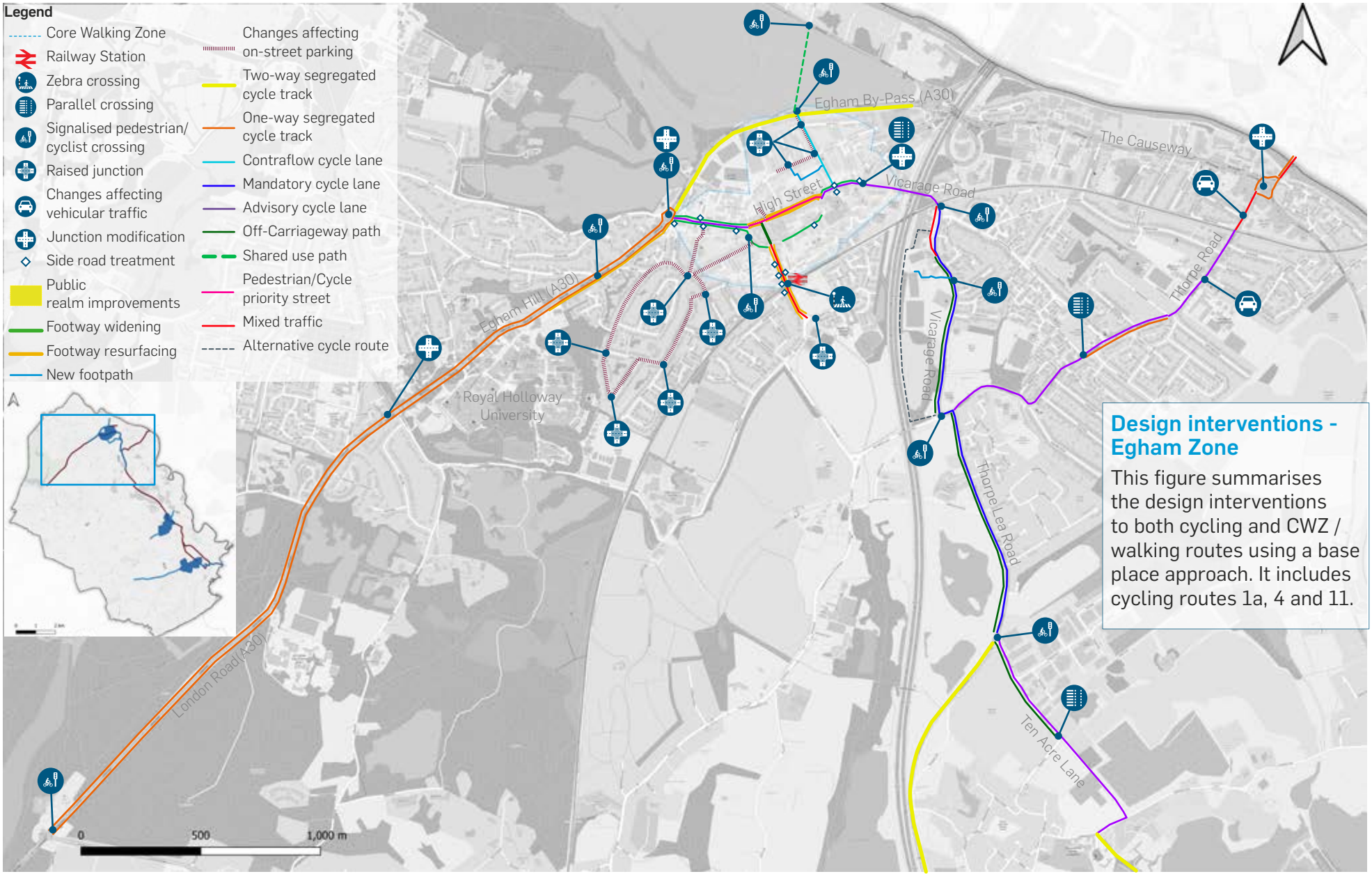
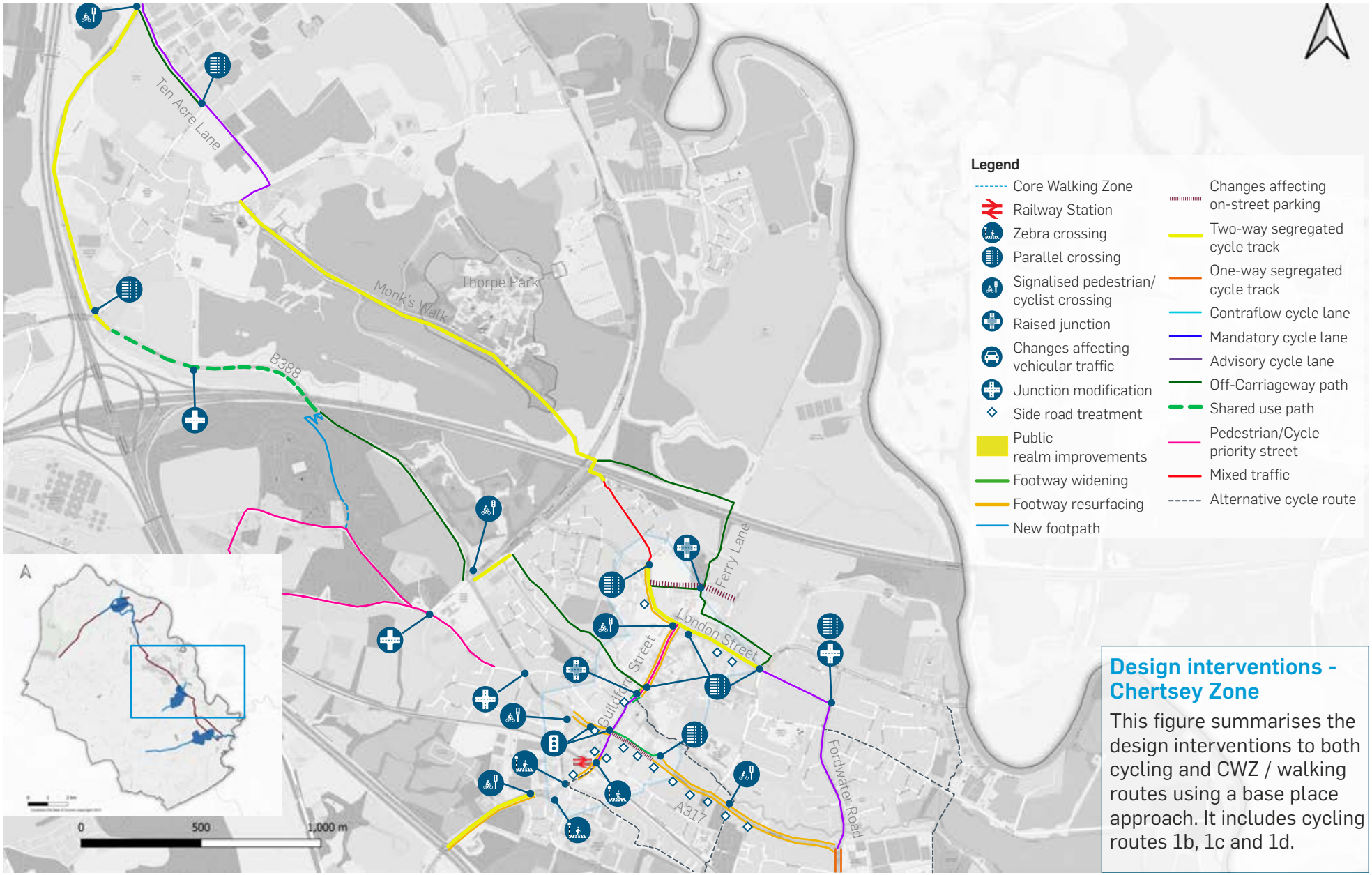


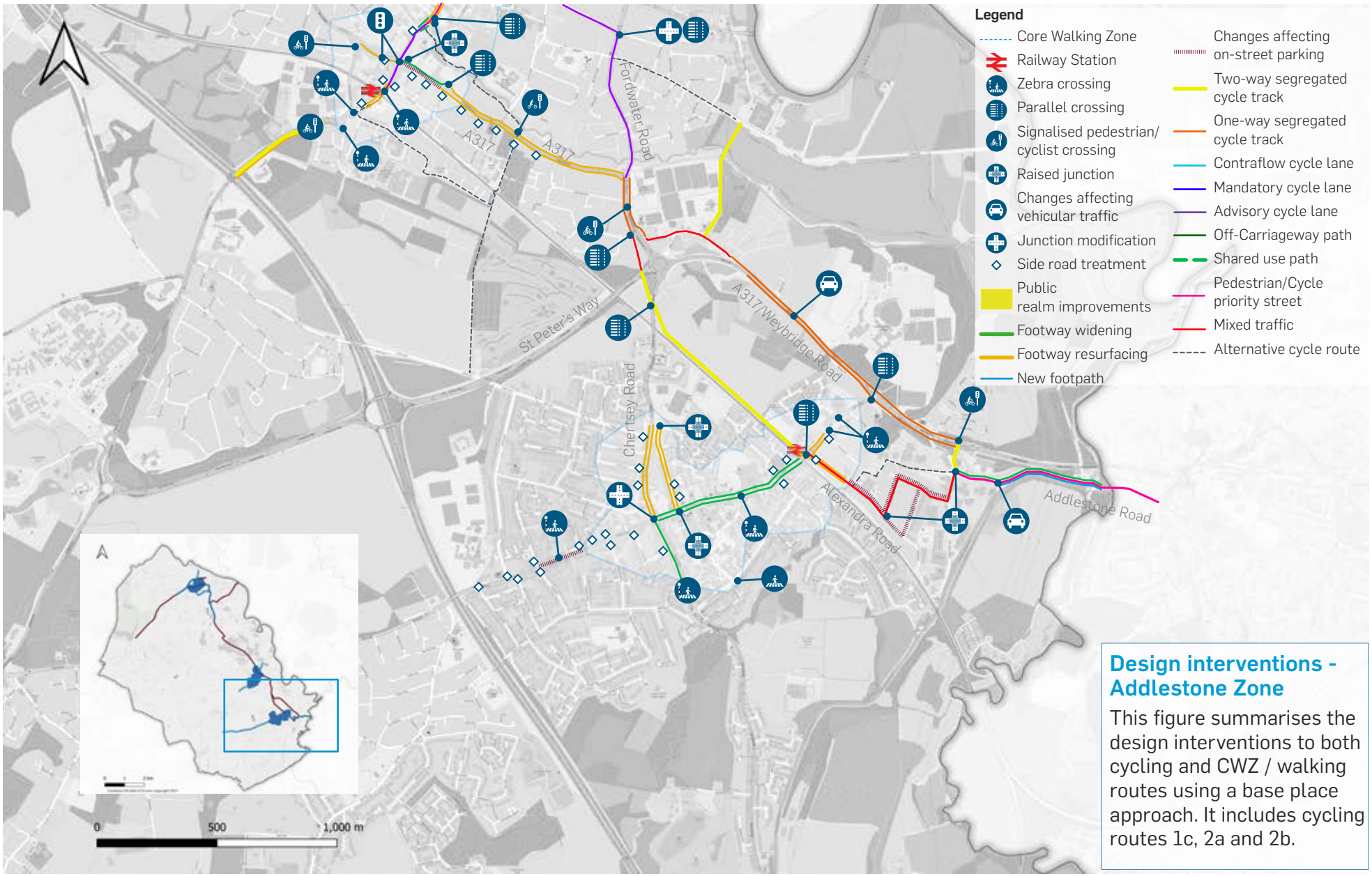
Figure 6. Area based design - Egham



Design interventions - Chertsey Zone

This figure summarises the design interventions to both cycling and CWZ / walking routes using a base place approach. It includes cycling routes 1b, 1c and 1d.

Figure 7. Area based design - Chertsey



Design interventions - Addlestone Zone

This figure summarises the design interventions to both cycling and CWZ / walking routes using a base place approach. It includes cycling routes 1c, 2a and 2b.

Figure 8. Area based design - Addlestone

Synergy with other LCWIPs

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

LCWIPs in neighbouring Boroughs, such as Elmbridge and Spelthorne, were taken into consideration during the development of the Runnymede LCWIP. This method has provided an opportunity for a joined-up approach amongst the 3 study areas. The regional collaboration should ensure that walking and cycling networks are coherent and continuous across administrative boundaries.

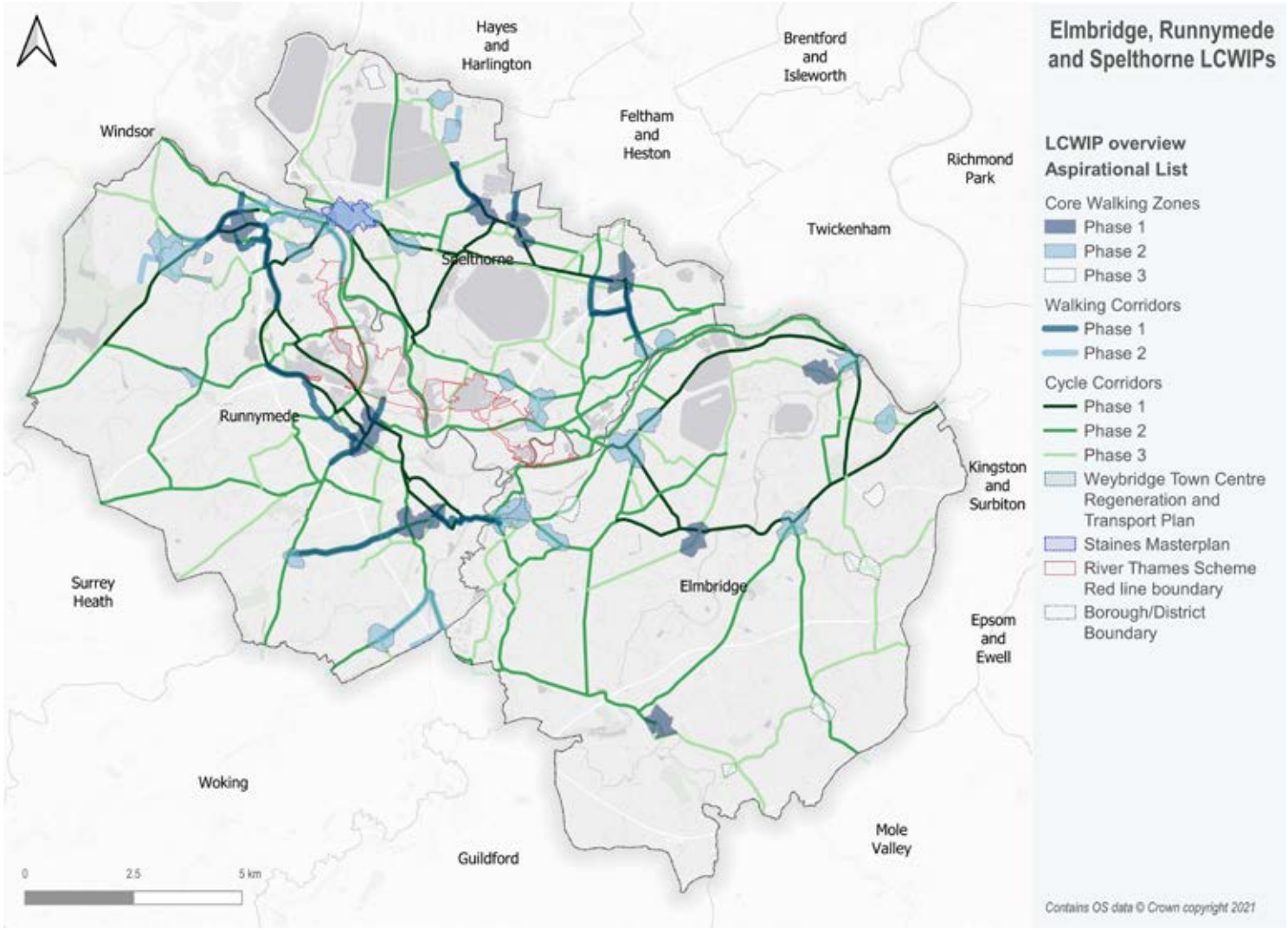


Figure 9. Runnymede Borough Council and neighbouring boroughs LCWIPs with the River Thames Scheme red boundary


Addlestone
Chertsey

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) in collaboration with Runnymede Borough Council (RBC). The geographic scope is the entirety of the Borough, as shown in Figure 10.

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 Runnymede but also in adjacent areas.
» Enhance accessibility by walking and cycling to key destinations for all users.

Figure 10. Study area

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

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 Runnymede as well as design proposals for key schemes as detailed in the scope of work.
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 RBC 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 four 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-reviewed 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.

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 RBC 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.

Design Vision

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 RBC, 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.

10 Good Reasons to Invest in Active Travel

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 five key design principles of effective walking and cycling infrastructure as per LTN 1/20:[1]

- Coherent
- Direct
- Safe
- Comfortable
- Attractive

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

There has been a growing demand for active travel not just in Runnymede 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 Runnymede LCWIP with key topics summarised below.

1. Quick, convenient and popular ways to get about

Thousands of residents of RBC commute less than 2km to work every day, a distance which can easily be walked. Additionally, approximately 15% of commuters' distance travelled to work is between 2km and 5km which can easily be cycled[1]. 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 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 construction[2]. 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 economy[3].

1 Department for Transport, Cycle Infrastructure Design (LTN 1/20). The design approach went beyond LTN recommendations and other key elements such as adaptability and context sensitivity were added.

1 Census (2011) (Table QS416EW)

2 Sustrans, Active travel and economic performance.
3 Transport for London, Walking and cycling: the economic benefits.

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 times[4] - replicating this in Runnymede 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 Runnymede's 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 Runnymede 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 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 transport[8]. 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

Egham is the busiest station in Runnymede followed by Chertsey. However, although Staines Rail Station is outside Runnymede's political boundary, it is a busy station for those visiting the Borough including the Thorpe Park resort and other local amenities[9]. Good accessibility to the stations was one of the crucial aims of the LCWIP promoting a comprehensive network of walking and cycling routes. 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. 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 preventing poor health, rather than curing people once they have become unwell[10]. Over 4 in 10 women and 1 in 3 men are not active enough for good health, costing the NHS £8.17 per person annually[11]. Public Health England consider the

4 Transport for London, Walking and cycling, the economic benefits.
5 Department for Environment, Food& Rural Affairs (2019) Clean Air Strategy.
6 Living Streets (2018) The pedestrian pound.
7 Transport for London Walking and cycling: the economic benefits.
8 F. Raje 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 Department of Health & Social Care (2018) Prevention is better than cure.
11 Public Health England (2018) Cycling and walking for individual and population health benefits.

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 dementia[12]. 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-being[13].

10. Reduce casualties on our roads

In the five years to 2020 there were 120 pedestrian collisions 3% were fatal (4 collisions), 23% were serious (27 collisions) and 74% were slight (89 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. More information on collisions, refer to Section 5 evidence Base.

12 Public Health England (2018) Cycling and walking for individual and population health benefits.
13 Transport for London Walking and cycling: the economic benefits.

Report Structure

The report is structured into 10 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.
- **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.
- **Cycle Network**: As with the previous 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 the four cycle corridors.
- **Walking Network**: In this 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 the three 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.
- **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.
- **Conclusions**: This section considers the findings from the LCWIP and the next steps.
- **Appendices**: In this last section, the summary of the analysis of the previous studies as well as complementary data is presented such as walking and cycle audits and stakeholder engagement responses.


Jack Sparrow

3. Previous Studies

Introduction

Previous Studies & Policy Context

Relevant Schemes

Previous Studies & Policy Context

The Runnymede 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.

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 Runnymede LCWIP will support the achievement of the CWIS objectives and targets locally.

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

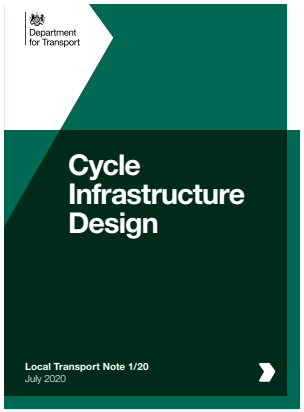
In 2020, the DfT published Gear Change and its updated Cycle Infrastructure Design (Local Transport Note 1/20). Both publications advance DfT's ambitions for a step-change in the provision of cycle infrastructure, a modal shift to cycling nationally, and establishing cycling as a form of mass transit.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

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

- Better streets for cyclists and people.
- Cycling at the heart of decision making.
- Empowering and encouraging Local Authorities.
- Enabling people to cycle and protect 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 Runnymede 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 Runnymede LCWIP.

Surrey's emerging fourth Local Transport Plan (LTP4) is currently being developed (as of January 2022). 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 the UK 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 Runnymede 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 Runnymede 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 intends to identify 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 100km is in Runnymede. 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.

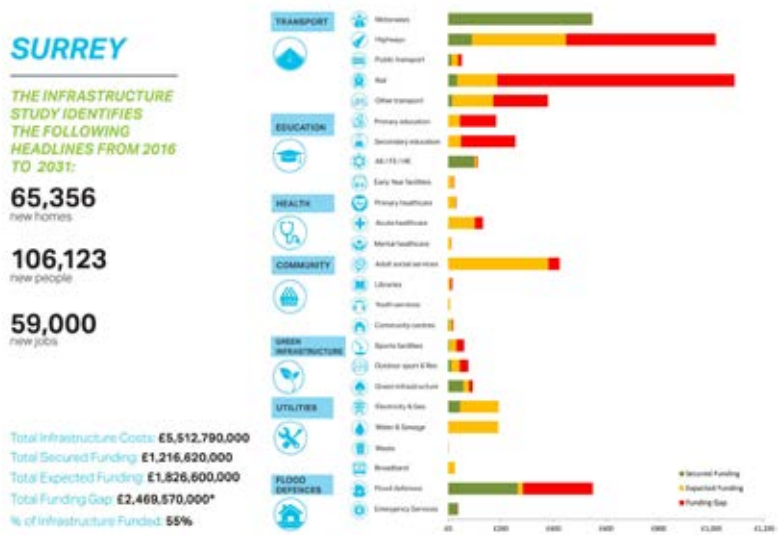


Figure 11. Summary of infrastructure project costs and funding gaps (2016-2031)

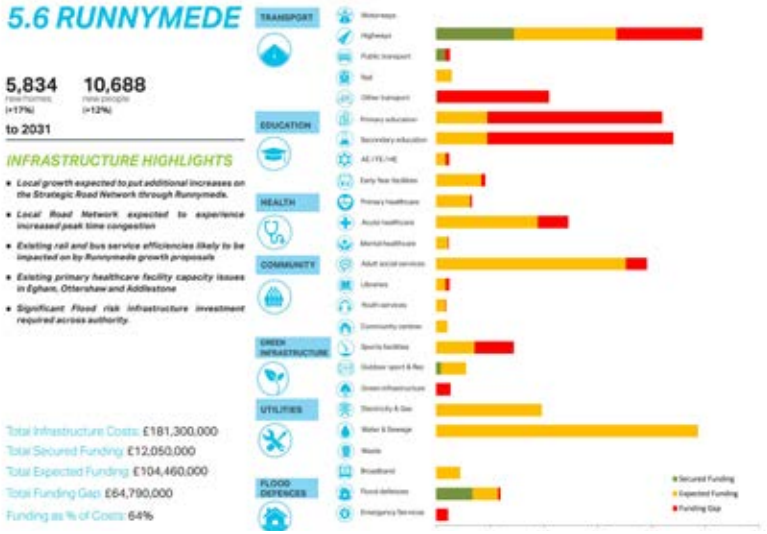


Figure 12. Summary of infrastructure project costs and funding gaps in Runnymede(2016-2031)

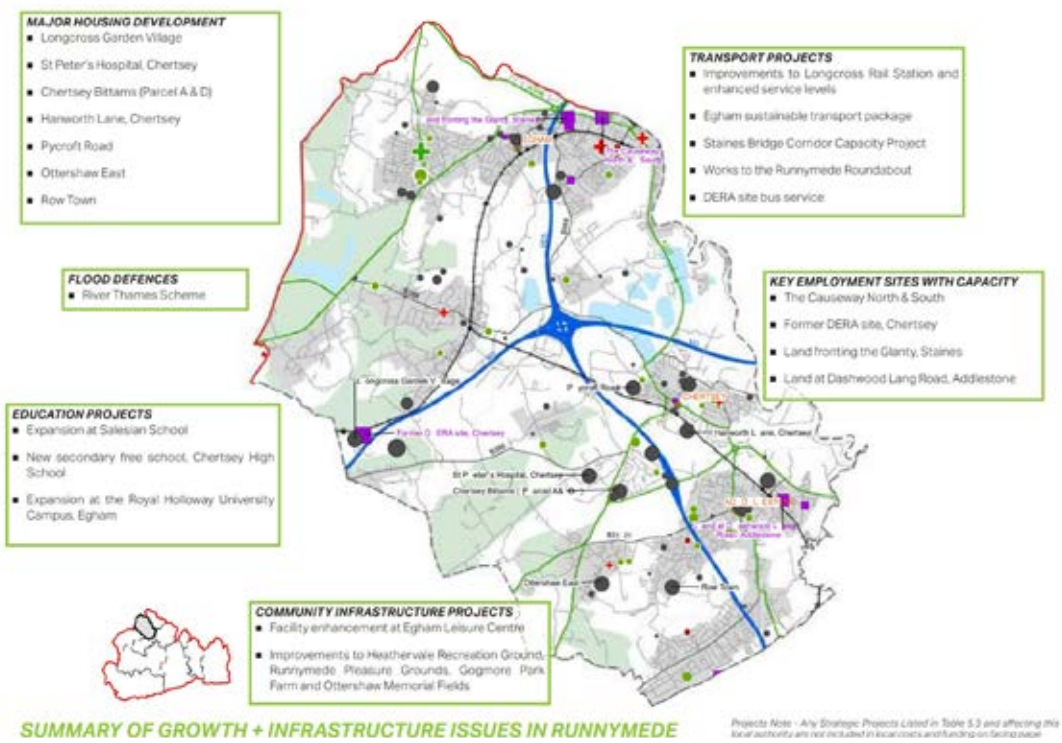


Figure 13. Summary of infrastructure projects in Runnymede (2016-2031)

Surrey Future

Surrey as a place has a central role to play in the regional and national economy and is already making a significant contribution to wealth creation, enterprise, jobs, business, homes, physical infrastructure, and skills. The promotion of Surrey's places and communities is at the heart of "good growth". It envisages 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
- Employments sites
- Population forecasts
- Infrastructure Analysis
- Cost Analysis
- Funding Assumptions

Surrey is currently having 152miles 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:

- 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.

Surrey 2050 Place Ambition (2019)

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

The 2050 Place Ambition defines good growth for Surrey as:

- 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.

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

Surrey Infrastructure Study (2017)

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.

New Runnymede 2030 Local Plan

The Runnymede 2030 Local Plan is the key document that provides the framework to guide the future development in the Borough of Runnymede. It sets out an ambitious vision and objectives, followed by a clear and focussed spatial strategy. It includes policies for managing development and infrastructure to meet the identified social, environmental, and economic challenges facing the area up to 2030 which will ensure that the Local Plan's vision is met. Ultimately, the Runnymede 2030 Local Plan is used to make decisions on planning applications. It also forms the strategic framework for Neighbourhood Plans. More detailed guidance has been produced following the adoption of the Local Plan in the form of Supplementary Planning Documents.

Runnymede is located in North West Surrey only twenty miles from Central London and is strategically located at the junction of the M25 and M3 motorways. It has excellent road and rail connections to the capital and by road to Heathrow Airport. Runnymede is a small Borough when compared with most of the other Surrey authorities.

The Council's CBP 2016-2020 contains a SWOT analysis for the Borough of Runnymede and it helps to identify the strengths, weaknesses, opportunities, and threats/challenges that exist in the Borough.

For transport infrastructure, the Council recognises that the growth aspirations of this Local Plan represent a step change from past delivery rates and cannot be implemented without the delivery of supporting transport and other infrastructure. The Council also recognises that there are a number of existing transport and infrastructure issues within the Borough and beyond including:

- Congestion on a key transport route through the Borough, the A320, and a number of other 'congestion hotspots' including the M25 and A317.
- Infrequent and limited bus services during peak hours and limited connectivity by walking/cycling routes in some areas.
- Level crossing barrier down times in the Addlestone and Egham areas in particular causing significant delays and queueing on the surrounding highway network.

Whilst delivery of the spatial strategy will be challenging given the existing picture of transport and infrastructure capacity, growth can bring with its opportunities to address existing problems and enhance existing facilities and assets. A number of proposed and potential strategic transport and infrastructure projects are identified within Runnymede and the wider area which, if delivered, will help to achieve improvements to the transport network and infrastructure capacity. These include:

- Four-lane through-running on the M25 between junctions 10 and 12 as identified through the Governments first Road Investment Strategy (RIS) with commencement by 2020.
- Potential Southern Rail Access to Heathrow (irrespective of airport expansion).
- Potential for Cross Rail 2 to connect Surrey to central London and beyond to Hertfordshire;
- Lower Thames Scheme to provide flood alleviation between Windsor and Teddington Lock with Flood Diversion Channel Two located in Runnymede from Thorpe to Chertsey.
- The M25 South West Quadrant Study which has explored how congestion and capacity issues on the M25 from junctions 10 to 16 could be alleviated. The study recommends pursuing alternatives to travel, sustainable modes of travel and improvements to local routes as alternatives to the M25, but discounts further widening, sections of elevated motorway or parallel tunnels.

The Borough is a victim of its own success, with high levels of car ownership and the majority of journeys to work made by private car/van as opposed to 11% by public transport and 14% by walking/cycling. Almost half of all car/van trips in Runnymede are short journeys under 10km and nearly three quarters of the Runnymede workforce commute in from outside the Borough with two thirds of working residents commuting out.

The high level of dependency on private vehicles for undertaking journeys, especially short journeys, and high levels of in/out commuting has led to unsustainable patterns of travel in the Borough with congestion on key highways at peak times.

Surrey County Council is the Highway Authority for Runnymede with the third Surrey Local Transport Plan (LTP3) updated by the County Council in 2016. LTP3 seeks to help people meet their transport and travel needs

effectively, reliably, safely and sustainably. The Spatial Development Strategy for this Plan seeks to direct development to the urban areas of the Borough and allocate sites in areas which perform well in terms of accessibility to public transport and active travel connections and to local services.

In this respect, the Spatial Development Strategy provides an opportunity to help achieve modal shift, especially given that a number of short journeys made by car could be replaced by more active and sustainable forms of travel. In order to achieve this, the Council will work in partnership with SCC and other stakeholders to help deliver the vision and aims of LTP3 or its successor, and seek opportunities which support and enhance the connectivity, accessibility and attractiveness of active and sustainable travel routes, especially to and from the sites allocated in this Plan.

Aims and objective of both LTP3 of Surrey County Council, for improvement of infrastructure of local transport, and LCWIP are aligned perfectly. Both are concentrating on a greater number of users for cycling and walking to reduce congestion and emission. Both are focusing on improvement for accessibility and safety of the network to attract a greater number of users.

Runnymede Infrastructure Delivery Plan

Runnymede Borough Council has appointed AECOM to produce an Infrastructure Delivery Plan (IDP) as a part of evidence base to support its Local Plan and identification of Site and Guidance. The IDP and the evidence supporting it should therefore be robust enough to withstand scrutiny at Local Plan examination. Runnymede development trajectory and Local Plan horizon have been simplified into 3 different phases,

- Phase 1: 2015/16 – 2019/20
- Phase 2: 2020/21 – 2024/25
- Phase 3: 2025/26 – 2029/30

Scope of the IDP reflects national planning policy and guidance and it covers a wide range of aspects, e.g., Education, Health, Community facilities. Transport, Green Infrastructure, Waste, Utilities, Emergency services & Flood Defences & Sustainable Drainage.

Along with the growth of all other aspects of IDP, growth in transport will have an impact on walking and cycling in Runnymede. The main town centres are well served by a network of footways and the rural areas, western part of the Borough, have an extensive network of bridleways. Issues with the existing network include heavy congestion and narrow road widths, which often leads to conflict between road users. The Borough is served by the National Cycle Network route four between London and Fishguard, Route 233 between Shoreham-by-Sea (West Sussex) and Chertsey. Existing dedicated cycle lanes towards Virginia Water Lake on the A30 and A308 provide good quality cycle links to this major leisure destination within the Borough. Other cycle infrastructure includes shared footways/ cycleways on key link roads such as the A30, the A320, the A318, Vicarage Road and Stroud Road.

The latter infrastructure allows urban areas in Runnymede to be connected by cycle infrastructure. Census 2011 analysis shows that 13% of all work-related trips in Runnymede are undertaken by either walking or cycling (broken down respectively 10% and 3% for the latter). This share is higher than that of Surrey (11%) and in line with England's average (14%).

Improvement of walking and cycling facilities in the IDP will enhance the accessibility and safety of the users and encourage people to use these facilities.

Masterplan Proposals

Egham Town Centre Masterplan (2013)

Runnymede Borough Council (RBC) and Surrey County Council (SCC) have set out a joint aspiration to lift and enhance the town centre, retaining essential parts of their heritage while also optimising opportunities offered by land and property assets. Egham has a particular set of needs and opportunities. The primary need is to advance the role and function of the centre and strengthen its offer while respecting the local character.

The purpose of this masterplan exercise is to identify a series of specific design enhancements and locally relevant development opportunities to support significant and lasting regeneration, increasing economic activity and retail and commercial competitiveness.

One of the current weaknesses to pedestrian movement in Egham town centre is a tiring public realm. There are a number of obvious visual and pedestrian barriers, with furnishings, lighting and surfaces all in need of major refurbishment.

For pedestrians approaching the High Street, routes from the east, west and south need to be significantly improved, in terms of the physical connections needed to overcome the barrier effect of Church Road. The main thoroughfare, from the east to the west of the town centre, is along the High Street, which has been pedestrianised along its core section. Other key pedestrian routes include the north and south

Figure 14. Existing Cycle Route & Pedestrian Movement

movements between the residential streets to the north and Tesco (via the Hummer Road/ Tesco Car Park) and the High Street. Further, there are significant pedestrian movements between the Station and Strode's College and Royal Holloway University to the west of the town centre. The main cycle routes run along the B388 High Street and Station Road.

In response to the context set by the analysis of strengths, weaknesses, opportunities and threats of development, public realm and movement context, the following principles and key projects have been identified for improvement of pedestrian & cyclist movement,

- Achieving a better balance between the needs of pedestrians and traffic;
- Create a truly public realm that makes it a pleasure to walk around Egham Town Centre;
- Upgrade maintenance and cleaning of the public realm.

Royal Holloway, University of London (RHUL) Master Plan (2013)

RHUL 2013 master plan is based on a growth in student numbers from 8,605 in 2012/13 to 10,500 by 2021, thereafter rising by an average of 1.5% per annum to 12,000 students by 2031. The aims of the Master Plan are as follows:

- Set out a clear and ambitious vision for campus showing the maximum growth that could be achieved by 2031.
- Comply with Runnymede Borough Council's draft local plan Policy L05, which requires a masterplan for the estate.
- Improve the quality of the campus for all current and future campus users and engage all in its development.
- Uphold environmental responsibilities and meet carbon reduction targets.
- Ensure campus investment is appropriately phased and financially sustainable, reducing or eliminating abortive costs.
- Ensure there is flexibility in campus development plans to enable us to adapt to changes in living, learning, and working over its 18-year period.
- Provide guidance on design principles for built and non-built spaces.
- Address existing under provision in academic space and facilities to improve ranking.
- Resolve existing problems/shortfalls experienced on and surrounding the site regarding transport, social provision, and accommodation.

One of the five principles of the RHUL master plan is for Pedestrian and Cycling access.

The principle is focused on the creation of a pedestrian friendly environment, with private vehicles omitted from the heart of the campus. A stronger network of clearer and more legible routes across the campus will help with ease of movement for students, staff, and visitors. New routes will be created, most notably across the A30 and between the heart and the East Gate. At the key nodes, or crossover points, artistic and way finding measures can create interesting spaces that help with orientation.

Other masterplan principles are:

- Vehicular access, a new junction at Piggery Gate will be created and will provide access to the estate's main car park. Additional car parks will be provided in other parts of the campus, considering the heart of the campus will be vehicle free.
- Improving existing sports and recreation facilities on the campus.
- Future development will need to be provided in a coherent manner to ensure that there is an appropriate arrangement of activities.
- Better integration of the landscape.

Figure 15. Cycle & Pedestrian routes of RHUL

Chertsey Master Plan (2013)

Chertsey is located towards the south of Runnymede Borough. It is linked to Addlestone and Weybridge. It is also close to Thorpe Park Theme Park to the north and the River Thames and the Thames Path to the north and east. As Chertsey is perceived to be under-performing in terms of shopping, quality of place, image and identity for the wider community, Runnymede Borough Council (RBC) has been joined by Surrey County Council (SCC) to respond to a changing economic and retail environment and advance opportunities for the town centre.

Based on the existing scenario, there are opportunities for pedestrian priority. Consideration can be given to the highway design to gradually improve the balance between pedestrian and vehicle needs, particularly to prioritise pedestrians at key crossing points. Existing green corridors along the Bourne could play a much more useful role in providing safe routes for pedestrians and cyclists to access the town centre from surrounding residential areas. Heriot Road could be improved significantly with new elements of development fronting onto it and clearer definition of public realm to enhance the pedestrian environment.

Between the northern and southern parts of Chertsey, the main cycle route runs along Windsor Street through Gogmore Lane and down along Guildford Street and Guildford Street. The main cycle routes east to west run along The Bourne from St Ann's Road, through Gogmore Farm Park and down across Guildford Street to Free Prae Road.

After analysis of strengths, weaknesses, opportunities and threats of the development, public realm, and movement, the following proposals are considered with respect to pedestrians and cyclists.

» Better balance to be achieved between the needs of pedestrians and traffic at Pyrcroft Road. Highlighting and improving pedestrian routes.
» Coordinating the streetscape of lighting, surfaces, furniture and signage.
» Upgrade maintenance and cleaning of the public realm.

An updated version of the 2013 Masterplan is currently being produced in partnership with SCC.

Figure 16. Issues and Opportunities of Chertsey

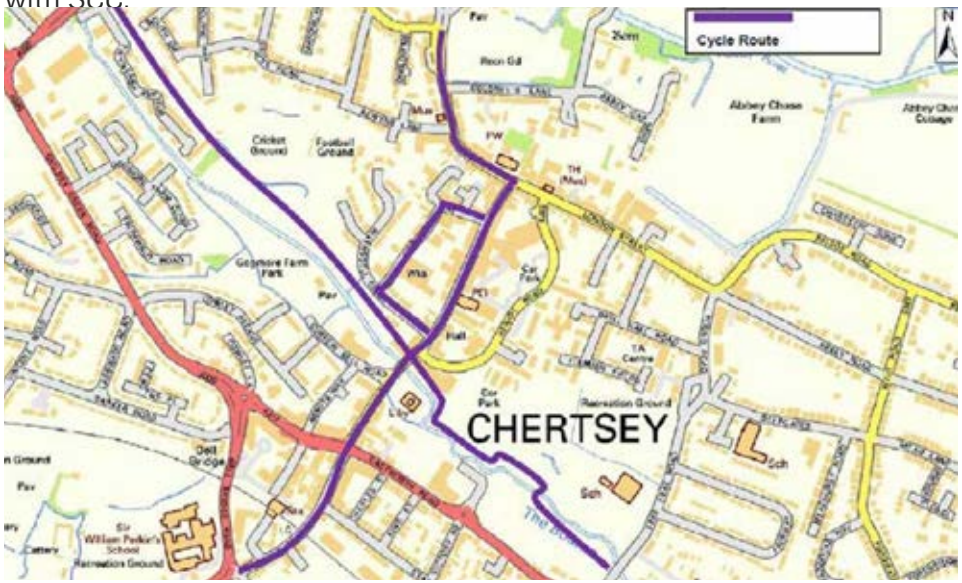


Figure 17. Issues and Opportunities of Chertsey

Thorpe Neighbourhood Plan

Thorpe Village Neighbourhood Forum has prepared this Neighbourhood Plan for the area designated by the local planning authority, Runnymede Borough Council. The purpose of the Neighbourhood Plan is to set out a series of planning policies that will be used to determine planning applications in the area in the period to 2030. The Plan will form part of the development plan for Runnymede Borough, alongside The Runnymede 2030 Local Plan. These plans provide local communities with the chance to manage the quality of development of their areas. Once approved at a referendum, the Plan becomes a statutory part of the development plan for the area and will carry significant weight in how planning applications are decided. Plans must therefore contain only land use planning policies that can be used for this purpose.

The Neighbourhood Plan (TNP) policies must be in general conformity with the strategic policies of the development plan. At the time of preparing the TNP Submission Plan, the development plan comprised the saved policies of the Runnymede Borough Local Plan (second alteration) 2001 whose policies pre-dated the publication of the NPPF. A number of other policies of the Runnymede 2030 Local Plan provide a helpful policy framework for the TNP.

Residents of Runnymede were asked to record what they liked about living and working in Thorpe; what was important for the future and how some identified issues could be addressed. The following themes emerged:

» Business
» Traffic
» Housing
» Heritage
» Environment

The key objectives of TNP are as follows,

» To sustain a thriving village that respects its cultural, historical, and archaeological heritage and the biodiversity value of its surroundings.
» To retain the character of the village and enhance the locality through encouraging sympathetic development that enhances local character.
» To meet the future housing and infrastructure needs for the area by enabling the community to continue to live in the village if they wish, but to ensure that development works for everyone including our young people.
» To support existing businesses including retail activity and to encourage new businesses.
» To improve the breadth and quality of community and sports facilities to enhance health and well being.
» To create an integrated safe and convenient network of green spaces and a footpath and cycleway network to serve the village.
» To plan for climate change and work in harmony with the environment to conserve natural resources and reduce flood risk.

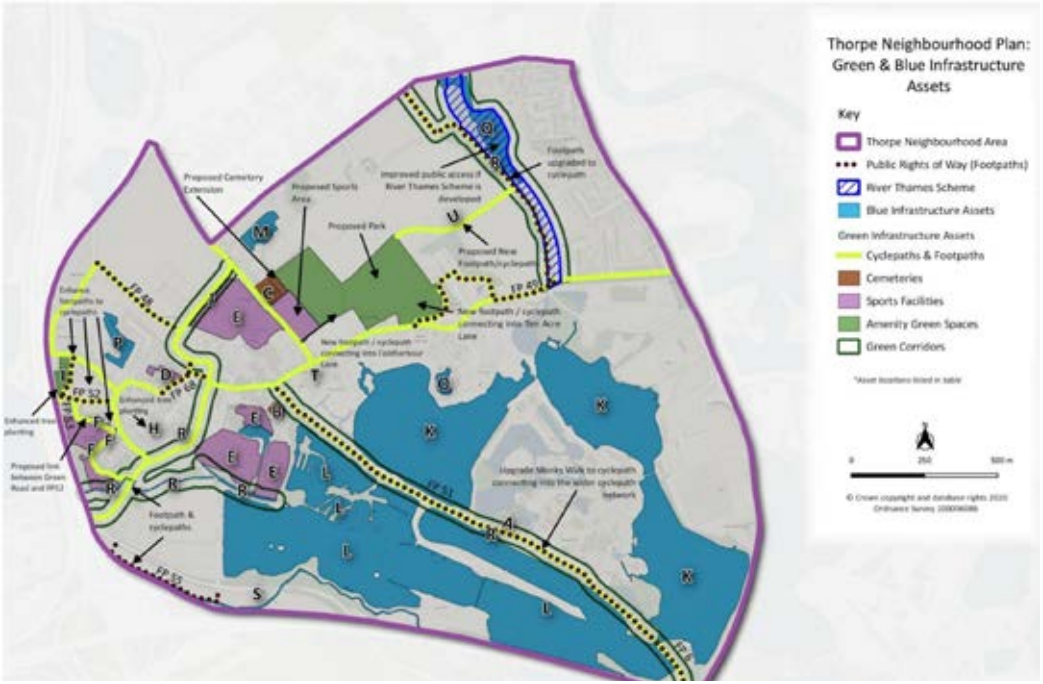


Figure 18. Green and Blue infrastructure policy map

The Neighbourhood Plan identifies a Green and Blue Infrastructure network as shown on the below Green and Blue Infrastructure Policies Map which is focusing on improvement of footpaths and cycleways.

The network comprises a variety of open spaces, including amenity green spaces, cemeteries and churchyards, outdoor sports facilities, natural and semi-natural urban green spaces, water bodies, assets of biodiversity value (including green corridors), footpaths and cycleways.

Development proposals on land that lies within or adjoining the network will be supported, provided they can demonstrate how the layout, means of access, landscape schemes, public open space provision and other amenity requirements including new pedestrian and cycle connections will allow for such improvements to the Network. This Green and Blue Infrastructure is crucial to the maintenance and protection of biodiversity and wildlife assets in the designated area and will contribute to health and well being of the community by proposing new walking and cycling links throughout the village which enhance the existing Rights of Way network.

The Forum has identified potential improvements to the Network and its functionality, and these opportunities are identified on the Green and Blue Infrastructure Map. A few points related to pedestrian and cycle facility improvements are mentioned next.

- Adjoining the Frank Muir Memorial Field and Footpath 53.
- A hard footpath from Green Road to the car park in Rosemary Lane.
- Opportunity for a cycle path along the bank on an existing footpath of the M25.

In addition to these identified opportunities, TNP is also focusing on the development of improved pedestrian and cycle links to the village core and primary school and there continues to remain an aspiration for circular walks around the village.

The aims and objectives of TNP, regarding cycle and footway improvement, are perfectly aligned with the objectives of the LCWIP. Both of them are focused on an improved network for cyclists and pedestrians, to provide safety and comfort to the users, modal shift and improved local air quality.

Runnymede Air Quality

Air pollution is associated with a number of adverse health impacts. It is recognised as a contributing factor in the onset of heart disease and cancer. Additionally, air pollution particularly affects the most vulnerable in society: children and older people, and those with heart and lung conditions. There is also often a strong correlation with equality issues, because areas with poor air quality are also often the less affluent areas.

Previous Reviews and Assessments by Runnymede Borough Council have concluded that concentrations of carbon monoxide, benzene, 1,3-butadiene, lead, sulphur dioxide and PM10 are compliant with the relevant national and European objectives. Air Quality Management Areas (AQMAs) have however been declared at two locations in Runnymede Borough Council for exceedances of the annual mean nitrogen dioxide objective, namely land adjacent to the M25 and at a traffic light-controlled junction in Addlestone town centre.

The SCC Local Transport Plan (LTP3) includes a number of supporting strategies including the Surrey Air Quality Strategy and the Surrey Climate Change Strategy. These are relevant for Runnymede, as SCC is the local highway authority for the road network in Runnymede, excluding major strategic roads.

The Borough is intersected by two motorways (M25 and M3) and a number of major A roads, including the A30, A318, A317 and A320. The number of cars per household in Runnymede amounts to 1.5. Car ownership within the Borough is higher than the average for England, with 85% of households having one or more cars available and 45% having two or more cars. Transport (mostly road transport) is a major source of air pollutant emissions, having contributed 66% of total nitrogen oxides (NOx) and 67% of total particulates (PM10) in 2010. In Runnymede, the main air pollutants are nitrogen dioxide and fine particulates.

To improve air quality, the following measures should be considered,

» Alternatives to car use :

Increasing use of public transport, cycling or walking will help to reduce emissions. Research has indicated that levels of air quality pollutants inside vehicles, even with the windows shut, can lead to higher exposure than pedestrians and cyclists on the same streets. So, by walking or cycling exposure could be reduced and fitness and health will be improved.

» Modification in driving style:

- Regular maintenance improves fuel efficiency by as much as 10% plus under inflated tyres increase rolling resistance, further increasing fuel consumption.
- Reduce excess weight and wind resistance.
- Reduce engine idling.
- Avoid aggressive acceleration and braking.
- Change up gears as soon as possible.

» Consider low emission vehicles over conventional ones.

To reduce air pollution, the report suggests more cycling and walking for short trips. Encouraging users towards cycling and walking is one of the aims of LCWIP. Additionally, LTP3, with which the aims and objectives of LCWIP are perfectly aligned, also supports a number of strategies to improve air quality across Surrey.

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 within Runnymede and Spelthorne boroughs.

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

The RTS is currently in the early stage of development, and development of proposals and concept designs for walking, cycling, and recreation facilities are 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 44 (Neighbouring Borough LCWIPs and Cycle Programmes).

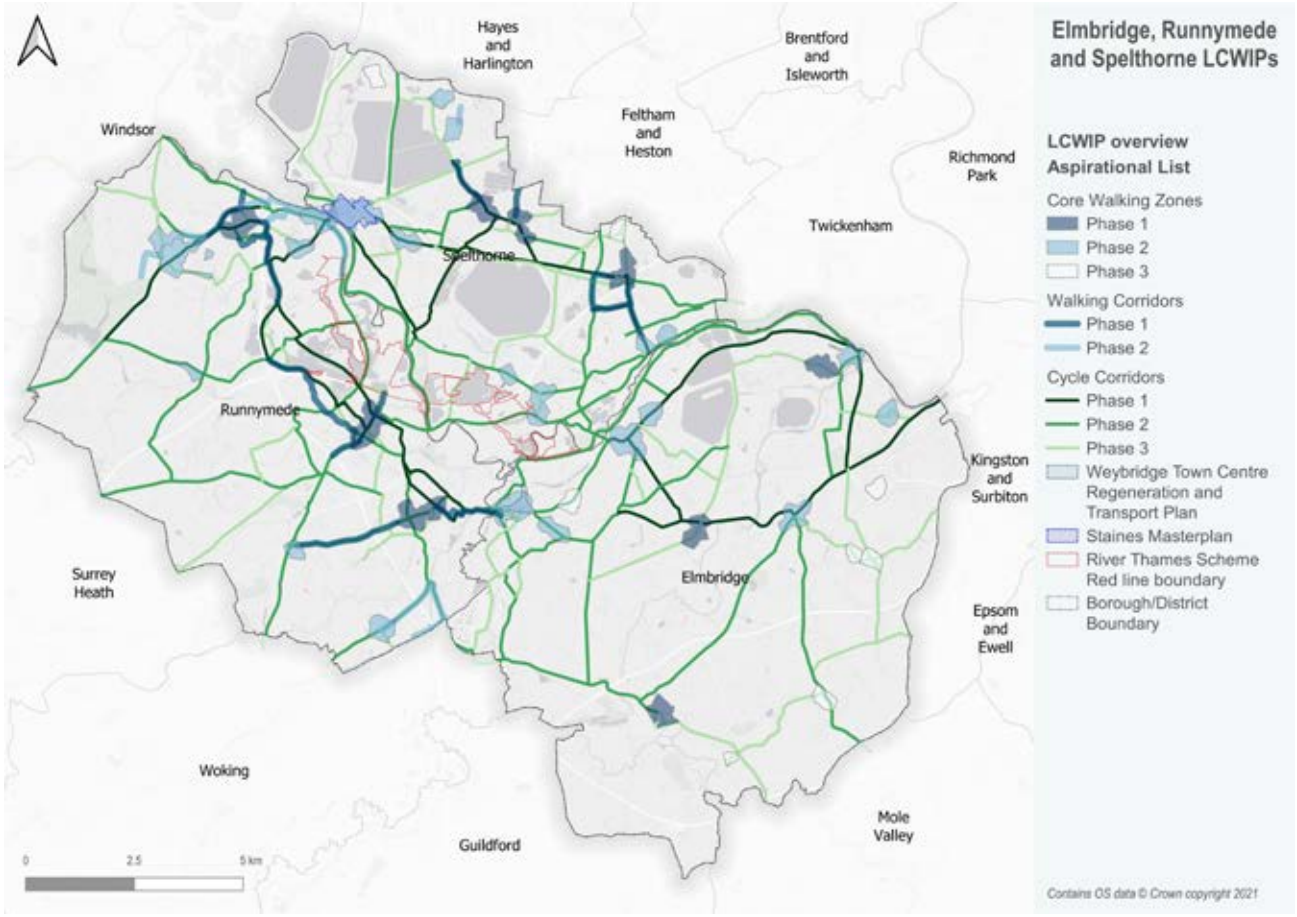


Figure 19. River Thames Scheme red line boundary (as it October 2021) in the context of Runnymede, Spelthorne and Elmbridge LCWIPs

A320 North of Woking Housing Infrastructure Fund

Surrey County Council and Runnymede Borough Council have been awarded £41.8 million by Homes England's Housing Infrastructure Fund (HIF) to improve the A320. The works will ensure there is extra capacity on the busy stretch of road between Chertsey and Ottershaw (approximately 2.25km stretch) to unlock future housing sites.

The proposed works will make sure all the junctions and roads work well together to improve traffic flow. There will also be improvements for walkers and people cycling, including new crossing points and wider foot and cycle paths, and improved access to public transport.

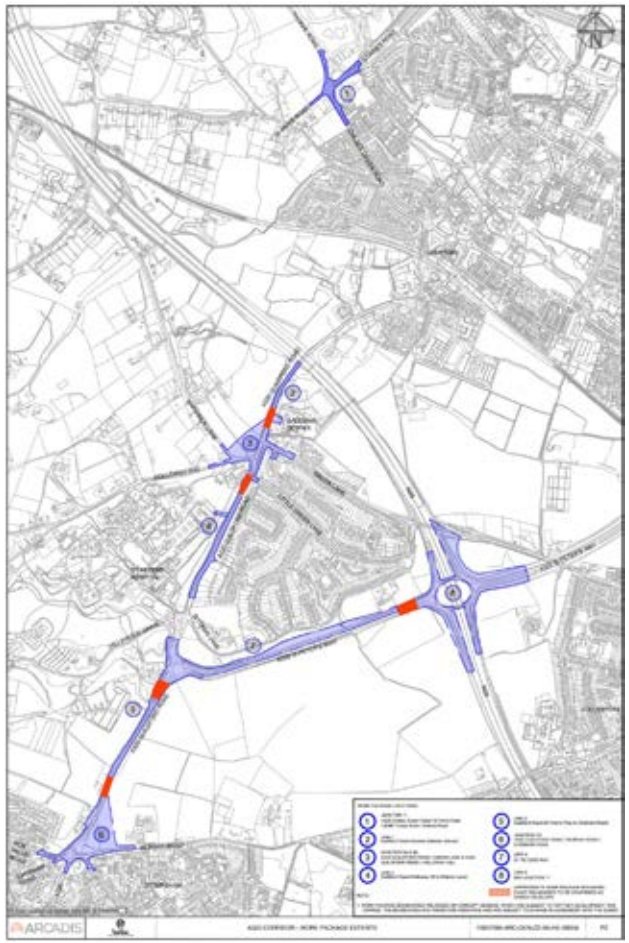


Figure 20. Proposed A320 improvements as part of the North of Woking HIF scheme

Egham Sustainable Transport Package

The Egham STP scheme focussed on A308 The Glanty / The Causeway between Woodhaw roundabout and Staines Bridge, a key business corridor for the area. The route was often congested and there had been a number of pedestrian and cyclist casualties over previous years.

Key objectives of the Egham STP were:

- To improve walking and cycling access to and through the Causeway Business area which will have direct impact on growth, economy & create new jobs.
- To reduce the need to travel by car (especially for local journeys) for tackling congestion.
- To reduce personal injury accidents (A308 The Causeway).
- To improved access into Egham town centre/ railway stations (Egham/Staines).
- To linkage with Runnymede Roundabout improvements and key educational establishments.

A number of improvements were made to make it easier and more appealing to walk and cycle along the corridor including:

- Widening of footway on the south side of A308 The Glanty / The Causeway to create a 3-metre wide shared use pedestrian and cycle path.
- Installation of a new toucan crossing over The Causeway at Woodhaw roundabout.
- Upgrade of the puffin crossing to a toucan crossing near the British Gas offices.
- Construction of raised road tables across a number of side roads to provide a continuous flat footway surface.
- The replacement of a bus shelter near Sainsbury's superstore and removal of existing bus lay-bys to enhance passenger waiting facilities and reduce bus timetable delays.
- Resurfaced carriageway on the A308 The Causeway and removal of sub-standard cycleway.

Figure 21. Woodhaw toucan crossing

Figure 22. Lovett Road crossing

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

An LCWIP was also recently completed for nearby Reigate and Banstead Borough and Woking town centre. Although Woking LCWIP was a more compact study area and the proposals did not extend to the boundary with Runnymede, one cycle route did extend to nearby West Byfleet station, and onward journeys from there to Elmbridge could be considered (e.g., via the A245).

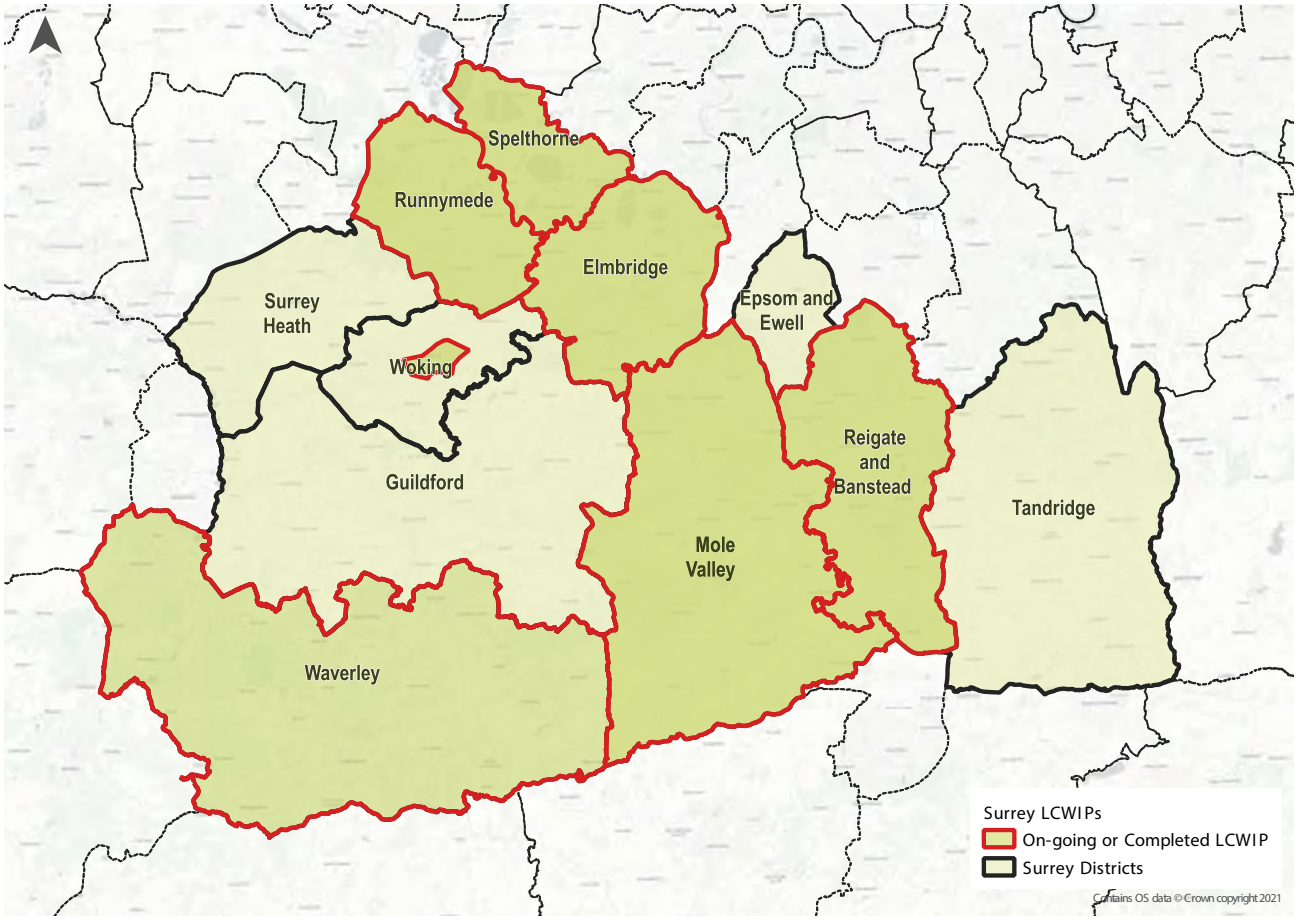


Figure 23. Concurrent or completed LCWIPs across Surrey as of March 2022

4. Evidence Base / Background Data

Introduction

Relevant Data

Introduction

To develop an evidence base for the Runnymede LCWIP, Atkins compiled and reviewed a range of existing spatial data within the study area (Figure 24). This data analysis 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 and potential development areas
- Existing walking and cycling infrastructure, including Public Rights of Way
- Barriers and topography
- Public Transport Networks
- Demographics, such as resident and workplace population, and car ownership
- Indices on multiple deprivation
- Collision data
- Public suggestions for active travel provisions
- Propensity to Cycle Tool
- Existing walking and cycling trips
- Strava data
- Strategic infrastructure development proposals

This chapter documents and summarises the data review. This background data informed the identification of core walking zones and key cycling routes, which are discussed in Chapters 5 and 6.

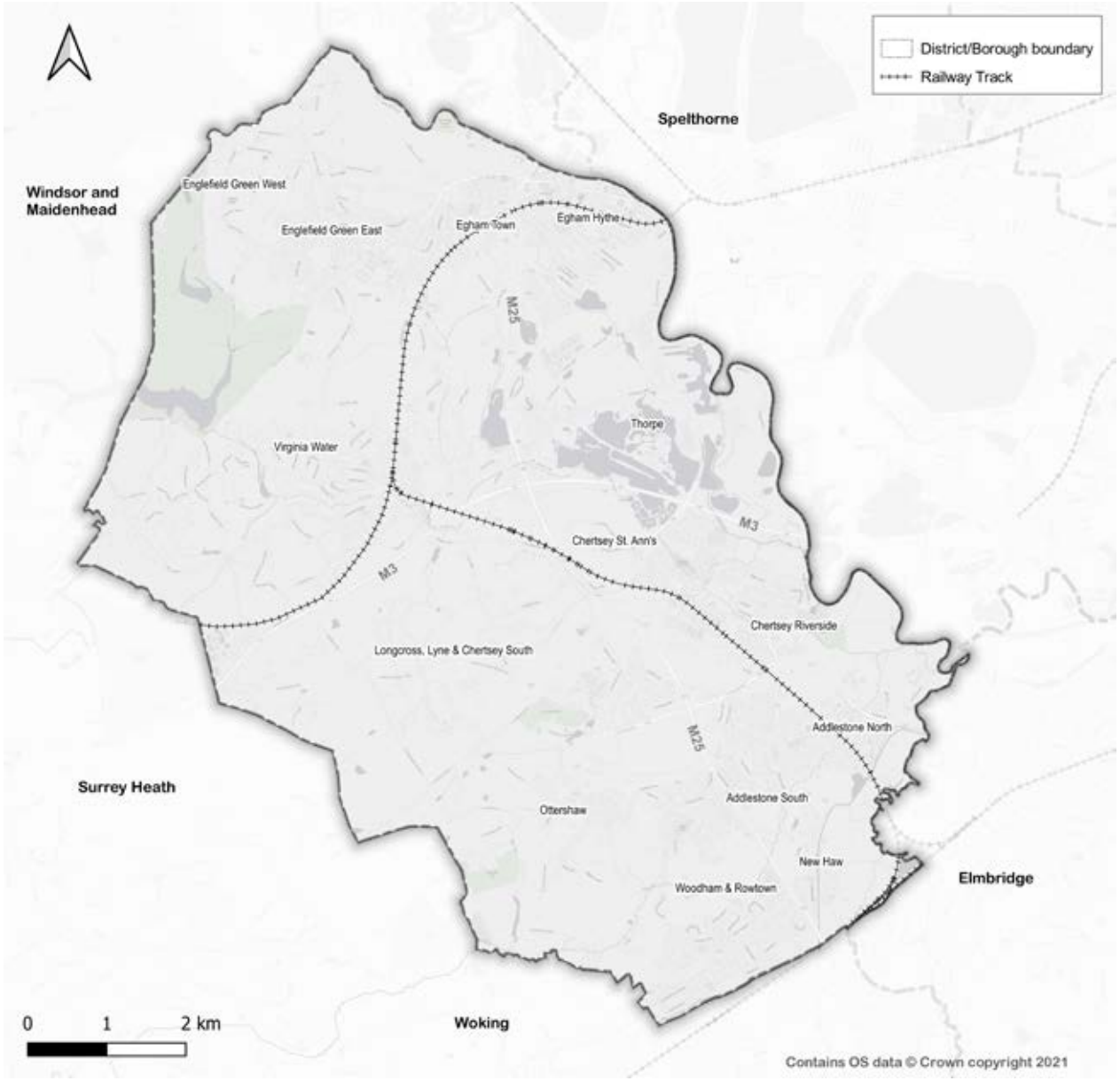


Figure 24. Study area

Background Data

Key Destinations

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

- Commercial areas
- Colleges / universities
- Schools
- Leisure centres
- Hospitals
- Parks and public open space
- Playing fields / sports facilities

Twelve commercial areas were identified within Runnymede. These are particularly important from the perspective of walking and cycling, as they are compact areas, serving a mix of destination types and trip purposes throughout the day. These are often short trips, which could easily be made by walking or cycling. The local high street, with convenient access to local shops and services, 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.

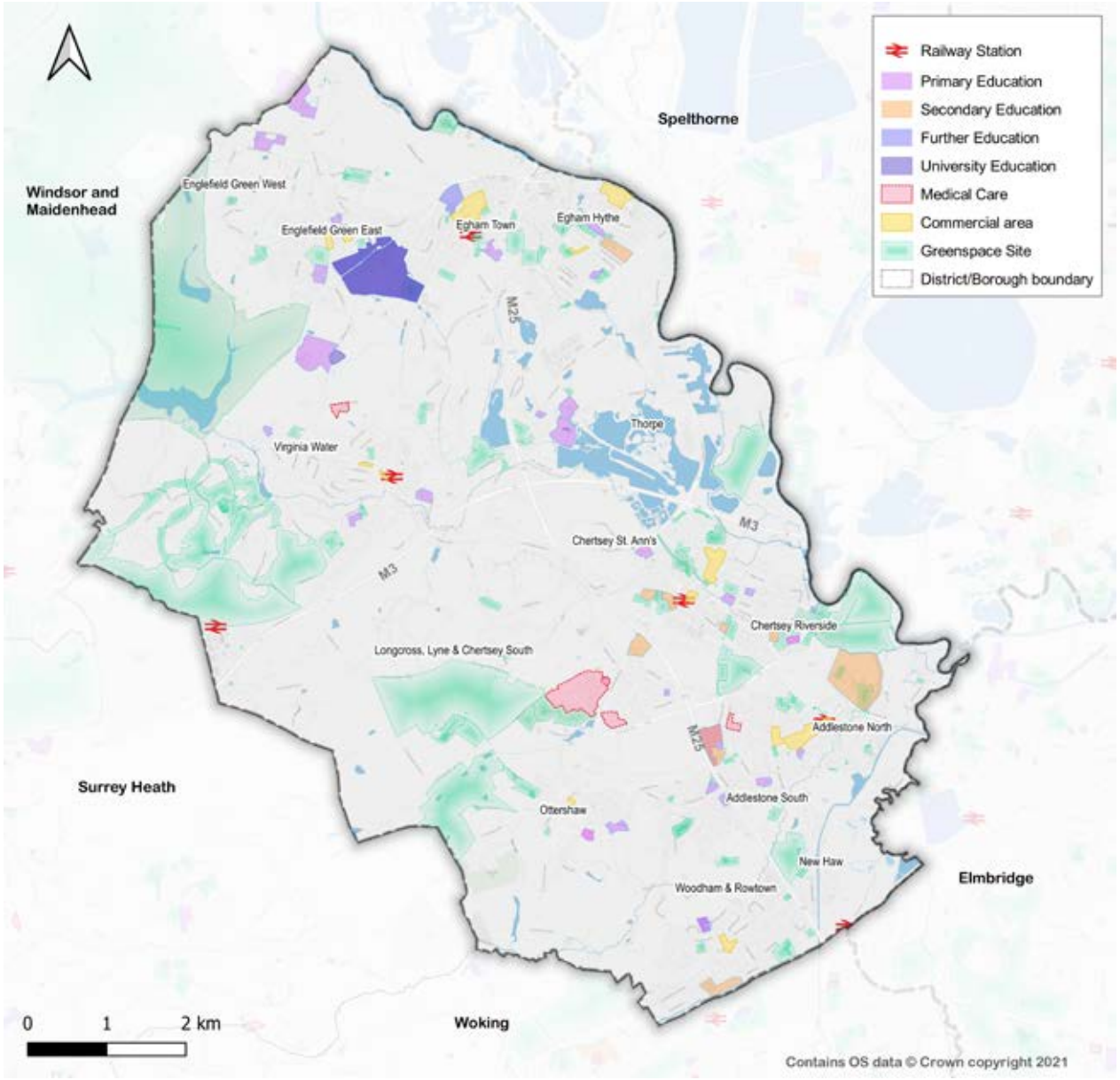


Figure 25. Key destinations

Key Destinations: Potential Development

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

The Runnymede 2030 Local Plan was adopted in July 2020 and indicates potential development sites across the Borough, as shown in Figure 2626.

A notable cluster of development sites were identified between Chertsey and Ottershaw, in addition to the proposed Longcross Garden Village.

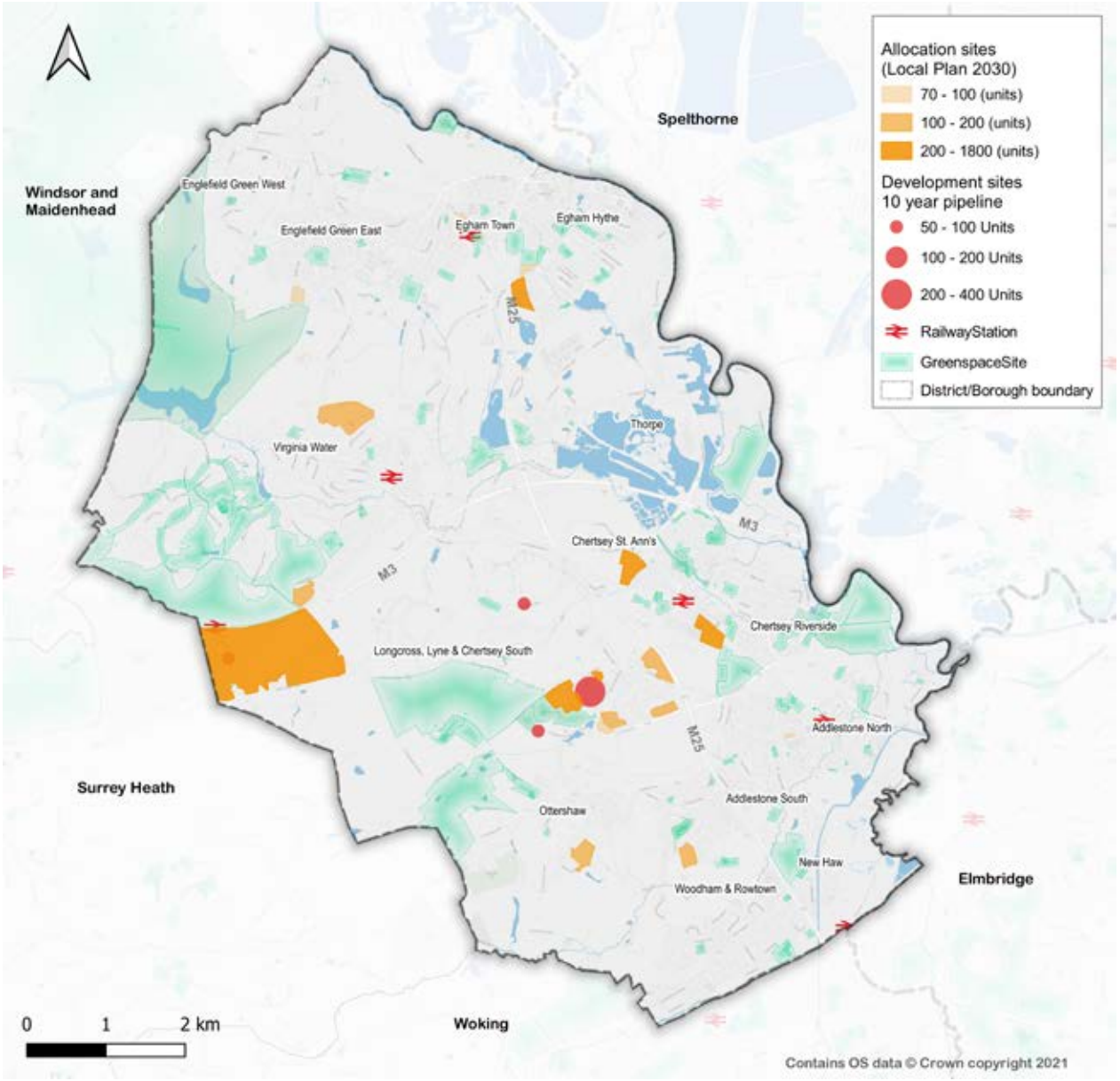


Figure 26. Future development sites in Runnymede

Existing Walking and Cycling Infrastructure

Existing walking and cycling infrastructure within Runnymede 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. This highlights a mix of facility types and routes scattered across the Borough, though generally not providing an interconnected, borough-wide network. Several existing routes include:

- Egham to Sunningdale cycle lane (A30).
- Stroude Road cycle path.
- Local cycle tracks within Egham (e.g. Thorpe lea Road).
- National Cycle Network (NCN) route 4 traverses through the Borough between Chertsey and Egham, providing wider connectivity to the south east region and long distance connections to places such as Bath and southwest Wales.
- NCN route 223 provides further regional connectivity between Chertsey and Woking via the town of Ottershaw.
- NCN route 221 passes along the Basingstoke Canal, connecting the Borough to the wider region.

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.

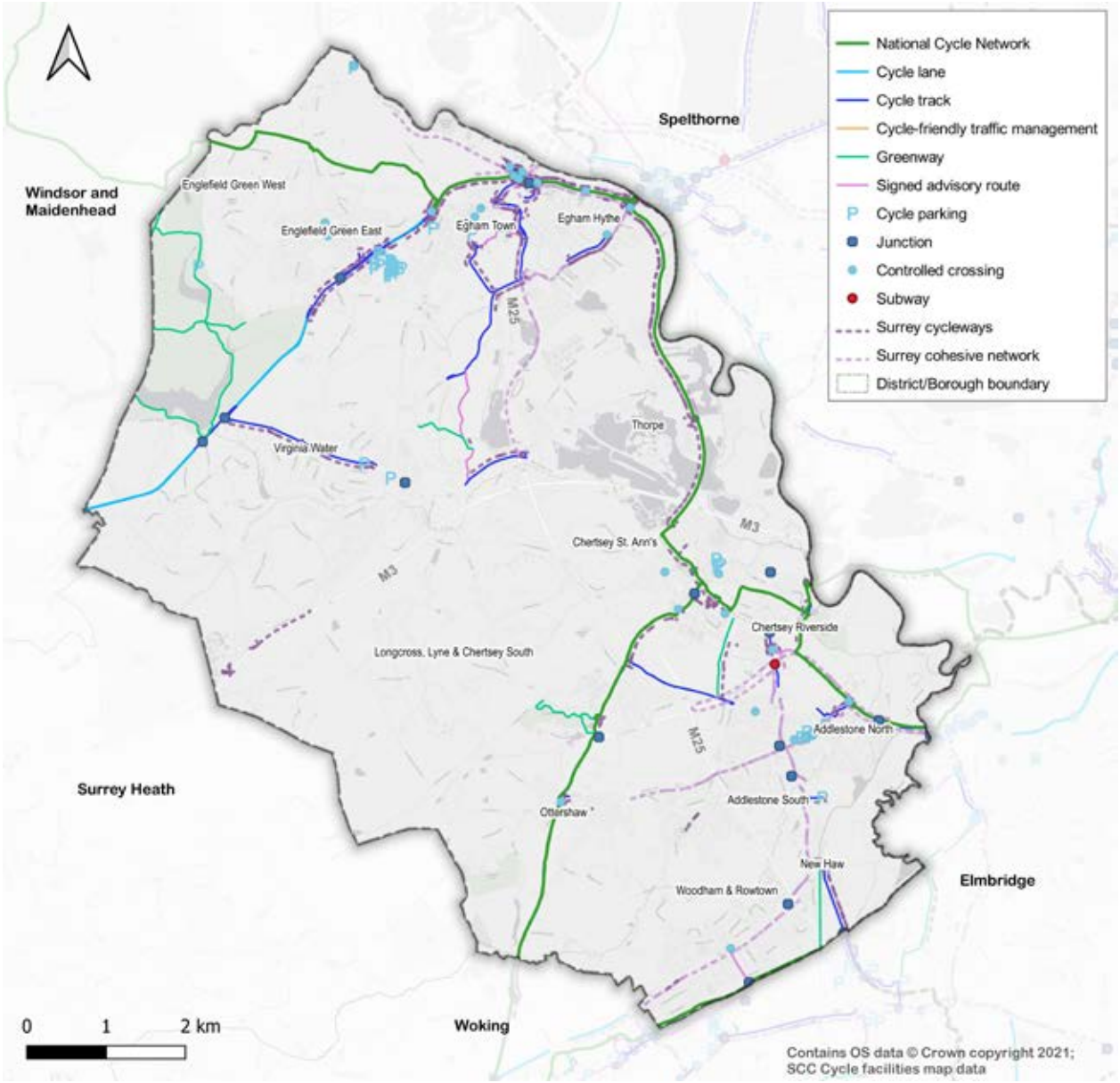


Figure 27. Existing cycling infrastructure

Public Rights of Way

In addition to the street network, there are approximately 100km of Public Rights of Way (PROW) in Runnymede. These public footpaths and bridleways may not form a coherent network, but they provide valuable connections and route choice options for walking and cycling trips, linking to the street and footway networks in urban areas.

Footways are typically provided within the urban road network, though provision varies and depends on the local context. They can be narrow, limited to one side of the road, discontinuous, or otherwise constrained by limited public highway width, built environment, and topography.

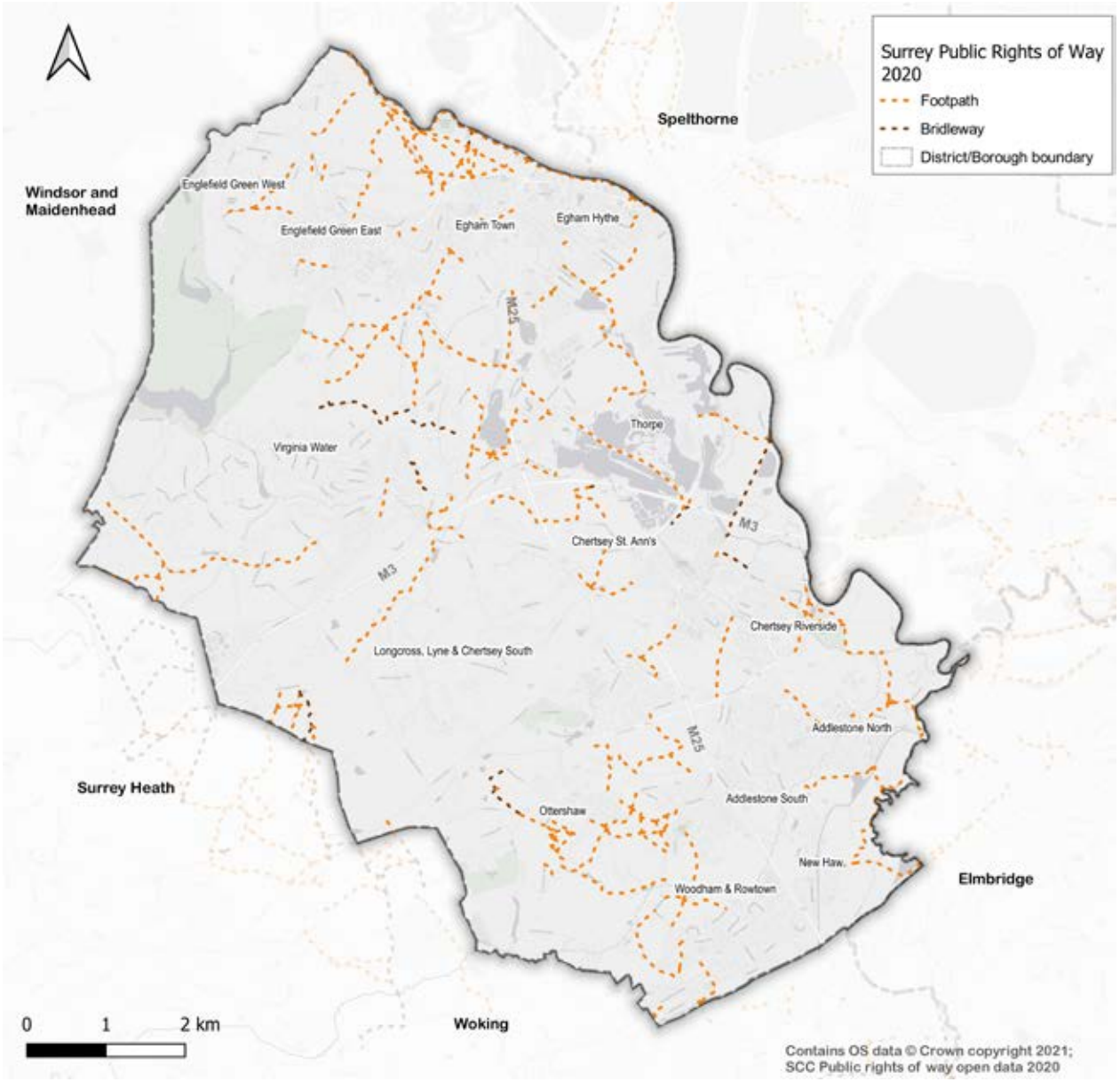


Figure 28. Public rights of way

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.

Figure 29 illustrates the topographical nature of Runnymede. There is a clear distinction between the hilly western half of the Borough and the contrasting eastern area, which is relatively flat. This landscape of little elevation is conducive for active travel, suggesting high potential for walking and cycling journeys in towns such as Egham, Thorpe and Chertsey.

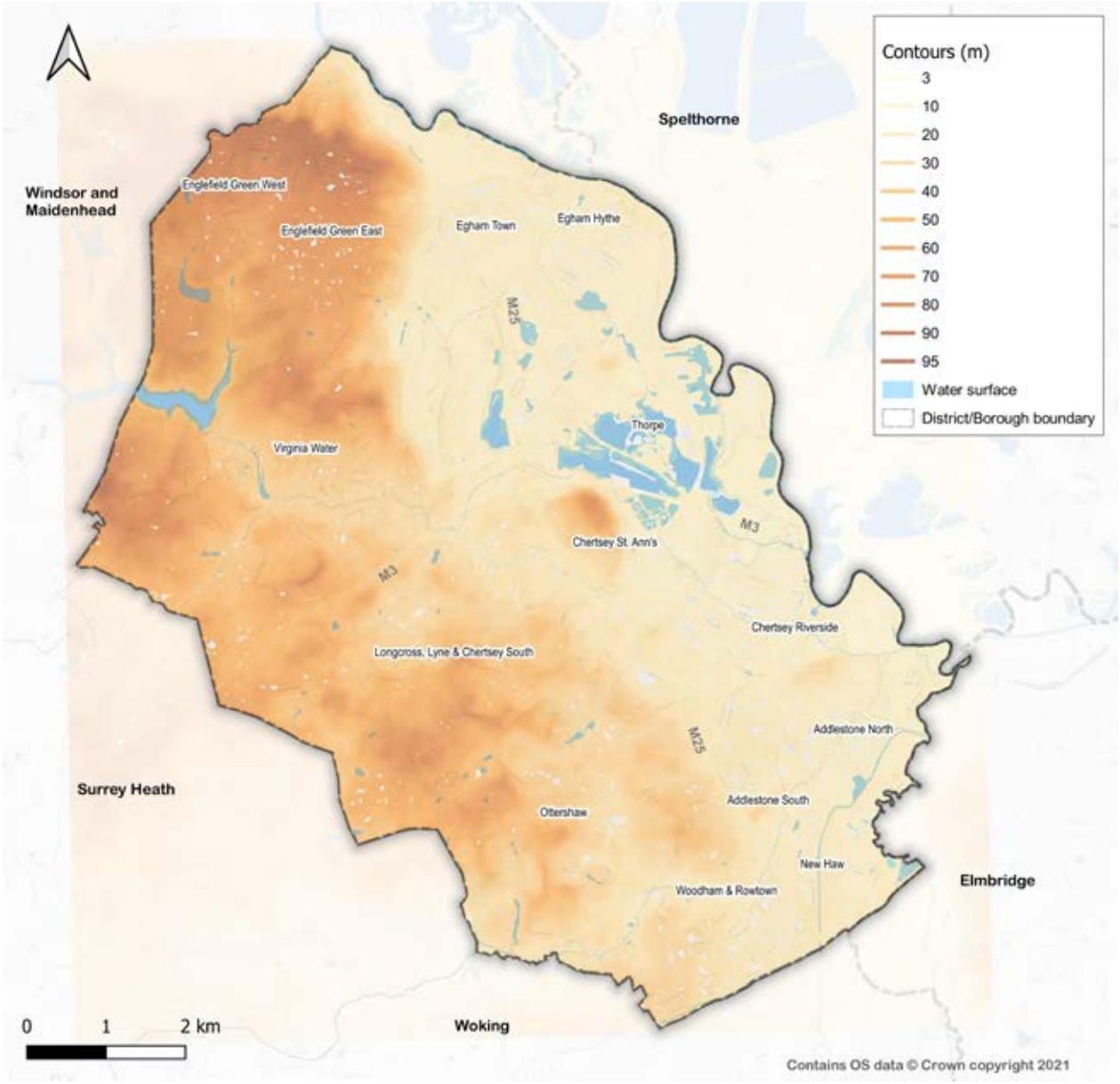


Figure 29. Topography

Rail Network

The Borough is connected to the National Rail Network and has direct services to London. There are six railway stations located within Runnymede, including Egham, Chertsey and Byfleet and New Haw on the southern border of the Borough. These railway stations are key destinations, providing sustainable travel opportunities that can connect with walking and cycle routes.

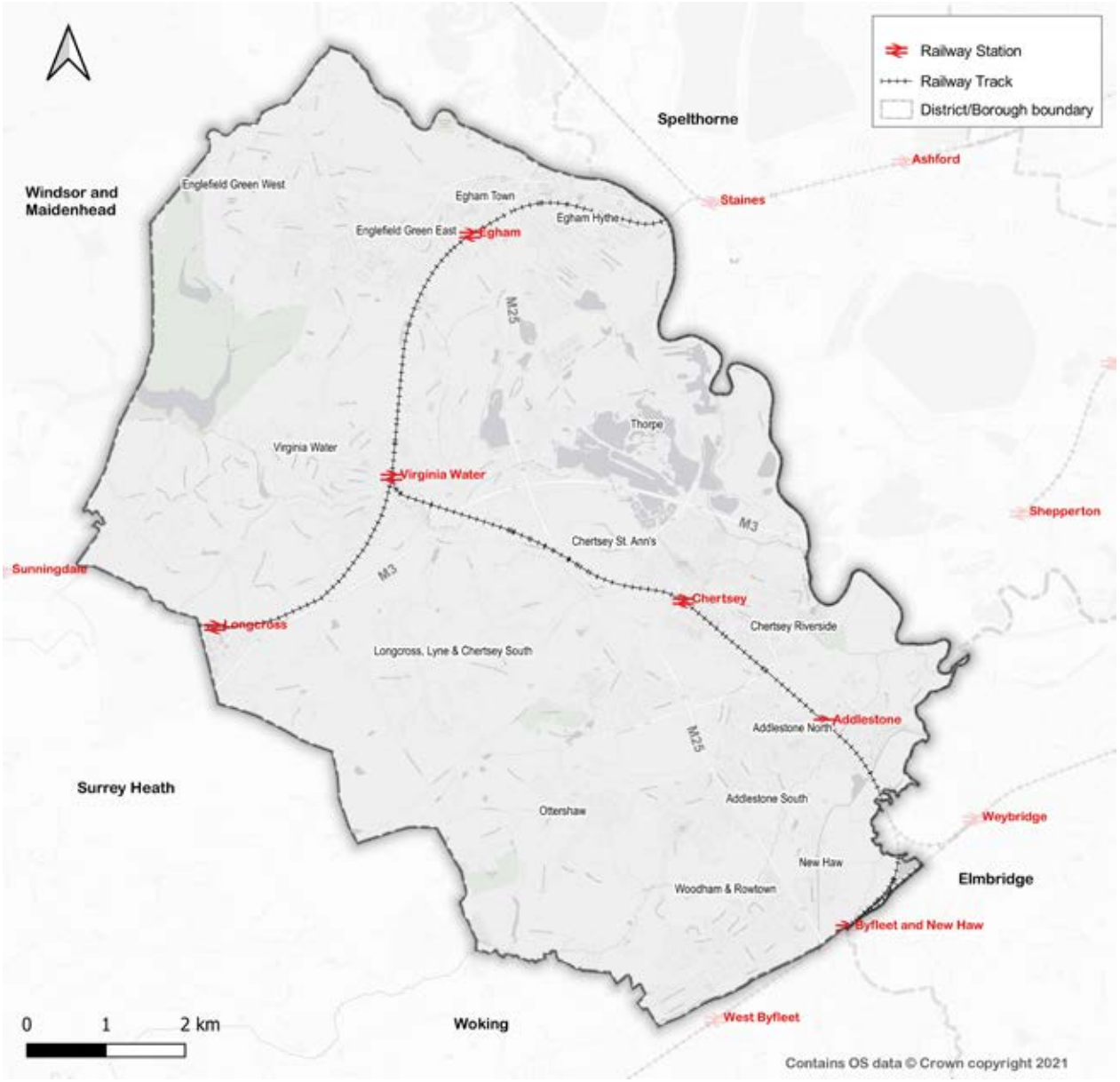


Figure 30. Railway network

Bus Network

Figure 31 demonstrates the extent of the bus network in Runnymede, highlighting routes available and stops where passengers can access the bus services.

Analysis of the bus network reveals there is good connectivity between the main towns in Runnymede, though the availability of service provision across the centre-west region is limited. This could be due to the lower population density in this area, which creates less demand and viability for a commercial bus service.

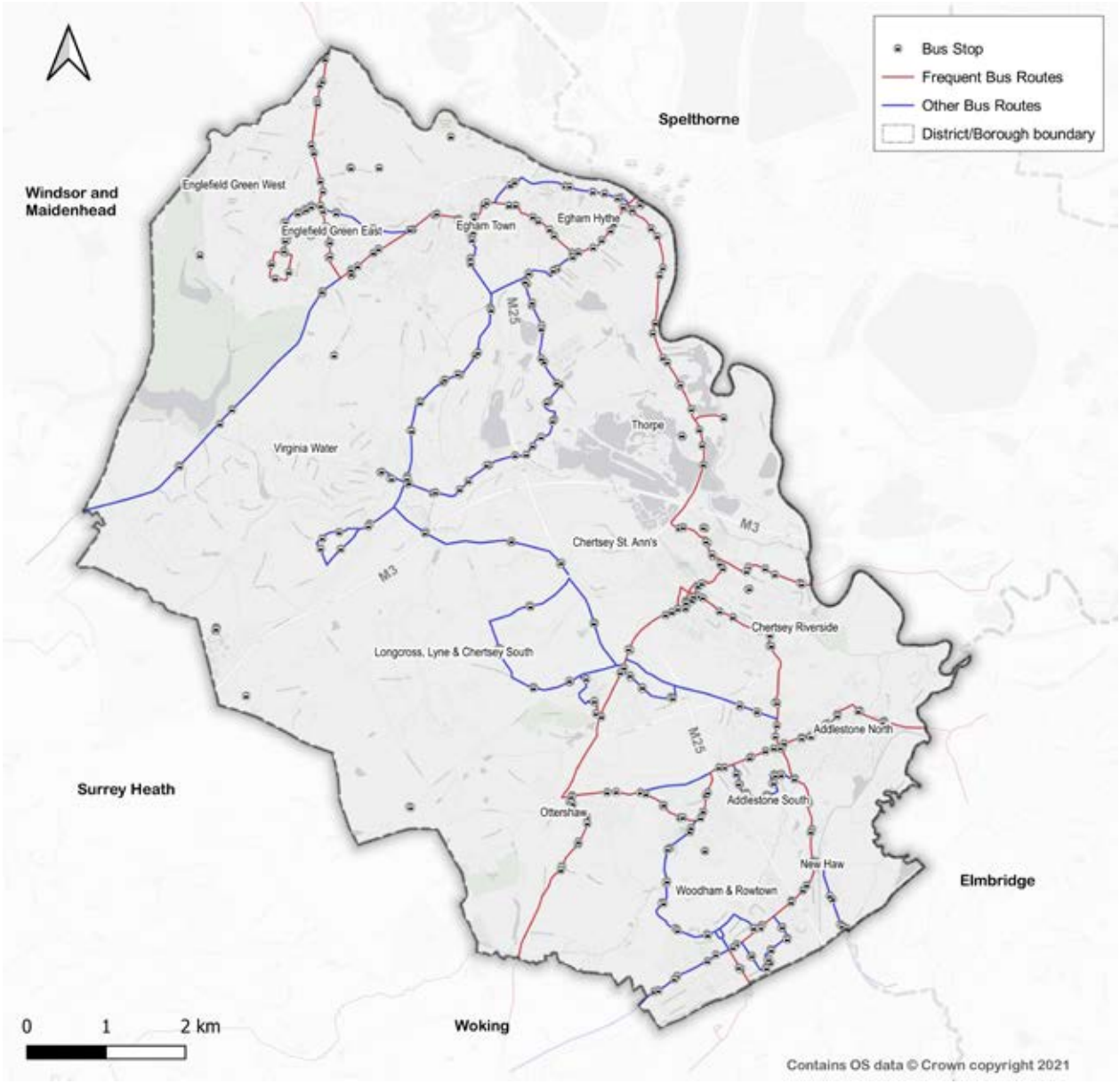


Figure 31. Bus network

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.

Figure 32 illustrates the residential population distribution of Runnymede. The highest population densities can be found in the north and east regions of the Borough, including the built-up urban settlements of Egham and Chertsey. In contrast, the central and western regions of the Borough have a lower population density, due in part to their relatively rural character (e.g., woodland, golf courses)

This data suggests there are greater opportunities for short distance walking or cycling trips in the urban areas of Englefield Green, Egham and Addlestone,

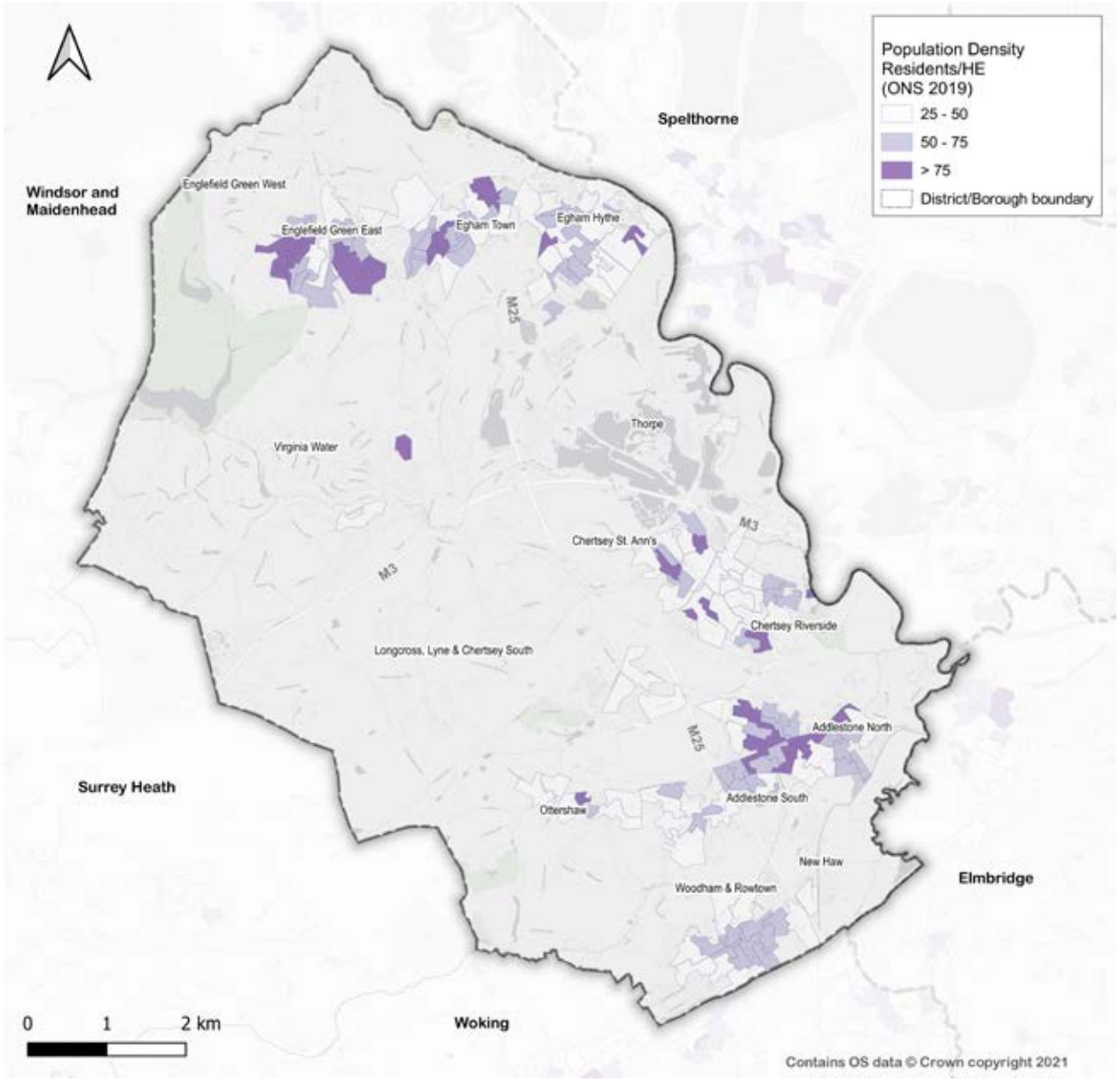


Figure 32. Resident population density

Employment

Figure 33 illustrates workplace population density, which is indicative of key employment hubs in the area and another key input into the identification of walking and cycling networks. The larger employment areas include:

» Egham
» Chertsey
» Addlestone North
» Woodham & Rowtown

Figure 33 also indicates the importance of connectivity across borough boundaries to provide linkages to neighbouring employment and population centres. In particular, Staines-upon-Thames has a relatively high employment and population density. The town may be located to the northeast of the Borough, but should be taken into consideration.

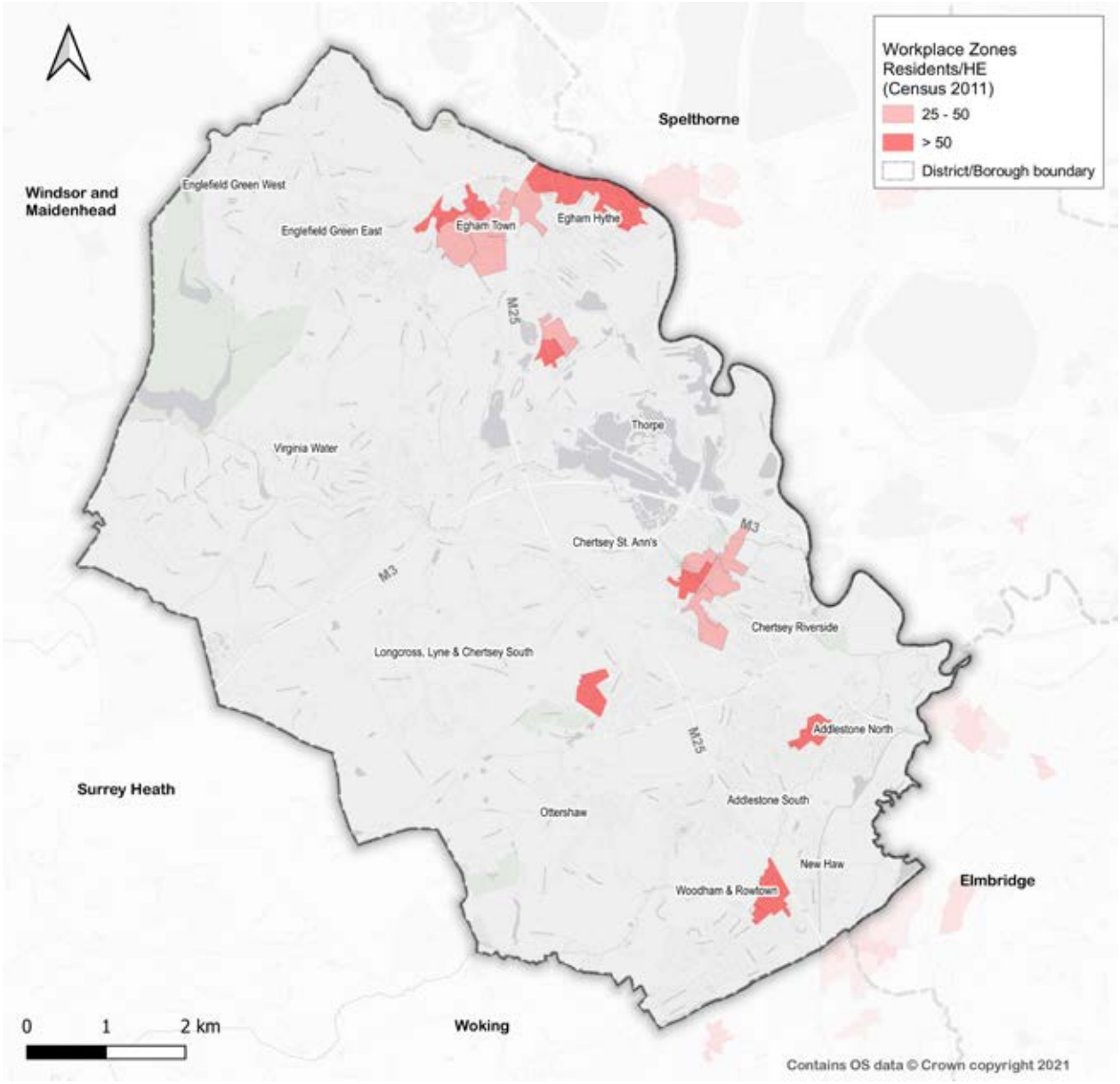


Figure 33. Workplace population density

Car Availability

Car availability is relatively high throughout Runnymede. Data from the 2011 Census indicates that the proportion of households with access to a vehicle is highest along the western boundary of the Borough, while vehicle availability is lower (>40% of households) in the urban towns located within the eastern half of the Borough (see Figure 34). With reference to earlier Figure 30 and Figure 31 (Railway network page 52 and Bus network page 53), it can be seen that the areas with fewer public transport connections have greater levels of car ownership.

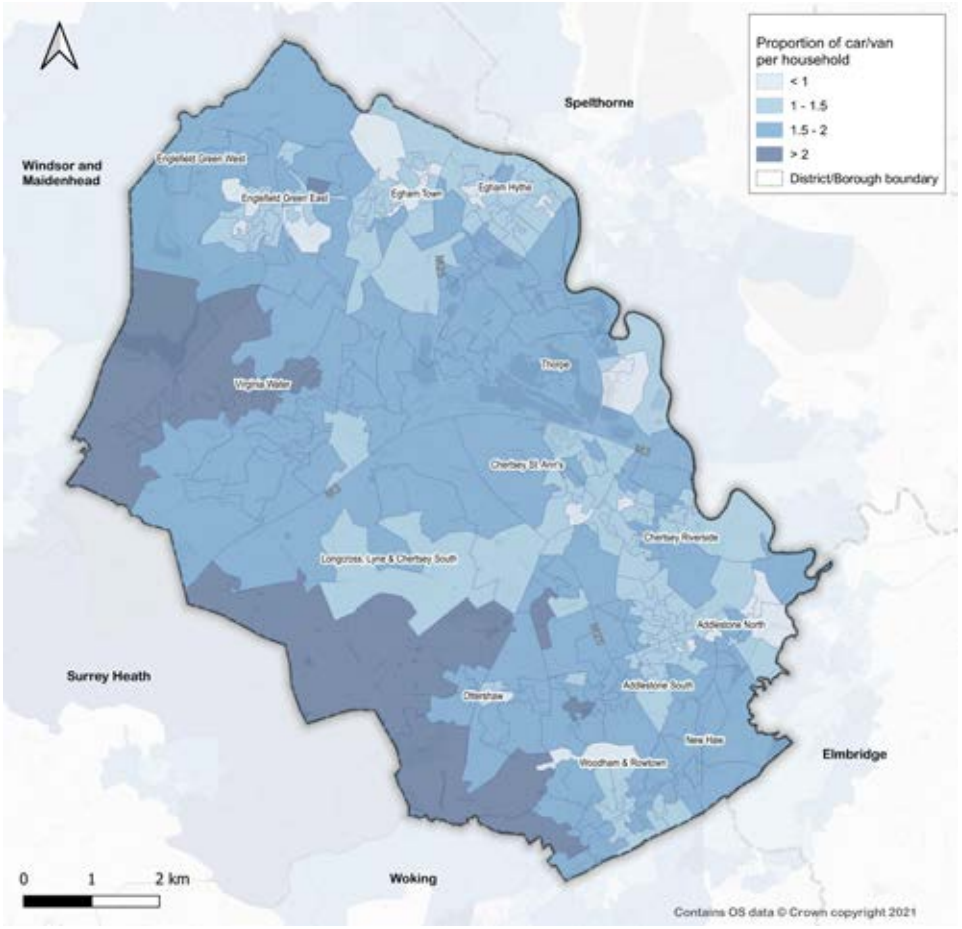


Figure 34. Proportion of car/van per household

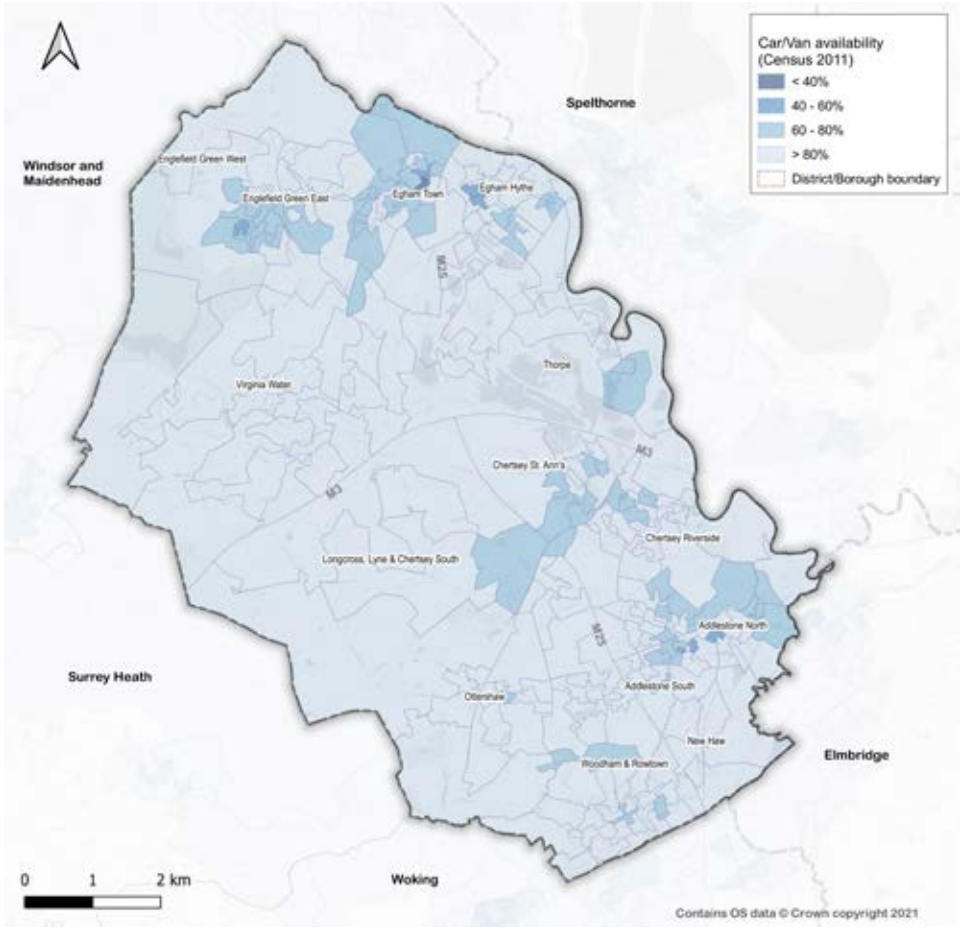


Figure 35. Car/Van availability

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 36 shows that most of the Borough is in the bottom half of the IMD (6th - 10th deciles), which suggests low deprivation levels. While there are no areas within the top two most deprived deciles in Runnymede, relative to the rest of the Borough, lower rankings in the IMD occur in the built up urban centres of Englefield, and Chertsey (within the 3rd/4th most-deprived decile).

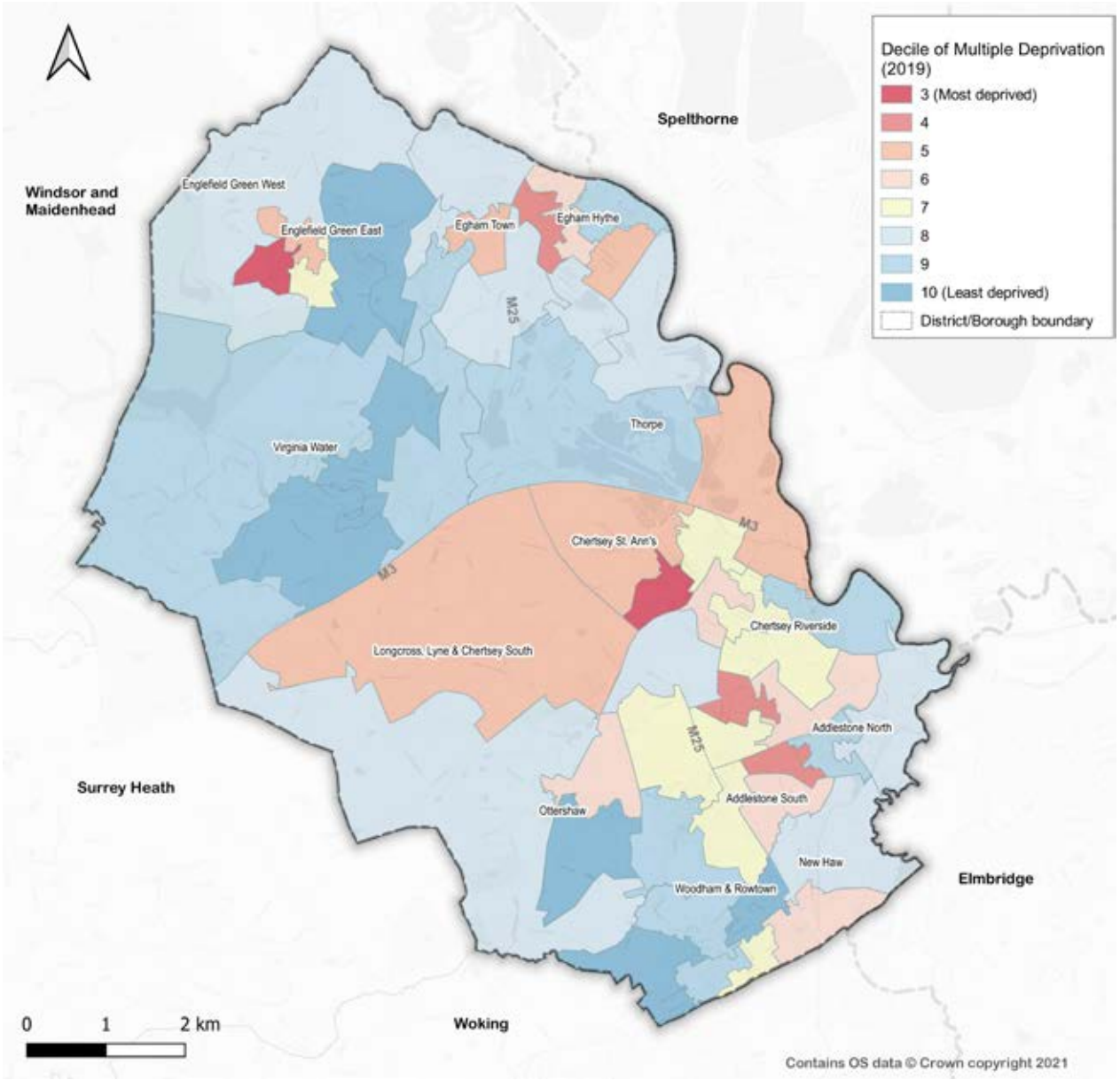


Figure 36. Index of multiple deprivation

Commuting Patterns

The Census data provides information on for main commuter inflows and outflows to/from Runnymede, which is shown in Figure 37. The neighbouring boroughs Spelthorne, Elmbridge and Woking are among the top 3 for inflows and/or outflows. Most commuter movements are within a 30 minute cycle ride from / to Runnymede. 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 cycle able distance and would have potential for modal shift.

There are also substantial commuter outflows to London and other further afield areas. This indicates the importance of providing high-quality walking and cycling links to railway stations in Runnymede to facilitate and encourage linked active travel/public transport trips.

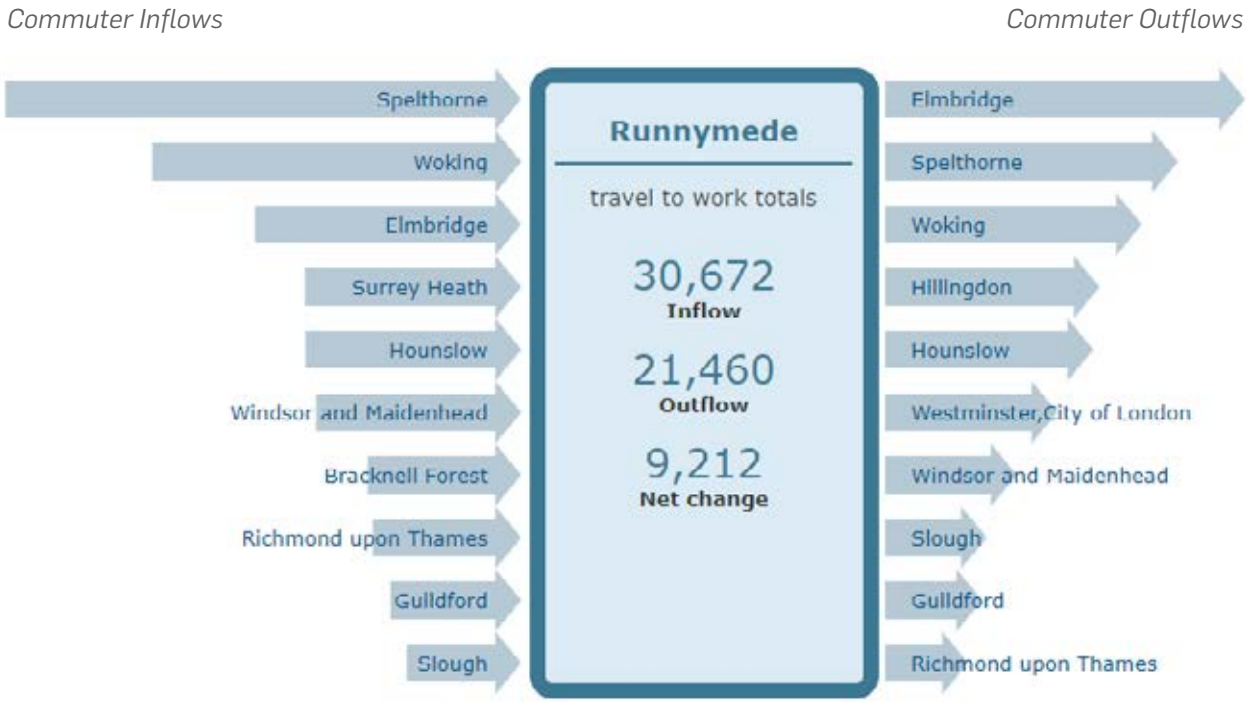


Figure 37. Travel to work commuter patterns for Runnymede Borough (source: https://www.nomisweb.co.uk/)

Barriers and Constraints

Severance is a significant barrier to mobility in Runnymede, particularly for active travel modes. Issues are illustrated in Figure 38 and include:

- Multiple railways traverse the Borough, which sever the local road network and funnel traffic for all modes to a limited number of crossing points.
- The M3 and M25 motorways are barriers to north/south and east/west connectivity, with access limited to main crossing points. The distance between crossing opportunities creates a significant barrier for all modes, particularly the viability of short trips via walking or cycling.
- Several A and B roads sever local street networks, creating physical and psychological barriers to active 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.
- Several lakes in the Thorpe area create severance issues, while the River Thames effects connectivity with the neighbouring Boroughs to the east.
- Topography is not a major barrier or constraint to active travel in Runnymede. As indicated in the contour lines in Figure 29, the built-up urban areas are relatively flat, particularly in the east where the population is higher, suggesting an opportunity for increasing cycling trips.

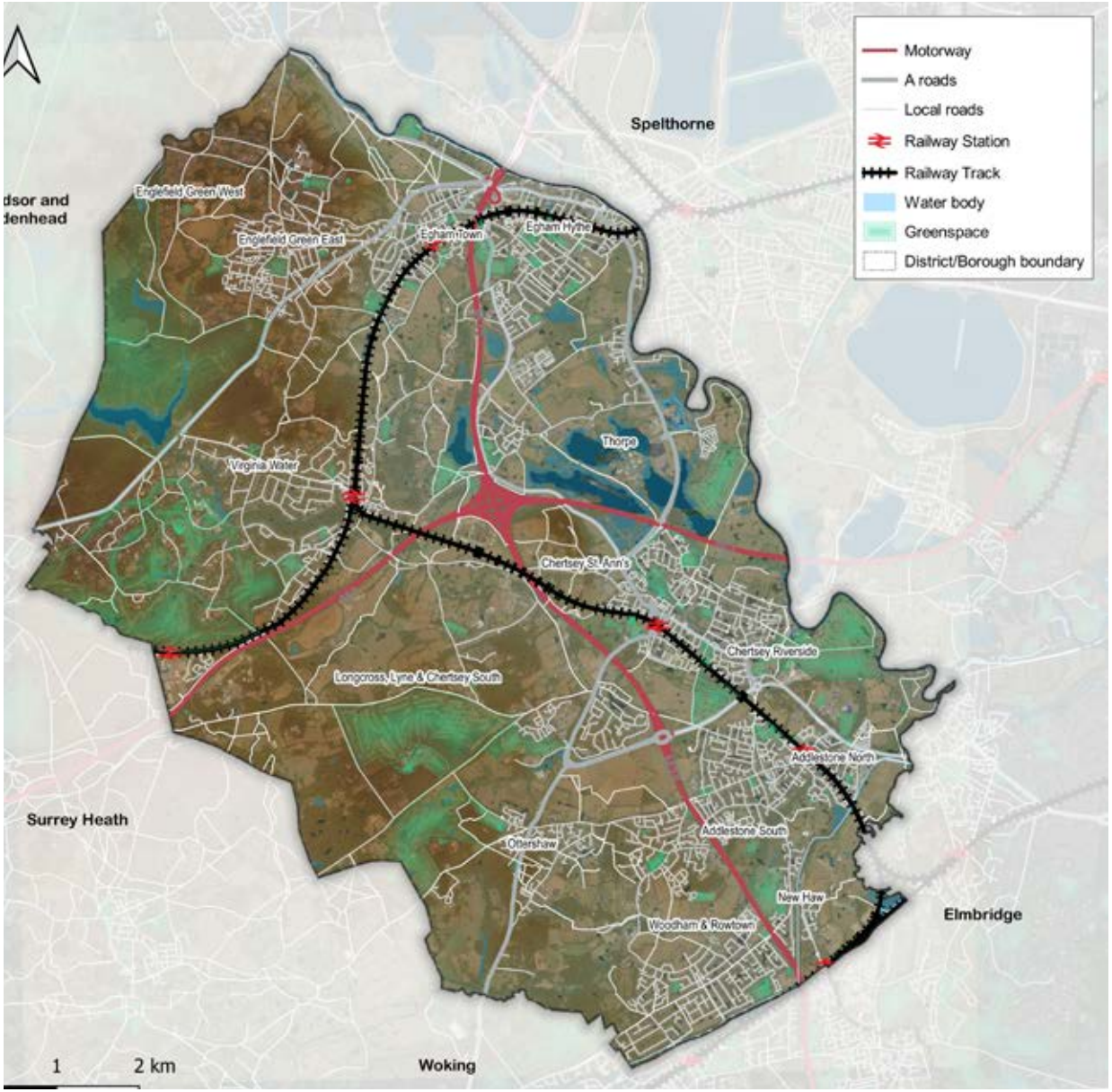


Figure 38. Severance in Runnymede

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 39 illustrates the location, severity and relative concentration of pedestrian collisions within the Borough. The map indicates that collisions were largely concentrated in the north and south east of the Borough. This is likely due to the higher population density and clustering of key destinations in these areas, and hence greater propensity for walking activity and higher traffic. Relative 'hotspots' include:

» Church Road/Station Road (B3121), Addlestone
» Church Road and Station Road, Egham Town
» Thorpe Road (B3376), Egham Hythe

Out of total 120 pedestrian collisions 3% were fatal (4 collisions), 23% were serious (27 collisions) and 74% were slight (89 collisions).

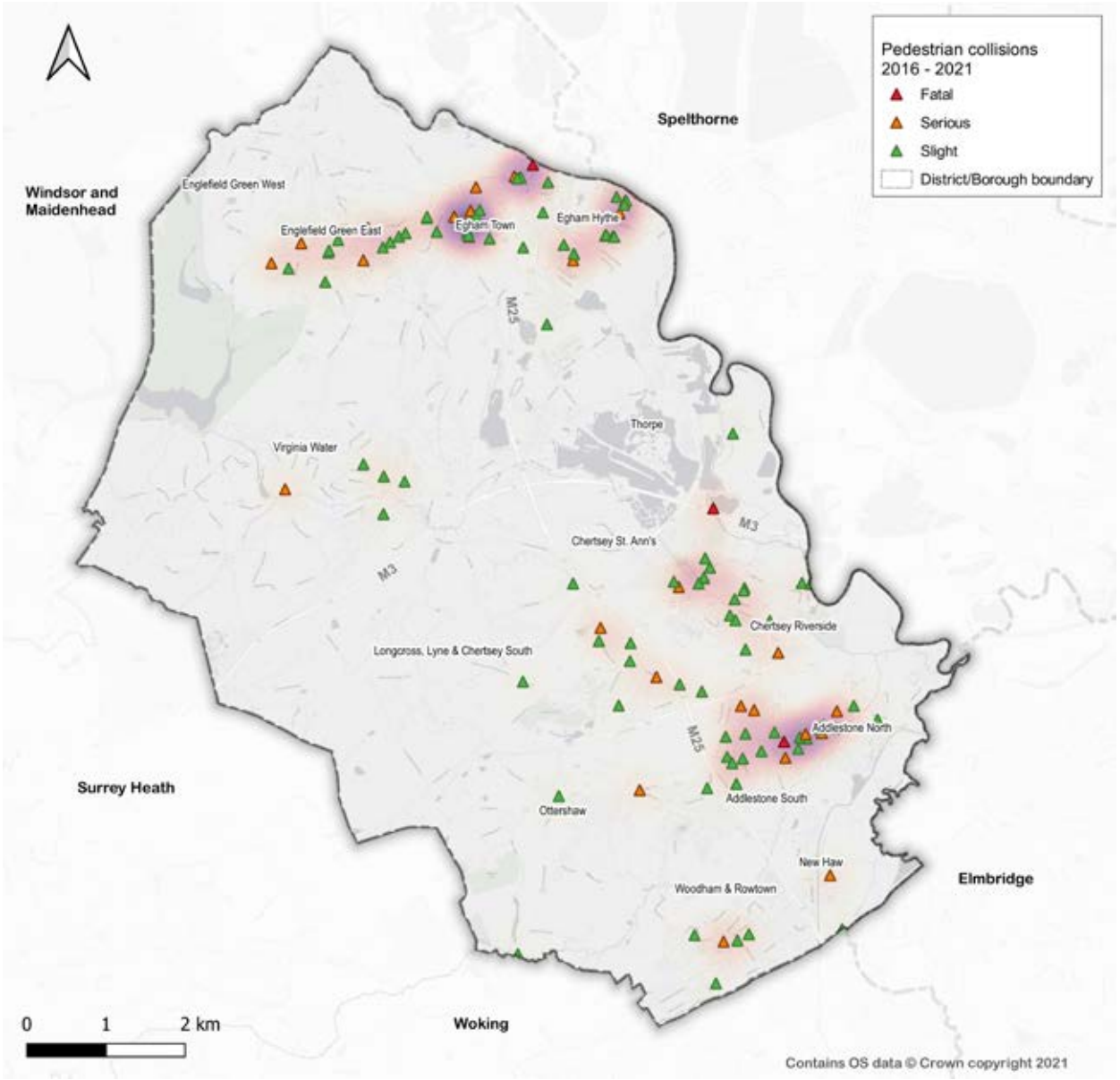


Figure 39. Pedestrian collisions

Cyclist Collisions

The locations and severity of cyclists' collisions are shown in Figure 40. As with the pedestrian collisions, clustering of cycling incidents is visible in the built up urban areas, where there are relatively higher population densities and vibrant commercial areas.

Areas with a higher concentration of cyclist collisions include:

» Egham By-Pass/High Street roundabout
» The Causeway/Thorpe Lea Road roundabout
» A317, Chertsey
» Bridge Road, Chertsey
» Church Road/ Station Road (B3121), Addlestone

Out of total 243 pedestrian collisions 0.8% were fatal (2 collisions), 28.8% were serious (70 collisions) and 70.4% were slight (171 collisions).

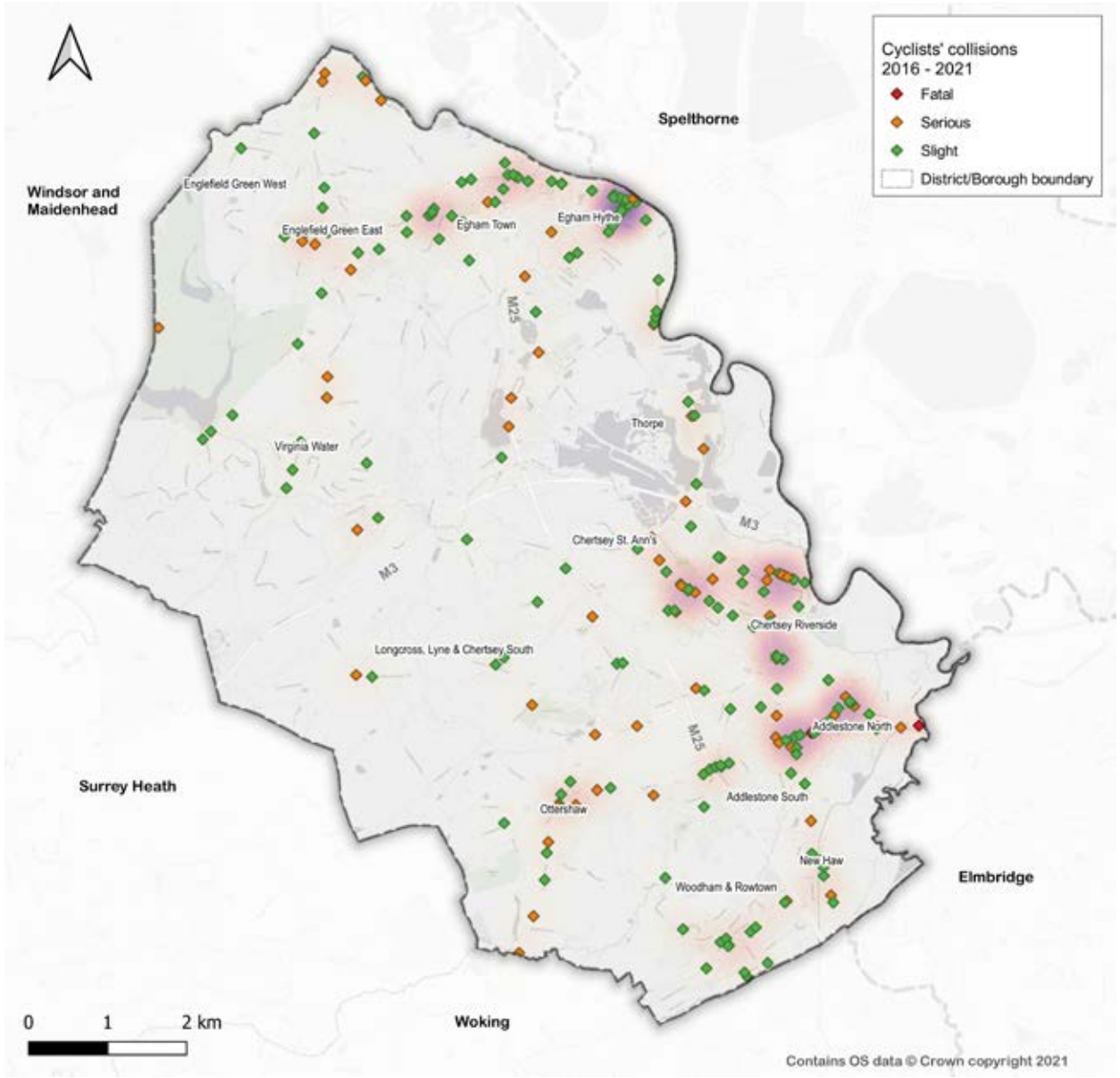


Figure 40. Cyclist collisions

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.

Both 'Widen My Path' and 'Commonplace' are online tools where members of the public can register a comment with regards to walking and cycling infrastructure, with the comments attributed to specific locations on the map.

This insightful information is then visible to local authorities, enabling them to identify and prioritise interventions to better enable and promote greater active travel.

Data from both 'Widen My Path' and 'Commonplace' has been reviewed as part of the option identification process and has also subsequently informed the measures that are required at specific locations.

Figure 41 provides a provides a visual representation of higher priority areas for walking and cycling improvements, from the perspective of local residents. Widespread comments were received from the public across the Borough, with high concentrations of comments noted in the towns of Egham and Addlestone.

In total 358 comments were logged in Commonplace platform with 932 agreements on the comments. 30% of the comments referred to cycle facilities, 31% to pedestrian facilities and 39% to both pedestrian and cycle facilities. Widen my path platform has 44 comments on the cycle facilities with 145 agreements.

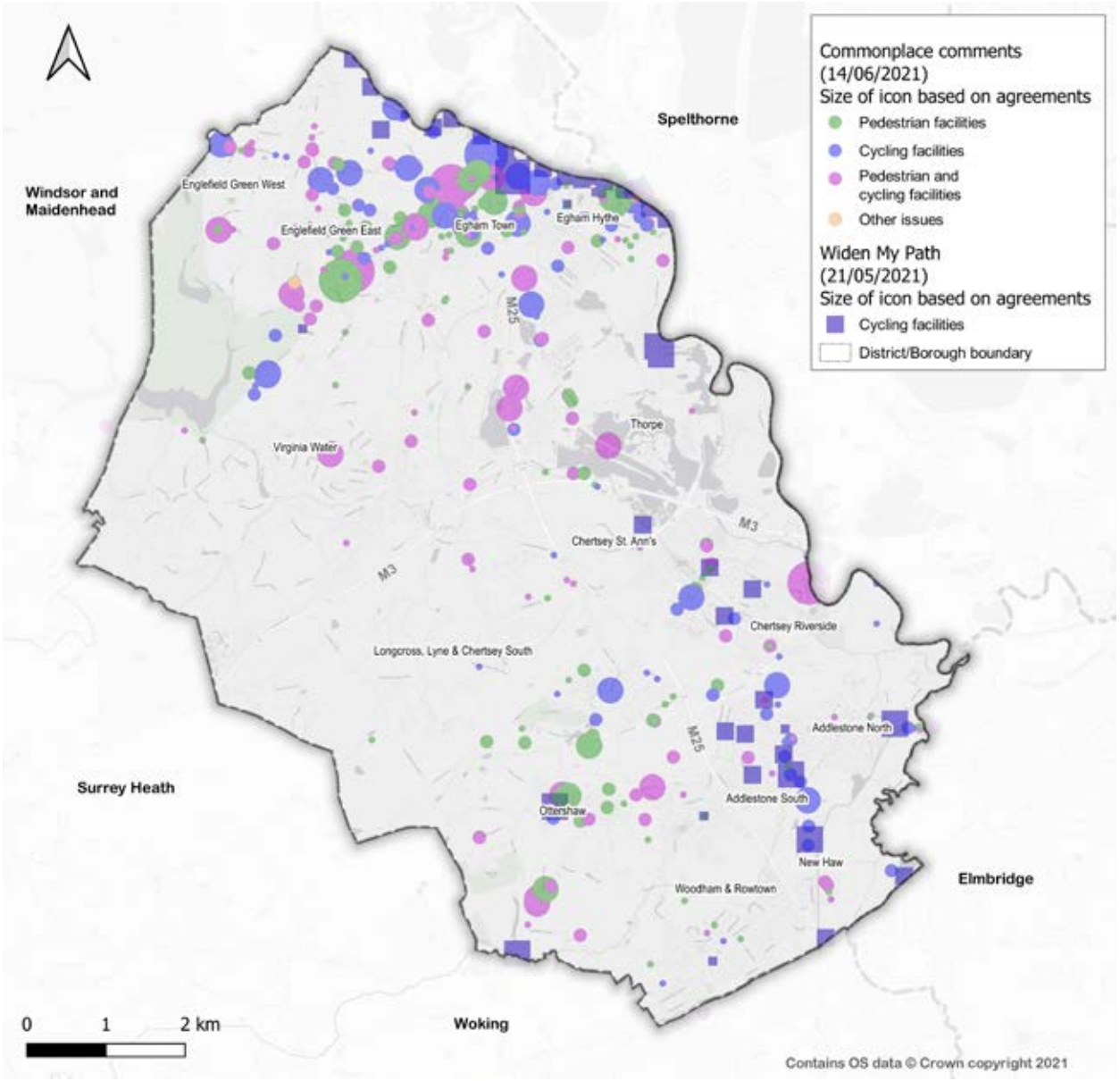


Figure 41. Comments related to walking and cycling issues across multiple online public comment platforms

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 Runnymede 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 Runnymede 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 disagregated 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 Runnymede. 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 low across the Borough, typically less than 5% as illustrated in Figure 42. Exceptions to this trend were identified near Englefield and Woodham, where the rate was slightly higher at 5% to 10%. The PCT, however, illustrates the high propensity for growth in cycling in the Borough of Runnymede. Under the 'Go Dutch' scenario, much of the Borough would have a cycle commuter mode share of over 15%.

The propensity is particularly high in the eastern half of the Borough, where population density and proximity to employment areas is highest. In this region, the PCT indicates a potential mode share of over 20% (Figure 43).

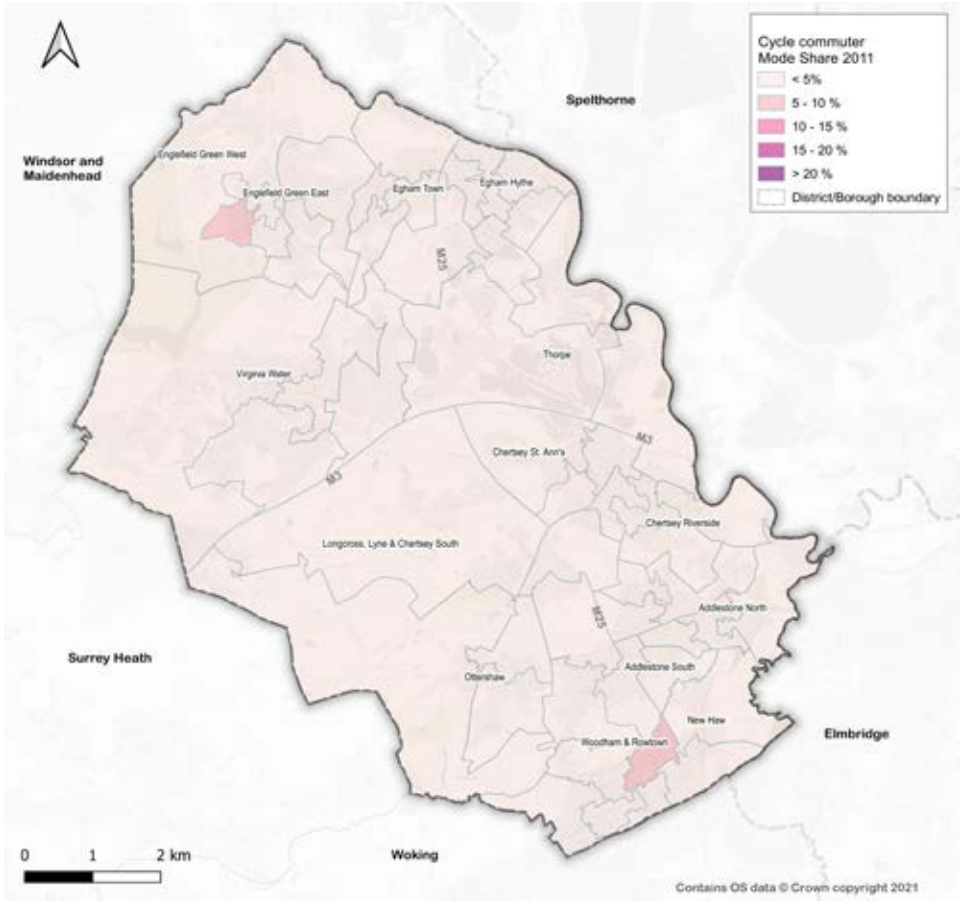


Figure 42. Journey to work cycling mode share based on 2011 Census data

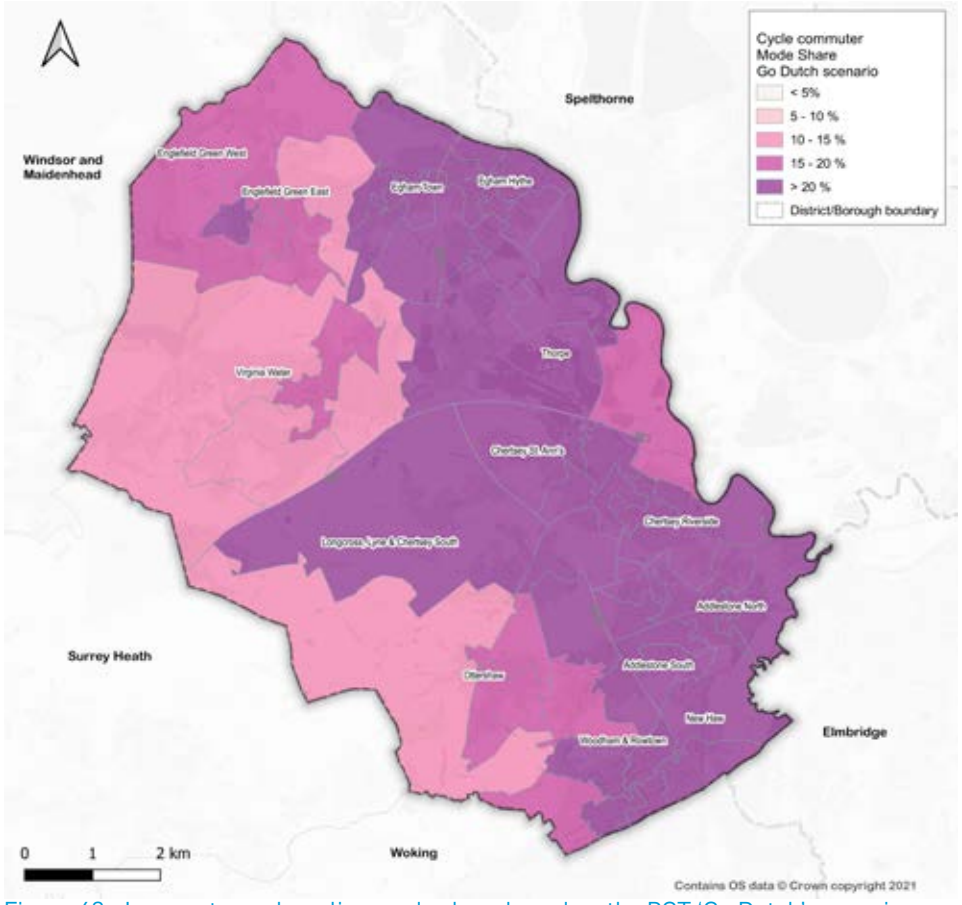


Figure 43. Journey to work cycling mode share based on the PCT 'Go Dutch' scenario

PCT - Existing commuter trips

Figure 44 illustrates the pattern of existing commuter flows across the Borough. The number of cycling trips is considered to be relatively low across Runnymede, with the highest levels of cycling found among the built up urban areas in the eastern half of the Borough. The most popular routes can be seen in the north east of the Borough, including the B3376 and A308, which provide access across the Thames towards neighbouring Staines-Upon-Thames.

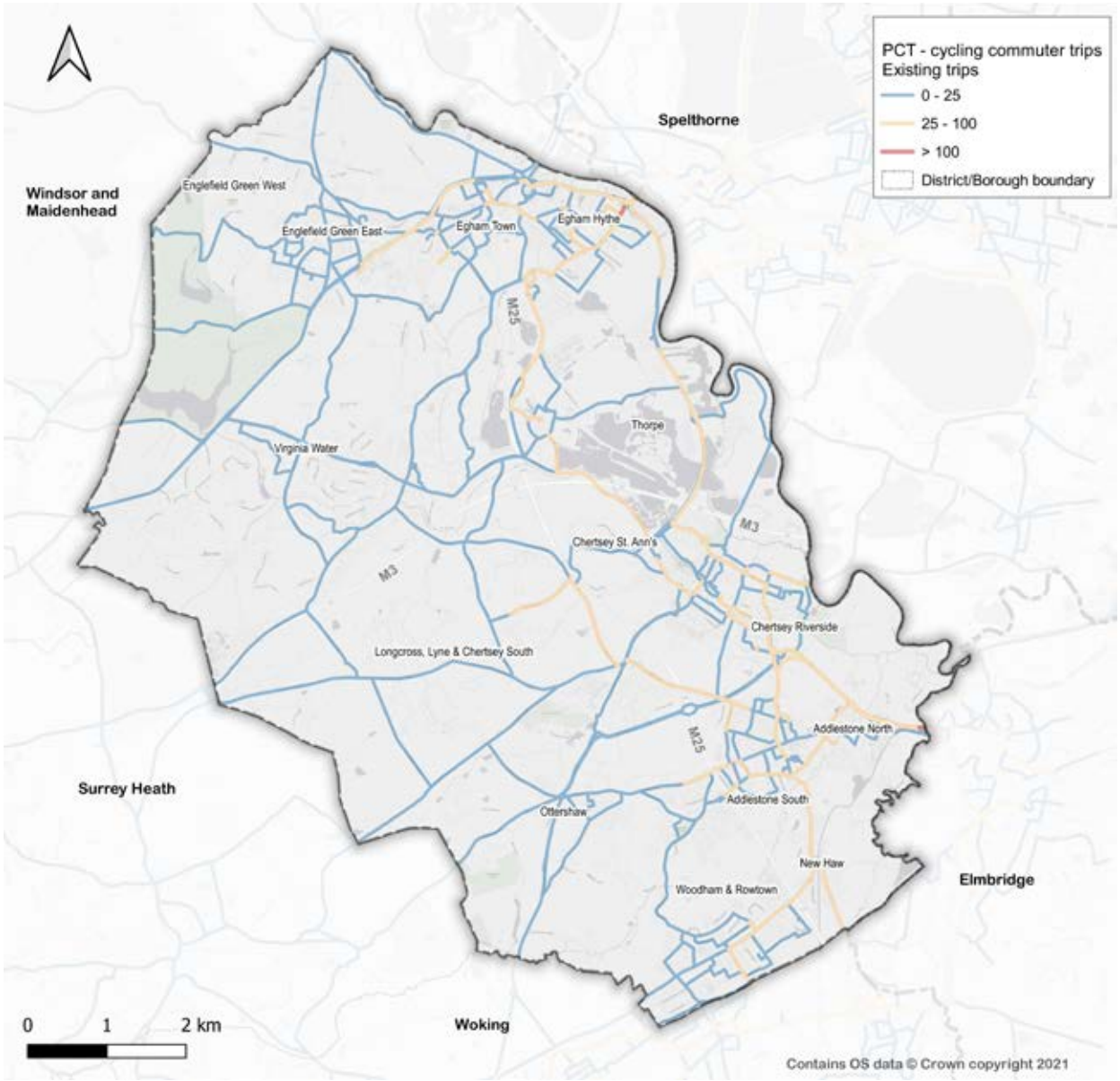


Figure 44. PCT daily commuter cycle flows - Existing

PCT - Government Target

The modelled scenario shown in Figure 45 represents a doubling of the level of cycling commuter trips, in line with the government's target to double the number of 'stages' (legs of a trip using a single mode) cycled by 2025.

Key route flows include:

» Egham to Staines-Upon-Thames (B3376)
» Egham to Thorpe (B388)
» Chertsey town centre (St Ann's Road-London Street)
» Chertsey to Addlestone (Chertsey Road)
» Addlestone to Woodham (A318-B385)

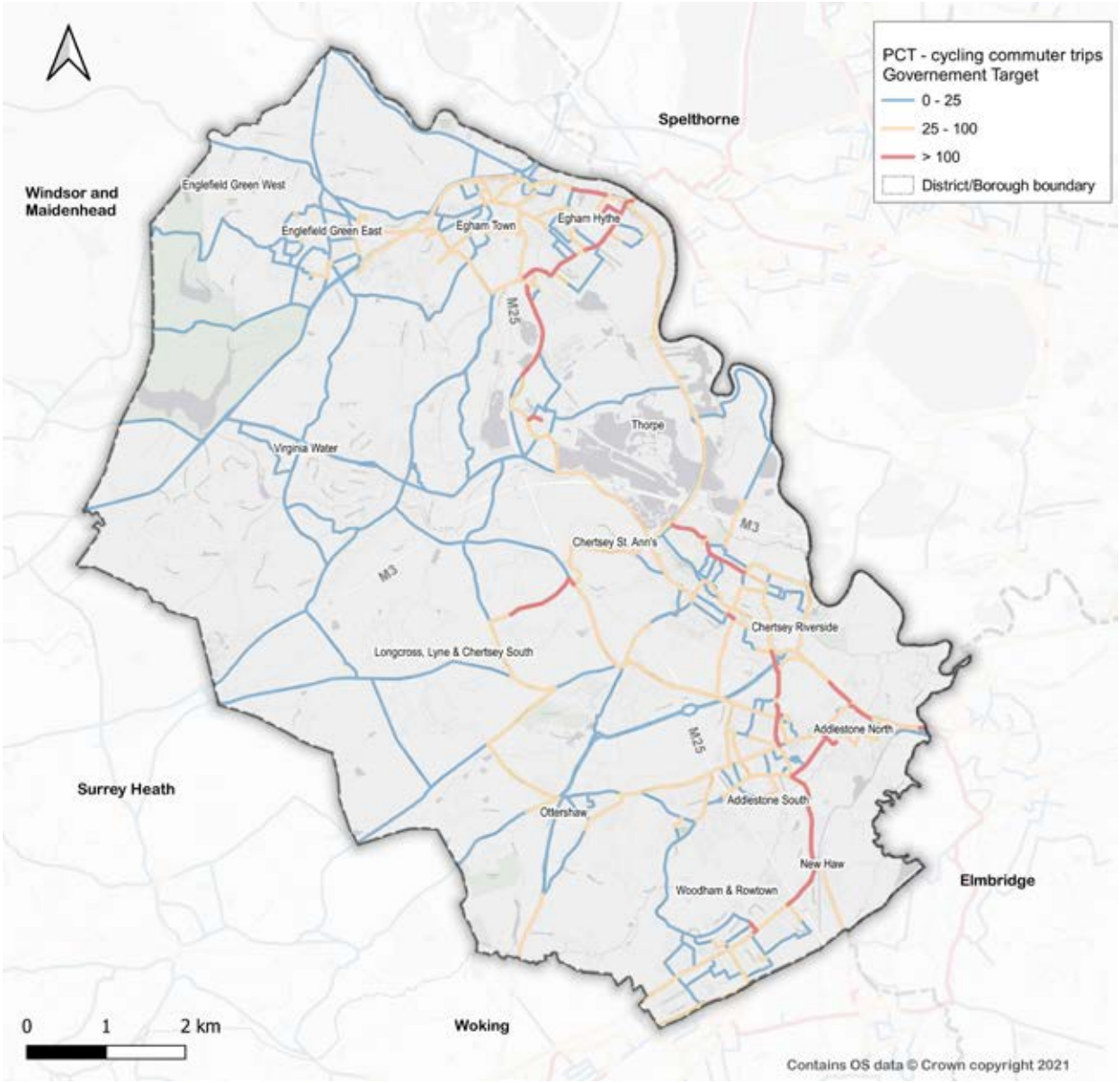


Figure 45. PCT daily commuter cycle flows - Government Target

PCT - Commuter Trips - Go Dutch

Estimated daily commuter cycle flows from the PCT Go Dutch scenario are illustrated in Figure 46. This indicates the routes with the highest relative propensity for cycling in Runnymede based on journey to work data.[1]

Roads in the eastern half of Runnymede are seen to have the highest flows, with busy routes linking populated settlement areas.

Indicative key corridors and linkages with relatively high flows include:

» Between Egham and Staines-Upon-Thames
» Between Englefield and Egham
» Between Egham and Thorpe
» Between Chertsey and Addlestone
» Between Addlestone and Woodham

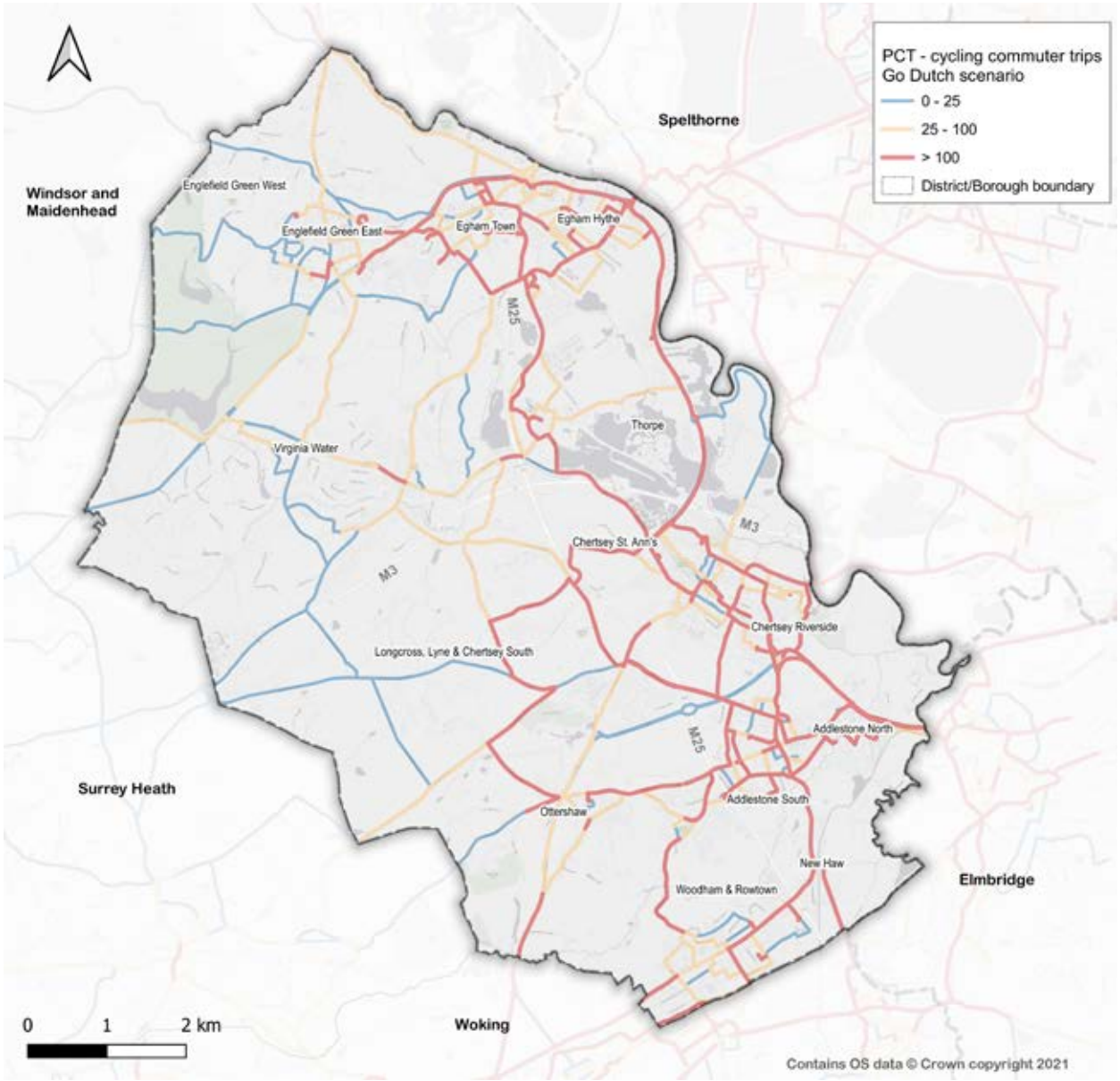


Figure 46. PCT daily commuter cycle flows, 'Go Dutch' scenario

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

PCT - E-Bikes

This scenario models the additional increase in cycling that would be achieved through widespread uptake of electric cycles ("E-Bikes"). Analysis of the data (Figure 47) reveals a continuation of the pattern seen in previous PCT scenarios, with high flow routes identified across the eastern half of the Borough between the urban settlements of Egham, Chertsey and Addlestone.

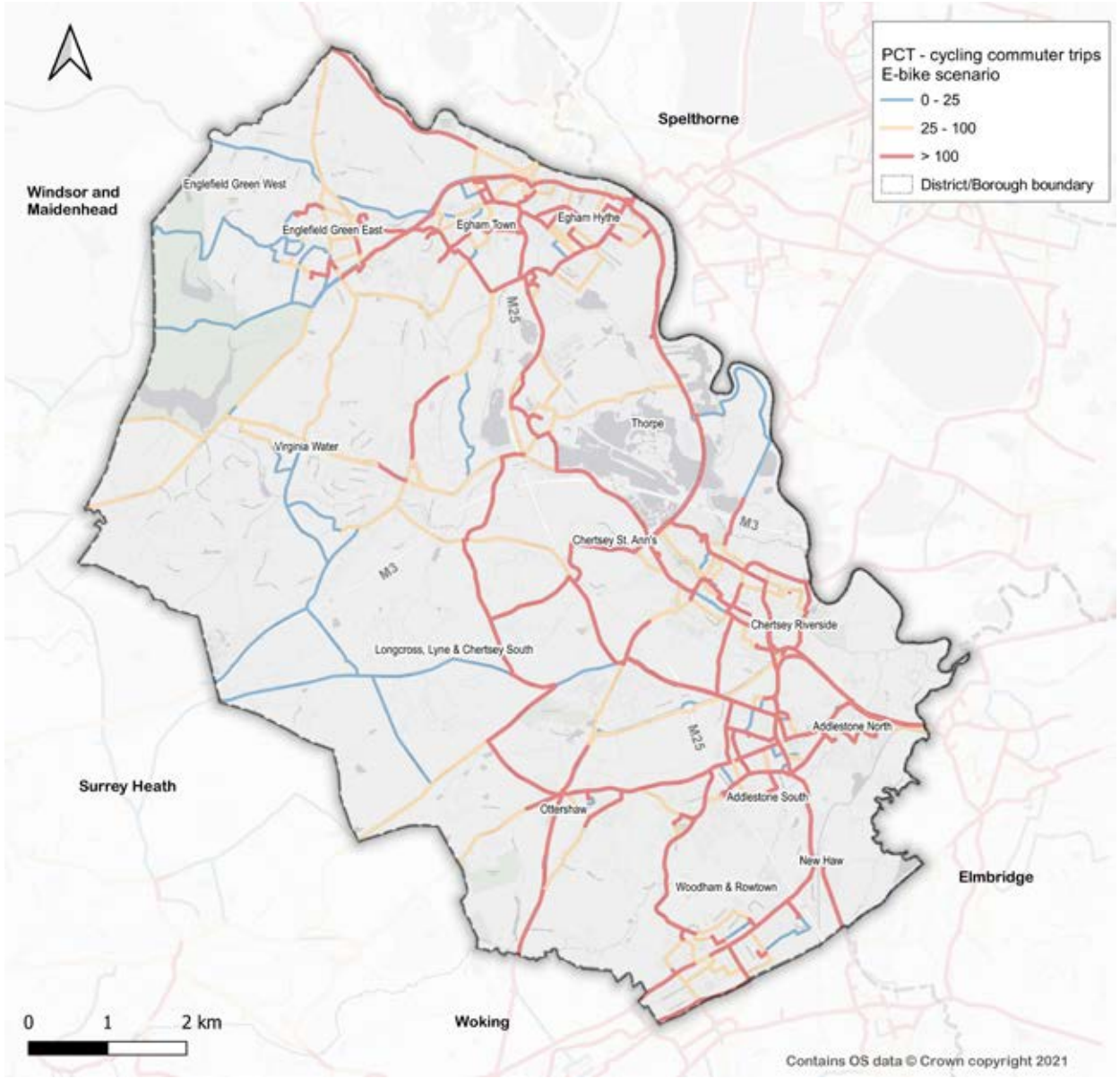


Figure 47. PCT daily commuter cycle flows - E bike scenario

PCT School Trip Mode Share

Figure 48 shows the existing level of cycling trips being made to schools and higher education destinations across the Borough. Popular cycle routes can be identified in the towns Egham, Addlestone and Woodham. This pattern is unsurprising given the close proximity of schools to high population densities in these areas and the availability of existing cycling facilities.

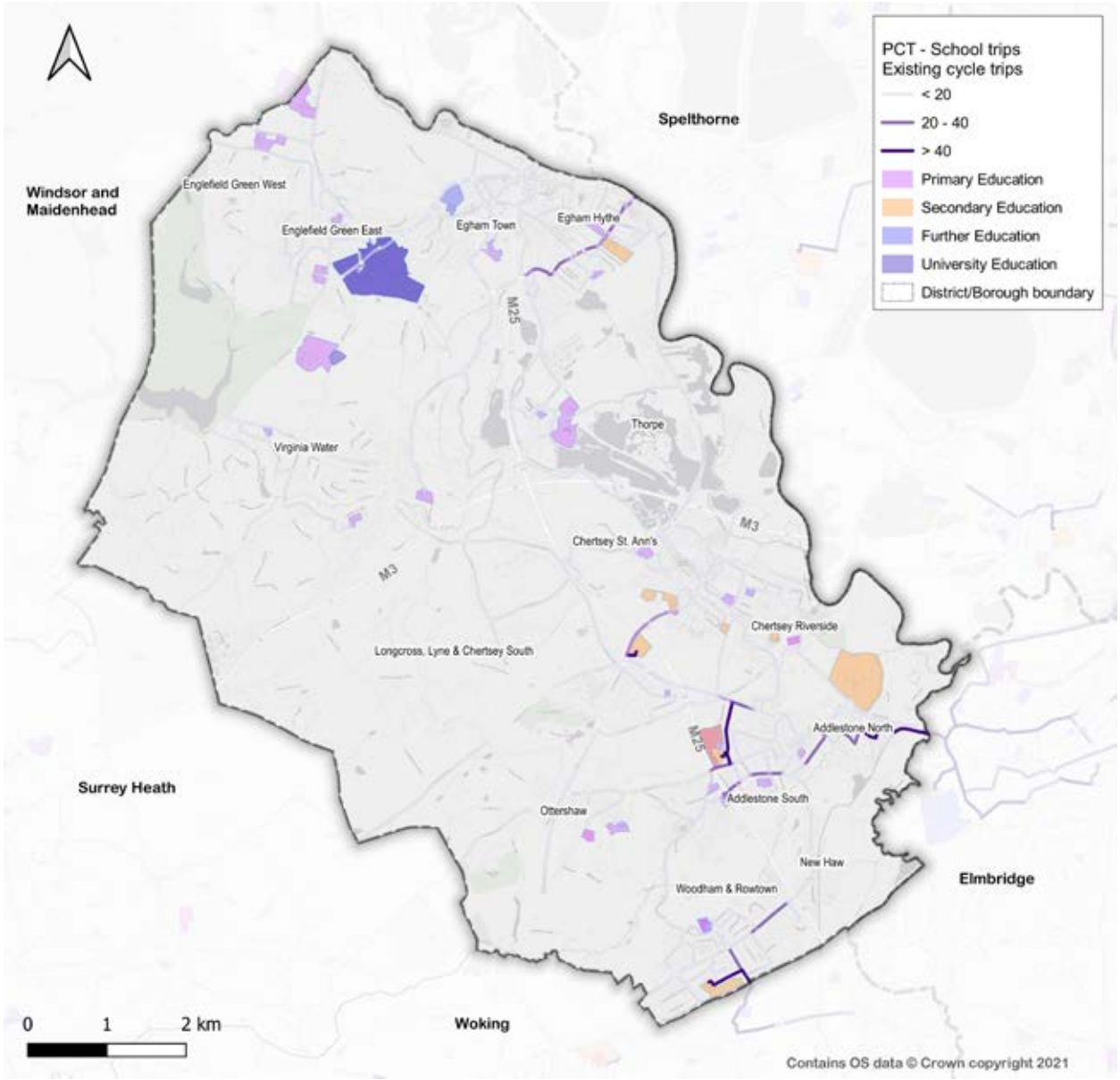


Figure 48. PCT existing school trips

PCT School Flows

Estimated daily journey to school cycle flows from the PCT Cambridge scenario are illustrated in Figure 49. This indicates the routes with the highest relative propensity for cycling in Runnymede based on journey to school data. The higher propensity for cycle trips to school are again concentrated in the built-up urban areas located wihtin the eastern half of the Borough. These include the following:

» Routes within Egham, with onward connectivity towards Virginia Water and Thorpe
» Routes within Chertsey and Addlestone
» Corridors linking Addlestone South with Woodham & Rowtown.

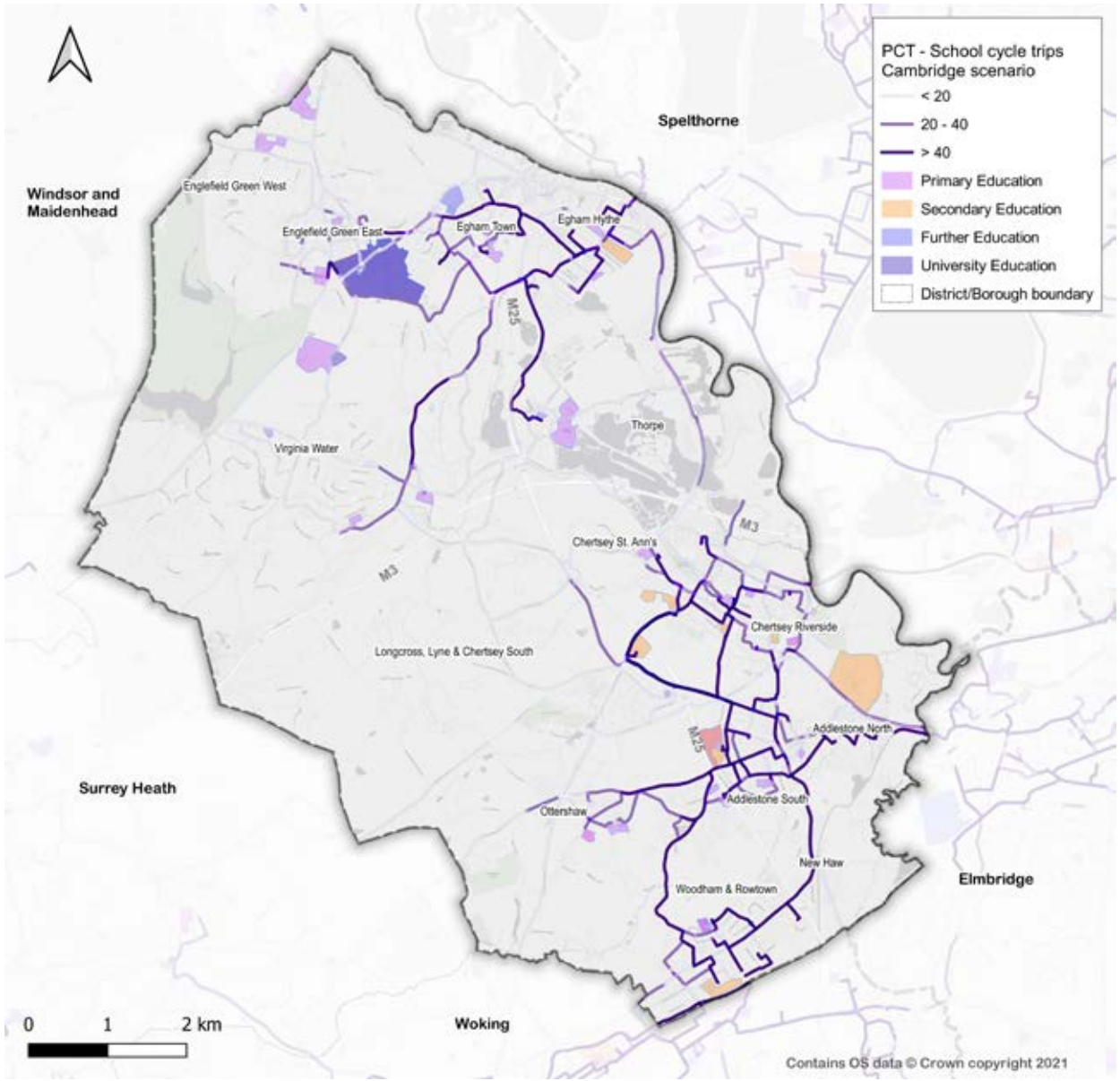


Figure 49. PCT School trips in the Cambridge scenario

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). Figure 50 illustrates commuter trips less than 2.5km made by private car (driver or passenger) which originate and/or end in Runnymede. This highlights trips that are within an easy cycling distance and opportunities for modal shift by providing improved cycle infrastructure.

Figure 51 highlights commuter trips by car that are less than 5km and displays similar trends. Areas with a higher number of short commuter trips made by car tend to be in the east of the Borough:

» Between Englefield and Egham
» Between Chertsey and Addlestone
» Within Woodham & Rowtown

It is also worth noting the relatively high number of trips made with towns located outside the Borough, including Staines-Upon-Thames and Woking.

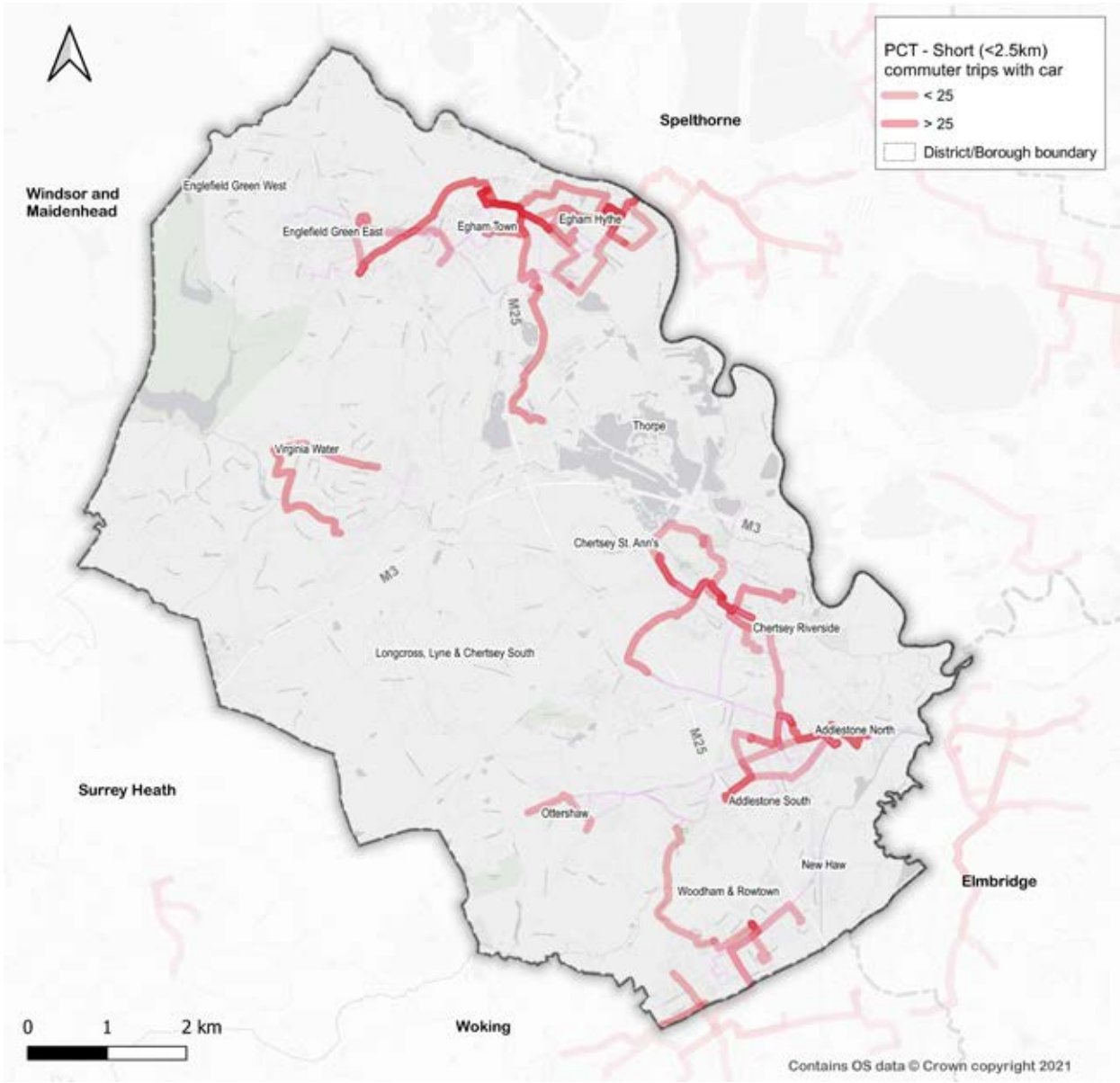


Figure 50. Short car trips (<2.5km)

Short car trips

Figure 51 highlights the distribution of short car trips (less than 5km). The data illustrates the potential of creating cycle routes connecting Egham to Chertsey as one of the key 'driving' corridors in the area. The connection between Egham, towards Staines also shows great potential.

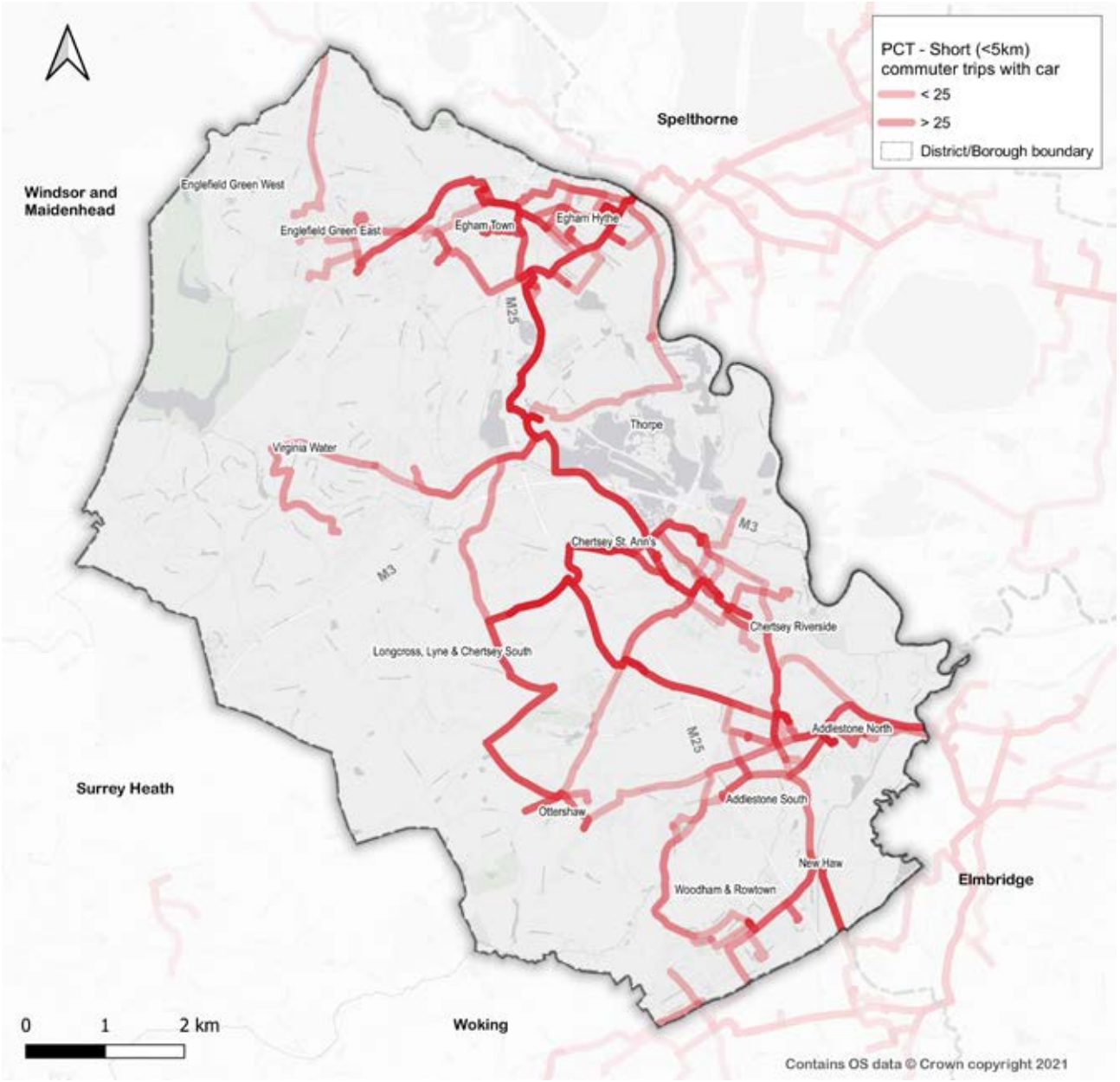


Figure 51. Short car trips (<5km)

Walking commuter Trips

Figure 52 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.

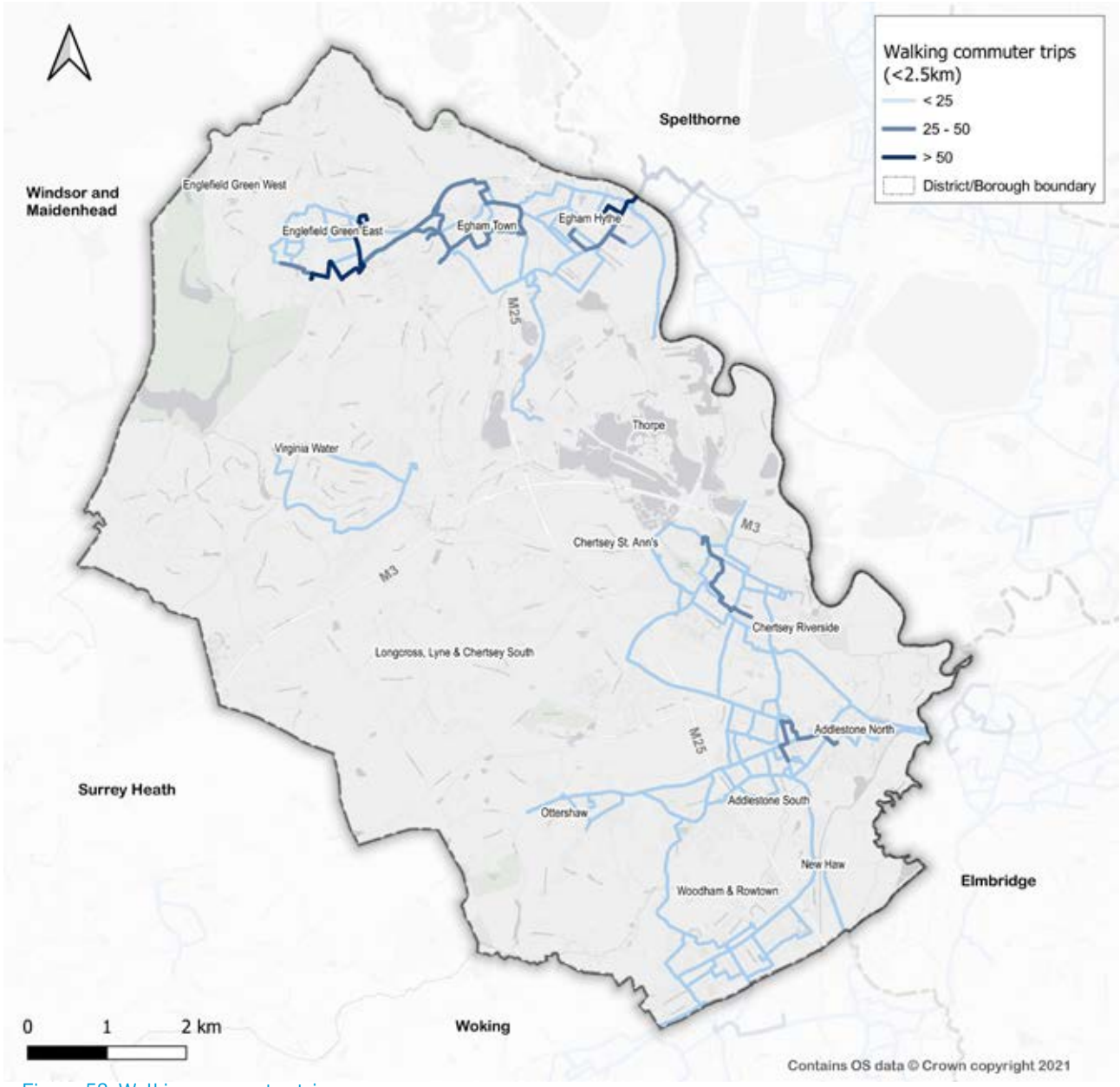


Figure 52. Walking commuter trips

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 Runnymede is shown in Figure 53.

Routes with higher relative usage include:

- A30 (Egham By-Pass - London Road)
- A308 (Egham)
- A317 (Eastworth Road - Woburn Hill)
- B388 (Connecting Egham to Chertsey)
- B386 (Chertsey Road - Longcross Road)
- B375 (London Street)
- Stonehill Road

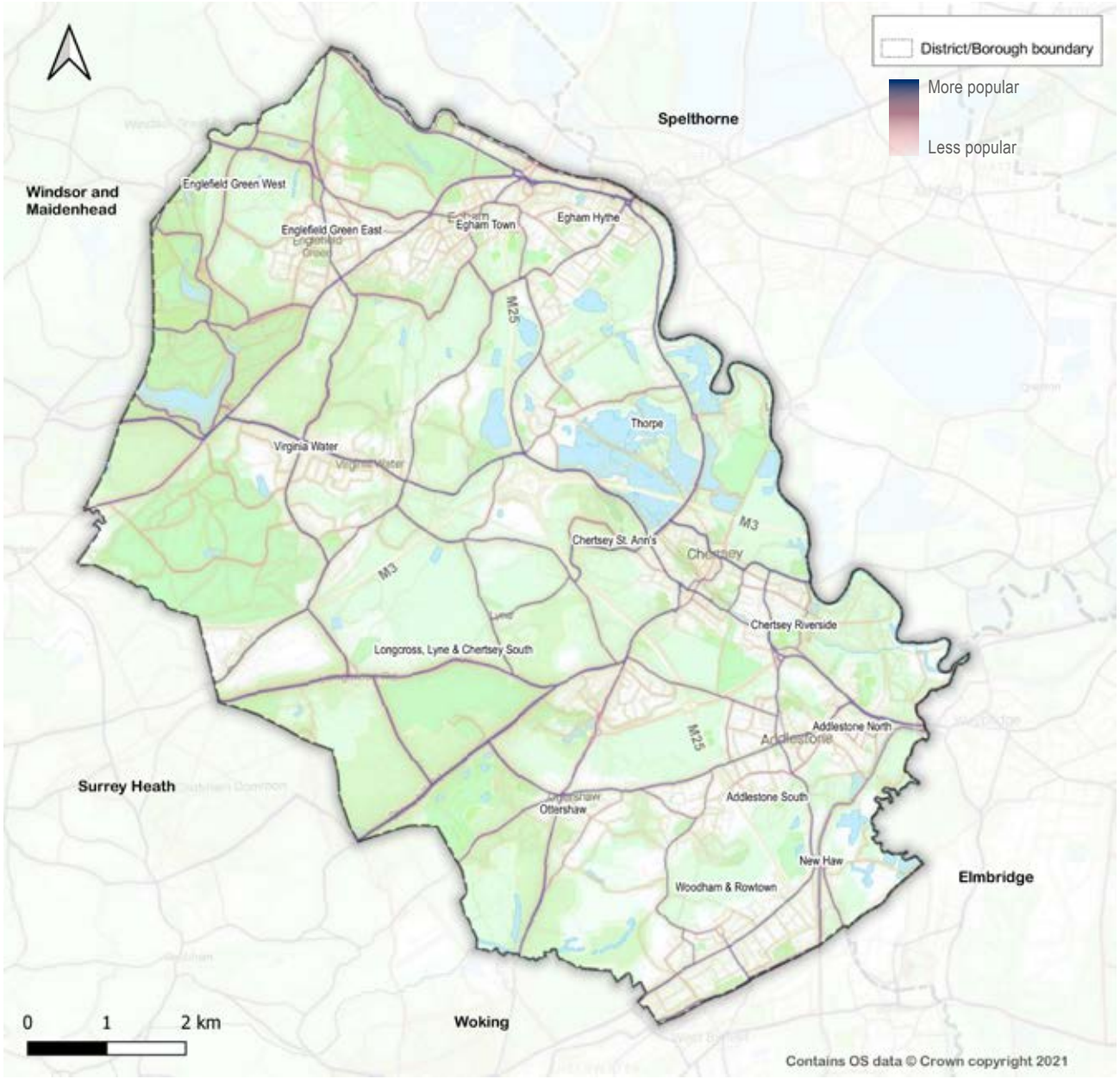


Figure 53. Indicative illustration of routes used cycle trips recorded using Strava.com (source: Strava global heatmap)

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

Proposed Infrastructure Developments

A range of targeted infrastructure proposals have been identified by Surrey County Council and Runnymede 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 54 highlights the locations of these proposed walking and cycling schemes.

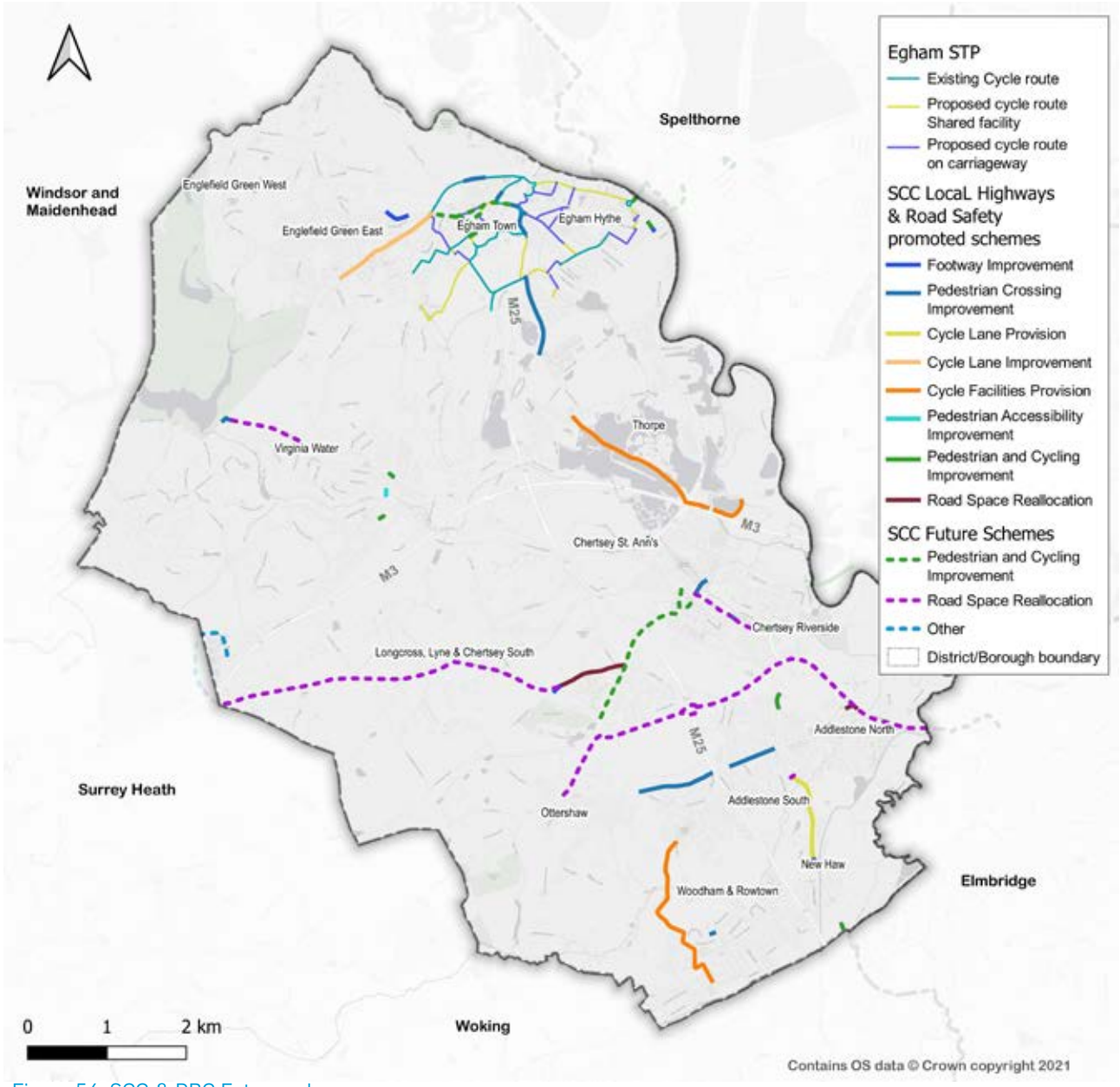


Figure 54. SCC & RBC Future schemes

River Thames Scheme

The River Thames Scheme aims to reduce the flood risk to communities in Surrey and South West London. The scheme extends between Runnymede and Spelthorne, north-east of Chertsey.

The construction of the channel provides an opportunity to create green spaces and enhance walking and cycling 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 Runnymede:

Laleham Golf Course: located to the south west of the village of Laleham, where a new walking and cycling route is proposed through the site to link Chertsey Lane to Ferry Lane in Chertsey.

Thorpe Hay Meadow & Royal Hythe Park: located south of Thorpe Lea, where a new west-east walking and cycle corridor is proposed to link Chertsey Lane with existing paths to Egham Hythe and Thorpe Industrial Estate.

Additiional aspirational connections are proposed though the scheme with new links between Chertsey and Shepperton, Chertsey and Desborough Island, and new river crossings.

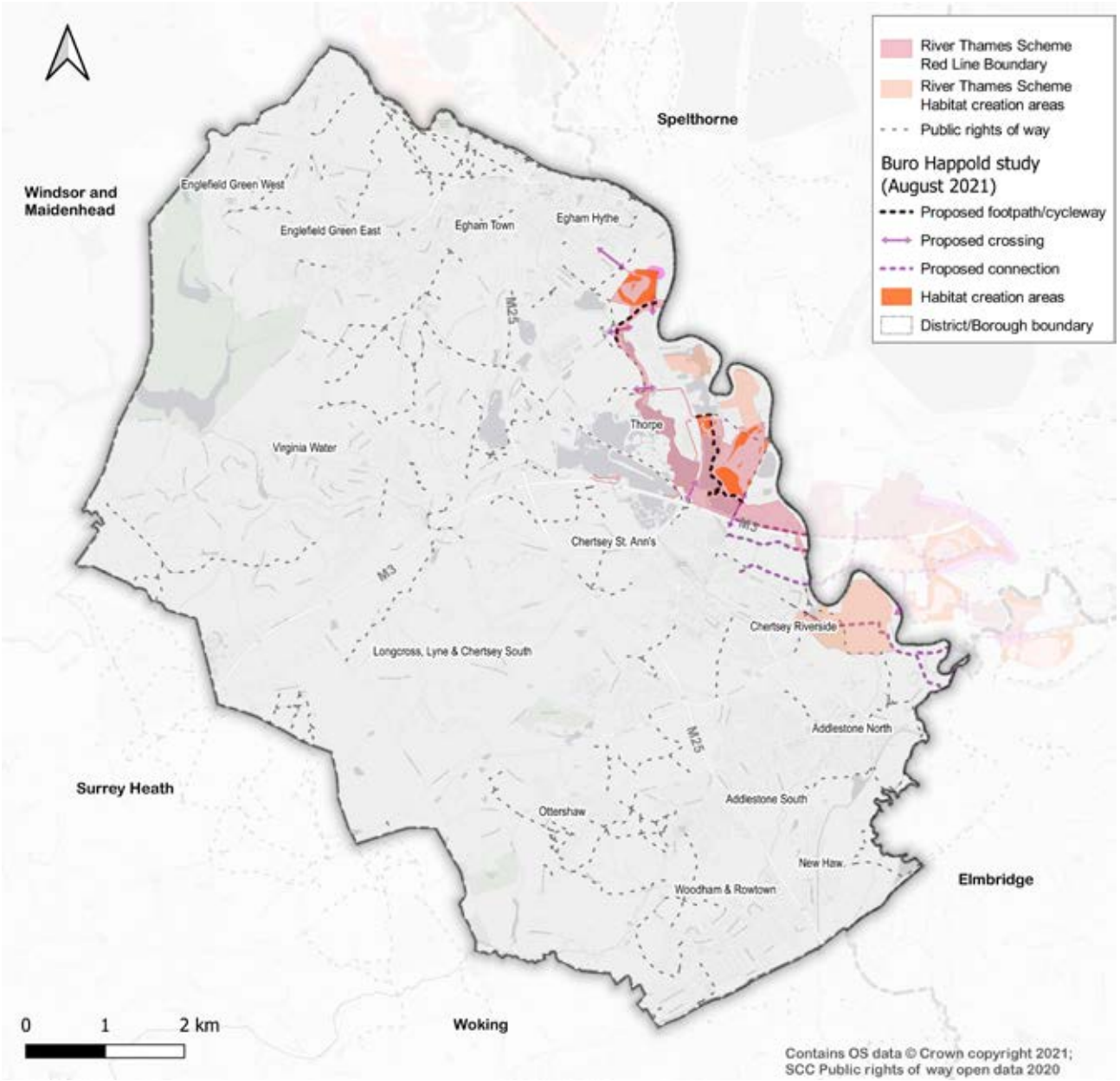


Figure 55. River Thames Scheme proposals

Summary of Key Findings

The evidence base review provided a wealth of data and information related to walking and cycling in Runnymede, which was 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 Runnymede are heavily concentrated in the eastern half of the Borough, as illustrated in the population data and key destinations figures. The higher density and proximity of trip attractors leads to a higher propensity for walking and cycling in this part 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 railway lines, the M25, M3 and several A roads. The road network in the west of the Borough is also more limited, due in part to its more rural character and settlement patterns, which creates limited opportunities for linkages between village centres and with the rest of the Borough.
- The River Thames limits regional connectivity to the east, respectively.
- The collision history indicates that the highest occurrences of cycle and pedestrian collisions are in the east of the Borough, again reflective of settlement patterns. Egham and Addlestone town centres also have 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 Runnymede, both for commuter and school trips. Propensity is again highest in the east due to the denser settlement patterns.
- 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 Runnymede.

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5. Cycle Network

Introduction

Methodology

Multi-Criteria Assessment Framework

Example Design Tools - Cycling

Phase 1 Proposed Cycling Improvements

Assessment of Proposals

Introduction

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

These proposals hope to address gaps in Runnymede'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, 25 cycle corridors were identified. Of these 25, 19 were prioritised for assessment (Figure 60).
» Out of these 19, selection of a 'short list', which prioritised four routes as 'Phase 1' for design concept development as part of the LCWIP. The renaming 15 are then categorised as Phase 2.

The remaining areas (categorised as Phase 2 or 3 (initial 6 not elected for prioritisation)) may be further developed in future, as part of future work streams or as other funding opportunities arise.

Methodology

Runnymede has good growth potential for cycling. Whilst the Borough is popular with leisure and sports cycling, its cycling infrastructure does not offer enough protection for new or less confident cyclists. Consequently, short trips into town centres, rail stations, and leisure assets 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 Runnymede LCWIP focused on identification of a Cycling Network Map detailing preferred routes for further development, as per the DfT's LCWIP technical guidance.

Identification of Cycling Routes

In Runnymede, 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.

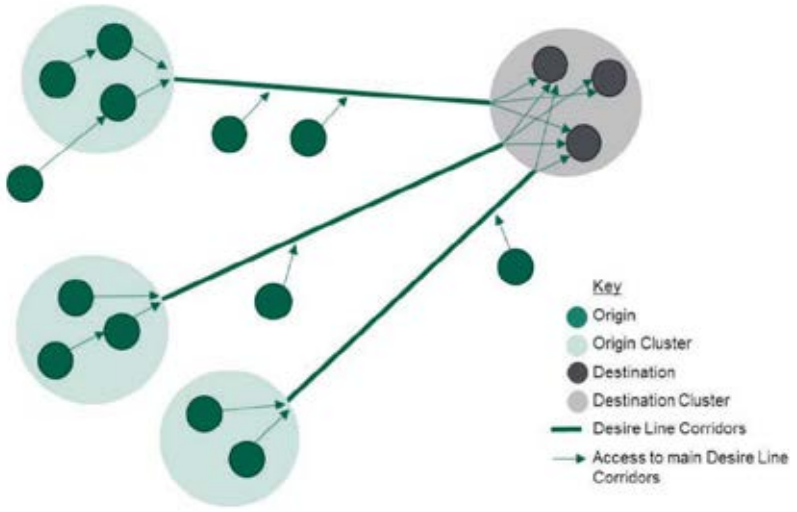


Figure 56. Clusters of trip origins and destinations and desire lines connecting them (DfT LCWIP Guidance)

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 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.
- 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.
- 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.

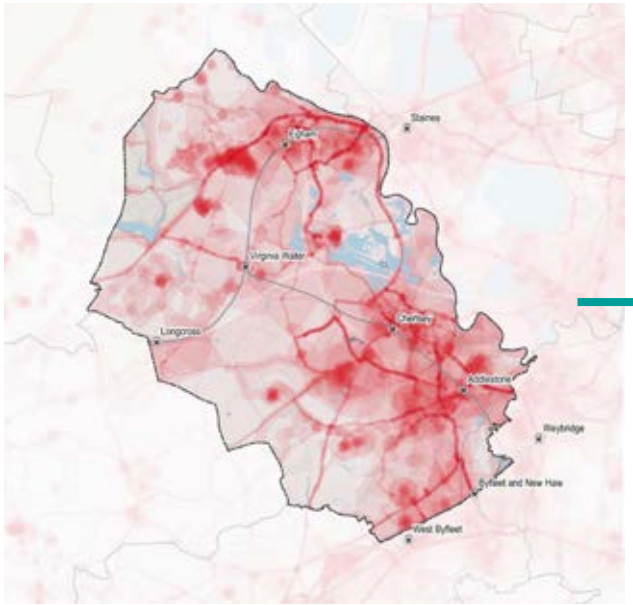


Figure 57. 'Heat Map' showing the various data elements overlaid to show concentration of issues and opportunities

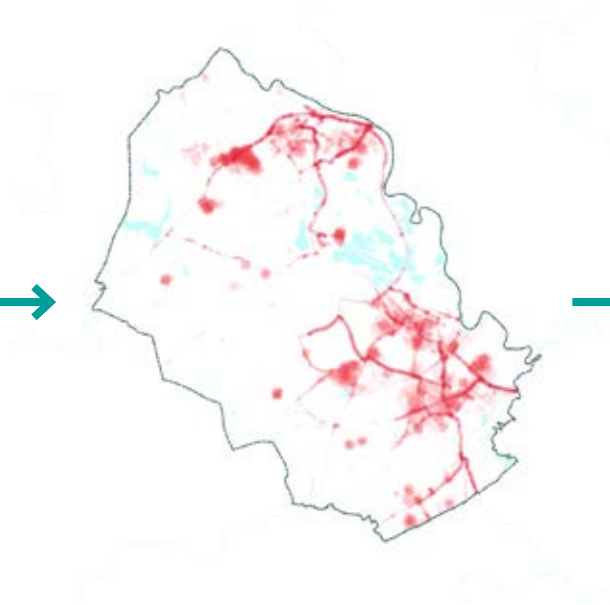


Figure 58. 'X-Ray Map' highlighting areas to consider as primary cycle corridors

Figure 59. The initial Cycling Network Map resulting from the X-Ray analysis

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.

The network is distributed across the study area (Figure 60[1]):

1. Thorpe Road/Chertsey to Egham
2. Weybridge Road
3. Chertsey Bridge
4. A30
5. Guildford Road
6. Woodham Lane
7. New Haw Road
8. Norlands Lane / Christchurch Road
9. Green Lane / Hardwick Lane
10. Staines Road / A320
11. Thorpe Lea Road
12. St. Ann's Road
13. St. Jude's Road
14. Spinny Hill / Church Road
15. Middle Hill
16. Windsor Road
17. Longcross Road / Holloway Hill
18. Egham/Station Road
19. Stroude Road / Longcross

1 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.

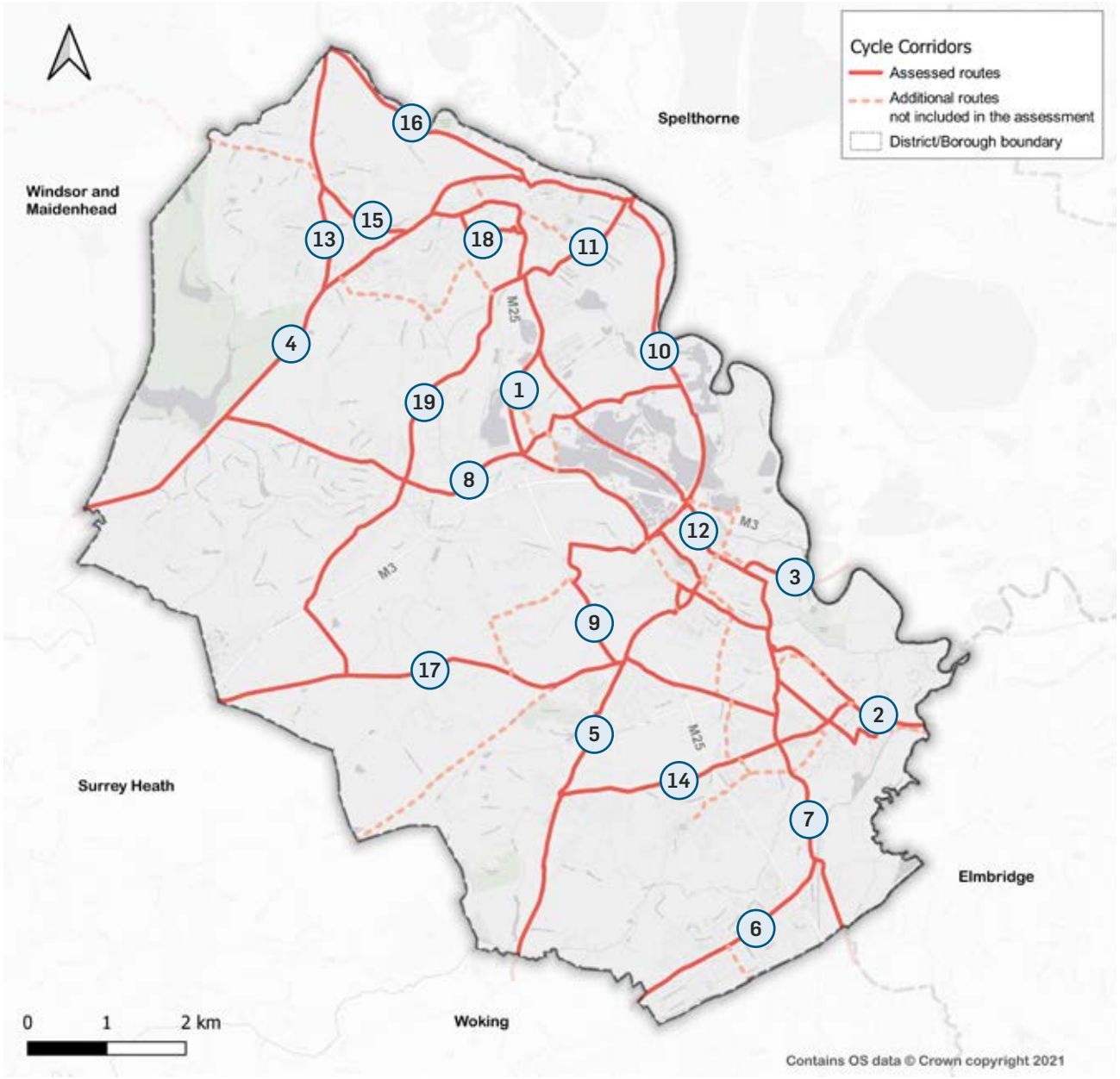


Figure 60. Aspirational cycle network

The long-list of cycle corridors has identified 19 different corridors. The key characteristics of these corridors are outlined in the subsequent section[1]. 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 60 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. Thorpe Road / Chertsey to Egham

This route is both a primary strategic route and delivers local infrastructure such as in Egham and Chertsey Town Centres. Egham and Chertsey are within an ideal cycling distance of each other, with only slight gradients on any route between them. Although Chertsey has its own railway station, Egham's has many more services, and links to different destinations. Between the two towns extends Thorpe industrial Estate with a high number of businesses that attract daily commuter trips. A high-quality cycle route between the two towns and the business area could probably encourage many more to travel by bike.

Existing conditions vary, but the main alignment is along a wide road with high traffic flows and speeds. Alternative routes are proposed via off-street paths (Monks' Walk) and quiet residential areas where cyclists will feel safer.

The approximate length of the route is 8km from Egham Town Centre (A30/High Street roundabout) to Chertsey Railway Station (A317), via Vicarage Road, Thorpe By-Pass, Thorpe Road, and Gogmore Farm Park.

A review of the PCT has shown that a route between the two locations shows a very high potential. Additionally, the data showed that a high number of trips are undertaken by car, and these could be easily be replaced by bike. Accident data has recorded 23 collisions involving people cycling along this corridor, equal to 2.7 per kilometre, with hotspots on Church Road in Egham, and A317 in Chertsey.

In terms of potential routes within the corridor, there is an opportunity via Monk's Walk, an off-carriageway path through St Ann's Lake, which avoids the high traffic flows on Thorpe Road and is a more direct alignment between Thorpe and Chertsey.

2. Weybridge Road

The corridor is approximately 3km in length, running from Chertsey to Weybridge town centre, northeast of Addlestone which will link via local routes to Weybridge Railway Station. Weybridge Railway Station has more frequent connections to London and other Surrey destinations than Addlestone and Chertsey, and the residents are more likely to travel to Weybridge for a train connection.

The proposed corridor serves a large number other destinations, such as Saint George's College, Bourne and Weybridge Business Parks and the three town centres.

Along Weybridge Road there is a cycle facility with narrow widths and poor connections in Chertsey. The accident data has shown that there have been 14 collisions recorded on the corridor (4.2 collisions per kilometre) confirming the poor quality of the route.

Additionally, a review of the PCT has shown that it is giving an indication of a high propensity.

There are two potential alignments the route could follow, either along the existing facilities on Weybridge Road or off-carriageway paths and quiet parallel routes (Addlestone Road).

3. Chertsey Bridge

The connection between Chertsey and Shepperton was identified as of high demand. Due to the River Thames the connectivity is restricted via Chertsey Bridge (Bridge Road), an old narrow bridge with high traffic flows.

1 The Aspirational cycle network map includes proposals that have been proposed during the early engagement workshops (workshop #1) but have not been assessed to be included in the Phase 1 routes.

The proposed route links Chertsey town centre with residential areas, NCN 4 (Thames Side) in Spelthorne, and the River Thames Scheme proposals.

This route received several public comments regarding cyclist safety. As a listed structure, the Bridge itself is a pinch point for cycling, as it has a narrow carriageway with poor provision for pedestrians and no provision for cyclists.

The length of this corridor is approximately 2km. A review of the accident data for this area has shown that over the last five years there have been a total of 14 collisions involving people cycling. This equates to 4.2 accidents per kilometre.

Additionally, a review of the PCT has shown that it is giving an indication of a high propensity.

Figure 61. Chertsey Bridge

4. A30

The A30 corridor is of high importance on the northern area of the Borough as it links the employment area in Staines, Egham, Englefield Green, Royal Holloway University, ACS Egham International School and Virginia Water Lake. This route could form part of a wider Sunningdale to Egham Corridor

The corridor is approximately 8.5km, with variable existing conditions. On Egham the A30 is a dual carriageway with high traffic flows and speeds as it operates as the exit from the M25. Along Englefield Green the road narrows to a single lane carriageway, with high traffic flows. The section between the High Street and Harvest Road is on a steep hill. The western section of the corridor has a more rural character, where vehicles are moving at higher speeds.

There are continuous but substandard cycle facilities on the A30. A narrow shared use path is provided between Egham and Englefield Green on the south side of the A30, with no priority over the side roads. West of Englefield Green, towards Virginia Water Lake, there are mandatory cycle lanes with no crossings to link the facilities.

The corridor records a high number of cycle trips (according to DfT traffic counts), which in comparison with the high traffic flows and the poor crossings at key junctions, results to a high number of collisions. 34 Cyclists' collisions have been recorded at the extent of the corridor (6.8 collisions per kilometre) with hotspots at Runnymede Roundabout[2], and A30/Church Road roundabout.

2 Some collisions have been recorded previous to the improvement of Runnymede Roundabout (opened December 2017)

This route shows high potential through the PCT tool and indicates that under the 'Go Dutch' scenario that the number of people cycling could increase 5 times.

Finally, the A30 has the most demand for improvements from residents both in Commonplace and in Widen my Path platforms.

Figure 62. Existing cycle facilities along the A30

5. Guildford Road/A320

The corridor is proposed to improve the connectivity between Chertsey, St Peter's Hospital, Ottershaw and Woking. The proposed corridor will link to the Woking LCWIP proposed corridors.

The A320 is the main road linking St Peter's Hospital from Chertsey Railway Station with daily traffic flows over 22000 AADT (according to DfT traffic counts). A high number of these trips are short distances, from Chertsey or Ottershaw, and could easily be replaced by bike.

Accident data show 13 collisions in approximate 5km of corridor, with most of the collisions recorded at the junctions and roundabouts.

The PCT data show moderate propensity for cycling between St Peter's Hospital and Woking, but higher cycle commuter flows close to Chertsey.

SCC has planned improvements on the A320 west of the M25 underpass (see Relevant Schemes) which include proposals for cycling and walking, with new shared use paths between Salestian School and St Peter's Hospital and segregated cycle facilities between Hillswood Drive and Ottershaw. The proposed corridor is included in the aspirational list for the cycle network due to the importance of the link for the Borough but it will not be included in the Phase 1 routes as it is part of another scheme.

6. Woodham Lane/B385

The Woodham and New Haw settlement is located at southern end of the Borough. A research centre located within the area is a major regional employer. The corridor will serve the Broadway Local Shopping Centre, the Animal and Plant Health Agency, an important research centre and major local employer, and will link with Woking's proposed cycle network (LCWIP). There is also potential for links to the railway stations (Byfleet and New Haw Railway Station and West Byfleet)

Woodham Lane has wide carriageway width which can provide cycle facilities of a high

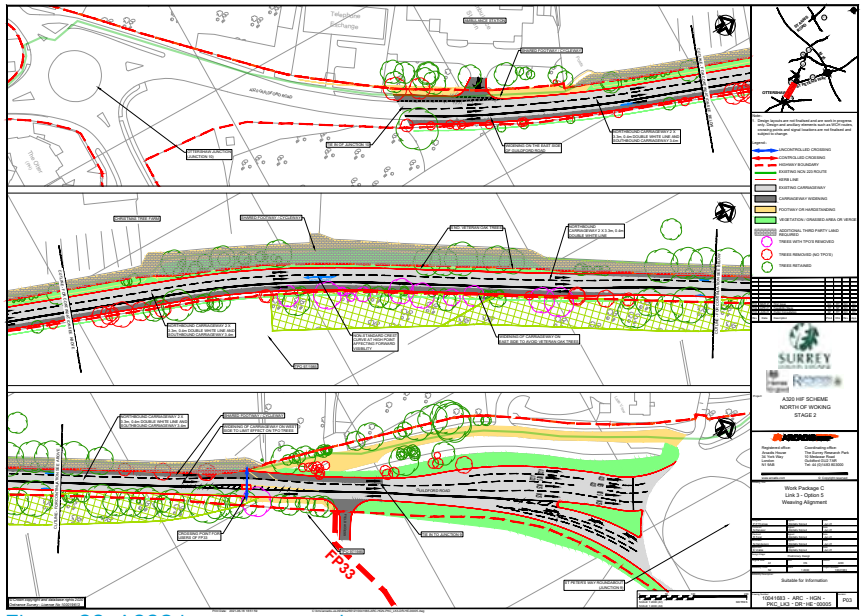


Figure 63. A320 improvement plans

standard. The length of this corridor is approximately 3km and accident data has shown that there have been 6 collisions recorded in the past five years, primarily close to the shopping centre.

Additionally, a review of the PCT has shown that it is giving an indication of a moderate propensity.

7. New Haw Road/A318

The corridor option to improve New Haw Road currently features poor quality of pedestrian and cycling infrastructure. The corridor will link Addlestone town centre with Byfleet and New Haw Railway Station as an alternative alignment to Weybridge Road.

The corridor serves areas with different characteristics, dense residential/commercial area in Addlestone, suburban area north of Woodham Lane and industrial area close to the railway station.

The approximate length of this corridor is 4km and PCT data shows that there is high potential.

8. Norlands Lane / Christchurch Road

The corridor provides an east-west connection in the centre of the Borough between Chertsey Lane and Virginia Water Lake. The corridor is an alternative flat alignment to the A30, for leisure trips, via quiet residential streets and rural roads.

There is poor connectivity along the network to key destinations and other proposed routes, but the corridor links Chertsey Lane (NCN 4) to Thorpe Road via River Thames Scheme area, and Virginia Water local centre to Virginia Water Lake.

The corridor records low traffic flows, which results in low numbers of collisions (4 collisions, all close to Virginia Water, in an extent of 6km route). The PCT data shows moderate to low propensity along the corridor.

9. Green Lane / Hardwick Lane

The corridor provides a connection between Addlestone and the extension of Chertsey Lane – Staines Road, as an alternative alignment to the routes via Chertsey. It also connects to new development at

Chertsey Bittams to Addlestone. It utilises rural roads and quiet residential streets with lower traffic flows than the road network in Chertsey.

Green Lane is a direct link between Addlestone and the A320 close to St Peter's Hospital and provides a high-quality cycle facility will help to get more people cycling to the hospital (as it is a key employer in the area). Additionally, Green Lane records high demand for improvements through the Commonplace platform, and through accident data.

PCT data shows high use of the corridor and a significant increase in future forecast scenarios.

10. Staines Road / A320

Chertsey Lane – Staines Road – Ruxbury Road is the main north-south corridor currently used by cyclists in Runnymede. NCN 4 extends along Chertsey Lane with a narrow shared use path on one side of the road and missing crossing facilities at key locations.

Figure 65. Staines Road with shared-use path at footway level.

The road records high traffic flows, as the key route between Staines, Thorpe Park and Chertsey. The extent of the corridor is along suburban and rural areas, and the road shifts from single carriageway (north of Thorpe Park) to dual carriageway (south of Thorpe Park) and to country road (west of Thorpe Road).

Even though there are cycle facilities on Chertsey Lane – Staines Road, there is need for improvements due to the high propensity of cycle trips, that the existing infrastructure will not be able to accommodate.

11. Thorpe Lea Road

The route extends from Staines Bridge to Thorpe Lea Road though a mixture of land uses: industrial areas, schools, local commercial areas and residential areas. It is one of the most important routes in the area as it links Thorpe Industrial Estate, and the residential areas with Staines-upon-Thames, the Causeway commercial area and Staines railway station, which has frequent connections to London and other Surrey destinations.

The DfT traffic counts records 246 cyclists per day, the highest number in the area, where the total vehicular traffic flows are 10000 (AADT).

Thorpe Lea Road is a collision hotspot at three locations: at the junction with Pooley Green, where the commercial activity is located, at Magna Carta School, and close to Chertsey Lane/Thorpe Lea Road/The Causeway/Staines Bridge roundabout.

Figure 64. Thorpe Lea Road

The existing cycle facilities are narrow, fragmented and do not provide priority to cyclists at any side roads, which results in high demand for improvements on the Commonplace platform.

12. St. Ann's Road

St Ann's Road is the key link between Staines Road (NCN 4) and Chertsey town centre. It is a residential street with a wide carriageway and high HGV flows.

The corridor offers an alignment parallel to the A317 (proposed corridor 1) which is closer to the commercial activity and can be linked to the River Thames Scheme proposals via quiet residential streets and off-street paths.

The corridor already has significant cycle flows, and the PCT predicts over 400 cyclists per day in the Go Dutch scenario.

13. St. Jude's Road

The corridor looks to improve the connection between the A30 and Windsor Road via Englefield Green, a connection that university students and employers could benefit from, as well as improve connectivity for leisure trips to the Magna Carta site and Windsor. The proposed corridor runs through the main commercial area of Englefield Green and links to schools, Royal Holloway University and development sites in the area.

One of the key issues of the corridor is the steep gradients on the approach to Cooper's Hill, that might discourage inexperienced cyclists. However, if safer facilities were to be provided, cycle use would increase, according to PCT data.

14. Spinny Hill / Church Road

Addlestone is the biggest town in the southern end of Runnymede. This corridor would serve the town centre and residential area and provide access to Addlestone Railway Station for the residential areas west of the M25.

The local high street has significant pedestrian and vehicular flows, which has resulted in 10 collisions along this section of the route. Outside the route and within Addlestone's residential area, 10 additional collisions have been recorded.

There is high propensity for commuter cycle trips due to the railway station and a high resident and workplace population density.

15. Middle Hill

This corridor acts as an important commuter corridor for Englefield Green residents working in Egham or commuting to other destinations by train (Egham Railway Station). It is the most direct route between Englefield Green and Egham served by frequent bus services.

The corridor was proposed by local stakeholders during the early engagement workshops (workshop #1) and shows moderate propensity for commuter cycle trips, primarily due to the hilliness of the area. However, there is potential for the use of eBikes and other assisted modes.

16. Windsor Road

The corridor extends along Runnymede Meadows parallel to the River Thames, with significant vehicular traffic flows, as it links Windsor and Old Windsor to Staines and the M25.

The corridor is of high importance due to the interconnectivity between Runnymede and Windsor and Maidenhead borough and can serve both commuter and leisure trips.

The corridor was proposed by local stakeholders during the early engagement workshops (workshop #1) and shows moderate PCT flows.

17. Longcross Road / Holloway Hill

The proposed corridor will serve future commuter trips for the Longcross Garden Village development site, as it will link to secondary schools in Chertsey, St Peter's Hospital, and business parks in Addlestone and Chertsey.

Today the PCT flows are low, since the PCT has not included the development in the information regarding the population. But the estimate need for the corridor is high.

18. Egham/Station Road

The corridor extends south of Egham Town Centre and links the commercial area, the railway station, Manorcroft Primary school and the Leisure Centre on Vicarage Road. The existing conditions vary, as the route runs along Station Road, which is constrained due to the railway station, residential roads, and off-carriageway paths.

The corridor was proposed by local stakeholders during the early engagement workshops (workshop #1) as an alternative alignment to Vicarage Road and shows moderate PCT flows.

19. Stroude Road / Longcross

The proposed corridor will serve future and existing commuter trips between Longcross Garden Village development site, Virginia Water and Egham, as it will link to the railway stations, Royal Holloway University, secondary schools and the college.

Today the PCT flows are low, since the PCT has not included the development in the information regarding the population. But the estimate need for the corridor is high.

Multi-Criteria Assessment Framework

Once the aspirational cycle network has been identified an assessment using both qualitative and quantitative criteria was used 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:

» **Access** – reflects the number of destinations within 200m of the proposed cycle route, including high streets and commercial area, schools, 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 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.

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

Table 1. Cycling network MCAF criteria

Category	Criterion	Cycle corridors Rating Rates
Access	Non-commuter destinations served by corridor	"1 = no obvious ones 2 = a small number e.g. a school or small parade of shops 3 = several e.g. a town centre "
	Links to The River Thames Scheme	"1 = isolated link 2 = limited links to it 3 = strong links"
	Proximity to schools	"1 = <1.5 2 = 1.5-2.5 3 = >2.5"
Demand	Pedal cycle collision rate	"1 = <2/km 2 = 2-4/km 3 = > 4/km"
	PCT Tool	"Commuter flows per day 1 = <200 2 = 200-400 3 = >400"
	Comments per km	"Commonplace comments per kilometer 1 = <1/km 2 = 1-3/km 3 = > 3/km"
Cycle network	Contributes to improved cycling network	"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)	"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	"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 "
	Stakeholder feedback	"1 – against 2 – neutral (or no comment) 3 – in favour"

First phase of cycle corridors

The output of the multi-criteria assessment is a first phase of four cycle corridors for further development and assessment[1]. The top four, presented in Figure 66, are:

1. Thorpe Road / Chertsey to Egham[2]

2. Weybridge Road

4. A30

11. Thorpe Lea Road

Once the corridors were identified they were assessed using the DfT's Route Selection Tool (RST[3]). The assessment provided a baseline for existing conditions and helped identified 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).

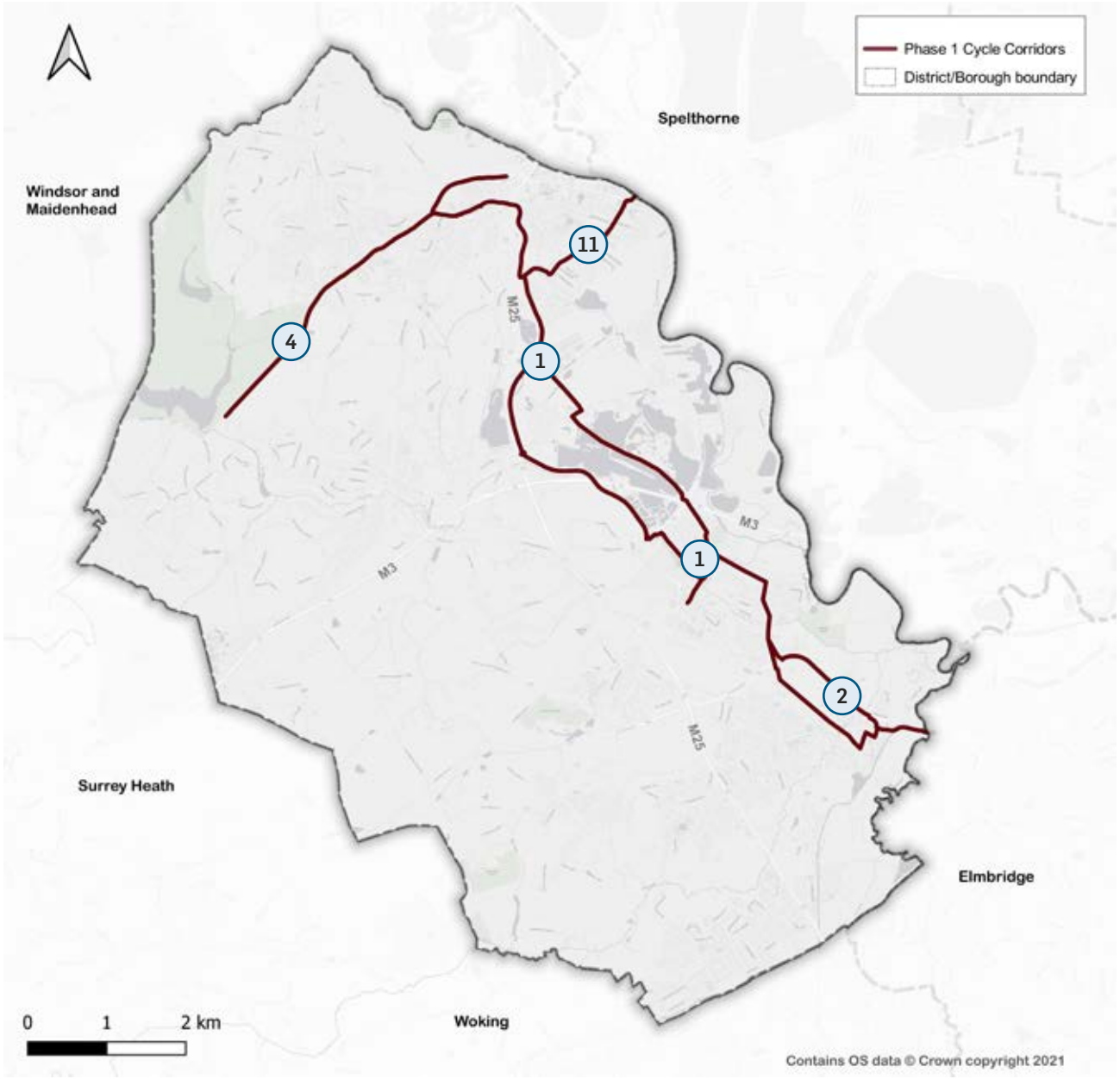


Figure 66. Phase 1 Cycle Corridors

1 Guildford Road (Cycle corridor 5) and Green Lane / Hardwick Lane (Cycle corridor 9) scored high in the assessment. However, there are proposals for infrastructure improvements on Guildford Road, and sections are currently under construction. Green Lane/ Hardwick Lane scored similarly to Thorpe Road/Chertsey to Egham (Cycle corridor 1) and it was selected to prioritise Cycle corridor 1 as the benefit will be greater for the residents and it would provide better connections in the area.

2 The route between Egham and Chertsey has two different alignments: via Monks Walk to Chertsey Town Centre and via Thorpe By Pass to Chertsey Railway Station

3 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.

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 (≤20mph) 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 cycling[1]. 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.

» **Reduce motor vehicle flows** - Strategies to reduce motor vehicle flows (e.g. local access only restrictions, time restrictions, or modal filters) should be considered on cycle routes where segregation is not feasible to improve comfort for people cycling and create a more attractive cycle route.

» **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).

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

- **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.
- **Way finding** - Good sight lines and visibility of destinations and of cycle routes are important elements that affect how easy a route is to navigate, how many people cycling use the route, and perceived personal security. Way finding 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 way finding 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 be reflected in both the route alignment and the nature of the infrastructure proposed.
- **Offer variety of cycle parking**
- **Design for utility**
- **Design for priority at side roads to reduce the conflict with motorised vehicles**
- **Consideration of heritage assets and the sensitive design of proposals.**

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.

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).

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.

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 Way finding
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 design[1]. 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 mentioning that representatives of groups of people with disabilities,mobility issues, and protected characteristics will be further engaged in the design so the outcomes of the interventions cater for their needs in the most appropriate way.

The proposed improvements are presented by cycle corridor on the following pages. Cycle corridor 1 (Egham to Chertsey) is divided into 4 sections due to the extent of the proposal and the different alignments. The sections are divided based on the characteristics of the road environment and connectivity to other facilities.

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.

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.

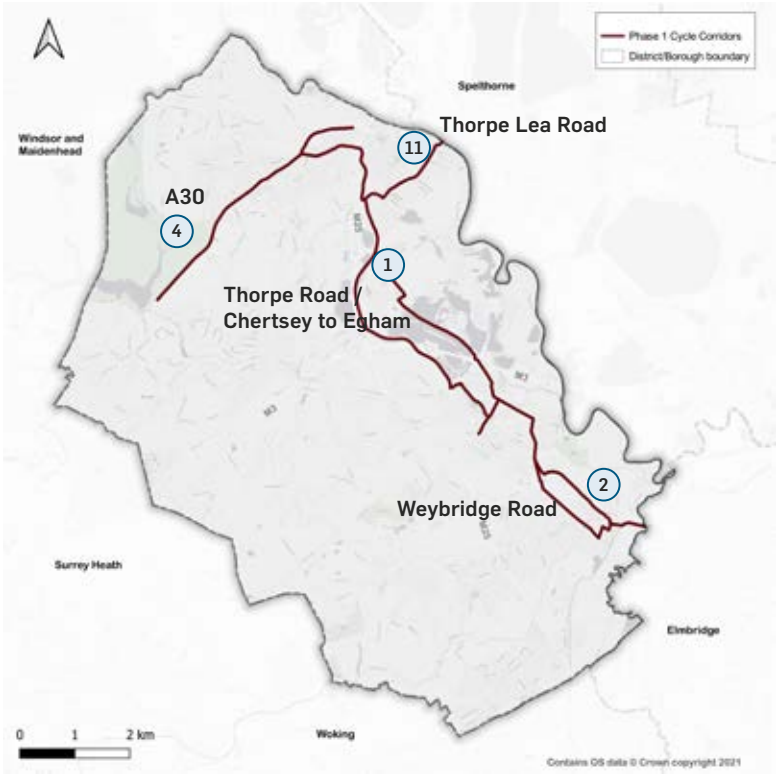


Figure 67. Phase 1 cycle corridors

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.

Cycle network typology

The proposed cycle facility typologies across the Phase 1 cycle route network are illustrated in Figure 68. 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 speeds, providing advisory cycle lanes, restricting motor vehicle access, tightening side road junctions, providing cycle markings, or redesigning streets to enhance cycle and pedestrian priority.

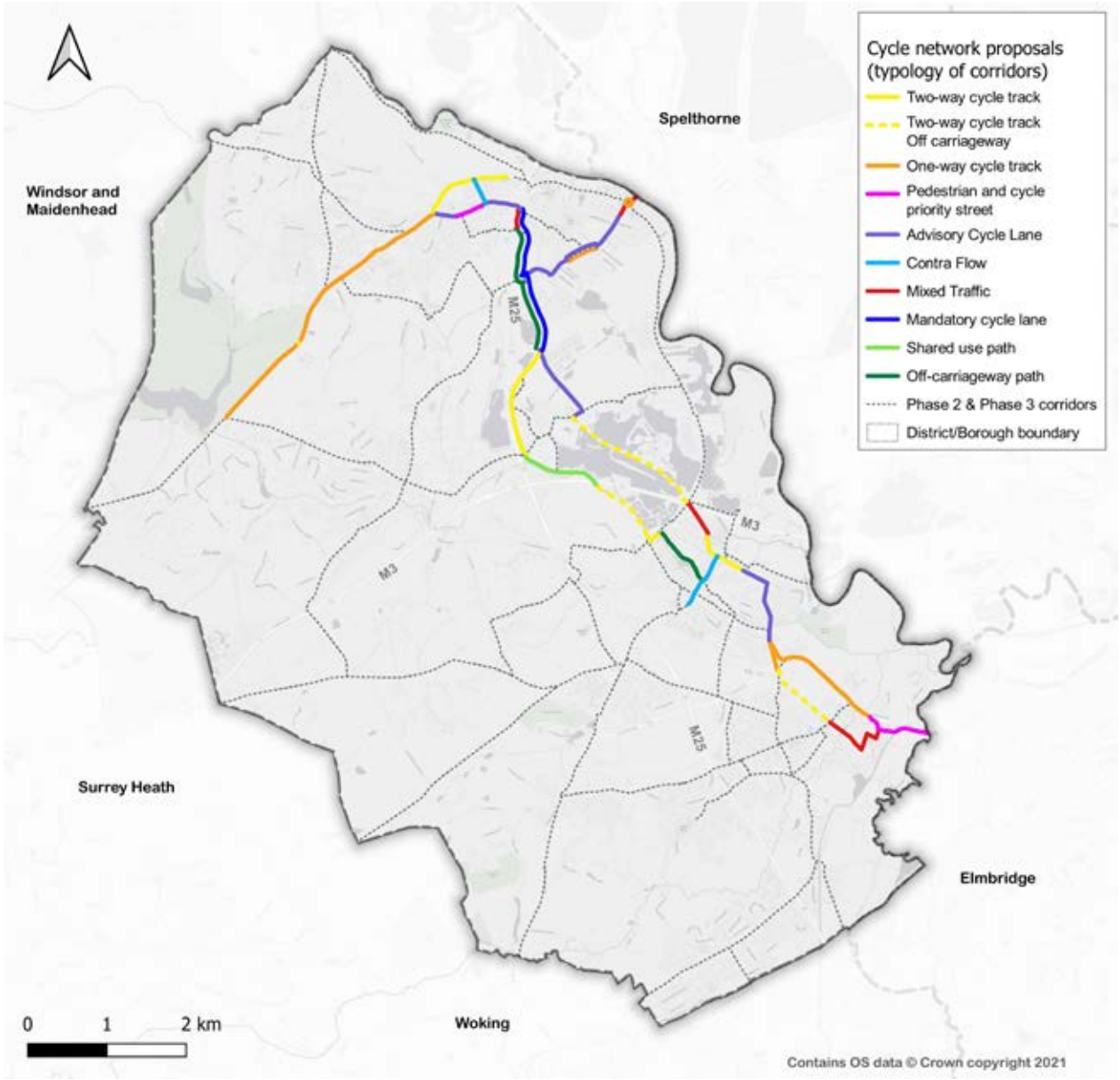


Figure 68. Phase 1 cycle corridors according to typology

Route 1, Part A: Egham Town Centre and Vicarage Road

Proposed Improvements

1. Introduce a signalised Cyclops junction at the existing roundabout on Egham Hill to reduce traffic speeds and improve pedestrian and cyclist priority at this accident hotspot.
2. Dutch treatment at High Street including speed limit reductions to 20mph, removal of road centre lines, rationalisation of on-street parking, and inclusion of coloured surfacing for cycling.

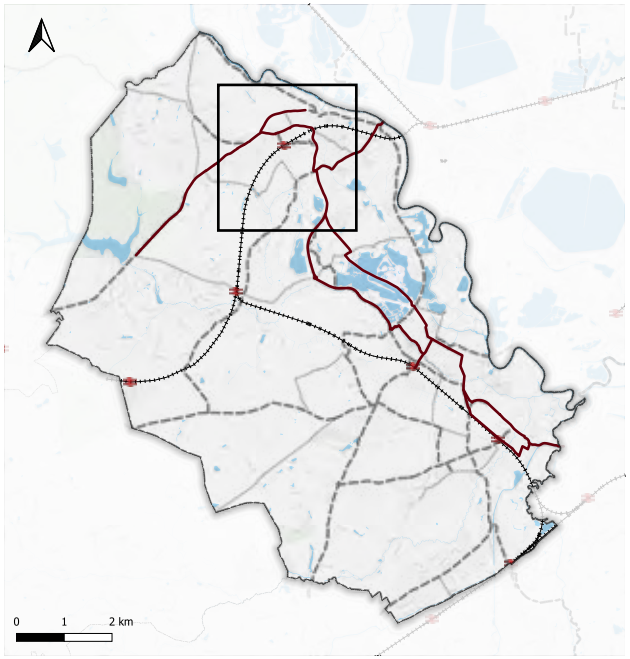


Figure 69. Location Map

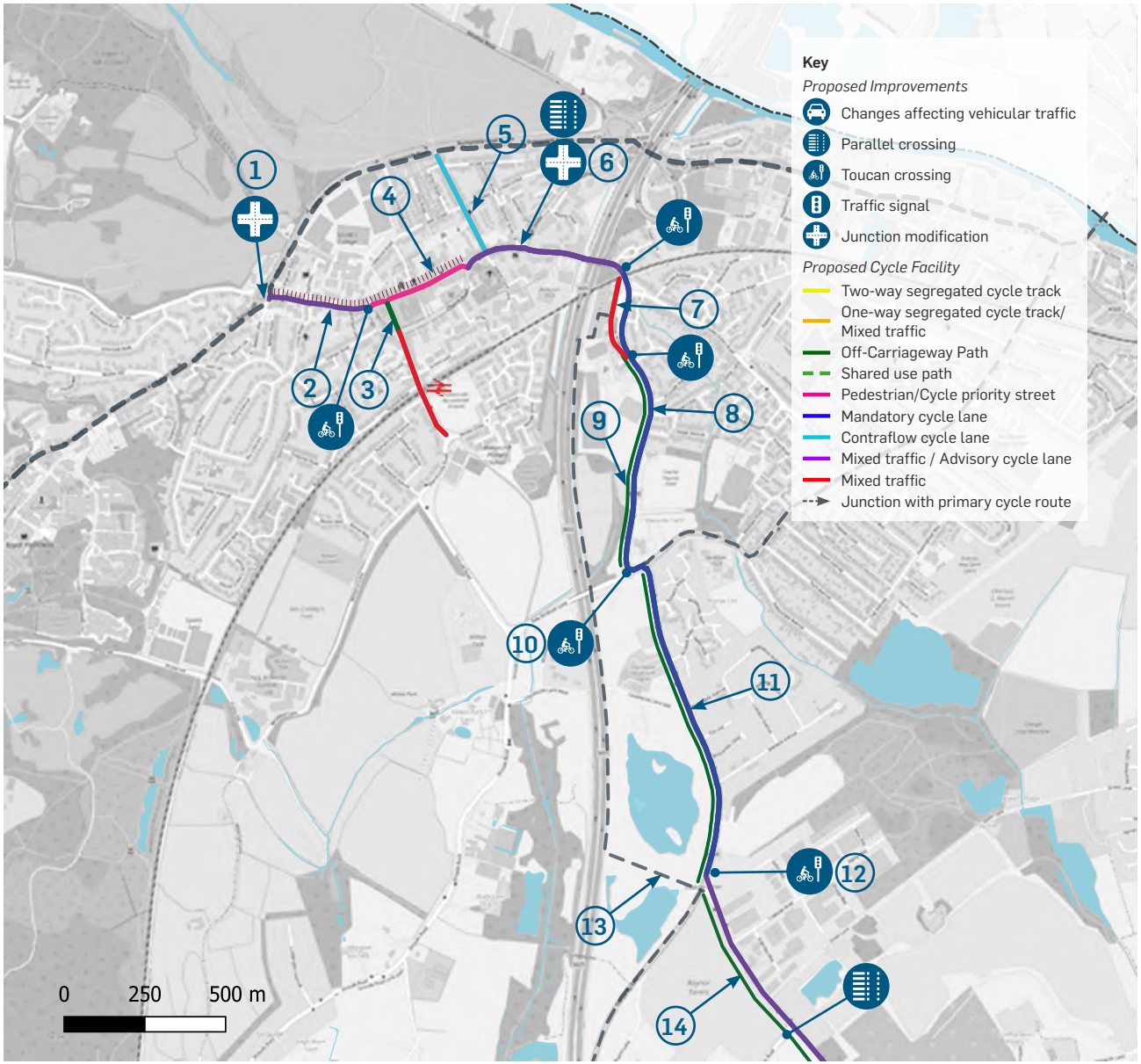


Figure 70. Route 1A, Egham

3. As part of the redevelopment of Station Road North, provide cycle access to Egham Railway Station via Magna Square. South of Magna Square, whilst not part of the Phase 1 cycle network for this LCWIP, Station Road/Manorcrofts Road is a key link connecting Egham's retail centre to its transport hub, and active travel should be prioritised to strengthen the connection between the two main trip attractors in Egham Town Centre.
4. High Street to be pedestrian and cycle priority street (See Egham CWZ), which would allow for cycling access. Additional cycle parking to be added at key locations.
5. Introduce contraflow mandatory cycle lane along Hummer Road to create a more direct connection with Runnymede Meadows (See Egham CWZ for detailed proposals on Hummer Road, which include one-way designation).
6. Introduce Dutch roundabout using lane markings and zebra markings to change priority to active travel.
7. Use service road section of Vicarage Road to introduce mixed traffic provision for northbound cyclists.
8. One-way mandatory cycle lane southbound on the main carriageway of Vicarage Road Speed limit reduction to the entirety of Vicarage Road to 30mph in the short-to-medium term.
9. Off-carriageway cycling alignment, which requires 3rd party land. This route can be a two-way 3m 'Quietway' with a parallel footway.
10. Signalised crossing provision at New Wickham Lane, connecting the two off-carriageway links. Type of crossing to be identified in feasibility stage once speeds and flows are determined at this location.
11. One-way mandatory cycle lane northbound on the main carriageway of Thorpe Lea Road, with kerb segregation at its widest points. Southbound travel to continue on shared facility until land is secured for greenway. Highway boundary to be assessed as part of feasibility design.
12. Toucan crossing on Thorpe Lea Road to access Ten Acre Lane.
13. Potential long-term alignment for a parallel route to Vicarage Road/Thorpe Lea Road to be delivered as part of housing developments. This route could serve as an alternative cycle corridor to Vicarage road, which has multiple width constraints.
14. On Ten Acre Lane, Option 1: provide parallel 'Quietway' consisting of off-carriageway cycling alignment, which requires 3rd party land. Option 2: provide mandatory cycle lanes on-carriageway, with speed reduced to 20mph.

Figure 71. Egham High Street to become pedestrianised with cycle access.

Figure 72. New Wickham Lane, where a parallel crossing is proposed.

Figure 73. Thorpe Lea Road, showing wider sections of the carriageway.

Route 1, Part B: Monks Walk

Proposed Improvements

1. Parallel crossing for off-road 'Quietway' on Village Road for cyclists to rejoin carriageway on residential section of Ten Acre Lane. Vehicle speeds to be assessed as part of feasibility design to confirm suitability of crossing type. Additional street lighting to be provided.
2. Speed limit reduced to 20mph along Ten Acre Lane and Coldharbour Lane, with advisory cycleway markings and removal of centre line. Inclusion of sympathetic horizontal traffic calming and street lighting along main carriageway.

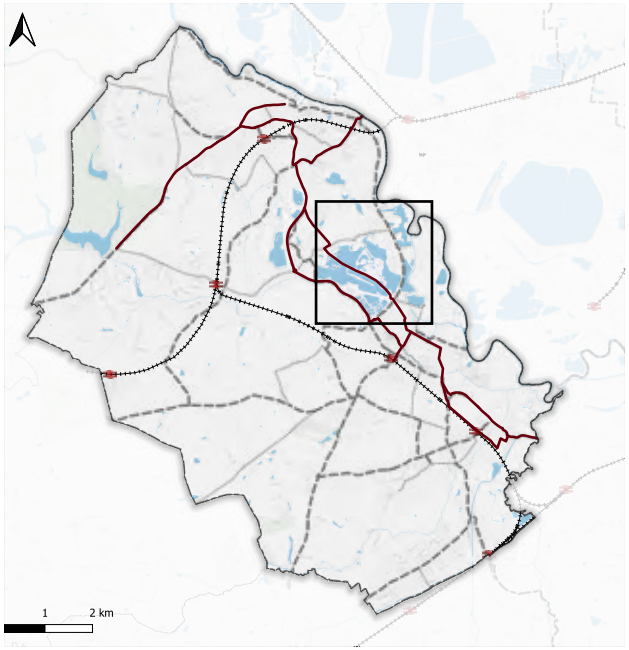


Figure 74. Location Map

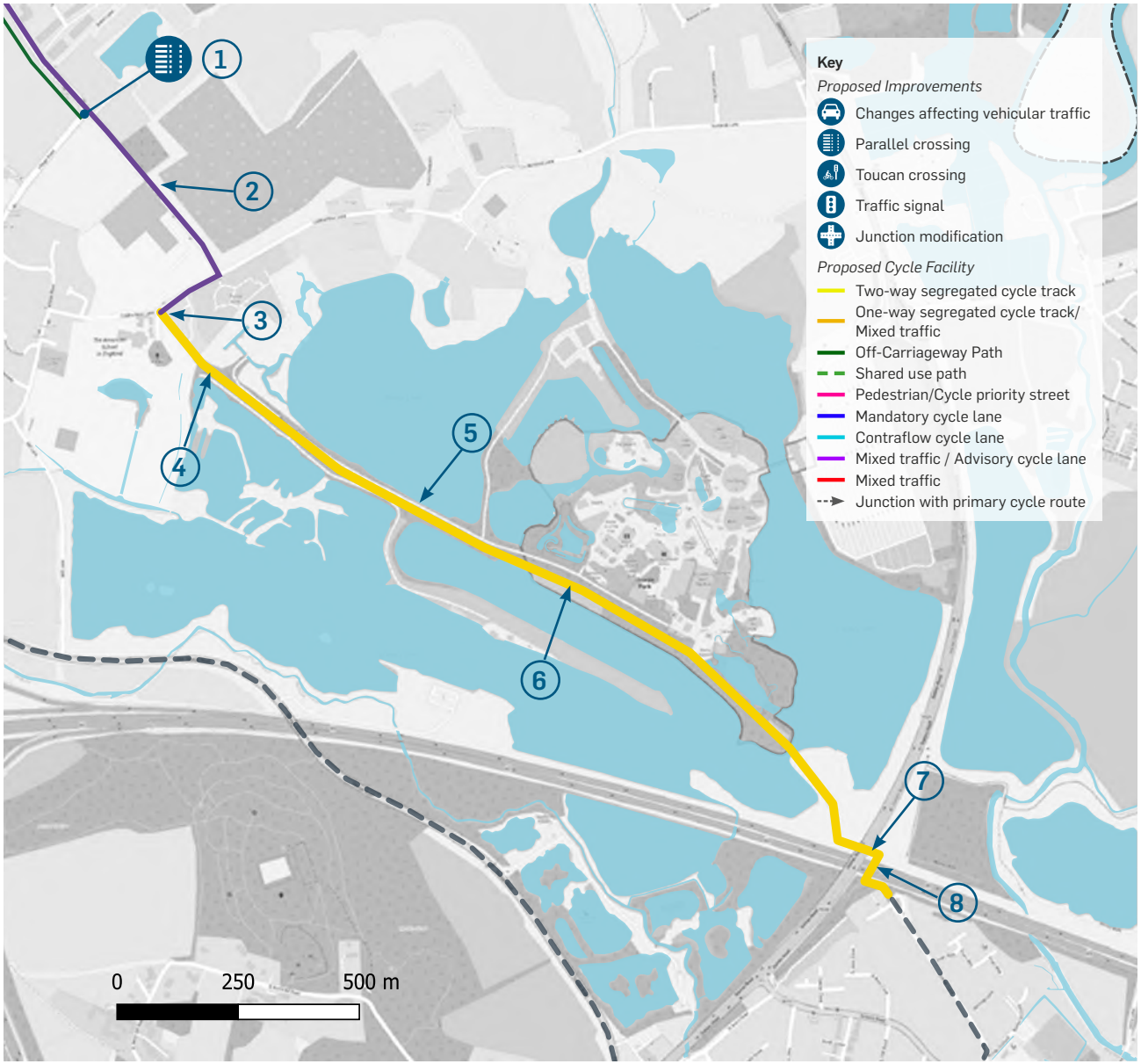


Figure 75. Route 4, Egham to Virginia Water

3. Provide access ramp or remove stone stile and steps to access Monk's Walk at grade. Removing/relocating the stone stile would be subject to determining its historic significance and any related protected status.
4. Prune overgrown vegetation to increase effective path width at pinch point. Shared-use path designation at pinch points.
5. Provide sympathetic lighting, and organise frequent maintenance/pruning to reinforce sense of personal security. Monk's Walk is adjacent to sites designated as 'Sites of Special Scientific Interest.' There are also other designations in this area, including sites of nature conservation interest, RAMSAR and SPA. Further analysis needs to be undertaken as part of feasibility design to understand any limitations to design proposals.
6. Off-carriageway track with potentially designated space for pedestrian use, although low pedestrian flows are expected. The case for/against segregation can be explored as part of the next phase of survey and design work.
7. Reduce gradients to <5% along access and egress ramps to/from Staines Road and widen path to 3m.
8. Improve subway access across M3 to allow for pedestrian and cyclist use. This route would provide an off-road link to Chertsey.

Figure 80. Aerial view of Monk's Walk alignment.

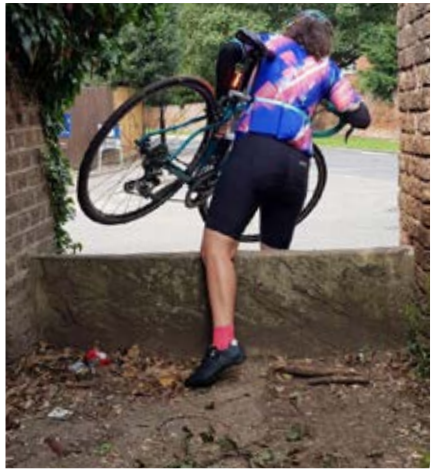


Figure 76. Stone stile at the entrance of Monk's Walk requires cyclists to dismount, and is a barrier for accessibility.

Figure 77. Existing route facilities at Monk's Walk.

Figure 78. Route underpass allows for grade separation from Staines Road.

Figure 79. Partly-buried route underpass below the M3 linking Monk's Walk to Chertsey.

Route 1, Part C: Chertsey Town Centre and Fordwater Road

Proposed Improvements

1. Mixed traffic provision along Staines Lane, a quiet residential street. Width here allows for mandatory cycle lanes but flows and speeds are assumed to be low.
2. Off-road route along western edge of Abbeyfields to connect Staines Lane to two-way facility on London Street via a parallel crossing. Separate footway to be retained on Abbeyfields.

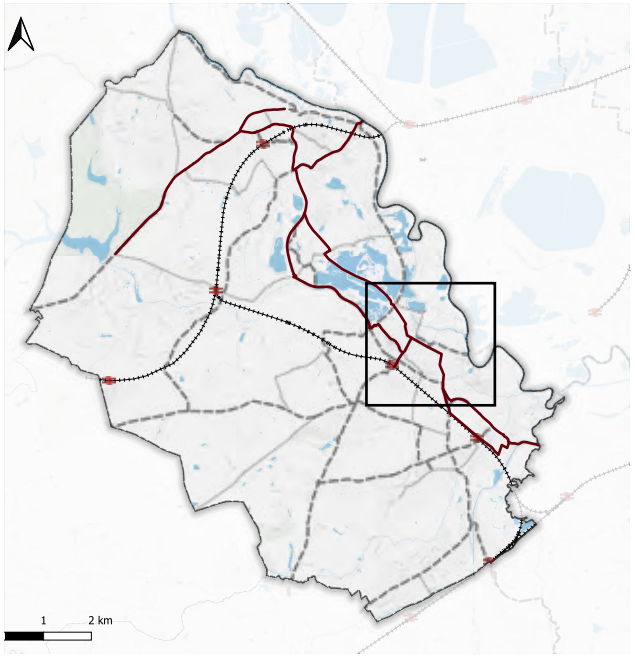


Figure 81. Location Map

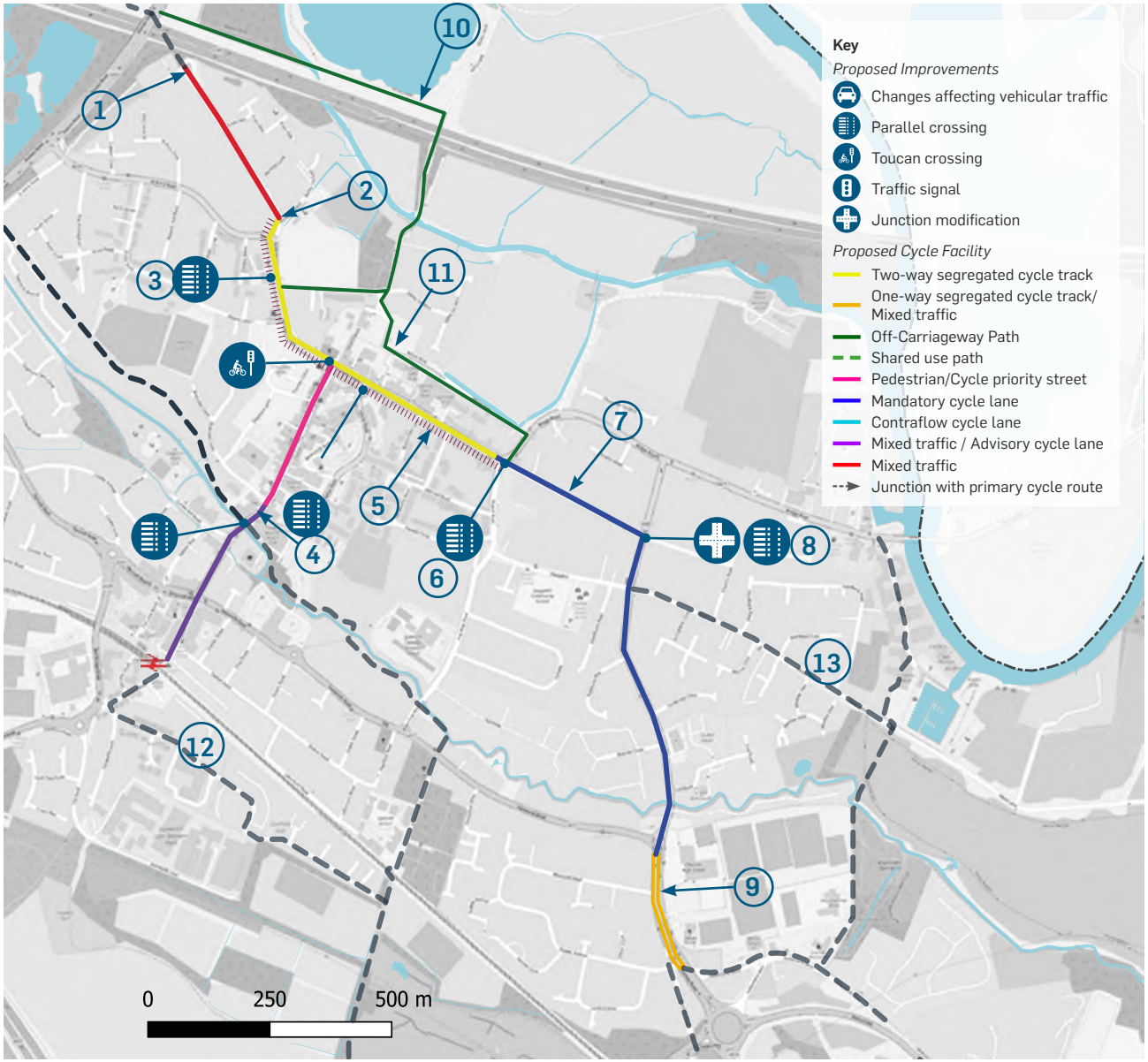


Figure 82. Monk's Walk to Chertsey

3. Parallel crossing on B375 Windsor Street, with two-phase right turn for northbound cyclists using service road behind Colonel's Lane Bus Stop.
4. Guildford Street contraflow cycle lane, mandatory (northbound) on the proposed pedestrian and cycle priority street. Additional cycle parking to be added at key locations.
5. Two-way cycle track on southern side of B375 London Street. Proposed cycle facilities enabled by removing the on-street parking on one side of the road *(See also walking proposals for Chertsey CWZ).* Introduce recessed parking with footway buildouts on one side of the road at locations . Reduce the speed limit to 20mph introducing traffic calming measures such as horizontal deflections as part of footway build-outs. Provide raised tables at all side roads with reduced bellmouth radii to reduce speeds of turning traffic.

Figure 83. Location of Parallel crossing on Windsor Road. (image credit: Bing Maps)

6. Parallel crossing at southern arm of roundabout to prioritise active travel movements. Continuous colour surfacing along junction.
7. Mandatory cycle lanes along Abbey Road, where the carriageway narrows. Potential for alternative mixed traffic provision to be explored after analysis of vehicle flows and speeds as part of further stages of design.
8. Introduce virtual speed cushions on Weir Road on its approaches to Abbey Road. Provide cycle wayfinding signage.
9. Reduce carriageway width to provide one-way segregated tracks on either side of Fordwater/Chertsey Roads.

Figure 84. Better access provision along Guildford Street, including two-way cycling via mandatory contraflow lane.

Alternative alignments

10. Potential off-road connection to Ferry Lane to access Monk's Walk.
11. Connect Ferry Lane with Chertsey Town Centre to promote local leisure cycling.
12. Alternative routes between Addlestone and Chertsey to be progressed in future phases of this study.
13. Alternative alignment along Mead Road to connect with existing National Cycle Network Route 4.

Figure 85. Two-way cycle track along southern side of the B375 (image credit: Bing Maps)

Figure 86. Alternative alignments north of Chertsey provide quiet routes suitable for leisure.

Route 1, Part D: Thorpe By Pass to Chertsey Railway Station

Proposed Improvements

1. Add toucan crossings at Thorpe By Pass and Ten Acre Lane to link to the proposed facilities to Egham.
2. Trim vegetation on the east side of Thorpe By Pass and propose a two-way cycle track along the verge with a 0.5m (minimum width) buffer. Propose reduction of speed limit to 40mph.

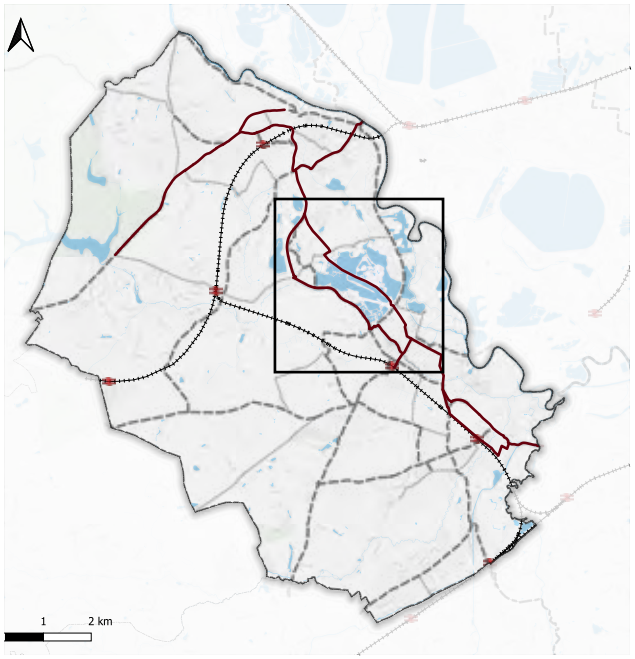


Figure 87. Location Map

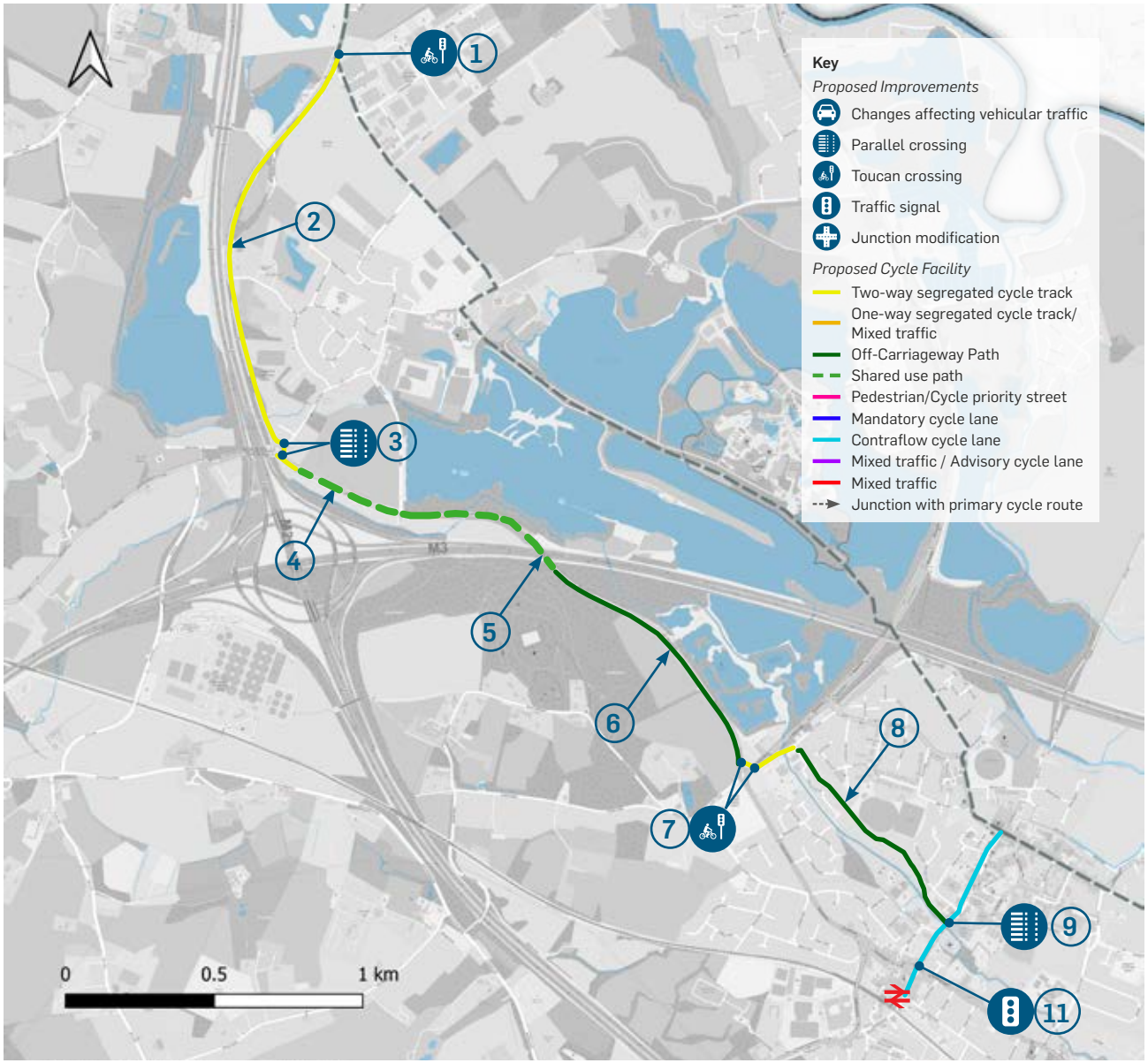


Figure 88. Monk's Walk to Chertsey

3. Propose parallel crossings at Thorpe By Pass/ Mill Lane/ Green Road roundabout on the east and south arms. Proposal to be linked to shared use path to Virginia Water.

Figure 89. Change of speed limit on Thorpe ByPass from 40mph to 60mph (National Speed limit) south of Thorpe Industrial Estate

4. Remove the verge and trim vegetation to propose cycle facilities (two-way cycle track or shared use path) on the south side of Thorpe By Pass with a 0.5m (minimum width) buffer. Typology of the proposed cycle facility to be subject to demand for pedestrian movements in the area. Propose reduction of speed limit to 40mph.
5. Remove the VRS and propose a shared use path on the southwest side of the M3 bridge. Propose a buffer where feasible.
6. Propose off-carriageway cycle facilities (two-way cycle track or shared use path) along Thorpe By Pass on the south side via St Ann's Hill green area with a 0.5m (minimum width) buffer. Proposal subject to land acquisition and environmental surveys.
7. Propose toucan crossings on Staines Road roundabout at the north and east arms to link the proposed facilities.
8. Widen the existing paths along Staines Road to provide two-way cycle track and a footpath by reallocating space from the verge. Improve the existing off-carriageway path along The Bourne at Gogmore Farm Park by widening the path to provide segregated facilities and introducing lighting (Proposals subject to environmental surveys).
9. Introduce a parallel crossing at Guildford Street at the exit of the off-carriageway path.
10. Introduce contra flow facilities with cycle logos along Guildford Street to link to the town centre and the railway station. Introduce ASLs and cycle signals at Guildford Street/Pyrcroft Road junction.

Figure 90. Thorpe By Pass south of Thorpe ByPass/Green Road roundabout that links to a SUP towards Virginia Water. Source: Google Street View

Figure 91. Thorpe By Pass on the M3 bridge and St Ann's Hiil Woodland. Source: Google Street View

Figure 92. Off-carriageway path on Gogmore Farm Park exit to Guildford Street. Source: Google Street View

Route 2: Chertsey to Weybridge Rail Station

Proposed Improvements

1. Provide single phase toucan crossing for cyclists to transition from one-way facilities on A317 Chertsey Road to mixed traffic on the Chertsey Road service lane alignment.
2. Provide parallel crossing with pedestrian and cyclist priority on Roakes Avenue.
3. Make use of existing subway provision under St Peter's Way to link to Addlestone avoiding St Peter's Way/A317 roundabout. Provide step or line segregation between pedestrians and cyclists along link, depending on expected flows.

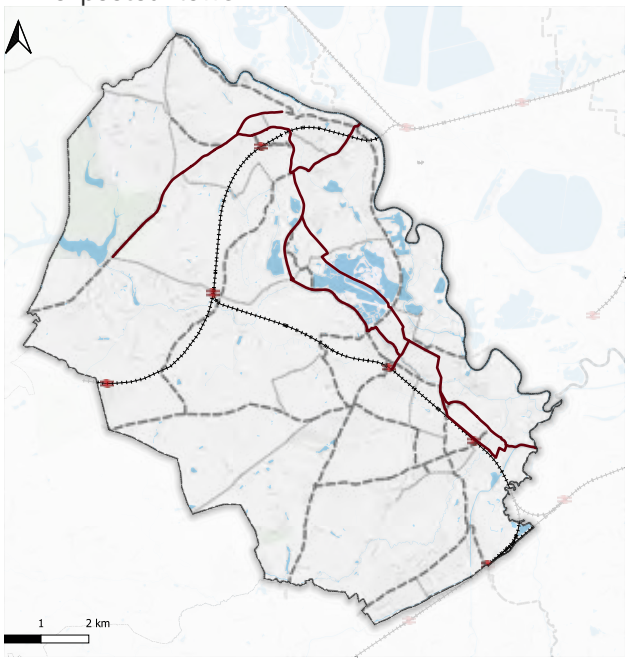


Figure 94. Location Map

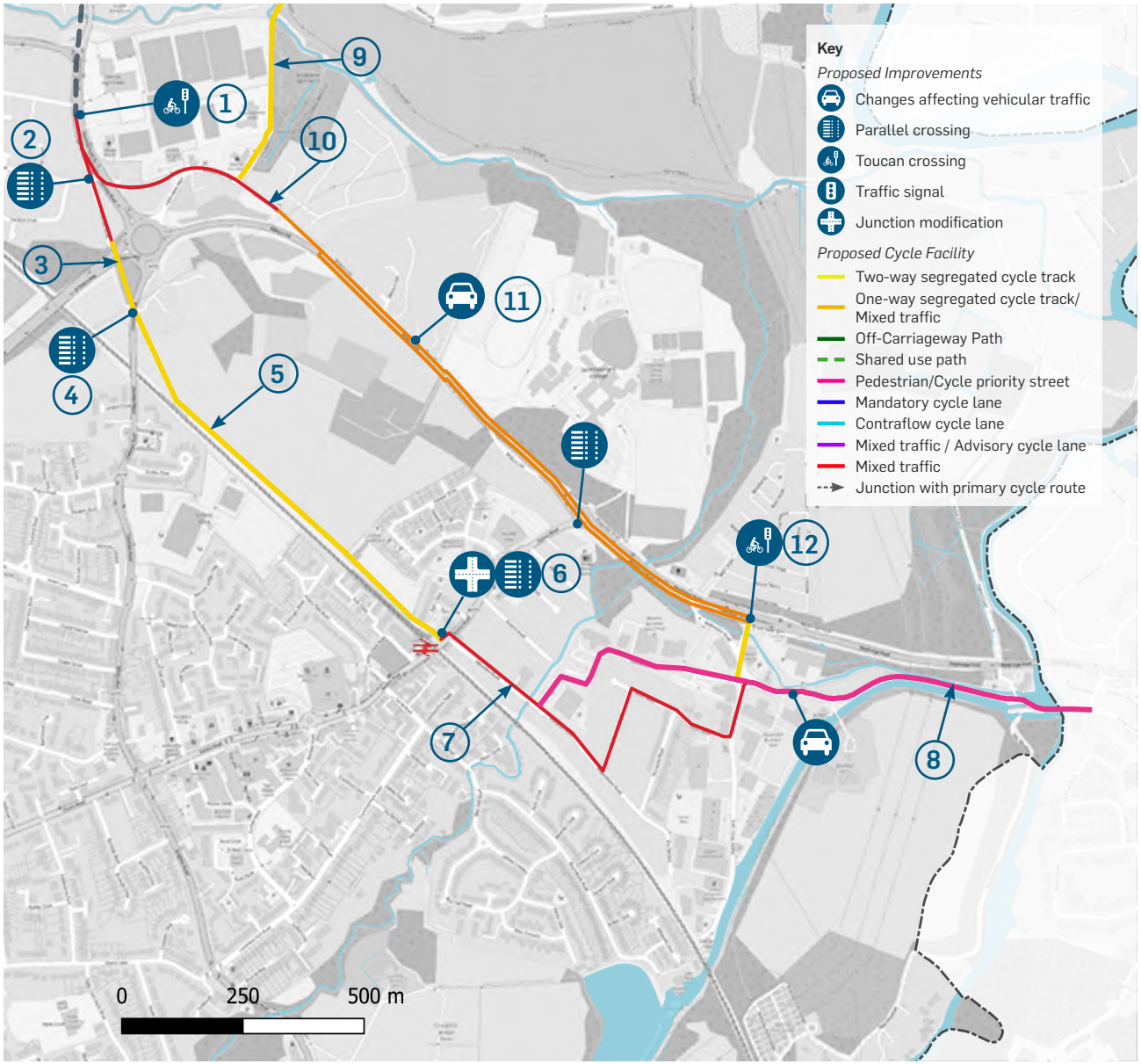


Figure 93. Route 2, Chertsey to Weybridge Rail Station

4. Provide parallel crossing at Chertsey Road to access proposed off-road facility. Further analysis needs to be undertaken as part of feasibility design to understand any limitations to design proposals.
5. New alignment northeast of railway line, with 3m two-way cycle track and potentially separate pedestrian provision, with 3rd party rural land acquisition required for active travel facilities. Facility to connect to existing cycle track through Marconi Sports Field.

Figure 95. Route alignment using existing subway under St Peter's Way (image credit: Bing Maps)

6. Raised table junction on Station Road/ Alexandra Road to slow traffic on the approach to cycle crossing location. Proposal to be confirmed in the next stages of design following discussions with Network Rail. Additional cycle parking to be added at key locations.
7. Mixed-traffic provision. Make use of existing point closure at Alexandra Road to connect to proposed off-road facility parallel to railway line. Additional investigations required to determine impact of Travis Perkins site traffic on corridor.
8. Addlestone Road as 'Active Travel Corridor'. Mixed traffic provision on Addlestone Road, with removal of road centrelines and including horizontal deflections for motor vehicles with cycle bypasses. Crossing of the River Way via the Town Lock

Figure 96. Point closure at Alexandra Road.

Alternative alignments

9. Promote existing alignment along NCN4 and its connection to Mead Lane.
10. Formalise cycling use at Addlestone Moor service road to connect with existing segregated route along Woburn Hill.
11. Widen cycle track and footway to LTN 1/20 standards. Requires carriageway realignment and may require 3rd party land acquisition and re-purposing of verge.
12. Provide toucan crossing for cyclists to access Addlestone Road 'Quietway' and avoid high traffic volumes on Weybridge Road.

Figure 97. Formalise provision on Addlestone Road.

Route 4: Egham to Virginia Water via the A30

Proposed Improvements

1. Two-way cycle track on eastern edge of the A30 carriageway to connect to existing facilities. New toucan crossing on Egham By-Pass/A30 adjacent to Hummer Road to link the proposed cycle facility and Egham Town to Runnymede Meadows.

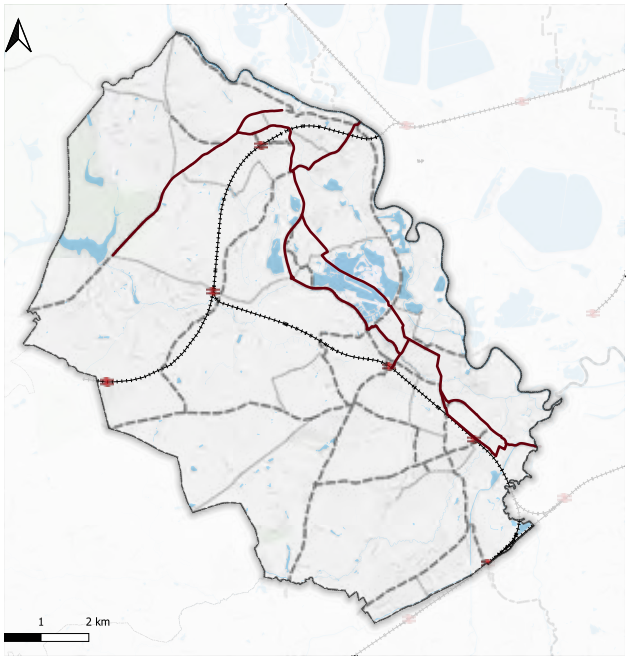


Figure 99. Location Map

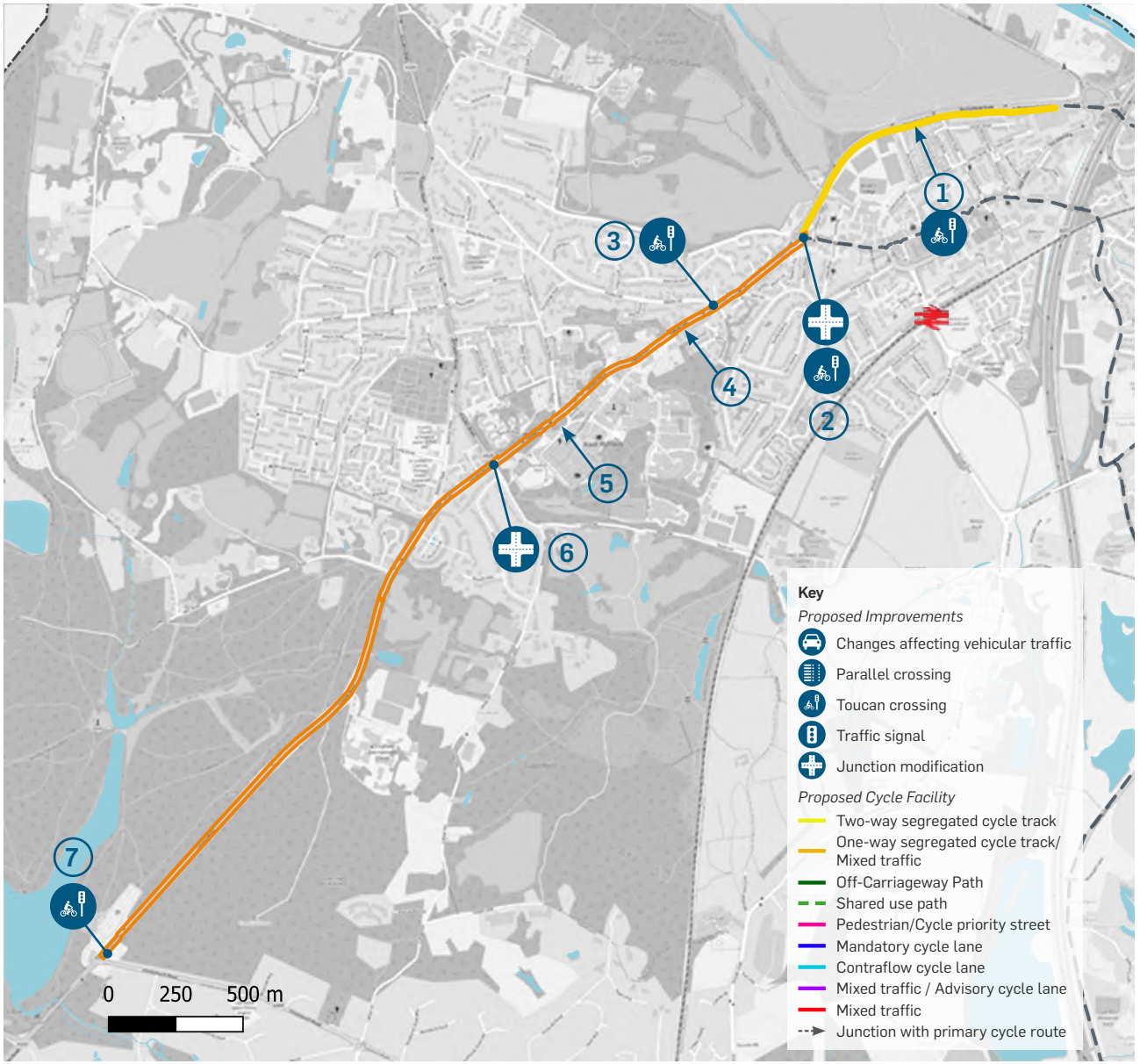


Figure 98. Route 4, Egham to Virginia Water

2. Introduce a signalised Cyclops junction at existing roundabout site on Egham Hill to reduce traffic speeds and improve pedestrian and cyclist priority at this accident hotspot. Main trip attractor in this area is Egham High Street, which also has a proposed cycle route. This junction also serves as a transition point between one-way and two-way cycle tracks along the A30.
3. Upgrade existing puffin crossing between Middle Hill and Piggery Gate at Royal Holloway University to a toucan crossing to allow cyclists to safely cross the carriageway. Additional cycle parking to be added at key locations.
4. Reduce speed limits on the A30 in the proximity of Englefield Green and Egham to 30mph. Proposed crossing facilities as described in locations 2 and 3, as well as carriageway width reductions due to segregated cycling facilities can help achieve traffic calming on some sections of the A30.

Figure 100. The A30 creates severance between Royal Holloway and residential areas to the north (photo credit: Bing Maps)

5. Protected one-way cycle tracks along the A30, a high speed route, which could be extended up to Virginia Water Lake. New facilities would be provided with central hatching, verge removal, and carriageway narrowing. Provide Bus stop bypasses at key stops near Egham High Street and Royal Holloway.
6. Provide advance stop lines at junction of Egham Hill and A328/Bakeham Lane to facilitate turning movements for cyclists.
7. Upgrade existing uncontrolled crossing between the A30 and the entrance to Virginia Water Lake to a toucan crossing to allow pedestrians and cyclists to safely cross the carriageway[1].

1 Part of the Runnymede Joint Committee's programme of work

Figure 101. Existing cycling facilities on the A30 are generally narrow, shared-use paths with 50mph traffic alongside.

Alternative Proposal

Potential to reduce length of segregated facility along the A30 and transition to mandatory cycle lanes south of Englefield Green to reduce initial implementation costs whilst capturing most local cycling trips in and around Egham and Royal Holloway.

Figure 102. Junction of Egham Hill and A328, showing shared facility along footway.

Figure 103. Some sections of the A30 are wide and can accommodate separate cycling facilities.

Interventions

1. Trim and / or remove overgrown vegetation to increase the footway effective width.

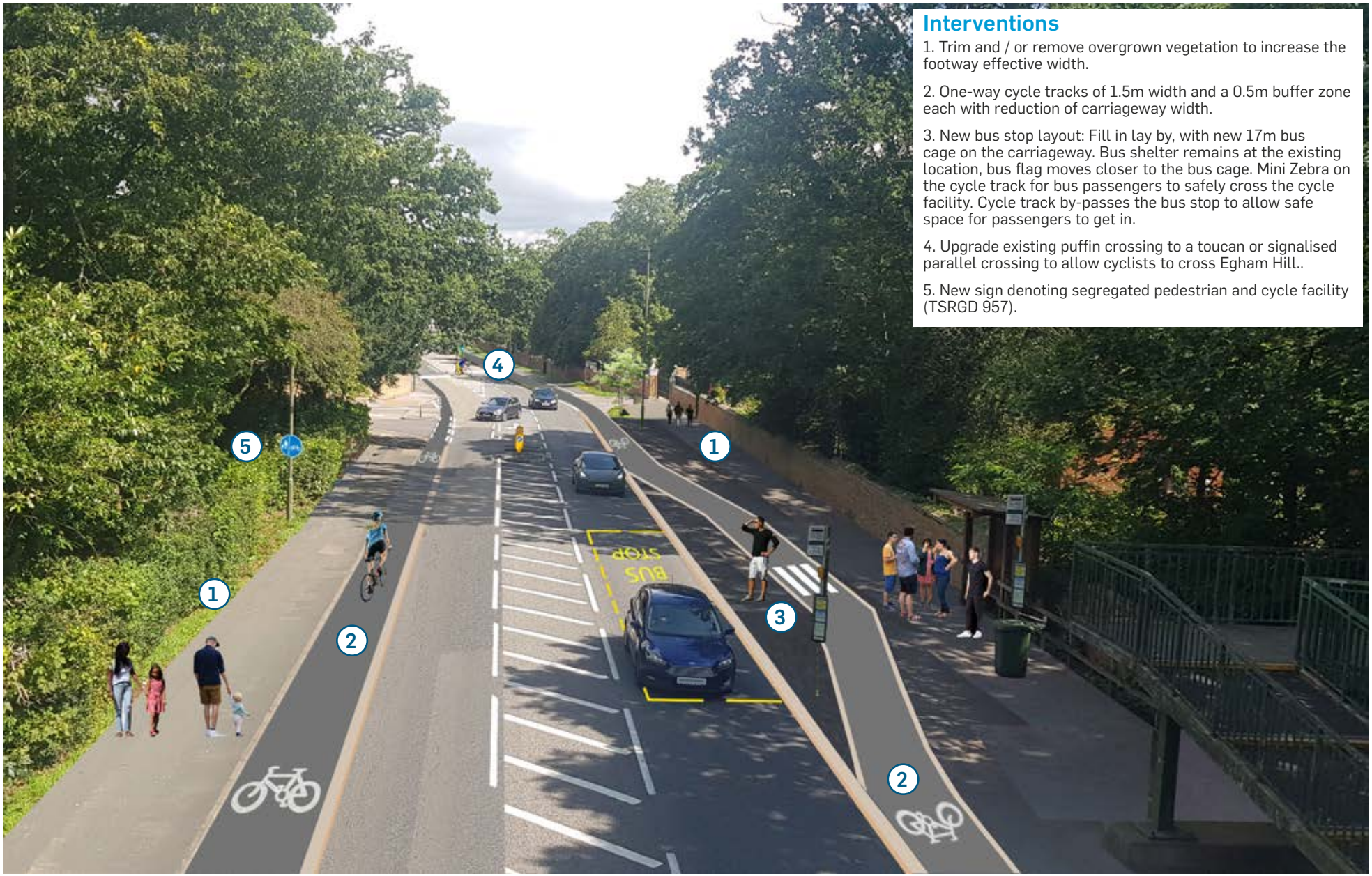
2. One-way cycle tracks of 1.5m width and a 0.5m buffer zone each with reduction of carriageway width.

3. New bus stop layout: Fill in lay by, with new 17m bus cage on the carriageway. Bus shelter remains at the existing location, bus flag moves closer to the bus cage. Mini Zebra on the cycle track for bus passengers to safely cross the cycle facility. Cycle track by-passes the bus stop to allow safe space for passengers to get in.

4. Upgrade existing puffin crossing to a toucan or signalised parallel crossing to allow cyclists to cross Egham Hill..

5. New sign denoting segregated pedestrian and cycle facility (TSRGD 957).

Figure 104. Egham Town: Existing situation



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4. Upgrade existing puffin crossing to a toucan or signalised parallel crossing to allow cyclists to cross Egham Hill..

5. New sign denoting segregated pedestrian and cycle facility (TSRGD 957).

Figure 105. Egham Town: Proposed interventions along Egham Hill

Route 11: Thorpe Lea Road/Thorpe Road

Proposed Improvements

1. Dutch treatment along western section of Thorpe Lea Road, including speed limit reductions to 20mph, removal of road centre lines, relocation of parking bays to side roads and inclusion of coloured surfacing for cycling.
2. Provide parallel crossings to provide pedestrian and cyclist access to Pooley Green Recreation Ground and adjacent parade of shops.

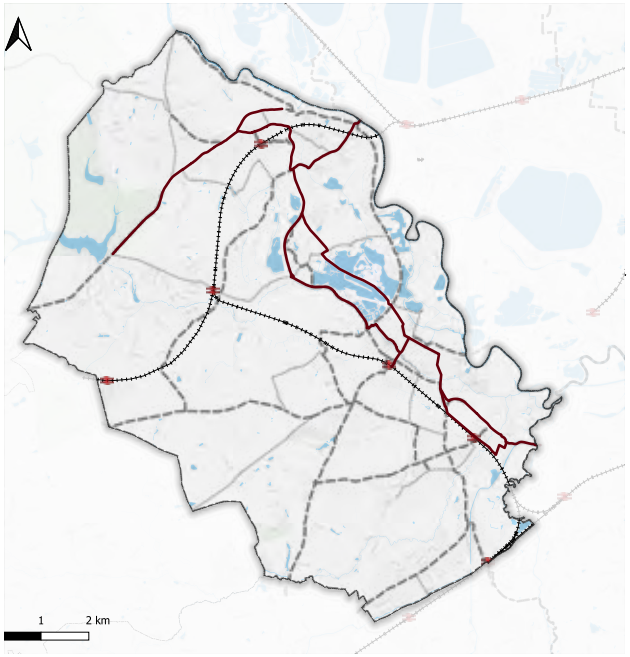


Figure 107. Location Map

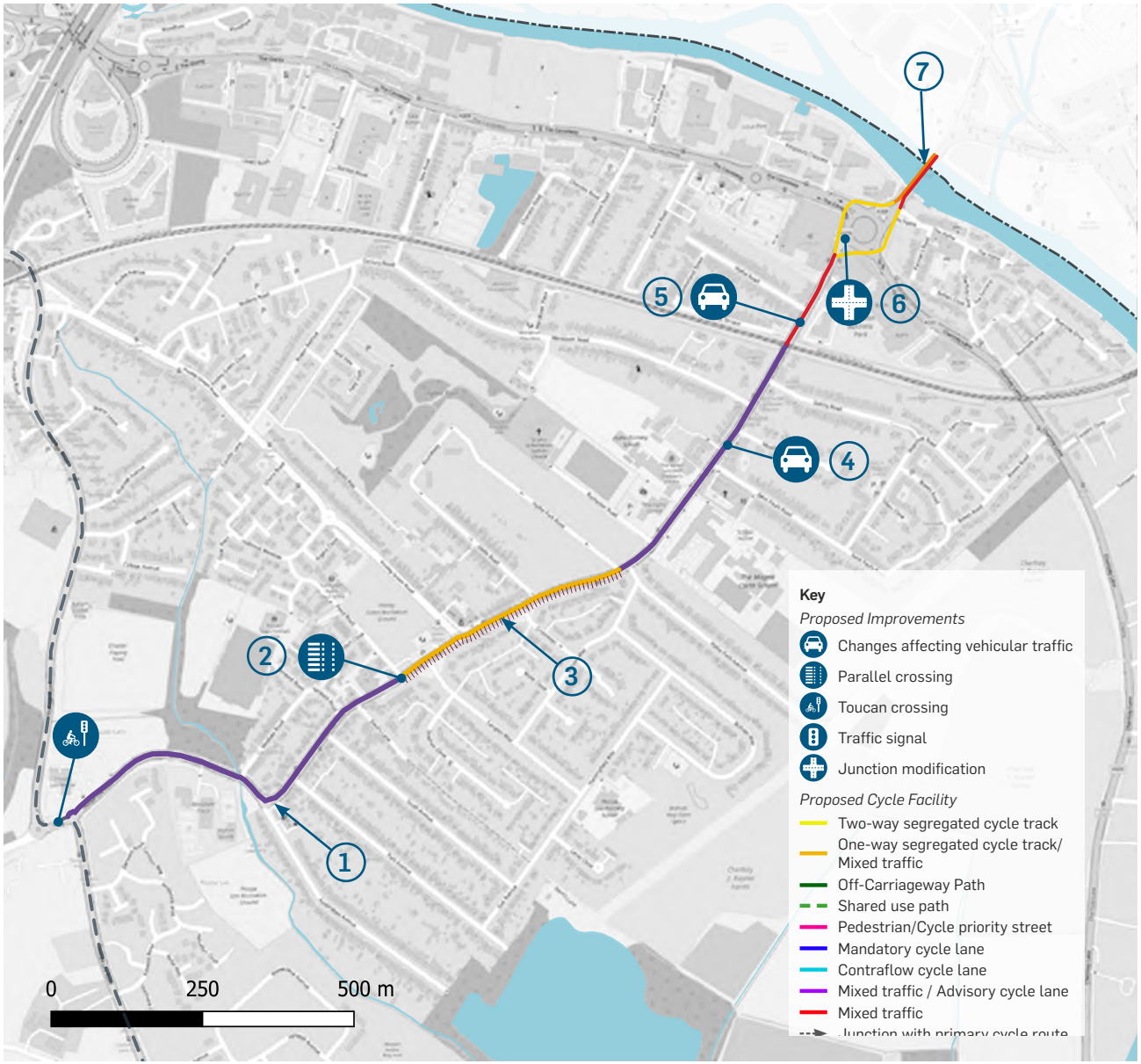


Figure 106. Route 11, Egham Hythe

3. Retain one-way segregated track southbound and provide cycle bypass by Glebe Road bus stop. Relocate on-street parking to provide stepped track in the northbound direction. Additional cycle parking to be added at key locations.
4. Dutch-style treatment along Thorpe Road, with speed limit reductions.
5. Speed limit reduction to 20mph using horizontal traffic calming measures to allow for mixed traffic provision.
6. Introduce a signalised junction at existing Staines roundabout, with 'hold the left' signalised working.
7. Aspirational scheme to widen Staines Bridge or fund alternative cycle/footbridge *(as proposed at Spelthorne Local Transport Strategy: Forward Programme)*. Current conditions at Staines Bridge allow for minimal widening of line-segregated cycling facilities.

Figure 108. Existing footway-level facility along Thorpe Lea Road.

Figure 109. Carriegeway narrowing is feasible in some sections of Thorpe Lea Road.

Figure 110. Existing facilities at Staines Roundabout.

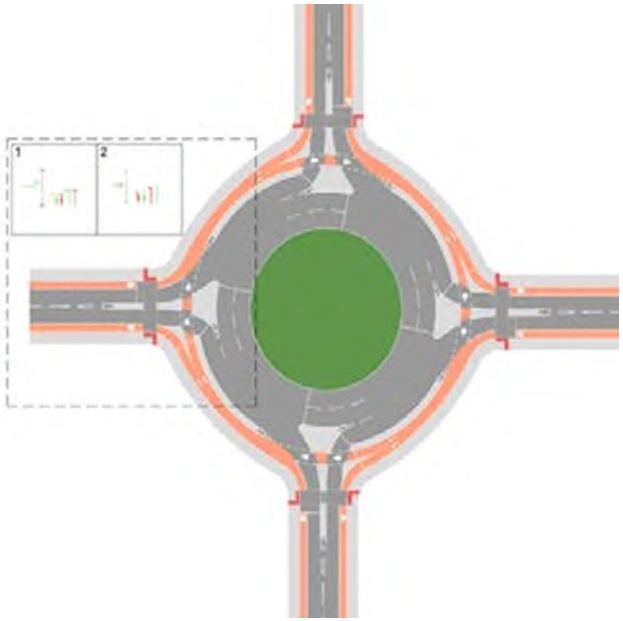


Figure 111. LTN 1/20: Carriageway-level cycle track used with 'hold the left' traffic staging

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 ≤ 1km 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 144).

For each route a comparison was made between the existing situation and the potential of the improvements. In case of Cycle Corridor 2 an RST assessment was undertaken to compare the two alignments of the route: Along Weybridge Road and along the off-street path by the railway lines.

Every cycle corridor is improved in terms of comfort, and safety, since the interventions are proposing protected cycle facilities[1]. Gradient and connectivity remain the same as the alignments are the same.

1 On Cycle Corridor 11 (Thorpe Lea Road), safety score is decreasing because the northbound direction is proposed on an mandatory cycle lane where in the existing situation is on a narrow two-way cycle track.

Table 2. RST results - Cycle Corridor 1

	Corridor 1: Egham to Chertsey							
	Part A: Egham Town Centre and Vicarage Road		Part B: Monks Walk		Part C: Chertsey Town Centre and Fordwater Road		Part D: Thorpe By Pass to Chertsey Railway Station	
	Existing	*Potential*	*Existing*	*Potential*	*Existing*	*Potential*	*Existing*	*Potential*
Directness	5.00	5.00	5.00	5.00	4.00	4.00	4.00	4.00
Gradient	4.42	4.42	2.71	4.60	5.00	5.00	4.69	4.69
Safety	0.83	1.70	3.00	3.78	1.00	3.29	0.66	3.81
Connectivity	4.41	4.41	2.00	2.00	5.00	5.00	4.80	4.80
Comfort	0.41	3.17	1.48	3.78	0.00	3.00	0.37	3.53
Total	**15.08**	**18.70**	**14.19**	**19.16**	**15.00**	**20.29**	**14.52**	**20.83**
Improvement (compared to existing)		*3.62 (24%)*		*4.96 (34.97%)*		*5.29 (35.29%)*		*6.31 (43.47%)*

Table 3. RST results - Cycle Corridor 2

	Chertsey to Weybridge Rail Station		Chertsey to Weybridge Rail Station - Off cariageway option	
	Existing	*Potential*	*Existing*	*Potential*
Directness	5.00	5.00	4.00	4.00
Gradient	3.88	3.88	3.68	4.29
Safety	3.57	4.28	2.90	4.00
Connectivity	5.00	5.00	3.74	3.74
Comfort	2.03	3.60	3.10	4.02
Total	**19.48**	**21.76**	**17.42**	**20.05**
Improvement (compared to existing)		*2.28 (11.7%)*		*2.64 (15.14%)*

Table 4. RST results - Cycle Corridor 4

	Egham to Virginia Water via the A30	
	Existing	*Potential*
Directness	5.00	5.00
Gradient	4.61	4.61
Safety	2.65	5.00
Connectivity	3.98	3.98
Comfort	0.00	3.23
Total	**16.23**	**21.82**
Improvement (compared to existing)		*5.58 (34.4%)*

Table 5. RST results - Cycle Corridor 11

	Thorpe Lea Road/Thorpe Road	
	Existing	*Potential*
Directness	5.00	5.00
Gradient	5.00	5.00
Safety	2.78	2.00
Connectivity	5.00	5.00
Comfort	0.00	3.00
Total	**17.78**	**20.00**
Improvement (compared to existing)		*2.22 (12.5%)*

6. Walking Network

Introduction

Methodology

Multi-Criteria Assessment Framework

Example Design Tools - Walking

Phase 1 Proposed Walking Improvements

Assessment of Proposals

Introduction

Proposed improvement concepts for the walking network for Runnymede 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 need or opportunity arises.

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 Phase 2) may be further developed in future, as part of future work streams or as other funding opportunities arise.

Methodology

Runnymede 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 (there are some areas of high-quality provision, neighbouring with areas of motor vehicle dominance).

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 Runnymede LCWIP focused on identification of Core Walking Zones (CWZs), as per the DfT's LCWIP technical guidance (Page 27).

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.

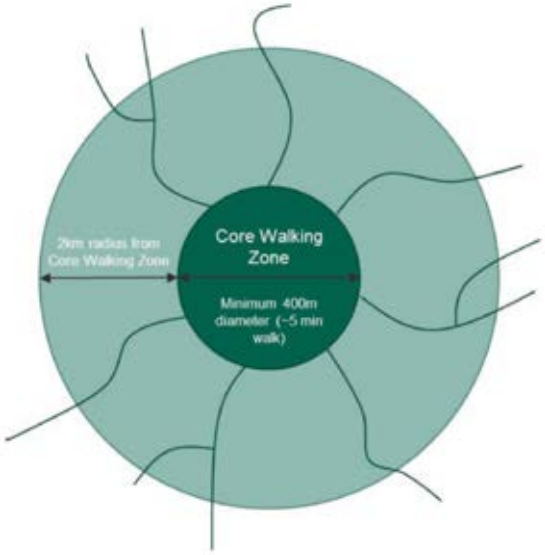


Figure 112. Core walking zones and key walking routes (DfT LCWIP Guidance)

Identification of Core Walking Zones

For Runnymede, 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 serve multiple journey types (e.g., shopping, dining, employment, personal business, leisure/social, education, 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 113). The CWZs were created using 250m isochrones around the high street areas (Figure 114) . 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 the CWZ covers the commercial area/high street and main access corridors.

This process identified 9 CWZs around local commercial areas within Runnymede, which are shown in Figure 115.

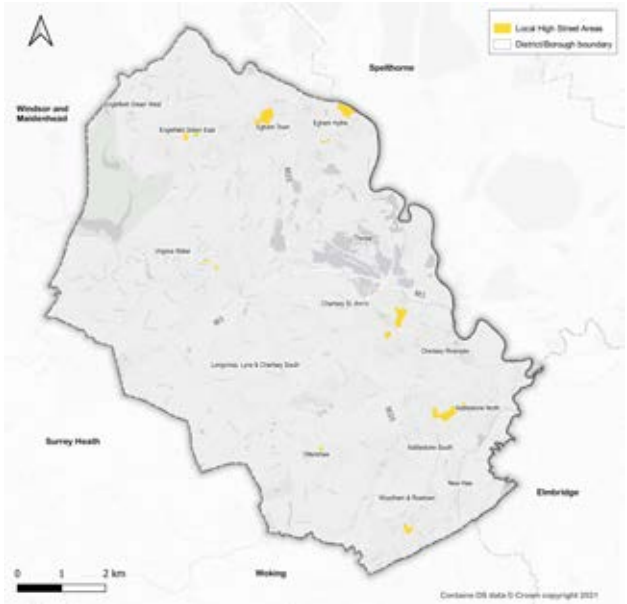


Figure 113. Identification of Local High Street Areas

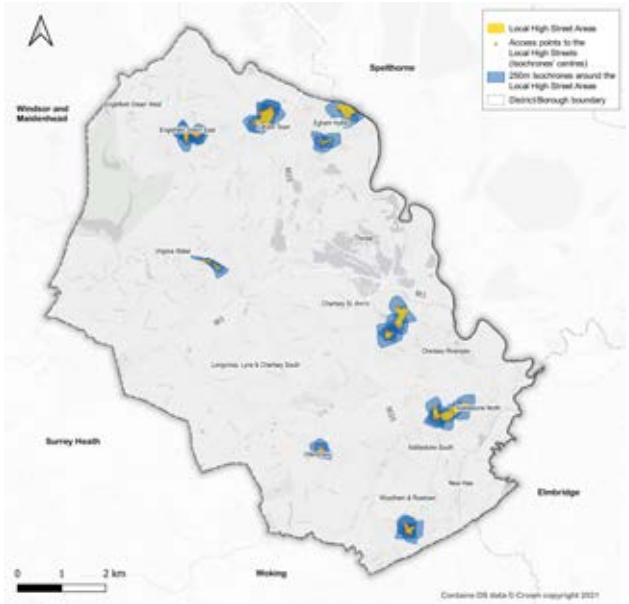


Figure 114. Identification of access points to the local high street areas and generation of 250m isochrones around them

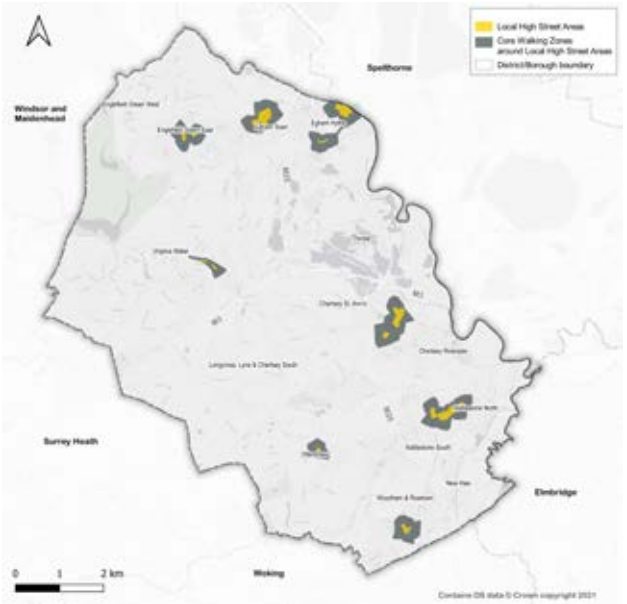


Figure 115. Core walking zones around local high street areas in Runnymede

The aim of the study was to identify an 'Aspirational Long List' of 10 core walking zones within the Borough focusing on high streets and local commercial areas. However, in the case of Runnymede only 9 local commercial areas were identified that can shape a core walking zone.

Following the analysis of "Background Data" on page 47 the key destinations that attract a significant number of local commuter trips were identified. These were: The Royal Holloway University in Englefield Green and St Peter's Hospital in Chertsey (Figure 116).

The same methodology as in Local High Street Areas was followed to create the core walking zones around those two key destinations (Figure 117).

St Peter's Hospital is located on Guildford Road in the outskirts of Chertsey, and the core walking zone that was created around the hospital's premised extended primarily along Guildford Road and Holloway Hill, both of which are semi-rural roads. For that reason, it was preferred to address the connectivity issues to St Peter's Hospital as a walking corridor, rather than a core walking zone.

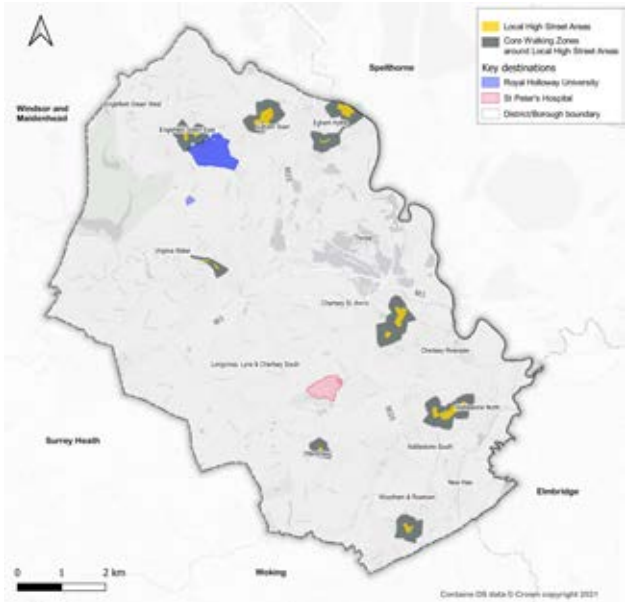


Figure 116. Key destinations that produce local commuter trips and qualify for a core walking zone

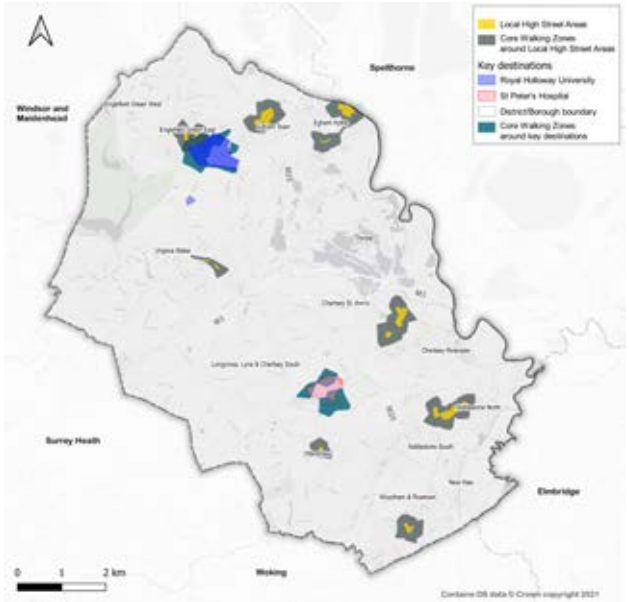


Figure 117. Core walking zones around the Royal Holloway University and St Peter's Hospital.

The final 'Aspirational list' of core walking zones in Runnymede, presented in Figure 118, includes 10 areas, as follows:

1. Egham High Street
2. Engfield Green
3. Staines
4. Thorpe Lea
5. Virginia Water
6. Chertsey
7. Addlestone
8. Ottershaw
9. Woodham
10. Royal Holloway University

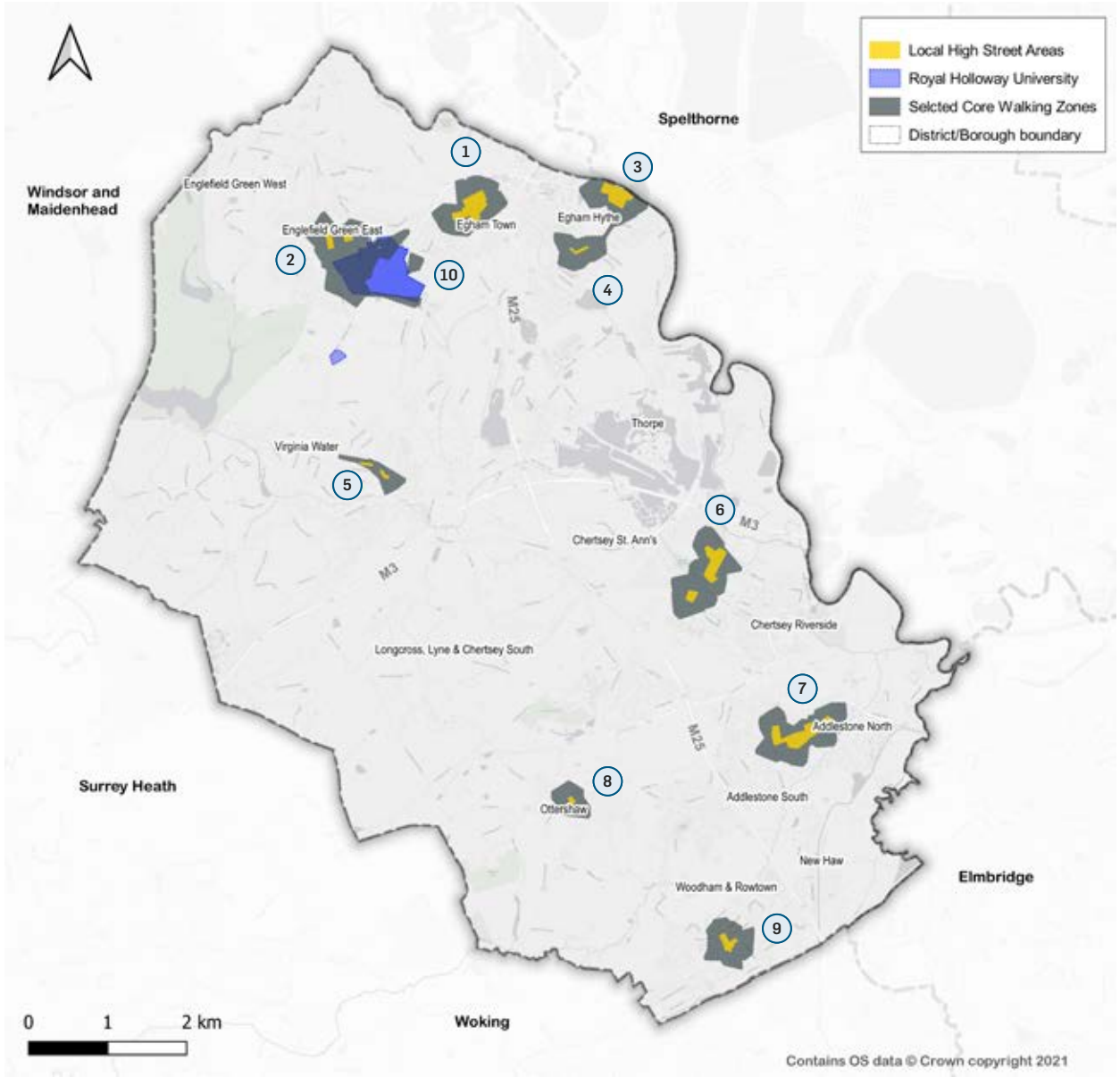


Figure 118. Core walking zones around local high street areas in Runnymede

Identification of Walking Corridors

Following the identification of the core walking zones, 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 and the University to significant destinations.

The background data compiled and summarised in the previous chapter 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 walking and cycling 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. 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.

Based on the data reviewed and evidence base compiled, potential demand and propensity for short, utilitarian walking trips is highest in the northern, and south-eastern areas of the Borough. In the north, Egham Town and Staines[1] have denser population, high workplace density and more compact, urban development patterns. In the south-eastern end of the Borough, the highlighted areas of Chertsey and Addlestone have a high number of key trip attractors (such as schools) and are located close to the neighbouring boroughs of Spelthorne and Elmbridge, creating additional commuter trips to those areas. Public comments and collisions also tended to be clustered in these areas.

Connectivity to the planned River Thames Scheme, which extends on the eastern area of the Borough and links to Spelthorne and Elmbridge, was a key criterion on the identification of the pedestrian routes. The construction of the new channel, as part of the River Thames Scheme, provides an opportunity to create green spaces and enhance walking and cycling facilities along the river, providing leisure routes and the potential for longer

1 Whilst Staines-upon-Thames is located within Spelthorne Borough Council, it has a transport catchment area that expands into Runnymede for rail, pedestrian and cycle journeys. It is also a main trip attractor for residents of both Spelthorne and Runnymede.

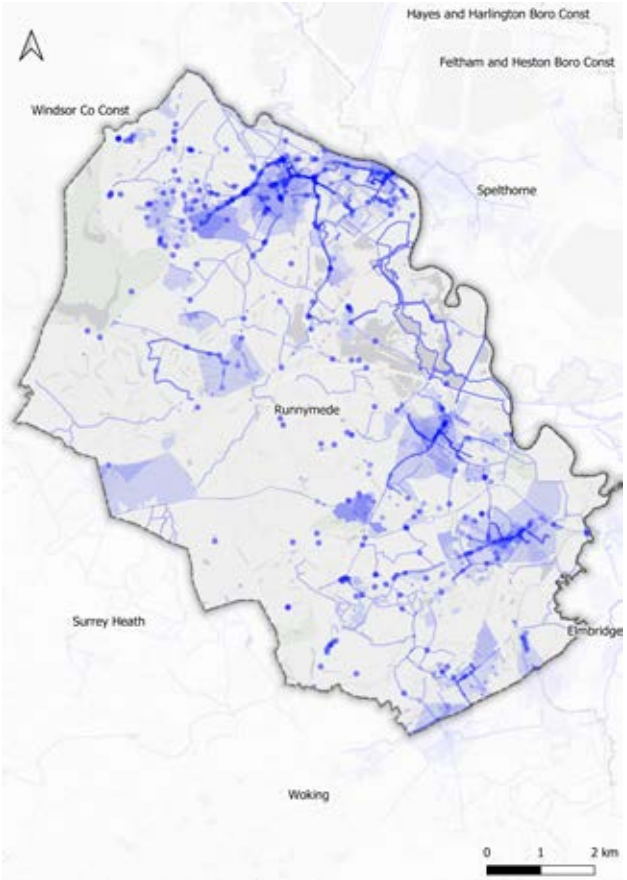


Figure 119. Background information related to walking trips was overlaid to create a heatmap for pedestrian opportunities and issues.

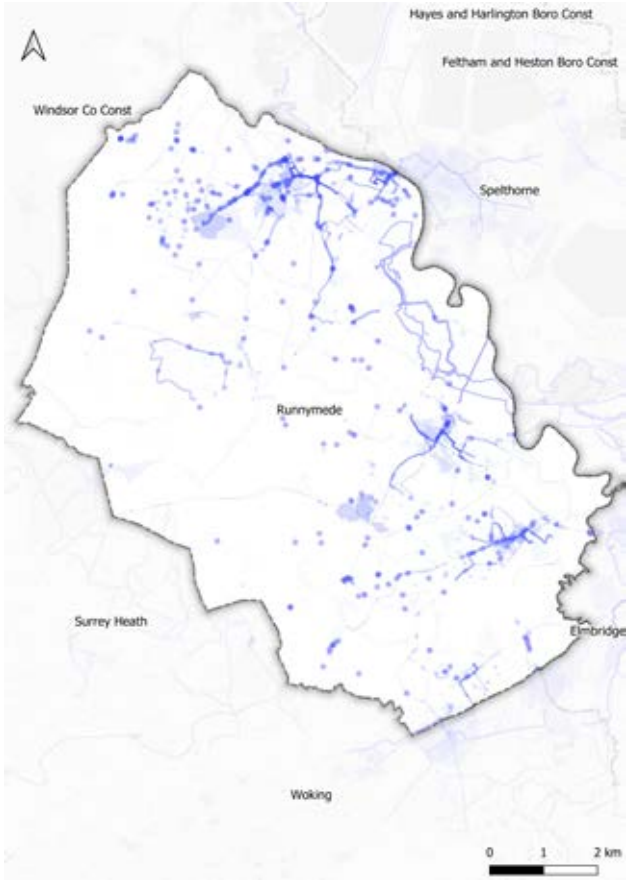


Figure 120. Changes in the opacity and the contrast of the items on the map reduces the 'noise' and highlights the areas and the road network of high importance for infrastructure improvements within the Borough.

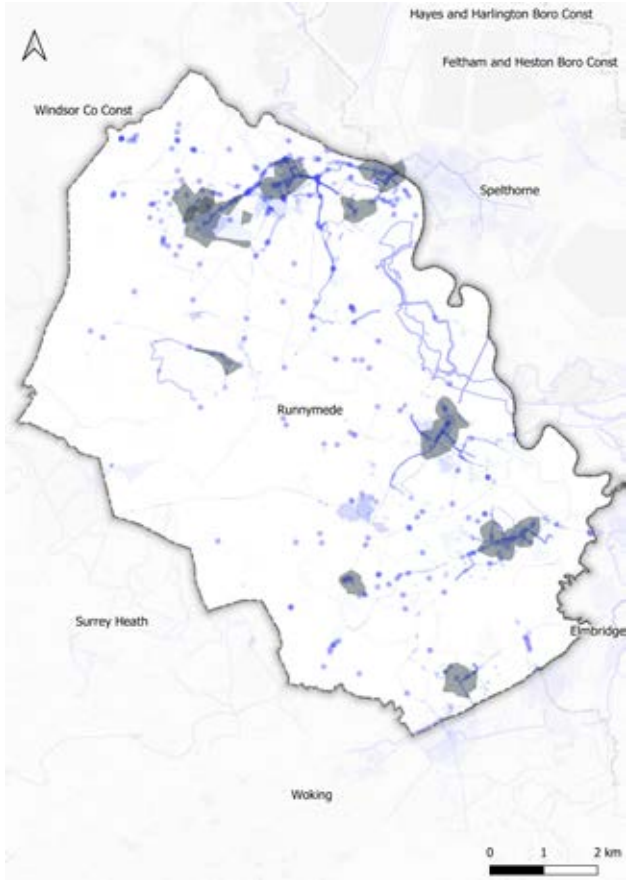


Figure 121. The selected core walking zones were overlaid on the heatmap and confirmed that the selected areas (Local High Streets and the University) are of high demand for improvements.

distance utility trips linking Elmbridge, Runnymede, and Spelthorne.

The selected walking routes that will supplement the list of core walking zones, presented in Figure 118, and capture the core routes at local level which funnel the main pedestrian flows between origin and destinations, are:

» Egham By-Pass - Egham Hill
» Vicarage Road
» Manorcrofts Road
» Middle Hill
» Brick Lane
» Chertsey Lane
» The Causeway
» Thames Path on eastern bank of the River
» Guilford Road (A320)
» Ferry Lane
» Addlestone Road
» Church Road (B3121)
» Woodham Lane – Byfleet Road
» Basingstoke Canal

The final list of walking corridors (presented in Figure 122) 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 Manorcrofts Road and Middle Hill).

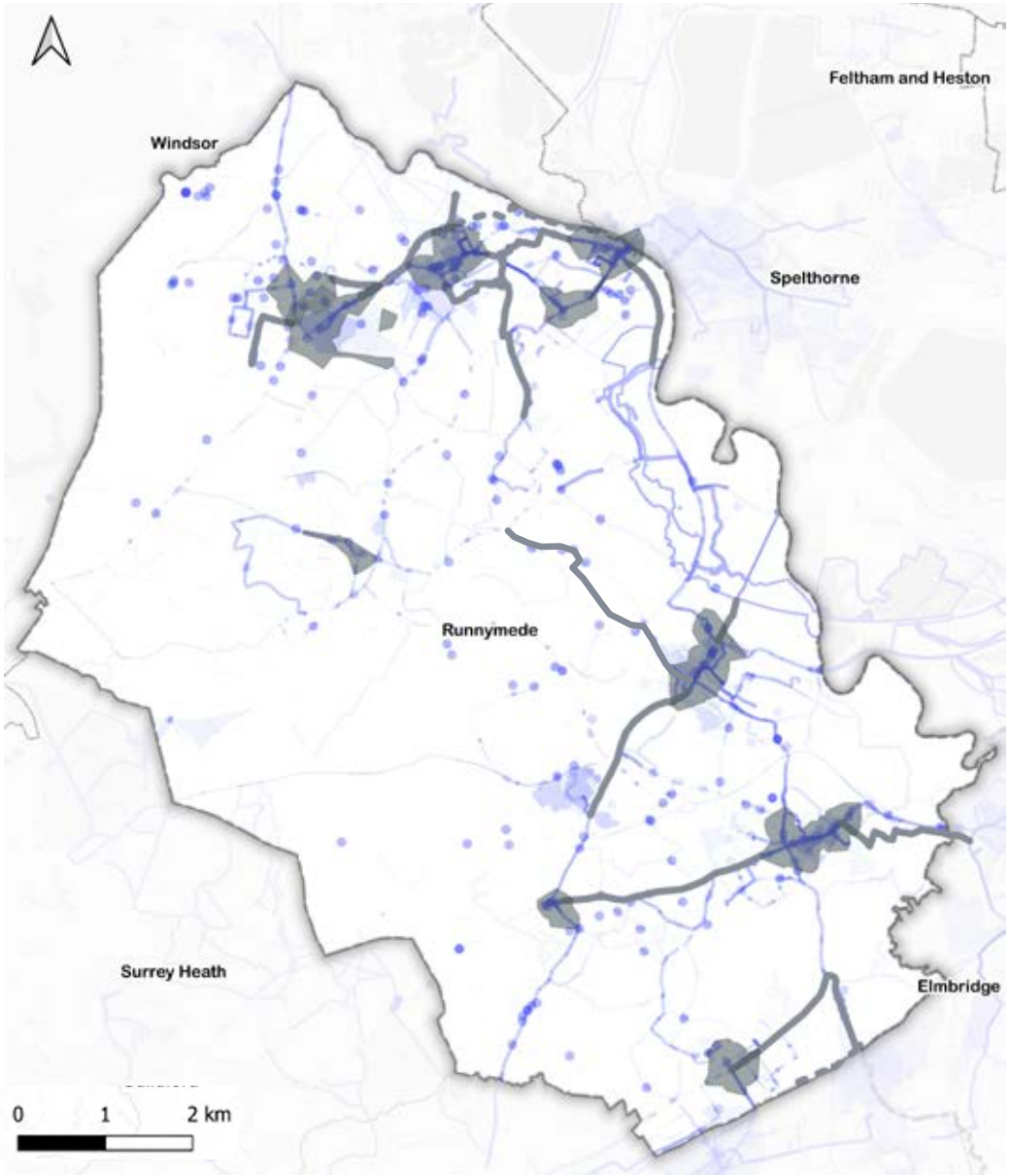


Figure 122. Added walking corridors following the results of the heatmap.

Aspirational List for walking

A core network of 10 core walking zones and 14 supplementary walking corridors is defined. The network is distributed across the study area:

1. Egham High Street core walking zone
   - Egham By-Pass walking corridor
   - Vicarage Road walking corridor
   - Manorcroft Road walking corridor
2. Englefield Green core walking zone
   - Middle Hill walking corridor
   - Brick Lane walking corridor
3. Staines core walking zone
   - Chertsey Lane (A320) walking corridor
   - The Causeway walking corridor
   - River Thames Path
4. Thorpe Lea core walking zone
5. Virginia Water core walking zone
6. Chertsey core walking zone
   - Guilford Road (A320) walking corridor
   - Ferry Lane walking corridor
   - Pyrcroft Road to St Ann's Hill walking corridor
7. Addlestone core walking zone
   - Addlestone Road walking corridor
   - Church Road (B3121) walking corridor
8. Ottershaw core walking zone
9. Woodham /New Haw core walking zone
   - Woodham Lane – Byfleet Road walking corridor
   - Basingstoke Canal walking corridor
10. Royal Holloway University core walking zone

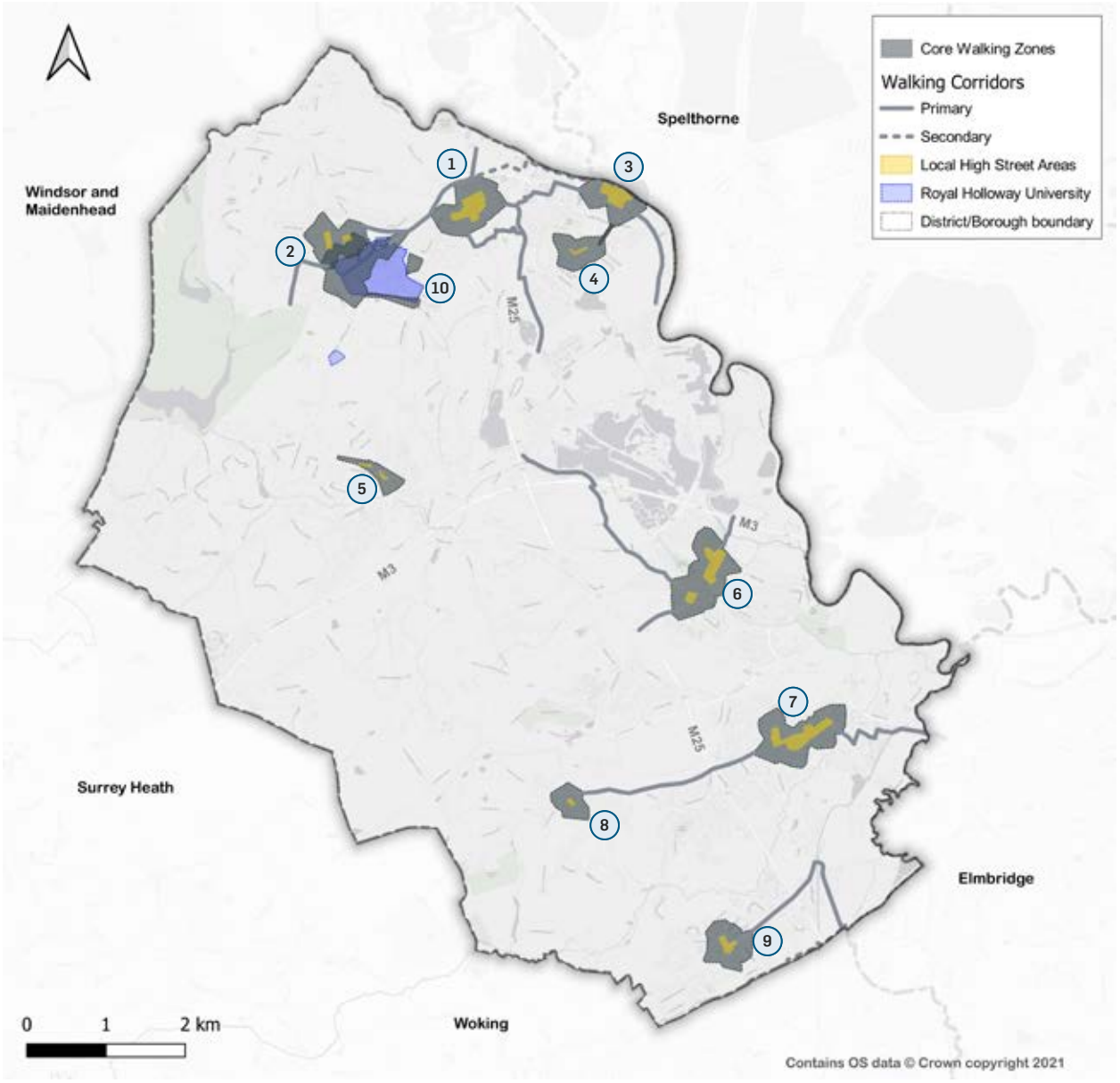


Figure 123. Aspirational list for the walking network

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

Egham High Street core walking zone

The walking zone extends around the commercial centre of Egham Town and includes a number of key destinations such as Strode's College and Egham Railway Station. The High Street is a typical town centre with shops, high flows of people walking and on-street parking, and it is closed to vehicular traffic between 10am and 4pm on weekdays and Saturdays. Within and around the commercial area there are several off-street parking spaces. Other sections of the core walking zone appear to be more residential.

North of the commercial centre of the town extends the A30 (Egham By-Pass) which records high traffic flows and speeds, since it operates as one of the main exits to/from the M25, by-passes Egham Town, and links to other towns in Surrey. The Egham By-Pass/High Street roundabout is a hot spot for pedestrian collisions. Egham By-Pass and Egham Hill were selected as supplementary walking corridor to the core walking zone as there is high demand for improvements.

Egham Town connects to Thorpe Industrial Estate via Vicarage Road. Background information showed that a high number of commuter trips are undertaken by car between Egham and Thorpe, and Vicarage Road was selected as a supplementary walking corridor, to improve the pedestrian facilities since today the traffic flows are high and the pedestrian environment seems hostile. This will also serve trips between the residential areas and the schools in Thorpe and Egham Town and Egham Railway Station.

During the early engagement workshops (workshop #1) local stakeholders noted the importance of an improved route to the leisure centre as an alternative alignment to Vicarage Road. The Manorcroft Road walking corridor was selected to link the railway station to Manorcroft School and the leisure centre via quiet streets in a residential area and off-street paths.

Figure 124. High Street - Egham

Figure 125. Signalised crossing on St Jude's Road - Englefield Green

Englefield Green core walking zone

The local commercial area in Englefield Green extends primarily along St Jude's Road. However there are also a few shops on Victoria Street. The core walking zone was designed around both commercial areas and serves the residential area, local schools and the university, which extends south of the core walking zone.

St Jude's Road records high traffic flows, and the pedestrian flows appear to be high too, due to the proximity of the area with the university and the schools. The footways are wide and there are signalised crossings at both ends of the commercial area to link to the shops.

During the early engagement workshops (workshop #1) local stakeholders noted the importance of improvements on Middle Hill since it is the most direct link between Englefield Green and Egham Town and is a bus route, and Brick Lane as the route links to the development site on Wick Road. Both roads were selected as supplementary walking corridors to the core walking zone.

Staines core walking zone

The commercial area in Staines includes a retail park and a supermarket close to Victoria Roundabout and Staines Bridge. The core walking zones extends along The Causeway, Thorpe Road and towards Staines-Upon-Thames via Staines Bridge. The area has an industrial character, with business parks, and the residential area is constrained by major A roads with high traffic flows, railway lines and the River Thames.

The roundabouts along The Causeway are pedestrian collision hotspots due to the poor visibility and the high traffic flows. The Causeway was selected as a supplementary walking corridor as it links the core walking zone with the business parks and with Egham Town via Vicarage Road.

Parallel to The Causeway along the River Thames extends an off-street path for pedestrians and cyclists that could be used as an alternative to the busy road. The path links to Runnymede Meadows and Egham Town via existing off-street paths parallel to Windsor Road. The route is partially isolated, requires resurfacing and is not accessible from Staines Bridge.

Finally, an additional walking corridor is proposed to link the core walking zone to the River Thames Scheme. The corridor via Chertsey Lane will essentially link the proposed development with Staines Upon-Thames, Thorpe, and Egham, via an extended leisure path. Chertsey Lane has significant traffic flows and is part of National Cycle Network (Route 4) with shared use facilities.

Thorpe Lea core walking zone

A local commercial area extends on Thorpe Lea Road and Pooley Green Road. North-east of the commercial area, and included in the core walking zone, there are two schools, and the rest of the area appears to be more residential.

Thorpe Lea Road has significant traffic flows, as it links Vicarage Road to Thorpe Industria Estate and Staines, and has frequent bus services. The pedestrian environment, especially closer to the schools is of good quality, however several pedestrian collisions have been recorded along the extent of the road.

The proposed core walking zone will directly link to the River Thames Scheme via Hythe Field Avenue.

Virginia Water core walking zone

Virginia Water's commercial area extends along a service road close to the railway station. The residential area is developed on private roads and cul-de-sacs north and south of Christchurch Road, hence the linear shape of the core walking zone.

Christchurch Road presents a significant number of short car trips according to PCT data.

Chertsey core walking zone

Chertsey extends between Staines Road, the M3, St Peter's Way, and the M25. The main commercial activity of the town is located on Guildford Street, which is a one-way street (southbound) with high pedestrian flows. On the southern end of Guildford Street there are a few local shops and the railway station with off-street parking. The core walking zone is a mix of land uses; commercial activity, residential, business park, green spaces and schools.

During the analysis of the background information the data showed demand for improvements on the A320, and a high number of short car trips between Chertsey and St Peter's Hospital. A supplementary walking corridor to the core walking zone to link to the hospital and the residential area south of the M25 is proposed to replace the short car trips. South of the M25 there are proposals for pedestrian and cycling improvements along A320 and the walking corridor will complement them.

North of Chertsey, a new channel as part of the River Thames scheme, is an opportunity to create a direct link between the town and the proposed leisure areas. The link will provide access to the proposed River Thames Scheme's paths for leisure trips and provide access to the commercial area and the railway station, so visitors of the site can use public transport as an alternative to private car. A walking corridor is proposed via Ferry Lane, which is a mix of off-street path, residential streets and private roads.

Additionally, during the stakeholder consultation engagement, a walking route between Chertsey and Thorpe was recommended. The proposed route links residential areas with schools to the town centre and continues as a leisure route via St Ann's Hill towards Thorpe.

Addlestone core walking zone

The commercial activity in Addlestone is located along Station Road. Pedestrians are mostly protected from vehicular traffic on wide footways and signalised crossings. However, a few collisions have been recorded on the road which may have been caused due to the high

traffic flows. The rest of the core walking zone appears to be more residential.

Station Road continues to the west towards Ottershaw via Church Road and Spinney Hill. According to the background information there is high demand for improvements on this corridor as they link to schools. On the approach of the M25 bridge close to Jubilee High School, Church Road is a collision hotspot.

East of the core walking zone extend the business parks where the PCT data showed a high number of short car trips between Addlestone and the business parks. A supplementary walking corridor is proposed to link Addlestone centre and the railway station to the business parks, which continues to Weybridge town centre via residential streets and a quiet road parallel to the busy Weybridge Road. The proposed corridor will serve both towns and link the two town centres.

Ottershaw core walking zone

Ottershaw extends around the Guildford Road/ Chobham Road roundabout. The two roads have high traffic flows creating a severance in the pedestrian movements in the area. The local commercial area is on Bousley Rise where PCT data shows a significant number of short car trips.

Woodham/ New Haw core walking zone

Woodham/New Haw is the southernmost settlement in Runnymede, extends parallel to Basingstoke Canal, and is directly connected to Sheerwater (Woking Borough) to the east. The local commercial area is in the centre of the settlement along The Broadway and Woodham Lane. It is a typical high street with high pedestrian flows and large amounts of car parking.

According to the PCT data most of the road network in the core walking zone shows a high number of short car trips. Woodham Lane to the east of the core walking zone links to a high workplace population density area and to Byfleet and New Haw Railway Station. A walking corridor is proposed to complement the core walking zone and link to the railway station to the east of the settlement via Woodham Lane and Byfleet Road, where there is high demand for improvements (according to Commonplace comments, and collision data). The corridor will also link the settlement to the development site on Byfleet Road.

An alternative route to Woodham Lane via off-street paths by Basingstoke canal was proposed by local stakeholders during the early engagement workshops (workshop #1). The corridor is more isolated than Woodham Lane but will provide a leisure route for residents and visitors.

Royal Holloway University core walking zone

As previously mentioned this core walking zone has a different character from the other 9 proposed core walking zones, as it is developed around the university's premises. Royal Holloway University is of high importance in the area with approximately 11,500 students and 2,500 employees, and produces a significant number of commuter flows in Runnymede. The premises are located south of Egham Hill and there is student accommodation north of Egham Hill which is linked to the south side with a footbridge. The core walking zone extends to Egham Town and Englefield Green, and covers short commuter trips to the local commercial areas, Egham Railway Station, and residential areas.

Egham Hill is the key corridor in the core walking zone, as the main entrances to the university and the student accommodation are located there. Egham Hill has high traffic flows, and the PCT shows a significant number of short car trips. There is high demand for improvements on Egham Hill (large amount of Commonplace comments along the corridor), since it is the most direct link between the university and Egham Town.

Figure 126. View of Egham Hill from footbridge

Multi-Criteria Assessment Framework

Once the aspirational walking network has been identified, an assessment using both qualitative and quantitative criteria was carried out 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 waking 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 6 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 6 on the following pages.

Table 6. Walking network MCAF criteria

Category	Criterion	Core Walking Zone Rating Rates	Walking Corridor Rating Rates
Access (Weighting 25%)	Links to key trip attractors (parks, Hospitals) (Weighting: 2-Medium)	3: >=6 green spaces; 2: 3-5 green spaces; 1: <3 green spaces	3: >2 green spaces and a functional site; 2: 1-2 green spaces; 1: <1 green spaces
	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: >10 bus stops; 2: 5 - 10 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: >14000 residents; 2: 7000 - 14000 residents; 1: <7000 residents	3: >5000 residents; 2: 2500 - 5000 residents; 1: <2500 residents
	Total Workplace Population (Weighting: 2-Medium)	3: >10000 residents; 2: 5000 - 10000 residents; 1: <5000 residents	3: >300 residents; 2: 150 - 300 residents; 1: <150 residents

Category	Criterion	Core Walking Zone Rating Rates	Walking Corridor 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: >4 collisions; 2: 2 - 4 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: >20 comments; 2: 10 - 20 comments; 1: <10 comments	3: >20 comments; 2: 10 - 20 comments; 1: <10 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 assessment[1]. The top three core walking zones with their supplementary walking corridors, presented in Figure 127, are:

1. Egham core walking zone

6. Chertsey core walking zone

7. Addlestone core walking zone

Once the corridors were identified they were assessed using the DfT's Walking Route Assessment Tool (WRAT[2]). 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 3: Walking Route Audit Tool (WRAT).

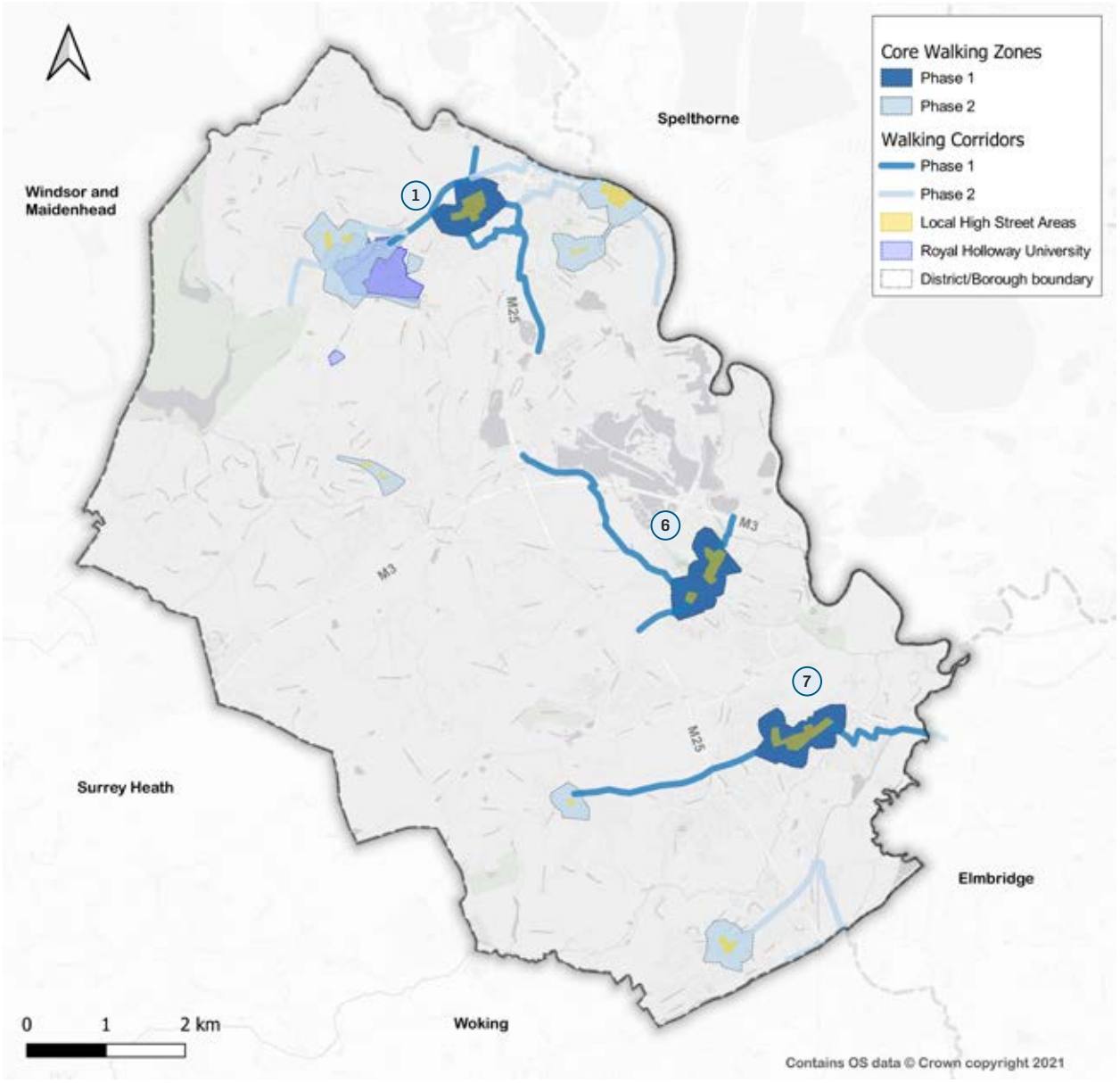


Figure 127. Phase 1 & 2 Core Walking Zones and Walking Corridors

1 Two core walking zones scored similarly in the MCAF: Addlestone: 76%, Royal Holloway University: 77%. Both core walking zones were assessed on site using the Walking Route Assessment Tool. Addlestone CWZ scored 60% in total and Royal Holloway University scored 45% in total. Following the site visits and the assessment, it is proposed to include Addlestone CWZ in Phase 1, as there is more benefit in improving the facilities for pedestrians and there is higher potential for infrastructures of high quality. Improvements to the access to the university will be proposed through Egham High Street core walking zone and Cycle Corridor 4 - A30.

2 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.

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 Runnymede 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/ Other relevant documents considered were DfT Inclusive Mobility and TfL Streetscape Guidance.

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 the urban and rural environment. The high-level concepts developed in the LCWIP should be suitable for the setting, and design guidance should be selected 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.

Figure 128. Guildford Street in Chertsey

Guiding Principles

To support the desired design outcomes, the walking improvements follow several general principles, which can be applied throughout Runnymede 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. Vehicles 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.

Pedestrian crossings - Appropriate crossing facilities should be provided along pedestrian desire lines to maintain the continuity of a walking route, improve safety, and reduce severance. The type of facility will depend on the context of the crossing. At a minimum, crossings should have appropriate tactile paving and dropped kerbs. Additional provisions for uncontrolled crossings could include raised tables, 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.

Way finding - 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. Way finding 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 way finding 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

Way finding 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 included 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).

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. *Source: Google Street View*

Pedestrian priority path through car park
Provide pedestrian priority routes through car parks. The routes will follow the more direct links to the exits of the car park and provide protection with the use of mini zebras, from vehicular traffic.

Example Design Tools - Walking

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.

Off-street path
Off Street path – Provide paths protected from vehicular traffic mainly through parks or green areas. Along the sections, in order to improve personal safety and create a more comfortable walking environment, it is important to consider lighting whilst preserving the natural environment.

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 design[1].

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 for 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.

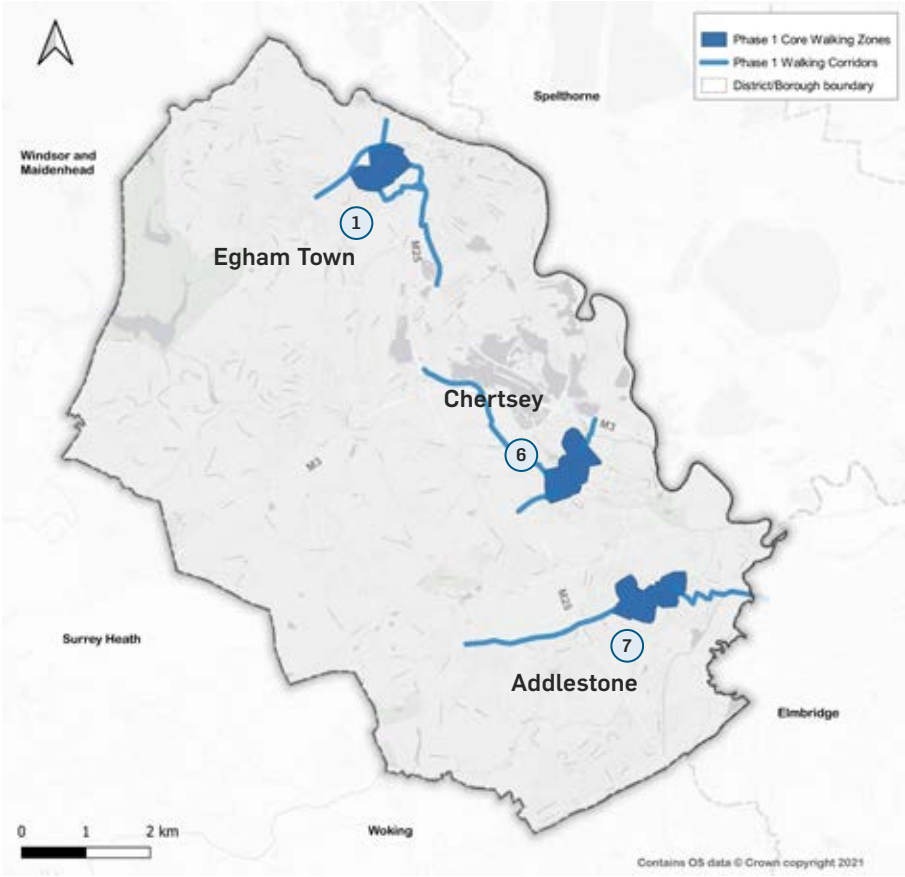


Figure 129. Phase 1 Core Walking Zones and Walking Corridors

Core Walking Zone 1: Egham

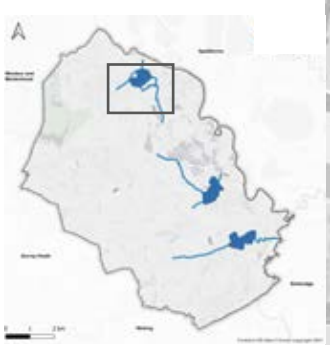


Figure 131. Location Map

Legend

- Core Walking Zone
- Proposed corridor
- Zebra crossing
- Parallel crossing
- Toucan crossing
- Raised junction
- Side road treatment
- Footway widening
- Footway resurfacing (Public realm)
- New footpath
- Cycle proposals
- Changes affecting on-street parking
- Proposed cycle route
- Railway Station
- Bus Stop

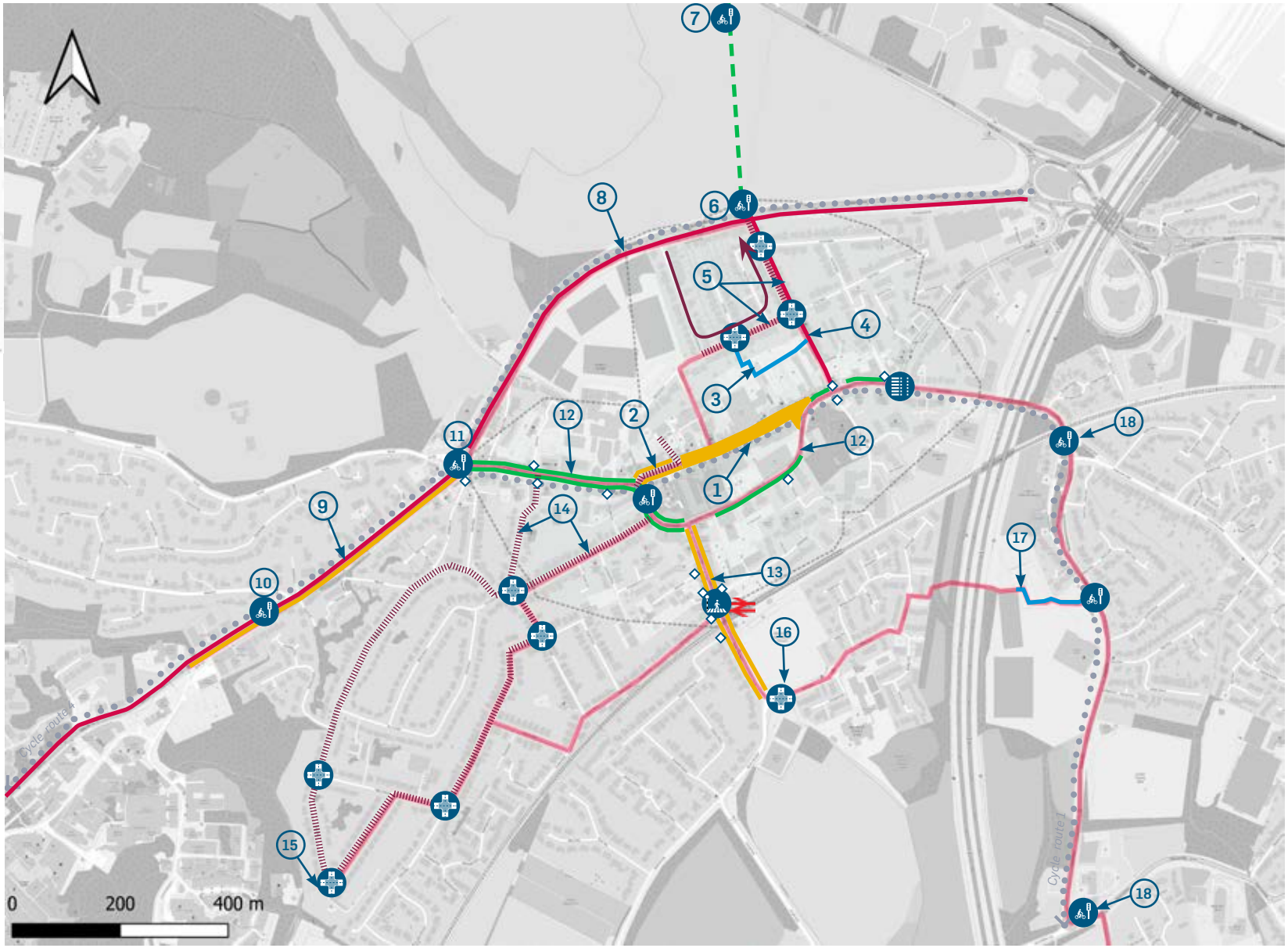


Figure 130. Core Walking Zone 1: Egham Town

Key Improvements:

1. High Street to be pedestrian and cycle priority street between Wetton Place and Church Road. Public realm proposals to improve pedestrian environment. Raise the carriageway to footway level to provide a more flexible space for all users, and use different materials to delineate space for different users. Retain one-way direction of the road and propose a contra flow cycle lane for the permeability of the cycle network. Review on-street parking needs and indicate disabled barking bays, loading areas (with time restrictions) and pick-up/ drop-off areas. Added seating, planting and sheltered areas to be reviewed in the detailed design.
   <u>Long term aspiration:</u> full pedestrianisation of the High Street at all times and days. Cyclists' movements to be permitted on both directions at a low speed. Emergency vehicles and freight vehicles with limited capacity to be permitted. Traffic modelling study to be undertaken to estimate the impact of pedestrianisation in the area.
2. Extend public realm to the west (up to Church Road) and link the proposals with Magna Square development. Allow vehicle access to the car park and for local residents through parking permit provision. Restrict on-street parking.

Case Study:
Pedestrian and cycle priority street and public realm improvements on East Street in Horsham, London UK. Source: Urb-i, Google Street View

3. New pedestrian route through Hummer Road Car Park to provide access between Town Path and Hummer Road, and Town Path and Crown Street.
4. Reduce the speed limit to 20mph and propose a contra flow cycle facility on Hummer Road.

Hummer Road Car Park
No pedestrian provision on the Hummer Road Car Park. Mini zebras are provided at locations but there are no paths thought the car park to link to Town Path, and the exits

5. Review on-street parking needs on Hummer Road and Crown Street. Extend double yellow lines and indicate parking bays on both sides of the road that create a chicane to lower traffic speeds. Propose footway buildouts to improve pedestrians' crossings. Propose raised junctions at key locations on Crown Street and Hummer Road.
   <u>Alternative proposal:</u> create a one-way system along Runnymede Road - Crown Street - Hummer Road (counter-clowckwise direction) to reallocate road space for people walking. Traffic modelling study to estimate the impact of the proposed one-way system will be undertaken in the next stages of design.

6 Toucan crossing on Egham By-Pass at the end of Hummer Road to link the town centre to Runnymede Meadows. Introduce rumble strips with 'antiskid carriageway surface' and flushing amber traffic lights on the Egham By-Pass on the approach to the crossing. Speed limit reduction to improve safety along Egham By-Pass to be reviewed in the next stages of design following traffic speed study.

Top: *Existing uncontrolled crossing on Egham By-Pass.*
Bottom: *Existing uncontrolled crossing with a refuge island on Windsor Road*

7 Propose toucan crossing on Windsor Road to improve the access to the River Thames path. Improve access to the crossing through Runnymede Meadows through widening and resurfacing of the existing path (subject to environmental surveys).

8 Egham By-Pass: Propose two-way cycle track on the south side and retain footway of 2m along the extent of the section *(See cycle proposals Route 4)*

9 Egham Hill: Propose segregated cycle facilities and widen the footways on both sides of the road where feasible. Reduce carriageway width and remove verge and overgrown vegetation. Removal of hatched median and turning lanes to provide more space for pedestrian and cycle facilities, to be reviewed in the next stages of design, following a traffic modelling study to estimate the impact of the removal. Proposed raised tables with parallel crossings at side roads to give priority to people walking and cycling.

10 Upgrade existing puffin crossing between Middle Hill and Piggery Gate at Royal Holloway University to a toucan crossing to allow cyclists to safely cross the carriageway.

Case study:
'Cycle Optimised Protected Signals' (CYCLOPS) junction at Royce Road, in Hulme, south Manchester. Source: Google street view

11 Introduce a signalised Cyclops junction at Egham By-Pass/High Street/Egham Hill/Tite Hill roundabout to reduce traffic speeds and allow safe crossings for pedestrians and cyclists in all directions. Traffic modelling study on the impact of the added crossings to be undertaken in the next stages of design.

12 High Street - Church Road: Widen footways on both sides of the road by reducing the carriageway width. Removal of turning lanes to provide more space for the pedestrian facilities, to be reviewed in the next stages of design, following a traffic modelling study to estimate the impact of the removal. Propose recessed parking, at the footway level, on both sides of the road (where the remaining footway width will be >2.0m). Provide disabled parking close to High Street for people with mobility or sensory impairments to have access to the shopping centre. Propose raised tables at side roads. Reduce speed limit to 20mph *(See cycle proposals Route 1a).*

13 Extend public realm to the railway station (resurface footways and propose raised tables at side roads) to improve access to the station. Add a zebra crossing north of the railway lines to provide safe access to the station. Exact location of the zebra crossing on the pedestrian desire line to be confirmed in the next stages of design following discussions with Network Rail and visibility checks.

Egham Railway Station:
Currently there is no provision for pedestrians to cross Station Road at the exit of the railway station

14 Propose 20mph zone at the residential area west of the High Street. Propose raised junctions at key locations to improve safety for residents and university students walking to Egham Town Centre and Egham Railway Station. Review on-street parking needs to propose a permit scheme and targeted parking restrictions to improve pedestrian environment.

15 Improve way finding to Spring Rise gate at Royal Holloway University. Discussions with University to improve lighting and access for cycles to the University premises.

16 Propose raised junction on Wesley Dr on the approach to Manocroft Primary School. Add raised tables on the uncontrolled crossing on Wesley Dr on the approach to Wesley Dr/Manorcrofts Road roundabout.

17 Resurface the M25 underpass and improve lighting. Discussions with Leisure Centre to provide new pedestrian and cycle route through the Leisure Centre's car park to give access to the proposed toucan crossing on Vicarage Road and the proposed cycle route. *(See cycle proposals Route 1a).*

18 Vicarage Road: Propose toucan crossings at key locations following the pedestrian and cyclists' desire line. Exact location of the crossing and the opportunity for a signalised crossing to be reviewed in the next stages of design, following visibility checks and traffic modelling studies.

Path to Spring Rise Gate:
Top: on the Runnymede side is poorly lit.
Bottom: on University premises is well lit and overlooked with CCTV

Additional proposals throughout the town:

A Add way finding along the walking routes. Provide information on key trip attractors, such as, Egham Railway Station, High Street, Royal Holloway University, car parks, Leisure Centre etc.

B Opportunity for 20mph zone in Egham Town to be reviewed in the next stages of design following the emerging LTP4 policy.

Core Walking Zone 6: Chertsey

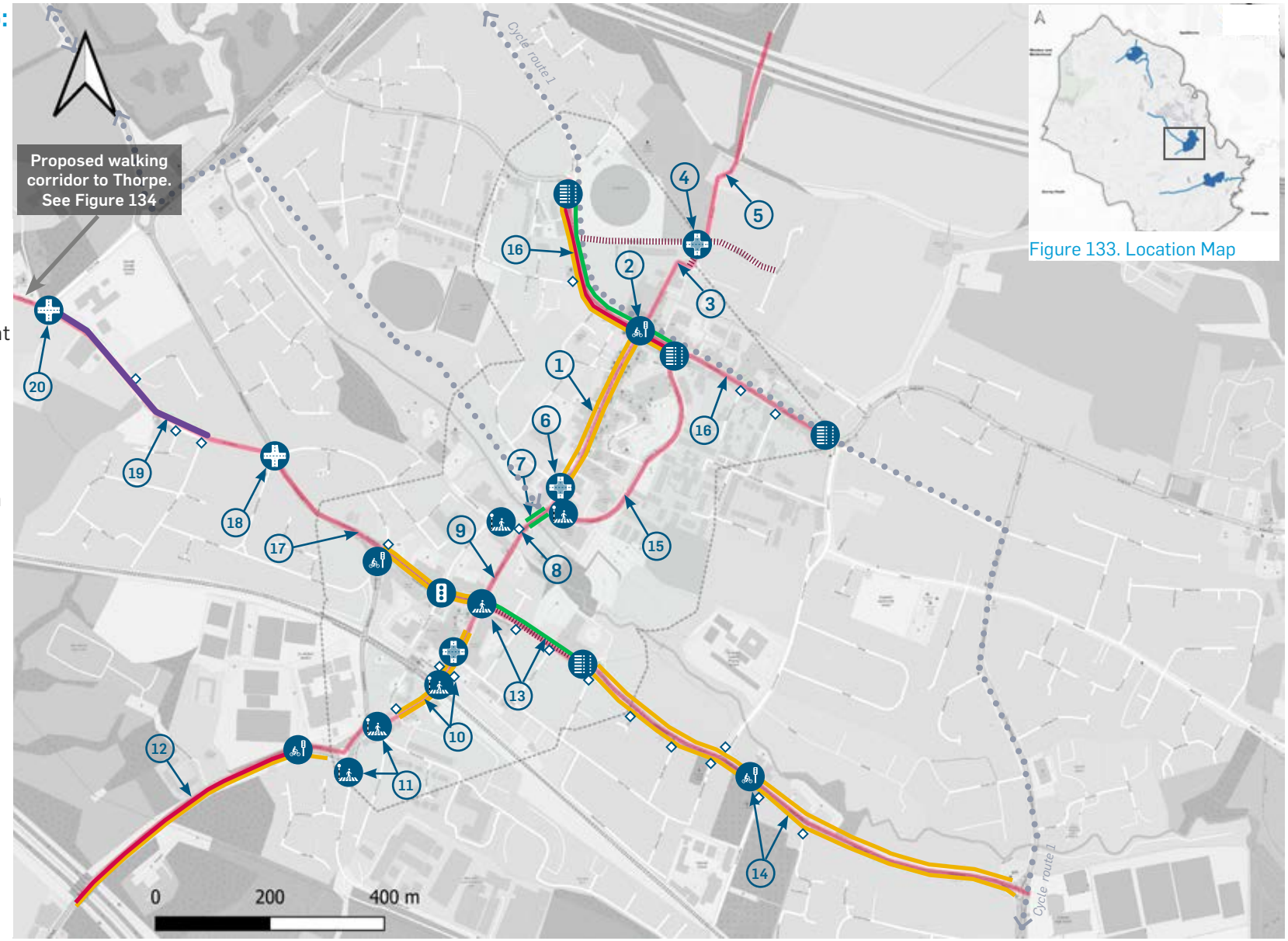


Figure 132. Core Walking Zone 6: Chertsey

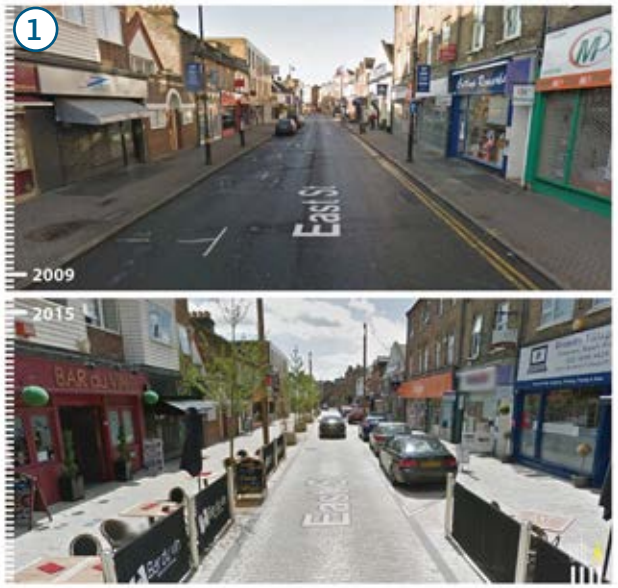
Figure 133. Location Map

Key Improvements:

1. Guildford Street to be pedestrian and cycle priority street between London Street and Riversdells Close. Raise the carriageway to footway level to provide a more flexible space for all users, and use different materials to delineate space for different users. Retain the one-way direction of the road and propose a contra flow cycle lane for the permeability of the cycle network. Review on-street parking needs and indicate disabled barking bays, loading areas (with time restrictions) and pick-up/ drop-off areas. Added seating, planting and sheltered areas to be reviewed in the detailed design stage.
   <u>Long term aspiration:</u> full pedestrianisation of Guildford Street at all times and days with public realm proposals to improve pedestrian environment. Cyclists' movements to be permitted on both directions at a low speed. Emergency vehicles and freight vehicles with limited capacity to be permitted.

2. Propose a toucan crossing on London Street on the approach to Guildford Street, to link to Ferry Lane path.

3. Investigate the opportunity to widen the path along St Peter's Church and permit cyclists' movements on the path. Propose a buildout at the exit of Ferry Lane path, add dropped kerbs with tactile paving and introduce double yellow lines to improve access to the path.



Case Study:
Public realm improvements on East Street in Bromley, London UK. Source: Urb-i, Google Street View

4. Raise Ferry Lane/Abbey Gardens/Colonel's Lane junction. Review on-street parking needs to propose a permit scheme and targeted parking restrictions to improve pedestrian environment in the area north of London Street.

5. Discussions with land owners to improve access to Ferry Lane for people walking and cycling.

6. Raise Guildford Street/Riversdells Close junction to reduce traffic speeds and to improve the access for people walking and cycling.

Top: *Ferry Lane path - opportunity for widening by removing the fence on St Peter's Church.*
Middle: *Exit from Ferry Lane path is blocked by parked vehicles.*
Bottom: *Gate at Ferry Lane to private land that allows access to cyclists and pedestrians*

7. Reduce the carriageway width to widen the footways on Steven's bridge. Retain the raised table on the approach to the access points to the green area and the bollards on the footway with wide gaps to improve accessibility. Review the need for two-lane entry at the roundabout to reduce the crossing distance for pedestrians and the opportunity to widen the footway.

8. Guildford Street/Curfew Bell Road roundabout: add zebra crossing at the western arm and a raised table at the northern arm with reduced radii on the approach to the roundabout.

9. Review needs of on-street parking on Guildford Street to convert to disabled parking, loading and pick up/drop off only (20min maximum stay) and raise parking bays to footway level. Retain parking only at locations where the footway width is >2m.

10. Extend public realm south of the railway lines. Raise Guildford Street/Station Road junction to footway level, add a zebra crossing north of the railway lines to improve access to the railway station (exact location of the zebra crossing to be confirmed in the next stages of design, at the pedestrian desire line, following discussions with Network Rail and visibility checks), and propose raised tables at all side roads with reduced radii.

Chertsey Railway Station
Poor pedestrian and cyclist provision on the approach to the railway station.

11. Add zebra crossings on Guildford Road on the approach to Bell Bridge Road and on The Knoll.

12. Extend the "A320 North of Woking improvements" proposals east of the M25 underpass: propose two-way cycle track and resurface the footway on the south side of Guildford Road by reducing the carriageway width and removing the overgrown vegetation. Add a toucan crossing on Guildford Road west of the roundabout for pedestrians and cyclists to access the proposed facilities.

13. Pycroft Road - Eastworth Road: Improve the pedestrian crossings at the traffic signals (reduce waiting times and increase crossing times). Widen the northern footway between Guildford Road and Victory Road and introduce single yellow line road markings on both sides of the road at the section with time restrictions. Upgrade uncontrolled crossing at the roundabout to parallel crossing and improve access to green area.

14. Eastworth Road: Resurface the footways east of Victory Road roundabout and indicate parking bays on the carriageway. Propose raised tables at all side roads with reduced radii.

15. Heriot Road: add raised table at all side roads. Add seating and planting.

16. London Street: Propose cycle facilities by removing the on-street parking on one side of the road. Reduce carriageway width to widen the footways where feasible. Resurface the footways on both sides of the road and propose recessed parking with footway buildouts on one side of the road at locations where the remaining footway width is >2m. Reduce the speed limit to 20mph introducing (horizontal deflection) traffic calming measures following vehicle tracking checks in the next stages of design. Extend the public realm east of Heriot Road up to Bridge Road and add a parallel crossing at the end of the section. Propose raised tables at all side roads with reduced radii. *(Mixed traffic road: See cycle proposals Route 1).*

London Street
Narrow footways and frequent on-street parking

17 A320: Extend the public realm west of Guildford Street up to the A320 / Bell Bridge Road roundabout. Review the existing pedestrian crossings at the A320 / Abbots Way junction for opportunity to reduce the stagger. Introduce a toucan crossing at Bell Bridge Road south of the roundabout to improve access to the residential area south of the A320.

A320
Pedestrian crossing at A320 / Abbots Way junction with long stagger. Source: Google Street View

18 Improvements to the A320 / Cowley Avenue/Lasswade Road / Pyrcroft Road junction by widening the bellmouths at the side roads and removing the second southbound lane at Cowley Avenue to widen the footways, reducing the crossing distance for pedestrians and reducing the traffic speeds at the turning movements. Investigate the option to restrict the right turn exit from Lasswade Road to Pyrcroft Road to reduce the conflicts between the vehicles' movements.

19 Pyrcroft Road: Convert section between St Ann's Road and Vincent Road to a pedestrian and cycle priority street with restrictions on the access to residents only and access to the school for the employers. Introduce traffic calming improvements with horizontal deflection to reduce the carriageway width to 2.8m and allow pedestrian/cycle bypasses. Add plantings to improve the attractiveness of the link. Side road treatments including additional measures such as: tactile paving, reduced radii at the side roads to widen the footways on the approaches, reduce the traffic speeds and reduce the crossing distance.

20 Convert Pyrcroft Road/ St Ann's Road junction to a priority junction for opportunity to widen the footways and introduce pedestrian crossings at all roads.

Pyrcroft Road
Poor pedestrian provision at the access to Pyrcroft Grange Primary School. Source: Google Street View

Additional proposals throughout the town:

A Add way finding along the routes. Provide information on key trip attractors, such as, Chertsey Railway Station, Guildford Street, River Thames proposed routes, pedestrian routes through green areas, car parks etc.

B Opportunity for 20mph zone in Chertsey to be reviewed in the next stages of design following the adoption of LTP4 policy.

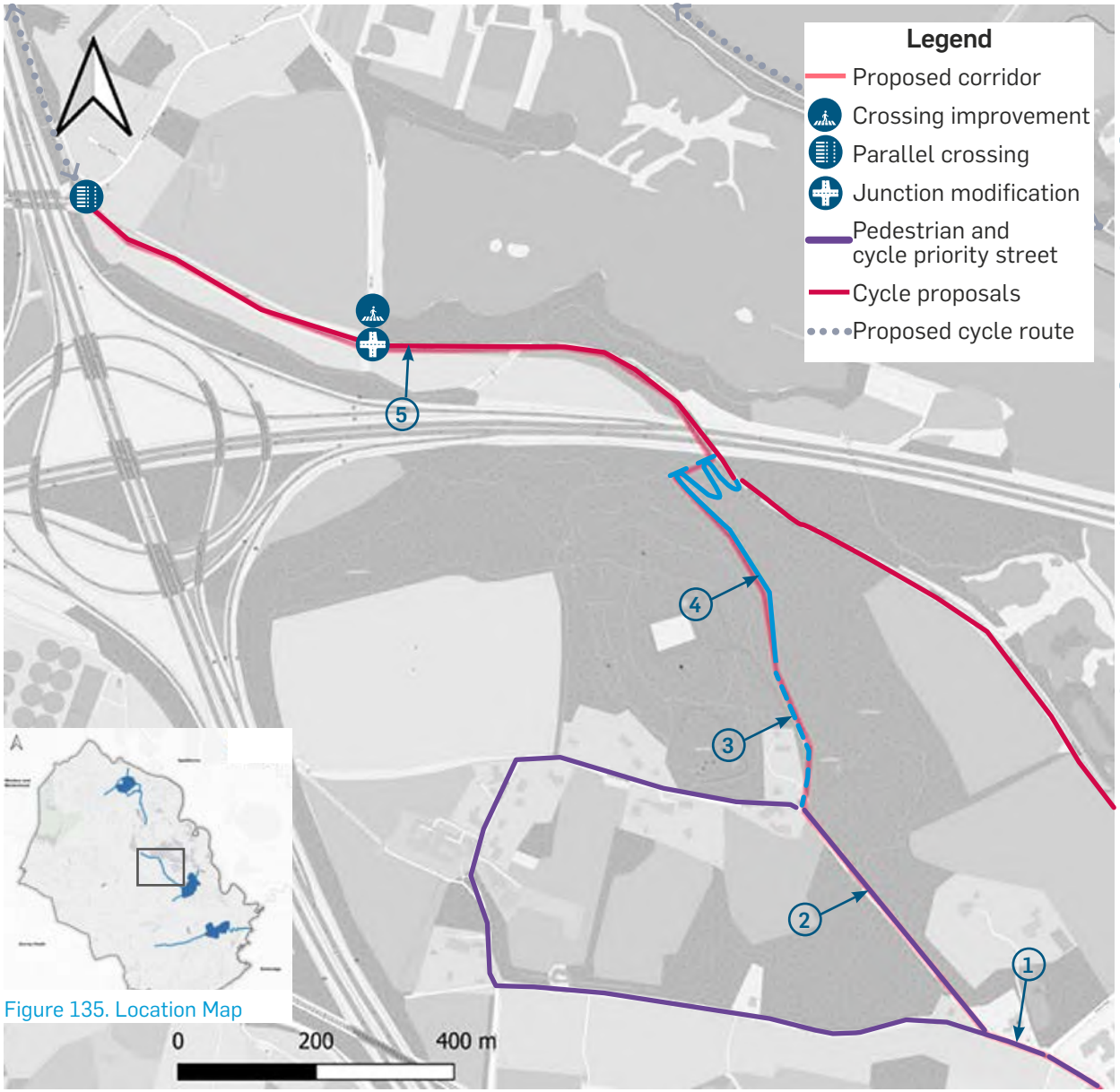


Figure 135. Location Map

Figure 134. Walking route between Chertsey and Thorpe Lea

Walking corridor between Chertsey and Thorpe[1]

Proposed Improvements

1. Ruxbury Road: Propose as pedestrian and cycle priority street with access restrictions to residents only and added traffic calming measures.
2. St Ann's Hill Road: Propose as pedestrian and cycle priority street with reduced speed limit to 10mph. Introduce lighting (subject to environmental surveys).
3. St Ann's Hill nature trail: Propose interventions to the existing path to improve accessibility including resurfacing and added lighting (subject to environmental surveys).
4. Propose a new path that follows the contour lines to link to Thorpe By Pass. At northern end provide two alternative paths: steps along the existing bridleway and a longer step-free with route smooth gradient that follows the contour lines.
5. Propose pedestrian and cycle route along Thorpe By Pass. Remove the VRS on the M3 bridge, remove the verge and trim vegetation to propose a cycle track and footpath or a shared use path on the south side of Thorpe By Pass with a 0.5m (minimum width) buffer where feasible. Junction improvements at Thorpe By Pass / Mill Lane junction to include removal of the exit and entry lanes to Mill Lane, propose new footways and new uncontrolled crossings with a refuge island on Thorpe By Pass. Propose parallel crossings at Thorpe By Pass/ Mill Lane/ Green Road roundabout on the east and south arms. Propose reduction of speed limit to 40mph.

1 Proposed route is subject to demand and environmental surveys for the new paths through St Ann's Hill.

Core Walking Zone 7: Addlestone

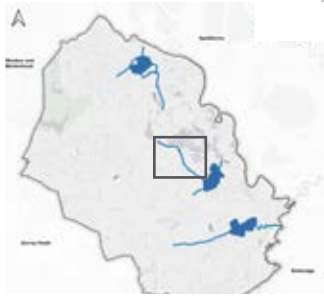


Figure 137. Location Map

Legend

- Core Walking Zone
- Proposed corridor
- Crossing improvement
- Zebra crossing
- Parallel crossing
- Raised junction
- Changes affecting vehicular traffic
- Side road treatment
- Footway widening
- Footway resurfacing (Public realm)
- New footpath
- Changes affecting on-street parking
- Proposed Cycle Route
- Railway Station
- Bus Stop

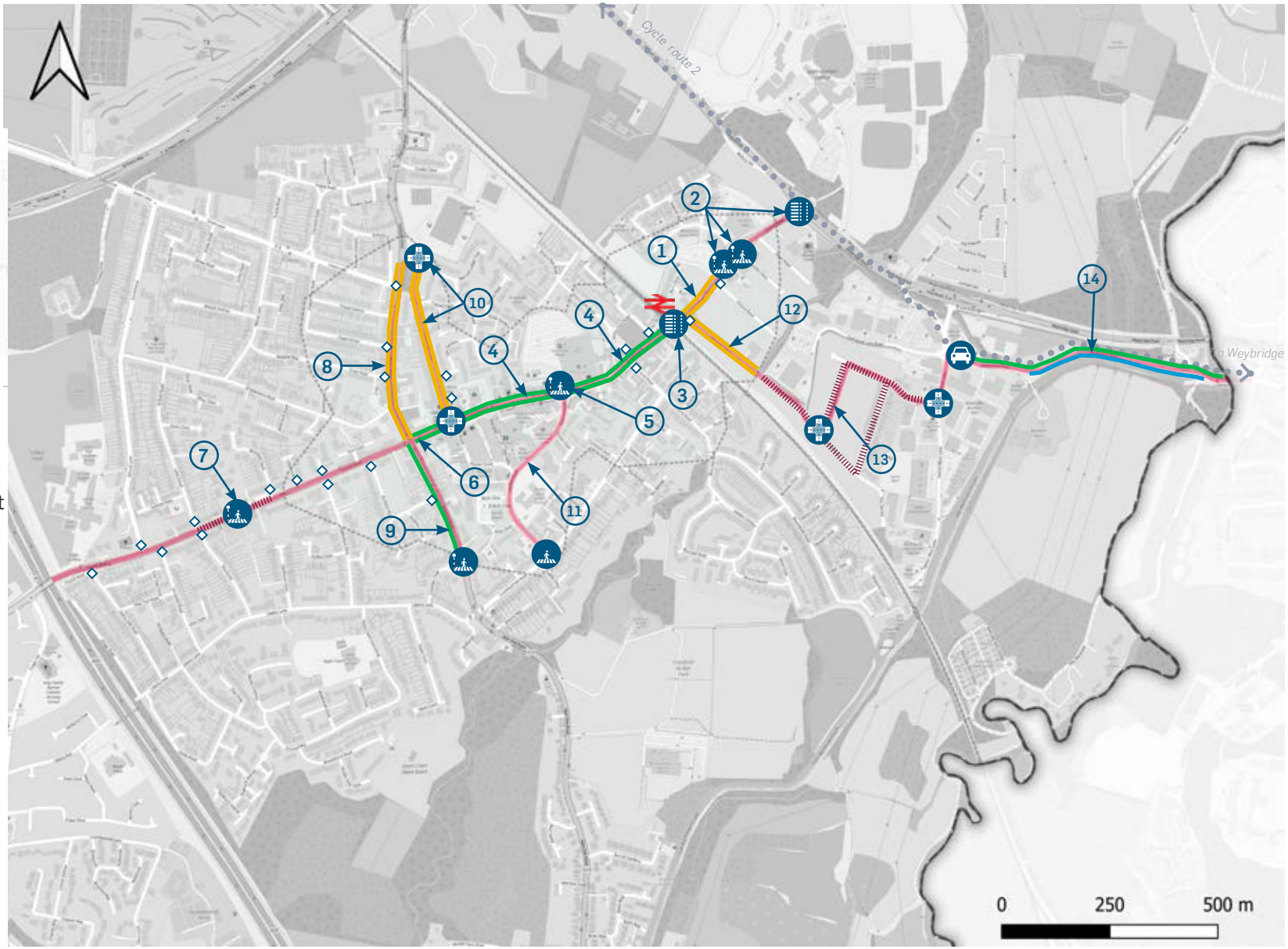


Figure 136. Core Walking Zone 7: Addlestone

Key Improvements:

1. Extend public realm on Station Road east of the railway lines up to Victoria Road.
2. Add zebra crossings on the Station Road/ Hawker Dr/Garden Cl roundabout on the southern arm (Station Road) and eastern arm (Garden Cl), and a parallel crossing on Weybridge Road/ Station Road roundabout on the southern arm (Station Road)
3. Add parallel crossing at the exit of the railway station north of the railway lines. Exact location of the crossing to be confirmed in the next stage of design, at the pedestrian/cyclists' desire line, following discussions with Network Rail and visibility checks.
4. Widen the footways on Station Road between the railway station and Brighton Road by reducing the carriageway width. Propose a continuous carriageway width of 6.6m along the section for vehicles to retain low speeds throughout the commercial area. Fill in the laybys at the bus stops and remove the guardrail. Review on-street parking needs and retain parking at locations with remaining available footway width of >2m. Raise the parking bays to the footway level and use different materials and bollards to delineate space for different users. Add raised tables at all side roads and on controlled crossings along Station Road. Reduce the speed limit to 20mph with introduced traffic calming measures.

Addlestone Railway Station
Poor pedestrian and cyclist provision on the approach to the station. The existing railway bridge is not accessible

5. On Station Road/Garfield Road roundabout add zebra crossings on the northern arm (access to the car park) and on the southern arm (Garfield Road).
6. Station Road/Church Road/Brighton Road junction capacity improvements to incorporate improved active travel provision within the design for the new junction.
7. Church Road: Add raised tables at all side roads. Add a pedestrian crossing (zebra or puffin - traffic speeds' study in the next stage of design will determine the type of crossing) at Birchfield Close bus stops to improve access to the local shops. Fill in the lay by at the bus stops and introduce double yellow lines between Lime Grove and Birchfield Close.

Church Road:
On-street parking reduces visibility on the approach to the local shops and parking on the footway restricts pedestrian movements. Source: Google Street View

8. High Street (A318): propose raised tables at all side roads to provide a continuous pedestrian environment. Resurface the footways at the extent of the section. Opportunity for new pedestrian crossings to be reviewed following investigations on pedestrian desire lines in the next stage of design.
9. Brighton Road: Widen the western footway by reducing the carriageway width. Remove parking from the footway and introduce parking bays on the carriageway on both sides of the road to create a chicane to reduce traffic speeds. Add a zebra crossing on the approach of Caselden Cl footpaths.

10 Crouch Oak Lane: resurface the footways and replace speed cushions with raised tables for a continuous pedestrian environment. Propose raised tables at all side roads with reduced radii. Remove right turn pocket on Station Road to reduce traffic flows on Crouch Oak Lane. Raise Station Road/Crouch Oak Lane and Crouch Oak Lane/Princess Mary Road junctions to improve access to Victory Park. Propose an additional refuge island on Station Road to provide uncontrolled crossings to Crouch Oak Lane.

11 Garfield Road: Add raised tables on all side roads and widen uncontrolled crossings at the junction with Crockford Park Road. Reduce speed limit to 20mph with introduced traffic calming measures.

12 Extend Station Road's public realm to Alexandra Road. Improve accessibility at the modal filter for pedestrians and cyclists and enforce parking restrictions on the approach to the modal filter.

Alexandra Road
Poor pedestrian provision on Alexandra Road, and limited visibility due to extensive on-street parking.

Top: *Existing modal filter on Alexandra Road. The dropped kerb is narrow and the footways are restricted by on-street parking.*
Bottom: *Case Study: Modal filter on Warner Road, Walthamstow, London, with wide dropped kerbs, cycle parking, and planting.*
Source: Google Street View

13 Shakespeare Road - Wordworth Road - Byron Road: Raise junctions to the footway level at key locations and review on-street parking needs to propose targeted parking restrictions to improve pedestrian environment.

14 Addlestone Road: Pedestrian and cyclist priority street. Widen the northern footway by reducing the carriageway to the minimum. Propose widening and resurfacing the off-street path by River Wey (south of Addlestone Road) and improving accessibility to the path. *(See cycle proposals Route 2).*

Additional proposals throughout the town:

A Add way finding along the routes. Provide information on key trip attractors, such as, Addlestone Railway Station, Victory Park, pedestrian routes through green areas, car parks, schools etc.

B *Opportunity for a 20mph zone south of and including Station Road and east of and including Brighton Road* to be reviewed in the next stages of design following the adoption of LTP4 policy.

Addlestone Road - Town Lock
Opportunity for new accessible path by Wey River to link Addlestone and Weybridge.

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 7 presents the total scores of each category in the existing situation and Table 8 the score if the interventions were implemented[1], 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.

Table 7. WRAT results - Existing situation

	Egham High Street	Chetsey	Addlestone
Attractiveness	57%	65%	65%
Comfort	56%	55%	54%
Directness	63%	68%	69%
Safety	37%	57%	70%
Coherence	36%	43%	33%
Total	**54%**	**59%**	**60%**

Table 8. WRAT results - Proposed interventions

	Egham High Street		Chetsey		Addlestone	
	Score	*Improvement from existing*	*Score*	*Improvement from existing*	*Score*	*Improvement from existing*
Attractiveness	66%	9%	74%	9%	78%	13%
Comfort	77%	21%	78%	23%	79%	25%
Directness	82%	19%	82%	14%	92%	23%
Safety	55%	18%	63%	5%	73%	3%
Coherence	80%	45%	72%	29%	72%	39%
Total	**74%**	**20%**	**76%**	**17%**	**81%**	**21%**

Coherence of the network seems to have the greatest improvement with the added priotity 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.

1 No aspirational proposals were included in the WRAT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7. Route Prioritisation and Costings

Introduction

Route Prioritisation

Indicative Costs Estimates

Introduction

This section summarises the prioritisation of the selected cycle routes and core walking zones and sets out indicative scheme costs for each of the cycle and walking 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 RBC select which routes should be developed first. At this stage of the assessment, the route prioritisation is independent of cost.

Route Prioritisation

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 "Multi-Criteria Assessment Framework" on page 129129 for core walking zones). 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 four 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 cycle corridors and core walking zones will be classified into two categories (Medium Term and Long Term) to suggest an order for implementation of the remaining 14 cycle corridors and 7 core walking zones, that will have the greatest benefit for users.

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 did not seem to have an immediate benefit for the users, had a lower propensity for cycle commuter trips, or significant implementation constraints. 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, and the time scale for their implementation is longer (20 year plan).

Table 9. Prioritisation table for the aspirational list - Cycling

Cycle Corridor	Priority / Timescale
11. Thorpe Lea Road	High/Short Term
4. A30	High/Short Term
2. Weybridge Road	High/Short Term
5. Guildford Road[1]	High/Short Term
1. Thorpe Road/Chertsey to Egham	High/Short Term
12. St. Ann's Road[2]	High/Short Term
7. New Haw Road	Medium/Mid Term
14. Spinny Hill / Church Road	Medium/Mid Term
3. Chertsey Bridge	Medium/Mid Term
6. Woodham Lane	Medium/Mid Term
8. Norlands Lane / Christchurch Road	Medium/Mid Term
18. Egham/Station Road	Medium/Mid Term
9. Green Lane / Hardwick Lane	Low/Long Term
10. Staines Road / A320	Low/Long Term
13. St. Jude's Road	Low/Long Term
16. Windsor Road	Low/Long Term
19. Stroude Road / Longcross	Low/Long Term
17. Longcross Road / Holloway Hill	Low/Long Term
15. Middle Hill	Low/Long Term

1 Guildford Road is of high priority and cycle facilities have been proposed via the A320 study

2 St Ann's Road has been integrated to Corridor 1 as part of Monks' Walk alignment to link to Chertsey Town Centre

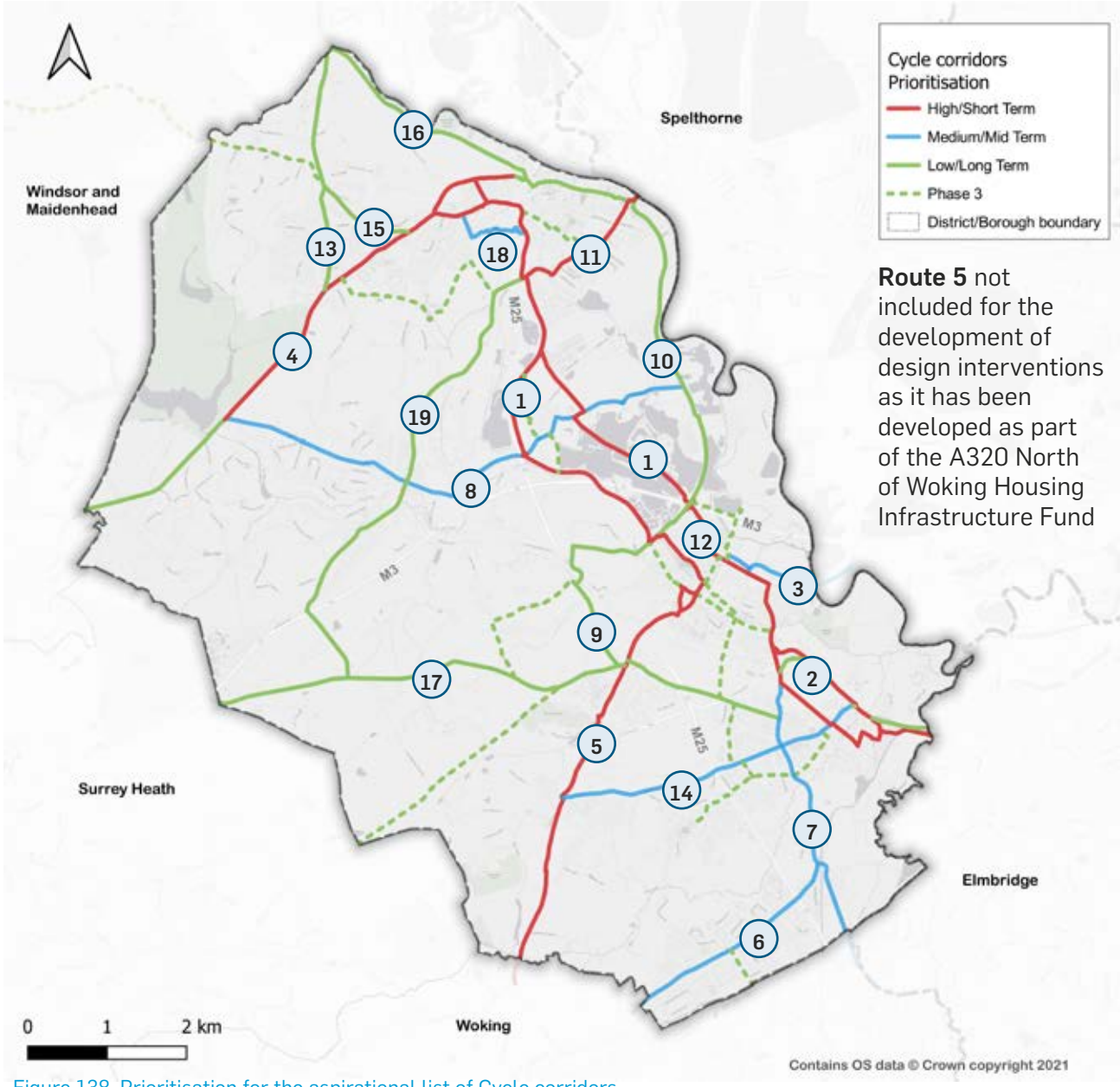

Figure 138. Prioritisation for the aspirational list of Cycle corridors

Table 10. Prioritisation table for the aspirational list of Core Walking Zones

Core Walking Zone	Priority / Timescale
1. Egham High Street CWZ	High/Short Term
6. Chertsey CWZ	High/Short Term
7. Addlestone CWZ	High/Short Term
10. Royal Holloway University CWZ	Medium/Med. Term
3. Staines CWZ	Medium/Med. Term
4. Thorpe Lea CWZ	Medium/Med. Term
2. Englefield Green CWZ	Medium/Med. Term
9. Woodham CWZ	Low/Long Term
8. Ottershaw CWZ	Low/Long Term
5. Virginia Water CWZ	Low/Long Term

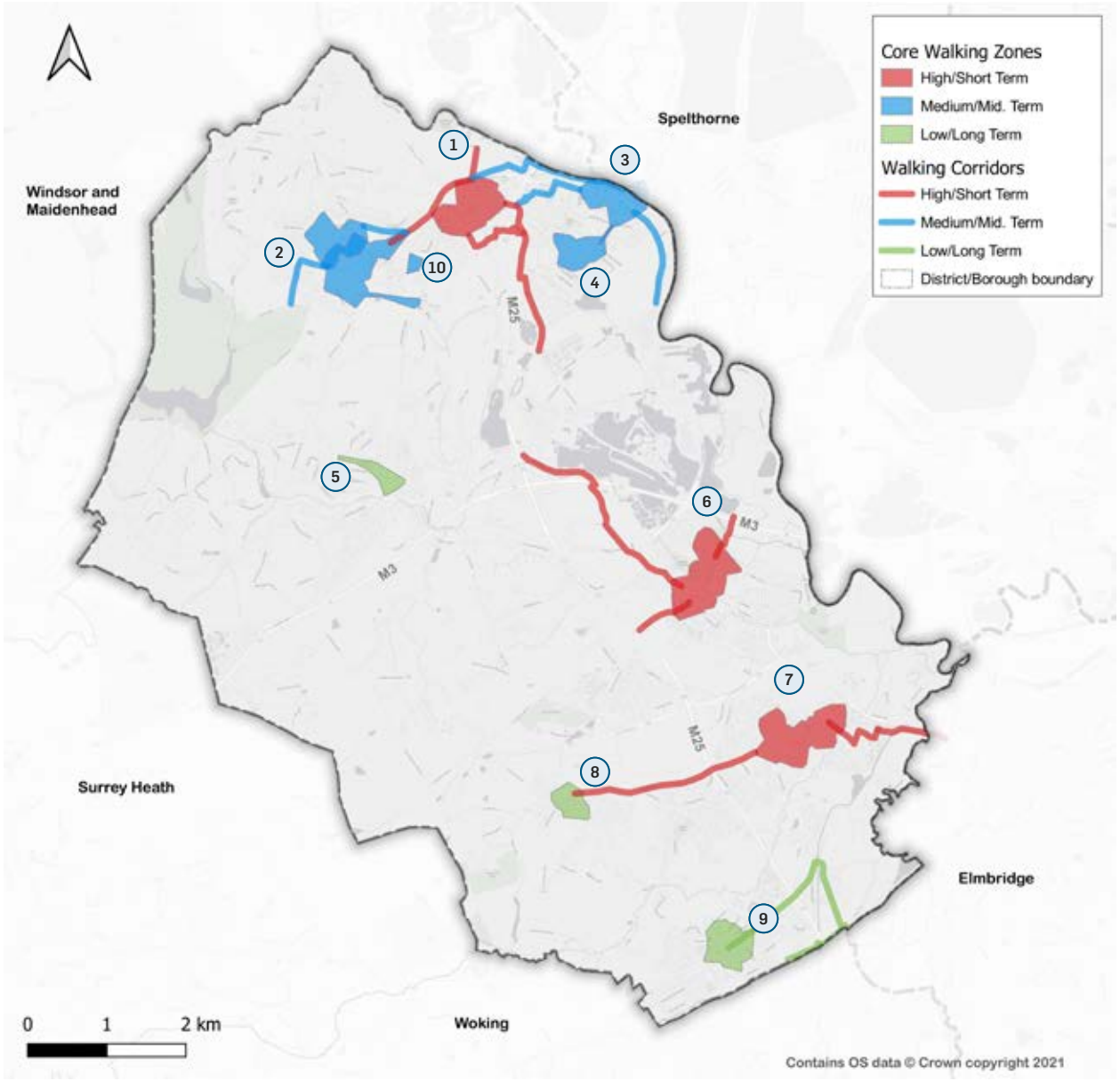

Figure 139. Prioritisation for the aspirational list of Core Walking Zones

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 RBC to understand which walking routes within the Phase 1 core walking zones[1] 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 included assessment of the proposed interventions.

Scoring Criteria

Demand Criteria

- Residents' demand: Surrey's Covid-19 Active Travel Improvements interactive map, which includes geolocated public suggestions for active travel improvements, was 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.
- 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 on other improvements [walking only]: as the walking routes were assessed separately this criterion is intended to assess the dependency of the proposals on other work streams or proposed interventions on neighbouring links.

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.

» 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 11) 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.

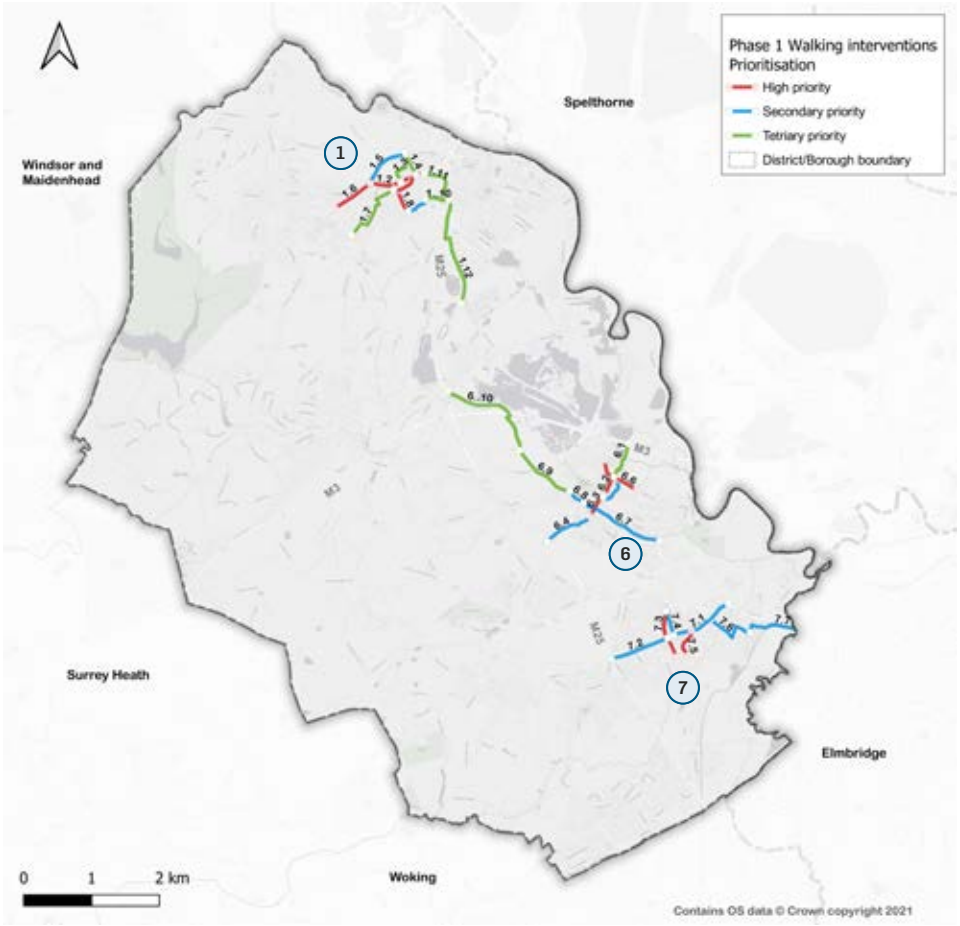

Figure 140. Prioritisation for the Phase 1 Walking links

Table 11. Prioritisation table for the Phase 1 Walking links

Core Walking Zone	Walking route		From	To	Score	Rank
1. Egham	1.1	High Street	High Street	Church Road	79.2%	1
6. Chertsey	6.3	Guildford Street	Riversdell Close	Chertsey Rail Station	72.5%	2
1. Egham	1.8	Station Road	High Street	Manocrofts Road	70.8%	3
1. Egham	1.2	High Street	Egham Hill	Vicarage Road	70.4%	4
7. Addlestone	7.3	A318	Crouch Oak Lane	Caselden Cl	69.6%	5
6. Chertsey	6.2	High Street	Winsdor Street	Riversdell Close	68.3%	6
1. Egham	1.6	Egham Hill	High Street	RHU East Entrance	67.1%	7
7. Addlestone	7.5	Garfield Road	Station Road	Crockford Park Road	66.7%	8
6. Chertsey	6.6	London Street	St Ann's Road	Bridge Road	66.3%	9
7. Addlestone	7.2	Church Road	A318	School Lane	66.3%	10
6. Chertsey	6.5	B375	London Street	Guildford Street	63.8%	11
6. Chertsey	6.7	A317	Bell Bridge Road	Chertsey Road	63.8%	11
1. Egham	1.5	Egham By-Pass	Hummer Road	High Street	63.3%	13
7. Addlestone	7.1	Station Road	A317 - Waybridge Road	A318	63.3%	13
1. Egham	1.9	Wesley Drive	Station Road	M25 Underpass	62.5%	15
6. Chertsey	6.8	A320	Guildford Street	Pyrcroft Road	61.7%	16
6. Chertsey	6.4	Guildford Street	Chertsey Rail Station	M25 Underpass	61.7%	17
7. Addlestone	7.4	Crouch Oak Lane	A318	Station Road	60.8%	18
7. Addlestone	7.6	Alexandra Raod	Station Road	Addlestone Road	60.4%	19
7. Addlestone	7.7	Addlestone Road	Link Road	Town Lock	59.2%	20
1. Egham	1.7	Clarence Street	RHU South Entrance	High Street	57.9%	21
1. Egham	1.1	Leisure centre	Wesley Drive	Vicarage Road	57.5%	22
1. Egham	1.4	Hummer Road	High Street	Egham ByPass	57.1%	23
6. Chertsey	6.1	Fairy Lane	M3 Overpass	Windsdor Street	56.7%	24
6. Chertsey	6.9	Pyrcroft Road	A320	St Ann's Hill	54.2%	25
6. Chertsey	6.10	St Ann's Hill	Pyrcroft Road	Thorpe	50.8%	26
1. Egham	1.3	Crown Street	High Street	Hummer Road	50.0%	27
1. Egham	1.12	Vicarage Road	Leisure Centre	Ten Acre Lane	45.4%	28
1. Egham	1.11	Vicarage Road	High Street	Leisure Centre	41.3%	29

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.

Where more than one route option has been considered for a cycle corridor, both options have been included within the table (Corridor 2). In the case of cycle corridor 1 the route was assessed in sections, as it can be delivered in different time frames. This has been undertaken to allow a comparison between the links and the options between corridors, and also to allow the councils to consider if they may wish to deliver the improvement within both options, where appropriate.

Table 12. Prioritisation table for the Phase 1 cycle corridors

Cycle corridor	Length (km)	Score	Rank
4. Egham to Virginia Water via the A30	4.908	92.5%	1
2. Chertsey to Weybridge Rail Station	1.713	82.9%	2
2. Chertsey to Weybridge Rail Station	2.351	81.7%	3
11. Thorpe Lea Road/Thorpe Road	1.959	74.8%	4
1c. Chertsey Town Centre	1.768	66.0%	5
1a. Egham Town Centre and Vicarage Road	4.206	65.8%	6
1d: Thorpe By Pass to Chertsey Railway Station	4.675	65.0%	7
1b. Monks Walk	2.363	58.1%	8

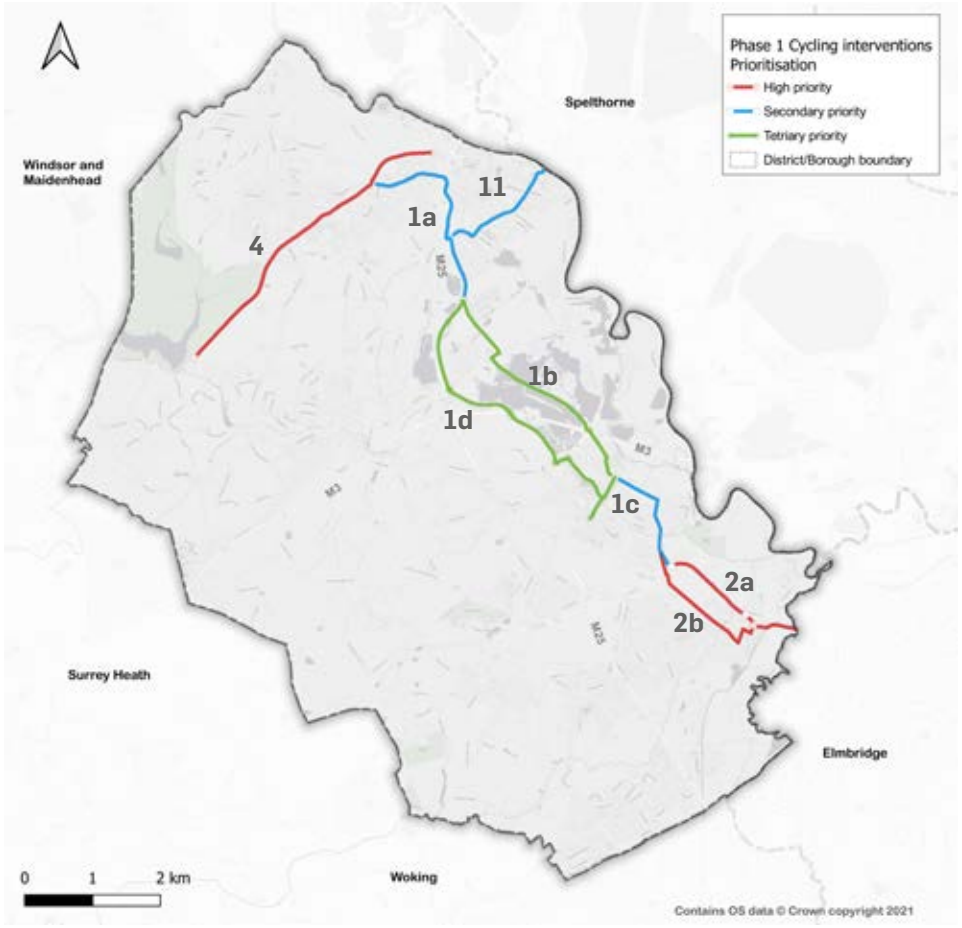

Figure 141. Prioritisation for the Phase 1 cycle corridors links

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 DfT[1], Wiltshire Council[2], and Greater Manchester[3] (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 quantities[4].):

» 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 aspirational 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 14, respectively. The unit cost references are summarised in "Appendix 5: Indicative cost estimates" on page 182.

Table 13. Indicative high level costs for the cycling improvements

Route	Indicative Scheme Costs
Cycle Corridors	
1a. Egham Town Centre and Vicarage Road	£4,500,000
1b. Monks Walk	£1,670,000
1c. Chertsey Town Centre and Fordwater Road	£3,175,000
1d. Thorpe By Pass to Chertsey Railway Station	*£7,320,000*
1. Egham Town to Chertsey[1]	*£16,660,000*
2. Chertsey to Weybridge Rail Station	£2,850,000
4. Egham to Virginia Water via A30	£5,100,000
11. Thorpe Lea Road/Thorpe Road	£1,745,000

1 *If Route 1 is implemented as a whole*

Table 14. Indicative high level costs for the walking improvements

Route	Cost Subtotal
Core Walking Zones	
1. Egham Town	£6,690,000
6. Chertsey *Improvements within the Core Walking Zone*[1]	£4,185,000
6. Chertsey *Including the walking route to St Ann's Hill and Thorpe*[2]	£6,855,000
7. Addlestone	£3,900,000

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.

1 Improvements presented at Figure 132 on page 143
2 Improvements presented at Figure 132 on page 143 and Figure 134 on page 147


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8. Stakeholder Engagement

Introduction

Stakeholder Workshops

Public Engagements 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 meeting with three separate audiences: internal stakeholders (such as representatives from Surrey County Council land Runnymede Borough Council), external stakeholders (such as representatives from walking and cycle groups, disability groups, business groups and Royal Holloway University) and elected members from the joint committee.

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

Stakeholder comments provided important feedback throughout each stage of the study. Comments were taken on board to refine the CWZs, walking and cycling route selection and the proposed intervention measures. The minutes of all six workshops are presented in Appendix 6: Stakeholder meeting minutes at the end of this report.

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

Stakeholder Workshops

Phase 1 Stakeholder Workshops

During the first stage of the LCWIP, stakeholder workshops were held in July 2021[1] where representatives from various borough's organisations such as SCC and RBC, cycling and walking groups, business groups and elected members attended. In total 28 participants (excluding Atkins and SCC / RBC project teams) attended all three workshops.

The workshops were 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 CWZs 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 142). Participants were also asked to vote for their top five cycle routes and top 5 CWZs / 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 stakeholder workshop on 12 July, external workshop on 20 July and elected members workshop on 23 July 2021.

Phase 2 Stakeholder Workshops

During the first stage of the LCWIP, stakeholder workshops were held in late September / early October 2021[2]. 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 27 participants (excluding Atkins and SCC / RBC project teams) attended all three workshops.

The workshops were 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 n the proposed design interventions for the selected CWZs and walking routes. As per the Phase 1 stakeholder workshops, after the presentation of the cycle and walking networks, there was an interactive session where participants comments were added to the relevant map.

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

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

Public Engagement and Other Meetings

Public engagement

The LCWIP also took into account the findings from public engagement carried out via a number of web base surveys conducted by SCC including Widen my Path, Your Funds Surrey, and Commonplace from 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

Throughout the development of the LCWIP, regular meetings took place with SCC and RBC project team to review the cycle and walking network proposals as well as the design interventions. Initial design interventions were also discussed with SCC highway engineers to verify whether the proposals were feasible.

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.

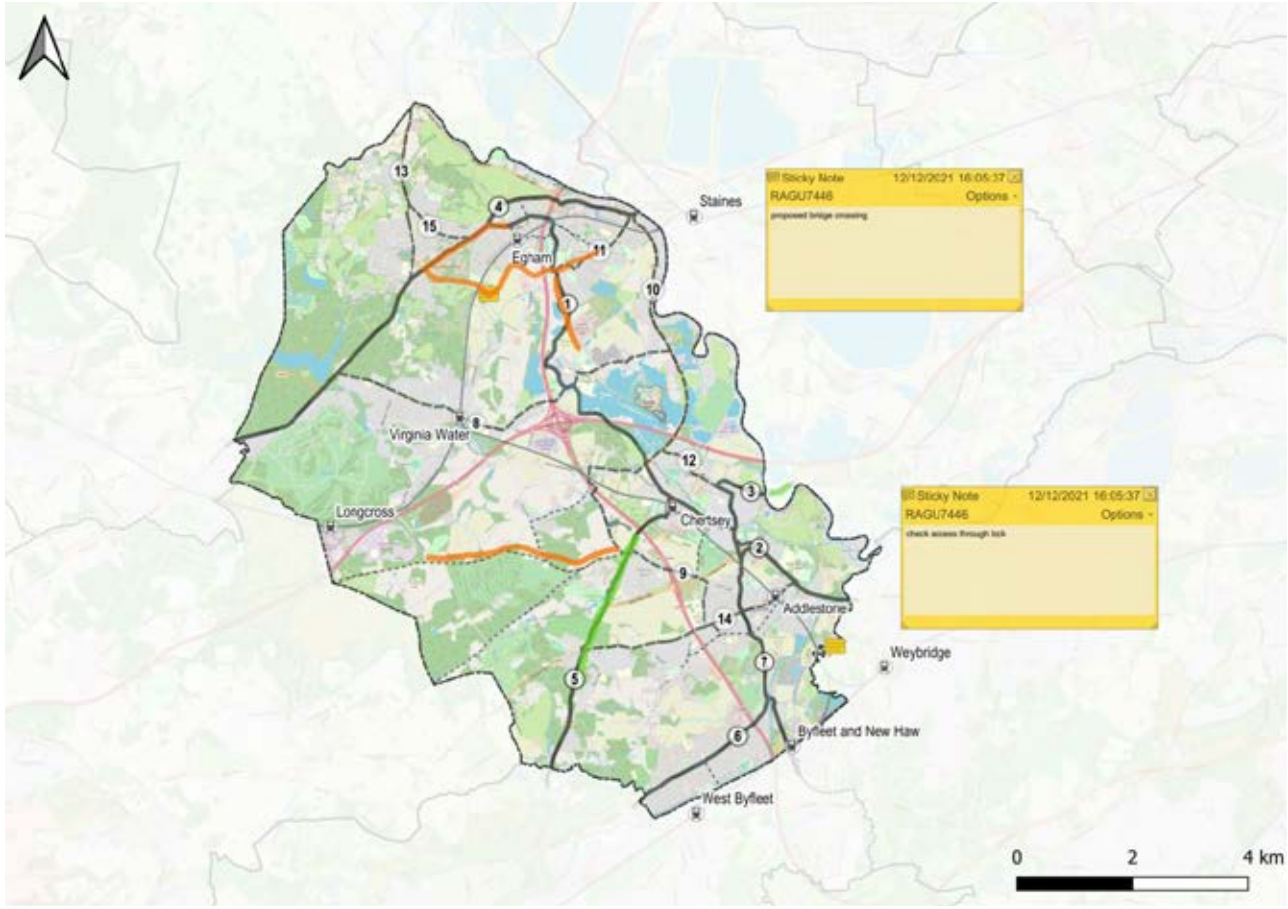


Figure 142. Stakeholder comments during Phase 1 Internal Stakeholder workshop

2

9. Conclusions

Interdependencies
Next Steps

Interdependencies

Synergy with other LCWIPs

There are numerous interdependencies across Surrey and potentially other counties.

LCWIPs in neighbouring Boroughs, such as Elmbridge and Spelthorne, were taken into consideration during the development of the Runnymede LCWIP approach providing the opportunity for a joined-up approach amongst the 3 study areas. The 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 future[1] and a continuous synergy amongst all LCWIPs is 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.

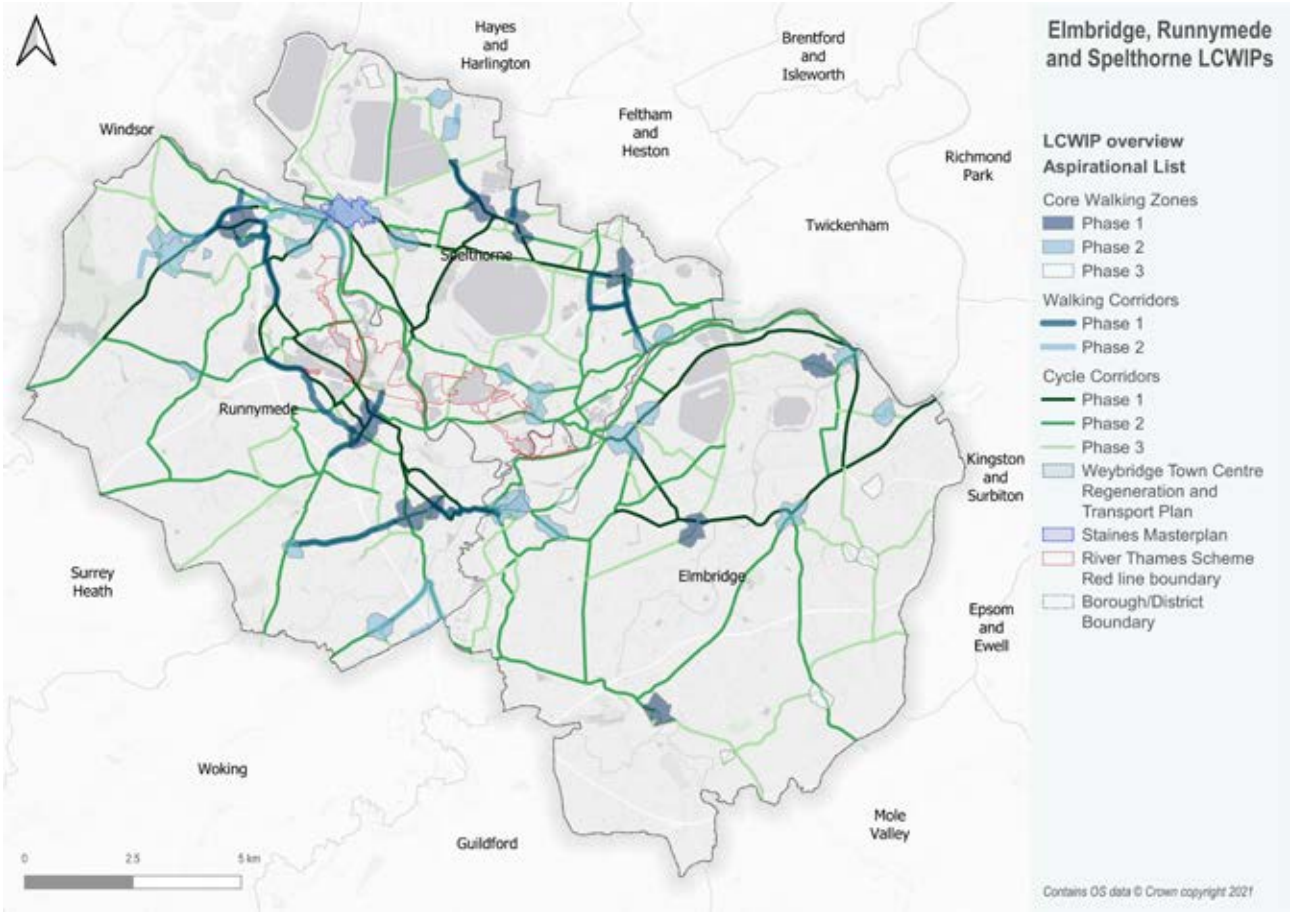


Figure 143. Runnymede and neighbouring boroughs LCWIPs showing the River Thames Scheme red line boundary development area

1 Mole Valley, Waverley and Surrey Heath are in Surrey's pipeline. 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 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 to progress to concept design at an appropriate time in the life of the LCWIP implementation. Whilst Phase 1 corridors will be progressed to concept design, the ultimate aim is to 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.

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.

Beyond feasibility 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 RBC 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.

10. 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)

Category	CORE WALKING ZONES															Total Score	% Score												
Criterion	Access						Demand		Existing pedestrian quality			Potential improvements		Stakeholder support																
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)					Access Score	Demand Score	Existing Quality Score	Potential Score	Stakeholder Score	Total Weighted Score	Rank
Rating Rules	CWZ 3: >=6 green spaces; 2: 3-5 green spaces; 1: <3 green spaces	CWZ 3: >=5 schools; 2: 3-4 schools; 1: <3 schools	CWZ 3: >35 bus stops; 2: 25 - 35 bus stops; 1: <25 bus stops	CWZ 3: Yes; 1: No	CWZ 3: Yes - direct link; 2: Yes using a corridor; 1: No	CWZ 3: >200 units; 2: 101-200 units; 1: <101 units	CWZ 3: >14000 residents; 2: 7000 - 14000 residents; 1: <7000 residents	CWZ 3: >10000 residents; 2: 5000 - 10000 residents; 1: <5000 residents	CWZ 3: >40mph; 2: >20mph; 1: =<20mph or off-street	CWZ 3: >12000 veh AADT; 2: 6000 - 12000 veh AADT; 1: <6000 veh AADT	CWZ 3: >10 collisions; 2: 5 - 10 collisions; 1: <5 collisions	CWZ 3: higher potential; 2: medium potential; 1: lower potential	CWZ 3: limited constraints; 2: constraints typical for a transport improvement; 1: significant constraints (e.g. land take, third party works)	CWZ 3: >20 comments; 2: 10 - 20 comments; 1: <10 comments	CWZ 3: >10 votes; 2: 5 - 10 votes; 1: <5 votes	Total Score	% Score	Network Priority	Rank							
Weighting	2	3	1	2	2	1	3	2	1	1	2	2	2	3	3					25%	25%	20%	10%	20%	100%		
Max Score	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	90	100%										
Scoring																											
1. Egham High Street CWZ	3	2	1	3	1	2	2	3	2	3	3	3	2	3	3	74	82%	High	2	70%	80%	92%	83%	100%	84%	1
2. Englefield Green CWZ	2	2	3	1	1	1	2	1	2	2	1	2	2	2	2	52	58%	Low	7	55%	53%	50%	67%	67%	57%	7
3. Staines CWZ	2	1	3	1	2	1	2	3	2	3	2	3	2	2	2	60	67%	Med	5	52%	80%	75%	83%	67%	70%	5
4. Thorpe Lea CWZ	2	2	1	1	3	3	2	2	2	2	2	3	3	1	1	58	64%	Med	6	67%	67%	67%	100%	33%	63%	6
5. Virginia Water CWZ	1	2	1	3	1	2	1	1	3	2	1	3	2	1	1	47	52%	Low	10	58%	33%	58%	83%	33%	49%	10
6. Chertsey CWZ	3	3	2	3	3	3	2	3	2	3	2	3	3	2	2	77	86%	High	1	97%	80%	75%	100%	67%	83%	2
7. Addlestone CWZ	3	2	3	3	1	2	3	2	2	3	3	3	2	1	2	68	76%	High	3	76%	87%	92%	83%	50%	77%	3
8. Ottershaw CWZ	2	1	1	1	1	2	1	1	3	3	1	2	3	3	1	49	54%	Low	8	42%	33%	67%	83%	67%	54%	8
9. Woodham CWZ	1	2	2	1	1	1	2	1	2	3	1	3	3	1	1	48	53%	Low	9	45%	53%	58%	100%	33%	53%	9
10. Royal Holloway University CWZ	3	3	2	1	1	1	3	2	3	2	2	1	2	3	2	65	72%	High	4	67%	87%	75%	50%	83%	75%	4

Table 15. MCAF table for walking aspirational list

		Category												
Criterion		Link performance			Demand			Cycle Network		Deliverability		Total Score	% Score	Rank (ascending)
Description		Non-commuter destinations served by corridor	Links to The River Thames Scheme	Proximity to schools	Pedal cycle collision	PCT Tool	Comments per km	Contributes to improved cycling network	Potential to improve existing conditions (to a high and accessible standard)	Ease of implementation	Stakeholder feedback			
Rating Rules	Length (km)	1 = no obvious ones 2 = a small number e.g. a school or small parade of shops 3 = several e.g. a town centre	1 = isolated link 2 = limited links to it 3 = strong links	1 = <1.5 2 = 1.5-2.5 3 = >2.5	1 = <2/km 2 = 2-4/km 3 = > 4/km	1 = <200 2 = 200-400 3 = >400		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				
Weighting		2	2	2	2	3	2	1	3	1	1			
Max Score		3	3	3	3	3	3	3	3	3	3	57	100%	
1. Thorpe Road/Chertset to Egham	8.6	3	2	1	2	2	2	3	2	2	3	40	70%	5
2. Weybridge Road	3.3	2	1	3	1	3	1	3	3	3	2	42	74%	3
3. Chertsey Bridge	1.9	2	2	2	3	1	2	2	2	2	2	37	65%	9
4. A30	8.7	3	2	3	3	2	3	3	2	2	3	48	84%	2
5. Guildford Road	5.3	3	1	2	2	2	2	3	3	1	2	41	72%	4
6. Woodham Lane	2.8	2	1	1	2	2	1	3	3	3	2	37	65%	9
7. New Haw Road	4.1	3	1	2	2	2	2	3	2	1	2	38	67%	7
8. Norlands Lane / Christchurch Road	6.4	3	3	3	1	1	1	3	2	2	1	37	65%	9
9. Green Lane / Hardwick Lane	4.0	2	2	3	1	2	1	3	2	2	1	36	63%	13
10. Staines Road / A320	6.6	2	3	1	2	2	2	2	1	1	2	34	60%	14
11/ Thorpe Lea Road / B	1.9	3	2	3	3	3	3	3	2	3	1	50	88%	1
12. St. Ann's Road	1.2	2	2	1	3	3	1	2	2	3	1	39	68%	6
13. St. Jude's Road	3.0	2	1	2	1	1	2	2	2	2	1	30	53%	15
14. Spinny Hill / Church Road	4.0	3	1	2	3	2	2	2	2	1	1	38	67%	7
15. Middle Hill	1.3	1	1	1	1	1	3	1	1	1	1	23	40%	19
16. Windsor Road	3.1	1	1	1	2	1	2	2	2	3	2	30	53%	15
17 Longcross Road / Holloway Hill	6.6	2	1	2	1	1	1	3	1	1	2	26	46%	18
18. Egham/Station Road	1.2	3	1	1	2	2	2	3	2	2	2	37	65%	9
19. Stroude Road / Longcross	6.4	2	2	2	1	1	1	2	2	2	1	30	53%	15

Table 16. MCAF table for cycling aspirational list

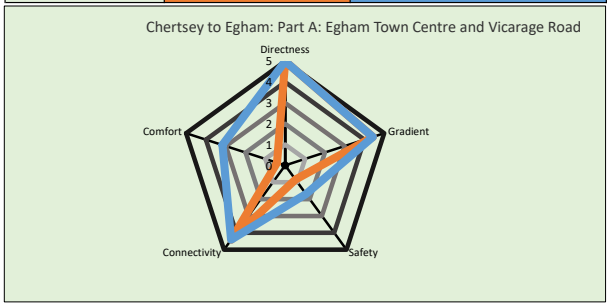
Appendix 2: Route Selection Tool (RST)

Local Cycling and Walking Infrastructure Plan: Route Selection Tool

ROUTE SUMMARY

Route Name	Chertsey to Egham: Part A: Egham Town Centre and Vicarage Road
Overall Length	4.11
Name of Assessor(s)	
Date of Assessment	

	Performance Scores	
Criterion	**Existing**	**Potential**
Directness	5.00	5.00
Gradient	4.42	4.42
Safety	0.83	1.70
Connectivity	4.41	4.41
Comfort	0.41	3.17



Number of Existing Critical Junctions/Crossings	22
Number of Potential Critical Junctions/Crossings	6

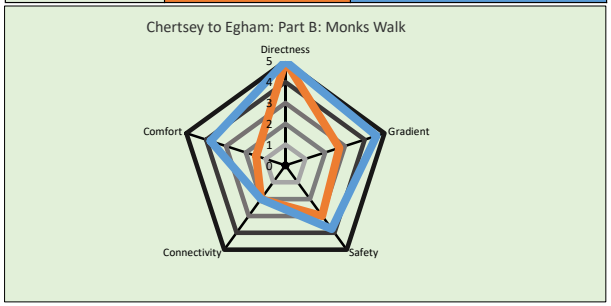
Table 17. RST summary for Route 1 - Part A

Local Cycling and Walking Infrastructure Plan: Route Selection Tool

ROUTE SUMMARY

Route Name	Chertsey to Egham: Part B: Monks Walk
Overall Length	2.36
Name of Assessor(s)	
Date of Assessment	

	Performance Scores	
Criterion	**Existing**	**Potential**
Directness	5.00	5.00
Gradient	2.71	4.60
Safety	3.00	3.78
Connectivity	2.00	2.00
Comfort	1.48	3.78



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

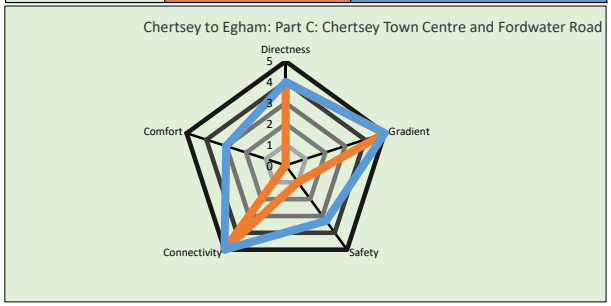
Table 18. RST summary for Route 1 - Part B

Local Cycling and Walking Infrastructure Plan: Route Selection Tool

ROUTE SUMMARY

Route Name	Chertsey to Egham: Part C: Chertsey Town Centre and Fordwater Road
Overall Length	1.74
Name of Assessor(s)	
Date of Assessment	

	Performance Scores	
Criterion	**Existing**	**Potential**
Directness	4.00	4.00
Gradient	5.00	5.00
Safety	1.00	3.29
Connectivity	5.00	5.00
Comfort	0.00	3.00



Number of Existing Critical Junctions/Crossings	8
Number of Potential Critical Junctions/Crossings	1

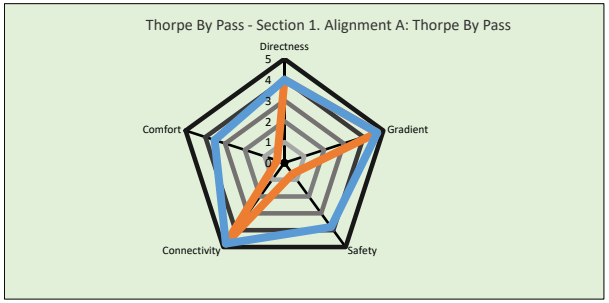
Table 19. RST summary for Route 1 - Part C

Local Cycling and Walking Infrastructure Plan: Route Selection Tool

ROUTE SUMMARY

Route Name	Thorpe By Pass - Section 1. Alignment A: Thorpe By Pass
Overall Length	3.60

	Performance Scores	
Criterion	Existing	Potential
Directness	4.00	4.00
Gradient	4.69	4.69
Safety	0.66	3.81
Connectivity	4.80	4.80
Comfort	0.37	3.53
	14.52	20.83



Number of Existing Critical Junctions/Crossings	24
Number of Potential Critical Junctions/Crossings	2

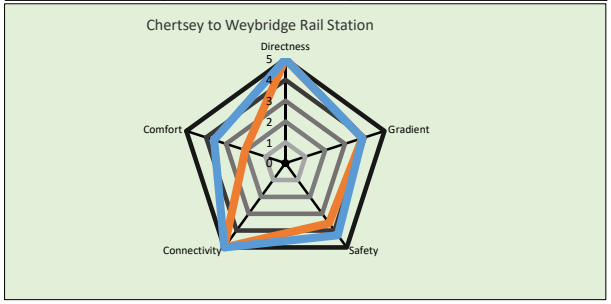
Table 24. RST summary for Route 1 - Part C

Local Cycling and Walking Infrastructure Plan: Route Selection Tool

ROUTE SUMMARY

Route Name	Chertsey to Weybridge Rail Station
Overall Length	2.65
Name of Assessor(s)	
Date of Assessment	

	Performance Scores	
Criterion	Existing	Potential
Directness	5.00	5.00
Gradient	3.88	3.88
Safety	3.57	4.28
Connectivity	5.00	5.00
Comfort	2.03	3.60



Number of Existing Critical Junctions/Crossings	9
Number of Potential Critical Junctions/Crossings	3

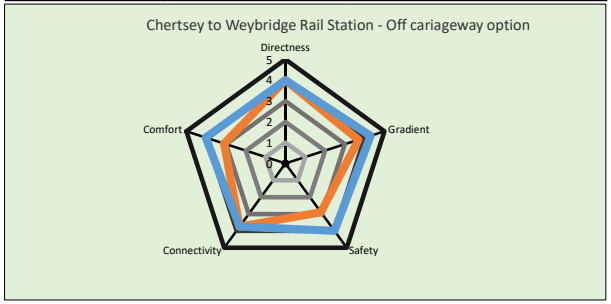
Table 20. RST summary for Route 2 - Option A

Local Cycling and Walking Infrastructure Plan: Route Selection Tool

ROUTE SUMMARY

Route Name	Chertsey to Weybridge Rail Station - Off cariageway option
Overall Length	3.09
Name of Assessor(s)	
Date of Assessment	

	Performance Scores	
Criterion	Existing	Potential
Directness	4.00	4.00
Gradient	3.68	4.29
Safety	2.90	4.00
Connectivity	3.74	3.74
Comfort	3.10	4.02



Number of Existing Critical Junctions/Crossings	6
Number of Potential Critical Junctions/Crossings	3

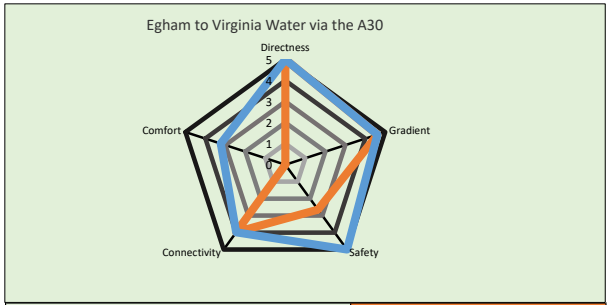
Table 21. RST summary for Route 2 - Option B

Local Cycling and Walking Infrastructure Plan: Route Selection Tool

ROUTE SUMMARY

Route Name	Egham to Virginia Water via the A30
Overall Length	4.91
Name of Assessor(s)	
Date of Assessment	

	Performance Scores	
Criterion	Existing	Potential
Directness	5.00	5.00
Gradient	4.61	4.61
Safety	2.65	5.00
Connectivity	3.98	3.98
Comfort	0.00	3.23



Number of Existing Critical Junctions/Crossings	3
Number of Potential Critical Junctions/Crossings	0

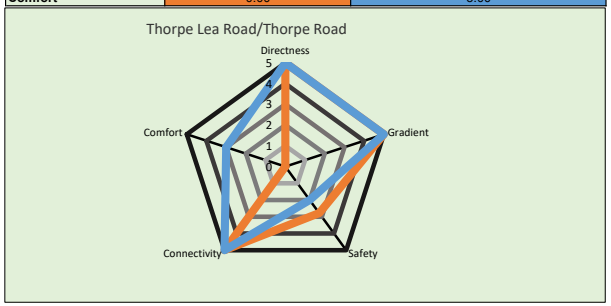
Table 22. RST summary for Route 4

Local Cycling and Walking Infrastructure Plan: Route Selection Tool

ROUTE SUMMARY

Route Name	Thorpe Lea Road/Thorpe Road
Overall Length	1.96
Name of Assessor(s)	
Date of Assessment	

	Performance Scores	
Criterion	Existing	Potential
Directness	5.00	5.00
Gradient	5.00	5.00
Safety	2.78	2.00
Connectivity	5.00	5.00
Comfort	0.00	3.00



Number of Existing Critical Junctions/Crossings	10
Number of Potential Critical Junctions/Crossings	6

Table 23. RST summary for Route 11

Appendix 3: Walking Route Audit Tool (WRAT)

	Route Li	link	road_name	Start	End	length (m)	WRAT - SCORES - EXISTING						WRAT - PERCENTILE - EXISTING						WRAT - SCORES - PROPOSALS						WRAT - PERCENTILE - PROPOSALS						Improvement					
							Attractiveness	Comfort	Directness	Safety	Coherence	Total	Attractiveness	Comfort	Directness	Safety	Coherence	Total	ttractiveness	Comfort	Directness	Safety	Coherence	Total	ttractiveness	Comfort	Directness	Safety	Coherence	Total	ttractiveness	Comfort	Directness	Safety	Coherence	Total
1	7895	1.1	High Street	High Street	Church Road	339	10	14	14	5	5	48	83%	70%	100%	83%	83%	83%	12	20	14	6	6	58	100%	100%	100%	100%	100%	100%	2	6	0	1	1	10
1	7895	1.2	High Street	Egham Hill	Vicarage Road	957	9	15	9	0	2	35	75%	75%	64%	0%	33%	60%	10	19	11	3	5	48	83%	95%	79%	50%	83%	83%	1	4	2	3	3	13
1	7895	1.3	Crown Street	High Street	Hummer Road	393	9	9	11	6	1	36	75%	45%	79%	100%	17%	62%	9	14	12	6	4	45	75%	70%	86%	100%	67%	78%	0	5	1	0	3	9
1	7895	1.4	Hummer Road	High Street	Egham ByPass	343	6	9	10	2	1	28	50%	45%	71%	33%	17%	48%	7	15	14	4	5	45	58%	75%	100%	67%	83%	78%	1	6	4	2	4	17
1	7895	1.5	Egham By-Pas	Hummer Road	High Street	750	6	7	5	0	3	21	50%	35%	36%	0%	50%	36%	8	16	10	0	5	39	67%	80%	71%	0%	83%	67%	2	9	5	0	2	18
1	7895	1.6	Egham Hill	High Street	RHU East Entran	631	7	11	7	0	3	28	58%	55%	50%	0%	50%	48%	10	18	12	1	5	46	83%	90%	86%	17%	83%	79%	3	7	5	1	2	18
1	7895	1.7	Clarence Stree	RHU South Entra	High Street	1078	6	10	8	5	1	30	50%	50%	57%	83%	17%	52%	8	12	10	6	4	40	67%	60%	71%	100%	67%	69%	2	2	2	1	3	10
1	7895	1.8	Station Road	High Street	Manocrofts Road	349	7	13	10	4	2	36	58%	65%	71%	67%	33%	62%	8	17	13	4	5	47	67%	85%	93%	67%	83%	81%	1	4	3	0	3	11
1	7895	1.9	Wesley Drive	Station Road	M25 Underpass	348	9	14	11	5	2	41	75%	70%	79%	83%	33%	71%	9	15	13	5	5	47	75%	75%	93%	83%	83%	81%	0	1	2	0	3	6
1	7895	1.1	Leisure centre	Wesley Drive	Vicarage Road	385	7	10	8	6	1	32	83%	70%	100%	83%	83%	83%	9	17	11	6	5	48	100%	100%	100%	100%	100%	100%	2	7	3	0	4	16
1	7895	1.11	Vicarage Road	High Street	Leisure Centre	658	7	10	11	1	1	30	58%	50%	79%	17%	17%	52%	7	13	13	2	4	39	58%	65%	93%	33%	67%	67%	0	3	2	1	3	9
1	7895	1.12	Vicarage Road	Leisure Centre	Ten Acre Lane	1664	4	11	7	1	2	25	33%	55%	50%	17%	33%	43%	4	13	10	2	5	34	33%	65%	71%	33%	83%	59%	0	2	3	1	3	9
6	7348	6.1	Fairy Lane	M3 Overpass	Windsdor Street	585	10	12	10	6	4	42	83%	60%	71%	100%	67%	72%	10	18	12	6	6	52	83%	90%	86%	100%	100%	90%	0	6	2	0	2	10
6	7348	6.2	High Street	Winsdor Street	Riversdell Close	300	9	17	14	4	5	49	75%	85%	100%	67%	83%	84%	10	19	14	4	6	53	83%	95%	100%	67%	100%	91%	1	2	0	0	1	4
6	7348	6.3	Guildford Stree	Riversdell Close	Chertsey Rail Sta	380	8	17	11	5	4	45	67%	85%	79%	83%	67%	78%	10	19	13	5	5	52	83%	95%	93%	83%	83%	90%	2	2	2	0	1	7
6	7348	6.4	Guildford Stree	Chertsey Rail Sta	M25 Underpass	772	7	8	7	1	4	27	58%	40%	50%	17%	67%	47%	8	18	9	2	6	43	67%	90%	64%	33%	100%	74%	1	10	2	1	2	16
6	7348	6.5	B375	London Street	Guildford Street	440	10	16	12	2	4	44	83%	80%	86%	33%	67%	76%	10	19	12	2	5	48	83%	95%	86%	33%	83%	83%	0	3	0	0	1	4
6	7348	6.6	London Street	St Ann's Road	Bridge Road	694	9	14	10	4	2	39	75%	70%	71%	67%	33%	67%	11	19	14	4	5	53	92%	95%	100%	67%	83%	91%	2	5	4	0	3	14
6	7348	6.7	A317	Bell Bridge Road	Chertsey Road	1274	9	12	10	4	3	38	75%	60%	71%	67%	50%	66%	10	17	12	4	4	47	83%	85%	86%	67%	67%	81%	1	5	2	0	1	9
6	7348	6.8	A320	Guildford Street	Pyrcroft Road	273	5	16	8	1	3	33	42%	80%	57%	17%	50%	57%	7	19	12	1	5	44	58%	95%	86%	17%	83%	76%	2	3	4	0	2	11
6	7348	6.9	Pyrcroft Road	A320	St Ann's Hill	993	9	12	12	4	1	38	75%	60%	86%	67%	17%	66%	10	14	13	4	3	44	83%	70%	93%	67%	50%	76%	1	2	1	0	2	6
6	7348	6.1	St Ann's Hill	Pyrcroft Road	Thorpe	1637	5	5	7	3	1	21	42%	25%	50%	50%	17%	36%	6	9	9	4	3	31	50%	45%	64%	67%	50%	53%	1	4	2	1	2	10
7	5161	7.1	Station Road	A317 - Waybridge	A318	1061	8	15	9	3	3	38	67%	75%	64%	50%	50%	66%	10	16	14	4	4	48	83%	80%	100%	67%	67%	83%	2	1	5	1	1	10
7	5161	7.2	Church Road	A318	School Lane	888	7	11	9	4	1	32	58%	55%	64%	67%	17%	55%	8	16	14	4	2	44	67%	80%	100%	67%	33%	76%	1	5	5	0	1	12
7	5161	7.3	A318	Crouch Oak Lane	Caselden Cl	711	7	11	9	4	2	33	58%	35%	64%	67%	33%	50%	10	16	13	4	4	47	83%	90%	93%	67%	67%	84%	3	5	4	0	2	14
7	5161	7.4	Crouch Oak La	A318	Station Road	401	8	11	11	5	1	36	67%	60%	79%	83%	17%	64%	9	16	12	5	5	47	75%	80%	86%	83%	83%	81%	1	5	1	0	4	11
7	5161	7.5	Garfield Road	Station Road	Crockford Park R	436	10	11	13	4	2	40	83%	95%	93%	67%	33%	83%	10	16	13	4	5	48	83%	95%	93%	67%	83%	88%	0	5	0	0	3	8
7	5161	7.6	Alexandra Rao	Station Road	Addlestone Road	828	8	11	9	5	1	34	67%	30%	64%	83%	17%	50%	9	16	10	5	5	45	75%	55%	71%	83%	83%	69%	1	5	1	0	4	11
7	5161	7.7	Addlestone Ro	Link Road	Town Lock	836	8	11	10	5	3	37	67%	45%	71%	83%	50%	60%	10	16	13	5	6	50	83%	85%	93%	83%	100%	88%	2	5	3	0	3	13

Table 25. WRAT results for walking links - existing & proposals

Figure 144. WRAT Results - Existing, CWZ 1

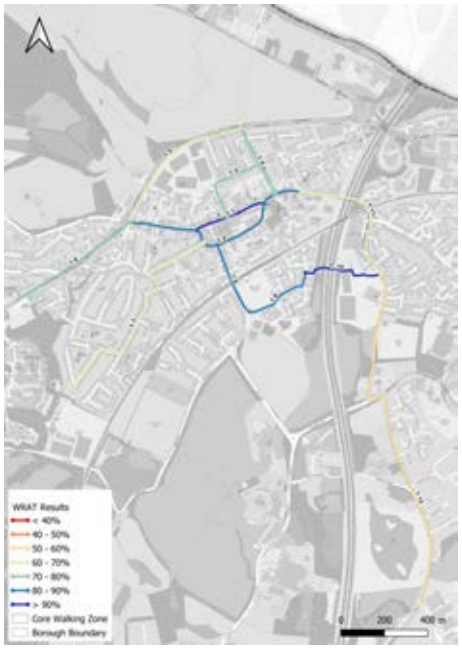


Figure 145. WRAT Results - Proposals, CWZ 1

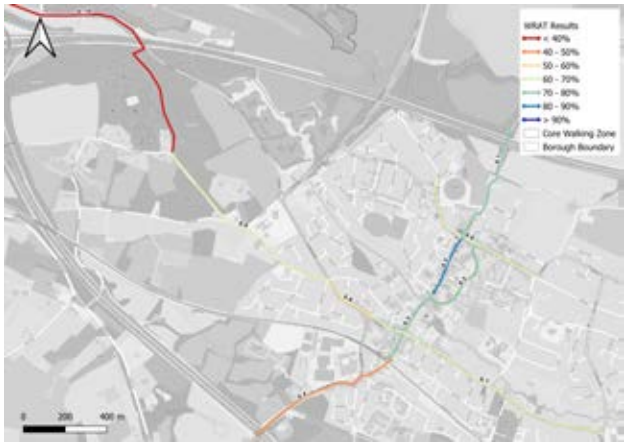


Figure 146. WRAT Results - Existing, CWZ 6

Figure 147. WRAT Results - Proposals, CWZ 6

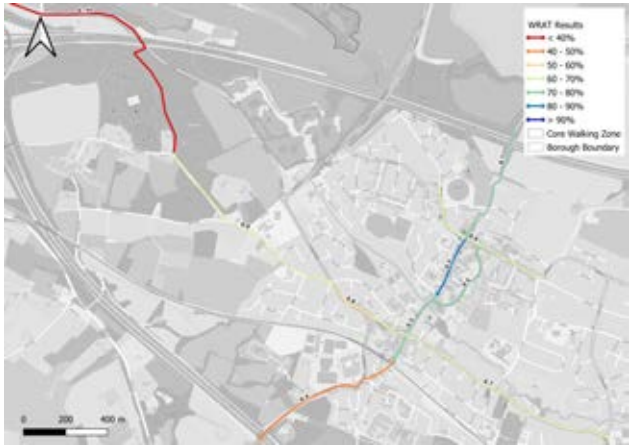


Figure 148. WRAT Results - Existing, CWZ 7

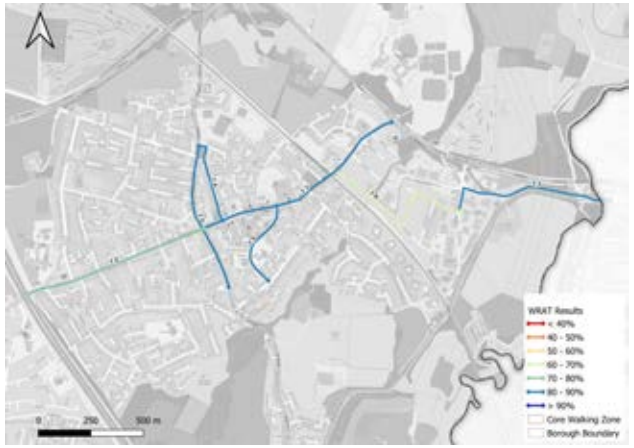


Figure 149. WRAT Results - Proposals, CWZ 7

UPDATE

Appendix 4: First phase assessments

CWZ	link	road_name	Start	End	Overall assessment of the walking link 3: >90% 2: 80 - 90% 1: <80%	Attractiveness 3: >15% 2: 0 - 15% 1: 0%	Comfort 3: >30% 2: 20 - 30% 1: <20%	Directness 3: >30% 2: 15 - 30% 1: <15%	Safety 3: >20% 2: 0 - 20% 1: 0%	Coherence 3: >60% 2: 30 - 60% 1: <30%	Ease of implementation 3: No significant constraints 2: Implementation will require further studies and engagement 1: Constraints to delay the implementation	Dependecy to other improvements 3: No depedency 1: Depedent	Residents' comments - Commonplace 3: >60 comments /km 2: 20-60 comments /km 1: <20 comments /km	PCT flows (trips on foot) 3: >160 daily trips 2: 80-160 daily trips 1: <80 daily trips	Collisions 3: >6 collisions /km 2: 4-6 collisions /km 1: <4 collisions /km	Rail / Bus Station 3: bus stops & railway station 2: bus stops 1: no connection	High Street / Commercial Area 3: Links to commercial area 1: No link to commercial area	Schools/Other education 3: Links to education facility 1: No link to education facility	Other key destination 3: Links to other key destination 1: No link to other key destination	Total	%	Ranking
Weighting					3	2	2	2	2	2	2	2	1	1	1	1	1	1	1			
Max Score					3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	72	100%	
1	1.1	High Street	High Street	Church Road	3	3	3	1	2	1	3	3	2	1	3	1	3	1	1	53	74%	1
1	1.2	High Street	Egham Hill	Vicarage Road	2	2	2	1	3	2	2	3	2	1	2	2	3	3	1	50	69%	3
1	1.3	Crown Street	High Street	Hummer Road	1	1	2	1	1	2	1	3	1	1	1	1	3	3	1	36	50%	27
1	1.4	Hummer Road	High Street	Egham ByPass	1	2	3	2	3	3	1	1	3	3	1	2	1	1	3	47	65%	7
1	1.5	Egham By-Pass	Hummer Road	High Street	1	3	3	3	1	2	3	1	3	2	1	1	1	3	3	49	68%	5
1	1.6	Egham Hill	High Street	RHU East Entrance	1	3	3	3	2	2	2	1	3	3	3	2	1	3	3	53	74%	1
1	1.7	Clarence Street	RHU South Entrance	High Street	1	3	1	1	2	2	2	3	1	2	1	2	1	3	1	42	58%	19
1	1.8	Station Road	High Street	Manocrofts Road	2	2	2	2	1	2	2	3	2	2	3	3	3	1	1	49	68%	5
1	1.9	Wesley Drive	Station Road	M25 Underpass	2	1	1	1	1	2	3	3	1	2	1	1	1	3	1	40	56%	22
1	1.1	Leisure centre	Wesley Drive	Vicarage Road	3	3	3	1	2	1	1	1	1	1	1	1	1	1	3	42	58%	19
1	1.11	Vicarage Road	High Street	Leisure Centre	1	1	1	1	2	2	1	1	2	2	1	2	1	1	1	31	43%	29
1	1.12	Vicarage Road	Leisure Centre	Ten Acre Lane	1	1	1	2	2	2	1	1	2	2	1	2	1	1	3	35	49%	28
6	6.1	Fairy Lane	M3 Overpass	Windsdor Street	3	1	3	1	1	2	1	1	1	1	1	1	3	1	3	40	56%	22
6	6.2	High Street	Winsdor Street	Riversdell Close	3	2	1	1	1	1	2	3	2	1	3	1	3	1	1	43	60%	14
6	6.3	Guildford Street	Riversdell Close	Chertsey Rail Station	3	3	1	1	1	1	2	3	2	1	3	3	3	1	1	47	65%	7
6	6.4	Guildford Street	Chertsey Rail Station	M25 Underpass	1	2	3	1	2	2	2	3	1	1	1	3	1	3	3	46	64%	12
6	6.5	B375	London Street	Guildford Street	2	1	1	1	1	1	3	3	1	2	2	2	3	1	1	40	56%	22
6	6.6	London Street	St Ann's Road	Bridge Road	3	3	2	2	1	2	2	1	1	3	1	2	3	1	1	47	65%	7
6	6.7	A317	Bell Bridge Road	Chertsey Road	2	2	2	1	1	1	2	3	1	2	1	2	3	3	1	43	60%	14
6	6.8	A320	Guildford Street	Pyrcroft Road	1	3	1	2	1	2	3	3	1	1	1	3	3	1	1	44	61%	13
6	6.9	Pyrcroft Road	A320	St Ann's Hill	1	2	1	1	1	2	2	3	1	1	1	1	1	3	3	38	53%	25
6	6..10	St Ann's Hill	Pyrcroft Road	Thorpe	1	2	2	1	2	2	1	3	1	1	1	1	1	1	3	38	53%	25
7	7.1	Station Road	A317 - Waybridge Road	A318	2	3	1	3	2	1	2	1	1	2	2	3	3	3	1	47	65%	7
7	7.2	Church Road	A318	School Lane	1	2	2	3	1	1	3	3	1	2	2	2	3	3	1	47	65%	7
7	7.3	A318	Crouch Oak Lane	Caselden Cl	2	3	3	2	1	2	2	3	1	3	1	2	3	1	1	50	69%	3
7	7.4	Crouch Oak Lane	A318	Station Road	2	2	2	1	1	3	2	3	1	2	1	1	1	1	1	42	58%	19
7	7.5	Garfield Road	Station Road	Crockford Park Road	2	1	1	1	1	2	3	3	1	1	3	1	3	3	1	43	60%	14
7	7.6	Alexandra Raod	Station Road	Addlestone Road	1	2	2	1	1	3	3	3	1	1	1	2	1	1	3	43	60%	14
7	7.7	Addlestone Road	Link Road	Town Lock	2	3	2	2	1	2	1	3	1	1	1	1	1	1	3	43	60%	14

CWZ link	road_name	Start	End	Other Score Total	%	Rank	Quality of improvements score Total	%	Rank	Deliverability score Total	%	Rank	Demand for improvements score Total	%	Rank	Access score Total	%	Rank	Priority for Total whole borough	Priority for Rank (ascending) whole Borough	Priority for Total whole borough	Priority for Rank (ascending) whole Borough
				9	0.2		30	0.25		12	0.25		9	0.15		12	0.15						
1 1.1	High Street	High Street	Church Road	9	100%	1	20	67%	5	12	100%	1	6	67%	4	6	50%	22	53	1	79%	1
1 1.2	High Street	Egham Hill	Vicarage Road	6	67%	7	20	67%	5	10	83%	8	5	56%	8	9	75%	3	50	3	70%	4
1 1.3	Crown Street	High Street	Hummer Road	3	33%	17	14	47%	21	8	67%	18	3	33%	21	8	67%	7	36	27	50%	27
1 1.4	Hummer Road	High Street	Egham ByPass	3	33%	17	26	87%	1	4	33%	25	7	78%	2	7	58%	15	47	7	57%	23
1 1.5	Egham By-Pass	Hummer Road	High Street	3	33%	17	24	80%	3	8	67%	18	6	67%	4	8	67%	7	49	5	63%	13
1 1.6	Egham Hill	High Street	RHU East Entrance	3	33%	17	26	87%	1	6	50%	22	9	100%	1	9	75%	3	53	1	67%	7
1 1.7	Clarence Street	RHU South Entrance	High Street	3	33%	17	18	60%	12	10	83%	8	4	44%	17	7	58%	15	42	19	58%	21
1 1.8	Station Road	High Street	Manocrofts Road	6	67%	7	18	60%	12	10	83%	8	7	78%	2	8	67%	7	49	5	71%	3
1 1.9	Wesley Drive	Station Road	M25 Underpass	6	67%	7	12	40%	26	12	100%	1	4	44%	17	6	50%	22	40	22	63%	15
1 1.1	Leisure centre	Wesley Drive	Vicarage Road	9	100%	1	20	67%	5	4	33%	25	3	33%	21	6	50%	22	42	19	58%	22
1 1.11	Vicarage Road	High Street	Leisure Centre	3	33%	17	14	47%	21	4	33%	25	5	56%	8	5	42%	28	31	29	41%	29
1 1.12	Vicarage Road	Leisure Centre	Ten Acre Lane	3	33%	17	16	53%	19	4	33%	25	5	56%	8	7	58%	15	35	28	45%	28
6 6.1	Fairy Lane	M3 Overpass	Windsdor Street	9	100%	1	16	53%	19	4	33%	25	3	33%	21	8	67%	7	40	22	57%	24
6 6.2	High Street	Winsdor Street	Riversdell Close	9	100%	1	12	40%	26	10	83%	8	6	67%	4	6	50%	22	43	14	68%	6
6 6.3	Guildford Street	Riversdell Close	Chertsey Rail Station	9	100%	1	14	47%	21	10	83%	8	6	67%	4	8	67%	7	47	7	73%	2
6 6.4	Guildford Street	Chertsey Rail Station	M25 Underpass	3	33%	17	20	67%	5	10	83%	8	3	33%	21	10	83%	1	46	12	62%	17
6 6.5	B375	London Street	Guildford Street	6	67%	7	10	33%	29	12	100%	1	5	56%	8	7	58%	15	40	22	64%	11
6 6.6	London Street	St Ann's Road	Bridge Road	9	100%	1	20	67%	5	6	50%	22	5	56%	8	7	58%	15	47	7	66%	9
6 6.7	A317	Bell Bridge Road	Chertsey Road	6	67%	7	14	47%	21	10	83%	8	4	44%	17	9	75%	3	43	14	64%	11
6 6.8	A320	Guildford Street	Pyrcroft Road	3	33%	17	18	60%	12	12	100%	1	3	33%	21	8	67%	7	44	13	62%	16
6 6.9	Pyrcroft Road	A320	St Ann's Hill	3	33%	17	14	47%	21	10	83%	8	3	33%	21	8	67%	7	38	25	54%	25
6 6..10	St Ann's Hill	Pyrcroft Road	Thorpe	3	33%	17	18	60%	12	8	67%	18	3	33%	21	6	50%	22	38	25	51%	26
7 7.1	Station Road	A317 - Waybridge Road	A318	6	67%	7	20	67%	5	6	50%	22	5	56%	8	10	83%	1	47	7	63%	13
7 7.2	Church Road	A318	School Lane	3	33%	17	18	60%	12	12	100%	1	5	56%	8	9	75%	3	47	7	66%	10
7 7.3	A318	Crouch Oak Lane	Caselden Cl	6	67%	7	22	73%	4	10	83%	8	5	56%	8	7	58%	15	50	3	70%	5
7 7.4	Crouch Oak Lane	A318	Station Road	6	67%	7	18	60%	12	10	83%	8	4	44%	17	4	33%	29	42	19	61%	18
7 7.5	Garfield Road	Station Road	Crockford Park Road	6	67%	7	12	40%	26	12	100%	1	5	56%	8	8	67%	7	43	14	67%	8
7 7.6	Alexandra Raod	Station Road	Addlestone Road	3	33%	17	18	60%	12	12	100%	1	3	33%	21	7	58%	15	43	14	60%	19
7 7.7	Addlestone Road	Link Road	Town Lock	6	67%	7	20	67%	5	8	67%	18	3	33%	21	6	50%	22	43	14	59%	20

Table 26. Phase 1 walking links prioritisation table

Per Cycle link	Length	Contributes to improved cycling network 1 = isolated link 2 = limited links to other cycle routes or cycle-friendly roads 3 = strong links, forms important extension/connection to other routes	Quality of design - safety Safety as scored by the RST 3 = RST score > 3.99 2 = RST score 2.5-3.99 1 = RST score <2.5	Quality of design - comfort Comfort as scored by the RST 3 = RST score > 3.99 2 = RST score 2.5-3.99 1 = RST score <2.5	Ease of implementation 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	Potential to improve existing conditions (to a high and accessible standard) 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.)	Pedal cycle collision rate It is envisaged that the proposed route will create an accident saving. Therefore those which currently have a high number of accidents involving cyclists will generate the biggest accident savings. 1 = <1/km 2 = 1-5/km 3 = > 5/km	PCT Tool 1 = up to 6 times increase 2 = 6 to 8 times increase 3 = over 8 times increase	Indicative demand from Commonplace 3 = >25 2 = 10-25 1 = <10	Enhances nework connectivity (RST) The potential to improve the cycling environment based on the RST scores. 3 = RST score > 3.99 2 = RST score 2.5-3.99 1 = RST score <2.5	Access to education Access to education e.g. school, college, library etc 3 = yes, direct access 2 = yes, within 400m 1 = no / further than 400m	Access to transport facilities 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	Other key destination Access to sports, recreation or outdoor space 3 = yes, direct access 2 = yes, within 400m 1 = no / further than 400m	High Street / Commercial Area Access to sports, recreation or outdoor space 3 = yes, direct access 2 = yes, within 400m 1 = no / further than 400m	Total	%	Ranking
Weighting		**2**	**3**	**3**	**2**	**2**	**2**	**3**	**2**	**1**	**1**	**1**	**1**	**1**			
Max Score		**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**72**	**100%**	
1a. Egham Town Centre and Vicarage Road	4.206	3	1	2	1	1	2	3	3	3	3	2	1	3	**50**	**69%**	**5**
1b. Monks Walk	2.363	2	2	2	1	2	1	2	1	1	3	1	2	1	**40**	**56%**	**8**
1c. Chertsey Town Centre and 1d. Thorpe By Pass	1.768	2	2	2	2	2	3	2	1	3	2	1	1	3	**48**	**67%**	**6**
2. Chertsey to Weybridge Rail Station	4.675	2	2	2	1	2	1	3	1	3	2	3	2	3	**48**	**67%**	**6**
2. Chertsey to Weybridge Rail Station	1.713	3	3	2	2	3	3	1	2	3	3	2	2	2	**56**	**78%**	**3**
4. Egham to Virginia Water via the A30	2.351	2	4	3	1	3	2	2	1	2	2	3	3	3	**58**	**81%**	**2**
11. Thorpe Lea Road/Thorpe Road	4.908	3	5	2	2	3	2	2	3	2	3	1	3	2	**64**	**89%**	**1**
	1.959	3	1	2	3	1	3	2	3	3	3	1	3	3	**54**	**75%**	**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
		6	0.2		18	0.25		12	0.25		24	0.15		12	0.15					
1a. Egham Town Centre and Vicarage Road	4.206	6	100%	1	9	50%	7	4	33%	8	22	92%	1	9	75%	4	50	5	**65.8%**	6
1b. Monks Walk	2.363	4	67%	5	12	67%	4	6	50%	6	11	46%	8	7	58%	7	40	8	**58.1%**	8
1c. Chertsey Town Centre and 1d. Thorpe By Pass	1.768	4	67%	5	12	67%	4	8	67%	3	17	71%	4	7	58%	7	48	6	**66.0%**	5
2. Chertsey to Weybridge Rail Station	4.675	4	67%	5	12	67%	4	6	50%	6	16	67%	5	10	83%	2	48	6	**65.0%**	7
2. Chertsey to Weybridge Rail Station	1.713	6	100%	1	15	83%	3	10	83%	1	16	67%	5	9	75%	4	56	3	**82.9%**	2
4. Egham to Virginia Water via the A30	2.351	4	67%	5	21	117%	1	8	67%	3	14	58%	7	11	92%	1	58	2	**81.7%**	3
11. Thorpe Lea Road/Thorpe Road	4.908	6	100%	1	21	117%	1	10	83%	1	18	75%	3	9	75%	4	64	1	**92.5%**	1
	1.959	6	100%	1	9	50%	7	8	67%	3	21	88%	2	10	83%	2	54	4	**74.8%**	4

Table 27. Phase 1 walking corridors prioritisation table

Appendix 5: Indicative cost estimates

Table 28. Cost estimates for proposed interventions

Intervention	Cost	
Zebra crossing	£34,000 per item	*New crossing including road markings, dropped kerbs, belisha beacons and high friction surfacing on approaches*
Parallel crossing	£34,000 per item	
Signalised Pedestrian and Cyclist Crossing	£70,000 per item	*New crossing including traffic signals, road markings, dropped kerbs, and high friction surfacing on approaches*
Upgrade Signal Crossing	£43,800 per item	*Added traffic signals for pedestrians/cyclists and road markings on existing crossings*
Uncontrolled crossing	£12,500 per item	*New crossing island including electrical works and all other associated works costs*
Side Road Treatment	£14,600 per item	*Raised carriageway with tactile information and associated works such as street lighting, signing and lining*
Raised Junction	£35,000 per item	*Raised junction with crossing point and associated works such as coloured surfacing, street lighting, signing and lining costs*
Speed cushion	£11,800 per item	*Double speed cushion layout and associated works such as street lighting, signing and lining*
New street lights	£5,000 per item	*New lighting columns*
New speed limit	£15,000 per km	*New signs, road markings and traffic calming measures*
Widened footway	£700,000 per km	*Widened footway, new kerbs and resurfacing of the full extent of the footway (3.0m)*
Resurfaced footway	£300,000 per km	*Resurfacing of the full extent of the footway*

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	
Raised carriageway	£1,500,000 per km	*Raised carriageway to footway level and resurfacing (assumes 4.5m width; does not include drainage)*
Resurfacing carriageway	£2.220,000 per km	*High friction surfacing, rumble strips and amber lights on approach to new toucan crossing (Egham By-Pass Assumes 7m width)*
Two-way cycle track	£1,332,000 per km	*2.5m (minimum width) on the carriageway level with kerb segregation*
One-way cycle track	£721,500 per km	*1.5m (minimum width) on the carriageway level with kerb segregation*
Stepped cycle track	£1,055,000 per km	*One way cycle track on a level between the footway and the carriageway without other segregation*
Mandatory cycle lane	£294,000 per km	*1.5m (minimum width) painted lanes including resurfacing of the carriageway*
Advisory cycle lane (Dutch style)	£294,000 per km	
Mixed traffic	£755,000 per km	*Speed limit reduction, road markings and traffic calming measures*
New off-carriageway path	£900,000 per km for walking	*New footpath of 2.5m width including vegetation clearance, surfacing and new street lights*
	£1,000,000 per km for cycling	*New cycle path of 3.5m width including vegetation clearance, surfacing and new street lights*
Widened off-carriageway path	£600,000 per km	*Widening existing path to 4.5m to accommodate pedestrian and cyclists, vegetation clearance and resurfacing*
Resurfacing of the existing path on the M25 underpass	£300,000 per km	*Drainage improvements, vegetation clearance, improved lighting*
New path indicated with road markings	£100,000 per km	*New paths through the car parks*

Appendix 6: Stakeholder meeting minutes

Phase 1 Internal stakeholder meeting 12 July 21

ATKINS

Meeting Notes

Project:	Runnymede LCWIP		
Subject:	Runnymede Workshop 1A		
Meeting place:	Online (MS Teams)	Meeting no:	01
Date and time:	12 July 2021 | 10:00	Minutes by:	Giovanni Sanna

Attendees:		Representing:	
	Neil Mostyn (NM)		SCC (Transport Policy)
	Jeff Wilson (JW)		SCC (Transport Policy)
	Katie Harris (KH)		SCC (Transport Policy)
	Ivan Wrigley (IW)		SCC (Major Projects)
	Hannah Gutteridge (HG)		SCC (Countryside Access)
	Alison Houghton (AH)		SCC (Passenger Transport Projects)
	Nigel Pond (TP)		SCC (Road Safety & Sustainable School Travel)
	Tim Brown (TB)		SCC (Traffic Operations)
	Greg Yeoman (GY)		SCC (Community Partnerships & Engagement)
	Tim Dukes (TD)		SCC (Transport Development Planning)
	Rachel Raynaud (RR)		RBC (Planning & Economic Development)
	Helena Merriott (HM)		RBC (Planning Policy and Strategy)
	Sam Maloney (SM)		Sustrans
	Giovanni Sanna (GS)		Atkins
	Georgia Christodoulopoulou (GC)		Atkins
	Simon Jay (SJ)		Atkins
	Reed Sibley (RS)		Atkins
	Beatriz Campos (BC)		Atkins
	Ariana Ragusa		Atkins

Next meeting:

Distribution:	Attendees and Apologies		
Date issued:	15/08/21	File Ref:	5205511

NOTE TO RECIPIENTS:

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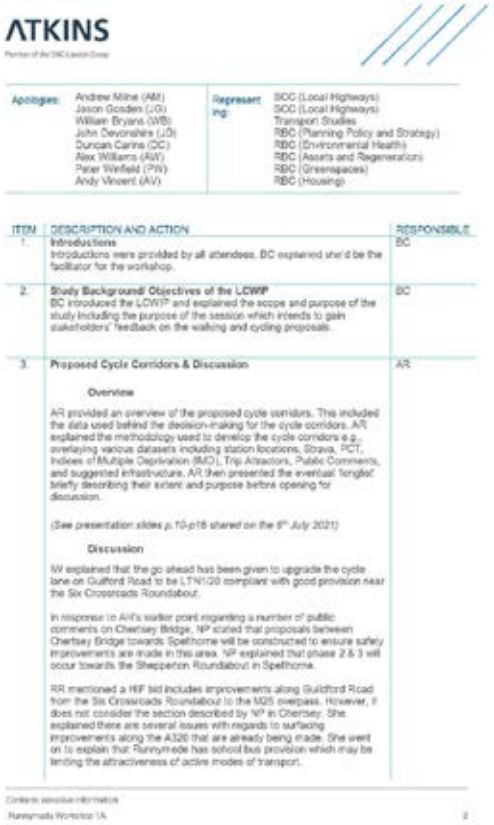
Runnymede Workshop 1A 1



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Apologies:	Andrew Milne (AM)	Representing:	SCC (Local Highways)
	Jason Gosden (JG)		SCC (Local Highways)
	William Bryans (WB)		Transport Studies
	John Devonshire (JD)		RBC (Planning Policy and Strategy)
	Duncan Carins (DC)		RBC (Environmental Health)
	Alex Williams (AW)		RBC (Assets and Regeneration)
	Peter Wetfield (PW)		RBC (Greenspaces)
	Andy Vincent (AV)		RBC (Housing)

ITEM	DESCRIPTION AND ACTION	RESPONSIBLE
1.	**Introductions** Introductions were provided by all attendees. BC explained she'd be the facilitator for the workshop.	BC
2.	**Study Background/ Objectives of the LCWIP** BC introduced the LCWIP and explained the scope and purpose of the study including the purpose of the session which intends to gain stakeholders' feedback on the walking and cycling proposals.	BC
3.	**Proposed Cycle Corridors & Discussion** **Overview** AR provided an overview of the proposed cycle corridors. This included the data used behind the decision-making for the cycle corridors. AR explained the methodology used to develop the cycle corridors e.g., overlaying various datasets including station locations, Strava, PCT, Indexes of Multiple Deprivation (IMD), Trip Attractors, Public Comments, and suggested infrastructure. AR then presented the eventual 'longlist' briefly describing their extent and purpose before opening for discussion. *(See presentation slides p.10-p16 shared on the 8th July 2021)* **Discussion** IW explained that the go ahead has been given to upgrade the cycle lane on Guilford Road to be LTN1/20 compliant with good provision near the Six Crossroads Roundabout. In response to AH's earlier point regarding a number of public comments on Chertsey Bridge, NP stated that proposals between Chertsey Bridge towards Spelthorne will be constructed to ensure safety improvements are made in this area. NP explained that phase 2 & 3 will occur towards the Shepperton Roundabout in Spelthorne. RR mentioned a HIF bid includes improvements along Guildford Road from the Six Crossroads Roundabout to the M25 overpass. However, it does not consider the section described by NP in Chertsey. She explained there are several issues with regards to surfacing improvements along the A320 that are already being made. She went on to explain that Runnymede has school bus provision which may be limiting the attractiveness of active modes of transport.	AR

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Runnymede Workshop 1A 2

ATKINS

ITEM	DESCRIPTION AND ACTION	RESPONSIBLE
	RR mentioned the importance to link Longcross development to the nearby towns, as the new development will have only a primary school and a link to the nearest secondary school will be of high demand. She asked whether the corridors towards Chertsey Station were the most direct. RR went on to explain that the cyclability up to Chertsey may be low due to the steep gradient. RR referred to the footbridge that will link Royal Holloway University to student accommodation. It would be cycle friendly and that link would be very useful in the area. A link could be added towards Thorpe Industrial Park. GY explained that a crossing going from Russian Park towards Royal Holloway was uphill and quite steep which could result in cyclability issues. TD explained that the footbridge from Russian Park to the university could also be improved. However, the routing and user groups who can utilise this route are yet to be confirmed as there are no public paths through the University's premises. JW made a summative comment regarding the length of the proposed corridors meaning this will make it challenging to provide infrastructure along its entirety. He explained that the route between Royal Holloway and Egham By-Pass are currently in poor condition and subsequently is hindering demand levels. He wondered whether it was possible to consider this with a higher level of priority. Finally, another routing that JW felt was high priority was between Weybridge Station going westward towards Byfleet and New Haw, an indicative routing is highlighted in Figure 1 below.

Figure 1 Indicative routing in orange from Weybridge Station through to Byfleet Road (Extract by Hannah Gutteridge from chat panel during workshop)

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Runnymede Workshop 1A 3

ATKINS

ITEM	DESCRIPTION AND ACTION	RESPONSIBLE
4.	**Proposed Core Walking Zones & Discussion**	GC

Overview

GC provided an overview on DfT guidance regarding the development of the CWZs including their overall objectives. GC explained the methodology used to identify the high street areas was using google maps. GC explained the importance of identifying background information to identify the walking corridors that will complement the CWZs. GC went on to explain the overlaying of data methodology. GC concluded her presentation by using Chertsey as an example which delineates the next steps required to develop the network within the CWZ. She then opened the discussion for comments on the proposed CWZs and walking corridors.

(See presentation slides p.19-p26 shared on 5th July 2021)

Discussion

AH stated it may be useful to consider bus routes in the development of the proposals as the direction of walking may be affected by the bus routing. She stated SCC may have this as a GIS layer.

RR explained there may be a way to connect between Addlestone and Bourne Business Park away from the main road (A317).

GY questioned what would constitute to promoting a minor route to a more significant one. This was noted by

HG explained that a route between Egham High Street going north from Egham Town Centre would be a good opportunity to connect with National Trust Site. JW added that in the old STP2 a link from Hummer Road was proposed with added crossings on Egham By-Pass. HG added that additional links should be included for cyclists towards Windsor. She mentioned that the off-street path along the Thames, west of Staines is considered for improvements and it is a good opportunity for pedestrians and cyclists for both commute and leisure trips.

Furthermore, a connection between 3. 'Staines CWZ' and 1. 'Egham High Street CWZ' corridor which includes Egham By-Pass and Vicarage Road corridors may be a further consideration for the proposals. SM

ATKINS

ITEM	DESCRIPTION AND ACTION	RESPONSIBLE
	agreed that the A308 may be a useful route to link between Staines and Egham. These improvements have been outlined in Figure 2 below.	

Figure 2 Egham and Staines annotations (extract by Hannah Gutteridge from chat panel during workshop)

5.	**Next Steps** BC went on to explain what the next steps will entail. This included: Network refinement & prioritising 'short list', route assessments, improvement concepts, further engagement, refinement of concepts and LCWIP report completion. She explained that the proposals will be developed further, she asked for further comments and explained the final report will be shared with SCC. BC re-iterated the need to complete the walking and cycle survey proposal responses by COP today (12th July 2021). *Post-Meeting Note: Survey responses to be submitted by Friday 16th July - email link sent by Atkins team.*	BC
6.	**AOB** BC stated that the Atkins team will share the comments made in this meeting with attendees in the subsequent workshops for Runnymede.	BC
7.	**End of meeting** BC and JW thanked all for attending and felt the workshop was a useful exchange in the ongoing LCWIP process.	

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ITEM	DESCRIPTION AND ACTION	RESPONSIBLE
8.	**Post meeting notes** 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 'longlists' 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.	

Phase 1 External stakeholder meeting 20 July 21

ATKINS

Meeting Notes

Project:	Runnymede LCWIP		
Subject:	Runnymede Workshop 1B		
Meeting place:	Online (MS Teams)	Meeting no:	02
Date and time:	29 July 2021 | 10:00	Minutes by:	Georgia Christodoulopoulou
Attendees:	Michael Berry (MB) Kylie Hargreaves (KH) Rena Chal (RC) Xavier Brice (XB) Sean Fitzpatrick (SF) Charlie Garai (CG) John Robinson (JR) Mark Adams (MA) Lucy Dowling (LD) Jonathan Howe (JH) Angela Farley (AF) Jonathan Fisher (JF) Jeff Wilson (JW) Katie Harris (KH) Beatriz Campos (BC) Georgia Christodoulopoulou (GC) Simon Jay (SJ) Ariana Raguse (AR) Giovanni Sanna (GS)	Representing:	Royal Holloway University Runnymede Green Travel Action Group Runnymede Green Travel Action Group Runnymede Green Travel Action Group Bourne Business Park Bourne Business Park Surrey Ramblers Chambers of Commerce National Trust Runnymede Royal Holloway University BUPA Runnymede Access Liaison Group SCC SCC Atkins Atkins Atkins Atkins Atkins

Next meeting:

Distribution:	Attendees and Apologies		
Date issued:	15/08/21	File Ref:	5265511

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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210720_Runnymede Workshop 1B meeting notes 1

ATKINS

ITEM	DESCRIPTION AND ACTION
1.	**Introductions** BC asked attendees during their introduction to describe what other benefits and opportunities the LCWIP will bring for their group. AF mentioned the opportunity for new facilities for the employees in the area MB mentioned that Royal Holloway University is issuing a new Sustainability strategy to reduce car movements and the LCWIP will tie in with the proposals CG mentioned the opportunity for new facilities to enhance safe routes to the park MA referred to the issues and the demand for parking and the LCWIP is an opportunity to encourage people to cycle LD mentioned that the National Trust wants to understand the proposals for the LCWIP and how they will be interpreted for better accessibility to the site JH referred to the interactions between the LCWIP and Royal Holloway's community, and how they can contribute to the plan KH mentioned that they are working with the local residents on Englefield Green and Sustrans on NCN 4 and wants to see how the route will complement the proposed network for the LCWIP and what are the opportunities for links outside the borough RC commented on the integration of the proposed network with the existing plans and facilities SF is looking for connections to Bourne business park JW referred to the early engagement that took place in Runnymede in May-early June and that the results have been shared with the Atkins team
2.	**Study Background/ Objectives of the LCWIP** BC introduced the LCWIP and explained the scope and in particular how it identifies long-term walking and cycling improvements at a local level and how such engagement allows the improvements to be shaped. purpose of the study including the purpose of the session which intends to gain stakeholders' feedback on the walking and cycling proposals. BC noted that the engagement was being undertaken at an early stage of the study to provide a valuable opportunity to obtain feedback and local knowledge from stakeholders, as the contents of the presentation are a draft set of corridors, that will be reviewed following the workshops.
3.	**Proposed Cycle Corridors & Discussion** **Overview** AR provided an overview of the proposed cycle corridors. This included the data used behind the decision-making for the cycle corridors. AR explained the methodology used to develop the cycle corridors e.g., overlaying various datasets including station locations, Strava, PCT, Indices of Multiple Deprivation (IMD), Trip Attractors, Public Comments, and suggested infrastructure. AR explained that although the map is oriented for infrastructure, for it to be suggested in the east of the borough, she explained that a hierarchy can help to consider areas in the west. AR then presented the eventual longlist briefly describing their extent and purpose before opening for discussion. *(See presentation slides p.10-p18 shared on the 16th July 2021)* **Discussion** XB asked for further explanation on the 'Heat map' and what are the shades of the colours representing. JH asked too if the darker shades represent the level of demand AR explained that the map highlights the areas and the corridors with clustering of issues. We overlayed the different information, for example collision data and comments

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Runnymede Workshop 1B 2

ATKINS

ITEM	DESCRIPTION AND ACTION
	from 'intervention' that point out the problematic locations, locations that are also identifies of higher demand and use. Then other information was overlayed, such as key trip attractors, to indicate the areas of higher demand for infrastructures. The darker shades show the potential network, and links with higher demand and estimated flows to link various destinations. JH asked if there is a level of interpretation for where the routes will be needed JW replied that the map is a representation of the existing and the simulated demand, factoring where the existing journeys are. BC added that the scope of the study is to identify which will be the most appropriate route, depending on the demand, either based on the existing or the future demand (if there is a development site, we estimate higher demand), and depending on the existing and potential infrastructures along the link/route. XB added in the chat "PCT is the 'Propensity to Cycle Tool, which is a way of identifying where there is potential demand for more cycling if the infrastructure was actually decent", and agreed with JW adding "It sounds like it is a combination of existing issues (stopping people cycling/hindering existing people cycling) and potential demand". He also added the link to the LTN 1/20. SJ added a link for the Propensity to Cycle Tool RC added a comment in the chat saying "The heat map also does mostly follow the agreements to issues/comments raised in the feedback data" MB referring to Route 4 (Egham Bypass) stated that it is an ideal road to link the University to Egham, but it is shared with vehicles with high speeds. He asked for a clear cycle route, segregated from other users, as today it is shared with pedestrians, and traffic calming measures to reduce the speed. He proposed to add an e-bike sharing scheme to assist cyclists in the area, as there are steep gradients between Egham and the University. He mentioned that people will not easily buy an e-bike to use on the route. He also proposed to add features that will propose the active use of the cycle corridors, as an alternative to car usage, like they do in SE and Central London, that have live cycle counters. AR acknowledged. XB added in the chat "The section that Michael is talking about on the top end of the A30 is critical - it is woefully inconsistent shared path that LTN1'20 could use as a case study of poor infrastructure." XB mentioned that the link between Route 4 (Egham Bypass) and Egham Rail Station should be prioritised to Phase 1, as it is vital. He added a that a route to Bishops Gate should be prioritised too. The park is a major trip attractor for leisure trips, there is ample room along the A328, and the traffic speeds are high (speed limit of 60mph), and there is an opportunity for improvement. He added that today people are driving to the park for their leisure walks/rides. AR mentioned that we do want to promote leisure trips, but we are targeting more habitual trips. She mentioned that this is the same case as Virginia Water park where people use their cars to visit the area. XB responded that now, post Covid, transportation is changing, and people are working from home and there is more demand for leisure trips (visiting friends, parks, trips to the markets etc). AR agreed and mentioned that we should also focus to trips to school and make cycling as a primary means of transport. XB added in the chat "There is cycle infrastructure that connects to Windsor Park at Virginia Water - both along the A30 and past Christchurch. They aren't wonderful, but they are ok - consistent. Bishopsgate has nothing - despite ample verge space that could be taken for a cycle path, and it would link to a school too." LD commented on Route 4 (Egham Bypass) that it is an important route, to link to the National Trust. She proposed a link along Windsor Road, since it is a very popular route, mentioning that the speed limit has been reduced to 40mph, but still the speeds are high

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Runnymede Workshop 1B 3

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ITEM	DESCRIPTION AND ACTION
	for cyclists. She added that it will be great to have a route to access Egham Rail Station from the park and Windsor Road, and new routes to link Windsor Road to routes 13 and 15, near Coopers Hill routes. She asked what we could suggest for the area. AR replied that we will revisit all the background information.
	KH Referred to the topography issues and the steep gradient of Route 4 (Egham Bypass). '200ft rise' that it is difficult or even walk. She asked about the methodology, if we are looking at existing routes and road network and mentioned that 'non-compliance' engagement platform was pinning only issues on existing facilities. She also asked about revising the long list following the update on the census data for 2021. AR replied that in the methodology we looked at all of the options in the area (footpaths and bridleways) and asked the participants that if they see and opportunity for a new alignment to note it. Referring to the census data, she mentioned that the results will be available in the end of 2022, so there will be no update in the study. JW replied regarding the 'commonplace' that people naturally were commenting on the existing facilities, in the same way that PCT is following existing routes. RC commented on the census data in the chat: "ONS will provide a draft set of results March / April 2022. Full results March/April 2023"
	RC proposed a route to link Thorpe Industrial Park to Staines Road (and Chertsey) instead of 'Route 1 along the B383. The route goes through Minak's Walk, where there is a barrier that cyclists will have to lift their bikes, and to the M3 bridge tunnel that has poor lighting. AR acknowledged the difficulties and noted the opportunity XB commented on the chat: "It's a sneaky way under the M25 but a bit of a secret as it's not signed - the road is private, but I imagine right of way is established."
	RC added a route along Vicarage Cres, that might be a private road, to join Vicarage Road, to Egham and Route 4 (Egham Bypass), without having to cross the A30.
	XB commented on the chat 'Cycling to Heathrow T5 would be an important consideration'
	At the end of the session BC posted the link of an online form where attendees could vote the preferred 5 cycle routes or add additional routes in the long list. JW added that attendees and everybody who was invited are welcome to send their feedback by the end of the week on the proposed routes and on additional routes that are missing.
4.	**Proposed Core Walking Zones & Discussion**
	Overview
	GS provided an overview on DfT guidance regarding the development of the CWZs including their overall objectives. GS explained the methodology used to identify the high street areas was using google maps. He explained the importance of identifying background information to identify the walking corridors that will complement the CWZs. Then went on to explain the overlaying of data methodology. GS concluded the presentation by using Chertsey as an example which delineates the next steps required to develop the network within the CWZ. He then opened the discussion for comments on the proposed CWZs and walking corridors.
	(See presentation slides p.19-p28 shared on 18th July 2021)
	Discussion
	JW Asked whether the feedback will be given on the CWZ and the corridors or if the attendees should give ideas on walking routes within the CWZ (as per the example in Chertsey)

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ITEM	DESCRIPTION AND ACTION
	BC replied that any feedback will be welcome, any additional/missing CWZs, or links between the zones.
	RC referring to Egham Bypass corridor, said that the crossing linking to the meadows with Egham is very popular but dangerous and should be improved. JW mentioned that it was included in the cycling routes. RC added that the path exits to Windsor Road on another crossing and the pedestrians have to rush to cross the road. GS acknowledged XB noted the importance of Runnymede Meadows by commenting in the chat "Why aren't Runnymede Meadows identified as a green space?". He added "It's really important - as the A30 is a huge barrier to accessing it, and requires a crossing about half-way down it, replacing the casual crossing. It also maps to where several of those ped collisions were". LD agreed. BC replied that we will review this. RC added comments on potential links to the meadows "About where Hanmer Road is" & "for the A30 crossing as that would join with a concrete path across the meadows".
	XB noted that the link between Egham and Englefield Green is essential. He said that pedestrians are following the most direct route, and south of Egham Bypass will be a development site that will have to be linked to the rail station. KH Agreed and commented in the chat that "most walkers would go via Middle Hill"
	JR proposed a corridor along Wick Lane to aid pedestrian safety. Kings Lane is a narrow twisty road that links Englefield Green to green areas. RC added Blays Lane from Wick Road to the High Street that requires traffic calming measures. XB added in the chat that "Blays lane is also going to see a lot of residential development at the southern end so some sort of traffic restriction is going to be needed as it is currently 2-way but only wide enough for one car." KH agreed and added in the chat "It is very popular with walkers and there is a lot of conflict with cars as there is no pavement"
	XB mentioned that a link between Staines and Thorpe Lea is missing. He commented in the chat "I imagine that there are many trips between Staines and Thorpe Lea that could be switched from short car trips to walking - it's not far, but the Causeway/Staines Bridge roundabout by Sainsbury's acts as a major barrier." He added that it is an important shopping area and schools (Magna school) that will require improvements. GC replied that it will be added walking corridor in Staines CWZ XB added in the chat "When I say half-way down it, I mean half-way down the dualled bypass section - the signal crossing at Maranello's and signalised roundabout (a big improvement) are not sufficient"
	RC asked if routes along the river have been looked at GC replied that in the previous workshop an off-street route between Staines Bridge and Egham had been proposed. The Thames path west of the M25 will serve primarily leisure trips and we are targeting improvements within the town centres and close to key trip attractors. Mentioning that, she referred to the proposed corridors from Chertsey and Staines that will be linked to the River Thames Scheme proposals. The RTS then will focus on routes by the river. RC responded in the chat: "The River would be a fantastic commute as well" XB agreed and commented "access to the Thames blocked by the A30 - there are footpaths across the Runnymede Meadows that before the bypass were built would have linked the town directly to the river."
	JW asked MA if Bourne Business park employees are travelling via Addlestone RS or Weybridge and which route they are taking.

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ITEM	DESCRIPTION AND ACTION
	MA said he does not know, but the routes to the park will need to be improved and accessible.
	XB asked how the CWZ were created and mentioned that they seem to be limiting the accessibility to the key areas. GC said that isochrones from the access points of the high streets were created and the different polygons dissolved to form the final CWZ. BC added that the proposed walking corridors were added link the CWZ to other key destinations outside the zone. GC continued with the example from Chertsey that shows the next step of identification of the walking corridors within the CWZ and that the proposals are not necessarily limited within the boundaries of the CWZ. XB then asked if new links can be created. He mentioned old neighbourhoods that have poor pedestrian provision and complex alignments, whether these could be utilised and how. BC responded that if there is need for new links, that will be proposed. As for the old neighbourhoods there are design tools that will help to improve access to the areas and reduce traffic use.
	RC proposed a route from Manorcroft School to the Leisure centre on Vicarage Road, following the similar alignment to the cycling route and utilising the footbridge. The path will link with the rail station. GS Acknowledged
	MA asked if the routes and the area have been visited by the Atkins team GS said that a site visit took place, primarily to see the potential connections to the River Thames Scheme Proposals. He added that the shortlisted routes will be visited and assessed on site using the DfT tools. BC added that we will cycle along the routes to check the issues for the users. MA added on that point that the route between Egham Rail Station and Magna Carta School is of high use (the route that students are taking) and it will be crucial for the study to be visited to see the issues in detail.
	RC asked if the LCWIP considers maintenance JW replied that the LCWIP is an improvement plan. XB replied in the chat that "[the LCWIP is] an infrastructure plan so maps out where routes needs to go/be improved."
	MA commented in the chat "From a business POV, particularly in relation to town centres, we would like to see routes that provide easier/safer access for visitors. Also, as mentioned by other contributors it is essential that we have cycle friendly facilities at the destination. In relation to local secondary schools do we have data to indicate where students currently travel from? If so we could use that data to identify safer routes and encourage more students to walk/cycle." JW replied "The Propensity to Cycle Tool does give information on the routes travelled to schools by pupils which are currently / could be cycled. In a few cases we also have schools that have produced Travel Plans which provides more in depth information on pupils travel patterns"
	XB asked in the chat: "Does the core walking zone in Chertsey extend from the station to the schools on the south of the railway? Sir William Perkins and Salesians on the A320 (Guildford Road)" BC Replied that there is walking route from the CWZ leading to the schools
	GC posted the link of an online form where attendees could vote the preferred 3 core walking zones and walking corridors or add additional routes in the long list.

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ITEM	DESCRIPTION AND ACTION
5.	**Next Steps** BC went on to explain what the next steps will entail. This included: Network refinement & prioritising 'short list', route assessments, improvement concepts, further engagement, refinement of concepts and LCWIP report completion. She explained that the proposals will be developed further, she asked for further comments and explained the final report will be shared with SCC.
6.	**AOB** BC stated that the Atkins team will share the comments made in this meeting with attendees in the subsequent workshops for Runnymede.
7.	**End of meeting** BC and JW thanked all for attending and felt the workshop was a useful exchange in the ongoing LCWIP process.

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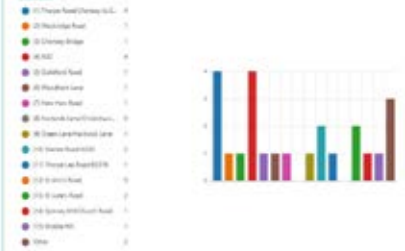
ITEM	DESCRIPTION AND ACTION
8.	**Post meeting notes** During and following the workshop, an online survey form was shared with attendees to get their input on which cycle routes and walking areas from the 'longlists' they felt were a higher priority. The results from this workshop are shown below. The 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. 1. Select the 5 proposed cycle routes that you feel are the highest priority for further study in Phase 1 of the Runnymede LCWIP.  2. Select the 3 proposed Core Walking Zones that you feel are the highest priority for further study through Phase 1 of the Elmbridge LCWIP. 

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Runnymede Workshop 1&

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Phase 1 Elected Members stakeholder meeting 23 July 21

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Meeting Notes

Project:	Runnymede LCWIP		
Subject:	Runnymede Workshop 1C		
Meeting place:	Online (MS Teams)	Meeting no:	03
Date and time:	23 July 2021 | 16:00	Minutes by:	Ariana Ragusa
Attendees:	Cllr Don Whyte (DW) Cllr Sylvia Whyte (SW) Cllr Isabel Mullens (IM) Cllr Scott Lewis (SL) Jonathan Hulley (JH) Jeff Wilson (JW) Katie Harris (KH) Beatriz Campos (BC) Georgia Christodoulopoulou (GC) Ariana Ragusa (AR)	Representing:	Local Council Local Council Local Council Local Council SCC SCC SCC Atkins Atkins Atkins

ITEM	DESCRIPTION AND ACTION
1.	**Introductions** BC asked attendees during their introduction to describe what other benefits and opportunities the LCWIP will bring for their group. Cllr D. Whyte mentioned the opportunity for the new LCWIP to link the new development on Longcross, and improve the pedestrian access in the neighbourhoods. Cllr Mullens referred to Egham town and the crossings on Egham By Pass and the river as important for the LCWIP to address, especially for the disabled. The A30 is a important route to link the university with the town. Cllr Lewis referred to the A320 and the improvements that are required. Cllr S. Whyte referred to the new developments and the A320 to access the Hospital

Next meeting:

Distribution:	Attendees and Apologies		
Date issued:	15/08/21	File Ref:	5265512

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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210723_Runnymede Workshop 1C meeting notes 1

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ITEM	DESCRIPTION AND ACTION
2.	**Study Background/ Objectives of the LCWIP** BC introduced the LCWIP and explained the scope and in particular how it identifies long-term walking and cycling improvements at a local level and how such engagement allows the improvements to be shaped. purpose of the study including the purpose of the session which intends to gain stakeholders' feedback on the walking and cycling proposals. BC noted that the engagement was being undertaken at an early stage of the study to provide a valuable opportunity to obtain feedback and local knowledge from stakeholders, as the contents of the presentation are a draft set of corridors, that will be reviewed following the workshops.
3.	**Proposed Cycle Corridors & Discussion** **Overview** AR provided an overview of the proposed cycle corridors. This included the data used behind the decision-making for the cycle corridors. AR explained the methodology used to develop the cycle corridors e.g., overlaying various datasets including station locations, Strava, PCT, Indices of Multiple Deprivation (IMD), Trip Attractors, Public Comments, and suggested infrastructure. AR explained that although the map is oriented for infrastructure, for it to be suggested in the east of the borough, she explained that a hierarchy can help to consider areas in the west. AR then presented the eventual longlist briefly describing their extent and purpose before opening for discussion. *(See presentation slides p.10-p18 shared on the 23rd July 2021)* **Discussion** Cllr D. Whyte noted Route 5 to link to Ottershaw, St Peter's Hospital, the rail station and the schools as important and he would strongly request the route to be progressed for improvements. He added that there are already cycle facilities along the route, and only at sections some complementary work will make the corridor an exemplary cycle route. AR agreed and noted that we have received a lot of comments on the route and the is demand Cllr Lewis commented on routes 6 & 7. He said that they link different sides of the borough. Route 6 links to schools. Route 7 links to the rail station and is congested due to the single file traffic in the tunnel on the railway. Cllr Mullens said she is glad that Route 1 is included. She added that Route 4 is important, commenting that now more University Students are accepted from West London and it will help link them to the University premises. She referred to the parking issues in Egham town and Englefield Green. She then added that a link to Windsor from Runnymede roundabout will be useful, as there are no facilities today to connect the areas. AR acknowledged and referred to the route to Windsor that it was highlighted in the previous workshops as well and will be added. Cllr S. Whyte mentioned the importance of links coming from Virginia Water. She noted that the area is very rural, and facilities will be very useful, as currently on the main road there is no footway. For example, links to Magna Carta school or Strode's College. AR agreed that there is no provision, and the selected route gives access to the main Leisure destination Cllr Mullens added that there is a train line that links Virginia Water to Egham Cllr S. Whyte responded that there are no frequent trains and an additional route will help reduce cars. She added that there are parking problems in Virginia Water.

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Runnymede Workshop 1C 2

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ITEM	DESCRIPTION AND ACTION
	Cllr Mullens referred to Thorpe's Neighbourhood Plan, which includes proposals for walking and cycling AR asked the attended on their opinion on different alignments of the routes Cllr D. Whyte commenced that the back roads in Runnymede are difficult due to vegetation and the poor visibility and he would prefer the proposals along the main roads. JW added that a lot of the proposals are draft from the data the team has collected. The consultation is targeting this kind of feedback, on implication for specific routes and items that should be taken into account. AR agreed and added that we have the demand data which will give a route from A to B and the optimal alignment will be addressed in the next stage. Cllr D. Whyte commented on the two options between Egham and Chertsey: Route 10 extends along a wide road with hatched median, with fast speeds and links to Staines Bridge, so he would prefer route 10 over 1. Cllr Mullens agreed with these aspects, but she mentioned that if Route 1 links to schools, she would prioritise it. Additionally, there are some developments along Route 1. BC added that we can propose both. JH asked if we could identify cycle access to Longcross and garden village? AR responded that at the moment there is nothing there so there is no data to show demand for improvements, but we are expecting more demand. She added that in the workshops we are asking people to support for new facilities to the new development area. Cllr D. Whyte added that now there is no planning application for the whole development but 200 houses are being built, where they will not have any commercial activity so people will have to travel to Virginia Water for their daily needs (shops, school). JH agreed and added that a cycle route to Virginia Water will be great for people to travel for their basics. Cllr D. Whyte said that the cycle route would solve the crisis of the parking restrictions. Cllr S. Whyte asked about routes outside the borough boundaries, to link the development to Chobham and Sunningdale. Cllr D. Whyte agreed with a link to Sunningdale Cllr Mullens added that people from Chobham are driving to Longcross to take the train. BC responded that a cycle route would then replace those trips. JH asked about the timelines, and what/when will be the residents' engagements BC presented the next steps JW added that 5 priority routes will be taken forward to feasibility design and move for funding where there will be open consultation.

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Runnymede Workshop 1C 3

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ITEM	DESCRIPTION AND ACTION
4.	**Proposed Core Walking Zones & Discussion** **Overview** GC provided an overview on DfT guidance regarding the development of the CWZs including their overall objectives. GC explained the methodology used to identify the high street areas was using google maps. She explained the importance of identifying background information to identify the walking corridors that will complement the CWZs. Then went on to explain the overlaying of data methodology. GC concluded the presentation by using Chertsey as an example which delineates the next steps required to develop the network within the CWZ. She then opened the discussion for comments on the proposed CWZs and walking corridors. *(See presentation slides p.19-p28 shared on 16th July 2021)* **Discussion** Cllr Mullens suggests that a pedestrian link is needed along Hummer Road across Egham Bypass and across Runnymede Meadows. In Egham bypass, the average speed is 47mph (there is a 50mph speed limit). Pedestrians coming from Egham High Street need to cross this busy road –dog walkers, schoolchildren and people using pushchairs need better and safer access to the recreation grounds. Disabled people cannot get to this destination. JW takes into account the desire for north south pedestrian movement from Egham to Runnymede Meadows. However Egham Bypass, may perhaps not be a realistic walking corridor, but maybe a parallel route should be proposed that is less traffic-heavy, through Egham Town, etc. Cllr Mullens mentions that she has not observed many people walking along the Bypass, so money should not be spent in this area. Note on Coopers Hill Lane – it's part of the national cycle network, and people walk along this alignment. Egham Town, Train Station and Staines need better connections to the Causeway, which is a major employment hub. JW mentions that to reach The Causeway, anecdotally people prefer to walk from Staines Railway Station. Cllr Mullens an alternative to The Causeway is the Thames Path which has some safety issues, there is flooding, and some accidents have occurred. She asks about which type of provision will be proposed along the corridor by Royal Holloway, which needs better pedestrian provision as students tend to drive. GC responds that improved access between Royal Holloway and Englefield Green may not make it to shortlist but may be kept as a 'future route'. Cllr Mullens asks about potential alternatives to the Bypass for student access, perhaps through Egham Town minor roads. GC responds that a site visit is required to check the area in the vicinity of Royal Holloway and identify potential route. Cllr Mullens presents a situation in which a disabled person was knocked down by an eScooter. Which type of infrastructure will eScooter riders use? Jeff Wilson Responds that this is more of a National Policy issues, that hasn't been resolved, but the most likely outcome is that these will be legalised, and it is expected that eScooters will use cycling facilities.
5.	**Next Steps** BC went on to explain what the next steps will entail. This included: Network refinement & prioritising 'short list', route assessments, improvement concepts, further engagement, refinement of concepts and LCWIP report compilation. She explained that the proposals will be developed further, she asked for further comments and explained the final report will be shared with SCC.

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Runnymede Workshop 1© 4

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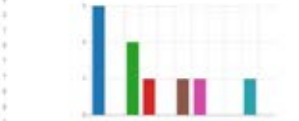
ITEM	DESCRIPTION AND ACTION
6.	**AOB** BC stated that the Atkins team will share the comments made in this meeting with attendees in the subsequent workshops for Runnymede.
7.	**End of meeting** BC and JW thanked all for attending and felt the workshop was a useful exchange in the ongoing LCWIP process.
8.	**Post meeting notes** 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 'longlists' 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. 1. Select the 5 proposed cycle routes that you feel are the highest priority for further study in Phase 1 of the Runnymede LCWIP.  2. Select the 3 proposed Core Walking Zones that you feel are the highest priority for further study through Phase 1 of the Elmbridge LCWIP. 

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Runnymede Workshop 1© 5

Phase 2 Internal stakeholder meeting 30 September 21

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Meeting Notes

Project:	Runnymede LCWIP		
Subject:	Runnymede Workshop 2A (Internal Stakeholders)		
Meeting place:	Online (MS Teams)	Meeting no:	02
Date and time:	30 October 2021 | 10:00	Minutes by:	Georgia Christodoulopoulou
Attendees:	Jeff Wilson (JW) Katie Harris (KH) Jason Gosden (JG) Hannah Gutteridge (HG) Alison Houghton (AH) Nigel Pond (NP) Martin Leppard (ML) Helena Merriott (HM) Iwan Pringley (IW) Alex Allen (AA) Chris Dulley (CD) Tim Dukes (TD) Beatriz Campos (BC) Ariana Raguza (AR) Georgia Christodoulopoulou (GC)	Representing:	SCC (Transport Policy) SCC (Transport Policy) SCC (Local Highways) SCC (Countryside access) SCC (Passenger Transport Projects) SCC (Road safety) SCC (Local highways) RBC (Planning Policy and Strategy) SCC (Major projects) SCC (transport development planning) RBC (Greenspaces) SCC (Transport development planning) Atkins Atkins Atkins
Apologies:	Neil Modure Andrew Milne Tim Brown William Bryans Rachel Raynaud John Devonshire Duncan Carins Alex Williams Peter Winfield Andy Vincent	Represent ing:	SCC (Transport Policy) SCC (Local Highways) SCC (Traffic operations) SCC (Transport Studies) RBC (Planning Policy and Strategy) RBC (Planning Policy and Strategy) RBC (Environmental Health) RBC (Assets and Regeneration) RBC (Greenspaces) RBC (Housing)

Next meeting:

Distribution:	Aciendees and Apologies		
Date issued:	14 October 21	File Ref:	5265511

NOTE TO RECIPIENTS:

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ITEM	DESCRIPTION AND ACTION
1.	**Introductions** Introductions were provided by all attendees and apologies were given.
2.	**Study Background** BC introduced the objectives of the workshop which incends to gain stakeholders' feedback on the walking and cycling proposals and gave an overview of the LCWIP including the activities undertaken so far.
3.	**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 will be in tandem in the overlapping areas. Then she presented the DfT's Walking Route Assessment Tool that helps to identify the issues on the walking network using 29 criteria and presented the results for the Phase 1 CWZs and Walking Corridors. Following that she presented the proposals for each Core Walking Zone ➢ **CWZ 1 – Egham town** *(see presentation slides p.11-p13 shared on the 15th September 2021)* NP Agreed with the pedestrianisation of the High Street (item #1) but should be restricted access so some vehicles could enter the area, such as emergency vehicles with limited capacity and freight vehicles. He added that Developers should be more involved and coordinated in delivering LCWIP proposals, for a sustainable long-term vision. JG Commented on item #7 that a zebra crossing is not suitable for the context of the road and a signalised crossing will be more appropriate as it is a straight road, with high traffic speeds. He added that for item #10 a signalised crossing is under construction due to be delivered in the next month further to the east. TD added that the signalised crossing on item #10 is going to be a puffin crossing as there are no cycle facilities on both sides of the road at the moment. He agreed with NP that the LCWIP should guide planning and development (like a master plan) as some of the proposed items have been proven to be difficult to be implemented. AA asked if the proposals also include designs for existing infrastructure provision. GC responded that yes, the whole network will be upgraded, where there are issues identified, to higher standards. JW commented on the parking restrictions on the residential area, whether there were comments or complaints that needed to be addressed. He added that the location of item #13 should be reviewed in the next stages as drivers might queue on the zebra crossing while wait at the level crossing. He noted that the one-way system south of Egham By-Pass (item #5) might resolve the issue of rat-running in the area. And asked to assess the feasibility of item #9 as includes some clashing measures between walking and cycling. AH noted the importance of linking the walking network with the bus stops and asked the bus stops to be shown on the maps.

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ITEM	DESCRIPTION AND ACTION
	➢ **CWZ 6 – Chertsey** *(see presentation slides p.14-p15 shared on the 15th September 2021)* JG commented that "High Street" should change to "Guildford Street" (items #1, #2 and #6). He added that pedestrianisation was proposed in the past and met opposition from traders, but he believes that it is something that will be welcome by the local community. He referred to item #13 that speed limit reductions have been requested by local residents with added traffic calming features but there were some concerns with noise/vibration issues from community due to large vehicles going over bumps/etc. He then added that a signalised crossing is been designed at the location #16 to access the shops. CD asked if green spaces have been considered since should provide completely off-road walking and cycling facilities, such as along the River Bourne. GC responded that these were considered but they have some barriers and do not score so well on the assessment, so on-road improvements were prioritised. ➢ **CWZ 6 – Addlestone** *(see presentation slides p.16-p18 shared on the 15th September 2021)* BC noted that she was particularly interested on item #15 if it is feasible as proximity to water may create some safety issues. JG noted that Station Road/Brighton Road junction is problematic, suffers from congestion due to single lane approach and the number of turning vehicle movements and there is major scheme to widen the approaches to the signalised junction. Crouch Oak Lane is used as a bypass so it would cause some issues if it were to be one-way as it would add congestion to the constrained junction. He added that the proposed raised junctions on A318 (item #6) need consideration as the road is used by heavy vehicles. He then asked why the parking bays are proposed as raised to the level of the footway (several items on all CWZs). GC responded that bays can be used by pedestrians when they are empty, and the feature improves the aesthetic view of the town. NP added that raised parking bays were implemented in Camberley but there were problems as were misused by drivers not parallel parking but perpendicular parking instead, nearly up to shop/building edge. He noted that bollards to control the parking should be added. NP asked to upgrade the crossing on the south arm of Weybridge Road/Station Road roundabout. There is opportunity to reduce the road width and add a refuge island with tactile paving, as it is a problematic crossing. TD added regarding Station Road/Brighton Road junction that land has been secured (apart from one building) to improve the junction.
4.	**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 explained that some corridors were additionally assessed and compared using the DfT's Route Selection Tool. Three alternative alignments connecting Egham to Chertsey were visited in August and assessed: Route 4, NCN 4 via Chertsey Road, Route 1a, Vicarage Road – Thorpe By-Pass, and Route 1b, Vicarage Road – Monks Walk. The RST showed higher quality scores via Route 1b and it was selected to be included in the 1st Phase. AR then presented different cycle facilities and how these can are implemented in each type of road network using LTN 1/20 tables as a guideline. ➢ **Egham Town Centre and Vicarage Road – Route 1a** *(see presentation slide p.22 shared on the 15th September 2021)* JW agreed with the reduction of the speed limit and asked the details of the change: where will the 20mph end and the 30mph start on Vicarage Road. AR responded that realistically we see 20mph zone in Egham town (up to the M25 underpass) and 30mph

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ITEM	DESCRIPTION AND ACTION

south of the underpass, but ideally the shcle extend of Vicarage Road would be 20mph.

JW asked how we can reduce the speed on Vicarage Road. AR replied that traffic calming measures should have more pedestrian aspects, such as raised crossings or refuge islands, and new footways to improve access to schools or the Leisure Centre, primarily at the sections where motorists are speeding.

JW commented on the opportunity for facilities on both sides of the road, and that would require extensive land acquisition. AR said that there are some pinch points along the proposed route that will require third party land but there are opportunities through parks, and sport facilities and along the road.

JG added that currently Vicarage Road is 30mph, and according to the speed survey there is poor level of compliance, that results to police speed enforcement. Trying to achieve 30mph where it was 40mph it is a struggle. Additionally, the road is the main corridor to Thorpe Industrial Estate, and we should be very considerate with the type of traffic calming measures to be added as the proportion of heavy traffic is high.

AR acknowledged the issues with the traffic calming and added that since this is the most direct route and should be promoted, the off – road alignment seems to be the best option.

TD informed that there is an allocation site between the M25 and Thorpe Lea Road which will provide new pedestrian crossings to access to Thorpe that will result to lower speeds on Vicarage Road. This could be an opportunity for on-street facilities though residential area.

- **Ten Acre Lane and Monk's Walk – Route 1b** *(see presentation slide p.23 shared on the 18th September 2021)*

AR presented the constraints of the route and how they could be addressed.

AA commented that south of Monk's Walk the reservoir is marked as triple-SI (Site of Special Scientific Interest) and additional lighting should be advised following surveys.

- **Chertsey – Route 1a** *(see presentation slide p.24 shared on the 18th September 2021)*

JW commented on the section that links to the railway station. Currently Guildford Street is one-way so instead of been proposed as mixed traffic it should be shown as contra flow. AR commented that the section is proposed in Walking Network as pedestrianised, and the link will be off-street two-way. She added that the section was not part of Route 1, but it was added to link with public transport.

JW noted that the speeds and the residential parking will be an issue on Weir Road. AR responded that the road is wide in places and any pinch points can be addressed in the next stages of design.

JG agreed with JW and added that residents have raised concerns about the speeds, even though the level of compliance is fair (30mph speed limit with 32-33mph measured speed). London Street – Weir Road is a bus route and other large vehicles are using the route and, as he mentioned earlier for the walking proposals, there were some concerns about noise and vibrations especially on some Victorian properties.

AR responded that a Dutch treatment could be a good option on these sections, with horizontal restrictions and raised tables on side roads. JG replied that the roads carry a lot of traffic.

JW commented that Route 1, including all the three presented sections will provide a link between Egham and Chertsey, and can be delivered in parts as presented.

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Runnymede Workshop 2A

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ATKINS

ITEM	DESCRIPTION AND ACTION

- **Chertsey to Weybridge Rail Station – Route 2** *(see presentation slide p.25 shared on the 18th September 2021)*

NP said that he is intrigued with the proposed Dutch style treatment for the roundabout.

CD commented for item #2 there is an existing off-street path south of the railway line through Victory Park and residential roads to be used instead of providing a new off-street path. He added that he is not aware of the widths of the path but should be an opportunity to widen it. BC asked about the ownership of the path. AA responded that County Council owns it, and NP added that access can be provided from the side of the petrol station on the A318.

- **A30 – Route 4** *(see presentation slide p.26 shared on the 18th September 2021)*

JW said the proposals are quite straight forward.

- **Thorpe Lea Road – Route 11** *(see presentation slide p.25 shared on the 18th September 2021)*

AH commented on the cycle by-pass on the bus stops that we will struggle to implement them and there will be accessibility issues. She then asked about the proposals for reducing the speed limits and proposing new traffic calming measures and pedestrian and cycle crossings if traffic modelling is planned to be undertaken and if it will include bus journey times. AR responded traffic modelling is planned on the next stages of design and bus routes are given to modellers who will include the effect of the measures on the journey times.

AH added that new bus shelters are planned to be installed at the bus stops.

JW commented on Staines Bridge, as it is proposed as mixed traffic, adding that there is a historical attempt to make changes to the bridge, and asked how will the Dutch treatment on the roundabout will affect the traffic on the bridge. AR responded that we add as an aspiration proposal cycle tracks if there is any scope to widen the bridge.

JW asked the attended if there is political will for improvements on the bridge and commented that there was desire from the Runnymede side. NP commented that there is significant potential for economic growth if we widen the bridge for Active Travel and a business case should help.

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 LCWIP report completion.

6. **AOB**
BC asked the attendees to send any additional comments on the proposed interventions by Friday 8th October.

7. **End of meeting**
BC thanked all for attending and felt the workshop was a useful exchange in the ongoing LCWIP process.

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Runnymede Workshop 2A

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Phase 2 External stakeholder meeting 5 October 21

ATKINS

Meeting Notes

Project:	Runnymede LCWIP		
Subject:	Runnymede Workshop 2B (External Stakeholders)		
Meeting place:	Online (MS Teams)	Meeting no:	02
Date and time:	05 October 2021 | 10:00	Minutes by:	Georgia Christodoulopoulou
Attendees:	Jeff Wilson (JW) Katie Harris (KH) Rachel Raynaud (RR) Jonathan Howe (JH) Michael Berry (MB) Piers Long (PL) Nigel Robbins (NR) Jonathan Robinson (JR) Jonathan Fisher (JF) Rima Chal (RC) Simon Jay (SJ) Beatriz Campos (BC) Ariana Ragusa (AR) Georgia Christodoulopoulou (GC)	Representing:	SCC (Transport Policy) SCC (Local Highways) RBC (Planning Policy and Strategy) Royal Holloway University Royal Holloway University Royal Holloway University Thorpe's residents' association Surrey Ramblers Runnymede Access Liaison Group Runnymede Green Atkins Atkins Atkins Atkins

ITEM	DESCRIPTION AND ACTION
1.	**Introductions** Introductions were provided by all attendees.
2.	**Study Background** BC introduced the objectives of the workshop which intends to gain stakeholders' feedback on the walking and cycling proposals and gave an overview of the LCWIP including the activities undertaken so far.

Next meeting:

Distribution:	Attendees and Apologies		
Date issued:	14 October 21	File Ref:	5266511

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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Runnymede Workshop 2B

1

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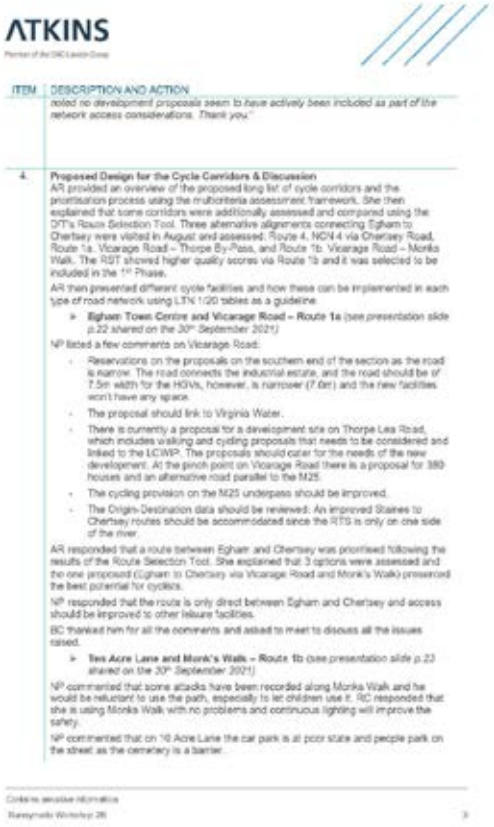
ITEM	DESCRIPTION AND ACTION
3.	**Proposed Design for the Core Walking Zones & Discussion** GC described the methodology of selecting the Core Walking Zones (CWZs) and presented the long list for the walking network. She then proceeded to describe the prioritisation process of the CWZs and Walking Corridors 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 will be in tandem in the overlapping areas. Then she presented the DfT's Walking Route Assessment Tool that helps to identify the issues on the walking network using 29 criteria and presented the results for the Phase 1 CWZs and Walking Corridors. Following that she presented the proposals for each Core Walking Zone ➢ **CWZ 1 – Egham town** *(see presentation slides p.12-p13 shared on the 30th September 2021)* JF commented that reduction of speed from 50mph at Egham Bypass would increase safety and RC added that reduction of lanes would decrease speed. BC responded that Atkins would need to look at modelling in order to understand the impact of reduction of lanes. JH asked about item #15 as it has an impact on the university entrance, what are the proposals? GC presented the proposals to reduce the speed limit, to change to access only and residential parking only roads and raised junctions. NR what happens to displaced traffic from the reduction of Egham bypass to one lane. GC this will need to be addressed through traffic modelling. JW added that the reduction of the traffic lanes is a comment from a stakeholder not a proposal from the LCWIP. NR asked regarding item #7 why not provide a segregated cycling facility as the River is a main trip attractor. BC responded that question to be addressed as part of cycling presentation. ➢ **CWZ 6 – Chertsey** *(see presentation slides p.14-p15 shared on the 30th September 2021)* RC mentioned that there will be a market along Guildford road in the near future, which may enable pedestrianisation. JW commented that over the last 18 months people have a better understanding of public spaces, but engagement needs to be held with local traders for the pedestrianisation. JF added that even with pedestrianisation parking is required for those with mobility issues and suggested the railway station as has available space and it is easy to access. ➢ **CWZ 6 – Addlestone** *(see presentation slides p.16-p17 shared on the 30th September 2021)* JW asked JF of his view of recessed, footway-level parking. JF responded that there should be care taken when cars are parked, tables for restaurants are in place, that there is sufficient clear space for those with mobility issues, and that movement space is not too narrow. JF added that footway surfacing needs taking care, that the crossfall and camber of the footway is steep at location #15. RR asked about the cycle facility Weybridge. GC responded that it is on Addlestone Road and exit on Weybridge Road. NP Added in the chat: *"Have you taken on board the current proposals for 1700 beds at RH that could provide a joined walkway to the station etc. I know it is a proposal but*



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ITEM	DESCRIPTION AND ACTION
	noted no development proposals seem to have actively been included as part of the network access considerations. Thank you"
4.	**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 explained that some corridors were additionally assessed and compared using the DfT's Route Selection Tool. Three alternative alignments connecting Egham to Chertsey were visited in August and assessed: Route 4, NCN 4 via Chertsey Road, Route 1a, Vicarage Road – Thorpe By-Pass, and Route 1b, Vicarage Road – Monks Walk. The RST showed higher quality scores via Route 1b and it was selected to be included in the 1st Phase. AR 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. ➢ **Egham Town Centre and Vicarage Road – Route 1a** *(see presentation slide p.22 shared on the 30th September 2021)* NP listed a few comments on Vicarage Road: - Reservations on the proposals on the southern end of the section as the road is narrow. The road connects the industrial estate, and the road should be of 7.5m width for the HGVs, however, is narrower (7.0m) and the new facilities won't have any space. - The proposal should link to Virginia Water. - There is currently a proposal for a development site on Thorpe Lea Road, which includes walking and cycling proposals that needs to be considered and linked to the LCWIP. The proposals should cater for the needs of the new development. At the pinch point on Vicarage Road there is a proposal for 380 houses and an alternative road parallel to the M25. - The cycling provision on the M25 underpass should be improved. - The Origin-Destination data should be reviewed: An improved Staines to Chertsey routes should be accommodated since the RTS is only on one side of the river. AR responded that a route between Egham and Chertsey was prioritised following the results of the Route Selection Tool. She explained that 3 options were assessed and the one proposed (Egham to Chertsey via Vicarage Road and Monk's Walk) presented the best potential for cyclists. NP responded that the route is only direct between Egham and Chertsey and access should be improved to other leisure facilities. BC thanked him for all the comments and asked to meet to discuss all the issues raised. ➢ **Ten Acre Lane and Monk's Walk – Route 1b** *(see presentation slide p.23 shared on the 30th September 2021)* NP commented that some attacks have been recorded along Monks Walk and he would be reluctant to use the path, especially to let children use it. RC responded that she is using Monks Walk with no problems and continuous lighting will improve the safety. NP commented that on 10 Acre Lane the car park is at poor state and people park on the street as the cemetery is a barrier.

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ITEM	DESCRIPTION AND ACTION
	➢ **Chertsey – Route 1c** *(see presentation slide p.24 shared on the 30th September 2021)* *JW suggested since most attendees were from the northern Runnymede to discuss Routes 4 and 11.* ➢ **Chertsey to Weybridge Rail Station – Route 2** *(see presentation slide p.25 shared on the 30th September 2021)* *JW suggested since most attendees were from the northern Runnymede to discuss Routes 4 and 11.* ➢ **A30 – Route 4** *(see presentation slide p.26 shared on the 30th September 2021)* PL referred to the new Campus Development and the opportunity for improved access to the college via a narrow land strip. He added that close to the roundabout the number of lanes increases and the footways are narrow, so there is available space to widen the facilities. AR responded that new facilities would be provided with central hatching and verge removal, and carriageway width reduction, but there are constraints since buses are using the road. LP added that the University has bus services too. The team asked whether a route though the University will be desired to avoid Egham Hill. LP responded that the university premises are private, but they cannot stop people from using the routes. There are, however, concerns for students' safety at the crossings if the traffic increases. LP also added that the A30 should be 30mph with added traffic calming measures and traffic enforcement cameras, since there are issues towards Virginia Water. He commented that the routes are disconnected and there are conflicts between cyclists and motorists. AR responded that the parking should be removed to provide cycle facility and added that the A30 is designed to be 50mph but there is space for improvement. RC commented that the A30 should be 20mph. AR responded that 20mph would be ideal, but it is very difficult. ➢ **Thorpe Lea Road – Route 11** *(see presentation slide p.27-28 shared on the 30th September 2021)* NP referred to residents' concerns for the RTS scheme that runs behind the properties that the new footpaths, that are close to the backyards of Thorpe residents would attract antisocial behaviours.
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 LCWIP report completion.
6.	**AOB** BC asked the attendees to send any additional comments on the proposed interventions by Friday 8th October.
7.	**End of meeting** BC thanked all for attending and felt the workshop was a useful exchange in the ongoing LCWIP process.

Phase 2 Elected Members stakeholder meeting 5 October 21

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Meeting Notes

Project:	Runnymede LCWIP		
Subject:	Runnymede Stakeholder Workshop 2C (Elected Members)		
Meeting place:	Online (MS Teams)	Meeting no:	02
Date and time:	05 October 2021 | 16:00-18:00	Minutes by:	Giovanni Sanna
Attendees:	Jeff Wilson (JW) Katie Harris (KH) Jason Godsen (JG) Rachel Raynaud (RR) Cllr John Furey (JF) Cllr Robert King (RK) Cllr Scott Lewis (SL) Cllr Robert King (RK) Cllr Isabel Mullens (IS) Cllr Peter Snow (PS) Cllr Don Whyte (DW) Simon Jay (SJ) Reed Sibley (RS) Ariana Ragusa (AR) Giovanni Sanna (GS) Georgia Christodoulopoulou (GC) Beatriz Campos (BC)	Representing:	SCC (Transport Policy) SCC (Transport Policy) SCC (Local Highways) RBC Councillor (Addlestone) Councillor (Egham) Councillor (Woodham and New Haw) Councillor (Egham) Councillor (Egham Town) Councillor (Addlestone South) Councillor (Longcross) Atkins Atkins Atkins Atkins Atkins Atkins
Apologies:	Andrew Milne (AM) Mark Nuti (MN) Cllr Marisa Heath (MH)	Representing:	SCC SCC Councillor (SCC)

Next meeting:	n/a
Distribution:	Attendees and Apologies
Date issued:	14/10/2021
File Ref:	5205136

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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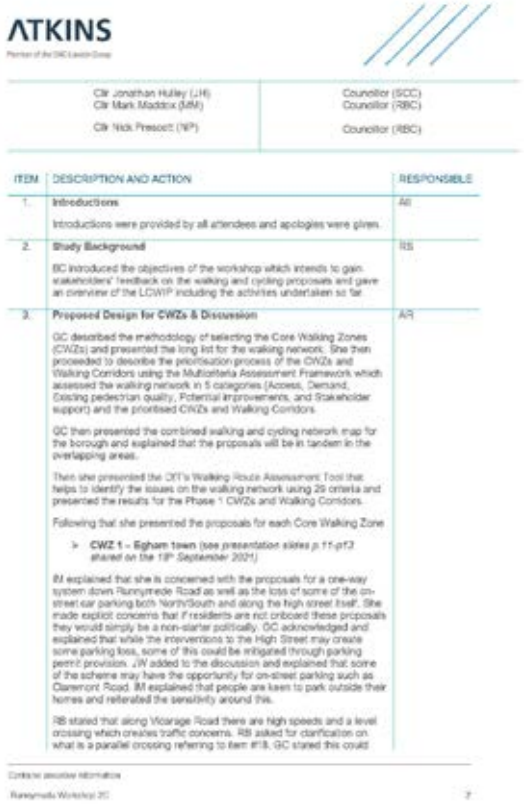
Runnymede Workshop 2C 1



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Cllr Jonathan Hulley (JH) Cllr Mark Maddox (MM) Cllr Nick Prescott (NP)	Councillor (SCC) Councillor (RBC) Councillor (RBC)

ITEM	DESCRIPTION AND ACTION	RESPONSIBLE
1.	**Introductions** Introductions were provided by all attendees and apologies were given.	All
2.	**Study Background** BC introduced the objectives of the workshop which intends to gain stakeholders' feedback on the walking and cycling proposals and gave an overview of the LCWIP including the activities undertaken so far.	RS
3.	**Proposed Design for CWZs & 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 will be in tandem in the overlapping areas. Then she presented the DfT's Walking Route Assessment Tool that helps to identify the issues on the walking network using 29 criteria and presented the results for the Phase 1 CWZs and Walking Corridors. Following that she presented the proposals for each Core Walking Zone ➢ **CWZ 1 – Egham town** (see *presentation slides p.11-p13 shared on the 18th September 2021*) IM explained that she is concerned with the proposals for a one-way system down Runnymede Road as well as the loss of some of the on-street car parking both North/South and along the high street itself. She made explicit concerns that if residents are not onboard these proposals they would simply be a non-starter politically. GC acknowledged and explained that while the interventions to the High Street may create some parking loss, some of this could be mitigated through parking permit provision. JW added to the discussion and explained that some of the scheme may have the opportunity for on-street parking such as Claremont Road. IM explained that people are keen to park outside their homes and reiterated the sensitivity around this. RB stated that along Vicarage Road there are high speeds and a level crossing which creates traffic concerns. RB asked for clarification on what is a parallel crossing referring to item #18. GC stated this could	AR

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Runnymede Workshop 2C 2

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ITEM	DESCRIPTION AND ACTION	RESPONSIBLE
	take the form of a signalised or unsignalised crossing. GC remarked that AR could then explain in more detail the proposals for this area. JF stated that the impact of the removal of parking has not been quantified and added that the closure of the road including not having access to shops is going to affect businesses. JF stated he would like to see more parking, if possible and has outlined that residents have opposed the pedestrianisation of the high street. JF stated that proposing two Toucan Crossings will have impacts car drivers by creating congestion that would back up into Staines. JF stated that the traffic flow impacts will be significant and explained that he felt the 20mph restrictions were a danger due to the focus drivers must place on staying within the speed limit. In response SJ acknowledged JF's concerns and reiterated the purpose and scope of the LCWIP. He added that at this stage we may not have the detail yet regarding the impacts on the traffic flow. GC also reiterate this and stated these are still high-level proposals that are open to change. IM explained that residents are generally in favour of pedestrianisation of the High Street. JF responded by stating that people will be unwilling to give-up the car and ultimately the proposals suggested will water down the changes that have been previously made. He concluded explaining that these changes will put further pressure on parking. BC closed the discussion on "CWZ 1 – Egham Town" and asked that attendees to place any further comments in the chat pane. ➢ **CWZ 6 – Chertsey** (see *presentation slides p.14-p15 shared on the 18th September 2021*) JF explained he does not believe it would be very easy to deliver any of the outlined schemes in Chertsey. He explained that the parking facilities make the area viable for businesses. He added that in areas like Chertsey and Egham, 20 mph zones will not be successful. DW explained that on the face of it the pedestrianisation of Guildford Street would be beneficial but would like to first see the effect of improved parking enforcement. DW explained that the catchment area for people for walking and cycling to then access the hospital would be positive and explained that this would also be beneficial along the A320. RR explained that with regards to markets in the area, there is an existing market located immediately outside St Peter's Church although it is limited in size, she went on to explain that anything that would provide pedestrianisation for markets is something residents are keener to date but traders have been less so. ➢ **CWZ 6 – Addlestone** (see *presentation slides p.16-p18 shared on the 18th September 2021*) JF stated concerns regarding the provision of a 20mph zone that he believed was incompatible with Addlestone as well. JF added that he is also against the reduction in parking being suggested. JF went on to explain that parking is the issue and reiterated whether a 20mph zone is	RESPONSIBLE

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Runnymede Workshop 2C 3

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ITEM	DESCRIPTION AND ACTION	RESPONSIBLE
	needed. He concluded with remarks about relocating the newly implemented existing crossing.	
4.	**Proposed Core Walking Zones (CWZs) & Discussion**	RS
	AR provided an overview of the proposed long list of cycle corridors and the prioritisation process using the multicriteria assessment framework. She then explained that some corridors were additionally assessed and compared using the DfT's Route Selection Tool. Three alternative alignments connecting Egham to Chertsey were visited in August and assessed: Route 4: NCN 4 via Chertsey Road, Route 1a: Vicarage Road – Thorpe By-Pass, and Route 1b: Vicarage Road – Monks Walk. The RST showed higher quality scores via Route 1b and it was selected to be included in the 1st Phase. AR 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. ➢ **Egham Town Centre and Vicarage Road – Route 1a** (see *presentation slide p.22 shared on the 30th September 2021*) IM agreed that providing two different speeds i.e., 20mph in the town centre and 30mph outside is positive, however, she expressed concern for the feasibility of reducing the speed limit to 30mph along the bypass due to the need to keep traffic flowing. She concluded that providing a cycle lane along Vicarage Road would be beneficial as there are wide carriageways. RK stated that cycle route number "2", just south of the station would be beneficial, he went on to explain that the M25 trunk route has significant impact on the surrounding roads. AR explained that at 'feasibility stage we generally only consider proposals within the highway boundary. RB stated that the footpath to the south-west of the station along the footpath itself, is not ideal as currently there are student facilities proposed in that area. RK went on to explain that the student facility could be tied into an extension of the cycle path in this area. ➢ **Ten Acre Lane and Monk's Walk – Route 1b** (see *presentation slide p.23 shared on the 18th September 2021*) AR provided context regarding the isolation of the location and its context between the two reservoirs. She also explained the alignment along the existing footpath means there are less cycle and vehicular conflicts to contend with. AR thanked stakeholders for previously highlighting this route as an option but added she did not expect much pedestrian traffic here due to its remoteness. DW agreed this may be an opportunity but cautioned that the provision of lighting along this proposed cycle route could create concerns for light pollution. Thorpe Park is alongside the path and inferred that if it operates at night it would create significant light pollution. AR agreed and added that there could be some environmental constraints which should be investigated further if this were to be taken forward.	

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ITEM	DESCRIPTION AND ACTION	RESPONSIBLE
	IM explained she rediscovered this path during lockdown and found there were some existing drainage issues, she also highlighted that there is an ancient stone near Thorpe Church (at the beginning of Monk's Walk). AR stated that this is a historical style of stone which would need to be considered carefully as there is no way to access the path at grade. AR explored some changes to the alignment which would allow the stone to stay in situ. RR added to DW comments regarding lighting and stated there are some designations which may need to be considered carefully. She directed the Atkins team to the use of the "Surrey Interactive Map (arcgis.com)" to explore the issues in more detail. AR went on to explain that this is something which could be considered in more detail in the next phase. ➢ **Chertsey – Route 1a** (see *presentation slide p.24 shared on the 18th September 2021*) PS offered Abbey Road as an alternative to this route which could potentially then connect with the nearby NCN 4. He offered this alternative as he believes that cycle route "3" is too narrow to provide a cycle lane and a footway along and the alternative route would simply require further establishment. He added that this is because there is simply not enough spaces to provide additional width. PS mentioned that it is challenging to walk from Addlestone to Weybridge. AR acknowledged this point and explained that there is a disconnect between the two areas. Returning to the cycle route alternative along Abbey Road, PS stated that there are a number of infrastructure works planned/ongoing and integrating saw this as an opportunity to implement a path. AR explained that by lowering traffic speeds less space would be required to provide the cycle lane making it more feasible to deliver on the proposed route. ➢ **A30 – Route 4** (see *presentation slide p.25 shared on the 18th September 2021*) IM stated that currently there is limited space along the northern side of the Egham-By-Pass. IM clarified that cyclists who travel south along the southside of the roundabout would need to have a safe option to tie in carefully with the proposals on the northern side. IM stated that the footway will also need to be widened in this area to accommodate for students and hoped that discussions with the university were ongoing for this including provision of funding to implement it. AR explained that it was challenging for cyclists and pedestrians to pass alongside each other. AR remarked about the ambition of this route particularly regarding its use as a connector for active travel.	

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ITEM	DESCRIPTION AND ACTION	RESPONSIBLE
	➢ **Thorpe Lea Road – Route 11** (see *presentation slide p.25 shared on the 18th September 2021*) RK commented that along Thorpe Lea Road, any implementation of physical traffic calming measures would require consultation with Highways England as this is a diversionary route. RK explained that as a result of this, it could be challenging to implement proposals here. AR elaborated on the proposals further by explaining they may include horizontal and vertical traffic calming. RK believed it may be more appropriate to consider an alternative routing rather than press ahead with developing proposals on the existing alignment due to the challenges it may cause later down the line.	
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 LCWIP report completion.	RS
6.	**AOB** BC asked the attendees to send any additional comments on the proposed interventions by Friday 8th October.	
7.	**End of meeting** BC thanked all for attending and felt the workshop was a useful exchange in the ongoing LCWIP process.	RS

Appendix 7: Sustrans Report

Runnymede LCWIP

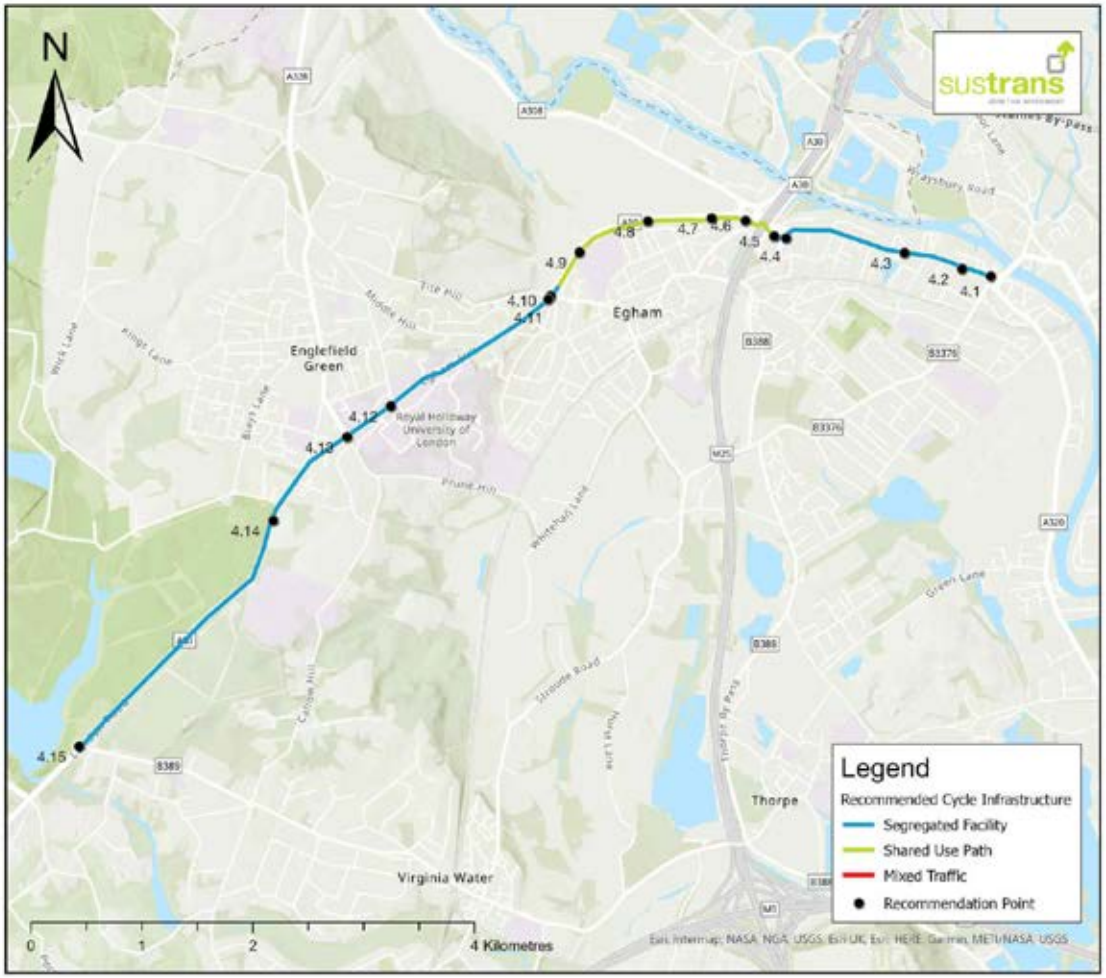
Runnymede Route 4

Chertsey Business Park to Virginia Water

Thorpe Rd/A308 Roundabout to M25 underpass: Segregated Cycle Track

M25 underpass to High Street: Shared Use Path

High Street to Virginia Water Park: Segregated Cycle Track



4.1

Remove striping to allow cyclists to use full width of shared use path alongside A308 roundabout. Replace white line segregation and shared use paths with a fully segregated cycle tracks in both directions.

Figure 1.1 A308 Roundabout (Sustrans)

4.2

Provide level surface pedestrian and cycle priority such as continuous footways over side road junctions such as Avenue Rd and Claremont Road. Investigate Dutch roundabout treatment at Sainsbury's/ Watermans Business Park roundabout.

Figure 1.2 Lotus Park crossing (Google)

4.3

Install a two-way segregated cycle track on the south side of the A308 from the A308/ Thorpe Rd roundabout to the M25 underpass.

Figure 1.3 A308 (Sustrans)

4.4

Improve visibility of cycle crossing on south arm of A308/Woodhaw roundabout, investigate installation of raised table with cycle/pedestrian priority. A large scale new development is under construction south of the crossing.

Figure 1.4 A308/Woodlaw south (Sustrans)

4.5

Remove and trim overgrowth and improve wayfinding on the approach to the M25 underpass. Investigate opportunities for widening.

Figure 1.5 Underpass approach (Sustrans)

4.6

Improve crossing signalisation to allow cyclists and pedestrians to cross in one signal phase.

Figure 1.6 A308/The Avenue (Sustrans)

4.7

Remove white line segregation to provide fully shared use path. A shared use path is only recommended if pedestrian counts are low. Investigate opportunity to provide fully segregated bi-directional cycle track if there is sufficient space. Improve surface and trim back greenery along the A30 from The Avenue to Hummer Rd.

Figure 1.7 A30 Path (Sustrans)

4.8

Remove striping allow cyclists to use full width of footway as a shared use path along the A30 from The Avenue to Runnymede Rd

Figure 1.8 A30/ Hummer Rd (Sustrans)

4.9

Expand shared use path from 2m to a minimum of 3m, may be achieved through trimming back verge overgrowth on the A30 from Runnymede Rd to High Street. Provide separation between path and carriageway.

Figure 1.9 A30 shared use path (Sustrans)

4.10

Install Dutch style roundabout at the Egham Hill/High Street roundabout. There is sufficient space to all fully segregated cycle facilities.

Figure 1.10 Egham Hill/High St (Sustrans)

4.11

Existing shared use path width is insufficient. Install new segregated cycle tracks on the carriageway from High Street to Wick Rd.

Figure 1.11 Egham Hill (Sustrans)

4.12

Wide junction with large curb radii at Harvest Rd/Egham Hill junction. Install raised priority crossing for cyclists using new segregated cycle tracks.

Figure 1.12 Harvest Rd (Sustrans)

4.13

Provide segregated cycle tracks on all junction approaches, may require removing turn lanes at Egham Hill/Bakeham Ln junction.

Figure 1.13 Bakeham Ln (Sustrans)

4.14

Upgrade existing mandatory cycle lanes to segregated cycle tracks with separation from the carriageway between the A30/Wick Rd junction and the Virginia Water Car Park.

Figure 1.14 A30 existing lanes (Sustrans)

4.15

Investigate upgrading existing uncontrolled crossing adjacent to the Virginia Water Car Park to a Toucan crossing for southbound cyclists accessing Virginia Water Park.

Figure 1.15 Virginia Water crossing (Sustrans)

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