Local Cycling and Walking Infrastructure Plan

Document History

Version	Author	Date
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1. Introduction

1.1 Overview

The development of the Slough Borough Council *Local Cycling and Walking Infrastructure Plan* (LCWIP) is a response to the Government's Local Cycling and Walking Strategy (CWIS, 2017). This demonstrates a shared commitment and recognition to increasing the level of active travel undertaken, recognising the contribution this will make towards a fully integrated, sustainable transport system.

The headline Government objectives in this strategy are:

- *To make cycling and walking the natural choice for short journeys, or as part of a longer journey (by 2040)*
- *To double the current level of cycling measured in number of stages made by 2025 (baseline 2013)*
- *To reduce cyclist KSIs in England*
- *To increase walking activity to 300 stages per person per year by 2025*
- *To "increase the percentage of children walking to school from 49% to 55% by 2025*

More generally in CWIS there is also a focus on better safety, better mobility and better streets.

More recently, the Department for Transport published 'Gear Change: a bold vision for cycling and walking' (2020) and an update to design standards (LTN1/20) which has led to a further reiteration of this document. There will also be a closer reference to TfL's Healthy Streets approach which describes how we can put people and their health closer to decision making.

This matches SBC's aspirations at a local level that aim to, benefit Slough residents and those visiting the borough to work. In transport terms, this means providing a network for travel and connectivity, contributing to the commitment to economic growth, but in an environmentally responsible way; a network that delivers improvements in public health and promotes social inclusion. In all areas here there is a specific focus on active travel. Progress towards these shared goals has long been understood to be best delivered at local level, through the Local Transport Plans developed and implemented by local transport authorities, with backing funding from National Government, including substantial funding sources covering a range of initiatives and statutory requirements. With the new design guidance. the LCWIP aims to capture these to identify how Slough will deliver direct, attractive, comfortable, safe and coherent cycle infrastructure

The LCWIP is not a starting point, then, but more of a restart, or a boost to existing commitments and aspirations. An opportunity, overall, to realise much that has been long

envisioned, as well as some exciting new areas of development. This has been helped along through a partnership enterprise to produce the plan.

In practical terms, the overall objective in this planning process has been to deliver

"A network plan for walking and cycling which identifies preferred routes and core zones for further development." (DfT)

In developing the LCWIPs, local authorities have been urged by the Government to be ambitious and innovative. Again, this reflects values that have been specifically stated by Slough Borough Council.

1.2. Developing the Plan

The LCWIP programme has to date been opened up to forty local authorities, with the expectation of an extension to the programme subject to assessment of the outcomes from the first round of allocations.

The development of the plan has entailed extensive consultation, research and data analysis. Slough has also benefited from a consortium approach, comprising technical and strategic support from highly respected bodies within the industry, with initial input and overall guidance from the Department for Transport. Excellent technical and strategic resources have been made available, ensuring the transfer of knowledge in a combined approach, sharing best practice and exploring options together. The Council has also provided substantial resources dedicated to advancing the project and making it fit within the policy suite of the service area, and the wider set of overall Council objectives and commitments.

1.3. Scenarios

The studies conducted have entailed considerable analysis, and reference has been made to the leading examples and best practice commonly recognised in the infrastructure of some of our European neighbours, notably the Netherlands and Denmark. One of the main data analysis tools has involved the use of scenarios designed to establish propensity for cycling levels subject to various conditions being met. This includes the Government's own scenario of doubling the amount of cycling, and the Dutch scenario (i.e. achieving the levels experience in the Netherlands, again subject to all necessary factors being in place and working effectively).

In many cases, it may not be immediately physically possible to recreate / retro-fit / re-build our towns and cities, but it is still valuable to learn from examples of excellence and applying what we can. Further, that which has previously been considered impossible, or perhaps undesirable by some, may ultimately prove possible and beneficial to all through funding, innovation, prioritisation and political will. Contribution to addressing climate crisis may prove to be the ultimate necessity.

By definition, the Council's LCWIP is focused on infrastructure, rather than strategy, but there are essential links and interdependencies between the respective areas. In terms of scope, the plan covers both structural improvements and the introduction of new

features, with a range of proposals in terms of scale and cost, and different levels of expected impacts.

1.4 Outcomes

The LCWIP includes three main deliverables:

1. Network maps for cycling and walking, before and after proposed interventions.
2. A prioritised list of proposed schemes with approximate costings.
3. A narrative report setting out the way the plan fits in with existing and complimentary Council strategies and commitments, and helps realise the overall vision.

Links to strategy context, commitments and vision are covered both in section 2 on policy and section 5, the overall review. Network maps are included in section 3 which covers analysis and route selection. The central feature is the dual set of prioritised, proposed lists of infrastructure schemes for walking and cycling, addressed in section 4. All of these elements make up a ten year plan designed to advance active travel across the borough.

There is recognition throughout the document that in order to be successful, the LCWIP must be:

"part of an integrated response to creating better places, safer streets and more reliable journeys" (DfT).

The list of schemes in this LCWIP presents established ways to address the opportunities available, as well as new, innovative approaches to help deliver greater gains and opportunities to monitor the success of the schemes. This will inevitably require considerable funding, particularly if we are to realise the comprehensive levels of change required to meet the stated quantitative and qualitative targets on sustainability stated at local, national and global level levels.

The approximate total cost for developing and implementing all of the proposed schemes in this plan is £47m, comprising £33m for cycling and £14m for walking. This covers the prioritised schemes and represents only a fraction of the cost of the investment that would be required to deliver the overall, ambitious changes that would be necessary to meet the Government targets at local level. The total costs for the scheme do not include utility diversions which are a common occurrence across the network in Slough.

The proposed schemes are considered to be the most useful in order to stimulate increased cycling and walking in and across the borough. We consider the measures entailed to be the most appropriate in terms of geographic / network opportunities and constraints, also in terms of social equality objectives and public health needs, and to be the most cost effective schemes based on preliminary assessments.

In addition, this document sets out how the plan will be implemented, managed, reviewed and adapted in the future. The LCWIP is a ‘living’ document and one that is expected to evolve and improve as this next iteration shows. The LCWIP is also essentially a management tool, designed to produce practical, successful infrastructure development. In partnership with strategy experts, Town Planners and policy makers, as well as engineers and project managers, we need to develop not just better infrastructure, leading to a better, more effective active travel network, but also improve monitoring , establishing clear baselines and for evaluating improvements. The LCWIP is only part of the process, then, but an essential part and a constructive way to continue promotion and take up of active travel.

2. National and Local Policy

2.1. Overall objective

The development of the LCWIP contributes towards meeting the overall strategic objective of achieving substantial increase in active travel and a major shift towards an integrated, sustainable transport system. This will entail increased integration of local transport strategies (and plans) with Land Use Planning and housing development. A multi-modal approach is also essential, specifically involving at least some element of active travel. The plan is expected to lead to improve social inclusion, mobility and accessibility. Ultimately, the plan seeks to facilitate and encourage the most appropriate forms of travel for short journeys at local level.

2.2. The role and status of the LCWIP

The LCWIP is not a strategic document. However, it is influenced by and has implications for cycling and walking. The LCWIP feeds into the existing and emerging Local Transport Plan 4 (LTP 4), Local Plan, Spatial Strategy and Strategic Transport Infrastructure Plan. The LCWIP is more than a technical appendix to the Cycling and Walking sub-strategies. These sub-strategies are further supported by the Access fund and Capability fund behavioural change programmes. There are also strong links between the LCWIP and the Road Safety and Network Management sub-strategies. All of these together will be reviewed when the overall Local Transport Plan is refreshed in the form of LTP4, which will make significant reference to the recently published Slough Transport Vision.

The LCWIP is also not a manual for technical construction however, as the LCWIP evolves it will continue to sign post engineers and technicians to technical guidelines including the LTN20 and other cycling and walking guidance documents. The LCWIP will have significant implications for the design of future schemes, whether specific to cycling or walking or part of a much wider transport brief. Varying levels of guidance on cycling and walking infrastructure design principles are therefore included in Appendix 2. The underlying principle is that LCWIP must form an authoritative source of reference in all future transport and highways planning, as well as being a varied and robust plan in itself for the delivery of bespoke, active travel schemes.

2.3. Main Council policy

Five Year Plan (2019-24) (5YP)

The various transport and highways strategies all contribute to the overall Council policy, most notably the Five Year Plan (5YP). In the introduction to this plan there is a commitment to:

“Inward investment, regeneration and infrastructure improvements will bring real benefits *to Slough, from housing and jobs, to better transport shopping and leisure facilities.”*

The LCWIP and the commitment to the provision of high quality cycling and walking infrastructure are relevant to all of the 5 key outcomes in the 5YP, and most notably:

Outcome 1: Slough children will grow up to be happy, healthier and successful
Children and young people will be able to confidently walk and cycle, with improved access to facilities and improvements to mental and physical wellbeing, contributing to better performance at school. Outcome 2 also focuses on health benefits.

Outcome 3: Slough will be an attractive place where people choose to live, work and stay
Plans are in place to create *"a vibrant and attractive location"*, with a reduced carbon footprint, reduced congestion, and improved air quality. Promoting sustainable modes of travel / active travel, ad increasing levels of physical activity will contribute to benefits in all aspects of life. The creation and enhancement of active travel links within the borough also links specifically to **Outcome 4: Our residents will live in good quality homes.**

Outcome 5: Slough will attract, retain and grow businesses and investment to provide opportunities for our residents
Commitment is made here to "encouraging a shift towards more sustainable forms of transport." This will play an important part in delivering sustainable economic growth, with environmental benefits, greater social inclusion, improved public safety and better public health.

The LCWIP will also contribute to the delivery of **The Slough Joint Wellbeing Strategy** (SJWS, 2016-20), protecting vulnerable children, increasing life expectancy by focusing on inequalities, increasing mental health and wellbeing.

It will also support the **Low Emission Strategy**, published in 2019, linking up with the 5Y P commitment to "Improved air quality in the borough with innovative solutions."

There are many links with **Public Health.** The UK chief medical officer has stated that cycling and walking deliver:

- improved metabolic health
- reduced premature mortality
- reduced risk factors in: cardiovascular and respiratory problems, some cancers, type II diabetes.
- Mental and neurological health benefits

Other wider benefits arise from general reduction in pollution and improved air quality.

2.4. The Local Plan

The LCWIP is also intended to support the emerging Local Plan, focusing on providing effective active travel links between areas of development and trip attractors including schools, places of worship and recreation centres as well as the major employment hubs. Extending and matching the cycling and walking networks to development areas is considered a priority by the Local Council. As the LCWIP progresses, more extensive links between the respective plans and policies are anticipated, including adherence to the LTN1/20 . Further reference to the relationship between the plans is made in Appendix 1.

2.5. Local transport policy

SBC has cycling and walking sub-strategies as part of the overall Local Transport Plan 3 (LTP3). Included in these are cycle and walking networks, and facilitating active travel have long been considered and essential consideration in project plans and designs. The LCWIP has now provided an opportunity for a 'restart', with an emphasis on infrastructure, and how infrastructure planning will integrate with behavioural change programmes. There are intrinsic links here with the ongoing Access programme, and more recently the Capability fund, targeting modal shift, concentrating on travel planning for schools and businesses, also working alongside the public health team but covering all aspects of sustainability. A prime example of the links between physical and behavioural measures is the ever increasing extent of the Slough Cycle Hire scheme and equipment.

Active Travel, both in terms of infrastructure and uptake, will make a vital contribution to the realisation of the Slough Transport Vision (launched 2019) with far reaching implications for the redevelopment of Slough town centre and across the borough. The LCWIP emphasis is on providing tangible ways to facilitate this essential uptake in demand. In order to deliver genuinely sustainable modes of transport, we need to deliver a network that will stimulate economic growth and connectivity without damaging the local environment and causing further air quality pollution.

Cycling and walking infrastructure must contribute to integrated, multi-modal travel, as well as being pleasurable activities in themselves. The Council is endorsing the Government's brief in focusing on the 'shorter journey', but we are also seeking to encourage cycle commuting, and cycling and walking as part of longer journeys particularly along the A4 corridor. Indeed, the main data source for the analysis and planning in the preparation of the LCWIP has been census data for commuter cycling, as processed with the aid of the Propensity for Cycling Tool (PCT).

2.6.1. Problems and opportunities

The LTP3 document (designed to cover the period from 2011 to 2026) sets out some significant problems that have still not been adequately addressed, hence the need for new initiatives and plans such as the LCWIP and more.

LTP3 refers to the slow growth in walking and cycling in Slough, and the conflicting priorities of different road user groups, leading to
"the trade-off between economic growth and improvement in environmental conditions"
The document acknowledges that
"even with a significant improvement in the quality of sustainable travel modes, the car will remain the dominant mode for many journeys"

The level of change required to bring about a genuinely sustainable transport system in Slough is significant. The LCWIP must therefore be ambitious. Political support, has become more apparent as we move out of pandemic lockdown but stakeholder buy in is required, with an adequate funding plan if the LCWIP is to ultimately prove successful.

Cycling and Walking appear alongside Road Safety, Accessibility and Smarter Choices in the core LTP references. There is also a specific commitment to the creation of new / better pedestrian and cycle links, which must be better maintained. The networks must be developed to maximise the 'permeability' of the town'. Alongside this is commitment to reduce demand for travel by private car. This continues to be a priority.

2.6.2 LTP3 Cycling supplementary strategy

The sub-strategy refers to a number of barrriers and issues specific to cycling in Slough including:

- Low levels of cycle ownership.
- Physical severance caused by major east-west arteries (road and rail)
- "Cultural challenges" – leading to low take up of cycling

Cycling does take place and for a wide variety of journey purposes. This continues to include "non-designated cycle routes" (such as Langley Road), despite high traffic flows and conflict with motorised vehicles, contributing to the number of cycling accidents. The infrastructure is inconsistent, with cycling being undertaken both on and off carriageways with low speeds. The Local Travel Plan commits to new facilities in a "hierarchy of solutions and the need to minimise clutter and the impact on 'streetscape' ".

In terms of opportunities, LTP3 considers that a top level ambition of 10% modal share for cyclists is realistic, based on Slough's topography, size and population density, though this is a long term target.
"Achieving a massive increase in cycling is not simply about investment in the mode – it would require restrictions on the motorised modes and reallocation of road space and signal timings in favour of cycling so that the car was no longer the default mode for short local journeys".

It is recognised also that not all mode switches are from the car. Some benefits to the rise of Active Travel can lead to the decline in the patronage of Public Transport.

Contributing towards this level of commitment, , the following infrastructure measures were proposed:

- Cycle hire scheme
- Mass implementation of residential cycle parking
- Restrictions on commuter parking
- Reallocation of carriageway space
- A mixture of segregated, shared / unsegregated, walking routes / cycleways
- Advisory lanes, traffic-free access

In addition, the sub-strategy called for more extensive behavioural campaigns and better enforcement of speed limits. The quality of the infrastructure must be improved if we are to realise a upturn in cycling numbers.

2.6.3 LTP3 Walking supplementary strategy

A commitment was made in this strategy to improving the walking environment, and to developing
"a network of routes maintained to a high standard consisting of footways and PROW that were appropriately lit and signed, connecting areas and facilities between which people wished to travel".

Proposed measures included improved lighting, signs, reduced waiting times at signalised crossings as well as more structural elements such as raised tables, crossing points, and new parking bays (to dissuade footway parking). Nb it is noted that this last item is in conflict with the SBC pavement parking policy that was subsequently developed. This area now needs aligning.)

Prioritisation was due to be given to the routes that were subject to the greatest use and where improvements were most needed. Severance was recognised as significant problem, also the presence of physical barriers

However, it was understood at the time of writing the LTP, and is still accepted, that *"Changing the infrastructure or re-allocating road space in Slough is not going to be enough. There needs to be a cultural shift to grasps the benefits of a less car-dominated society".*

Overall, it was recognised that some features are not good for all, and we need to constantly consider the best ways to implement reallocation of mode and road space. We would therefore have to continue with our behaviour change messaging and continue to prioritise cycling and walking through all scheme designs.

All of these comments and principles remain valid and have been considered in the development of the LCWIP. As a result, a variety of measures of varying scale and scope have been included in the prioritised list of proposed measures.

2.6. Regional transport policy

Regional Policy is currently being developed and consulted on by Transport for the South East (TFSE), the emerging sub-national body. This is wide ranging and is broadly in line with both national and local policy. Slough Borough Council expects to see increasing links between the variations levels and initiatives.

2.7. LCWIP strategy conclusions

A major issue is the need to develop a network that includes active travel infrastructure as part of the solution to addressing the long-standing problem of promoting sustainable economic growth. A great deal has been done already since the publication of LTP3. The opportunity now arises with the introduction of the LCWIP to make still greater advancements, with the proposal of a range of new schemes, specific to locations in the borough but based on core principles and potentially applicable across the whole borough.

The requirements set by the Department for Transport at the are simple , i.e. to deliver safe and reliable ways to travel for short journeys, cause more people to cycle and walk, make active travel ‘normal and enjoyable’ in *“places that have cycling and walking at their heart”.* In many ways, this remains a challenge, but one that must be met. This has led to the development of the LCWIP, essentially from an infrastructure point of view but intrinsically linked with behavioural change nudges and wider Council policies. Ambitious measures have been proposed in this plan. The intention of the LCWIP has also been to demonstrate the Council’s values, stated in a descriptive form as being Responsive, Accountable, Innovative, Ambitious and Empowering

3. Cycling and Walking Networks

3.1. Analysis and route selection for Cycling

3.1.1. Methodology

Identification of the Slough cycle network for inclusion in the LCWIP was an iterative process that used outputs from the LCWIP tools, as well as local input and knowledge to identify, screen, and prioritise a core cycling network for advancement through the LCWIP process. The key inputs and steps in the process are outlined below, and the results of each step summarised in the following sections.

1. Broad cycling network identified through the Propensity to Cycle Tool (PCT) and Slough Borough Council stakeholder input
2. Preliminary network developed using the above input and refined based on mapping and review of key attractors, existing cycling facilities, and overall network connectivity
3. Network screened and a core network prioritised for advancement utilising the Route Selection Tool (RST)

3.1.2. Propensity to Cycle Tool analysis

The Propensity to Cycle (PCT) is an online tool and dataset designed to assist with strategic planning of cycling networks. It illustrates the current and potential future distribution of commuter cycle trips based on different growth scenarios. The model identifies the 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. Hilliness of the route is also a factor within the model.

The Slough PCT analysis was conducted using data downloaded in December 2018. 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 the Borough and is appropriate for the scale of the study area
- **Growth Scenario**: Government target (national doubling of the proportion of commuters who cycle from 3% to 6%)
- **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 a 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:** PCT data for 'fast' routes through Slough were aggregated across the network, which provided a total commuter cycle flow for each link in the cycle network. A threshold of commuter cycle flows ≥ 100 was used to illustrate the routes with highest cycle flows and identify an initial cycle network with coverage across the Borough.

The output of the PCT analysis is shown in Figure 1.

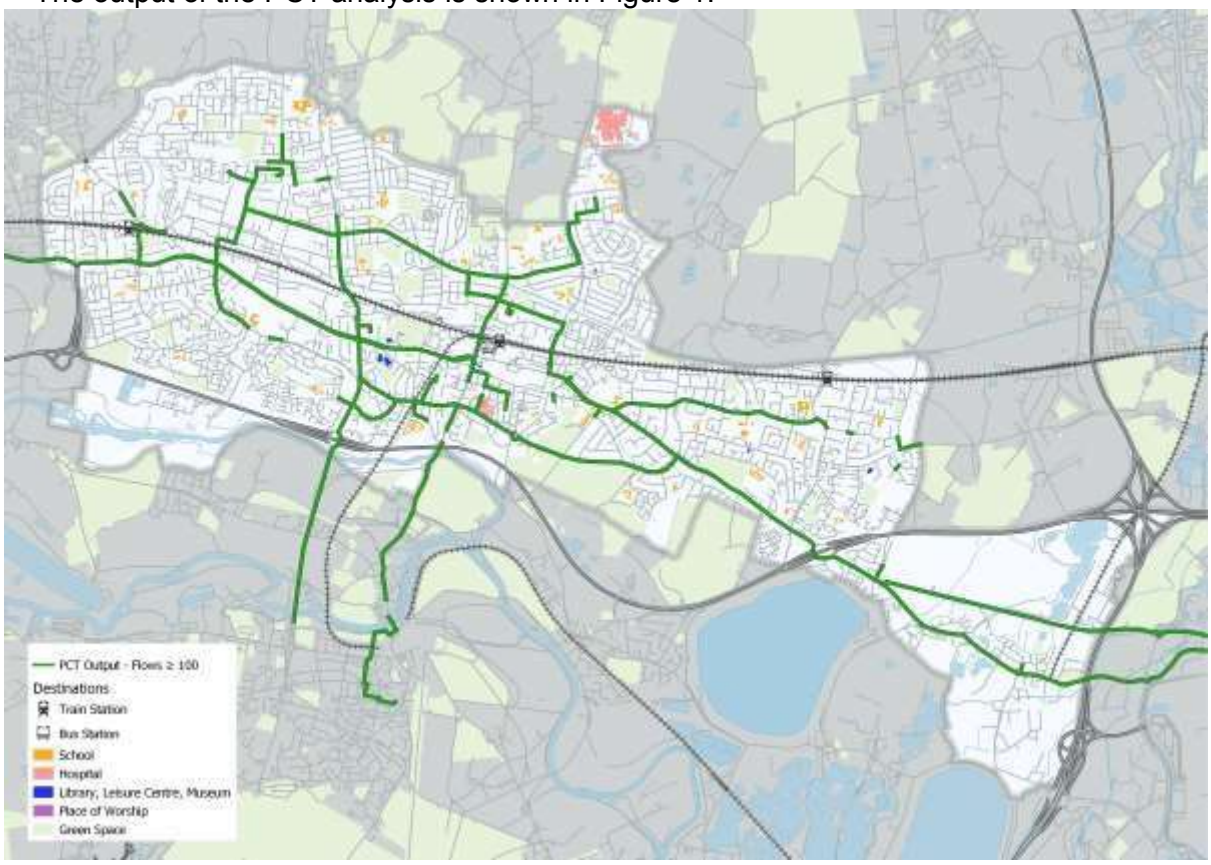

Figure 1: PCT flows ≥ 100 cyclists (government target scenario)

3.1.3. Stakeholder input

An internal workshop with Slough Borough Council staff was held on 13 September 2018 to gather input on the Slough cycle network. Attendees included engineers, transport planners, policy officers and the public rights of way officer, all representing Transport and Highways, along with representatives from related services areas, local cycling groups and a number of technical consultants. The workshop included a mapping exercise where attendees identified aspirational routes for cycling, which built upon or enhanced existing cycling infrastructure. Following the workshop, the aspirational routes were categorised as high/medium/low priority based on factors such as improvements to overall network connectivity, potential usage (based on PCT data), overall importance (access to major attractors, population centres, planned development, etc.), existing infrastructure, and potential feasibility.

The output of the stakeholder aspirational mapping exercise is shown in Figure 2.

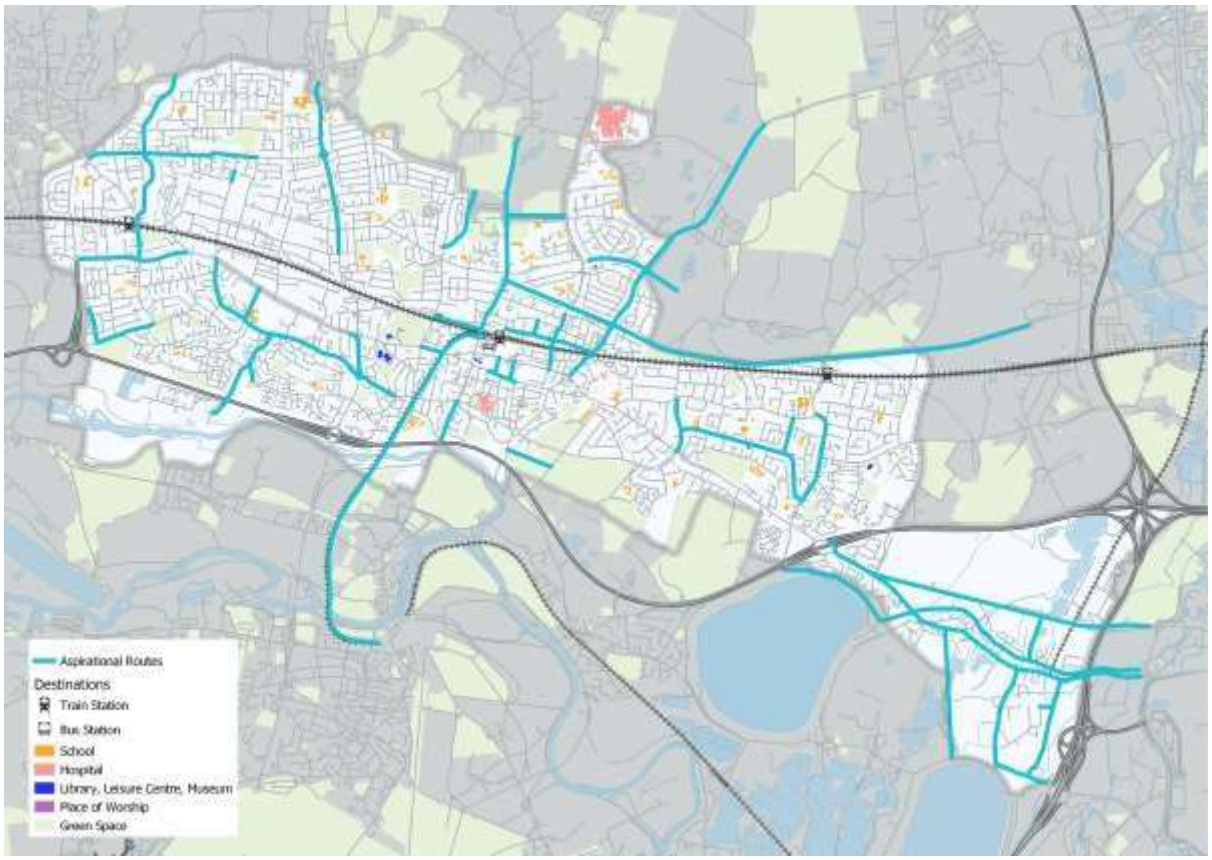

Figure 2: Aspirational routes for cycling identified during Slough Borough Council staff workshop

3.1.4. Preliminary Network

The results of the PCT analysis and aspirational mapping exercise were combined to form the basis of a preliminary cycle network. The results were supplemented with inputs from other sources to further refine the network and provide continuous routes with coverage throughout the Borough. Other inputs and analysis included:

- Mapping and reviewing of key attractors to verify if the network would provide access in reasonable proximity (e.g., schools, rail stations, bus station, hospitals, leisure centres, libraries, museums, and parks)
- Mapping and reviewing of potential residential development areas to verify if the network would provide access in reasonable proximity (based on Slough trajectory list of sites 2018-2036)
- Review of the existing Slough Cycle Map to identify routes that currently have cycle infrastructure and to verify linkages with existing or proposed routes/infrastructure
- Limit the scope of the network to within Slough's boundaries but ensure cross boundary liaison with neighbouring authorities
- Review of overall network connectivity to ensure continuous and coherent routes throughout the proposed network

The refined preliminary network, shown in Figure 3, established a broad network totalling 30 routes throughout Slough. The routes are overlaid with the key destinations and

potential housing development areas noted above to illustrate they cycle network's connections to these areas.

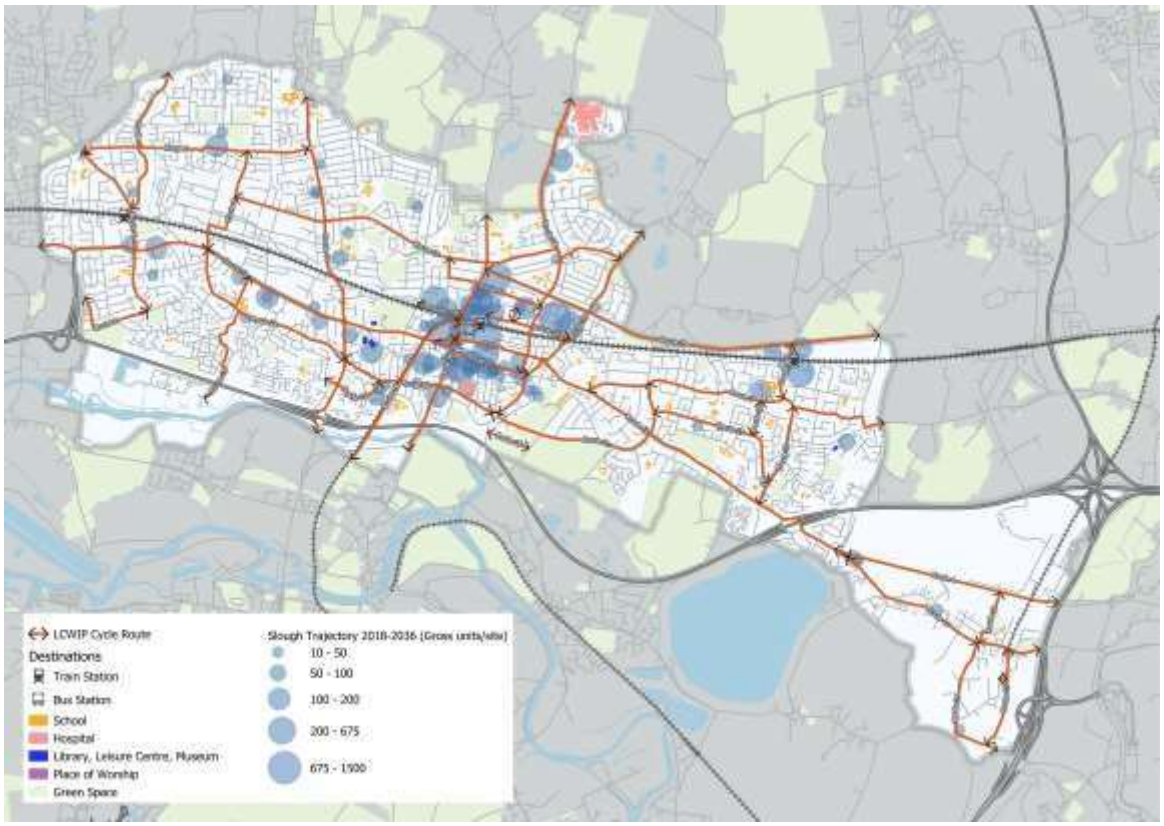

Figure 3: Preliminary cycle network

3.1.5. Route Selection Tool and initial sifting

Following development of the preliminary cycle network, an RST assessment was completed for each route. The RST enables a high-level, comprehensive review of existing conditions for cyclists along the 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 are ≤ 1km in length and reflect consistent characteristics among factors that may impact RST output (e.g., existing facility type, width, traffic speeds or volumes, etc.)
- Where existing traffic speed data was not available, the speed limit was utilised.
- Where existing traffic volume data was not available, professional judgement was used to categorise the route within the RST categories for traffic flows.
- For existing shared path facilities, pedestrian flow data was unavailable. The assessment therefore does not account for potential reductions in user comfort if there are areas with high pedestrian flows.

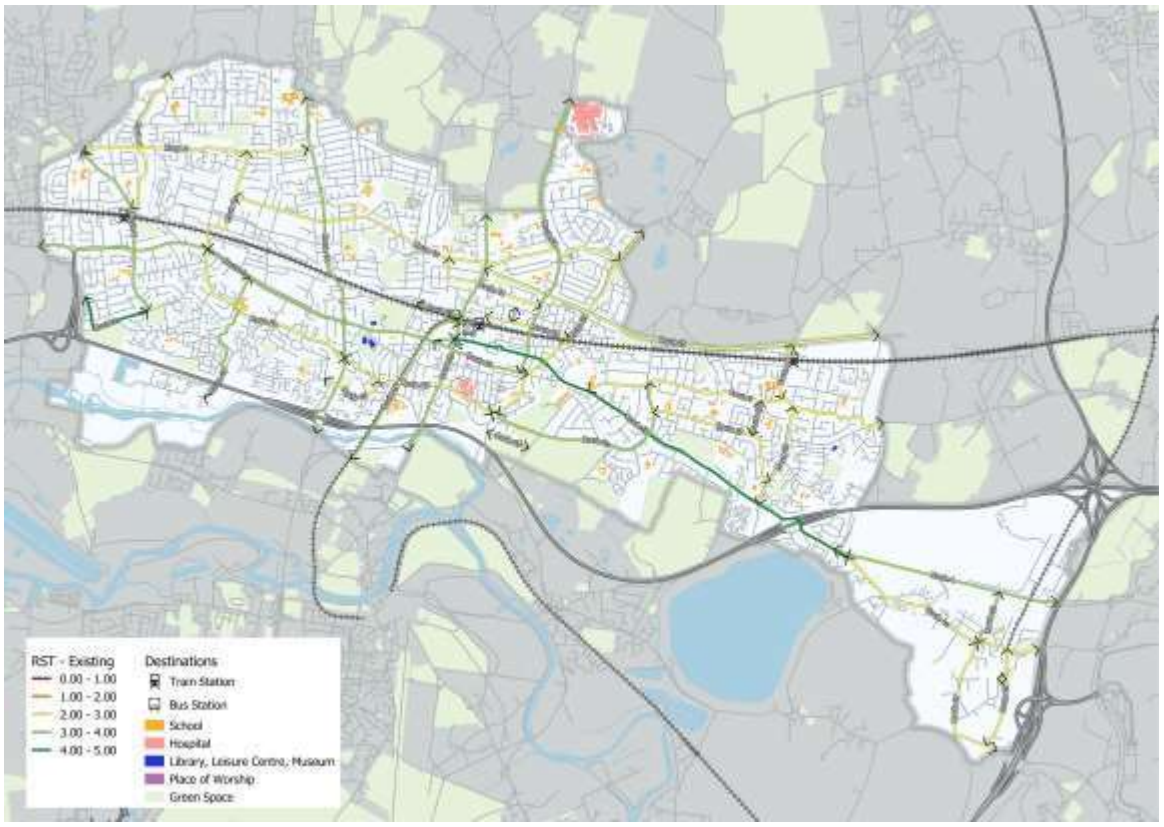

Figure 4: RST output - existing condition assessment

In the RST assessment, most routes in Slough generally scored well for directness, gradient, and connectivity. Therefore, the RST results were recalibrated to isolate the variables of safety and comfort, which can be most impacted by potential design interventions as outputs of the LCWIP. The results are shown in Figure 5, illustrating a generally lower and wider range of scores in comparison to the full RST scores from Figure 4.

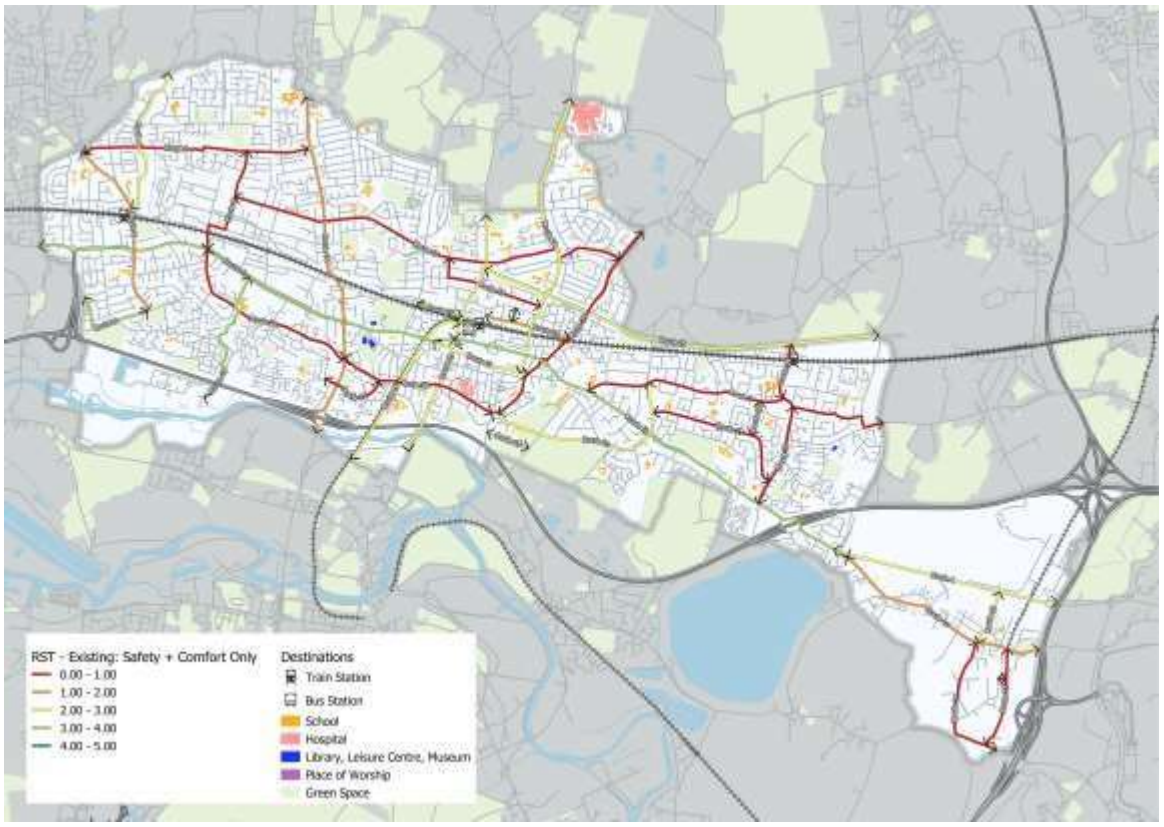

Figure 5: RST output - safety and comfort scores only

Following the RST assessment, an initial sifting framework was developed and applied to identify higher priority routes for further assessment and advancement in the LCWIP. The remaining elements of the cycle network may be developed in future studies or updates to the LCWIP.

The entire A4 corridor was identified as a local priority for inclusion in the LCWIP. The A4 provides the only continuous east/west corridor across the Borough, supporting direct access to many of the key destinations within Slough, including the heart of Slough, town centre, Trading Estate, rail stations, bus stops, bus station, residential areas and future developments. The PCT data also indicates that the A4 has high potential for cycling with among the highest forecast cycle flows in the Borough, making it a critical east/west spine within the cycle network. Despite existing cycle infrastructure along the A4 corridor, the LCWIP presents an opportunity to improve the disjointed route by setting standards for provision of better crossing facilities and segregated cycle routes.

The RST results were also used as an initial screening criterion, focusing on routes that currently score poorly for safety and comfort (average score ≤ 2). This generally resulted in routes with existing shared-use facilities being categorised as lower priority due to the segregation from traffic they provide and the high safety scores they therefore receive. While shared-use facilities may not necessarily be the optimal cycle facility in the long term, they currently provide a generally safer option for less confident cyclists. Improvements for these facilities especially around schools may be considered in future studies and projects.

After focusing the LCWIP on routes scoring poorly for safety and comfort, other sifting factors included:

- **Potential increase in cycle flows**: based on PCT output in the government target scenario (national doubling of the proportion of commuters who cycle from 3% to 6%) compared to the 2011 census scenario
- **Enhancement to cycle network connectivity**: based on RST connectivity score
- **Coherence – access to:**
    - Existing residential development: scale of residential development along the route
    - Education: number of schools within 400m of the route
    - Jobs: scale of job centres within 400m of the route
    - Retail: scale of retail development within 400m of the route
    - Leisure facilities: number of leisure centres, libraries, museums, and parks within 400m of the route
    - Places of worship: number of places of worship within 400m of the route
    - Rail/bus stations: distance between the route and transport hubs
    - Growth/regeneration area (planned): scale of regeneration activity within 400m of the route

3.1.6. Proposed Cycling Network

Based on the network prioritisation, the A4 routes (1A, 1B and 4) and ten additional routes were identified as highest priority for inclusion in the LCWIP, which are listed in 3.1.7 Table 13.1.7 Table 1 and shown in Figure 6. A full prioritisation of the cycle routes carried forward is provided in Chapter 4.

3.1.7 Table 1: Priority cycle routes for inclusion in the LCWIP

Route ID	Street(s)	Start	End	Length (km)
A4 east/west spine				
1A	A4 (Bath Rd)	Western borough boundary (Huntercombe Lanes)	William Street	4.7
1B	A4 (Wellington St, London Rd)	William Street	Colnbrook By-Pass	5.0
4	A4 (Colnbrook By-Pass)	London Road	Eastern borough boundary	2.4
Additional high priority routes				
1C	London Rd, High St, Bath Rd	A4	Eastern borough boundary	2.4
2A	Cippenham Ln	A4	Tuns Ln	2.1
2B	Church St, Chalvey Road W/E, A412 (Albert Lane)	Tuns Ln	Yew Tree Rd	1.6

Route ID	Street(s)	Start	End	Length (km)
3	Langley Rd, Willoughby Rd, Kennett Rd, Burroway Rd, Market Ln, North Park	A4	Eastern borough boundary	3.5
6	Burnham Ln, Station Rd, Elmshott Ln	Western borough boundary	Lower Cippenham Ln	2
10	Edinburgh Ave, Sheffield Rd, Oatlands Dr, Elliman Ave, Shaggy Calf Ln, The Frithe	Fairlie Rd	Uxbridge Rd	4.4
14	Farnham Rd, Tuns Ln	Northern borough boundary	Southern borough boundary	3.8
18	Shackleton Rd, Belgrave Rd, St Pauls Ave	Elliman Ave	Wexham Rd	1.3
25	Uxbridge Rd, Yew Tree Rd	Northern borough boundary	Upton Ct Rd	2.6
29	High St	Willoughby Rd	A4	1.9

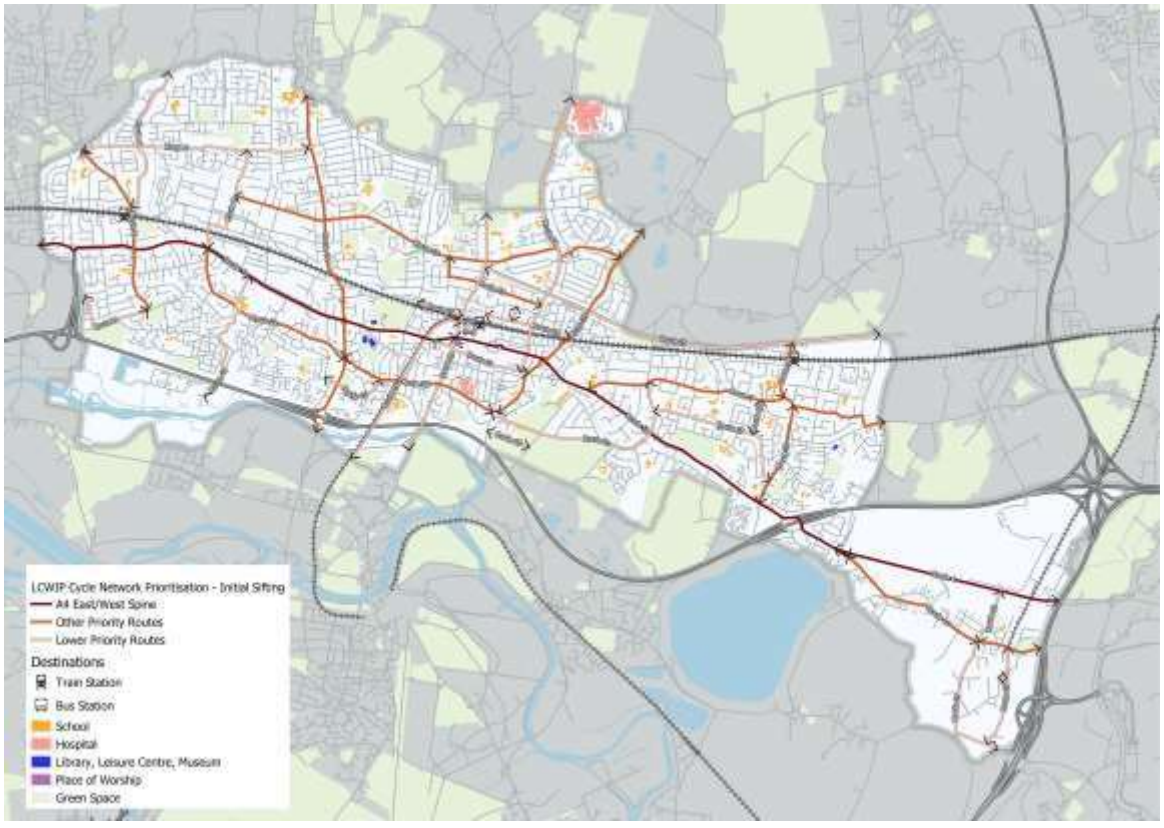

Figure 6: Priority cycle routes for inclusion in the LCWIP

3.1.8. Cycling Network Improvements

This section summarises the outline design measures for each cycle route identified for inclusion in the LCWIP. Measures are high level and identify the preferred cycleway

typology for each specified route (as limited by potential constraints anticipated at this initial stage of option assessment) and would be subject to future feasibility design. For each route, the future RST was calculated to evaluate the anticipated improvement over the existing condition.

The broad ambition is to provide segregated cycle lanes where feasible and appropriate for the context. Where this is not anticipated to be feasible, alternate facilities such as light segregation, shared footway, mandatory/advisory cycle lanes, or a quietway / healthier streets approach were considered. The healthier streets concept is based on Transport for London's approach for street design to improve air quality, reduce congestion, and help make communities greener, healthier, and more attractive places to live, work, play and do business. In the context of the LCWIP, healthier streets improvements are meant to include a package of measures that would improve the attractiveness, safety, and comfort of a route for cyclists and pedestrians, particularly where space is too constrained for other facilities (e.g. segregated lanes). Measures for each route would be developed in future design stages, but would include multiple elements such as speed limits reduced to 20mph, traffic calming, narrower travel lanes (e.g. 3.1m), removing centre lines, parking management, modal filters, continuous footways, improved crossings, public realm improvements, tree planting and so forth.

Outline cost estimates for the proposed design measures were also calculated. All costs are indicative at this stage and are subject to feasibility studies, site investigation and detailed design. Initial costs have been based on data available from Transport for Greater Manchester[1], Travel Choices Bristol[2], and Wiltshire Council.[3] Slough Borough Council does not have ready access to in-house costing expertise, and therefore have based the cost estimates on data provided by other authorities. These costs may vary locally and be subject to inflation. In applying the above resources, base year costs were adjusted to a 2019 base, as necessary. Where a range of indicative prices were provided (low to high), the higher range was typically used to provide a more robust estimate.

Estimates are for construction costs only, an uplift of 44 percent added to account for potential optimism bias, as per DfT guidance for stage 1 of scheme development.[4] The estimates do not include design fees, contingencies/risk, or potential impacts to statutory undertakers and costs to introduce monitoring equipment.

Each route is summarised below and in the priority list in Table 6 (Section 4) as priorities for improvement.

[1] Greater Manchester Cycling Design Guidance (Appendix C) (Transport for Greater Manchester, 2014)
[2] Traffic Choices Bristol (University of West of England/ Bristol City Council), costs provided by Bristol City Council in 2013;
[3] Wiltshire Council Cost of Highway Works (2019)
[4] TAG Unit A1.2 – Scheme Costs (Department for Transport, 2017);

3.1.9. Cycling Routes

Routes 1A, 1B and 4 (A4 East/West Spine)

Extent: Western boundary to eastern boundary

Purpose: Forms the primary east/west route across the entire Borough; provides linkages to the town centre, rail stations, and large employment areas (Slough Trading Estate)

Key Design Principles:

The aspiration is to create a high-quality, segregated or part-segregated cycle facility along the extent of the A4. Initial principles and design concepts for the western section from the western boundary to Uxbridge Road have already been developed under a separate study. The remainder of the route is envisioned to incorporate a continuation of these concepts.

i. Routes 1A & 1B – A4 (Bath Road / Wellington Street / London Road)
   - Proposed: Fully segregated cycle tracks, wherever feasible, raised from the carriageway. Design would take inspiration from successful 'Mini-Holland' schemes in London. Design to consider sustainable forms of drainage; cycle continuity around bus stops, loading bays and parking bays (e.g., floating bus stops); redesign of major junctions; cycle signals; and side road treatments (e.g., tight radii, blended/'Copenhagen' crossings).
   - Constraints/Considerations: optimal widths of provision for pedestrians, cyclists and vehicular traffic including bus lanes to be maintained throughout. Integration with other proposed schemes, such as A4 bus lanes, future development in the town centre, and the Strategic Transport Infrastructure Plan (Western Gateway concept proposal). Several pinch points where available width may be challenging (e.g., bridge over railway). Redesign of several major junctions likely required to accommodate cycle facilities. High vehicle flows, speeds, and significant presence of HGVs along the route require cyclists to be physically segregated from traffic. Existing utilities that may require relocation and lowering to accommodate the cycle infrastructure.

ii. Route 4 – A4 (Colnbrook Bypass)
   - Proposed: Fully segregated two-way cycle track, raised from the carriageway. Initial concept review suggests a new facility on the north side of the carriageway from Sutton Lane to Lakeside Road. Existing traffic signal at Lakeside Road to be upgraded to incorporate a cycle crossing, linking the facility to the existing shared-use path on the south side. Existing shared-use path to be improved, providing connectivity and continuity east towards Heathrow.
   - Constraints/Considerations: Several pinch points where available width may be challenging (e.g., M4 bridge by J5 Colnbrook). Existing laybys along the proposed route are heavily used for lorry parking. Improvements should be integrated with planned junction improvement scheme at A4/Sutton Lane/London Road and with proposed P&R development at A4/Sutton Lane junction. High vehicle flows, speeds, motorway junction (M4 junction 5) creating safety concerns for cyclists crossing this section

and significant presence of HGVs along the route require cyclists to be physically segregated from traffic.

Indicative Cost: £31,140,000 (TBC)

Route 1C – London Road / High Street / Bath Road

Extent: Colnbrook By-Pass to eastern boundary

Purpose: In conjunction with sections of the A4, forms the primary east/west route across the entire Borough; provides linkages to a large employment area (Poyle industrial estate) and points east (Heathrow airport)

Key Design Principles:

iii. London Road/Bath Road (Colnbrook By-Pass to High Street)
- Proposed: Shared footway – upgrade existing mix of advisory cycle lanes and sections of shared footway to provide a continuous shared footway and tie into the planned SMaRT Phase 2 scheme at Colnbrook By-Pass junction
- Constraints/Considerations: Improvements should tie into the SMaRT Phase 2 works to the west of the segment (along the A4 from Langley High Street to Colnbrook By-Pass), which currently feature a shared footway along the north side of the A4. Footway widening is required to accommodate comfortable shared use. Pinch points will need to be evaluated and overcome, which may require land acquisition where public highway space is unavailable and/or modifications to the carriageway are not feasible. Any modifications to the carriageway must also maintain adequate provision for bus routes and HGV traffic. A section of route is also an existing 20mph zone. Segregated cycle lanes were considered but not anticipated to be feasible due to width constraints.

iv. High Street (Bath Road to Poyle Road)
- Ambition: Healthier Street – create a more comfortable village high street by introducing 20mph speed limit to supplement existing traffic calming and restricted vehicular access (package of healthier streets elements to be determined during design stages).
- Constraints/Considerations: Review of existing traffic calming measures and potential enhancements to be considered, such as priority working. Narrow carriageway, particularly through western portion (Bath Road to Albany Park), hinders segregated cycle lane options. Data on existing traffic speeds and volumes required to guide design of scheme.

v. Bath Road (Poyle Road to eastern boundary)
- Proposed: Healthier Street – create a more comfortable street by introducing 20mph speed limit (package of healthier streets elements to be determined during design stages)
- Constraints/Considerations: relatively high HGV flows to industrial area, bus traffic, on-street parking, pinch points; data on existing traffic speeds and volumes required to guide design of scheme

Indicative Cost: £2,788,000

Route 2A – Cippenham Lane

Extent: A4 to Tuns Lane

Purpose: As part of the whole of Route 2 (Cippenham Lane, Chalvey Road West/East, A412, Upton Court Road), provides an important east/west route as an alternative to the A4. Links residential areas with the town centre, Slough Trading Estate, shops and businesses along Chalvey Road W/E, Upton Hospital, and several schools

Key Design Principles:

i. Bath Rd to Lower Cippenham Lane shared use path
   - Proposed: Shared footway – widen the existing footway to more comfortably accommodate shared use and provide segregation from motor vehicles traffic and provide continuity of the cycle network
   - Constraints/Considerations: narrowing of carriageway likely required to accommodate widening, footway parking to be prohibited; local pinch points to be overcome; striped median may provide some design flexibility; side road entries to be improved to enhance cycle/pedestrian priority; opportunity for segregated cycle lanes hindered by constrained carriageway width and highway boundary, frequent vehicle crossovers, and bus stops; healthier streets improvements may also be considered, however, traffic flows likely reduce cyclist comfort on-street

ii. Lower Cippenham Lane shared use path to Weekes Drive
   - Proposed: Shared Footway – widen existing footway to improve comfort for shared use to provide continuity of the cycle network
   - Constraints/Considerations: narrowing of carriageway likely required to accommodate widening; local pinch points to be overcome; striped median may provide some design flexibility; bus stops; two side road crossings; healthier streets improvements may also be considered, however, traffic flows likely reduce cyclist comfort on-street

iii. Weekes Drive to Tuns Lane approach (via Cippenham Lane service road on south side)
   - Proposed: Healthier Street – utilise adjacent residential frontage road as a quiet route for cyclists (existing 20mph zone), improve signing and wayfinding, crossing enhancements (package of healthier streets elements to be determined during design stages)
   - Constraints/Considerations: improve cycle priority at side road crossings; accommodate cycle permeability/connectivity to the north of Cippenham Lane

iv. Cippenham Lane service road to Tuns Lane
   - Proposed: Stepped cycle path and footway –to connect quietway to existing Tuns Lane toucan crossing; consider toucan or parallel zebra to improve crossing of Cippenham Lane
   - Constraints/Considerations: wide verge may accommodate footway widening; improve crossing of Cippenham Lane to improve cycle priority

Indicative Cost: £1,855,000

Route 2B – Church St / Chalvey Road W/E / A412 (Albert Street)

Extent: Tuns Lane to Yew Tree Road

Purpose: As part of the whole of Route 2 (Cippenham Lane, Chalvey Road West/East, A412, Upton Court Road), provides an important east/west route as an alternative to the A4. Links residential areas with the town centre, Slough Trading Estate, shops and businesses along Chalvey Road W/E, Upton Hospital, and several schools

Key Design Principles:

i. Church Street (Tuns Lane to Chalvey Road)
   - Proposed: Segregated Cycle Lanes – existing advisory cycle lanes and striped median provide potential to be upgraded to provide segregation
   - Constraints/Considerations: localised pinch points will need to be overcome; type of segregation and linkage with Route 2A at Tuns Lane (e.g., integration of proposed cycle provision with existing signalling at junction, routing all cyclists to existing toucan at north arm, new toucan at south arm) to be determined during design stages;

ii. Chalvey Road W/E (Church Street to The Crescent)
   - Proposed: Segregated Contraflow Cycle Lane – upgrade existing partially segregated contra-flow cycle lane to provide segregation along entire route. Provide cycle markings for with-flow cycling. Reduce speed limit to 20mph
   - Constraints/Considerations: high kerbside activity through high street area, on-street parking, and shop servicing needs limit options for segregated facilities in both directions of travel. Type of segregation to be determined during design stages; light segregation may be considered due to width constraints

Figure 7: Example of cycle lane with light segregation (Royal College Road, Camden, London; image source: Google)

iii. Chalvey Road E (The Crescent to Windsor Road)
   - Proposed: Healthier Street - Refresh existing cycle markings, introduce 20mph speed limit and traffic calming (package of healthier streets elements to be determined during design stages).
   - Constraints/Considerations: Significant width constraints limit opportunities for a continuous segregated facility; data on existing traffic speeds and volumes required to guide design of scheme; existing one-way traffic pattern to the west reduces through traffic along the route.

iv. Albert Street (Windsor Road to Yew Tree Road)

- Proposed: shared footway – utilise existing space within highway boundary and/or reduce carriageway width to improve suitability of existing footway for shared use
- Constraints/Considerations: pinch points will need to be evaluated and overcome; land acquisition may be required at pinch points to maintain full suitable footway width; bus route/stops. Albert Street may be designated as part of the Major Route Network (MRN) and as part of proposed changes to the A4 in the town centre, which may constrain cycle improvement options.

Indicative Cost: £2,686,000

Route 3 – Langley Road, Willoughby Road, Kennett Road, Burroway Road, Market Lane, North Park

Extent: A4 to Sutton Lane

Purpose: Provides an important link through Langley St Mary's and Langley Kederminster Wards, including access to or in the vicinity of Langley High Street and Langley rail station. The proposed route would provide a more direct and convenient alignment than an alternative existing route via Turner Road, Sutton Avenue, Downs Road, Alderbury Road, and Meadfield Road, which follows a quiet route but requires numerous changes in direction.

Key Design Principles:

i. Langley Road (A4 to Willoughby Rd)
   - Proposed: Healthier Street – introduce 20mph speed limit and traffic calming (package of healthier streets elements to be determined during design stages)
   - Constraints/Considerations: there are no direct, parallel routes to Langley Road, so limited opportunity to either reduce vehicle traffic or direct cyclists to a quieter route (enhancements to an existing parallel route via Turner Road, Sutton Avenue, Downs Road, Alderbury Road, and Meadfield Road was considered but not advanced as it requires numerous changes of direction); data on existing traffic speeds and volumes required to guide design of scheme; width constraints and frequent vehicle crossovers hinder options for segregated cycle facilities

ii. Willoughby Road, Kennett Road, Burroway Road (High Street to Market Lane)
   - Proposed: quiet route/healthier street – create more comfortable residential street by introducing 20mph zone, traffic calming, and/or modal filters to reduce impacts of vehicles (package of healthier streets elements to be determined during design stages)
   - Constraints/Considerations: data on existing traffic speeds and volumes required to guide design of scheme

iii. Market Lane, North Park (Burroway Road to Sutton Lane):
   - Proposed: segregated cycle lane – upgrade existing advisory cycle lanes to provide segregation
   - Constraints/Considerations: type of segregation to be determined during design stages; potential to reduce carriageway width; high speeds; modifications to existing on-street/footway parking may be required;

impacts to vehicle capacity at signalised junctions to be considered; land acquisition may be required at pinch points

Indicative Cost: £4,743,000

Route 6 – Burnham Lane, Station Road, Elmshott Lane

Extent: West boundary to Mercian Way

Purpose: provides a north/south link in the western side of the Borough, linking residential areas to Burnham rail station

Key Design Principles:

i. Burnham Lane (west boundary to railway bridge)
   - Proposed: refresh existing advisory cycle lane markings and enhance with coloured cycle lane markings and improved signage
   - Constraints/Considerations: upgrading the existing advisory cycle lanes to segregated lanes was considered to have limited feasibility due to limited width, numerous residential cross overs, and potential need to reduce carriageway and/or footway width may be required

ii. Station Road (under railway bridge)
   - Proposed: maintain existing shared footway provision for contraflow cyclists; introduce cycle markings for with-flow cyclists
   - Constraints/Considerations: n/a

iii. Station Road (Stanhope Rd to A4)
   - Proposed: healthier street – create more comfortable residential street by introducing 20mph zone, traffic calming, and/or modal filters to reduce impacts of vehicles; existing one-way filter under railway bridge already reduces the amount of through traffic on the route (package of healthier streets elements to be determined during design stages)
   - Constraints/Considerations: data on existing traffic speeds and volumes required to guide design of scheme. Existing Automatic Traffic Counts Infrastructure at this location could provide analysis data to guide the design.

iv. Elmshott Lane (A4 to Mercian Way):
   - Proposed: maintain existing shared path and quiet route (20mph zone) – enhance cycle route with cycle markings to and better designate and encourage on-carriageway cycling option
   - Constraints/Considerations: n/a

Indicative Cost: £858,000

Route 10 – Edinburgh Avenue, Sheffield Road, Oatlands Drive, Elliman Avenue, Shaggy Calf Lane, The Frithe

Extent: Fairlie Road to Uxbridge Road

Purpose: potential to provide the primary east/west route across the northern portion of the Borough (north of the railway), linking residential areas with the Slough Trading Estate

Key Design Principles:

i. Edinburgh Avenue (Fairlie Road to Farnham Road)
   - Proposed: introduce cycle markings and signage to improve visibility and awareness of cycling in mixed traffic

- Constraints/Considerations: relatively high presence of HGVs in industrial estate; upgrade of footways for shared use and segregated cycle lanes were considered but deemed to have low feasibility due to limited width within highway boundary; parallel route via Buckingham Avenue also considered, but does not provide the same level of direct continuity with the remainder of Route 10 and has higher traffic flows

ii. Sheffield Road (Farnham Road to Belfast Road)
- Proposed: refresh existing advisory cycle lanes and improve signage
- Constraints/Considerations: existing 20mph zone; constrained carriageway width and numerous vehicle crossovers; upgrade of advisory cycle lanes to segregated lanes may be considered following pilot of similar scheme along Oatlands Drive section of the route

iii. Oatlands Drive (Belfast Road to Waterbeach Road)
- Proposed: segregated cycle lanes – upgrade existing advisory cycle lane to provide segregation
- Constraints/Considerations: existing 20mph zone; extensive engagement with local residents required and management of kerbside access; numerous residential cross overs; type of segregation to be determined during design stages; localised pinch points to be overcome; striped median provides potential to reallocate space for cycle facilities; modifications may be required for areas with on-street parking; may serve as a pilot scheme for conversion of advisory cycle lanes to segregated lanes elsewhere in the Borough

iv. Elliman Avenue, Shaggy Calf Lane (Waterbeach Road to Wexham Road)
- Proposed: refresh existing advisory cycle lanes and improve signage
- Constraints/Considerations: existing 20mph zone; constrained carriageway width and numerous vehicle crossovers; upgrade of advisory cycle lanes to segregated lanes may be considered following pilot of similar scheme along Oatlands Drive section of the route

v. Public right-of-way (Wexham Road/Shaggy Calf Lane to Sheehy Way/the Frithe)
- Proposed: existing shared footway connector linking Shaggy Calf Lane and the Frithe; enhance wayfinding and widen to extent possible (desired width 3m); install ‘pedestrian priority’ signage
- Constrains/Considerations: limited area within the highway boundary may constrain the ability to significantly widen the path connector; Kola Court also considered as a more direct connector, however it was not included as it is severely width-constrained

vi. The Frithe (public right-of-way to Uxbridge Road):
- Proposed: quiet route/healthier street – create more comfortable residential street by introducing 20mph zone, traffic calming, and/or modal filters to reduce impacts of vehicles (package of healthier streets elements to be determined during design stages)
- Constraints/Considerations: data on existing traffic speeds and volumes required to guide design of scheme

Indicative Cost: £3,279,000

Route 14 – Farnham Road, Tuns Lane

Extent: north boundary to south boundary

Purpose: continuous route to the west of the town centre spanning the entire Borough from north to south. Facilitates access to various destinations, including the Slough Trading Estate, shops/businesses along Farnham Road, schools, and parks, as well as onward links to Eton and Windsor

Key Design Principles:

i. Farnham Road (northern boundary to Northborough Road)
   - Proposed: extend existing shared footway to provide continuous facility full extent of the route; enhance signage and wayfinding; prohibit footway parking
   - Constraints/Considerations: widening of footway required at existing pinch points; observed footway parking reduces effective width for shared use

ii. Farnham Road (Northborough Road to Buckingham Avenue)
   - Proposed: segregated cycle lanes – upgrade existing shared footway provisions and/or reduce carriageway width/capacity, where necessary, to accommodate segregated lanes
   - Constraints/Considerations: high kerbside activity in commercial area; sections with service roads provide opportunity to reconfigure the street and public realm through the retail corridor including improved cycle facilities, footways, public space,parking and servicing/loading space; extensive reconfiguration of carriageway/footways likely required for implementation; type of segregation to be determined during design stages; feasibility study of the scheme required

iii. Farnham Road, Tuns Lane (Buckingham Avenue to Church Street)
   - Proposed: maintain existing shared footway; enhance signage and wayfinding
   - Constraints/Considerations: n/a

iv. Tuns Lane (Church Street to south boundary):
   - Proposed: not applicable
   - Constraints/Considerations: route segment not advanced due to limited access/local trips along the segment, poor connectivity/cycle facilities into Windsor, and high traffic road

Indicative Cost: £6,315,000

Route 18 – Shackleton Road, Belgrave Road, St Pauls Avenue

Extent: Elliman Avenue to Wexham Road

Purpose: east/west connector route north of the railway. Enhances network connectivity, linking proposed routes on Wexham Road, Stoke Road, and Elliman Avenue.

Key Design Principles:

- Proposed: healthier street – minor interventions to include cycle wayfinding and cycle markings to delineate the route; reduce speed limit to 20mph (package of healthier streets elements to be determined during design stages)
- Constraints/Considerations: residential street with existing traffic calming features; limited scope to provide segregation

Indicative Cost: £440,000

Route 25 – Uxbridge Road, Yew Tree Road

Extent: north boundary to Upton Ct Road

Purpose: continuous north/south route, providing a link across the A4 and access to the east side of the town centre. Links residential areas and planned development to the north with the town centre.

Key Design Principles:

i. Uxbridge Road (northern boundary to A4)
   - Proposed: segregated cycle lanes – upgrade existing shared footway provisions and/or reduce carriageway width/capacity, where necessary, to accommodate segregated lanes
   - Constraints/Considerations: pinch points at bridges; additional pinch points and width constraints south of Broadmark Road; type of segregation to be determined during design stages; feasibility study of the scheme required

ii. Yew Tree Road (A4 to High Street)
   - Proposed: advisory cycle lane; enhance signage and wayfinding
   - Constraints/Considerations: shared footway may also be considered, however, footway width is significantly constrained between High Street and the A4. Yew Tree Road may be designated as part of the Major Route Network (MRN) as part of proposed changes to the A4 in the town centre, which may constrain cycle improvement options.

iii. Yew Tree Road (High Street to Upton Court Road)
   - Proposed: shared footway
   - Constraints/Considerations: Yew Tree Road may be designated as part of the Major Route Network (MRN) as part of proposed changes to the A4 in the town centre, which may constrain cycle improvement options. Existing total footway width is approximately 2.5m and segment is currently denoted as shared path on existing Slough cycle map, but not signed as such on-street. West side footway likely preferred for shared use due to fewer motor vehicle crossovers and side road junctions, and direct access to St. Mary's Church of England Primary School. Potential for footway widening would likely require adjustment of kerbline and narrowing carriageway due to constraints at back of footway.

Indicative Cost: £7,343,000

Route 29 – High Street, Station Road

Extent: Grand Union Canal to the A4

Purpose: north/south connector, providing a link between the A4 corridor and Langley centre, providing access to shops, schools, residential neighbourhoods, Langley rail station, and Grand Union Canal Tow Path

Key Design Principles:

i. Station Road (Langley Road to Grand Union Canal Tow Path)
   - Proposed: segregated cycle lanes
   - Constraints/Considerations: existing public highway space is constrained, but existing advisory cycle lanes and relatively wide footway space may enable light segregation or stepped cycle tracks between Langley Road and Alderbury Road / southern station forecourt, where the existing

parallel crossing would facilitate access to the southern rail platform. Extension of a segregated cycle facility further north is likely not feasible due to the narrow railway underbridge, requiring cyclists to join the carriageway and mix with motor vehicle traffic. Integration with the new signalised junction improvements at Langley Road/Station Road/High Street required.

ii. High Street (Langley Road to High Street frontage road)
    - Proposed: Healthier Street - enhance/extend existing 20mph zone to improve comfort for cycling on-road, markings/signage to designate cycle route (package of healthier streets elements to be determined during design stages).
    - Constraints/Considerations: available width of High Street area limits feasibility of segregation options..

iii. High Street (High Street frontage road to A4)
    - Proposed: segregated cycle lanes
    - Constraints/Considerations: utilise west verge and/or reduce carriageway width/capacity, where necessary, to accommodate segregated lanes. Type of segregation and configuration (two-way lane or separate lanes along each direction of travel) to be determined during design stages. Option to use the local access/frontage road section of High Street as the primary cycle route was also considered, as this street is 20mph with low traffic flow. However, improvements along the main High Street alignment are preferred, as it would provide a more direct and continuous route, and provide priority for cycle movements across side road junctions. Feasibility study of the scheme required.

Indicative Cost: £3,065,000

3.1.10. Future RST Assessment

After identifying potential cycle facilities along the cycle network, the proposed improvements were evaluated using the RST in order to review the anticipated changes relative to the existing provisions. The comparison of existing and potential future RST scores for each route are summarised in 3.1.11. Table 2.

The proposed interventions achieve an overall improvement in RST scores across all the routes, with each route having an average RST score ≥ 3.0. Several routes, however, were unable to achieve a score of 3 or higher in the individual metrics of safety and/or comfort, as listed below:

- Route 1C (London Road / High Street / Bath Road): overall comfort score is less than 3 as only healthier street improvements are anticipated to be feasible along the majority of the route due to width constraints in the public highway. Speeds would be reduced to 20mph (improved safety score); however, vehicle flows are likely to exceed 2,500/day and there is not an alternative parallel route.
- Route 2B (Church St / Chalvey Road W/E / A412 (Albert Street)): substantial improvement in comfort score from 0 to 2.51. However, the comfort score remains below 3 because segregation is not anticipated to be feasible in two segments due to width constraints in the public highway. As segment 2B-ii is one-way, actual comfort scores also differ depending on the direction of travel. The 'worst case' score is reflected in the RST scoring, which is for mixed traffic with-flow

cycling (20 mph zone). A fully segregated contraflow lane is proposed, however, which would achieve a comfort score of 4 for contraflow travel.

- Route 3 (Langley Road, Willoughby Road, Kennett Road, Burroway Road, Market Lane, North Park): although there are modest improvements to safety and comfort scores, both remain below 3 because segregation is not anticipated to be feasible along the majority of the route, and there is not a direct, coherent, and intuitive parallel route with low vehicle flows.
- Route 6 (Burnham Lane, Station Road, Elmshott Lane): significant improvements (e.g., segregation) along the longest segment of the route (6-i) is not anticipated to be feasible due to width constraints in the public highway.
- Route 10 (Edinburgh Avenue, Sheffield Road, Oatlands Drive, Elliman Avenue, Shaggy Calf Lane, The Frithe): significant improvements (e.g., segregation) along the longest segments of the route (10-i, ii, iv) are not anticipated to be feasible due to width constraints in the public highway. However, future improvements along the route may be considered following the proposed pilot for segregation along section 10-iii, which would significantly improve safety and comfort scores.
- Route 18 (Shackleton Road, Belgrave Road, St Pauls Avenue): safety score improved to 3.0 with proposed healthier street improvements (20mph zone); however, comfort remains below 3 due to vehicle flows likely to exceed 2,500/day. Segregation is not anticipated to be feasible due to width constraints in the public highway.
- Route 29 (Station Road, High Street Langley): safety score improved to 4.66 with proposed segregated cycle lanes and healthier street improvements (20mph zone); however, comfort remains just below 3 due to vehicle flows likely to exceed 2,500/day and the healthier street/mixed traffic sections and segregation is not anticipated to be feasible for some sections of the route due to width constraints in the public highway.

3.1.11. Table 2: Route Selection Tool (RST) Outputs for Existing and Proposed Cycling Facilities

Route ID	Street Name	Directness			Gradient			Safety			Connectivity			Comfort			Total (Average)			Critical Junctions		
		Existing	Potential	Change	Existing	Potential	Change	Existing	Potential	Change	Existing	Potential	Change	Existing	Potential	Change	Existing	Potential	Change	Existing	Potential	Change
01a	Bath Rd / Wellingston St	5.00	5.00	0.00	4.84	4.84	0.00	5.00	5.00	0.00	2.91	4.02	1.11	1.12	4.00	2.88	3.78	4.57	0.80	0	0	0
01b	Wellington St / London Rd	5.00	5.00	0.00	5.00	5.00	0.00	5.00	5.00	0.00	3.59	4.63	1.04	2.56	4.00	1.44	4.23	4.73	0.49	8	0	-8
01c	London Rd / High St / Bath Rd	5.00	5.00	0.00	4.30	4.30	0.00	2.10	3.18	1.07	1.00	2.65	1.65	0.16	0.94	0.77	2.51	3.21	0.70	3	1	-2
02a	Cippenham Ln	5.00	5.00	0.00	4.28	4.28	0.00	1.00	4.65	3.65	2.42	2.81	0.39	0.00	4.35	4.35	2.54	4.22	1.68	5	2	-3
02b	Church St / Chalvey Rd W/E / A412 (Albert St)	5.00	5.00	0.00	4.14	4.14	0.00	1.21	4.09	2.88	2.44	3.70	1.26	0.00	2.51	2.51	2.56	3.89	1.33	7	3	-4
03	Langley Rd, Willoughby Rd, Kennett Rd, Burroway Rd, Market Ln, North Park	5.00	5.00	0.00	4.72	4.72	0.00	1.37	2.51	1.15	2.69	3.48	0.79	0.19	0.39	0.20	2.79	3.22	0.43	11	9	-2
04	Colnbrook Bypass	5.00	5.00	0.00	5.00	5.00	0.00	2.28	5.00	2.72	2.96	3.41	0.46	1.82	4.00	2.18	3.41	4.48	1.07	5	0	-5
06	Burnham Ln, Station Rd, Elmshott Ln	5.00	5.00	0.00	4.50	4.50	0.00	2.80	2.95	0.15	2.83	3.63	0.80	1.35	1.35	0.00	3.30	3.49	0.19	2	2	0
10	Edinburgh Avenue, Sheffield Rd, Oatlands Drive, Elliman Avenue, Shaggy Calf Ln, The Frithe	5.00	5.00	0.00	5.00	5.00	0.00	1.74	2.18	0.44	2.37	3.20	0.83	0.58	1.13	0.54	2.94	3.30	0.36	9	9	0
14	Farnham Rd, Tuns Ln	5.00	5.00	0.00	3.75	3.75	0.00	2.51	4.13	1.63	2.27	2.51	0.25	0.83	3.31	2.48	2.87	3.74	0.87	24	5	-19
18	Shackleton Rd, Belgrave Rd, St Pauls Avenue	5.00	5.00	0.00	4.58	4.58	0.00	2.00	3.00	1.00	2.00	3.42	1.42	0.00	0.00	0.00	2.72	3.20	0.48	1	1	0
25	Uxbridge Rd, Yew Tree Rd	5.00	5.00	0.00	4.27	4.27	0.00	1.16	4.69	3.53	2.16	3.41	1.25	0.22	3.69	3.47	2.56	4.21	1.65	13	2	-11
29	High St	5.00	5.00	0.00	3.23	3.23	0.00	1.00	4.66	3.66	2.82	3.58	0.76	0.00	2.99	2.99	2.41	3.89	1.48	2	0	-2

key
red - criterion score < 3
green - improvement in score

3.2. Analysis and route selection for Walking

3.2.1 Methodology

Identification of the Slough walking network for inclusion in the LCWIP focused on providing access to key destinations and attractors. The key inputs and steps in the process are summarised in the following sections.

3.2.2. Identification of Core Walking Zones

Slough is a largely urban area, providing the potential for many short journeys to be made on foot. A GIS analysis plotted key destinations within the Borough to help identify areas with higher potential for walking trips (shown in Figure 8). Types of destinations captured in the assessment included:

- Schools
- Rail stations
- Bus station
- Places of worship
- Recreational sites (libraries, leisure centres, museums, parks/green space)
- Hospitals
- Town Centre
- Major employment areas[5]
- Potential residential development areas[6]

[5] Locations of prominent employers and clusters of workplaces based on analysis by Atkins to review the potential for area travel plans in Slough (April 2019)

[6] Based on Slough trajectory list of sites 2018-2036

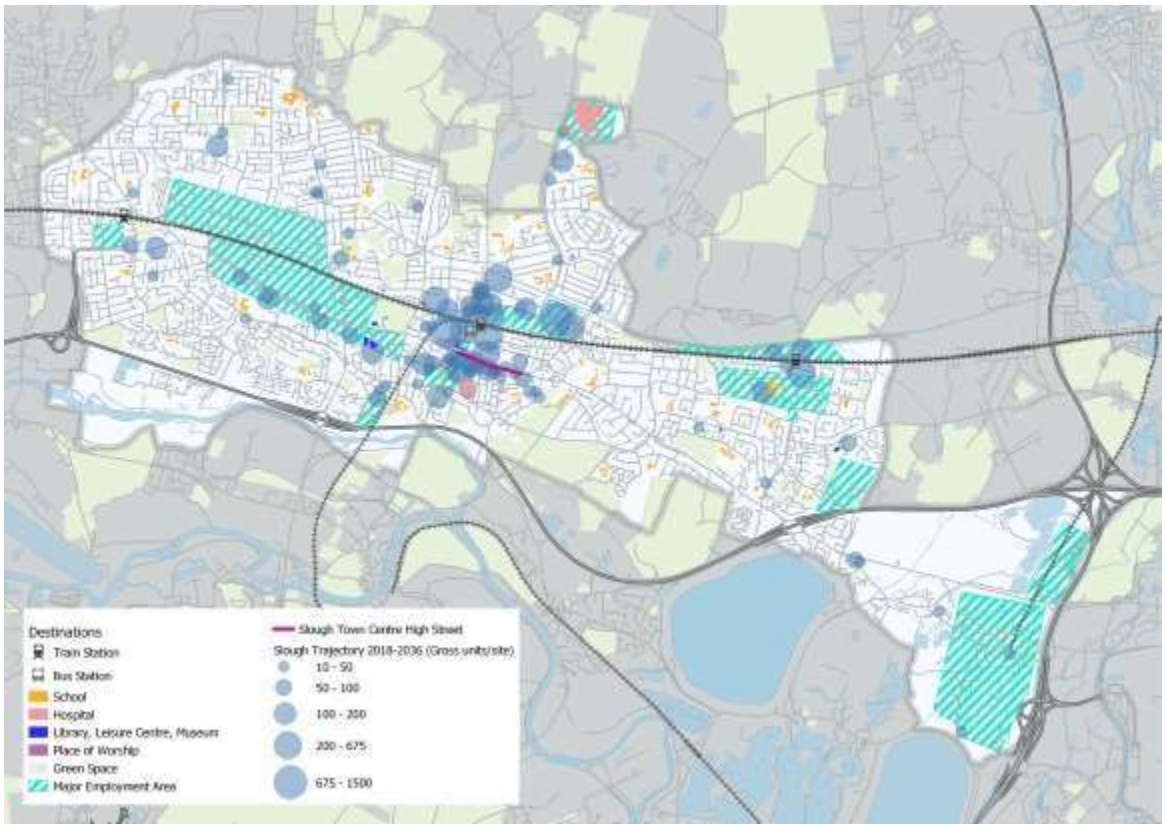

Figure 8: Key destinations and activity attractors

Following the review of key destinations and activity centres, two areas were selected as Core Walking Zones (CWZ) for further inclusion in the LCWIP. Consistent with DfT guidance, the CWZs are defined by a 200m-radius buffer around the primary attractor area. The CWZs include:

- Slough Town Centre/Heart of Slough – focused along Slough's central retail district (High Street), the zone also includes or is in close proximity to major employers and clusters of workplaces (e.g., Upton Hospital), rail and bus stations, a school, several places of worship, and community activity centres (e.g., the Curve Slough)
- Slough Trading Estate – large cluster of numerous workplaces in Slough (centred along Buckingham Avenue), as well as close proximity to Burnham rail station and Farnham Road retail district

In each CWZ, main walking routes were identified through the zone, as well as routes that link the zone to the surrounding area (extending up to 2km from the zone, depending on context and development patterns). In total, 33 walking routes were identified for inclusion in the LCWIP. The CWZs and walking routes are illustrated in Figure 9.

Figure 9: Location of core walking zones (CWZs) and walking routes

3.2.3. Walking Route Audit Tool findings

Each walking route was reviewed using the walking route audit tool (WRAT). The WRAT enables a high-level review of existing conditions for pedestrians along the route based on 20 factors audited on-site. The audit produced a score for the key metrics of attractiveness, comfort, directness, safety, and coherence, as well as an overall score for the segment. Where the character of the street varied along a route, the route was divided into subsections with generally consistent characteristics that may impact WRAT output (e.g., existing footway width, traffic speeds or volumes, occurrence of footway parking, etc.).

The results of the WRAT assessment are shown in Figure 10 and summarised in

3.2.4. Table 3 and **3.2.5**. Table 4 by core walking zone). A full breakdown of the WRAT scores for each route segment are provided in Appendix 4. The individual segment scores by category help to identify where improvements are needed.

Overall, walking routes in the Town Centre area generally scored slightly better than those in the Sough Trading Estate area. However, the overall averages in both zones were slightly below the 70% threshold LCWIP guidance considers is a minimum level of overall provision (67% average score in the Town Centre, 61% in the Slough Trading Estate). On average, metrics for attractiveness, comfort, directness, and safety scored similarly in both zones, with scores ranging from 62% to 70%. Coherence was the lowest scoring metric, particularly in the Slough Trading Estate (16%), which reflects a lack of

dropped kerbs and/or tactile paving as a common issue in both CWZs. Findings related to each metric are summarised below.

Attractiveness

Many of the links in both the Town Centre and Slough Trading Estate included main roads with relatively high levels of traffic, which reduced scores due to noise and air pollution. Deductions related to maintenance were also common, but typically associated with minor issues such as some littering and overgrown vegetation. Instances of more significant vegetation overgrowth/encroachment were noted on only a few links. Perceived personal security was generally adequate, with major instances of vandalism or fear of crime were only observed on two pedestrian-only links due to their relative isolation and lack of natural surveillance.

Comfort

Comfort scores were often negatively impacted by extensive patching/trenching by utility companies on footways and frequent vehicle crossovers. Parking on the verge was a common issue on residential streets, as well as for servicing on some commercial streets. Verge parking both reduced the effective footway width and pedestrian permeability. Footway width was generally adequate throughout the study area. Where present, scores related to pedestrian crossing islands were mixed. Older infrastructure often appeared to be narrow, reducing pedestrian comfort when waiting on the island or when passing another pedestrian crossing. Narrow islands can also decrease comfort and accessibility for wheelchair users and those with prams. Newer pedestrian islands typically afforded more space for pedestrians.

Directness

Footways were typical throughout the study area and generally provided direct routes parallel to the carriageway. Existing crossings were generally located at or in close proximity to main desire lines. A common issue on main roads were widely spaced crossings, which reduces opportunities for crossing and can create longer walking routes, often encouraging informal crossing behaviour.

Safety

Visibility scored consistently well throughout the study area, with few obstructions limiting intervisibility between pedestrians and vehicles. Traffic volumes and speeds related to safety often scored lower due to the number of arterial and connector streets through the study area. Higher volumes and speed can decrease the safety and convenience of crossings, as well as decrease the attractiveness of the route for walking.

Coherence

Coherence relates to the continuity of the walking route. On average, coherence scored poorly throughout the study area, particularly in the Slough Trading Estate zone. The low scores were due to issues related to dropped kerbs and tactile paving. Tactile paving was absent at many uncontrolled crossings, such as at side road crossings. Dropped kerbs were more common; however, these were still missing in some areas.

3.2.4. Table 3: Summary WRAT Scores

		WRAT Score				
		≥70%	60%-69%	50%-59%	≤50%	Total
Town Centre CWZ	# links	18	4	4	1	27
	length (m)	6,832	3,027	3,217	1,446	14,522
	% network (by distance)	47%	21%	22%	10%	100%
Slough Trading Estate CWZ	# links	12	5	5	4	26
	length (m)	5,875	4,438	3,517	4,455	18,285
	% network (by distance)	32%	24%	19%	24%	100%

3.2.5. Table 4: Summary of average WRAT scores by metric

Core Walking Zone	Average Metric Scores[1]					
	Attractiveness	Comfort	Directness	Safety	Coherence	Total Score[1]
Town Centre	69%	70%	66%	65%	57%	67%
Slough Trading Estate	65%	62%	62%	65%	16%	61%

[1] weighted average by segment length

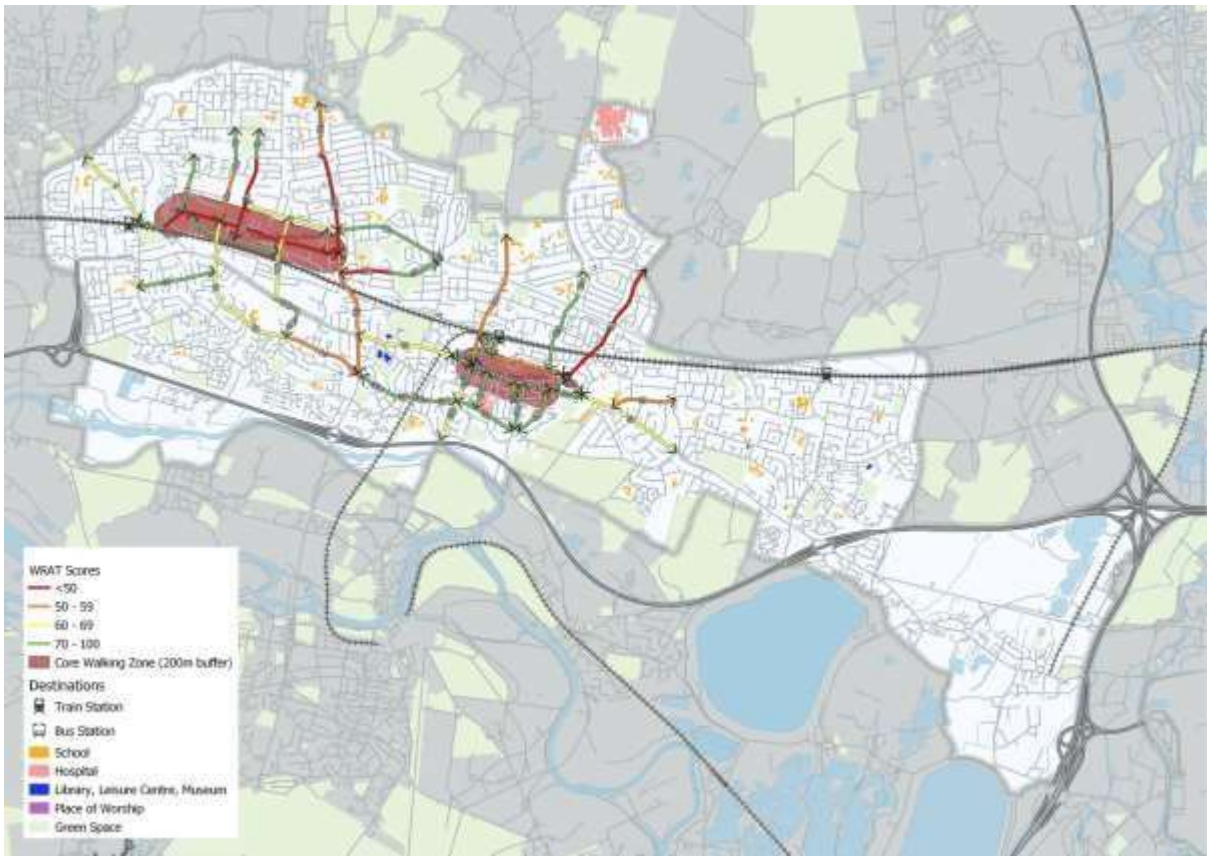

Figure 10: WRAT results

3.2.6. Proposed Walking Route design measures

Based on the output of the WRAT, development of design measures to improve conditions for walking within the CWZs focused on route segments that scored <60 percent. Design measures included a range of strategies to improve the quality of pedestrian environment, from relatively minor interventions such as improved dropped kerbs and tactile paving to more extensive measures such as new crossings, signal improvements, improved side road treatments (raised entry and/or reduce kerb radii), and redesign of public realm space.

As with the cycling schemes, the proposed measures are high level and identify the types of enhancements along each specified route (as limited by potential constraints anticipated at this initial stage of option assessment), and would be subject to future feasibility design.

Outline cost estimates for the proposed design measures were also calculated. All costs are indicative at this stage and are subject to feasibility studies, site investigation and detailed design. Initial costs have been based on data available from Transport for Greater Manchester[7], Travel Choices Bristol[8], and Wiltshire Council.[9] Slough Borough

[7] Greater Manchester Cycling Design Guidance (Appendix C) (Transport for Greater Manchester, 2014)
[8] Traffic Choices Bristol (University of West of England/ Bristol City Council), costs provided by Bristol City Council in 2013;

Council does not have ready access to in-house costing expertise, and therefore have based the cost estimates on data provided by other authorities. These costs may vary locally and be subject to inflation. In applying the above resources, base year costs were adjusted to a 2019 base, as necessary. Where a range of indicative prices were provided (low to high), the higher range was typically used to provide a more robust estimate.

Estimates are for construction costs only, with an uplift of 44 percent added to account for potential optimism bias, as per DfT guidance for stage 1 of scheme development.[10] The estimates do not include design, contingencies/risk, or potential impacts to statutory undertakers.

3.2.7. Table 5 summarises the proposed measures along each route and their associated indicative cost.

[9] Wiltshire Council Cost of Highway Works (2019)
[10] TAG Unit A1.2 – Scheme Costs (Department for Transport, 2017);

3.2.7. Table 5: Proposed Walking infrastructure improvement measures

Route / Segment	Scheme ID	Street Name	Improvements	Commentary	Proposed Treatment	Indicative Cost (including OB)
2b	2b-1	Buckingham Ave	tactiles throughout	Tactiles currently lacking at most side roads and junctions, reducing coherence of the route and access for the visually impaired. Drop kerbs at side roads often positioned at apex, directing pedestrians diagonally into main road (Buckingham Ave) rather than across side road.	Install tactiles. Locate dropped kerbs to accommodate direct, perpendicular crossing of side road along desire lines. Raised side roads and/or reducing of kerb radii at many locations desired but not considered feasible due to high HGV activity with industrial estate (and likely vehicle tracking requirements).	£ 47,000
2b	2b-2	Buckingham Ave	Leigh Road junction -tactiles -ped signal heads -improved islands	Signalised junction but lacks pedestrian signal heads. Existing islands and dropped kerbs, no tactiles.	Upgrade signals to provide controlled pedestrian crossing. Install tactiles. Widen islands to extent feasible - 2.0m preferred min, 1.5m absolute min.	£ 458,000
2b	2b-3	Buckingham Ave	Fairlie Road junction -tactiles -ped signal heads -improved islands	Signalised junction but lacks pedestrian signal heads. Existing islands and dropped kerbs, no tactiles.	Upgrade signals to provide controlled pedestrian crossing. Install tactiles. Widen islands to extent feasible - 2.0m preferred min, 1.5m absolute min.	£ 458,000
2b	2b-4	Buckingham Ave	Dundee Road junction -tactiles -ped signal heads -improved islands	Signalised junction but lacks pedestrian signal heads. Existing islands and dropped kerbs, no tactiles.	Upgrade signals to provide controlled pedestrian crossing. Install tactiles. Widen islands to extent feasible - 2.0m preferred min, 1.5m absolute min.	£ 458,000

Route / Segment	Scheme ID	Street Name	Improvements	Commentary	Proposed Treatment	Indicative Cost (including OB)
2b	2b-5	Buckingham Ave	relocate bus stops to minimise blockage to footways	2 bus stops on north side located within footway, reducing effective width	Locations constrained by highway boundary. Consider obtaining permission to locate stop at back of footway within adjacent land (similar to other stop along route). Interim, remove side panel to reduce profile of bus shelter, relocate bin to reduce clutter/further obstructions to footway width (e.g. locate bin in-line with bus shelter).	£ 26,000
2b	2b-6	Buckingham Ave	new crossing at Bestobell Rd jct	Observed desire line with pedestrians crossing to/from McDonalds, Wickes.	Install uncontrolled crossing with crossing island.	£ 21,000
5c	5c-1	Dundee Rd	new crossing of Pevensey Rd	Link/desire line between Pentland Rd (onwards to Kennedy Park) and NMU path connector to Dundee Rd; no existing crossing provision	Install uncontrolled crossing. Crossing island or raised crossing to be considered to improve pedestrian safety/comfort.	£ 27,000
5c	5c-2	Dundee Rd	Pentland Rd side road entry	Link/desire line between Pentland Rd (onwards to Kennedy Park) and NMU path connector to Dundee Rd; no existing crossing provision.	Install raised side road entry to improve pedestrian priority and slow vehicles turning speeds. Reduce kerb radii to extent feasible.	£ 39,000
5c	5c-3	Dundee Rd	tactiles at side roads	Tactiles currently lacking at most side roads and junctions, reducing coherence of the route and access for the visually impaired. Drop kerbs at side	Install tactiles. Locate dropped kerbs to accommodate direct, perpendicular crossing of side road along desire lines. Raised side roads and/or reducing of kerb radii at many locations	£ 22,000

Route / Segment	Scheme ID	Street Name	Improvements	Commentary	Proposed Treatment	Indicative Cost (including OB)
				roads often positioned at apex, directing pedestrians diagonally into main road (Dundee Rd) rather than across side road.	desired but not considered feasible due to high HGV activity with industrial estate (and likely vehicle tracking requirements).	
6c	6c-1	Cippenham Ln	Twinches Ln junction -tactiles -ped signal heads -improved islands	Signalised junction but lacks pedestrian signal heads. Exiting islands and dropped kerbs, no tactiles.	Upgrade signals to provide controlled pedestrian crossing. Install tactiles. Widen islands to extent feasible - 2.0m preferred min, 1.5m absolute min.	£ 344,000
6c	6c-2	Cippenham Ln	trim encroaching vegetation	Encroaching vegetation reduces effective footway width.	Routine maintenance to trim vegetation.	£ -
6c	6c-3	Cippenham Ln	install raised side entries along route, including at: - Cranbourne Rd - Cranbourne Cl - Avebury - Boarlands Cl - Ivy Cres - Westgate Cres - Cippenham (service road along A4) - Mallard Dr - Ridgebank - Hanover Gate - Bentley Rd - Bennetts Cl - Bunten Meade	Side road entries to local residential streets, low traffic, several entries to 20zones (Cranbourne Rd & Cl).	Install raised side road entry to improve pedestrian priority and slow vehicles turning speeds. Reduce kerb radii to extent feasible (will require review of vehicle tracking).	£ 498,000

Route / Segment	Scheme ID	Street Name	Improvements	Commentary	Proposed Treatment	Indicative Cost (including OB)
7a	7a-1	Fairlie Rd	new crossing of Northborough Rd	Link/desire line between footway connector to Kennedy Park and Chatfield; no existing crossing provision.	Install uncontrolled crossing. Kerb build-out on Chatfield and tighten radii of west arm to accommodate crossing. West arm is a dead end with low traffic flows and minimal large vehicle movements.	£ 47,000
7a	7a-2	Fairlie Rd	tactiles throughout	Tactiles currently lacking at most side roads and junctions, reducing coherence of the route and access for the visually impaired. Drop kerbs at side roads often positioned at apex, directing pedestrians diagonally into main road Fairlie Rd/Chatfield Rd) rather than across side road.	Install tactiles. Locate dropped kerbs to accommodate direct, perpendicular crossing of side road along desire lines. Raised side roads and/or reducing of kerb radii at many locations desired but not considered feasible due to high HGV activity with industrial estate (and likely vehicle tracking requirements).	£ 31,000
7a	7a-3	Fairlie Rd	introduce footway connection on worn path on Pevensey Rd from junction to bus stop introduce uncontrolled	Worn path evident on south side of Pevensey Rd between Fairlie Rd and Pentland Rd, providing access to bus stop.	Install footway on south side of Pevensey Rd. Area may be outside of adopted highway. Install uncontrolled crossings	£ 84,000
7a	7a-4	Fairlie Rd	crossings of Fairlie Road at Pevensey Rd junction	No existing crossings of north and south arms of roundabout.	with crossing islands.	£ 50,000
7a	7a-5	Fairlie Rd	prohibit footway parking	Parking on footway reduces effective width for pedestrian movement.	Prohibit footway parking.	£ 8,000
7a	7a-6	Fairlie Rd	tighten bell mouth and raised side road entry junctions at: - Bodmin Ave	Wide side road crossings, low traffic residential streets.	Reduce kerb radii to extent feasible to reduce pedestrian crossing lengths; introduced raised entry treatments.	£ 123,000

Route / Segment	Scheme ID	Street Name	Improvements	Commentary	Proposed Treatment	Indicative Cost (including OB)
			- Belmont - Thorndike			
10	10-1	Bestobell Rd	dropped kerbs/tactiles throughout	Side roads and major crossovers lack dropped kerbs and/or tactiles. Wide kerb radii, however high use by HGVs in the industrial estate.	Install tactiles. Locate dropped kerbs to accommodate direct, perpendicular crossing of side road along desire lines. Review kerb radii and vehicle tracking, reduce radii to extent practical.	£ 9,000
11a	11a-1	Farnham Rd	install tactiles - Cumberland Ave roundabout - 4 side roads (Westfield Rd, Crofthill Rd, Broad Oak Ct x2)	Several crossing lack tactiles, reducing coherence of the route and access for the visually impaired.	Install tactiles. Locate dropped kerbs to accommodate direct, perpendicular crossing of side road along desire lines.	£ 53,000
11a	11a-2	Farnham Rd	prohibit footway parking	Parking on footway reduces effective width for pedestrian movement	Prohibit footway parking, increase enforcement.	£ 8,000
11b	11b-1	Farnham Rd	Farnham Rd @ Furnival Ave - ped signals on minor road	Signalised junction but lacks pedestrian signal heads for minor arms (Furnival Ave, Essex Ave).	Upgrade signals to provide controlled pedestrian crossing at all arms of junction.	£ 193,000
11b	11b-2	Farnham Rd	Farnham Rd @ Montrose Ave - ped signals	Signalised junction but lacks pedestrian signal heads. Existing islands and dropped kerbs, tactiles.	Upgrade signals to provide controlled pedestrian crossing. Widen islands to extent feasible - 2.0m preferred min, 1.5m absolute min.	£ 344,000
11b	11b-3	Farnham Rd	Farnham Rd @ Edinburgh Ave - Ped signals	Signalised junction but lacks pedestrian signal heads. Existing islands and dropped kerbs, tactiles.	Upgrade signals to provide controlled pedestrian crossing. Widen islands to extent feasible - 2.0m preferred min,	£ 458,000

Route / Segment	Scheme ID	Street Name	Improvements	Commentary	Proposed Treatment	Indicative Cost (including OB)
					1.5m absolute min.	
11b	11b-4	Farnham Rd	Farnham Rd @ Gloucester Ave - realign side entry, raised entry	Gloucester Rd junction is skewed, creating intervisibility issues and facilitating faster entry/exit for some vehicle movements.	Realign to create perpendicular junction, introduce raised entry treatment to improve pedestrian priority and slow turning movements.	£ 57,000
11b	11b-5	Farnham Rd	Reconfigure streetscape (Essex Ave to Sheffield Rd) - remove frontage roads - widen footways - provide loading bays - incorporate cycle scheme - raised tables at uncontrolled side roads junctions	Busy commercial area; existing adjacent service roads provide opportunity for improve public realm.	Redesign space to provide wider footways, cycle provisions, and reconfigure servicing/parking arrangements. Provide raised entry treatments at uncontrolled side road junctions.	£6,680,000
11c	11c-1	Tuns Ln	Tuns Ln @ Beckwell Rd - tighten bell mouth / raised entry	Wide road entry has centre crossing island, but individual lanes are wide and has large kerb radii. Provide access to small residential area and private car park (gate access).	Reduce kerb radii to extent feasible to reduce pedestrian crossing lengths; consider raised entry treatment to improve shared footway priority across side road; provide tactiles.	£ 44,000
13a	13a-1	Whitby Rd	prohibit footway parking	parking on footway reduces effective width for pedestrian movement.	Prohibit footway parking.	£ 8,000
13a	13a-2	Whitby Rd	tactiles at side roads	Tactiles and dropped kerbs currently lacking at most side roads and junctions, reducing coherence of the route and access for the visually	Install tactiles. Locate dropped kerbs to accommodate direct, perpendicular crossing of side road along desire lines.	£ 20,000

Route / Segment	Scheme ID	Street Name	Improvements	Commentary	Proposed Treatment	Indicative Cost (including OB)
				impaired.		
13a	13a-3	Whitby Rd	install raised side entries at: - Godolphin Rd - Northampton Ave	Side road entries to local residential streets, low traffic; Godolphin is 20mph; Northampton Ave provides access to school.	Install raised side road entry to improve pedestrian priority and slow vehicles turning speeds. Reduce kerb radii to extent feasible; Would improve pedestrian priority along north footway between Farnham Rd and park.	£ 77,000
17a	17a-1	A4 - Wellington St	long term - remove vehicle traffic from A4 - part of long term strategy for town centre	Long term plans for the town centre includes removing most vehicular traffic from Wellington Road.	Close Wellington Road to most vehicular traffic and improve public realm and ped/cycle provisions.	n/a
19	19-1	Langley Rd	upgrade existing traffic islands to provide formal pedestrian crossing islands (2 locations)	Long gaps in crossing opportunities along Langley Rd.	Upgrade existing traffic islands to serve as pedestrian crossing islands - 2.0m preferred min, 1.5m absolute minimum. Constrained carriageway - may require alterations to kerbline or consideration of alternative crossing treatment.	£ 51,000
19	19-2	Langley Rd	install tactiles at side roads and tighten bell mouth junctions/provide raised side road entry at: - Turner Rd - Hempson Ave - Whitehouse Way - Lynwood Ave	Several crossings lack tactiles, reducing coherence of the route and access for the visually impaired. Bell mouth at side roads for low traffic residential streets.	Install tactiles. Locate dropped kerbs to accommodate direct, perpendicular crossing of side road along desire lines. Reduce kerb radii to extent feasible to reduce pedestrian crossing lengths, introduce raised side road entry treatments.	£ 154,000

Route / Segment	Scheme ID	Street Name	Improvements	Commentary	Proposed Treatment	Indicative Cost (including OB)
19	19-3	Langley Rd	prohibit footway parking	parking on footway reduces effective width for pedestrian movement	Prohibit footway parking, increase enforcement.	£ 8,000
24	24-1	Stoke Rd	Stoke Rd @ Shaggy Lane - install ped signal heads - reduce kerb radii	Signalised junction but lacks pedestrian signal heads. Existing islands and dropped kerbs, tactiles. Wide junction with wide kerb radii, reduced pedestrian comfort.	Upgrade signals to provide controlled pedestrian crossing. Widen islands to extent feasible - 2.0m preferred min, 1.5m absolute min. Tighten kerb radii to extent feasible.	£ 458,000
24	24-2	Stoke Rd	prohibit footway parking	Parking on footway reduces effective width for pedestrian movement.	Prohibit footway parking, increase enforcement	£ 8,000
24	24-3	Stoke Rd	Stoke Rd @ Belgrave Rd - install ped signal heads	Signalised junction but lacks pedestrian signal heads. Existing dropped kerbs, tactiles.	Upgrade signals to provide controlled pedestrian crossing.	£ 386,000
24	24-4	Stoke Rd	de-clutter footways - prohibit bins on footway	Bins along footway (residential refuse) reduce effective footway width.	Prohibit storage of bins along footway except during refuse collection days, increase enforcement.	£ 8,000
24	24-5	Stoke Rd	tighten bell mouth junctions at: - Mill Street - Stanley Cottages	Wide junctions create long crossings for pedestrians, uncomfortable environment.	Tighten kerb radii to extent feasible. Will require review of vehicle tracking.	£ 69,000
24	24-6	Stoke Rd	install raised side road entries at uncontrolled junctions: - Littledown Rd - Queens Rd - Railway Terrace - Montague Rd	Low traffic side road entries along main road with access to commercial, school, train station.	Improve pedestrian priority along corridor by introducing raised side road entries, tighten kerb radii to extent feasible.	£ 154,000
27a	27a-1	Wexham Rd	prohibit footway parking	Parking on footway reduces effective width for pedestrian	Prohibit footway parking, increase enforcement.	£ 8,000

Route / Segment	Scheme ID	Street Name	Improvements	Commentary	Proposed Treatment	Indicative Cost (including OB)
				movement.		
27a	27a-2	Wexham Rd	install crossing at north arm of Broadmark roundabout; improve west arm crossing	Observed desire line with pedestrians crossing to/from school, commercial area; west arm entry to school.	Install uncontrolled crossing at north arm with crossing island - 2.0m preferred, 1.5m minimum. Available carriageway width and highway boundary may constrain opportunities to provide proper island. Upgrade west arm crossing to raised to improve ped priority and slow traffic entering school.	£ 47,000
27a	27a-3	Wexham Rd	Reconfigure streetscape - remove frontage/service road - widen footways - provide loading bays - incorporate cycle scheme	Busy commercial area; existing adjacent service roads provide opportunity for improve public realm.	Redesign space to provide wider footways, cycle provisions, and reconfigure servicing/parking arrangements. Provide raised entry treatments at uncontrolled side road junctions.	£1,775,000
28	28-1	Uxbridge Rd	Relocate bus shelter to increase effective width	Bus stops near Dolphin Rd on west side located within footway, reducing effective width.	Location constrained by highway boundary. Interim, remove side panel to reduce profile of bus shelter.	£ 13,000
28	28-2	Uxbridge Rd	install tactiles at side roads - Uxbridge Rd Gas Works entrance - Victoria Rd - Broadmark Rd - Mirador Cres	Several crossings lack tactiles, reducing coherence of the route and access for the visually impaired.	Install tactiles. Locate dropped kerbs to accommodate direct, perpendicular crossing of side road along desire lines.	£ 14,000

Route / Segment	Scheme ID	Street Name	Improvements	Commentary	Proposed Treatment	Indicative Cost (including OB)
28	28-3	Uxbridge Rd	Install crossing at Rochford Gardens signalised junction	Signalised junction but lacks pedestrian signal heads. Existing dropped kerbs, tactiles. No existing crossing of Uxbridge Rd and long distance between formal crossing opportunities.	Upgrade signals to provide controlled pedestrian crossing. Widen islands to extent feasible - 2.0m preferred min, 1.5m absolute min. Tighten kerb radii to extent feasible.	£ 344,000
29a	29a-1	Yew Tree Rd	de-clutter footways - prohibit bins on footway and cars overhanging from forecourt	various obstructions reduce effective footway width, including bins (residential refuse) and encroaching parked vehicles.	Prohibit storage of bins along footway except during refuse collection days; increase enforcement.	£ 8,000
29a	29a-2	Yew Tree Rd	raised table side road entry treatments at Clifton Rd, High St and Sussex Pl	Key pedestrian route to High Street from the east. Both side roads are low traffic residential streets.	Introduce raised table entry treatments to improve pedestrian priority along route; consider continuous footway at High St; tighten junctions where feasible.	£ 129,000

4. Prioritised Lists of Proposed Schemes

4.1. Cycling

The proposed design measures for cycling were prioritised based on the metrics listed below. Each metric was rated from 0 to 3 (low to high). When different design typologies were proposed along a given route, the individual route segments were scored separately. A total score was then calculated for each route based on the average scores of its segments (weighted by segment length), which was used to rank the relative priority of each route.

- Potential increase in cycle flows: based on PCT output in the government target scenario (national doubling of the proportion of commuters who cycle from 3% to 6%) compared to the 2011 census scenario (initial prioritisation criterion)
- Enhancement to cycle network connectivity: based on RST connectivity score (initial prioritisation criterion)
- Coherence / Access: average of the access scores for types of trip attractors noted previously (initial prioritisation criteria)
- Feasibility of the preferred design – ease of the which the scheme can be physically constructed
- Deliverability of the preferred design – ease of which the scheme can be implemented, taking into account a variety of factors including both physical and non-physical constraints (e.g., stakeholder support, impacts to other road users, etc.)
- Quality of the preferred design – expectation of the design to deliver improved cycling provision (e.g., safety, comfort, convenience, aesthetics)
- Change to RST score – anticipated change to RST criteria for safety and comfort relative to the existing condition
- Impact on pedestrians – consideration of potential negative impacts to pedestrians (e.g., reduction in footway width, increased potential conflicts with pedestrians on shared-use footways, etc.)

Project timescales were categorised based primarily on a combination of project complexity/deliverability and indicative cost, whereby those with higher cost and/or greater potential for feasibility/deliverability issues would be implemented over the longer term, and schemes with a lower anticipated cost would be implemented in the shorter term.

4.1.1. Table 6 lists each of the cycle routes for which design measures were proposed, including their location, proposed scheme(s), prioritisation score, prioritisation ranking, indicative construction cost (including optimism bias), and proposed timeframe. Project timescales were categorised based primarily on a combination of project complexity/deliverability and indicative cost, whereby those with higher cost and/or greater potential for feasibility/deliverability issues would be implemented over the longer term, and schemes with a lower anticipated cost would be implemented in the shorter term.

4.1.1. Table 6: Prioritised Cycling Schemes

Route ID	Street(s)	Length (km)	Proposed Cycle Typology(s)	Prioritisation Score (0-100)	Prioritisation Rank	Indicative Cost (including OB)	Timescales[1]
1A	Bath Rd, Wellington St (A4)	4.8	one-way cycle track	70	5	£ 12,403,000	Long
1B	Wellington St, London Rd (A4)	5.0	one-way cycle track	70	5	£ 13,663,000	Long
1C	London Rd, High St, Bath Rd	2.4	shared footway, healthier street	68	10	£ 2,788,000	Long
2A	Cippenham Ln	2.1	shared footway, healthier street	75	2	£ 1,855,000	Medium
2B	Church St, Chalvey Road W/E, A412 (Albert Lane)	1.6	one-way cycle track, healthier street, shared footway	86	1	£ 2,686,000	Medium
3	Langley Rd, Willoughby Rd, Kennett Rd, Burroway Rd, Market Ln, North Park	3.5	one-way cycle track, healthier street	75	3	£ 4,743,000	Long
4	Colnbrook Bypass (A4)	2.5	two-way cycle track	62	12	£ 5,074,000	Long
6	Burnham Ln, Station Rd, Elmshott Ln	2	shared footway, healthier street, advisory cycle lane	69	9	£ 858,000	Short
10	Edinburgh Ave, Sheffield Rd, Oatlands Dr, Elliman Ave, Shaggy Calf Ln, The Frithe	4.4	one-way cycle track, shared footway, healthier street, advisory cycle lane	64	11	£ 3,279,000	Medium
14	Farnham Rd, Tuns Ln	3.8	one-way cycle track, shared footway	59	13	£ 6,315,000	Long
18	Shackleton Rd, Belgrave Rd, St Pauls Ave	1.3	healthier street	0	5	£ 440,000	Short
25	Uxbridge Rd, Yew Tree Rd	2.6	one-way cycle track, shared footway, advisory cycle lane	72	4	£ 7,343,000	Long
29	Station Rd, High St Langley	1.2	one- and two-way cycle tracks, healthier street	70	8	£ 3,065,000	Medium

[1] short : < 3 years; medium: < 5 years; long: > 5 years

4.2. Walking

The proposed design measures for walking were prioritised based on the metrics listed below. Each metric was rated from 0 to 3 (low to high). Proposed design measures along each route were scored separately. Scores were then aggregated by route segment, based on the average scores for proposed schemes along a given route. The total score was used to rank the relative priority of each route.

- Feasibility of the preferred design – ease of the which the scheme can be physically constructed
- Deliverability of the preferred design – ease of which the scheme can be implemented, taking into account a variety of factors including both physical and non-physical constraints (e.g., stakeholder support, impacts to other road users, etc.)
- Potential to encourage new walking trips – anticipated impact of the proposed improvement on the walking environment such that it would encourage more walking trips (e.g., improved safety, comfort, convenience, attractiveness)
- Coherence / Access: access to key types of trip attractors in close proximity to the route/proposed measured (average of scores for residential areas, employment area, schools, retail, leisure facilities, places of worship, rail/bus connections, planned growth/regeneration areas)

4.1.2. Table 7 lists each of the walking routes for which design measures were proposed, including their location, prioritisation score, prioritisation ranking, indicative construction cost (including optimism bias), and proposed timeframe. Project timescales were categorised based primarily on a combination of project complexity/deliverability and indicative cost, whereby those with higher cost and/or greater potential for feasibility/deliverability issues would be implemented over the longer term, and schemes with a lower anticipated cost would be implemented in the shorter term.

4.2.1. Table 7: Prioritised Walking Schemes

Route Segment	Street Name	Prioritisation Score (0-100)	Rank	Indicative Cost (including OB)	Timescale[1]
2b	Buckingham Ave	68%	10	£ 1,468,000	Long
5c	Dundee Rd	69%	8	£ 88,000	Short
6c	Cippenham Ln	75%	2	£ 842,000	Long
7a	Fairlie Rd	71%	7	£ 343,000	Medium
10	Bestobell Rd	65%	11	£ 9,000	Short
11a	Farnham Rd	68%	9	£ 61,000	Short
11b	Farnham Rd	75%	1	£ 7,732,000	Long
11c	Tuns Ln	73%	5	£ 44,000	Short
13a	Whitby Rd	74%	3	£ 105,000	Short
17a	A4 - Wellington St	57%	15	£ -	Long
19	Langley Rd	60%	14	£ 213,000	Medium
24	Stoke Rd	73%	5	£ 1,083,000	Long
27a	Wexham Rd	62%	13	£ 1,830,000	Long
28	Uxbridge Rd	63%	12	£ 371,000	Long
29a	Yew Tree Rd	74%	3	£ 137,000	Medium

[1] short : < 3 years; medium: < 5 years; long: > 5 years

4.3. Further notes on scoring and prioritisation

Cycling

The original selections of routes for consideration were generated from the rigorous, scenario based analysis using the Propensity for Cycling Tool (PCT).

The scoring mechanisms applied were provided by the DfT via the technical consultants from the consortium. The process also involved drawing upon Slough specific local knowledge.

Scores of 0 to 5 were applied to the original states of the routes prior to proposed intervention. Interventions / proposals were then only been considered for low-scoring existing routes (or no route). Scoring was conducted again to the routes with the proposed measures included.

To some extent there was an anomaly / skewing in the scoring of the cycling routes: Existing shared cycle way / footways tend to score highly due to safety compared to on-carriageway options. Hence, the shared routes along the A4 footway score relatively high in the RST assessment. This is not to say, however, that these existing examples of infrastructure in Slough should be replicated, or even recommended. Innovative, more comprehensive solutions and suggestions have been considered wherever possible.

The data used in the PCT analysis was 2011 Census data for commuter cycling. Future selection and scoring will include additional data sources and types of cycling, expected to include data for shorter trips.

Walking

PCT was not applicable when selecting walking routes and other infrastructure interventions to apply. The selection was based on key areas in the borough, in this study these were the town centre and the trading estate.

A score of 70% had to be achieved for any existing route to be deemed satisfactory. Again, the lowest scoring routes were selected for proposed interventions. As above, the scoring was then repeated taking into account the condition of the route including the proposed measures. A revised score of at least a 3 (out of 5) for comfort and safety was required for any route / measure to be taken forward.

General Points

Regarding ratings on safety and ‘comfort’, some scores were more subjective than others, but overall the process led to realistic appraisals of existing infrastructure, and how it might be following intervention / investment.

Further, it might be prudent to retrospectively apply higher width standards to existing routes, and to demand changes including, ultimately, reallocation of road space. But, again, there has been a bias in favour of creating new routes and applying any such new standards in these schemes.

The scoring of routes generated by the Route Selection Tool was based on reasonable expectations and assumptions as to what can be realistically achieved. There was no scoring where any proposal was deemed physically impossible overall.

The PCT scenario based process can generate theoretical predictions only, and the suggested infrastructure may not be possible given topology, existing urban design, available roads pace and so forth, geographical constraints may prove preventative or at least not currently within the realm of affordability in purely financial terms at least.

Further scoring could potentially be applied in the future subject to establishing wider boundaries for what might be considered *possible* and *reasonable*, subject to more ambitious aspirations, political backing, anticipated public reaction, and specification of available funding limits (or lack of). More extensive plans could be considered in the light of drastic changes to Transport and Highways strategy and actual measures in the future (i.e. maintaining the aspiration, though acknowledging that the time is not yet right for certain, theoretically possibly interventions e.g. to the scale of some of our European neighbours infrastructures).

Prioritisation

All the schemes considered were subsequently prioritised against a range of criteria including proximity to areas of development, trip attractors, sustainability, council priorities and deliverability.

The prioritisation table of criteria intentionally did not include overall cost of scheme or timescale for delivery. Further prioritisation including these factors may be advisable. See the notes on further prioritisation in Appendix 1.

Costings

For all the proposed schemes, indicative costings have been provided, due to the level of design work undertaken to date. Hence, all costings are subject to change.

All costs are indicative at this stage and are subject to feasibility studies, site investigation and detailed design. The costs do not include utility diversion work, contingencies e.t.c.).

BCR / Value for Money

Value for Money has not been established in the assessment of schemes in this plan given the availability of details in the proposals at this stage. VFM studies will be necessary for all schemes that are considered further for implementation.

5. Review

The LCWIP preparation has had to take account of a certain amount of inconsistency in existing infrastructure design in Slough. The hierarchy of measures is rarely straightforward at either local or national level. The LCWIP has had to consider the specific objectives of making sustainable travel available to all, increasing economic competitiveness, facilitating new housing development, enhancing social inclusion, regenerating deprived areas, reducing accidents involving injury or death, improving public health, reducing CO2 emissions and particulates, minimising noise, better connecting neighbourhoods and improving the overall journey experience.

The plan has taken account of all of these factors and includes various schemes intended to address a complex challenge in different ways and to different extents. Some of the features proposed in the LCWIP have previously been introduced as part of the commitments in the Local Transport Plan, and for example via the Local Sustainable Transport Fund. Where previous interventions have proved successful, they have been advocated or enhanced still further in the LCWIP.

The issue remains that the desired target levels of increase in Active Travel can only be brought about through more ambitous measures, commonly understood to involved stricter forms of travel demand management, frequently with financial implications to motorists

5.1. Outcomes

The LCWIP contains proposals that are based on substantial research and data analysis. The suggestion in the LTP3 Cycling sub strategy to consider the A4 for *"Cycle Superhighway style treatment"*, with cycle lanes, blue surfacing (advisory or mandatory) and junction alterations, was considered a step change that would require significant commitment which is now being made. A reallocation of road space is being considered, with a view to make significant improvements to facilitate improvements to cycling and walking journeys.

The proposed cycling measures include new segregated cycle ways, shared use footway/cycleways, 'healthier' street design, improved signage and general improvements to the streetscape.

Segregation is regarded as the first option wherever possible. Shared routes are only considered where circumstances are prohibitive. The provision of shared footways is known to be problematic, and stepped cycleway delineating pedestrians and cyclists will be installed, which is regarded as better than not provision for cyclists at all.

The proposed walking measures include tactile paving, dropped kerbs, signalised crossings, pavement widening, improved drainage, better surfacing, improved junction/crossing design and treatment, enhanced and additional signage including wayfinding, and better lighting.

Some of the schemes can be described as ‘off the shelf’ and are not considered to be hard to develop plans for. There is a high expectation that these schemes can be delivered relatively quickly and easily. Others are more complex and extensive. Hence they include proposals to first conduct feasibility surveys. There is a mixture, then of the obvious and the exploratory.

Some schemes may take the form of prototypes or trial schemes, with a view to extending the list of locations / streets / areas, where such techniques and infrastructure are also likely to be successful.

The plan has been designed, overall, to be extensive, responsive, robust and deliverable. This includes a certain amount of further research and, where appropriate, experimentation with techniques, materials and associated traffic orders. The Council will continue to endeavour to still be more ambitious long term, and at every realistic opportunity in the meantime.

The level of ambition, of course, depends on community support, political will, and funding. As part of this work, we will continue to engage with our communities to understand how we an improve our infrastructure to support walking and cycling and where we would lead to genuinely segregated routes and the reallocation of roadspace. Less ambitious schemes involving smaller changes to existing infrastructure are still expected collectively and will lead to significant differences on the network.

5.2. Strategic links

As covered in Section 2, the LCWIP takes account of the major national and local policies. The LCWIP is therefore consistent in its intentions and proposals, to meet the objectives set out in the Five Year Plan, and the Local Transport Plan, and the full suite of sub-strategies.

The LCWIP is part of a much wider overall plan intended to bring about a step change in increasing cycling and walking. The LCWIP manager will work closely with the Service Lead and Transport Planning Team and other internal departments to raise awareness and incorporate the plan into the overall service plan, linking up with all relevant strategies, including the Transport Vision, and forming an important part of the prioritisation process. This will include the development of the LTP4, taking into account the respective implications for the plans and the influences they will have on each other.

The LCWIP therefore presents a package of proposed measures intended to increase the amount of active travel in Slough, to make it safer, more convenient and enjoyable, while reducing reliance on travel by car. To increase connectivity, improve accessibility and mobility. Promote improvements in public health, physical and mental.

The LCWIP will serve as a management tool to deliver success in meeting the various objectives, with an emphasis on sustainability in all of its forms.

5.3. LCWIP Status and Approval

The LCWIP will be presented to the lead Slough Borough Council Member responsible for Transport and the Environment. This will be accompanied by a Significant Decision, setting out the intentions and recommendations of the Major Infrastructure Projects Service. In this way, cabinet approval will not be required in order to formally approve the LCWIP. Hence, commencement of the appropriate elements of the plan can be commenced and implemented without undue delay. The plan will also maintain its status as a 'living document', subject to regular review in accordance with the requirements of the Major Infrastructure Projects Service. The need for full cabinet approval may be considered in the future, for example where authorisation of significant levels of funding is required.

5.4. Management of the LCWIP

The LCWIP will be owned and managed by the Major Infrastructure Service.
It is recognised that the success of the plan will depend on Cycling and Walking Champions as well as designated officers with responsibility for the plan.
Implementation of the plan is also subject to funding and all other requisite factors and circumstances being in place.

As noted in section 2, the LCWIP will form part of the suite of Transport policies, and it will be referred to a complementary document to the LTP Cycling and Walking Sub-strategies and the Access Programme.

The LCWIP is to be considered a live document that is likely to evolve, and indeed is expected to progress with regular reviews and amendments. However, the core principles and features / strategies / infrastructure guidelines are all likely to remain largely the same. The areas likely to change include specific scheme proposals and prioritisation of schemes, along with response to any new legislation or DfT directives, Local Transport Notes and other high priority recommendations.

The LCWIP is intended to be a ten year plan. However, regular reviews will be conducted. The initial review is likely to be one year after publication of the LCWIP, with subsequent reviews recommended on a 3 yearly basis. The initial review will cover the need to focus on any particularly significant outstanding areas for consideration. It is expected that this document will be the basis of the Cycling and Walking supplementary documents, supporting the emerging LTP4.

No Key Performance Indicators have been set at this stage for formal review and evaluation of the implementation of the LCWIP, but KPIs may be considered at a future stage, subject to overall service policy.

5.5. Ongoing assessment and evaluation

A comprehensive review of the plan will require further analysis and reviews of Slough's ongoing infrastructure and all relevant, available resources. This will include information and data on network activity from cycling counts, surveys, national statistics and census data (2021). It will be necessary, as far as possible in both subjective and objective

terms, to assess how much difference the LCWIP is making. Reviews will cover how exactly has progress been achieved, what interventions / types of infrastructure worked and what didn't; what are the trends and the specifics.

Reviews will also take into account Transport strategy developments (including the realisation of the new Slough Transport Vision), and the ongoing Council response to local needs in all of these areas.

The Service Lead and the Member with responsibility for Transport and the Environment will be sent regular updates on the progress of the plan.

5.6. Funding considerations

Whilst no funding has been committed for the implementation of the LCWIP to date, there is an expectation of significant funding opportunities relating to cycling and walking infrastructure initiatives coming up from a variety of sources, both internal and external, in the future.

5.6.1. External funding

Funding to implement the LCWIP will be sought from all available and appropriate sources. This is expected to include the Service budget, local developer contributions, contributions from partner organisations, and national funding streams.

One likely source of funding is Section 106 contributions in relation to planning applications from developers. A process will be established with a view to ring fencing funds for LCWIP purposes.

The Council anticipates future national government spending reviews, with the realistic possibility of extensive and substantial funding schemes similar to the previous Local Sustainable Transport Fund (LSTF), Access Fund, Capability Fund, Cycling and Walking to Work Fund, National Productivity Investment Fund (NPIF), and the Local Growth Fund.

5.6.2 Regional and Local Partnerships

Slough Borough Council will continue to play an active role in the Thames Valley Berkshire Local Enterprise Partnership and Transport for the South East. Funding opportunities are expected to be announced and facilitated through these channels at various intervals.

5.6.3. Internal service funds

It is recommended here that consideration be given to diverting some of the funding for highways maintenance (including resurfacing) to cycling and walking infrastructure project. Nb safety must remain of paramount importance. Such a policy might work best where cycle lane surfacing is being put down as part of the full resurfacing of a street that might not otherwise be a high enough priority in the resurfacing programme. Even where specific funding cannot be diverted, it would be reasonable to expect significant financial savings in a joint approach to installation and subsequent maintenance.

5.7. Next steps

The LCWIP is a ten year plan, but in the early stages it will be regularly reviewed and updated. The LCWIP presented is very much an initial plan based on the assessments and conclusions reached at this still early stage in the overall process. It is very much a dynamic plan, and as such the document will be amended and revised at repeated intervals. The immediate next steps are set out in Appendix 1. This covers a number of areas that have been identified for further, closer study, and deemed either essential or extremely helpful in order to develop and implement the plan. The features include:

- Aspects identified for further attention
- Full Independent Audit
- Major Development areas
- Service wide prioritisation
- Consultation
- Ongoing analysis
- Asset management links
- Project planning
- Barriers to implementation

5.8. Summary: A vision for the future

The LCWIP is expected will be promoted to generate an increased interest in active travel and further commitment to developing infrastructure to bring about real change. This, in turn, is likely to lead to calls for still more ambitious projects. Schemes that have not been proposed specifically in the first edition of the LCWIP plan have now featured in subsequent revisions.

As momentum for the development of the town centre has increased, and with SBC's response to the pandemic - reallocating road space for sustainable modes, in parallel with government's demonstrable commitment to walking and cycling – the desire for introducing stronger walking and cycling scheme has grown. The Slough Transport Vision had already begun to give greater priority to the possibility of dedicating greater road space to cyclists along the A4; space which has always previously been occupied by cars and larger motorised vehicles. A cycle route along the centre of the A4 is being reviewed, with a robust A4 cycle route being proposed as a viable option.

This scheme development recognises that are only likely to deliver the level of change required in the national and local targets if we make genuinely substantial changes to our transport infrastructure, with active travel at the heart of the re-design of the borough.

Appendix 1

A1. Aspects identified for further attention:

A1.1. Full independent audit

A full independent audit of all existing and planned cycling and walking routes is highly recommended in order to further validate the proposals in the LCWIP. Audits were conducted for the routes selected in the LCWIP data analysis and scoring, but this process was by definition limited, and a comprehensive, overall study would be welcomed. Any resulting challenges could then be incorporated into revisions to the LCWIP at an appropriate time.

A1.2. Major Development areas

Despite the best of intentions, the level of engagement with the Council's Planning team has not been sufficient for the purposes of developing the LCWIP. There has been broad recognition of and reference to the geographical areas where major development is expected to take place, most notably the town centre including the Stoke Road regeneration project, and the north of the borough towards the border with South Bucks District Council. To some extent, though, the major update to the Slough Local Plan is still in an emerging state.

The major development areas are shown in the maps in section 3, and proximity to expected areas of development was included in the prioritisation of the longlists of selected routes. However, increased engagement with Planning and considerably greater detail is required. This will provide the basis for more informed decision making on route selection, including specifically the possibility of new cycling and walking routes. Any new proposals can then be included in the LCWIP, subject to the same scoring and prioritisation methods used in the original LCWIP process.

The desired and necessary outcome is a further enhanced network of active travel routes, again taking into account assessments of the origins and destinations that will become established, leading to high levels of connectivity to new areas of housing served by attractive links.

A1.3. Development Control responses

|n addition to closer analysis of major new development sites, increased scrutiny of regularly incoming planning applications is highly recommended. Many developments, including extensions, new builds, changes of use and so forth have the potential to create demand for enhanced active travel connectivity. Planners will be encourages to further stress the importance of walking ad cycling implications relating to potential developments. Reference has already been made in section 5 to the opportunities here for funding sources for LCWIP schemes.

A1.4. Service-wide prioritisation

The LCWIP proposed schemes will be included in the overall Service wide Project List prioritisation. This will entail rigorous scoring of all the LCWIP proposed schemes again

against all other planned or requested projects that fall within the domain of the Major Infrastructure Service's remit. The criteria used in the LCWIP preparation will again be used in this overall process, which will also include any LTP criteria and commitments in the leading party manifesto not previously referenced.

The expectation is that the highest scoring schemes in this process will be the same as in the LCWIP prioritisation process. Further, subject to funding, and all other appropriate circumstances being in place, the highest scoring schemes will be the first to be delivered. Where funding becomes available specifically for cycling and walking infrastructure, these schemes will be actioned accordingly.

Depending on cost and timescale for delivery, relative to scope and scale, some schemes may be relatively straightforward and may be included in the overall service plan on a 'business as usual' basis. Others will require closer scrutiny and are likely to include feasibility studies and business cases and tendering. In all cases, schemes are expected to deliver best value and the most effective results, contributing to the fulfilments of the commitments made across the Council's main policies and the leading party manifesto.

A1.5. Consultation

In preparation of the LCWIP, substantial internal consultation was conducted in order to maximise the transport and highways knowledge pool relating to cycling and walking. This included officers and consultants involved in cycling and walking related work streams and, to varying degrees, colleagues from related services areas including Planning, Parks, Public Health and others. In development of the LCWIP, it has been established that further, more detailed input would be highly beneficial from various parties, and detailed feedback will be sought on the new plan.

As an active plan it will be an important guide to project selection and scheme introduction. Although not an official policy document in itself, the LCWIP is expected to be an authoritative source of reference, and a recognised example of how to respond to challenges and policies on a practical level and form the basis of our cycling strategy. The expectation is that the LCWIP will be welcomed by transport planners, project managers, engineers, technicians and all involved in delivering active travel schemes, or where active travel is part of larger schemes.

Further links will be developed between the LCWIP, the transport strategy team, and the Access programme team. This will enhance the relationship between infrastructure and behavioural change initiatives in the promotion of Active Travel.

External Consultation will also be undertaken with relevant local community groups and forums in the first instance, within Slough and potentially across local borders. Information about the LCWIP will also be included on the public website.

At the point where the Major Infrastructure Service team is ready to propose commencement of specific schemes, residents in the relevant locations will be consulted first by all appropriate methods. This will contribute to the further prioritisation process and to the development of detailed designs.

The Service team will also continue to seek increased Member support, initially via the Significant Decision process, and thereafter in terms of further promoting the plan internally and in the local community.

A1.6. Ongoing analysis

PCT analysis will be conducted again at appropriate points to check the effectiveness of the network. This will allow future monitoring of actual travel mode trends, and will aid in preparing still more routes as the level of requirement increases or can reasonably be predicted subjected to all relevant circumstances contributing to such patterns and predictions. This will again involve analysis of commuter cycling, but will be expanded to include data and scenarios relating to shorter, local trips within and across the borough. Other data analysis tools will also be researched and incorporated into the programme of analysis where useful.

A1.7. Asset Management

The LCWIP has significant implications for the Asset Management Plan. Greater interaction is recommended between the custodians of the respective plans. This will ensure more comprehensive, shared knowledge and awareness of the infrastructure that Slough provides and is responsible for. In terms of maintenance, enhanced links should be established with the Highways Maintenance team, in order to maintain high quality surfacing and to repair other, damaged infrastructure when the need arises. Regular reviews of cycling surfacing programmes would be one obvious area to consider.

A1.8. Project Planning

A1.8.1. Existing schemes: recently introduced / planned

There are links between some of the LCWIP schemes and major schemes that have already been considered or for which the planning has already commenced. The proposed LCWIP changes to the A4/Bath Road/Colnbrook Bypass, for example, draws on the existing concept design for the SMaRT phase 2 scheme. Prior to the detailed design stage, the LCWIP manager will engage further with the relevant project manager in order to ensure there is consistency between the proposals and that the best all round scheme is delivered.

Previous major schemes recently introduced, included SMART phase 1, including reallocation of roadspace for dedicated bus lanes, and the improvements to the A332/Windsor Road, will be reviewed in order to established how well they meet the proposed new LCWIP principles and recommended guidelines. These reviews will aid in the feasibility studies and detailed design stage for LCWIP schemes proposed for implementation in the future.

In some cases, where advisable, it may be possible to retrospectively fit elements proposed in the LCWIP within the recently installed infrastructure.

A1.8.2. Future schemes

Any new schemes not specifically proposed in the LCWIP will be expected to give prior consideration to the options available via the LCWIP, and to incorporate proposals wherever appropriate. It is expected that the LCWIP standards and guidelines (Appendix 2) will also be adhered to as far as reasonably possible. The availability of LCWIP scheme proposals could, in theory, increase the overall scope and scale of major schemes, as well as contributing to the fulfilment of the LCWIP ambitions.

This will lead to a consistent approach by project managers, planners and engineers, with an acknowledged focus on promoting active travel, providing high quality, connected, effective, attractive safe routes and related infrastructure.

A1.9. Barriers to implementation

The implementation of the LCWIP may be affected by a number of factors. Some problems can be resolved simply through the provision of information. Others will be harder to resolve and there may not be an acceptable all-round solution. In all cases, it is important to understand the likely impacts on all concerned, and to address any concerns at an early stage through pre-engagement activities.

A culture of car ownership and dependency is often perceived to be a major problem in Slough if not nationally. Similar, anti-cycling sentiment has previously been identified as a problem in the Local Transport Plan. Both of these issues are hard to quantify but cannot be overlooked or ignored.

A more rational and obvious problem is space constraints. Narrow roads make it seem difficult to consider measures such as segregated routes. The demand for parking spaces adds to the difficulties here.

Benefits in promoting active travel sometimes come at the expense of Public Transport.

Resource limitations, mainly in funding levels, can be a big factor in limiting progress.

All of these issues have been considered and addressing in the development of this plan. Through a combination of measures of different scale and scope, the cycling and walking infrastructure can be improved considerably within the borough. The emphasis, always, is on a sustainable approach, acknowledging the needs of everyone in society, and taking positive action. Slough Borough Council is firmly committed to implementing this plan as part of the overall commitment to provide a more attractive, better connected travel network for all to enjoy and benefit from.

Appendix 2

A2. Cycling and Walking Standards

A2.1. Introduction

The following sets out the general guidelines applicable to cycling and walking infrastructure design and implementation in Slough. For more specific, technical details, the starting point and overall recommendation is to comply with the existing design manuals, particularly Manual for Streets (I and 2) and guidance from Transport for London. It may subsequently be desirable for Slough to develop its own technical manual of requirements specifically for Slough. Should this be required, this is likely to be developed as part of the 'living' nature of the LCWIP, though not timescale has been set for this yet.

In all cycling and walking infrastructure plans, safety remains of paramount concern. Schemes must also enhance connectivity and promote overall sustainability. *It should* also be noted that the following guidelines are not exhaustive, and flexibility must be permitted. Specific local circumstances (geographical, social needs and so forth must always be taken into consideration).

These guidelines are not legal requirements then, but in appropriate cases they are expected to be backed up by formal traffic orders in order to support the recommendations and measures, and ultimately to enforce them where relevant.

A2.2. Guidance

A2.2.1. Rationale and prioritisation / ambition

In a hybrid approach to reality and aspiration, the LCWIP includes measures and proposals for various schemes based on what is considered to be either aspirational or pragmatic – both where there is possible. Careful attention must be paid to the criteria for prioritisation, though prioritisation is not confined absolutely to what is currently considered technically possible. In some cases, explorative, feasibility studies will be essential.

A2.2.2. Infrastructure Hierarchy

The design and maintenance of infrastructure is heavily influenced by availability of financial resources and political direction, but it is also determined significantly by spatial concerns and restraints. There is no point, for example, proposing a cycle super highway where there is simply insufficient width to allow the safe, segregated passage of cyclists alongside at least one lane for motorists, as long as motorists continue to be prioritised in the overall hierarchy of road users and considered to be a major factor in the generation of economic growth.

A2.2.3. Shared footways/cycleways

Consistent with DfT guidance, SBC does not favour shared footways. However, a considerable amount of Slough's existing cycle network includes this form of

infrastructure. It is currently considered realistic to maintain the existing infrastructure to a large extent. Shared footways are helpful where there is a need for certain routes, with no reasonable alternative, and there is simply insufficient space for segregation, taking into account all geographical, political and economic considerations. Hence, shared footways have not been rule out in this LCWIP process, but they have certainly not been the first choice.

In a scenario where there are no such limitations, the ideal hierarchy in the design of cycling infrastructure is as follows:

1. Fully segregated cycle ways (physical segregation between cycle lane and adjacent mainstream traffic lanes.
2. Adjacent but raised level cycle ways.
3. Light segregation for cycle ways.
4. Line marked cycle lanes – mandatory
5. Line marked cycle lanes – advisory
6. Shared use cycle lane / footways.
7. Healthier street branding / signing / marking

Where no segregated cycleway exists, and no separate on carriageway cycle lane, cyclists should be allowed to use bus lanes.

Time based segregation can also be beneficial, though this will usually work best in combination with physical measures. The simplest form of this is the use of Advanced Stopping Lines (ASL) at signalised junctions (widely installed in Slough already).

Reduction in speed and volume are also effective in some circumstances, though is counter-intuitive and can be in conflict with the overall proposals to increase active travel in other ways.

A2.2.4. Priority

On shared routes, pedestrians will generally take priority, again from a safety perspective. Pedestrians must have confidence to walk more and to feel safe as well as to enjoy the activity, though care should be taken not to alienate cyclists. Where applicable, ‘Pedestrian priority’ signs must be placed prominently. Additionally / alternatively, ‘cyclists dismount’ signs should be used where appropriate.

A2.2.5. Signage / clutter

A thorough review of policy on signage infrastructure is recommended. Signs are, of course, a basic form of infrastructure, and detailed guidance on this is expected to be included in any detailed technical documentation to follow. In the interim, the recommendation is that signage should be clear, durable, easily maintainable and appropriate to the specific location.

As a general guide, in the interests of keeping the streetscape free from clutter, signage should not stand out obtrusively, and be limited within reason. However, adhering to the legal minimum is not usually recommended, especially where this leads to signs frequently being missed by road users.

Greater use of wayfinding signage should be made across the borough for the benefit of walkers, specifically.

Where new infrastructure is introduced, consideration should be given to temporary signage, with subsequent review and likely removal where appropriate, i.e. once there is no longer a discernible need to draw road users' attention to infrastructure that is no longer likely to cause surprise leading to potential danger.

A2.2.6. Multiple route options

Where the network allows, consideration should be given to different parallel or adjacent routes for different types of cyclists and/or different types of journeys, e.g. confident/competent cyclists v beginners, occasional cyclists commuters v local trips.

Good signage is essential to make people aware of the route options.
Overall the network must be inclusive as far as reasonably possible. Considerable though must go into this requirement, and the solutions will not always be obvious.

The overall intention must be to encourage active travel in all forms, and to remove both physical and psychological barriers to cycling and walking wherever possible and safe.

A2.2.7. Crossings and interruptions

Routes should be continuous routes wherever possible. Continual where not, for example at junctions. Again, safety is a crucial aspect here.

Toucan crossings must be staggered (to prevent cyclists proceeding straight across unaware of stage timings and possibly conflicting with traffic movements on the second section of the crossing.

Where possible, cycle lanes should not require cyclists to repeatedly change from one surface or level to another. The installation of bespoke crossing points (e.g. signal controlled parallel crossings to pedestrian crossings are preferable to shared Toucan crossings which require manoeuvring around kerblines and people).

A2.2.8. Conflict with parking space requirements

Engineering designs must address potential conflicts with the need for parking spaces. Roadspace / lane reallocation is likely to be fiercely contested. All proposals for physical measures and supporting traffic orders preventing drivers from parking in cycle lanes (either mandatory or advisory) must entail consultation with the Highways Parking section.

A2.2.9. Drainage and related problems

Even where new cycling and walking infrastructure can be introduced without dispute, there may still be a need to consider existing physical challenges, e.g. drainage requirements. The ideal is for cycle lanes to be raised higher than the level of the main carriageway. This will normally address drainage concerns as well providing the segregation that increases safety and boosts confidence for cyclists.

But, ensuring that the various road users are encouraged to comply with the 'rules of the road' and not encouraged to perform illegal or unexpected manoeuvres.

A2.2.10. Future proofing

All aspects of design, and supporting policies – dimensions, prioritisation etc - need future proofing need to cater for likely increase in use in due course, not just to satisfy current demand.

A2.3. Outstanding Policy concerns:

It is recommend that the following issues be subject further study and agreement with the Major Infrastructure Projects and the Transport and Planning service areas.

A formal policy on mandatory and advisory cycle lanes should be developed and ratified.

Increase use of experimental / pilot schemes is recommended, specifically for cycling and walking infrastructure, potentially against the interests of other road users. This could incorporate a policy of showing residents / road users what can be achieved, and winning hearts and minds through this process. Likely measures to include increased use of segregation and roadspace reallocation, notably reduced parking space availability.

A formal policy on the introduction of ambiguity in shared spaces should be formulated and adopted. This will require careful assessment of both the legalities and the practicalities.

Formal adoption of Active Travel policies within a service wide forum (similar to the old Highways and Transport Coordination group) is recommended.

A2.4. Summary

One of the major challenges in the preparation of the LCWIP and the various scheme proposals has been the desire for fully segregated routes; this remains the gold standard. However, where this is not possible or permitted, shared routes are better than no provisions at all for active travel at all. The LCWIP has to be both physically and politically possible. The most important factor of all is the safety of all network users.

Feasibility studies will inevitably be required for the ambitious, large scale proposals, wither in the LCIWP or still to be developed.

Implementation of the LCWIP, and future revisions to the plan, are likely to involve compromises between road users depending of the specific location and circumstances as well as the needs of all users. As a general guide, however, consistency is the ideal. Furthermore, policy needs to be clear to all, as well as realistic and physically possible.

From an Active travel perspective, the fundamental proposal is to make it a) more attractive and easy to cycle or walk, and b) less attractive to drive.

A2.5. Technical references

For more detailed advice when designing schemes, the following sources of information are recommended:

Manual for Streets 1 (DfT)

Manual for Streets 2 (CIHT)

CD 195 – Highways England guidance on designing for cycle traffic (formerly IAN 195/16)

London Cycle Design Standards (Transport for London).

LTN 1/20 Cycle Infrastructure Design

Gear change: a bold vision for cycling and walking

Appendix 3

A3. Slough Borough Council: Related policy documents

Owner	Owner / strategy / document	Dates / comments
SBC	**LCWIP**	
DfT	**Cycling and Walking Investment Strategy**	
DfT	LCWIP Technical Guidance for Local Authorities	
SBC / DfT	LCWIP – SBC Expression of Interest	
SBC	**Five Year Plan**	2019-2024
SBC	Slough Joint Wellbeing Plan	2016-2020
SBC	Public Health – policy / strategy	Public Health Slough
SBC	Local Plan	Under Review
SBC	**Transport Vision**	Published 2019
SBC	Low Emission Strategy	Published 2019
SBC	Major Infrastructure Projects Service Plan	
SBC	Planning and Transport Service Plan	
SBC	Transport and Highways Priority Project List	Under review
SBC	**Local Transport Plan (LTP3)**	2011 to 2026
SBC	LTP3 Implementation Plan	Last created up to 2014/15
SBC	**LTP3 Cycling Supplementary Strategy Document**	Under review
SBC	**LTP3 Walking Supplementary Strategy Document**	Under review
SBC	LTP3 Network Management Plan	To be reviewed

	Supplementary Strategy Document	With Walking in Slough and Strategic Cycle Network maps
SBC	Access Fund bid document	Covers 2018 - 2020
SBC	Access Fund – programme	
SBC	Rights of Way Improvement Plan	Up to 2017 Review required
	Miscellaneous	
SBC	Traffic Orders	e.g. High Street access
SBC	Council Travel Plan	Not yet fully implemented
SBC	Transport Policy statements	
SBC	Highway Maintenance Policy	
SBC	Highway Resurfacing Programme	
SBC	Ad hoc Project documentation	
SBC	Other Transport, Highways and Planning documentation	

Appendix 4

A4. Walking Route Assessment Tool Results

						SCORES						PERCENTILE
ID	Route Name	Start	End	Length (m)	Walk Zone	Attractiveness	Comfort	Directness	Safety	Coherence	Total	Total
1	Burnham Lane	Priory Rd	Parkview Chas	894	Trading Estate	7	7	7	4	0	25	63%
2A	Buckingham Ave	Parkview Chase	Burnham Ln	313	Trading Estate	4	9	11	5	2	31	78%
2B	Buckingham Ave	Burnham Ln	Farnham Rd	1944	Trading Estate	5	6	5	3	0	19	48%
3	Bedford Ave	Buckingham Ave	Leigh Rd	1077	Trading Estate	5	9	10	4	0	28	70%
4	Weston Rd	Buckingham Ave	Scafell Rd	634	Trading Estate	4	7	11	6	0	28	70%
5a	Kennedy Park	Long Furlong Dr	Pentland Rd	316	Trading Estate	7	11	12	6	1	37	93%
5b	Pentland Rd	Kennedy Park	Pevensey Rd	138	Trading Estate	5	10	8	5	0	28	70%
5c	Dundee Rd	Pevensey Rd	Buckingham Av	540	Trading Estate	4	9	6	3	0	22	55%
6a	Dover Rd / Cipper	Buckingham Ave	Avebury	997	Trading Estate	5	8	7	3	1	24	60%
6b	Cippenham Ln	Avebury	Twitches Ln	667	Trading Estate	4	10	6	3	1	24	60%
6c	Cippenham Ln	Twitches Ln	Tuns Ln	862	Trading Estate	4	6	7	4	2	23	58%
7a	Fairlie Rd	Bedford Ave	Northborough F	894	Trading Estate	4	6	2	4	0	16	40%
7b	Fairlie Rd	Northborough Rd	Long Furlong D	290	Trading Estate	6	10	7	5	0	28	70%
8	Edinburgh Ave	Fairlie Rd	Farnham Rd	1016	Trading Estate	5	8	8	4	0	25	63%
9a	Sheffield Rd	Stoke Pages Ln	Loddon Spur	117	Trading Estate	5	12	10	5	0	32	80%
9b	Sheffield Rd	Loddon Spur	Farnham Rd	1058	Trading Estate	7	8	10	5	0	30	75%
10	Bestobell Rd	Buckingham Ave	Edinburgh Ave	257	Trading Estate	5	6	8	4	0	23	58%
11A	Farnham Rd	Cumberland Ave	north boundary	555	Trading Estate	4	6	8	3	0	21	53%
11B	Farnham Rd	Buckingham Ave	Cumberland Av	1074	Trading Estate	4	8	5	2	0	19	48%
12	Farnham Rd	Buckingham Ave	Cippenham Ln	1303	Trading Estate	6	6	7	2	0	21	53%
13a	Whitby Rd	Farnham Rd	park	543	Trading Estate	4	4	7	3	0	18	45%
13b	park	Whitby Rd	Stoke Pages Lr	515	Trading Estate	8	12	12	6	2	40	100%
14a	Leigh Rd	Edinburgh Ave	A4	864	Trading Estate	5	7	7	5	0	24	60%
14b	A4	Leigh Rd	Twinches Ln	263	Trading Estate	6	10	7	6	2	31	78%
14c	Twinches Ln	A4	Cippenham Ln	319	Trading Estate	4	8	11	5	0	28	70%
15	Bower Way	Elmshott Ln	Cippenham Ln	835	Trading Estate	8	6	8	6	0	28	70%
16	A4	Tuns Ln	High St	1012	Town Centre	5	9	6	3	2	25	63%
17a	A4	Sussex Pl	Brunel Way	1068	Town Centre	4	9	3	3	2	21	53%
17b	A4	Brunel Way	High St	433	Town Centre	6	11	7	5	2	31	78%
18	A4	Susex Pl	Upton Ct	1170	Town Centre	5	9	7	3	0	24	60%
19	Langley Rd	A4	Upton Ct	680	Town Centre	6	6	7	4	0	23	58%
20	High St	A4	Windsor Rd	230	Town Centre	6	11	9	5	2	33	83%
21a	High St	Alpha St N	Yew Tree Rd	374	Town Centre	6	12	12	6	2	38	95%
21b	High St	Church St	Alpha St N	306	Town Centre	6	12	12	6	2	38	95%
21c	High St	Windsor Rd	Church St	186	Town Centre	6	11	12	6	2	37	93%
22	Sussex Pl	Yew Tree Rd	A4	377	Town Centre	6	8	12	6	0	32	80%
23	Brunel Way	Stoke Rd	A4	349	Town Centre	6	11	10	5	2	34	85%
24	Stoke Rd	High St	north boundary	1427	Town Centre	5	5	7	3	2	22	55%
25a	Windsor R	High St	Chalvey Park	257	Town Centre	6	8	9	4	2	29	73%
25b	Windsor R	Chalvey Park	M4	589	Town Centre	7	6	6	4	2	25	63%
26	Church St	High St	Albert St	410	Town Centre	7	10	12	6	2	37	93%
27a	Wexham Rd	Grasmere Ave	Broadmark Rd	256	Town Centre	7	6	9	4	0	26	65%
27b	Wexham Rd	Broadmark Rd	A4	862	Town Centre	6	8	11	4	0	29	73%
28	Uxbridge Rd	A4	the Frithe	1446	Town Centre	4	7	5	2	0	18	45%
29a	Yew Tree Rd	A4	Sussex Pl	42	Town Centre	6	6	7	3	0	22	55%
29b	Yew Tree Rd	Sussex Pl	Albert St	563	Town Centre	5	9	10	4	2	30	75%
30	St Laurence Way	Albert St	High St	505	Town Centre	6	10	10	5	0	31	78%
31	Alpha St N	St Laurence Way	High St	246	Town Centre	6	6	10	6	0	28	70%
32	Albert St	Windsor Rd	Yew Tree Rd	654	Town Centre	7	10	8	4	1	30	75%
33a	Church St	Tuns Ln	High St	403	Town Centre	7	10	11	4	0	32	80%
33b	Chalvey Rd W	High St	Ledgers Rd	205	Town Centre	6	9	11	4	2	32	80%
33c	Chalvey Rd E	Ledgers Rd	College Ave	186	Town Centre	6	7	11	5	2	31	78%
33d	Chalvey Rd E	College Ave	Windsor Rd	286	Town Centre	7	9	10	5	2	33	83%