Royal Borough of Windsor & Maidenhead **Local Cycling & Walking Infrastructure Plan**

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This document has been reformatted to improve its accessibility.

FOREWORD

The Royal Borough of Windsor and Maidenhead is pleased to present its Local Cycling and Walking Infrastructure Plan (LCWIP).

We want walking and cycling to be convenient, safe and enjoyable travel options for everyone. While not every journey can be walked or cycled, many of the shorter trips made in our borough could be made on foot or by bike with the right investment. To get moving at pace with this plan, we are accompanying its launch with a £1.5 million investment in walking and cycling this year (2022/23).

In our borough, 33% of our carbon emissions come from driving – more than from any other source. Timely, focused action to make walking and cycling realistic options for more trips is vital if we are to address the Climate Emergency fast.

We also know that more walking and cycling helps each of us to live healthier and happier lives, reducing the strain on our health and social care systems. It can stimulate demand for new and recovering businesses on our high streets. Naturally too, if more short trips are walked and cycled, our roads will be clearer for those journeys that need to be driven.

We recognise that action is needed to achieve this. The results of last summer's borough-wide Big Conversation showed that only 1 in 3 borough residents are satisfied with existing walking infrastructure, and fewer than 1 in 10 residents are satisfied with cycling infrastructure. This plan is a step towards investing in improvements.

This plan takes your feedback from the Big Conversation and combines it with the borough's Cycling Action Plan which many residents contributed to in recent years, and from these derives a list of locations where walking and cycling investment would be desirable. This, together with an analysis of trip demand data and existing conditions on-street, leads the plan to identify locations where we plan to undertake studies and public consultations, looking at what walking and cycling improvements could be introduced.

This plan will be kept under review, as we recognise that the list of locations in this report is unlikely to be exhaustive. Equally, we are not confirming changes will be made in any location mentioned within the report, as we have not at this stage undertaken those studies to confirm that a suitable improvement can be made at any of the identified sites. That work is to happen next, and we will consult closely with local communities as we investigate what options exist in each area. In publishing this plan, our aim is to continue our conversation with residents and businesses by setting out what we have learned so far and being transparent about the steps we intend to take from here.

Our ultimate aim is to invest in increasing rates of walking and cycling as means of travel, and to improve the safety of our streets. Our proposals for recreational walking, cycling and horse- riding facilities have already been published in this

plan's sister document, the borough's Rights of Way Improvement Plan. We do nevertheless anticipate that investment in making streets safe and attractive for walking and cycling will only further enhance our borough as a standout location for enjoying the great outdoors.

Making improvements will not always be straightforward. It will take time, require sustained investment, and at times will require tough decisions to be taken. The rewards for acting – tackling the climate emergency and traffic congestion together with boosting the local economy and health outcomes – are compelling reasons to rise to the challenge.

Cllr Phil Haseler
Cabinet Member for Planning,
Parking, Highways and Transport

INTRODUCTION

Increasing the levels of walking and cycling is essential to tackle some of the challenging issues the Royal Borough of Windsor and Maidenhead faces such as combatting climate change, reducing congestion, improving air quality, health and wellbeing, addressing inequalities and improving the local economy.

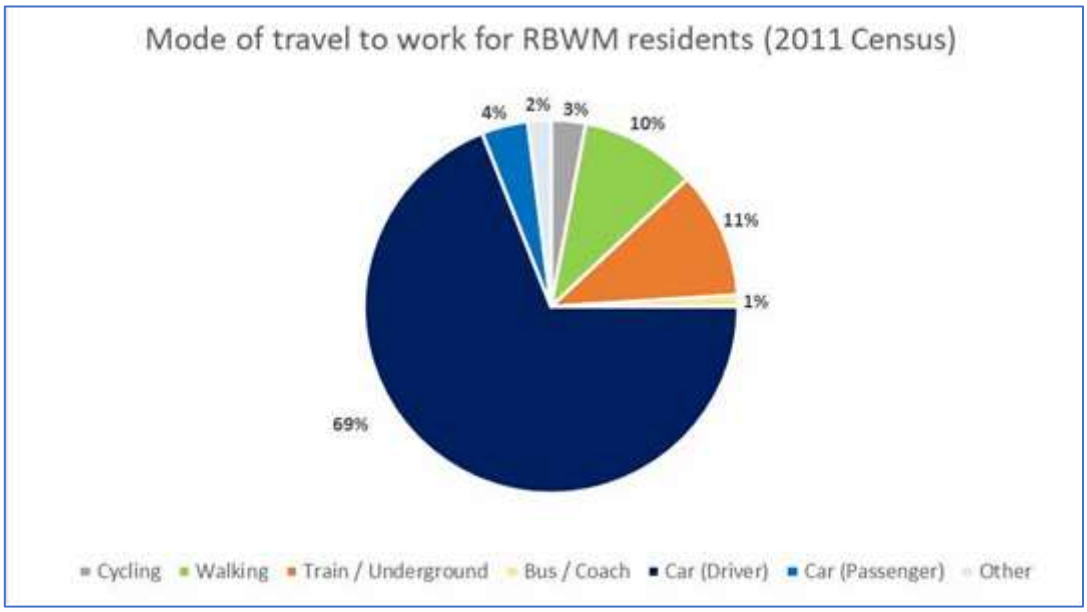


Figure 1. Mode of travel for trips to work by Royal Borough of Windsor and Maidenhead residents (2011 Census)

The 2011 Census data states over half (55.2%) of borough residents have a commuting distance of less than 10km, while over a third (36.1%) commute less than 5km (3 miles). Many of these journeys could readily be made by cycling or walking. However, cycling accounts for less than 3% and walking for 10% of all journeys to work.

The Census also showed that 8,618 children were driven to school by car or van (43%) while 8,064 (41%) walked and 800 cycled (4%). 9.8% of pupils who live in the borough go to school outside the borough and 15.6% of pupils live in surrounding local authorities. Our 2021 survey stated that 60% of people drove a car as their main mode of travel, with 27% walking and 8% cycling.

This LCWIP provides the Royal Borough of Windsor and Maidenhead with the strategic approach to deliver quality walking and cycling networks across the borough, including information on where active travel investment could be considered. For any future investment in active travel from Central Government, all Local Authorities will need to provide or be working towards creating an LCWIP. Schemes identified within the LCWIP will go through a feasibility process and public consultation.

This plan presents an opportunity to improve walking and cycling environments inclusively, including for people with disabilities who often rely on walking and wheeling as ways to travel. In developing improvement schemes, we will seek to learn from best practice nationally and to engage with disabled people during the project's development.

The LCWIP covers the whole of the Royal Borough of Windsor and Maidenhead.

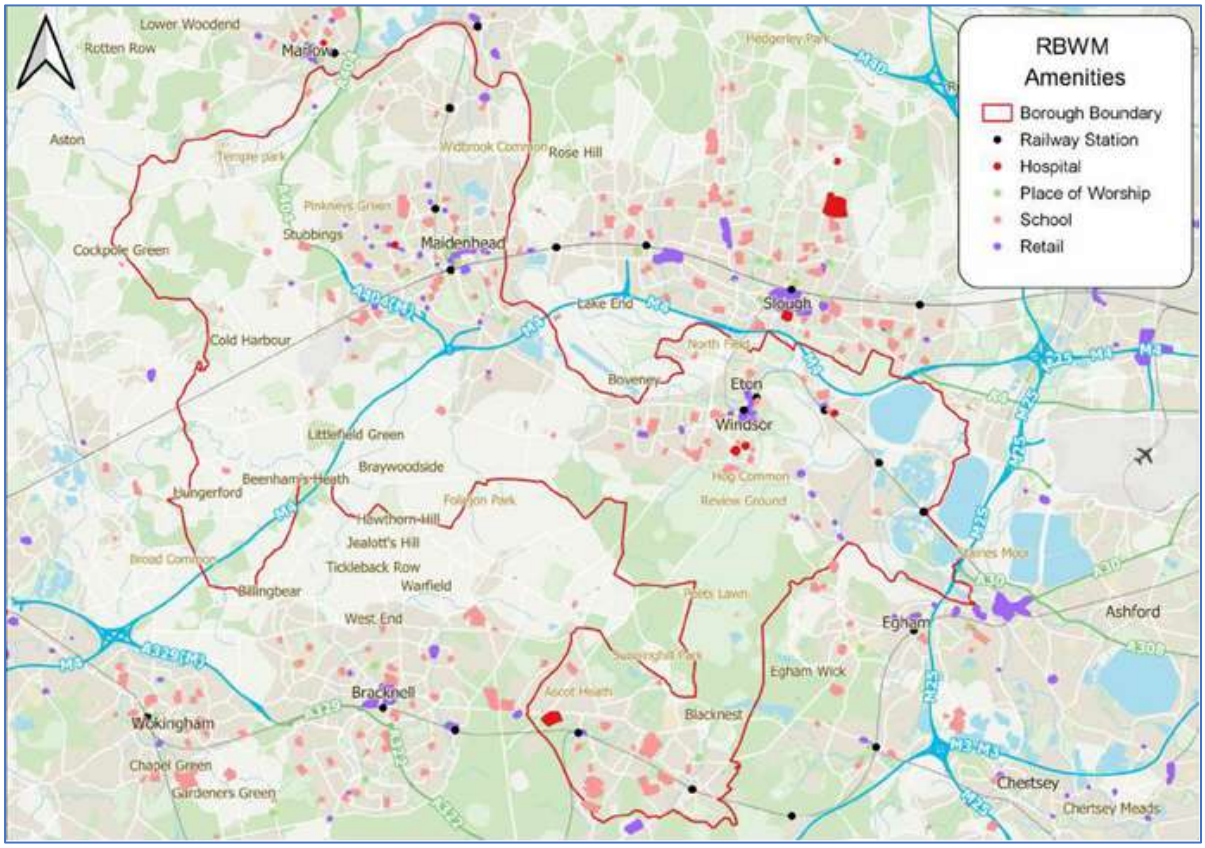


Figure 2. Geographic extent of LCWIP

To date we have completed public engagement on the LCWIP which opened on Monday 16 August 2021 and ran until Sunday 3 October 2021 which enabled the council to begin 'The Big Conversation' with residents, visitors and stakeholders within the Borough. The council engaged with people on a number of active travel topics, including walking and cycling centred around the four key themes stated below:

- Cycle routes and infrastructure
- Accessible routes and pedestrian spaces
- School streets – temporary road closures around schools during school run times (term time only)
- People-friendly streets – changes that can be made to neighbourhoods that reduce traffic dominance

In addition to feedback from the Big Conversation, we have incorporated proposals from the Cycling Action Plan, a plan that stakeholders helped to develop in 2018.

Once published, this combined LCWIP will be the council's plan for delivering both walking and cycling infrastructure improvements, superseding the Cycling Action Plan.

We will continue to explore and review options along corridors within the borough to identify workable solutions. Furthermore, once a feasibility study is completed for a location, we will begin a local public consultation phase with residents in the vicinity to look at potential active travel improvements.

The LCWIP process looks to plan a network of walking and cycling routes across the borough which connect people to the places that they want to get to, whether for work, education, leisure or other purposes. The process, developed by Department for Transport, is made up of six stages:

1. Determining scope: establish the geographical extent of the LCWIP and arrangements governing and preparing the plan;
2. Gathering information: identify existing patterns of walking and cycling and potential new journeys (e.g. from engagement, developments or modal shift);
3. Network planning for cycling: identifying origin and destination points and create network and improvements required;
4. Network planning for walking: identify key trip generators, core walking zones and routes and improvements required;
5. Prioritising improvements: prioritise improvements to create a phased programme of investment; and
6. Integration and application: distil outputs into policy, strategies and funding delivery plans.

The LCWIP supports and ties into several national, regional and local policies which aim to make cycling and walking the natural choice for shorter journeys as well as providing better streets for people to 'be' in. Furthermore, the LCWIP will help to contribute to decarbonising the UK economy by 2050 as well as enabling half of all journeys in built-up areas to be walked or cycled by 2030. Further information regarding the policy integration can be found within Appendix A.

The LCWIP can play an important role in encouraging active travel at new developments within the borough. With over 4,000 additional new homes expected by 2025, and a further 3,500 additional homes expected by 2030 (per the Borough Local Plan) the LCWIP can play a fundamental role in making sure these new developments are served by quality active travel infrastructure.

VISION, AIMS AND OBJECTIVES

The vision of the LCWIP is:

"There will be an established active travel culture within the Royal Borough where walking and cycling is seen as a safe, attractive, healthy and normal form of everyday transport for residents, employees and visitors."

A series of objectives have been set and these will be monitored annually to understand if the LCWIP has been successful:

- Increase cycling by 50% by 2025, and 75% by 2031 (based on 2019 baseline);
- Increase the numbers of people walking as a means of transport by 25% by 2027 and 50% by 2031 (based on 2019 baseline); and
- To reduce cyclist and pedestrian casualties by 20% between 2021 and 2026 and 40% by 2031 (baseline 2020).

We will work to understand whether these objectives are sufficiently ambitious in light of the need to decarbonise transport to act on the Climate Emergency, and update these objectives accordingly if needed.

The LCWIP supports several aims within RBWM's 2021-2026 Corporate Plan:

- Increase walking and cycling in the borough;
- An increase in the number of adults undertaking activity in line with the UK Chief Medical Officer's physical activity guidelines, particularly in those groups where current activity is likely to be lower;
- Deliver new transport infrastructure to support growth;
- Investment along the A308 corridor; and
- A decrease in the borough and council's own emissions by 50% by 2025 – and net zero by 2050, at the latest.

EVIDENCE

Our approach

This plan has been developed by combining the results of our 'Big Conversation' exercise together with data relating to trip demand and the existing condition and safety of our network. Data sources include:

- Stakeholder comments, from the 'Big Conversation' and public comments from the development of the 2018 Cycling Action Plan;
- Propensity to Cycle Tool;
- Location of amenities and trip attractors;
- Location of development sites and existing schemes (including plans in neighbouring local authority areas);
- Location of crossing points; and
- Collision data (last 36 months to December 2020).

Public engagement

Our public engagement consisted of:

- Leaflets delivered to residential and business properties across the borough informing them of the LCWIP development and drop-in sessions;
- Five in-person drop-in sessions across the borough – at Cookham Dean Village Hall, The Community Room Sunningdale Parish Office, Windsor Library, Old Windsor Library and Maidenhead Library;
- An online engagement session on the 9 September 2021; and
- Creation of website including four themed surveys and interactive maps.

Alongside this broad public engagement, 17 borough and 10 parish councillors took part in an online discussion discussing key themes based on their constituents' needs, and discussions were also held with key stakeholders including those managing Windsor and Maidenhead town centres and neighbouring local authorities.

The engagement activities focused on gathering ideas for improvements. Views were sought on the current barriers to active travel, potential solutions to the identified barriers, specific schemes which could be taken forward to tackle existing issues and thoughts on the current solutions being explored in the UK to encourage walking and cycling.

Engagement survey results

Four key themes were identified and formed the basis for discussion throughout the engagement sessions:

- Cycle lanes, pathways and parking;
- People-friendly streets;
- School Streets; and
- Walking, accessible routes and pedestrian spaces.

A total of 827 surveys responses were received over the four surveys from local residents. The Cycle Lanes, Pathways and Parking Survey had the highest number of respondents (350), followed by the Walking, Accessible Routes and Pedestrian Spaces survey (249 respondents). The People Friendly Streets Survey had a total of 124 respondents and 104 people responded to the School Streets Survey.

Appendix B sets out the detailed analysis of all of the survey questions for reference, however the main findings of the report can be seen below.

In addition to the surveys, the website provided the opportunity for the public to drop pins on interactive maps to suggest locations for walking and cycling improvements.

Cycle Lanes, Pathways and Parking Survey

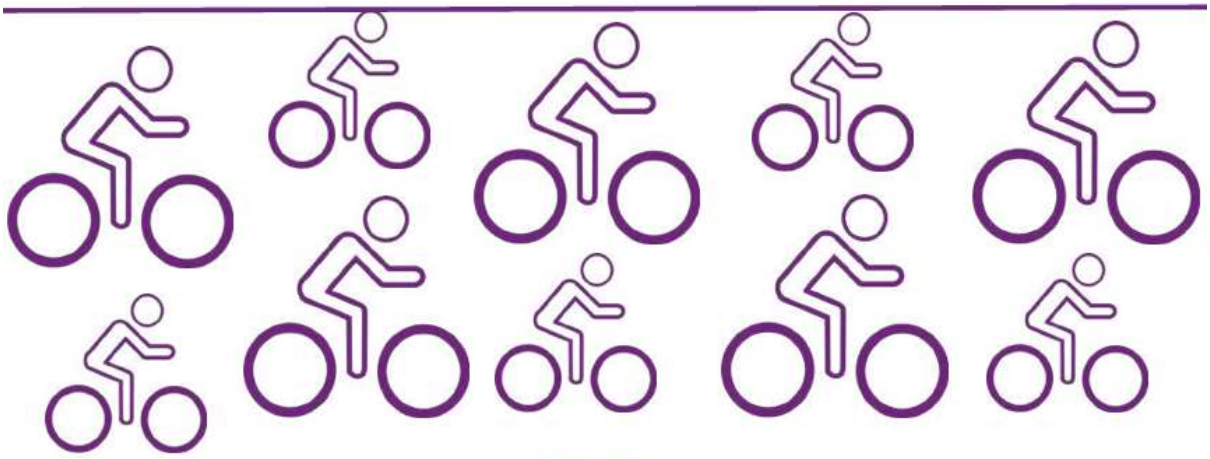
The Cycle Lanes, Pathways and Parking survey saw the most comments from residents with 350 residents responding to the survey and 380 pins on the map. In the survey 47% stated that not knowing good routes prevents them from cycling, 58% stated that indirect routes prevent them from cycling in some capacity and 85% stated that busy roads prevent them from cycling in some capacity.

Respondents views on the current cycling network in RBWM: 31% satisfied; 69% dissatisfied. Therefore, respondents are requesting improvements to the cycle network to increase the uptake of cycling in the borough.

75% of respondents state personal safety, quality of environment, busy roads and difficult junctions as barriers to cycling the borough alongside lack of safe cycle parking.

Public suggestions:

- 70% suggested cycling routes be implemented, extended or improved
- 11% suggested that overgrown vegetation to be tended to
- 11% suggested improvements to the quality of streets, e.g. lighting



73% of respondents state they would be supportive of cycle improvements, even if there was less space for traffic.

There were a number of locations where people requested improved cycle facilities and cycle parking. These locations are shown in Figure 3.

There were multiple segregated cycle lane requests at the same location:

- A308 Maidenhead Road between Ruddlesway and Vale Road, Windsor
- Dedworth Road near junction with Oakley Green Road
- Grenfell Road, Maidenhead
- Bridge Road, Maidenhead

There were also multiple cycle parking requests at the same location:

- William Street, Windsor town centre
- St Leonard's Road, Windsor
- Windsor Leisure Centre
- Dedworth shopping precinct
- Maidenhead retail park, Stafferton Way, Maidenhead

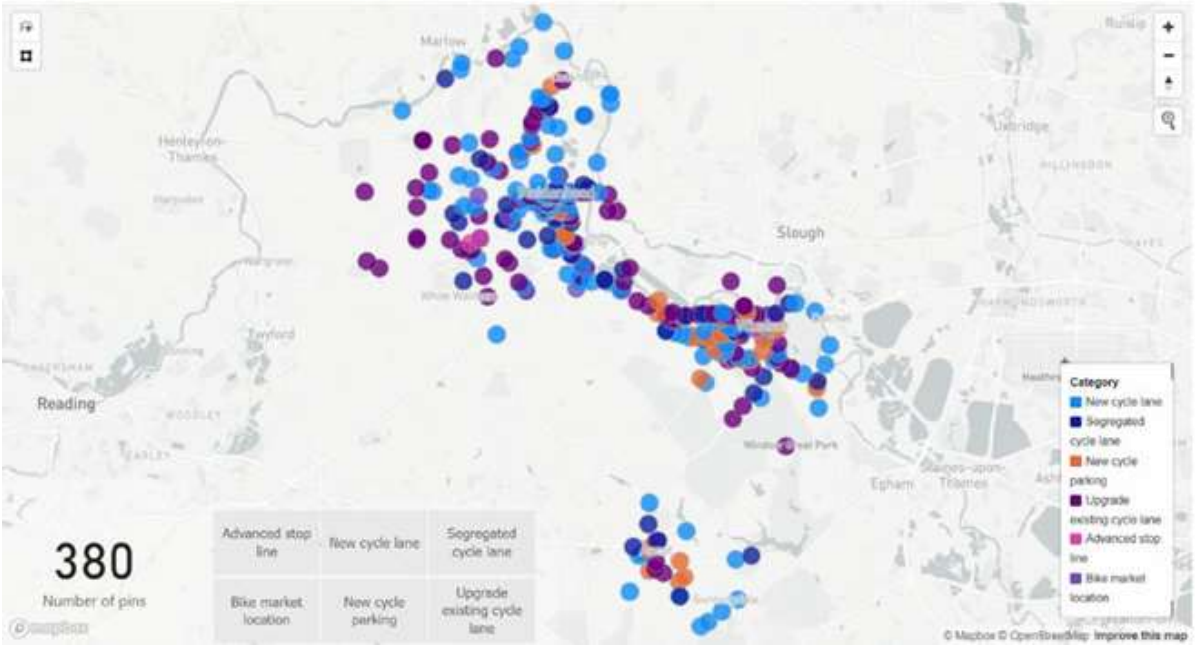


Figure 3. Pin Drops on the Cycle Lanes, Pathways and Parking Interactive Map

The feedback that we've received has helped inform our proposed approach, as set out in the table below.

You said	We did
85% of people stated that busy roads prevent them from cycling	This report proposes some of our busiest roads as suggested locations for improvements, which could include dedicated space for cycling on these roads or developing alternative routes on adjacent quieter streets.
49 people provided locations where new or more bike parking is required	We are introducing new cycle parking at a number of these suggested locations as a direct result of this feedback.
21 people requested cycle improvements to A308 between Oakley Green Road and Mill Lane	This plan recommends this corridor be a priority for improvement.
15 people commented on cycle improvements along A308 in Maidenhead particularly between Grenfell Road to Holyport Road	This plan recommends this corridor be a priority for improvement
11 people commented on cycle improvements to Switchback Road South and North	This plan recommends this corridor be a location for future improvement

People-friendly streets survey

People-friendly streets are sometimes referred to as 'Liveable Neighbourhoods'. They are designed to be attractive, healthy, accessible and safe neighbourhoods

for all. This may include traffic calming and an improved street environment including additional planting and more space for walking and sitting. The Department for Transport is particularly keen on the use of modal filters in these locations and these include restrictions for certain vehicles (bus gates) or even a full physical closure of a road to through traffic. These will be carefully judged for their appropriateness and subject to local consultation.

The people-friendly streets survey asked what people wanted to see as part of their neighbourhood. In total 42 people provided comments on the mapping (see figure 4) and 124 people answered the survey. Particular areas of support for people-friendly streets included Ascot, Belmont, Boyn Hill, Clewer, Dedworth and Sunninghill, with people suggesting lower traffic speed limit, public realm improvements with greening and better surfacing.

Introducing people-friendly streets in neighbourhoods that are alongside or connect into the corridor and link improvements identified in this plan would help more people access quality walking and cycling facilities and spread the benefit of investment more widely. This can be achieved by working with local residents and businesses to understand the particular needs and circumstances of each neighbourhood.

We will additionally look at opportunities to make our town centres – as particularly important destinations for local trips – better suited for cycling and walking.

Figure 4. Pin Drops on the People Friendly Streets Interactive Map

The feedback that we've received has helped inform our proposed approach, as set out in the table below.

You said	We did
67% of all respondents agreed with the idea of people-friendly streets	We note there is generally a good level of support for people-friendly streets across the borough, and we will look at whether in addition to the proposals in this LCWIP for corridor and link improvements there is scope to investigate area-based plans for individual neighbourhoods and town centres alongside connecting into these improvements
71% and 67% of respondents are supportive of people friendly streets in Boyn Hill and Belmont respectively	This plan recommends investigating future improvements to walking facilities on several local streets (see Figure 20), as well as improved cycling connections to Maidenhead town centre, Boyn Hill, Furze Platt and Cookham (cycle corridors PR08 and PR09)
57% of respondents are supportive of people friendly streets in Ascot and Sunninghill	This plan recommends investigating future improvements to walking facilities on local streets in Ascot and Sunninghill (see Figure 24), as well as improved cycle facilities (cycle corridor PR04)
Comments in Clewer and Dedworth East to reduce speeds of vehicles	Previous speed surveys show an 85th percentile speed of 23.3mph along Dedworth Road. We will look to tackle these concerns in future projects that come forward.

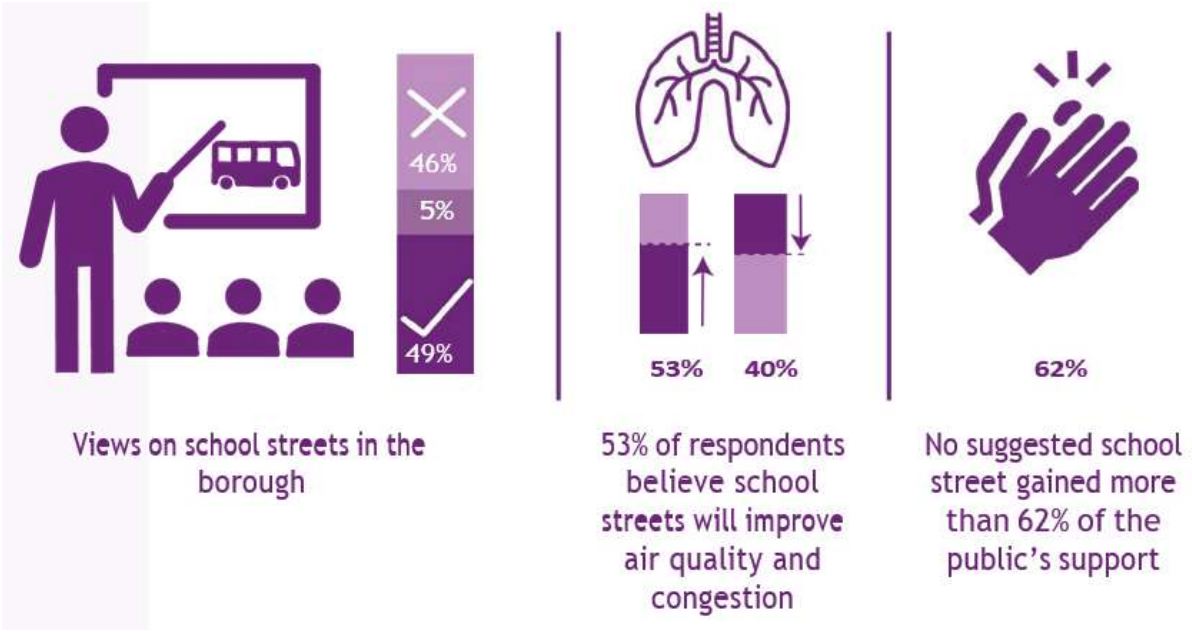
School streets survey

School Streets are temporary traffic restrictions around school entrances, which operate around school pick up and drop off times throughout the school term, that make it safer and easier for parents and children to walk and cycle to school where they can. School street schemes typically maintain access to properties along the street whilst restricting general through traffic during their times of operation.

The School Streets Survey asked people whether they support the principle of school streets and provided options of potential school streets in their area. Furthermore, people were asked to drop pins on the map to add their own comments. In total 21 comments (see figure 5) were received on the map. A particular concentration of comments was received on The Fairway in Cox Green close to Lowbrook Academy.

Figure 5. Pin Drops on the School Streets Interactive Map

Overall, support for school streets was more mixed than other proposals. We recognise that any school streets would need careful assessment and dialogue with local residents and businesses as well as the schools themselves if they are to be successful. However, where there is local support we will work with schools to bring forward proposals for safer school gate environs and improved walking and cycling routes to schools.



Based on the data we have made some decisions of how to progress with school streets as described below.

You said	We did
8 comments on the map regarding parking issues on The Fairway, Cox Green, close to Lowbrook Academy	We have noted concerns on this specific issue and will investigate measures that might ease pressure at this location, including a school streety-type measure if this can be found to be workable
St Michael's Church of England Primary School in Sunninghill, St Edward's School in Clewer East, and All Saints Junior CE and Altwood Schools in Boyn Hill were suggested for school streets	We commit to review these sites to understand the viability of school streets in these locations.

The walking, accessible routes and pedestrian spaces survey

We want everyone to enjoy and feel safe walking or wheeling in the borough, and to make sure all parts of the borough are easy to access these ways. The aim of the Walking, Accessible Routes and Pedestrian Spaces survey therefore was to understand where we can deliver crossings, lighting, planting, seating and other facilities that will help to enhance and improve access routes and provide security for all active travellers.

249 people provided their comments with most people suggesting more crossing facilities, wider pavements and removing access barriers. 38% of respondents are currently dissatisfied with the walking network in Royal Borough of Windsor and Maidenhead. The map below details the locations of improvements to the walking network that were suggested.

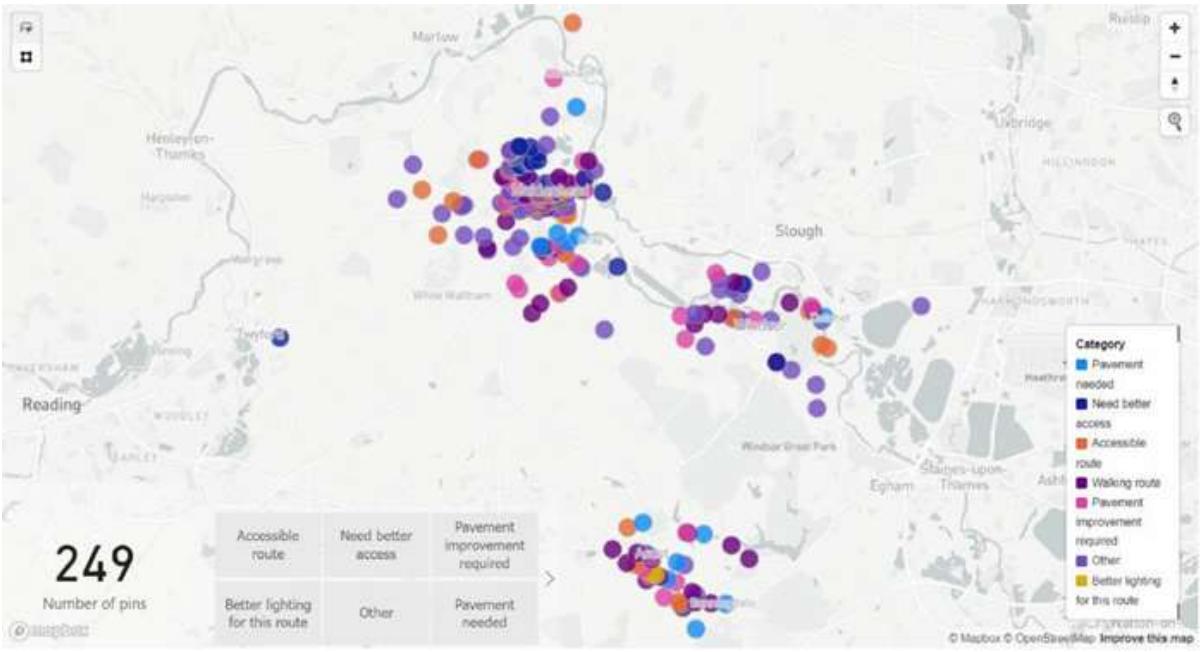
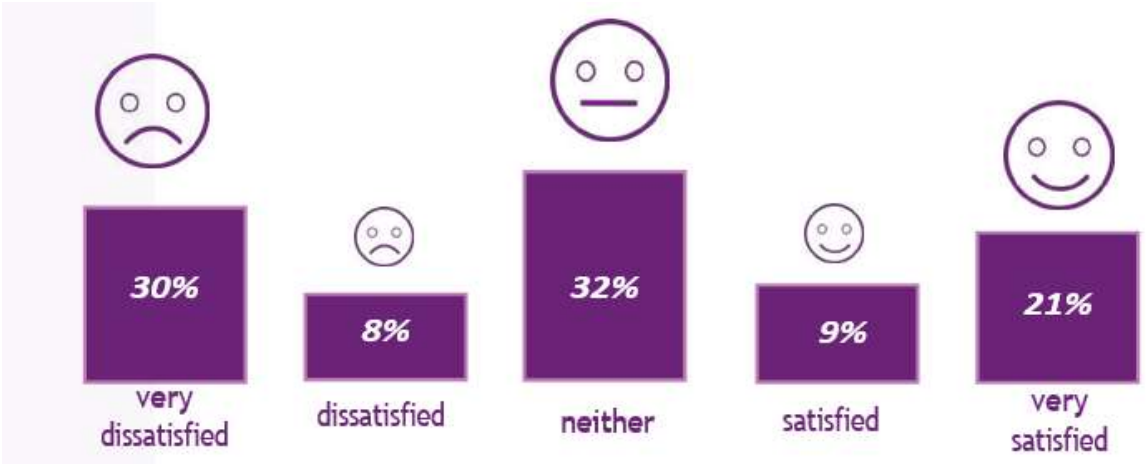


Figure 6. Pin Drops on the Walking, Accessible Routes and Pedestrian Spaces Interactive Map

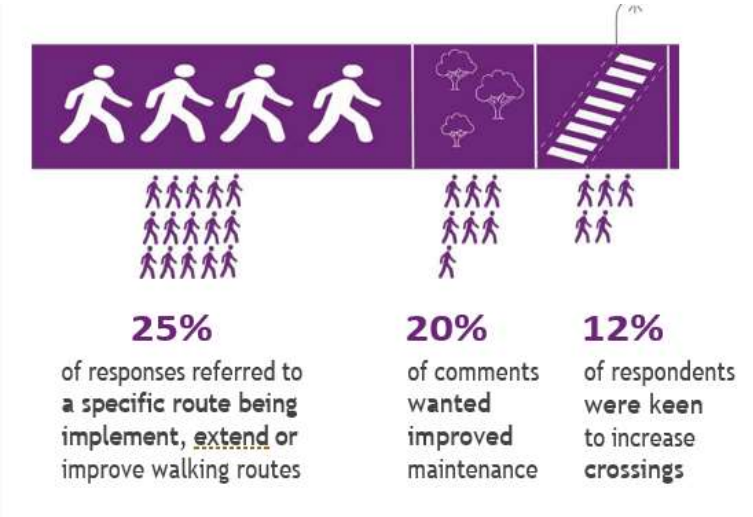
Respondents' views of the current walking network in the borough are shown in the diagrams below.



69%

of respondents state busy roads as barriers and prevention for walking in the borough.

The issue of a lack of maintenance and overgrown paths was also highlighted as a barrier for walking.



The feedback that we've received has helped inform our proposed approach, as set out in the table below.

You said	We did
100% people strongly agreed with improved crossing points along B376 The Green	We have identified this as a potential secondary walking route
97% of people strongly agreed or agreed with a new pedestrian crossing on Woodlands Park Road between roundabout with Shoppenhangers Road and Ockwells Road	We have identified this as a potential alignment for a primary cycling corridor. We will include proposals for improved pedestrian facilities
90% of people strongly agreed or agreed with improved crossing points around B470 and Queens Road in Datchet	We have identified this as a potential secondary walking route
86% of people strongly agreed or agreed on extension of footway on Harvest Hill	We are reviewing the feasibility of improved pedestrian and cycle access along the entire length of Harvest Hill, in line with development proposals for the area
85% of people strongly agreed or agreed to improved pedestrian crossing facilities on Horton Road	We have identified this as a potential secondary walking route and link footway
70% of people strongly agreed or agreed to a pedestrian refuge island or crossing on A308 Gringer Hill between the railway bridge and the junction with Belmont Road	Identified as a primary waling route and a connection to secondary walking routes. Furthermore it has been identified as a consideration within a primary cycling corridor (Maidenhead to Cookham)
Harrow Road, Furze Platt – 8 comments on better access such as flush crossings and tactile paving	Identified as a potential secondary walking route

You said	We did
Courthouse Road, Belmont – 7 comments on traffic calming, better crossings for pedestrians	Identified as a potential secondary walking route
A332 / A308 / Maidenhead Road roundabout – improvements to crossing points	Identified as potential primary walking route and a connection to link footway

Propensity to Cycle Tool

The Propensity to Cycle Tool (PCT) for England and Wales provides an evidence base to inform cycling investment. It uses journey to work and school travel data to model demand for trips between origins and destinations around the borough.

The PCT has been used to create a data driven approach to developing a cycle network. The 'Go-Dutch' Scenario has been used to understand which routes provide the greatest potential. An extract of the 'Go Dutch' top 100 lines (most cycled) for the area is shown in Figure 7 and 8.

The results from the tool were cross-referenced with feedback from the public engagement activities to understand where interventions are both most wanted and have the potential to improve the most journeys.

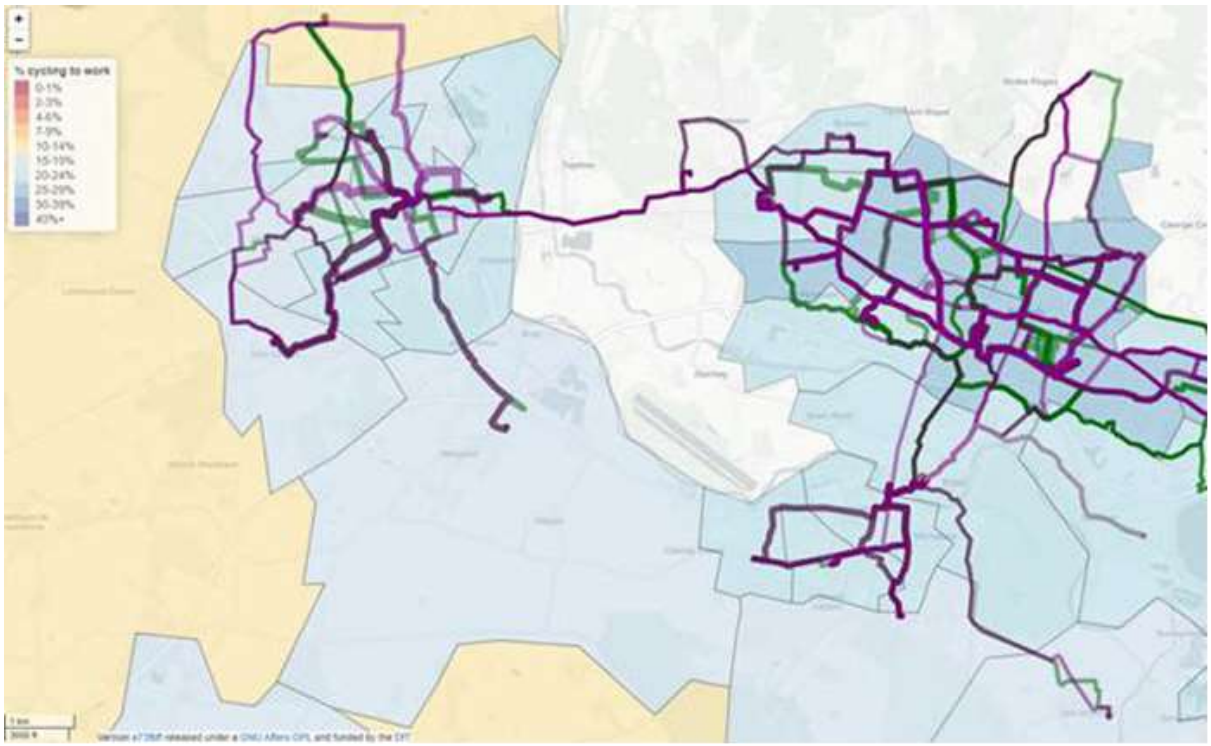


Figure 7. 'Go Dutch' top 100 lines, showing Windsor and Maidenhead (from Propensity to Cycle Tool)

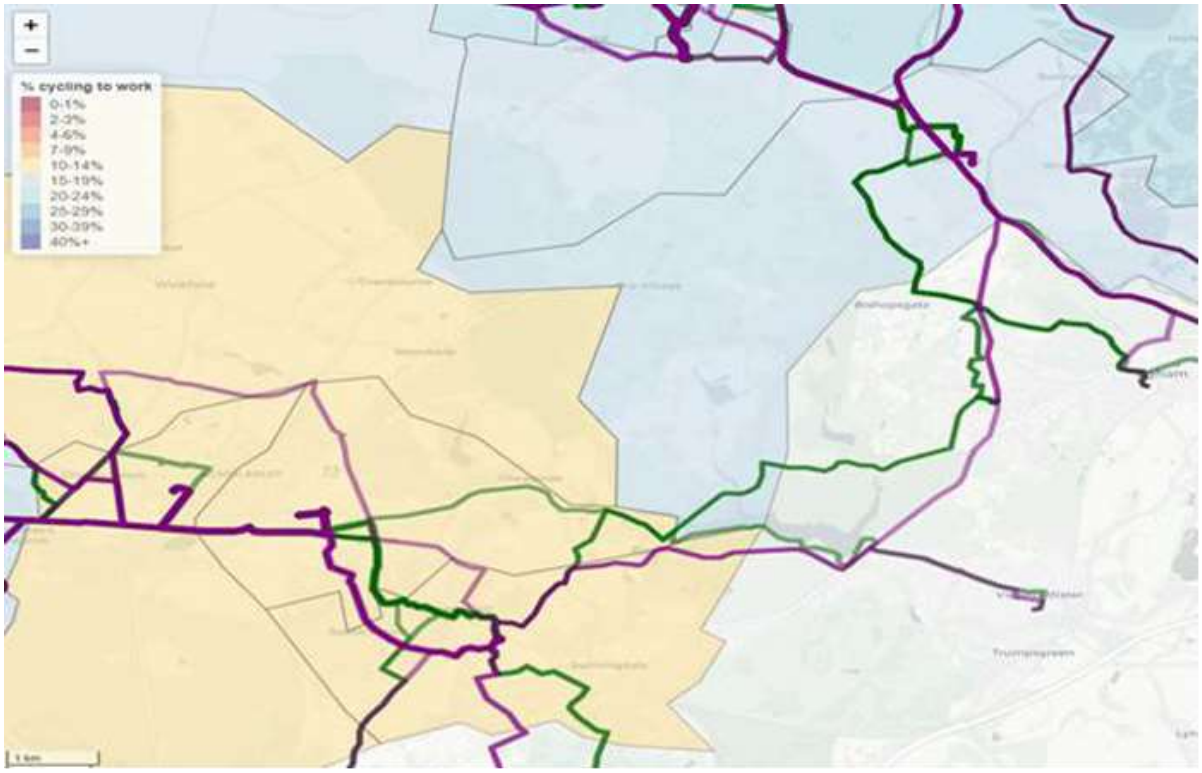


Figure 8. 'Go Dutch' top 100 lines, showing Ascot (from Propensity to Cycle Tool)

Location of amenities and trip attractors

In order to further understand what potential routes could be developed within the borough, research has been undertaken to understand what would be considered 'trip attractors' within the borough as well as the location of amenities that would receive high numbers of visitors each day. The following locations have been identified as key locations within the borough to consider when planning for new and existing routes:

- Railway stations;
- Major bus stops and interchange points;
- Primary and secondary schools;
- Hospitals;
- Town centres; and
- Retail parks and local shopping outlets.

Location of development sites and planned schemes

The location of development sites and planned schemes has been considered when planning for new and improved existing routes.

There are currently a number of existing allocated sites for various developments within the borough. These developments are earmarked as:

- Green Infrastructure development sites;
- Proposed Employment development sites (largely based around and within Maidenhead); and
- Housing development sites – which are largely surrounding Maidenhead and Ascot, however there are a handful of smaller housing allocation sites surrounding Windsor.

Crossing points and barriers

Crossing points (zebra crossings, parallel zebra crossings, toucans, walk/cycle only bridges) have been mapped to understand where there is severance or barriers to walking and cycling. These are the points where facilities for people to cross to access other neighbourhoods are lacking. Examples of features that can create severance or barriers can include railways, water courses, motorways/dual carriageways/main roads, geographic features etc. This has been used in the prioritisation process to weight routes more favourably for investment if they currently have more barriers. Within the audits of the routes, crossings were identified to understand if they are suitable for cycling.

Collision data

The number of casualties involving cyclists on the borough's roads is summarised in Figure 9. The data shows an increase in both killed and seriously injured (KSI) as well as slight casualties from 2012 to 2016 followed by a steep fall in 2017 that levels out over the next two years.

Geographic data of collisions has been used against each corridor, feeding into and informing the prioritisation process. Windsor and Maidenhead's cyclist casualty rate is 2% higher than the national average, but 9% lower than the South East of England rate.

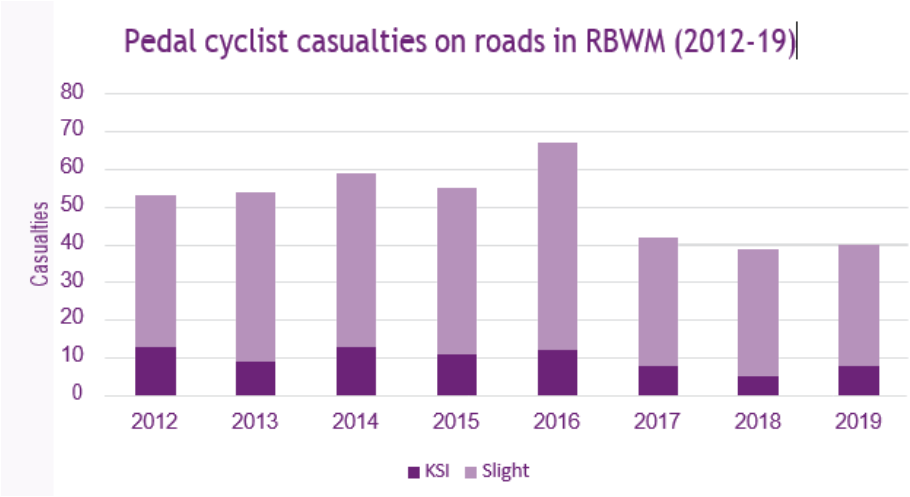


Figure 9. Cycling casualties from 2012 to 2019

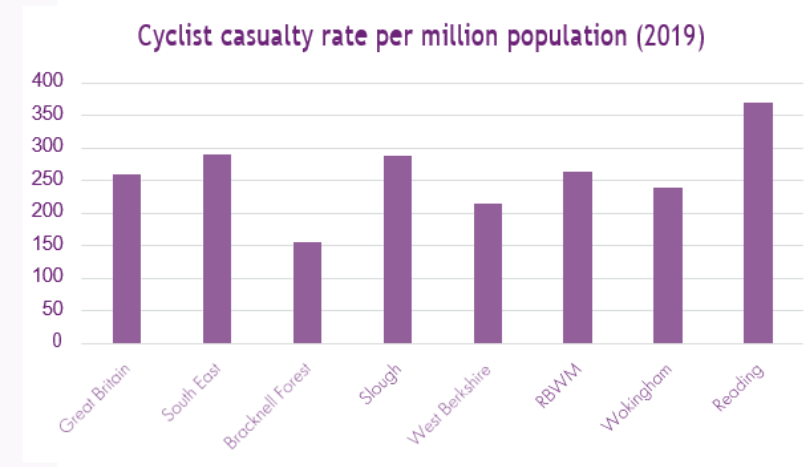


Figure 10. Cycling casualty rate per million population (2019)

Further analysis identifies that:

- 85% occur during daylight hours; and
- 76% occur at junctions or within 20m of a junction.

The data suggests that junctions should be a focus for investment to improve safety for cyclists.

The data for pedestrian casualties shows that levels are relatively inconsistent in years up to 2017. Since then, the number of pedestrians being killed or seriously injured has dropped significantly and remained at a similar level up until 2019, which saw a slight increase from 2018.

Windsor and Maidenhead's resident pedestrian casualty rate in 2019 is 21% lower than the national average, and 5% lower than the rate for South East England.

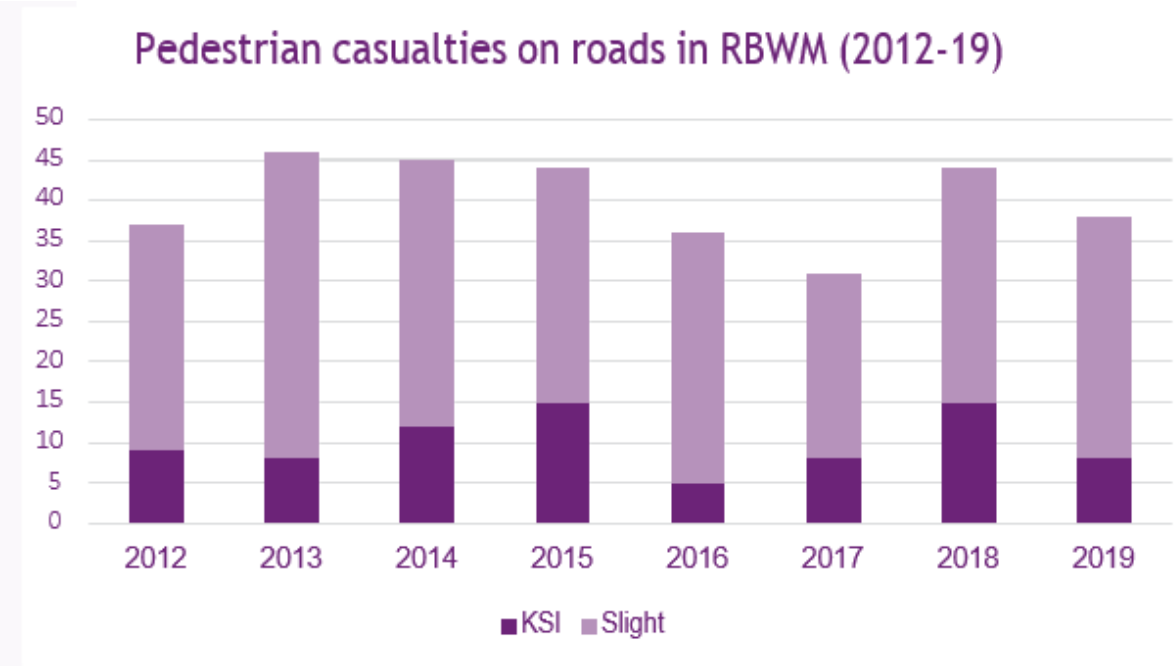


Figure 11. Pedestrian casualties from 2012 to 2019

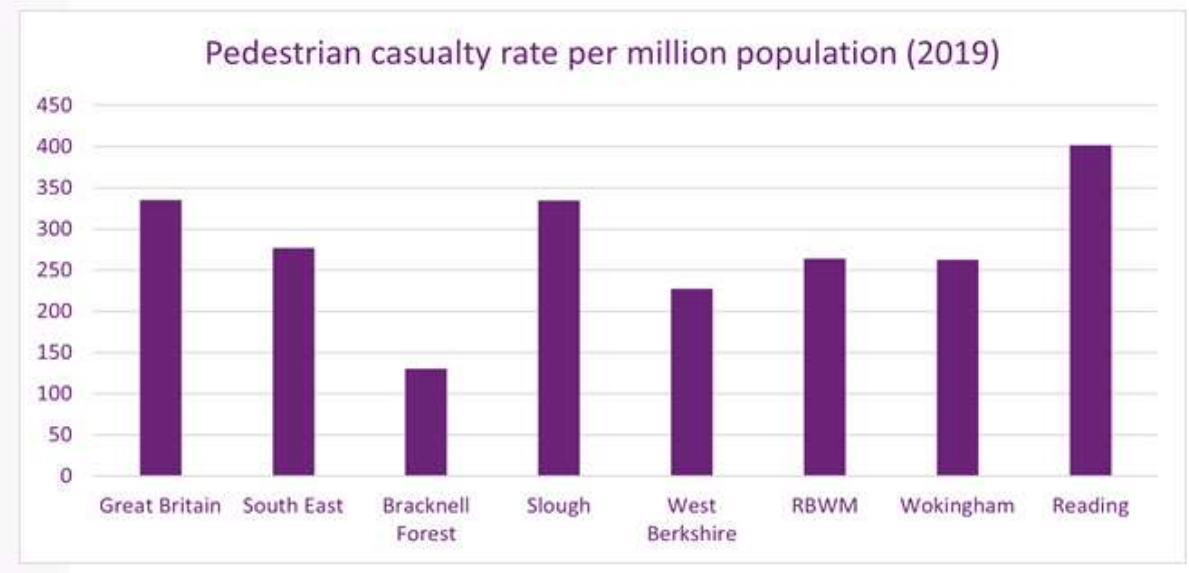


Figure 12. Pedestrian casualty rate per million population (2019)

Further analysis of collisions resulting in pedestrian casualties showed that:

- 68% occur during daylight hours; and
- 55% occur at junctions or within 20m of a junction.

Traffic data

Traffic volume and speed data has been gathered to assess routes using the Route Selection Tool and to meet the criteria of Local Transport Note 1/20. Additionally, traffic data has been utilised within the LCWIP as it enables us to assess what sort of intervention that may be required for each individual street across the borough to increase the viability and attractiveness of active travel in any specific area.

Links to Surrounding Areas

As part of the LCWIP development, discussions were undertaken with the neighbouring authorities to understand their proposals and make sure our proposals tie in. The links identified are:

- Slough Borough Council - Yew Tree Road;
- Buckinghamshire Council - Maidenhead Bridge on Bath Road;
- Wokingham Borough Council - Bath Road (tertiary cycle route);
- Bracknell Forest Council - no borough boundary links however will tie in proposals to existing Bracknell cycling network; and
- Surrey County Council - links to Spelthorne's Route 5 and Route 8

NETWORK PLANNING FOR CYCLING

Key barriers to cycling were identified in the engagement survey, with the following frequently mentioned:

- Busy roads;
- Difficult junctions;
- Personal safety; and
- Quality of physical environment.

73% of respondents advised that they would be supportive of cycling improvements in the borough.

We will introduce facilities for cycling that are:

- Coherent – easy to follow, with legible and seamless connections between individual link sections and through junctions and no gaps in provision;
- Direct – minimising distance, time, delay and loss of momentum;
- Safe – maximising sure people are safe and feel safe;
- Comfortable – facilities designed for the needs of cyclists of all abilities and all types of design cycle, engineered with user experience in mind; and
- Attractive – contributing to an improved street environment, with cycle facilities that inspire people to try cycling more often.

Current challenges for encouraging cycling

The Royal Borough of Windsor and Maidenhead has three main population centres (Maidenhead, Windsor, Ascot) comprising most of the population. Most people therefore live in built-up areas, and many more short trips within these built-up areas to everyday shops and services could be cycled if this was made to feel comfortable, enjoyable and more safe.

Additionally, the distance between Maidenhead and Windsor is 6.5 miles (10.5 kilometres), whilst the distance between Ascot and Windsor 7 miles (11.2 kilometres), which would take less than an hour to cycle at an average speed. The challenges to encourage more people to cycle include:

- The geography of the borough, with narrow old roads being difficult to deliver cycling facilities in some locations;
- The cycle network is not complete or not always connecting people to the places they want to go;
- People cycling can be left vulnerable where cycle lanes end, particularly at pinch points or difficult junctions;
- Barriers of main roads, rivers, railways;

- Pedestrian and cycle conflict on shared paths (perceived and actual);
- A lack of secure residential cycle parking and good quality cycle parking at key destinations;
- Perceptions of personal fitness and ability to ride a cycle;
- A fear of safety from road danger;
- A fear of safety in rural parts of the borough, or traffic free routes due to a lack of lighting;
- Ownership of land such as the Windsor Great Park; and
- Borough boundaries can affect end-to-end routes.

Methodology

The cycle network is developed using the steps of:

- Identifying corridors from stakeholder comments;
- Assess potential demand on these corridors using the Propensity to Cycle Tool (PCT), to prioritise investment where it can be expected to have the greatest impact for the most people. This is key for funding from the Department for Transport, however the council needs to take the lead on ensuring investment takes place across the borough;
- Refined by understanding the current condition of routes within corridors using the Route Selection Tool; and
- Prioritising routes against key metrics.

Corridors were developed to understand the start and end points of a cycle network, while cycle routes present options of which roads, streets and paths could be connected together within the corridor to link the start and end points. These have been categorised as Primary, Secondary or Tertiary corridors.

The primary corridors have the most potential for cycle trips. They have been developed by looking at comments from the public and aligning them with potential for the highest cycling flows. Secondary and tertiary corridors have been developed in the same way, but have slightly lower initial potential for future cycle trips, with a focus on feeding in to primary corridors.

Where routes link with boundary boroughs we have tried to make sure they are providing the same classification (in terms of primary, secondary or tertiary) so that a joined-up network can be delivered.

Future cycle network maps

The Future Cycle Network Map below identifies potential primary, secondary and tertiary routes around the borough. There are links to neighbouring boroughs such as Slough from Windsor and Spelthorne from Wraysbury.

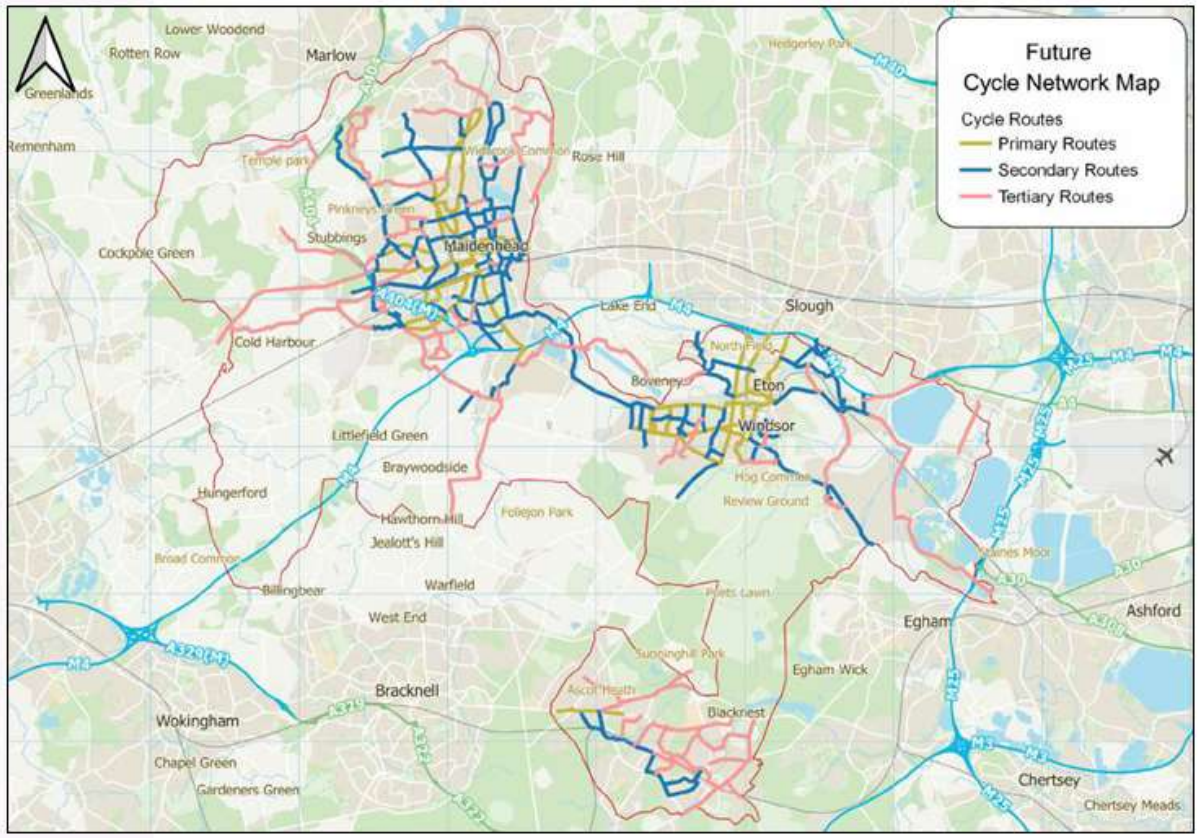


Figure 13. Future cycle network map

There are multiple options (routes) for a number of corridors to be able to access areas. These will be further assessed in terms of feasibility to create a deliverable network.

The maps below detail a 400m buffer around all routes. The ambition is that all urban areas should be within 400m of a safer cycle route whilst our villages are connected to the wider network.

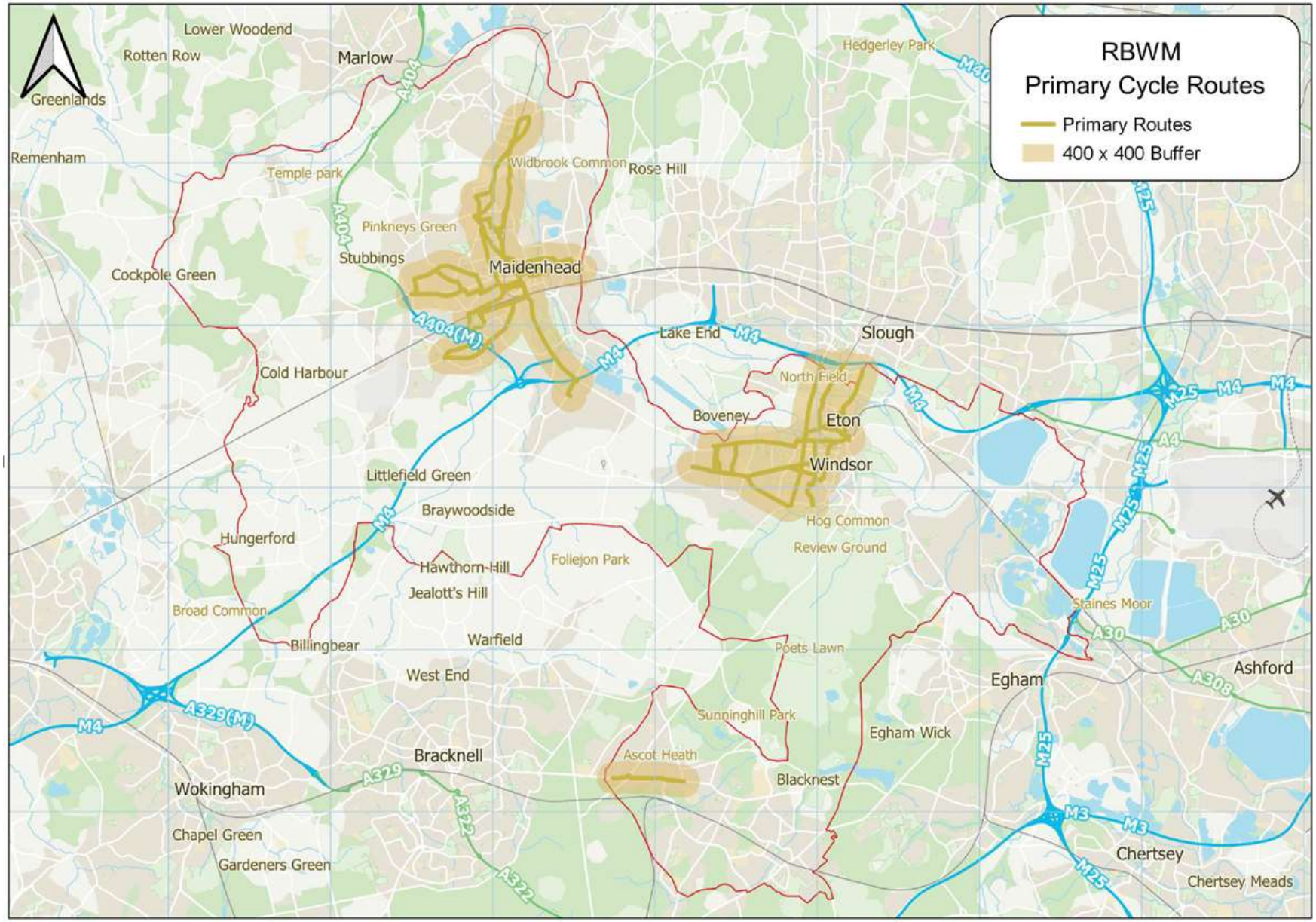


Figure 14. Map showing proposed primary cycle routes, with 400m catchment area shown

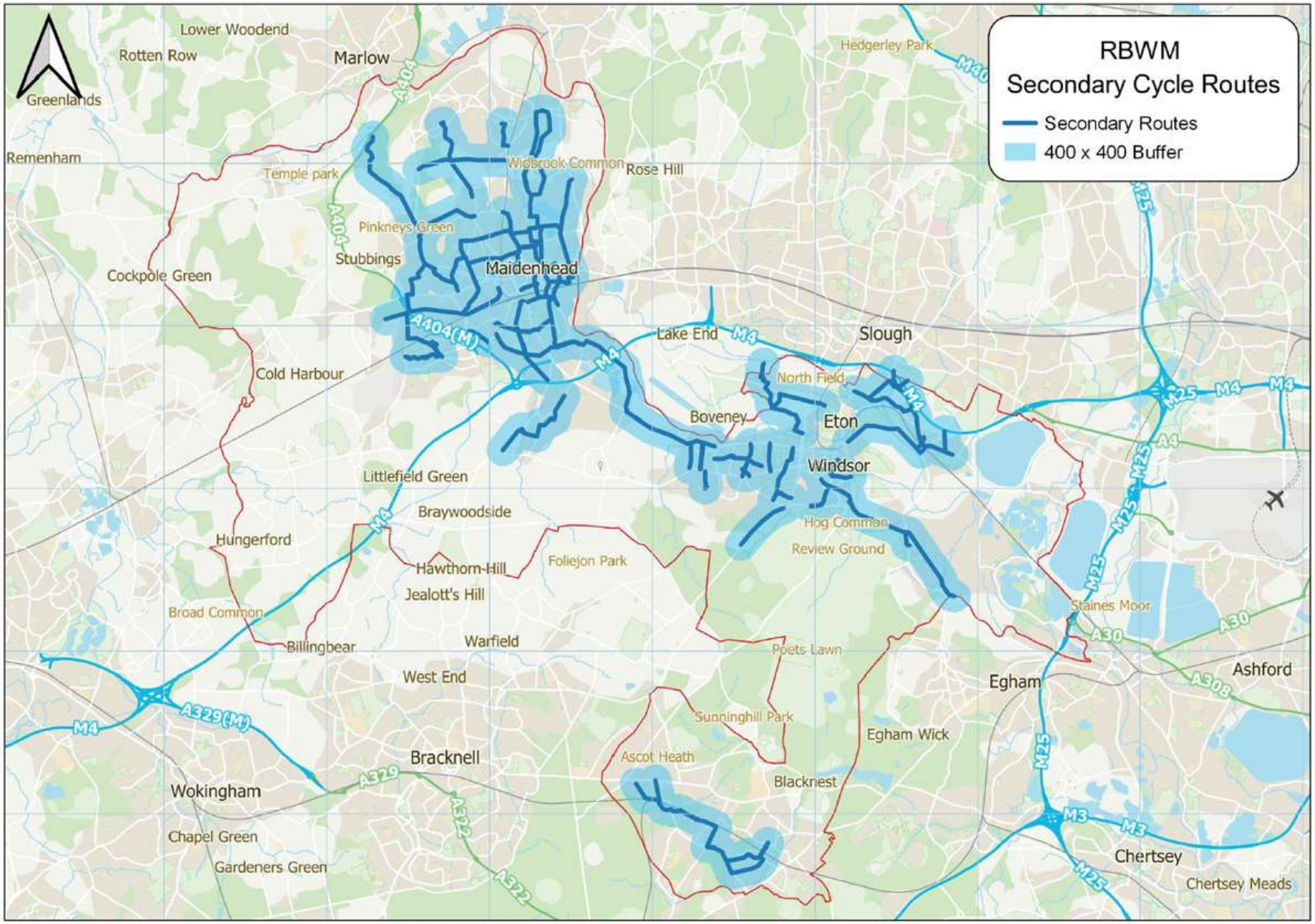


Figure 15. Map showing proposed secondary cycle routes, with 400m catchment area shown

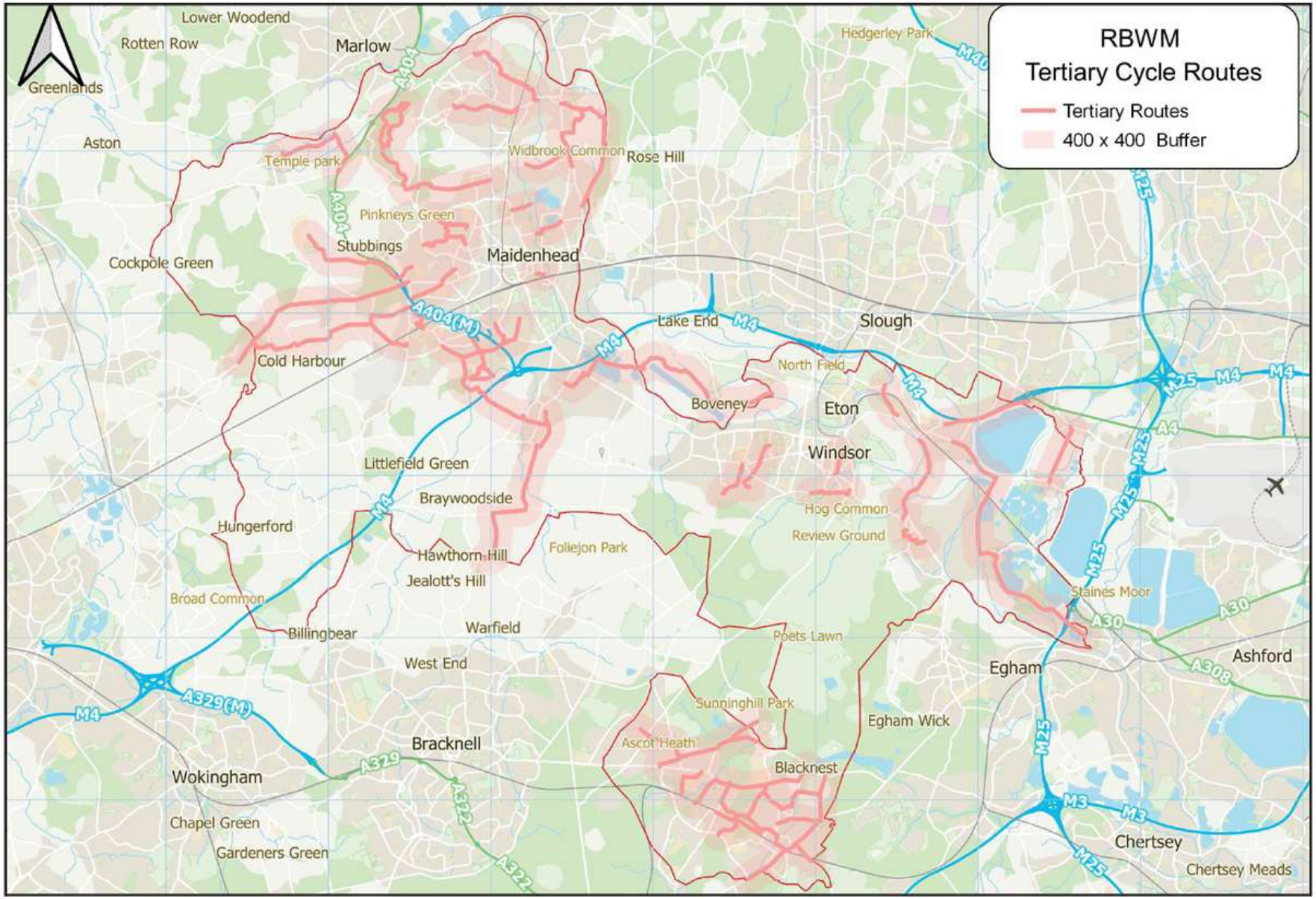


Figure 16. Map showing proposed tertiary cycle routes, with 400m catchment area shown

Cycling Corridors and Route Options

The table below lists all the identified Primary corridors and routes, those with the most cycling potential. Secondary and Tertiary corridors can be found in Appendix C. Routes have been limited in length to enable deliverability.

This is not a list of agreed projects, but instead is a list of locations where we propose, subject to funding, to undertake studies and seek views from the communities involved on what cycling improvements could be introduced in these locations.

Identifier code	Corridor name	Corridor description
PR01	Maidenhead to Holyport	A308, between King Street and Holyport Road
PR02	A308 Oakley Green Road to Windsor	A308, between Oakley Green Road and Mill Lane, then Mill Lane, Clewer Court Road, Stovell Road and Barry Avenue
PR03	Dedworth Road to Windsor	**Option A:** From junction of Dedworth Road with Oakley Green Road, along Dedworth Road and Clarence Road, to its junction with Vansittart Road. **Option B:** From junction of Dedworth Road with Oakley Green Road, along Dedworth Road, Green Lane and Vansittart Road, to its junction with Clarence Road.
PR04	Ascot High Street	Ascot High Steet, between Blytheswood Lane and Winkfield Road
PR05	Maidenhead to Cox Green	**Option A:** Shoppenhangers Road, from A308 to Ockwells Road **Option B:** Current route of National Cycle Network 4 – from the junction of Shoppenhangers Road with A308 to Ockwells Road via Shoppenhangers Road, Ludlow Road, The Gullet, Fane Way, Norreys Drive, Kendall Place, Cox Green Road, Cox Green Lane, Highfield Lane.
PR06	Maidenhead to River Thames	**Option A:** From the junction of High Street with Queen Street, along High Street, Bridge Street, Moorbridge Road, Bridge Road, to boundary with Buckinghamshire **Option B:** From West Street, then Kidwells Park Drive crossing into Kidwells Park, Kennett Road, Blackamoor Lane, Ray Park Road, Ray Park Avenue, Bridge Road, to boundary with Buckinghamshire
PR07	A308 to Dedworth Road	**Option A:** Willows Path **Option B:** Ruddlesway **Option C:** Gallys Road

Identifier code	Corridor name	Corridor description
PR08	Maidenhead to Cookham	**Option A:** underpass or crossing by Kidwells Park Drive, Kidwells Park, Fairford Road, Norfolk Road, Bridle road, Malvern Road, St Peters Road, Cannon Court Road, Nightingale Lane, Switchback Road North, Alfred Major Park, Peace Lane, High Road up to Cookham station **Option B:** underpass or crossing by Kidwells Park Drive, Kidwells Park, Fairford Road, Norfolk Road, Bridle Road, Harrow Lane, Queensway, Edinburgh Road, Maidenhead Road, B4447, Alfred Major Park, Peace Lane, High Road up to Cookham station **Option C:** South Road or High Town Road, Folly Way or Grenfell Road, College Road, Belmont Park Avenue, Camden Road, Furze Platt Road, Switchback Road South, Switchback Road North, Station Hill up to Cookham station
PR09	Maidenhead town centre to Cannon Lane	**Option A:** South Road or High Town Road, Grenfell Road, Boyn Hill Avenue, Boyn Hill Road, All Saints Avenue, St Marks Road, St Marks Crescent, Farm Road, Newlands Drive, Bath Road to roundabout with Cannon Lane **Option B: S**outh Road or High Town Road, Grenfell Road, Boyn Hill Avenue, Boyn Hill Road, Rutland Place, Westborough Road, Bath Road, Courthouse Road, Allenby Road, Farm Road, Newlands Drive, Bath Road to roundabout with Cannon Lane **Option C:** South Road or High Town Road, Grenfell Road, Boyn Hill Avenue, Boyn Hill Road, Rutland Place, Westborough Road, Bath Road, Courthouse Road, Allenby Road, Farm Road, Newlands Drive, Bath Road to roundabout with Cannon Lane
PR10	North-South Windsor Route	**Option A:** From junction of Bulkely Avenue with St Leonards Road, then along Bulkely Avenue, Springfield Road, York Avenue, York Road, Goslar Way crossing, Alma Road, Alexandra Gardens and Barry Avenue **Option B:** from junction of Bulkely Avenue with St Leonards Road, then along Bulkely Avenue, Springfield Road, York Avenue, Green Lane, Vansittart Road and Barry Avenue

Identifier code	Corridor name	Corridor description
PR11	Eton to borough boundary	**Option A:** From Clewer Court Road, following path link up to A332, then NCN4 and NCN461 up to borough boundary **Option B:** From junction of Thames Street with B3022 Datchet Road, follow Thames Street, The Eton Walkway, Brocas Street, Meadow Lane and NCN461 up to borough boundary with Slough **Option C:** from junction of Thame Street with B3022 Datchet Road, follow Thames street, Eton Walkway, Brocas Street, Meadow Lane, south Meadow Lane, Eton Wick Road (B3026) and Slough Road (B3022) to A332 roundabout with B3022
PR12	Dedworth to Spital	Clewer Hill Road between Dedworth Road to St Leonards Road

Route Selection Tool

The route options for the primary corridors have been assessed using the Department for Transport recommended Route Selection Tool. The tool identifies five criteria (directness, gradient, safety, connectivity and comfort), assigning a score from 0-5 for each. The selection of a preferred option will be influenced by the potential for a future cycle route to score highly across these metrics.

National Cycle Infrastructure Design Guidance

Local Transport Note 1/20: 'Cycle Infrastructure Design' ("LTN 1/20") is the UK's national design guidance for cycle routes, introducing greater consistency of design across the country that helps those cycling and other road users have confidence in how bikes use and navigate streets to reduce confusion and improve comfort, safety and convenience, as well as setting a measurable quality threshold to achieve when designing cycling schemes. The prioritisation of the routes includes consideration of this design guide.

The Department for Transport has indicated that it will not ordinarily fund projects that substantially deviate from this national design guidance. Alternative funding will be required to secure the development of any new infrastructure elements that the Department for Transport are not willing to fund, and it is recognised that this could be the case for some of the proposals.

The Route Selection Assessment summary for primary route options is included in Appendix D. Further Route Selection Assessment's will be completed for secondary and tertiary route options in due course.

Barriers for Cycling

Barriers for cycling can be split between both natural and built environment, with watercourses providing a natural barrier to completing a trip, with main roads, junctions, busy high streets and railway lines also being barriers to completing quick and easy trips.

As well as primary routes there is a network of quiet streets, lanes and public rights of way which can be naturally high- quality environments for both walking and cycling. It is therefore important to tackle the barriers to access to enable safe cycling into these quiet areas.

Zebra crossings, toucans and walk/cycle bridges have been included as gateways into areas. An area is deemed 'porous' if it has two crossings, semi-permeable if only one safe crossing and impermeable if there are none.

Figure 17. Cycle and pedestrian access under railway bridge on Barry Avenue, Windsor

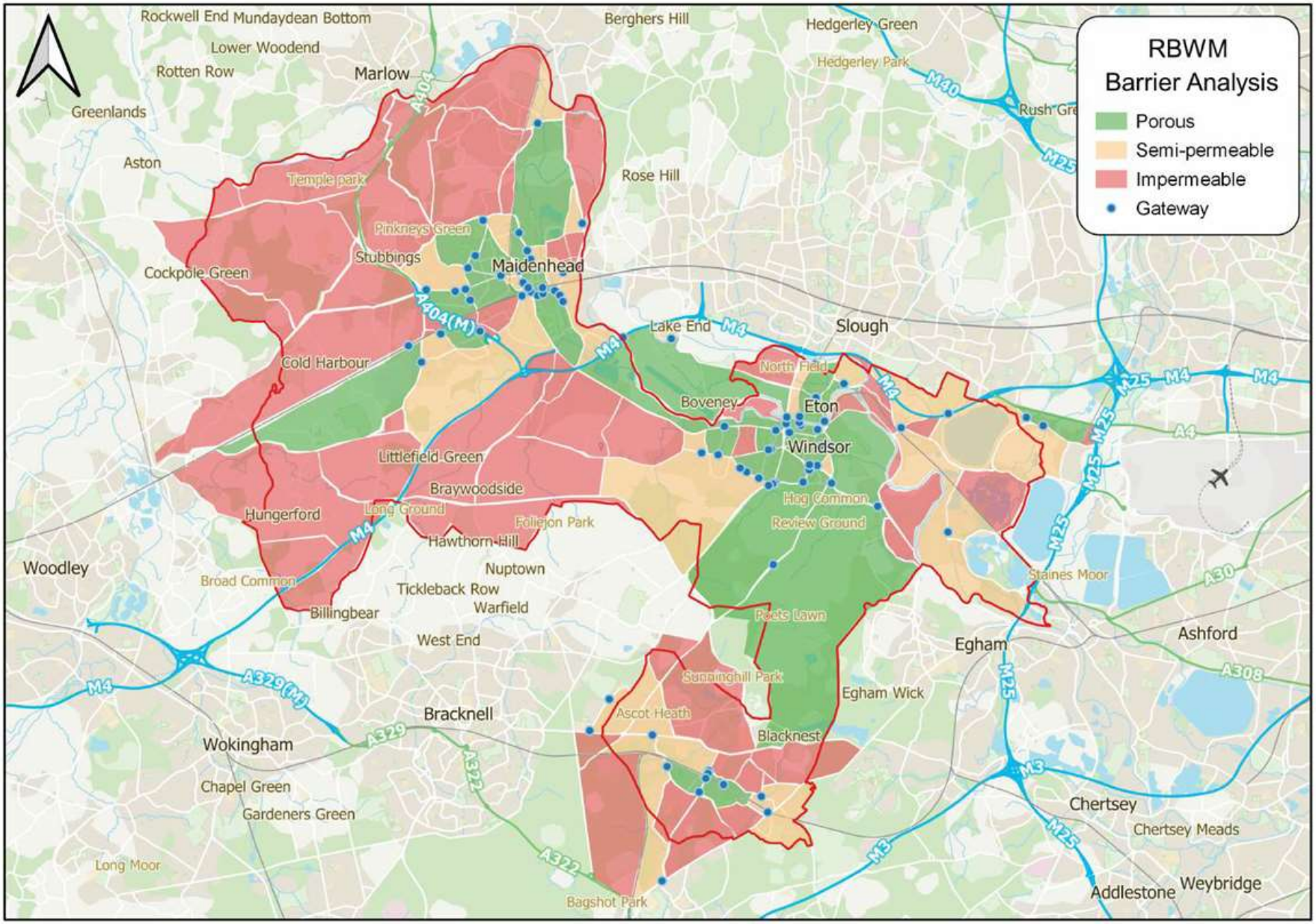


Figure 18. Barrier analysis

Types of Infrastructure

A number of different types of infrastructure can be used to enable cycling. The list below with pictures is a snapshot of the infrastructure toolkit. These have been used throughout the Route Selection Tool process to outline improvements which can be made.

Parallel Zebra Crossing

Cycle Gate

Early release cycle lights

School Streets

People Friendly Streets

Fully Segregated Cycle Track

Lightly Segregated Track

Bus Stop Bypasses

Cycle Parking

Cycle parking has been identified during the stakeholder engagement. The map below shows the full range of destinations for cycle parking based on the online engagement.

Figure 19. Map showing cycle parking comments from 'cycle lanes, pathways and parking' survey

NETWORK PLANNING FOR WALKING

Methodology

This LCWIP sets out to identify existing and potential walking routes that could be provided or improved upon for residents and visitors within the Borough. The LCWIP will look to encourage more people to walk around the Borough, and by engaging with a number of stakeholders we have been able to develop an understanding of the main concerns and infrastructure that stakeholders would like to see developed to encourage walking.

Using a number of methods outlined below, the LCWIP has engaged with a number of stakeholders as well as utilised the latest guidance to identify a number of routes to develop a user-friendly walking network around the Borough.

The walking network is developed using:

1. Mapping refined by stakeholder comments on routes and improvements;
2. The Department for Transport guidance, identifying key amenities and barriers;
3. Core Walking Zones confirmed with Town Centre Managers;
4. Walking audits to determine where improvements are needed; and
5. Infrastructure prioritisation into three categories (short, medium and long term due to complexity of work involved).

Current challenges for encouraging walking

The towns and villages in the Royal Borough of Windsor and Maidenhead have the potential to be walkable in terms of distance with many residential areas are within a two kilometre radius of the town centre (Core Walking Zone). The key challenges for the borough in terms of encouraging walking are:

- Areas of poor quality pavements and tactile paving;
- Pavement obstructions (e.g. signage, lighting columns) and pavement parking;
- Crossings not meeting desire lines, or missing, or difficult to use;
- Crossing times do not allow everyone to cross safely;
- More seating and greening on routes required; and
- Fear of safety at night or in the dark.

Overcoming these challenges will require close cooperation with residents and town businesses. The network maps that follow outline the current situations and it is the aim of this policy to determine location specific solutions for each town or village centre.

Walking network maps

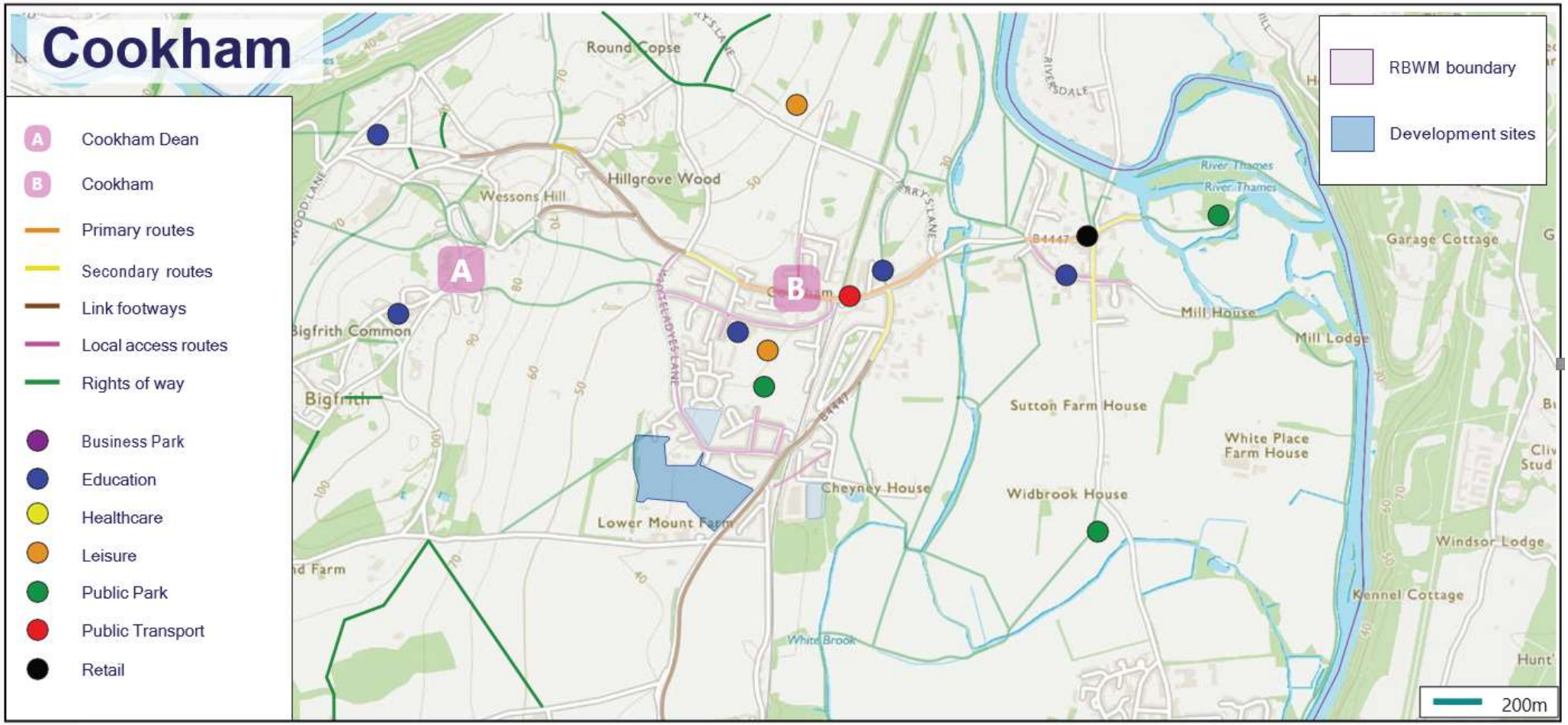


Figure 20. Cookham area walking network map

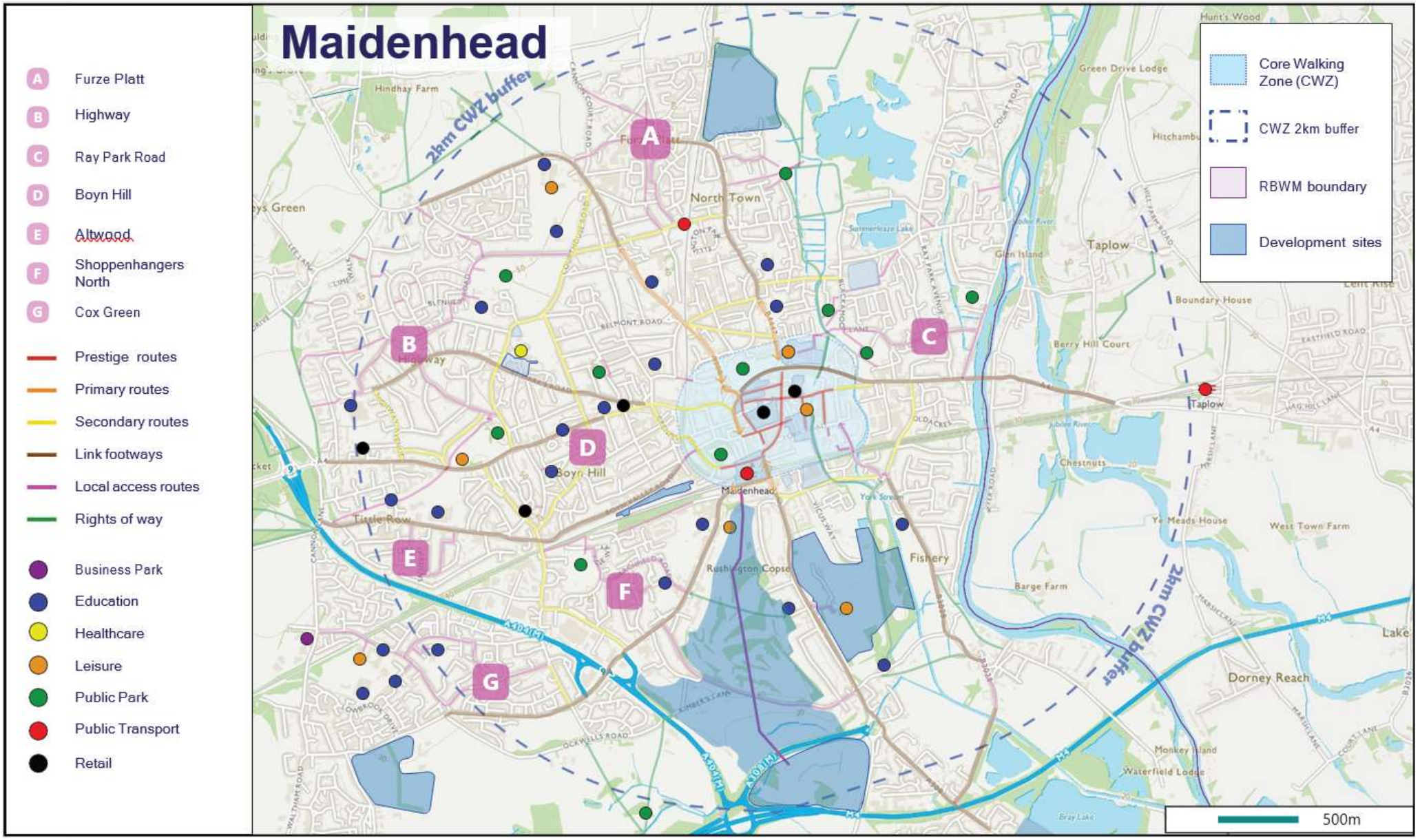


Figure 21. Maidenhead area walking network map

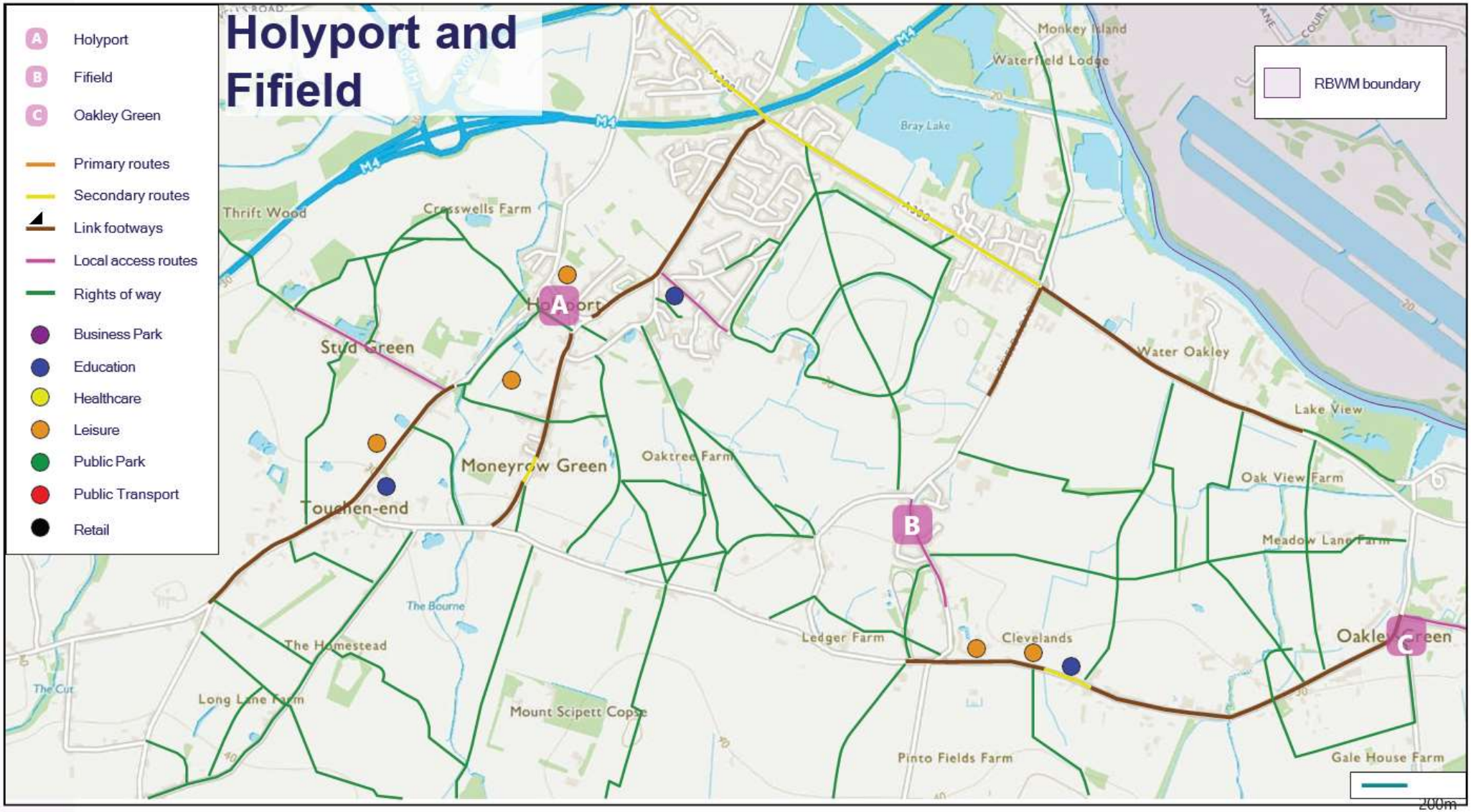


Figure 22. Holyport and Fifield area walking network map

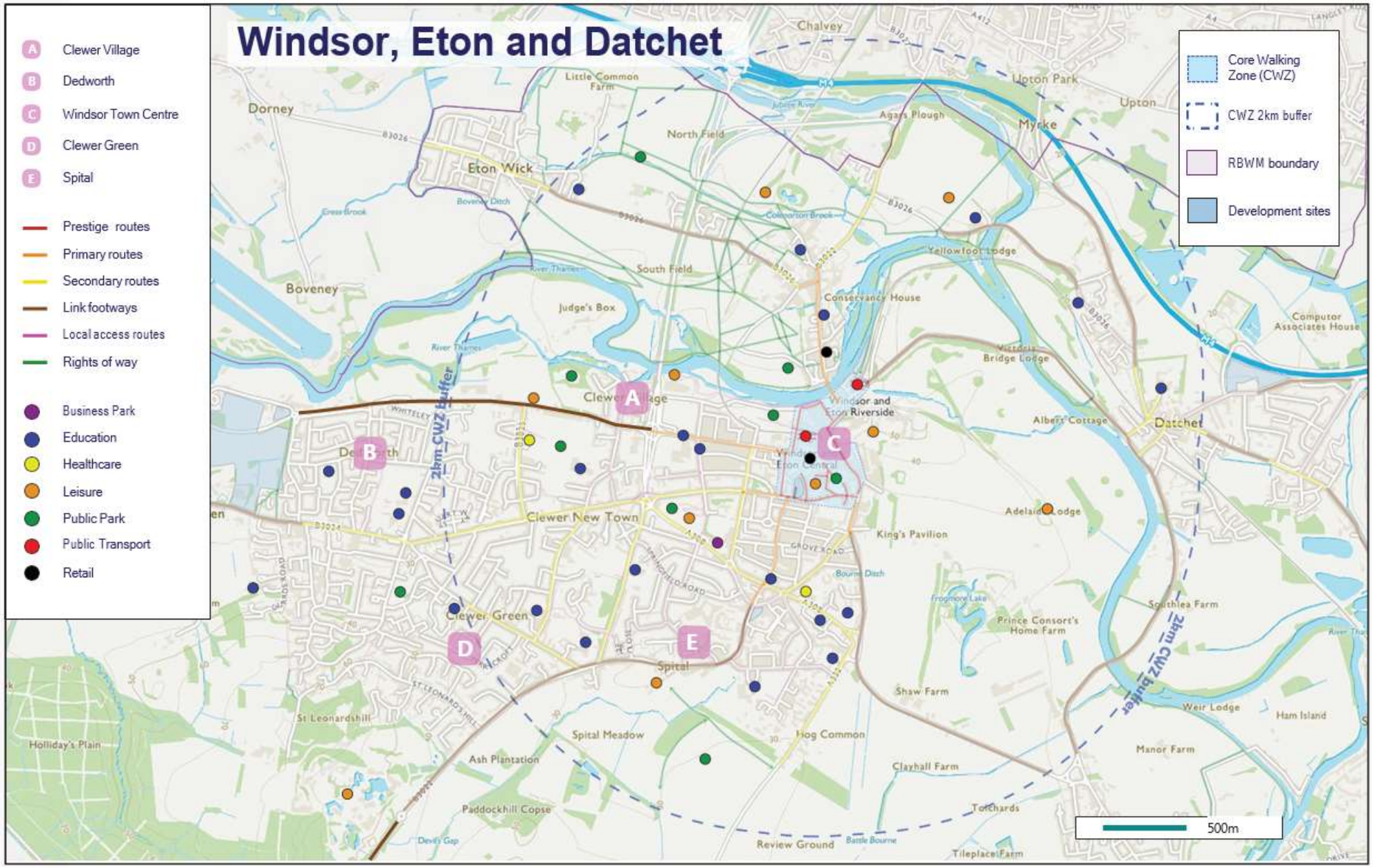


Figure 23. Windsor, Eton and Datchet area walking network map

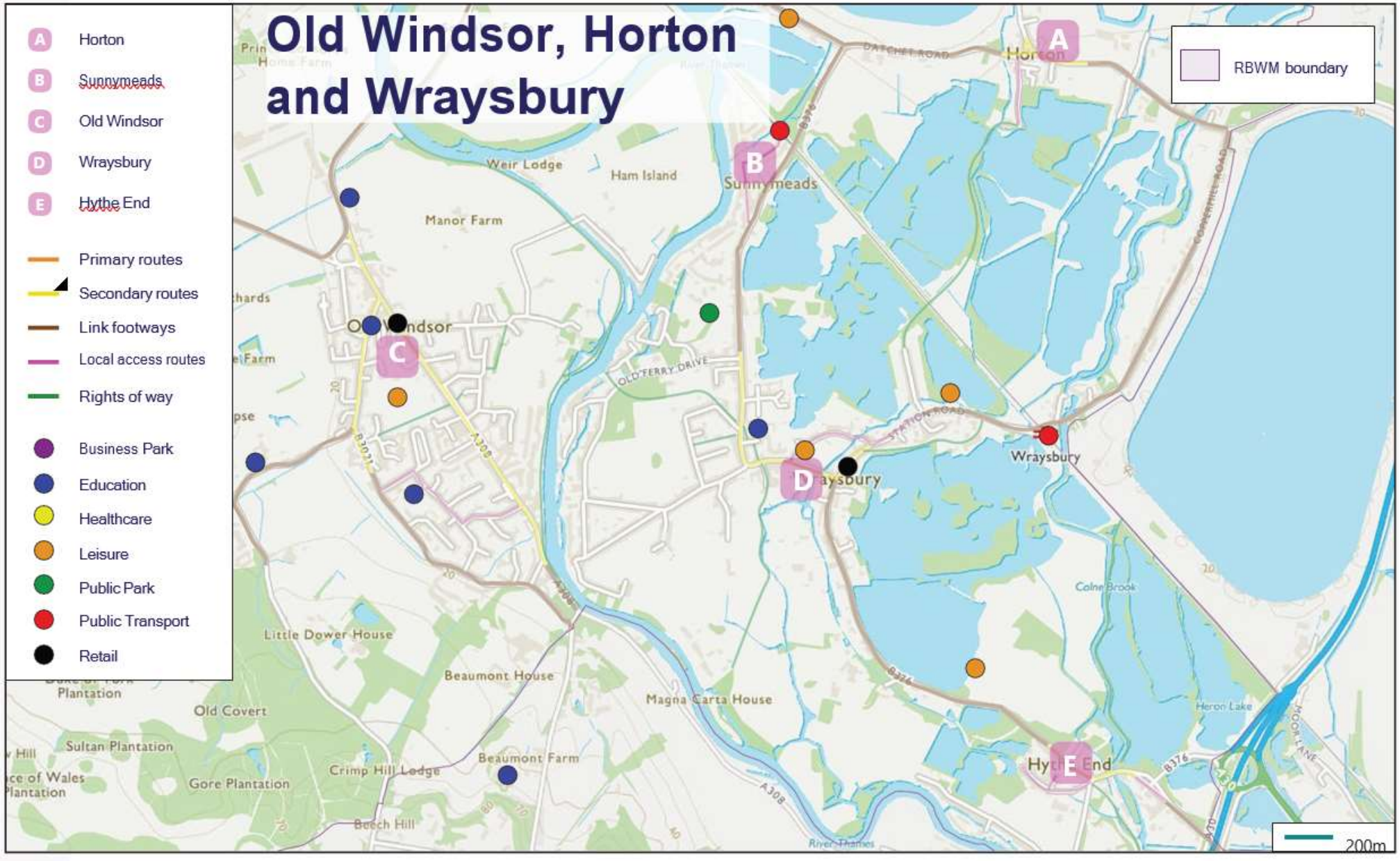


Figure 24. Old Windsor, Horton and Wraysbury area walking network map

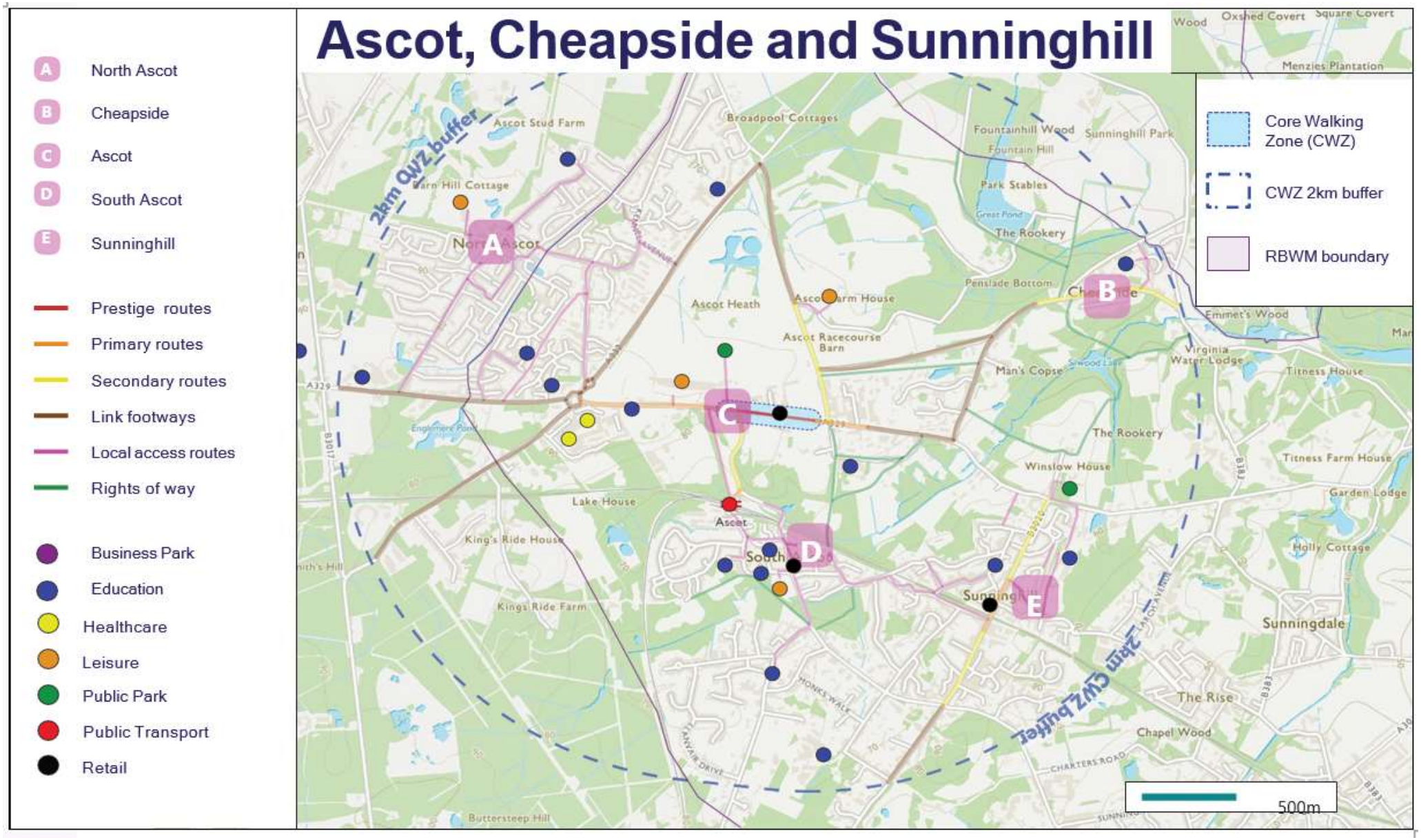


Figure 25. Ascot, Cheapside and Sunninghill area walking network map

The walking routes are split into the following categories:

- **Prestige routes:** very busy areas of towns with high public space and street scene contribution
- **Primary routes:** busy shopping or business areas and main pedestrian routes
- **Secondary routes:** medium usage routes to residential areas which feed into primary routes
- **Link footways:** linking local access footways through urban areas and busy rural areas
- **Local access routes:** footways with low usage, short estate roads to the main roads and cul-de-sacs; and
- **Public Rights of Way:** leisure and rambling routes around the borough.

Core Walking Zones

Core walking zones have been developed for the key town centre areas of Maidenhead, Windsor and Ascot. These are a minimum of 400m diameter or a 5 minute walk time. It is important that walking infrastructure is exemplar in the core walking zone.

From the core walking zones, routes of up to 2kms have been developed.

Walking Audits

Walking audits have been completed for all the Prestige, Primary and Secondary routes. The walking audits target five key design outcomes for pedestrian infrastructure which are:

- Attractiveness;
- Comfort;
- Directness;
- Safety; and
- Coherence.

Each route was scored against the above criteria and the infrastructure improvements were proposed and costed. The walking audits are included in Appendix E.

PRIORITISING IMPROVEMENTS

Cycling corridors

An appraisal process has been undertaken to confirm what the primary cycle corridors should be researched further first.

Prioritisation factors were chosen based on available data sources. These are presented below.

Prioritisation metric	Priority	Relevance
Public engagement comments	The highest number of comments relating to an individual areas will receive the highest prioritisation score for this metric. (Score based on actual number of comments for each road and averaged per route.)	We need to take on board the opinions and feelings of stakeholders within the borough to make sure we are designing schemes with the right issues in mind for the people it will serve.
Councillors / schools comments to do something	The highest number of comments from individual schools or councillor comments will receive the higher prioritisation score for this metric. (Score based on number of comments for each road and averaged per route.)	We need to facilitate a modal shift towards active trave and have political leadership for these changes. This starts with delivering on what councillors and organisations want
Potential increase in cycling along route (Go Dutch, PCT Tool)	Areas with the highest potential for increase in cycling will receive a higher priority score (score range of between 0-2)	Increasing cycle numbers is a key objective of the LCWIP
Collision data – last 36 months (to December 2020)	Highest number of collisions means a higher priority corridor (score 0-4 collisions = 0, 5-9 collisions = 1, 10+ collisions =2)	We need to reduce collisions across our borough and make it feel safer for vulnerable users and this will also encourage further active travel usage
Current improvement schemes (at site or nearby)	Proximity to improvement scheme (within 400m) will improve prioritisation score (if within 400m then a score of 1 is provided. Otherwise score is 0)	We need to assess if it is close to existing schemes as it could enable these schemes to be designed with LCWIP design outcomes
Near Borough Local Plan Site Allocation location	Proximity to new developments (within 400m) will increase priority to make sure new infrastructure is ready to serve these sites (if within 400m then a score of 1 is provided. Otherwise score is 0)	We need to make sure new developments are served with reliable infrastructure for active travel and can be a source of funding

Prioritisation metric	Priority	Relevance
Barriers	The more barriers to tackle the higher the score (impermeable = 2 semi-porous = 1, porous = 0)	We need to make sure barriers are tackled so every person can walk or cycle freely
Deliverability	The mores simple the delivery the higher the score (simple = 2, somewhat difficult =1, difficult = 0)	We need to make sure we prioritise easier schemes to enable a quick start to delivery of the plan

There is weighting against the prioritisation matrices to make sure engagement comments are paramount in terms of understanding which corridors to invest in first.

This prioritisation ranks five corridors as most suitable for investigation first. This is not a list of agreed projects, but instead is a list of locations where we propose, subject to funding, to undertake studies and seek views from the communities involved on what cycling improvements could be introduced in these locations:

1. PR01 – Maidenhead town centre to Holyport Road
2. PR02 – A308 Oakley Green Road to Windsor
3. PR03 – Dedworth Road to Windsor
4. PR04 – Ascot High Street; and
5. PR05 – Maidenhead town centre to Cox Green

Each corridor has been analysed based on deliverability in the short term (< 2 years), medium term (2-5 years) and long term (>5yrs). Details for the primary routes are found in Appendix F.

The assessment of deliverability regarding any design or build time has been assessed by planners and engineers. The timeframe for deliverability of each individual route will depend on how they have scored, particularly when factoring in routes with multiple 'critical junctions' as opposed to those with fewer or none. Furthermore, deliverability will also be dictated by the length of any route, with longer routes along main highway routes taking longer than shorter routes within residential areas.

Walking links

A programme of walking infrastructure improvements has been developed by comparing the walking audit scores (lowest score meaning it requires more improvement) against the stakeholder comments. These were used in assessing the prioritised routes to deliver.

Prioritisation metric	Priority	Relevance
Public engagement comments	The highest number of comments relating to an individual section of route will receive the highest prioritisation score for this metric. (Score based on actual number of comments for each road and averaged per route.)	We need to take on board the opinions and feelings of stakeholders within the borough to make sure we are designing schemes with the right issues in mind for the people it will serve
Councillors / schools comments to do something	The highest number of comments from individual schools or councillor comments will receive the higher prioritisation score for this metric. (Score based on number of comments for each road and averaged per route.)	We need to facilitate a modal shift towards active travel and have political leadership for these changes. This starts with delivering on what councillors and organisations want
Walking Audit Score	The furthest away from the walking audit total score of 32 receives the highest score. The actual figure is used in prioritisation	This prioritises places which require further work due to not meeting the Department for Transport's Walking Audit criteria

This has identified that the top 20 schemes to be investigated first are:

1. B470 High Street, Datchet
2. Queens Road, Datchet
3. A308 Gringer Hill between Frascati Way and Harrow Lane
4. B376 Horton Road, Datchet
5. Datchet Road – Huntswood Motor Company to Milton Close, Horton
6. King Street, Maidenhead
7. Grenfell Road, Maidenhead
8. Bachelors acre / Acre Passage, Windsor
9. Ascot Station, Ascot
10. Arthur Road, Windsor
11. A308 roundabout Frascati Way, Maidenhead
12. Imperial Road, Windsor
13. B4447 Cookham Road, Maidenhead
14. A308 – Braywick Roundabout to Fifield Road, Holyport and Fifield
15. Sunninghill Road, Sunninghill
16. B376 Welley Road, Wraysbury
17. B3024 Oakley Green Road, Fifield
18. High Street / Bridge Street to Forlease Road, Maidenhead

19. Cordwallis Road, Maidenhead
20. Madeira Walk, Windsor

A summarised table of all the walking routes can be found in Appendix C.

People-Friendly Streets, Town Centres and School Streets

To improve access to and from the walking and cycling corridor and link improvements outlined above, we will additionally investigate wider, area-based people-friendly street schemes, as well as the potential for introducing school streets, alongside and connecting in to these corridors and links. We will do this working closely with local residents and businesses – and also parents and teachers in the case of school streets – to identify measures that are right for each neighbourhood.

This includes specifically looking at improved walking and cycling measures in and around our town centres, which are particularly key destinations for many of the proposed walking and cycling links and corridors.

NEXT STEPS

Ten-year delivery plan

This LCWIP is a ten year delivery plan, and will guide our investment in walking and cycling over this period.

The LCWIP recommends locations where investment should be taken forward. For each location, feasibility studies will be needed to identify what options for making improvements exist, combined with engagement with local residents and businesses so that options reflect local circumstances and needs. Following this first feasibility and options step, where a suitable preferred option is identified a detailed design will be developed, and consulted on again with local residents and businesses. Figure 25 details the process in terms of delivery for active travel schemes.

As a ten year plan, we undertake to investigate a few of the recommended locations each year, as part of a rolling programme. Locations that the report identifies as being of the highest priority will be investigated towards the front end of the ten year programme. Each year, we will look to progress a selection of both larger, strategic projects and smaller, complimentary schemes which will build towards a cohesive network.

We recognise that the locations in this report are unlikely to form an exhaustive list of where improvements would be beneficial, and where additional opportunities are identified for initiatives that will compliment the overall shape of the borough's cycle network these can be adopted into future versions of this plan.

As we take forward the walking and cycling links and corridors referred to in the report, we will look to support these with complimentary 'people-friendly street' (and, where appropriate, 'school street') improvements to neighbourhood and town centre streets along and adjacent to these identified routes or corridors, to improve access to the main walking and cycling routes and spread benefits more widely.

A budget of £1.5 million has been approved by the Council for the 2022-2023 financial year, to support the development and delivery of the first set of improvements. This matches the recommendation of the All Party Parliamentary Cycling Group that councils spend an equivalent of £10 per person in the borough to support active travel, noted in the borough's 2018 Cycling Action Plan. In addition to the £1.5 million budget, we will pursue opportunities to bring in external funding when they present.

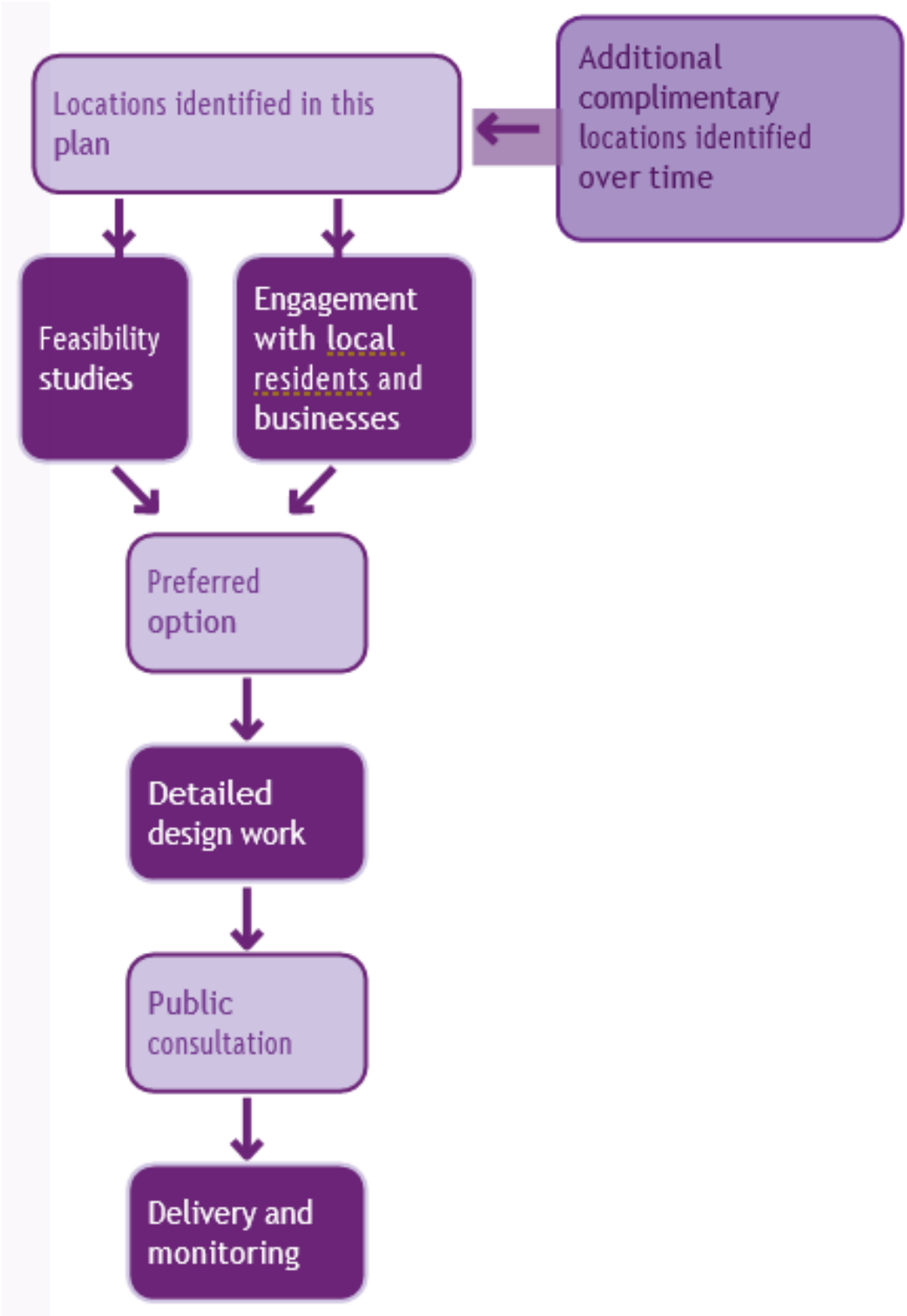


Figure 26. Stages of project delivery

Monitoring

Regular monitoring is essential to track progress. The below performance monitoring tools will be used to ensure an accurate representation of how the borough is performing.

Monitoring will be achieved through various different indicators on all LCWIP schemes to measure the success of any scheme implemented and to continue to identify areas in most need of improved walking and cycling infrastructure developments. The process for monitoring (which is structured in the below infographic) will be a firmly embedded process of delivery using indicators, including but not limited to:

- Changes in cycling trips;
- Changes in walking trips; and
- Cycle and pedestrian casualties.

This process will be achieved via frequent contact and dialogue with various stakeholders such as developers, businesses and town centre managers in order to successfully produce improvements that will benefit all stakeholders.

Where necessary data recording such as vehicle counts will be undertaken to understand cycle and walking patterns pre, during and post scheme implementation.

Example indicator	Methodology	Frequency
Changes in cycling trips	Department for Transport statistics and cycle counts	Annual
Changes in walking trips	Department for Transport statistics and footfall surveys	Annual
Cycle and pedestrian casualties	Police records	Annual