

DIDCOT LOCAL CYCLING AND WALKING INFRASTRUCTURE PLAN



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SYSTRA

DIDCOT LOCAL CYCLING AND WALKING INFRASTRUCTURE PLAN

LCWIP STRATEGY REPORT

IDENTIFICATION TABLE

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Appendix B - Network Map

Appendix C - Core Walking Zone Map

Appendix D - Proposal Maps

Appendix E - Programme of Walking and Cycling Infrastructure Improvements

Appendix F - Didcot LCWIP Consultation Stage 2 Consultation Outcomes Report

HOW TO USE THE DIDCOT LCWIP

The key information for applying the Didcot LCWIP can be found in the following outputs from the LCWIP development process:

- Appendix B: Network Map
- Appendix C: Core Walking Zone Map
- Appendix D: Proposal Maps (a visual aid to the interpretation of the proposals listed in Appendix E)
- Appendix E: Programme of Walking and Cycling Infrastructure Improvements

Some readers may only wish to review the proposals for infrastructure changes in and around Didcot, without reading the background material included in this report and some of the appendices. These readers should refer to *Appendix D: Proposal Maps* and *Appendix E: Programme of Walking and Cycling Infrastructure Improvements*.

A full list of the appendices which form part of this LCWIP is provided in the table of contents on page 6.

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1. INTRODUCTION

1.1 What is an Local Cycling and Walking Infrastructure Plan (LCWIP)?

- 1.1.1 The Local Cycling and Walking Infrastructure Plan (LCWIP) will provide a ten-year plan for the delivery of cycling and walking interventions that will maximise the uptake of active travel, and that will help to ensure the travel needs of the growing populations of Didcot and surrounding areas will be met.
- 1.1.2 The LCWIP is complementary to South Oxfordshire District Council and Vale of White Horse District Council’s existing and emerging policies and programmes, focused upon an ambitious commitment to active travel and the range of benefits it delivers. The LCWIP also ensures connectivity with villages surrounding Didcot and the wider Oxfordshire County Council (OCC) network and projects including Science Vale Active Travel Network (SVATN) and Strategic Active Travel Network (SATN).
- 1.1.3 The LCWIP has been prepared to identify cycling and walking infrastructure improvements that will also have benefits that include responding the climate change emergency, improving air quality, enhancing public health, reducing inequality and cutting congestion.
- 1.1.4 In 2017 the government published its first Cycling and Walking Investment Strategy which sets out the ambition to make cycling and walking ‘the natural choices for shorter journeys or as part of a longer journey’. LCWIP’s are noted in the investment strategy as the preferred approach to identify cycling and walking improvements at the local level.
- 1.1.5 Realising the ambition to make cycling and walking the natural choices will require sustained investment in infrastructure for both modes, partnership with local bodies, the third sector and the wider public and private sector to build a local commitment. The LCWIP is designed to facilitate a long-term approach to developing networks, but is also designed so that the document can be updated and revisited throughout the 10-year period.

1.2 LCWIP Guidance

- 1.2.1 As detailed above LCWIP’s are the Department for Transport’s (DfT) preferred approach for identifying and in turn delivering walking and cycling improvements, helping local authorities plan networks of walking and cycling routes. LCWIP’s take a comprehensive approach to network planning and provide a clear, short, medium and long term framework for local authorities to deliver on their ambitions around active travel.
- 1.2.2 The LCWIP process includes six stages, as set out in Table 1.

Table 1. LCWIP Process

STAGE	NAME	DESCRIPTION
1	Determining Scope	Establish the geographical extent of the LCWIP, and arrangements for governing and preparing the plan.

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STAGE	NAME	DESCRIPTION
2	Gathering Information	Identify existing patterns of walking and cycling and potential new journeys. Review existing conditions and identify barriers to cycling and walking. Review related transport and land use policies and programmes.
3	Network Planning for Cycling	Identify origin and destination points and cycle flows. Convert flows into a network of routes and determine the type of improvements required.
4	Network Planning for Walking	Identify key trip generators, core walking zones and routes, audit existing provision and determine the type of improvements required.
5	Prioritising Improvements	Prioritise improvements to develop a phased programme for future investment.
6	Integration and Application	Integrate outputs into local planning and transport policies, strategies, and delivery plans.

1.3 Why is encouraging more cycling and walking important to Didcot?

Overview

- 1.3.1 Increasing the levels of everyday walking and cycling has a wide range of benefits for society including mental and physical health improvements, improved air quality and increased social mobility. However, there are a number of key barriers to more people walking and cycling nationally and locally in Didcot. Key to this is a lack of a joined up network of walking and cycling routes that improve road safety and make walking and cycling for local journeys more attractive as an alternative to private motor vehicles.
- 1.3.2 Currently the network, especially for cycling, in Didcot is sporadic and often the routes are perceived as unsafe and require users to mix with motor vehicles. There is a lack of connection between suitable routes or radial connections between the town centre and peripheral areas. More detail on the existing network and its limitations can be found in Section 3.7.
- 1.3.3 By investing in walking, and cycling, and developing a logical and extensive network that enables people to reach their destinations by active modes rather than private motor vehicles, a wide range of benefits for the individual and the region can be unlocked.

Health benefits

- 1.3.4 Active travel is an easy, accessible way of achieving recommended physical activity levels. The Active People Survey has shown that people who cycle for travel purposes are four times as likely to meet physical activity guidelines.

- 1.3.5 The NHS recommends that adults between 19 and 64 get at least 150 minutes of moderate aerobic exercise per week, which includes brisk walking or riding a bike. Active travel can help people increase their physical activity, which can help improve physical and mental health.
- 1.3.6 As will be covered in more detail in section 3.9 the current percentage of people that walk and cycle to work is 8% and 3% within Didcot, and 4% and 2% within the LCWIP Area of influence (as defined in the Didcot Garden Town Delivery Plan (DGTDP) and shown in Figure 1 below). The DfT have set a goal of half of short trips in cities and towns to be made by walking and cycling by 2030, and the Oxford County Council Active Travel Strategy (2022) has a target to increase the number of cycle trips to 1 million by 2031, county-wide, from the current level of 600,000.
- 1.3.7 However, according to 2021 Census data, walking and cycling makes up only a small percentage of total trips to work in Didcot. Similarly, as per Census 2011 figures, rates of walking and cycling make up just 7% and 4% of journeys under 10km. Short journeys such as this could be walked and cycled easily (for many people) rather than utilising a vehicle and the benefits for Didcot resident's health would be significant. Increased cycling is linked to improved health benefits such as weight loss and cardiovascular conditions.
- 1.3.8 As detailed above, participation in active travel can improve an individual's mobility, health, and social interaction. However, one major obstacle to the prevalence of active travel is community severance, whereby transport infrastructure or motorised traffic acts as a physical or psychological barrier to movement of pedestrians and cyclists. This severance may form a barrier to accessing local resources, exacerbating a lack of community cohesion, and increasing social isolation. Therefore, this LCWIP seeks to make walking and cycling more accessible and attractive for residents of Didcot and make active modes the first choice for short journeys.

Climate change

- 1.3.9 Oxfordshire County Council has committed to becoming carbon neutral by 2030 with a plan that enables a net-zero Oxfordshire well ahead of the national target of 2050. The council state that the benefits of climate-related action are many, there are opportunities to improve health and well-being; support innovation and create green jobs; and invest in a more diverse and resilient natural landscape that will help sustain across the county.
- 1.3.10 It is noted that transport and connectivity will play a crucial role in achieving this vision through the local systems and networks in addition to further initiatives such as electric vehicle strategies.
- 1.3.11 The LCWIP and ensuing network development and delivery will be integral to Didcot delivering on this pledge by providing a safe and attractive network for walking and cycling and helping to reduce dependence on private motor vehicles.

Air quality

- 1.3.12 Poor air quality is the largest environmental risk to public health in the UK, as long-term exposure to air pollution can cause chronic conditions such as cardiovascular and respiratory diseases as well as lung cancer, leading to reduced life expectancy. Nitrogen Dioxide (NO₂), a pollutant that arises from vehicles, has been identified as having various adverse health effects, particularly on

the respiratory system. Short-term exposure to this pollutant can increase the likelihood of reaction to allergens such as pollen and has been known to increase asthma in some people. Children exposed to this pollutant may have an increased risk of respiratory infections.

- 1.3.13 Walking and cycling are the ultimate low emissions options. For short trips, or longer trips combined with public transport, higher levels of active travel could make a significant contribution to reducing pollution. Dedicated, well-designed cycle infrastructure is essential, not just because it helps encourage modal shift away from private motor vehicles, but also because facilities such as segregated cycle paths take space from cars and move motor traffic away from building façades where long-term exposure to exhaust emissions is likely to occur.

Benefits for Didcot transport network

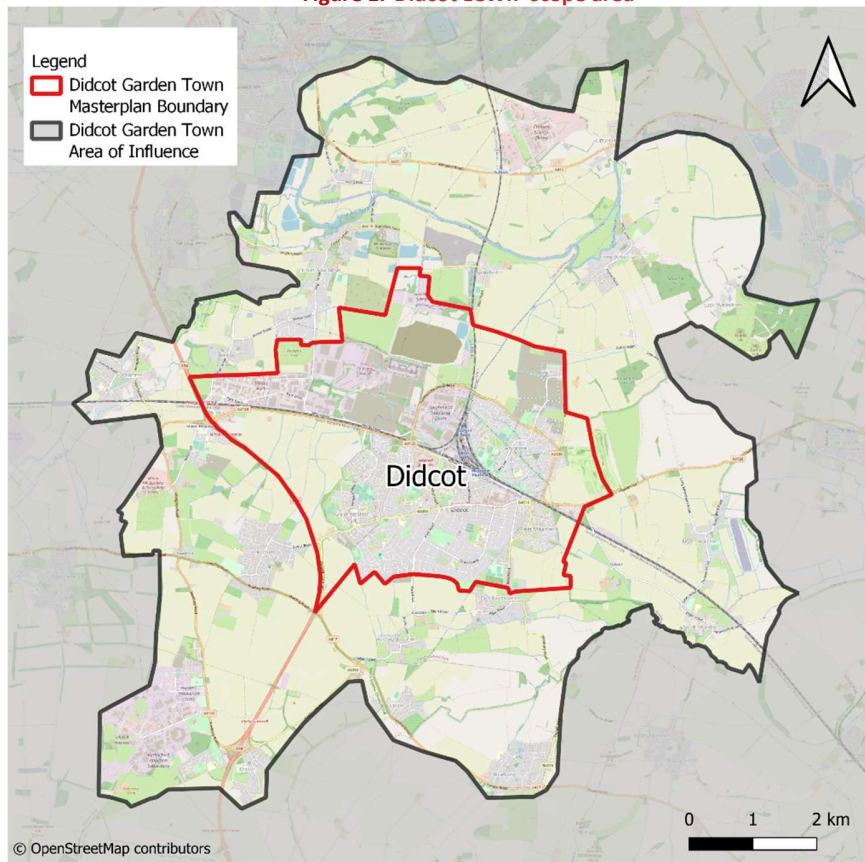
- 1.3.14 As has been detailed above and in latter sections of this report, residents of Didcot are heavily reliant on their own private vehicles for many of their journeys. This reliance on vehicles can lead to regular congestion and pressure on the county road network especially at peak times.
- 1.3.15 An over reliance on motor vehicles for short trips also has negative impacts on air quality and inactivity levels. Cycling, in particular, is a far more efficient and healthy way to complete short local journeys without the negative impacts associated with motor vehicles.
- 1.3.16 Any modal shift away from driving to active modes such as walking and cycling will benefit not only the individual making that change but also the wider transport network freeing up space for essential car journeys and buses.

1.4 LCWIP Scope

- 1.4.1 During Stage 1 of the LCWIP process, it was agreed with the Council that the LCWIP will cover the Didcot Garden Town boundary as a priority, but also include a wider ‘area of influence’, as defined in the Didcot Garden Town Delivery Plan (DGTDP). This will ensure connectivity into Didcot and around the villages surrounding Didcot and other projects including Science Vale Active Travel Network (SVATN) and Strategic Active Travel Network (SATN).

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Figure 1. Didcot LCWIP scope area



1.5 Funding

- 1.5.1 This project is funded by the Didcot Garden Town programme using capacity funding to progress projects to support implementation of the Didcot Garden Town Delivery Plan (DGTDP). As the Garden Town boundary lies across districts of both South Oxfordshire District Council (SODC) and the Vale of White Horse District Council (VOWHDC), the two councils act as the contracting entities.
- 1.5.2 The LCWIP itself does not directly fund any of the schemes contained within it. It provides a basis for the preparation of bids for funding from central government for the development and delivery of active travel schemes, and also provides a wish-list of active travel infrastructure improvements to which local funding sources (most notably developer contributions or direct delivery) should be applied. The LCWIP is aimed at help securing capital funding.

1.6 Governance and co-production arrangements

- 1.6.1 The Didcot LCWIP has been produced in coordination with a local community network of interested volunteers to ensure community participation in the project delivery.

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1.6.2 The core project team consisted of a working group of Oxfordshire County Council officers and South and Vale District Council officers responsible for active travel and local transport strategy and a team of SYSTRA external consultants. The group held regular (approximately monthly) progress meetings throughout the development of the LCWIP. The core project team was supported and guided by the input of a larger steering group.

Didcot LCWIP Steering Group

1.6.3 The Didcot LCWIP Steering Group (non-public) chaired by Cllr David Rouane was established in November 2022 and met regularly (approximately every 6-8 weeks) throughout the development of the LCWIP. During the meeting, members were informed of the progress of the LCWIP and were asked to provide local information and feedback on the proposed routes, interventions and priorities. To ensure an open dialogue regarding the LCWIP review, it is suggested that the steering group will continue to meet after the LCWIP is adopted, to monitor progress on implementation.

1.6.4 As well as County/District/Parish Councils, other organisations confirmed their desire to work in partnership to help develop the LCWIP, as such they were invited to join the steering group:

- Culham Science Centre representatives
- Didcot Central Corridor Project team
- Didcot Garden Town Advisory Board Members
- Didcot Phoenix Cycling Club
- Didcot Town Council
- Harwell Science and Innovation Campus Bicycle User Group (HarBUG)
- Local Authority Officers
- Milton Park representatives
- Oxfordshire Cycling Network (OCN)
- Residents representatives
- Sustainable Didcot
- Sustrans
- Wheels for Wellbeing

1.6.5 Four steering group meetings have been held, where the following points have been discussed and feedback gathered:

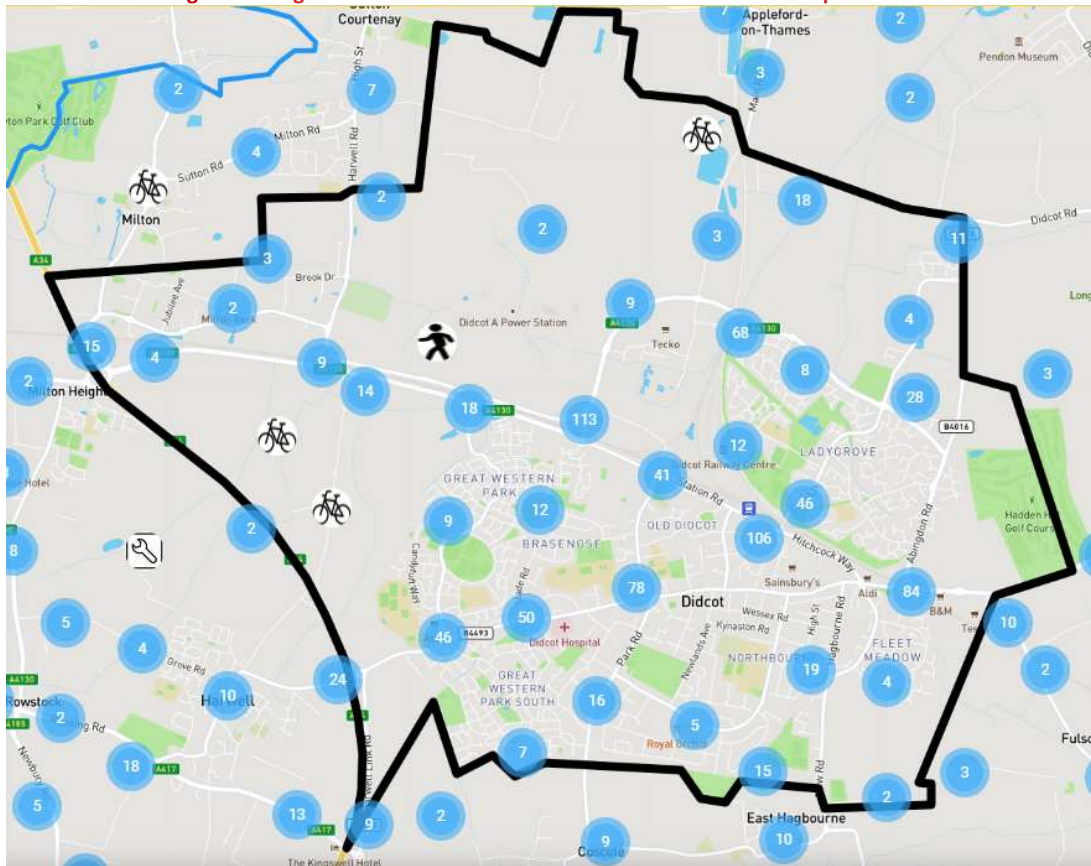
- October 2022: project kick off and working group introduction;
- November 2022: steering group governance and LCWIP co-production process;
- March 2023: initial network development tasks discussion, public consultation interim results and cycle safari findings;
- April 2023: public consultation final results, cycle network planning updates, primary routes for auditing identification.
- August 2023: draft LCWIP document and the proposed interventions discussed and updated prior to final public consultation.

Public Consultation

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1.6.6 Input from residents and the wider community of people working, studying and visiting Didcot has also been central to the development of the LCWIP document. A first round of open engagement was undertaken in March 2023 to ask the community about issues and opportunities for improvement of the walking and cycling network in Didcot. Respondents were able to drop pins on specific locations on a map, the locations of these comments were then used in the mapping exercise for the walking and cycling network development.

Figure 2. Stage 1 Consultation - Didcot Garden Town comments map



1.6.7 The public has also been consulted on the draft LCWIP in August and September 2023. In this instance, they were asked to provide comments on the proposed interventions and routes, including the extent to which the proposed interventions will encourage them to walk or cycle more. Some suggestions for routes that have not been audited as part of this LCWIP were requested, which in some cases have resulted in changes to the LCWIP proposals, and in other cases have been collated for consideration in future iterations of the LCWIP, as detailed in Appendix F: Didcot LCWIP Consultation Stage 2 Consultation Outcomes Report.

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Figure 3. Stage 2 Consultation – On-line Survey



Didcot Local Cycling and Walking Infrastructure Plan

We are inviting residents to have their say on the forthcoming Didcot Local Cycling and Walking Infrastructure Plan (LCWIP). South Oxfordshire District Council (SODC) and Vale of White Horse District Council (VWHDC) have commissioned SYSTRA, an independent transport consultancy, to create this plan and manage the consultation process.

This short survey follows on from an extensive open feedback exercise held between 27th February to 19th March 2023, and supplements online and in-person events held by the Councils. The Stage 1 consultation report can be downloaded [here](#). The closing date for this survey is 17:00 on Wednesday 20th September.

What is a Local Cycling and Walking Infrastructure Plan?

The Didcot Local Cycling and Walking Infrastructure Plan (LCWIP, or 'Cycling and Walking Plan' for short) is our long-term plan, aimed at dramatically improving the safety, comfort and attractiveness of walking and cycling in the district. The purpose of this plan is to set out a list of schemes for delivery over the coming years that will improve walking and cycling infrastructure for Didcot residents, workers and visitors alike. It will enable the councils to seek finance for projects as and when funding becomes available.

The Cycling and Walking Plan covers the following key area:



- 1.6.8 The report summarising the results of the first round of engagement is provided in Appendix A, the report for the second round of engagement is provided in Appendix F.

1.7 Application and Review of the LCWIP

- 1.7.1 As well as providing a basis for the preparation of bids for funding from central government for the development and delivery of active travel schemes, the LCWIP provides a wish-list of active travel infrastructure improvements to which local funding sources (most notably developer contributions or direct delivery) should be applied. All new developments located within or near the geographical scope of the Didcot LCWIP (refer to Figure 1 above) will be reviewed for opportunities to deliver or make funding contributions towards the delivery of any proposals of this LCWIP deemed relevant to the site (as well as any improvements deemed relevant to the site which have not been explicitly included in the LCWIP).

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- 1.7.2 Opportunities for exploring synergies between the Didcot LCWIP’s proposals and those made in the neighbouring LCWIPs for Oxford (adopted) and Abingdon (adopted) should be explored as and when relevant schemes from these LCWIPs are progressed. The same approach should be taken for any relevant proposals and schemes emerging from the SVATN and SATN projects.
- 1.7.3 The key information for applying the Didcot LCWIP can be found in the following outputs from the LCWIP development process:
- Appendix B: Network Map
 - Appendix C: Core Walking Zone Map
 - Appendix D: Proposal Maps (a visual aid to the interpretation of the proposals listed in Appendix E)
 - Appendix E: Programme of Walking and Cycling Infrastructure Improvements
- 1.7.4 The Didcot LCWIP is a ‘living document’, which will be reviewed regularly in order to ensure that it reflects any significant changes in local circumstances (including changes to the relevant policy and guidance set out in section 2), as well as to reflect progress made with implementation of the original proposals.
- 1.7.5 The first draft of the LCWIP has been reviewed in light of the feedback received as part of the Stage 2 consultation. The Stage 2 Consultation Outcomes Report is provided in Appendix F. The report also contains a list of proposals received during the Stage 2 consultation to be considered during the next review of the LCWIP document.

1.8 Report Structure

- 1.8.1 Following this introductory section, the remainder of this LCWIP Report is structured as follows:
- **Section 2: Policy Review** – Overview of relevant current and emerging national, regional, and local policies and strategies that need to be considered when developing the LCWIP.
 - **Section 3: Baseline Conditions** – Details current transport conditions and provision across Didcot.
 - **Section 4: Cycle Network Development** – Analysis of cycle demand and identification of potential cycle network that serves desire lines.
 - **Section 5: Walking Network Development** – Identification of core walking zones.
 - **Section 6: Cycle Audits and Interventions** – Identification of improvements to priority cycle routes.
 - **Section 7: Walking Audits and Interventions** – Identification of improvements to walking routes.
 - **Section 8: Prioritisation of Proposals** – Identification of a prioritisation methodology for the delivery of the proposed interventions.
 - **Section 9: Next steps** - Summary of LCWIP process next steps

2. POLICY CONTEXT

2.1 General

2.1.1 To establish the context for the LCWIP across Didcot, a comprehensive review of current and emerging policy and strategy documents related to development, transport and current active travel schemes has been undertaken.

2.1.2 The documents considered in the Policy Review are shown in Figure 2.

Figure 4. Policy review documents



2.2 National Policy Documents

Gear Change: A Bold Vision for Cycling and Walking (2020)

2.2.1 This document, published by the DfT, sets a goal that cycling, walking (and wheeling) will be the natural first choice for most short journeys, with half of all journeys in towns and cities being cycled or walked by 2030. This will occur through a travel revolution in our streets, towns, and communities in which places will become truly walkable and attractive for cycling. The report sets out actions required at all levels if Government is to make this goal a reality, under four overarching themes:

- **Theme 1:** Better streets for cycling and people;
- **Theme 2:** Putting cycling and walking at the heart of transport, place-making and health policy;
- **Theme 3:** Empowering and encouraging local authorities; and
- **Theme 4:** Enabling people to cycle and protect them when they cycle.

2.2.2 Better streets for cycling and people refers to: *a requirement for on-road cycle tracks separated from traffic; cycle, bus and walking corridors; more low traffic neighbourhoods to prevent rat-*

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running; more school streets; and improvement of the National Cycle Network to make it entirely off road or traffic-calmed by 2040.

- 2.2.3 Putting cycling and walking at the heart of transport refers to: *place-making and health policy; increasing spending on cycling and walking; ensuring that new road schemes include appropriate cycling provision; smoothing the integration of cycling with public transport; increased cycle parking; and promoting cycling for freight.*
- 2.2.4 Empowering and encouraging local authorities refers to: *improved capacity and assistance for local authorities; channelling most of the allocated funds through local authorities; the development of new body, Active Travel England, which will inspect and approve schemes, and review major planning applications.*
- 2.2.5 Enabling people to cycle and protect them when they cycle refers to: *safe cycle training; combat bike theft by consolidating ownership registers; and changing the Highway Code to protect vulnerable road users.*

The Cycling and Walking Investment Strategy (CWIS) – Report to Parliament (2020) and Second Cycling and Walking Investment Strategy (CWIS2) (2022)

- 2.2.6 The Cycling and Walking Investment Strategy (CWIS) sets a range of short-term goals to meet the Government’s ambitious plan of half of journeys to be made by walking and cycling by 2040. Most notably, by 2025, the Government aims to double cycling, increase walking activity and increase the number of children walking to school to 55% (from 49% in 2014).
- 2.2.7 The report reviews the progress of actions set to be achieved between April 2016 and March 2019. The major outputs noted in the review include:
 - 912,349 people completed cycle training;
 - 13,112 new or upgraded cycle parking spaces;
 - 2,096 new or upgraded cyclists and pedestrian crossings; and
 - 129 rail stations benefitting from cycle improvements and facilities.

An update of this paper, Cycling and Walking Investment Strategy 2 was published in July 2022. The document incorporates the latest government funding commitments, in light of the change in travel habits resulting from the Covid-19 Pandemic. The strategy set out the minimum quality requirements for infrastructure to receive fundings and the tools to support the delivery of high quality infrastructure, which include the development and delivery of LCWIPs, adherence to the Cycle infrastructure design guidance (LTN 1/20) and the Manual for Street Guidance.

Local Transport Note 1/20 – Cycle Infrastructure Design (2020)

- 2.2.8 This Local Transport Note (LTN1/20) provides guidance and good practice for the design of cycle infrastructure, in support of Gear Change. It explains the five core design principles, which represent the essential requirements to achieve more people travelling by cycle or on foot, based on best practice. Networks and routes should be coherent, direct, safe, comfortable, and attractive. Infrastructure must be accessible to all, and the needs of vulnerable pedestrians and

local people must be considered early in the process to ensure schemes are supported locally in the long term.

- 2.2.9 Planning for cycling should be based around providing a network of on- and/or off-carriageway routes that are suitable for all abilities. Subject to topographical constraints, the aim is to create a densely spaced network so that all people can easily travel by cycle for trips within and between neighbourhoods. Developing a network plan should follow a process of thinking about the people who make trips, the places that they go and the journey purpose to pursue a demand-led approach to cycle infrastructure provision.

2.3 Regional Policy Documents

England’s Economic Heartland Transport Strategy (2021)

- 2.3.1 The England Economic Heartland (EEH) brings together the regions Local Transport Authorities (Bedford, Central Bedfordshire, Buckinghamshire, Cambridgeshire, Hertfordshire, Luton, Milton Keynes, North Northamptonshire, West Northamptonshire, Oxfordshire, Peterborough and Swindon) in a strategic partnership. The EEH Transport Strategy sets out how reliance on the private car can be reduced by investing in strategic public transport infrastructure, alongside investment in digital infrastructure to better connect communities, and how that needs to be complemented by investment in active travel measures locally. The strategy is ambitious in nature, challenging the region to achieve a net zero carbon transport system by 2040.
- 2.3.2 The EEH will work with partners to ensure walking and cycling levels continue to grow across the region. In regard to Didcot and the wider Oxfordshire region, the document demonstrates its support for the Oxford-Cambridge Arc, including commitment to a proposed Oxford-Cambridge ‘Varsity Way’ segregated cycling and walking route. The document also references how the region’s science and technology-based innovation is crucial to transport systems moving forward, in which Oxfordshire can build upon its existing experience.
- 2.3.3 In regard to monitoring and evaluation of the strategy to be implemented, indicators have been derived, which include:

Table 2. England’s Economic Heartland Transport Strategy indicators

PRINCIPLE	INDICATOR	MEASURE
Improving quality of life and wellbeing through a safe and inclusive transport system accessible to all which emphasises sustainable and active travel	An increase in the number and percentage of journeys made by walking and cycling between 2km-5km and public transport between 5km-60km	Baseline and measure data at a regional level to measure method of travel to work by distance travelled
Improving quality of life and wellbeing through a safe and inclusive transport system accessible to all which	Greater levels of accessibility and inclusivity available to all transport users	Undertake bespoke research with partners to develop appropriate measure

PRINCIPLE	INDICATOR	MEASURE
emphasises sustainable and active travel		

England’s Economic Heartland Draft Active Travel Strategy (2022)

2.3.4 This document describes a high-level ambition for active travel in England’s Economic Heartland (EEH) and is the first phase in developing a full active travel strategy for the region. In regard to the eight surrounding villages that will be analysed as part of this LCWIP, the document states that much of the Heartland is rural in nature and communities are often relatively poorly connected and dependent upon the private car for everyday trips. New technologies, changing travel demands and increasing pressure on the highway network are enabling new opportunities and emphasis on active travel for rural communities. Some of the key features of the ambition for rural areas are:

- reducing traffic volumes and existing traffic speeds in villages and small towns, especially where space constraints mean new cycle and pedestrian infrastructure is difficult to introduce;
- introducing public realm and placemaking schemes in villages where possible to encourage more everyday walking;
- considering the introduction of new pavement infrastructure, road crossing infrastructure and appropriate cycle facilities, recognising that well designed and connected traffic free routes are likely to be more appropriate in rural areas. Ensuring these local traffic free routes connect with longer distance regional / national active travel networks and take into account the relevant design guidance including LTN 1/20;
- using the least restrictive access option for rural routes, including by removing stiles and barriers where appropriate, in line with the British Standard for gaps, gates and stiles (BS 5709:2018);
- ensuring provision of cycle parking at suitable locations in rural areas to encourage short and first/last mile trips, including at mobility hubs, village/town centres, and key shopping/ leisure destinations.

Oxfordshire County Council Local Transport and Connectivity Plan (LTCP) and Active Travel Strategy (ATS, a supporting strategy of LTCP) (2022)

2.3.5 The LTCP outlines a clear vision to make Oxfordshire a better place to live for all residents whilst protecting the environment by delivering a net-zero travel and transport system.

- 2.3.6 The important targets for the LTCP include aspirations to make the following changes by 2030:
- replace or remove 1 out of every 4 current car trips in Oxfordshire;
 - increase the number of cycle trips in Oxfordshire from 600,000 to 1 million cycle trips per week; and
 - reduce road fatalities or life changing injuries in Oxfordshire by 50%.

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- 2.3.7 To achieve these targets, LTCP policy 3 commits to developing LCWIPs for all major urban settlements (with a population greater than 10,000) in Oxfordshire by 2025.
- 2.3.8 The Active Travel Strategy estimates that a doubling of the number of cycle trips per week across Vale of White Horse and South Oxfordshire districts is required in order to achieve the headline targets outlined above.

Connecting Oxfordshire: Local Transport Plan 2015-2031 (LTP4)

- 2.3.9 Within the Local Transport Plan is a Cycling Strategy which aims to create the foundation for cycling to become a major mode of travel in Oxfordshire by making cycling a safe, simple and accessible option for people of all ages. The vision is for Oxfordshire to be a place where as many people as possible will consider cycling as a safe and feasible transport option, particularly for short trips. The county council want Oxfordshire to be a county where people will be able to cycle to work, to the shops, to rail stations or bus hubs on safe, attractive routes with secure cycle parking at their destination.
- 2.3.10 The aim is for cycling to be part of everyday life, which people are used to from an early age. The council want to see demonstrable increases in levels of cycling for journeys to school, work and access to services like health and shopping. To achieve this, the council will work with partner organisations, businesses, local councils, schools and communities to promote, enable and increase understanding of cycling throughout the county.

Oxfordshire County Council Walking Design Standards (2017)

- 2.3.11 It is the overriding aim of this document to provide technical solutions appropriate to specific scenarios that support all pedestrian groups when planning for new development. The core aims of this guidance are to make walking the first choice for travel and to enable walking through good design.
- 2.3.12 The council recognises that good highway design should prioritise and create space for walking and cycling. The walking design guidance for new developments revolves around eleven design factors that must be considered when designing facilities for pedestrians in new developments and schemes.

Oxfordshire County Council Cycling Design Standards (2017)

- 2.3.13 The aim of this guidance is once more to provide technical solutions for new development and support the Active Travel Strategy by making cycling a first choice for more journeys. In regard to the provision of cycle infrastructure the most notable cycling design considerations include green corridors, spine & distributor roads and public rights of way. Additionally, there is guidance on the specification of infrastructure elements for cycle users alongside new developments. This guidance can apply to schemes on the existing highway network as well.

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2.4 Local Policy Documents

Didcot Garden Town Delivery Plan (2022)

2.4.1 The Didcot Garden Town Delivery Plan was originally published in 2017, in which it set out the vision for the town. The plan aims to tackle all the key areas: housing, jobs, transport, landscape and the environment - within the context of South Oxfordshire and Vale of White Horse District Councils' emerging local plans.

2.4.2 The plan also includes the garden town masterplan, which is states will be delivered through proposals such as:

- Reducing traffic travelling through the centre of Didcot by re-directing as much traffic as possible around the town's northern periphery.
- Upgrading and completing the "Garden Line" cycleway and walkway that links the town centre with Culham and Harwell Science and Innovation Campuses
- Connecting Didcot to the surrounding countryside through cycle routes and pathways
- Enhancing the streets that link Didcot Station with the town centre, including civic spaces for gathering such as a new public square opposite the station
- Upgrading routes such as Broadway and Station Road so that they are safer for cyclists today and are ready for the autonomous vehicles of the near future being developed by high tech businesses in the area
- Providing a wider mix of homes, from apartments that are attractive to young, footloose professionals near to the town centre to family homes and retirement housing, with care and support if people need it
- Bringing a technology institute into the town, giving a local presence to the Science Vale and its enterprise zones
- Creating new, attractive commercial space for bars and restaurants and new office or co-working space for smaller businesses
- Encouraging multi-generational living – perhaps a trial project of students connecting with elderly residents

2.4.3 The proposals within the plan also provide a number of opportunities to:

- Accelerate the delivery of homes and the social and physical infrastructure required to support new residential development
- Support economic growth generated by UK's leading cluster for commercialisation of science, building on the strengths of Harwell Science and Innovation Campus, Culham Science Centre and Milton Park to deliver an additional £1bn of annual gross value added to the UK economy
- Explore ways to capture value from new development, which can be channelled into the infrastructure, affordable housing and green spaces to ensure these developments benefit the wider community
- Establish strong local governance for the garden town. Representatives of the local community, local businesses and district, county and town councils to create a unified, democratically accountable delivery body

2.4.4 The delivery plan was then revised in 2022 to provide a refined list of delivery projects which will focus on providing community benefits, a retail recovery strategy, encourage healthy lifestyles and help to tackle climate change.

Vale of White Horse District Council Local Plan 2031

2.4.5 The Vale of White Horse Local Plan 2031 sets out the Spatial strategy and strategic policies of the district to deliver sustainable development. The Local Plan Part 1, adopted in 2016, sets out some district-wide policies, including policies supporting public transport, cycling and walking. New developments should be designed to encourage walking as the preferred mode of transport, not only within the development itself, but also to nearby services and transport hubs. Cycle friendly infrastructure should be provided to link developments to services, employment areas, educational facilities and public transport. It is recognised that due to the rural nature of the district, some residents will be dependent on car travel for some of their journeys, as such improvements to travel choices in rural areas should be supported.

2.4.6 The Local Plan Part 2, adopted in 2019, complements the Part 1 plan with additional development sites to meet the Council housing needs.

South Oxfordshire District Council Adopted Local Plan 2035

2.4.7 The Local Plan sets out a strategy for delivering growth in the council from 2011 to 2035. It sets out the vision for South Oxfordshire in 2035, to “remain a beautiful and prosperous place to live. It will be an attractive place for people to work and spend their leisure time”. One of the key objective of the Local Plan is to “Make sustainable transport, walking and cycling an attractive and viable choice for people, whilst recognising that car travel and parking provision will continue to be important in this predominantly rural district”.

2.4.8 The Council will work with Oxfordshire County Council to deliver the transport infrastructure to support the delivery of Didcot Garden Town, including the measures identified in the Local Transport Plan 2015-2031. The Council will also:

- Support the development and delivery of:
 - a new Thames River crossing between Culham and Didcot Garden Town;
 - the A4130 widening and road safety improvements from the A34 Milton Interchange to Didcot;
 - a Science Bridge over the A4130 and railway into the former Didcot A power station site; and
 - the Clifton Hampden Bypass.

Didcot Cycle Review, Harwell Bicycle Users Group (HarBUG) (2019)

2.4.9 It is the purpose of this document to summarise a review of Didcot’s cycling routes. It was organised by local cycling groups as an input to the LCWIP process and for the various council officers and planners to understand the status and issues of cycling facilities across Didcot. The routes that were assessed by the participants in this review included:

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- Section 1 – Didcot Parkway to Milton Park
- Section 2 – Didcot West from Milton Interchange to Great Western Park
- Section 3 – Wantage Road and Southern Great Western Park
- Section 4 – Orchard Centre to Fleet Meadow
- Section 5 – Ladygrove

2.4.10 The overarching conclusion of this review was that Didcot should be a cycling town due to its compact and flat nature with few inclines. It determined that most existing residential areas are already suitable for cycling. Major employment sites are within easy cycling distances and Didcot Parkway transport hub is in the centre of the town allowing connections for greater distances. However, it also states that whilst there is potential to increase cycling rates, the opportunity has not been taken advantage of in recent developments and there is a continued over reliance on car use.

2.4.11 The review identifies that Didcot needs a town cycle network that is connected, convenient, comprehensive and safe with links to a wider Science Vale Cycle Network. The review suggested a variety of different improvements for cycling across several scales such as quick small-scale projects, localised barriers needing larger schemes plus future road schemes and developments.

2.5 Relevant Project and Plans

2.5.1 In addition to the developments and plans set out in the Didcot Garden Town Delivery Plan other packages of transport measures are being developed and delivered across the area covered by this LCWIP. These need to be referenced and integrated throughout the LCWIP development process.

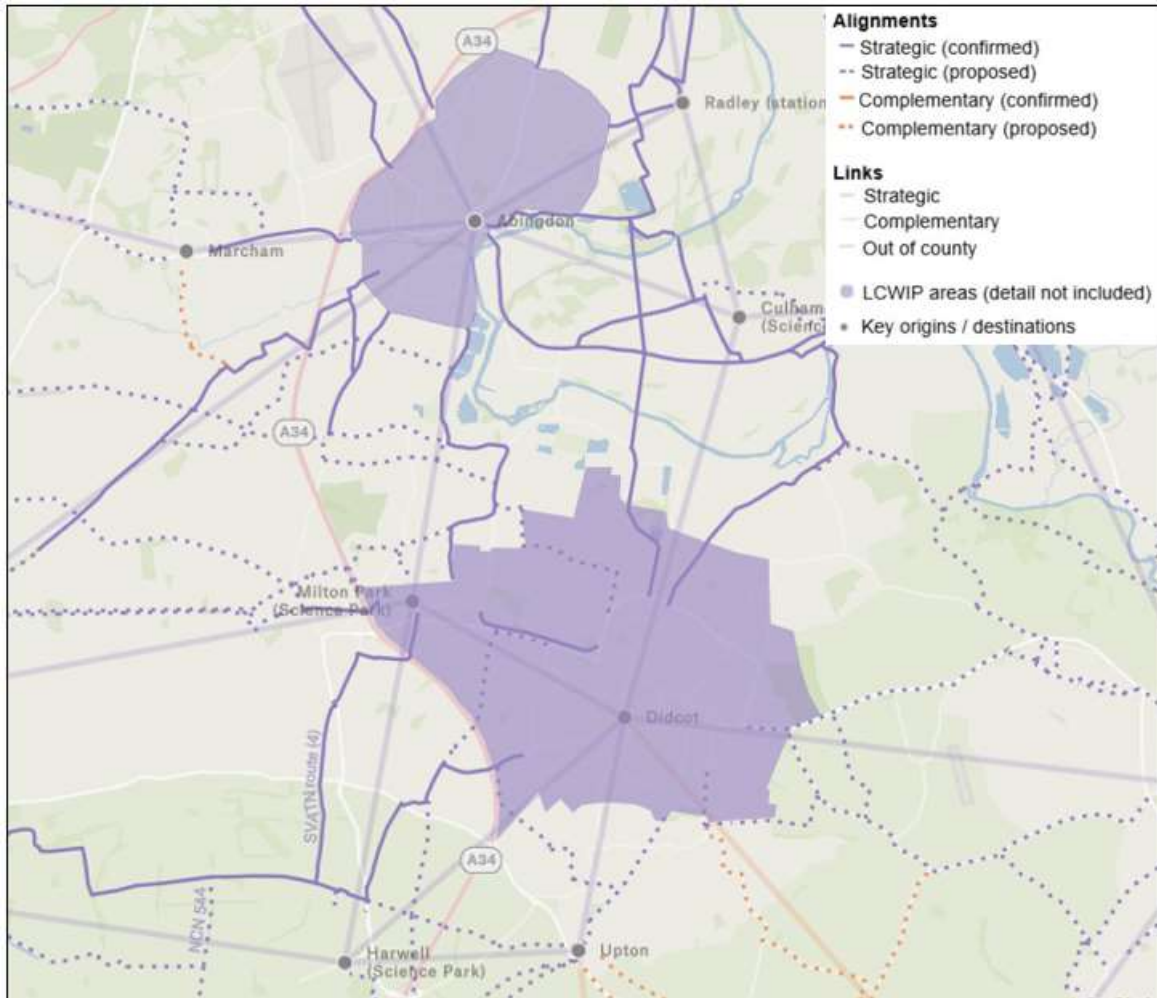
Strategic Active Travel Network (SATN): final draft consultation (2023)

2.5.2 The Strategic Active Travel Network (SATN) is a long-term plan for a network of walking and cycling routes across Oxfordshire. It is intended to enable a prioritisation of routes that would contribute to active travel connections and provide detail to increase the chances of securing funding for them.

2.5.3 This work has led to the development of a long list of potential routes, including improvements changes to existing/confirmed infrastructure but also a large number of potential alignments which have not yet been assessed or consulted on. At this stage the SATN is to be considered an early optioneering exercise to identify options for future development and to guide bidding efforts and allocations of resources. Those currently sought to connect with the Didcot LCWIP area are detailed in Figure 5 below.

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Figure 5. SATN Potential Alignment Map¹



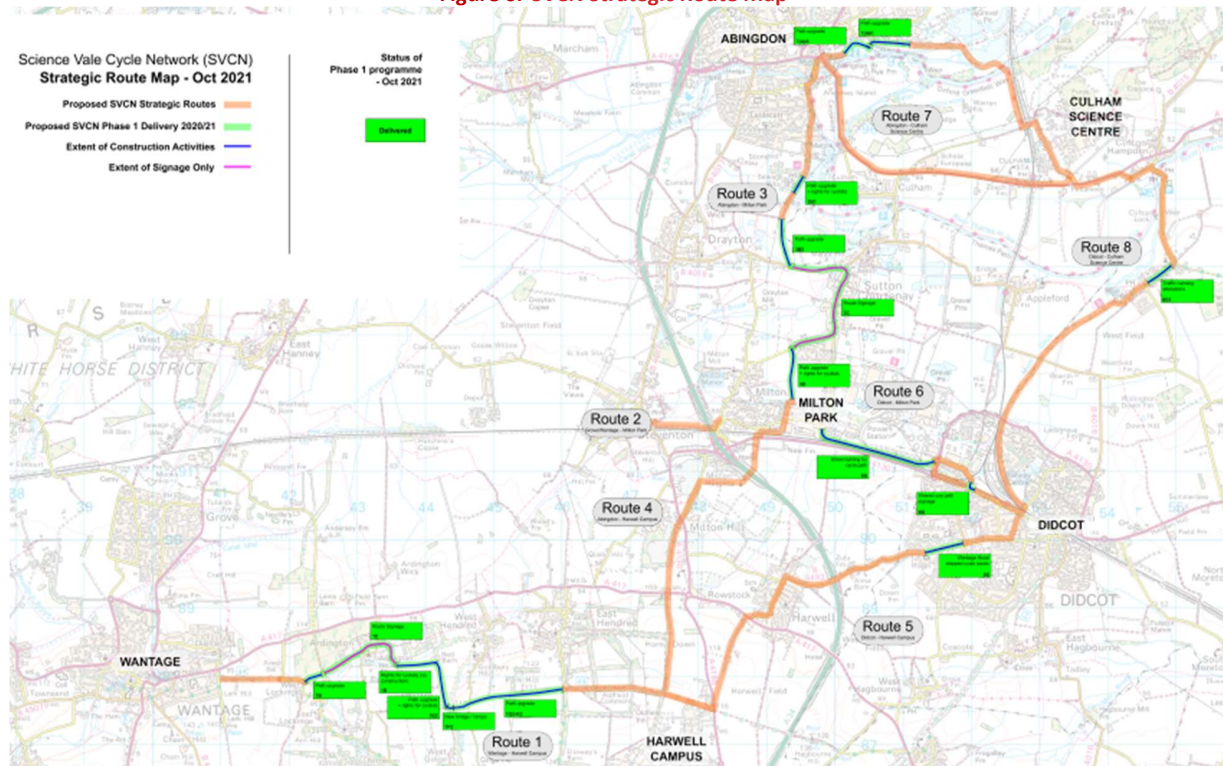
Science Vale Cycle Network

2.5.4 The central aims to the Science Vale Cycle Network (SVCN) project are to provide easier and greater connectivity between three main employment centres at Harwell Science and Innovation Campus, Milton Park and Culham Science Centre and key urban centres: Didcot, Abingdon and Wantage within the Science Vale area. The SVCN is seeking to improve routes for cyclists and pedestrians and to make cycling a more attractive choice. The project adds a key layer to the Science Vale transport network to encourage sustainable travel across the area for cyclists and pedestrians, who are going to benefit from improved facilities for many journeys, not just those to or from work. Note that future work on the SVCN will be under the Science Vale Active Travel Network (SVATN) name instead of SVCN.

¹ SATN Network: final draft (consultation) <https://felt.com/map/SATN-network-final-draft-consultation-uUudnI9CkQW2ZdSXsjhHzjD?loc=51.6957,-1.0845,11.24z>

2.5.5 The routes and sections that form Phase 1 of the SVCN project are illustrated in Figure 6 below:

Figure 6. SVCN Strategic Route Map²



Abingdon LCWIP (2023)

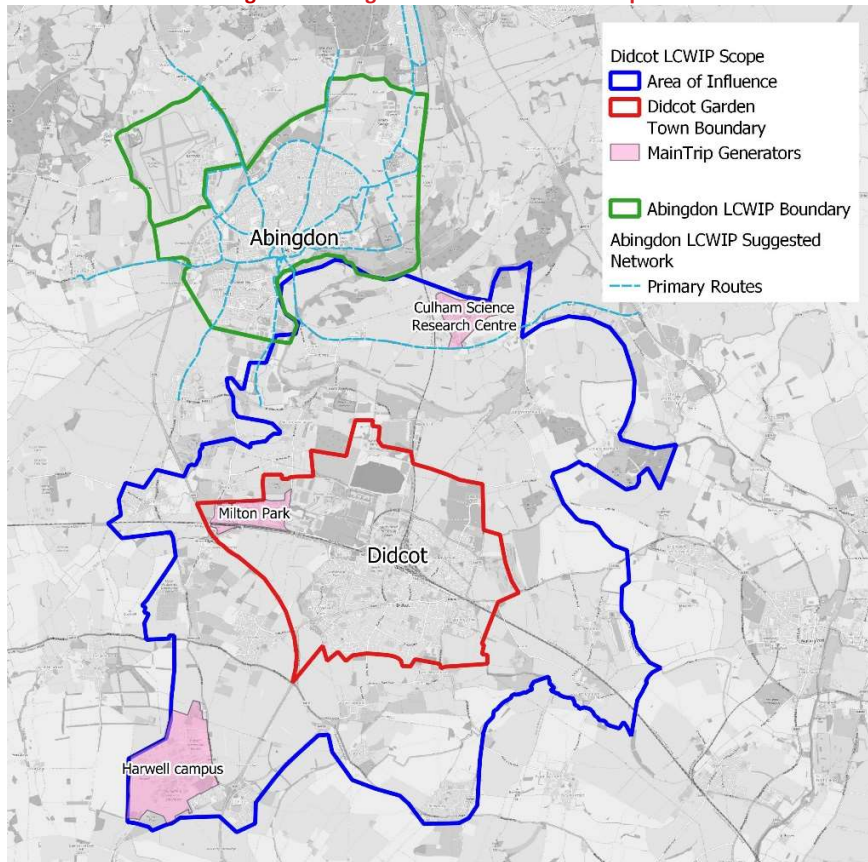
2.5.6 The Abingdon LCWIP was developed in 2022-2023 to provide a “wish-list” of active travel infrastructure improvements to which central government funding and local finding sources (such as developer contributions) should be applied when the opportunity arises.

2.5.7 This community-led LCWIP follows the Government guidance and presents the evidence for a cycle network and a core walking zone. The evidence supporting this LCWIP indicates that levels of cycling in Abingdon are already high relative to much of the UK. This provides a reasonable expectation that the town has the potential for very high levels of cycling if adequate infrastructure is provided to make cycling accessible and attractive to all.

2.5.8 Given the proximity to Didcot and the similar size of the urban area, the LCWIP provides a blueprint for Didcot LCWIP. In addition, some of the Primary routes of the Abingdon LCWIP fall within the Didcot Garden Town area of influence, as such the Didcot LCWIP ensures continuity and connectivity between the two plans.

² https://www.oxfordshire.gov.uk/sites/default/files/file/roads-and-transport-major-projects/science_vale_cycle_network_0.pdf

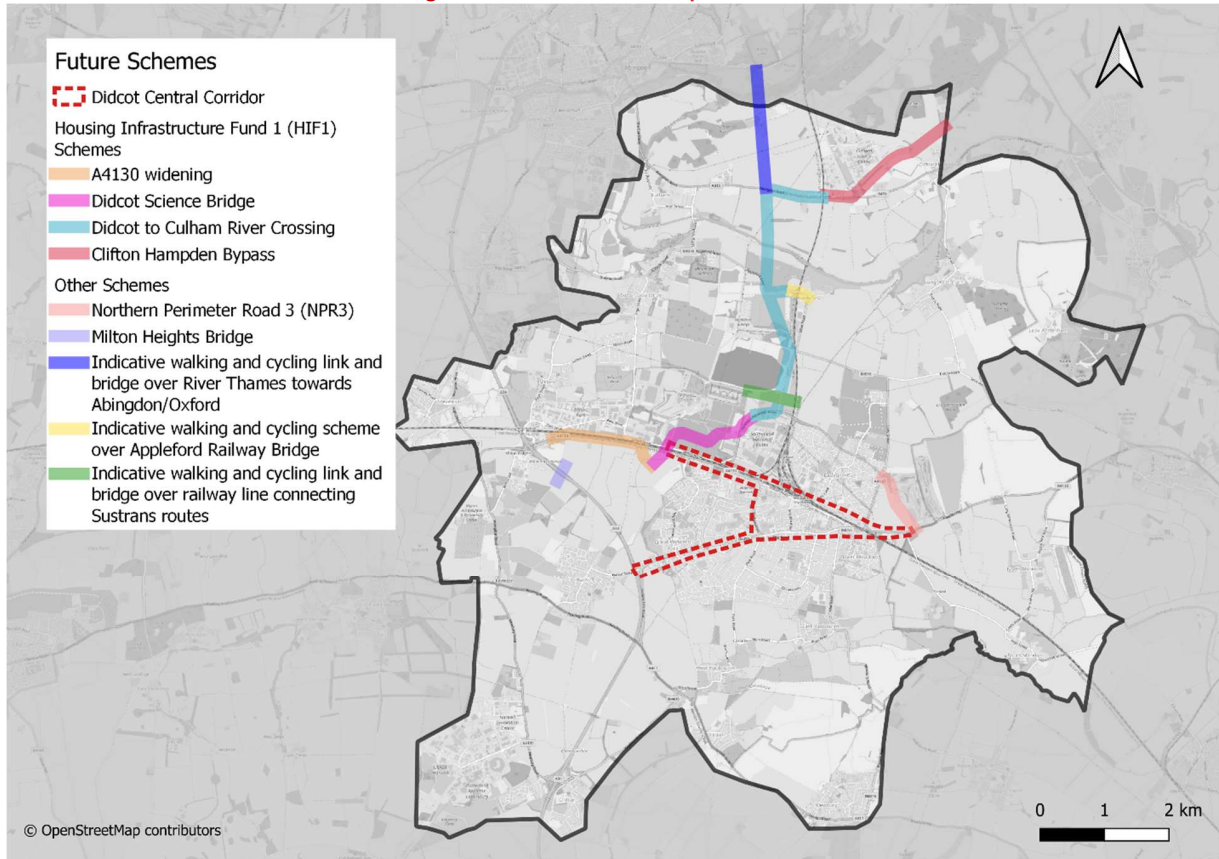
Figure 7. Abingdon and Didcot LCWIP scope



Didcot Future Transport Schemes

2.5.9 A map summarising future transport schemes within Didcot is shown below. The following sections provide more information for each of the scheme.

Figure 8. Didcot Future transport schemes



Didcot Garden Town Housing Infrastructure Fund (HIF1)

2.5.10 The proposed HIF1 scheme is complex and formed of multiple elements. It is the cornerstone of a future wider active travel network that addresses the existing severe severance to walking and cycling created by road, rail and river in the Didcot and surrounding areas. It is the central ‘puzzle piece’ that unlocks a predominantly off-road walking and cycling route from Oxford to Harwell Science and Innovation Campus (and further afield in both directions) via Kennington, Radley, Culham Science Centre, multiple rail stations, and Didcot.

2.5.11 The HIF1 Transport Assessment (September 2021) describes the proposed scheme and the non-motorised users (NMU) facilities proposed for each of the 4 scheme elements. Relevant text from the Transport Assessment has been reported below. For more details, including cross section drawings, please refer to the Transport Assessment and the General Arrangement drawings that can be found on OCC on-line planning portal (planning reference: R3.0138/21).

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“The Scheme is designed to improve access to future housing and employment growth in the local area, including access by walking, cycling and public transport. The Scheme is policy-backed and is the cornerstone of mitigation for the planned growth in the area. The Scheme does not aim to provide unlimited highway capacity for cars, or to remove all congestion; it forms part of a balanced transport strategy which also provides high-quality walking and cycling infrastructure, helping to engender modal shift to more sustainable modes.”

○ A4130 Widening

“Along the length of this section of the Scheme, dedicated two-way, off-carriageway, cycling and walking facilities will be provided. East of the Milton Gate junction, the Scheme will include a shared, cycle and footway adjacent to the eastbound and westbound carriageways. This will link to the existing NMU only Backhill Tunnel, and extend around the northern side of Backhill roundabout, where an inline Toucan crossing (east of the roundabout) will be provided allowing users to cross both carriageways. Dedicated cycling and walking facilities and raised Parallel crossings will also be included around the southern side of Backhill roundabout. The existing toucan crossing by Backhill Tunnel will be replaced by an in-line Toucan crossing over the new dual carriageway to the west of the new roundabout. To the east of Backhill roundabout, a dedicated two-way cycleway and new footway will be provided to the south of the widened and new sections of the road, up to and including the Science Bridge roundabout, and will continue over the Science Bridge.

A shared walking and cycling crossing will be included at the access to the Valley Park development (western access). Additionally, a shared crossing will be provided across both carriageways, which will provide access to the eastbound bus stop (with bus shelter and cycle stands on the southern side). A Toucan crossing will be included across the new A4130 immediately south of the Northern roundabout. This will provide access to the existing shared path for cyclists and pedestrians along the current alignment of the A4130 linking to Didcot.”

○ Didcot Science Bridge

“The SBLR will be a single carriageway, with segregated footways and bi-directional cycleways on both sides of the road for most of its length. Various accesses are planned off the road alignment for the proposed development in the power station site (P15/S1880/O and P15/V1304/O). Other works required include the diversion of a watercourse, which will cross underneath the new road in a culvert, and provision of formal Non-Motorised User (NMU) crossings, including a toucan crossing where a National Cycle Route crosses the road alignment.

A dedicated two-way cycleway and adjacent footway will be provided over the Didcot Science Bridge on the eastern side of the bridge. East of the Science Bridge and northern approach embankment dedicated bi-directional cycleways and adjacent footways are to

be provided on both sides of the road. Three parallel crossings will allow users to cross the Science Bridge Link Road and there will be one Toucan crossing. Where the Scheme ties-in with the existing A4130 Northern Perimeter Road, a Toucan crossing will be provided to allow those using the north-south bridleway (and National Cycle Network route 5) to safely cross the new road. East of this crossing, a dedicated two-way cycleway and adjacent footway will be located away from the carriageway. The existing footway on the southern side of the A4130 will be realigned to the new carriageway.”

○ Didcot to Culham River Crossing

“Shared-use footway/cycleways are proposed at the Collett roundabout. An in-line Toucan crossing on eastern arm, raised parallel crossing on southern arm, and uncontrolled crossing points on the other two arms.

North of the Collett roundabout, there will be dedicated, off-road, two-way cycleways and footways located either side of the highway. The facilities adjacent to the northbound lane will cease at a parallel crossing. The facilities provided alongside the southbound lane will continue to the northern extent of the Scheme at the A415. There are proposed two parallel crossings and one toucan crossing on the southern section of the new road.

After the point at which the Scheme forms a junction with the B4016 Appleford Road, the cycleway and pedestrian footway will continue along the current alignment of the B4016. There will be an uncontrolled crossing immediately north of the B4016 junction. This will connect with a shared-use pedestrian and cycleway facility, which will extend alongside the northbound lane of the Scheme and continue beside the westbound lane of the B4016 from the Sutton Courtenay roundabout. This crossing serves the new bus stops and connections with existing PROWs. The bus stops have shelters and cycle stands.

A shared facility will also be located alongside the eastbound lane of the B4016, which will be accessed via a Toucan crossing located across the arm for the River Thames bridge. This route offers connection towards Sutton Courtenay.

A shared-use cycleway and pedestrian footway will be created adjacent to the eastbound lane of the B4106, in order to connect the Scheme with the village of Appleford.

There will be dedicated, off-road, two-way cycleway and footway facilities located adjacent to the southbound lane on the bridge across the River Thames. These will continue to the northern A415 roundabout, where they will extend east adjacent to the westbound lane of the A415. This will continue as a shared use facility along the southern side of the A415 to connect with the existing provision at Culham Science Centre. An in-line Toucan crossing is proposed on the eastern arm of the new roundabout, which connects to an improved segregated two-way cycleway and footway on the northern side of the A415, separated from the carriageway. The northern arm of the roundabout is a stub to serve a future housing development allocated in the adopted SODC Local Plan. A raised parallel crossing will be provided across the northern arm of the roundabout.”

○ **Clifton Hampden Bypass**

“A dedicated, off-road, two-way cycleway and footway will be provided adjacent to both carriageways of the A415, west of the roundabout.

There will be several shared and segregated cycleways and footways, with crossings, created around the roundabout with the CSC and Clifton Hampden Bypass. A new segregated cycleway / footway is proposed to link Culham Station and CSC, in anticipation of heavy NMU demand between these two points. Three raised parallel crossings are proposed to maintain direct NMU links. The stopped-up existing A415 carriageway will be used as a shared-use footway / cycleway, which links up to a new shared-use footway / cycleway on the south side of the A415. This new route extends west across the existing rail bridge and into the Didcot to Culham River Crossing scheme. The existing main entrance to the CSC will be repurposed as a shared-use cycleway / footway. A toucan crossing is proposed where this route meets the bypass, which also serves a pair of new bus stops with shelters and cycle parking.

Along the bypass, a shared-use cycleway / footway will be provided along the north side of the road. Several crossings across adjoining roads will be provided and links to existing footpaths will be provided. Additionally, two uncontrolled crossings over the bypass will be provided.

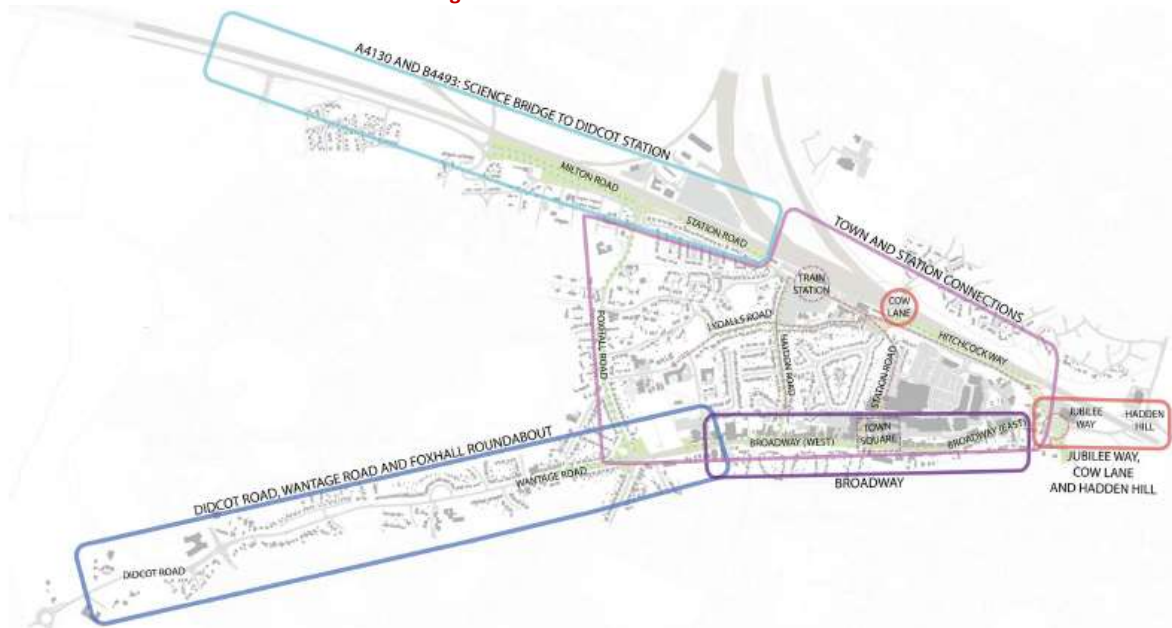
A shared-use cycleway / footway will be provided along the west side of the realigned B4015 to connect in with the northern end of Clifton Hampden Village.”

Didcot Central Corridor

2.5.12 The Didcot Central Corridor scheme aims to improve street spaces and placemaking, helping combine transport and connectivity with public realm. As can be seen in Figure 9 the scheme focuses on improving three important routes and one area, the ‘Gateway Spine’, ‘Cultural Spine’ and Foxhall Road, and the Town Centre.

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Figure 9. Didcot Central Corridor



- 2.5.13 Measures being investigated include public open space improvements and improved walking and cycling infrastructure.
- 2.5.14 Didcot’s **Cultural Spine** extends along Didcot Road, Wantage Road and Broadway, which includes Cornerstone Arts Centre. The masterplan proposes a series of public spaces to serve as a platform for community events and activities, accommodating a number of shops, cafes and nightlife establishments. The street will incorporate high quality cycle routes to serve as a commuting route connecting to Harwell Science and Innovation Campus and village.
- 2.5.15 Didcot’s **Gateway Spine** comprises of A4130, B4493, Station Road and Hitch Road. The spine will serve as the gateway to the town. As a key movement corridor it will seamlessly connect east and west parts of the town working equally for all modes of transport. To the east, it will accommodate a landscaped arrival space at the station creating a new image for the town. To the west, it will provide a ‘gateway’ development (Didcot Gateway) to sign-post the town and Milton Park employment area. The masterplan allows for the gateway spine to accommodate cycling and new methods of transport.

Northern Perimeter Road 3 (NPR 3)

- 2.5.16 The NPR3 scheme would extend the existing A4130 Didcot Northern Perimeter Road (NPR), linking the A4130, Abingdon Road and B4016 junction to the A4130 and Hadden Hill junction. The scheme includes cycle infrastructure, pedestrian infrastructure and wayfinding measures as part of OCC measures to support housing delivery in the area.

Milton Heights Bridge

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- 2.5.17 The scheme would provide a new walking and cycling bridge over the A34 south of the Milton Interchange, as shown on route 4 on the Science Vale Cycle Network Strategic Route Map. It would reduce the severance to walking and cycling created by the A34, helping to conveniently link multiple origins and destinations for a range of journey purposes.

2.6 Didcot LCWIP relation with policy and plans

Relationship with Local Transport and Connectivity Plan (LTCP)

- 2.6.1 Development of LCWIPS is one of the supporting strategies (LTCP Policy 3) contained within Oxfordshire County Council’s Local Transport and Connectivity Plan (LTCP). Area Transport Strategies (LTCP Policy 52) is another strategy that the LTCP promotes to improve local connectivity. The Didcot Area Travel Plan is in development as a ‘part 2’ of the LTCP. This document will set out a wider transport strategy for all modes. The Didcot LCWIP will feed into and become a key component part of the Didcot Area Travel Plan, thereby becoming a component part of the Local Transport and Connectivity Plan.

Relationship with other walking and cycling strategies

- 2.6.2 There is some overlap between the Didcot LCWIP network and the Science Vale Active Travel Network (SVATN) (originally known as the Science Vale Cycle Network). The two projects are complementary, and care has been taken to incorporate the relevant sections of the SVATN into the LCWIP proposals, in order to help seek funding for improvements to these routes. As work progresses on both the development of LCWIP schemes and the development of the SVATN, information will be shared between the two projects and potential synergies will be explored (e.g., opportunities to deliver complementary schemes at the same time in order to create longer active travel routes which are continuous and high-quality).
- 2.6.3 Work is underway at Oxfordshire County Council to develop a county-wide Strategic Active Travel Network (SATN) (which is promoted in LTCP policy 4). As part of the information gathering phase of this project, the SVATN draft has been reviewed for opportunities to create wider strategic active travel links. It is anticipated that some links in the Didcot LCWIP network will become links in the SATN (which may have an impact on the priority of improvements to these links relative to other parts of the LCWIP network).

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3. BASELINE CONDITIONS

3.1 General

- 3.1.1 Understanding how people currently travel within Didcot, and thus their potential to switch to active travel is an important aspect of the LCWIP. This section of the report provides a summary of existing travel patterns within the Didcot study area.
- 3.1.2 Didcot is located approximately 10 miles south of Oxford and lies within the County of Oxfordshire, on the border of South Oxfordshire District and Vale of White Horse District (with majority of the built up area in South Oxfordshire). The town is situated to the east of the A34 trunk road (running north-south) which connects with the M4 (to the south) and the M40 (to the north east), which are all part of the strategic road network (SRN). Didcot is also an established interchange on the Great Western Railway mainline and the Cherwell Valley Line. The rail and road linkages ensure connections to London (and Heathrow Airport), Reading, Oxford, Bristol, Birmingham and beyond.
- 3.1.3 The main roads running through Didcot that connect the town to the A34 and the wider strategic road network include the A4130, B4493, Broadway and Station Road. All these roads are under pressure at peak times, and opportunities are being sought to promote a mode shift in favour of walking and cycling to help alleviate such pressures. Many of the roads create severance to walking and cycling.
- 3.1.4 According to the most recent 2021 Census data, Didcot has a population of 31,357 people and has seen an increase of 16% from the last Census data, which was conducted in 2011.
- 3.1.5 Didcot itself is fairly compact, with the main town being around 3-3.5km across both east/west and north/south. The Great Western Railway mainline runs east-west through the town, immediately north of the town centre, severely severing north-south movements. There are few opportunities for people to travel over or under the rail line, and the walking / cycling provisions are generally poor. The same is true for the north-south Cherwell Valley Line, which creates severance to east-west movements in the northern Didcot area, especially for walking and cycling. Further to the north, the River Thames flows approximately west-east, creating further severance to walking and cycling in the north-south orientation due to the historic roads only providing two narrow, listed bridges (at Culham and Clifton Hampden) across the river, which have very poor or no facilities for pedestrians, and none for cycles.
- 3.1.6 The LCWIP also covers, to varying levels of detail, surrounding villages of:
- Appleford,
 - Blewbury,
 - Chilton,
 - Clifton Hampden,
 - Culham,
 - East Hagbourne,
 - Harwell,

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- Little Wittenham,
- Long Wittenham,
- Milton,
- Milton Hill,
- North Moreton,
- Rowstock,
- South Moreton and
- Steventon,
- Sutton Courtenay,
- Upton,
- West Hagbourne.

3.1.7 These are mostly within 6km of Didcot Town Centre, to which they are generally linked to by the local road and bus network.

3.1.8 According to local authorities officers and members of the steering group, there is a perception of issues around a lack of connectivity between ‘existing’ Didcot and the newer housing developments within and on the outskirts of the town. Consequently, there is a desire locally to improve the connectivity between different parts of Didcot as well as a desire to improve the town centre and established parts of Didcot. There is also a priority to improve connectivity by sustainable transport modes to and from the surrounding villages as part of the area of influence in the Didcot Garden Town masterplan. From a transport perspective this can be done through sustainable transport measures to increase connectivity and accessibility between different parts of the town, which in turn will lead to improved community and social connectivity and wellbeing.

3.1.9 Didcot lies at the heart of ‘Science Vale’, the UK’s leading area for science, technology, innovation and research. Science Vale comprises four main employment centres that are shown in Figure 10. Harwell Science and Innovation Campus and Milton Park, both awarded Enterprise Zone status in 2012, are in the Vale of White Horse District (VoWHDC). Harwell Science and Innovation Campus is the gateway to the UK space sector accommodating a cluster of space related businesses. Milton Park is renowned for bioscience and technology. Milton Hill is a smaller employment site in VoWHDC. The site was originally allocated for employment use within the Vale of White Horse Local Plan 2011, but is no longer allocated in the Local Plan 2031 Part 2. Within SODC, the Culham Science Centre (CSC) is the focus for European fusion research and technology and is also the UK’s research centre for autonomous and connected vehicles. Employment in CSC is expected to increase with additional land for employment allocated in the adopted Local Plan.

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Figure 10. Science Vale employment sites



3.1.10 Another site of Science Vale is the Didcot Growth Accelerator Enterprise Zone within SODC . It comprises five sites totalling 95 hectares with planning consents, some unencumbered and ready for development around Didcot. These sites can deliver 3.25 million sq. ft of new business space and are expected to accommodate over 8,500 jobs.

3.1.11 Didcot was approved as a Garden Town in 2015, and the Didcot Garden Town Delivery Plan (DGTDP) was prepared in 2017 to identify the vision, masterplan and opportunities to recreate Didcot as a Garden Town. While not part of the Local Development Framework suite of planning policy documents, the Didcot Garden Town Delivery Plan was adopted by both district councils in 2017 and the updated Delivery Plan programme approved by both Cabinets. The delivery plan was then revised in 2022 to provide a refined list of delivery projects which will focus on providing community benefits, a retail recovery strategy, encourage healthy lifestyles and help to tackle climate change.

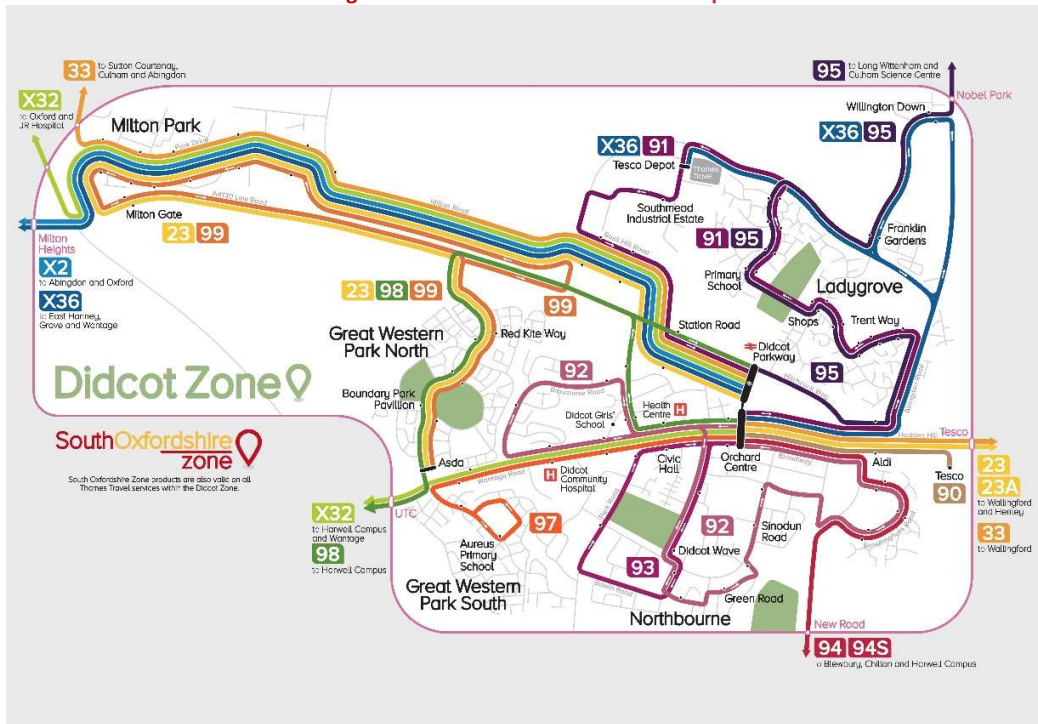
3.2 Public Transport

3.2.1 Didcot has one railway station, Didcot Parkway. It is served by the Great Western Railway which provides main line services from London Paddington to the south-west of England and Wales, and the Cherwell Valley Line providing services to Oxford, the Cotswolds and the north. Appleford and Culham Railway Stations are located to the north of Didcot, on the Cherwell Valley Line.

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3.2.2 The bus services along the two main roads running through Didcot, the A4130/Station Road and the B4493/Broadway, operate every 10 to 20 minutes. Figure 11 highlights the main bus routes running through Didcot.

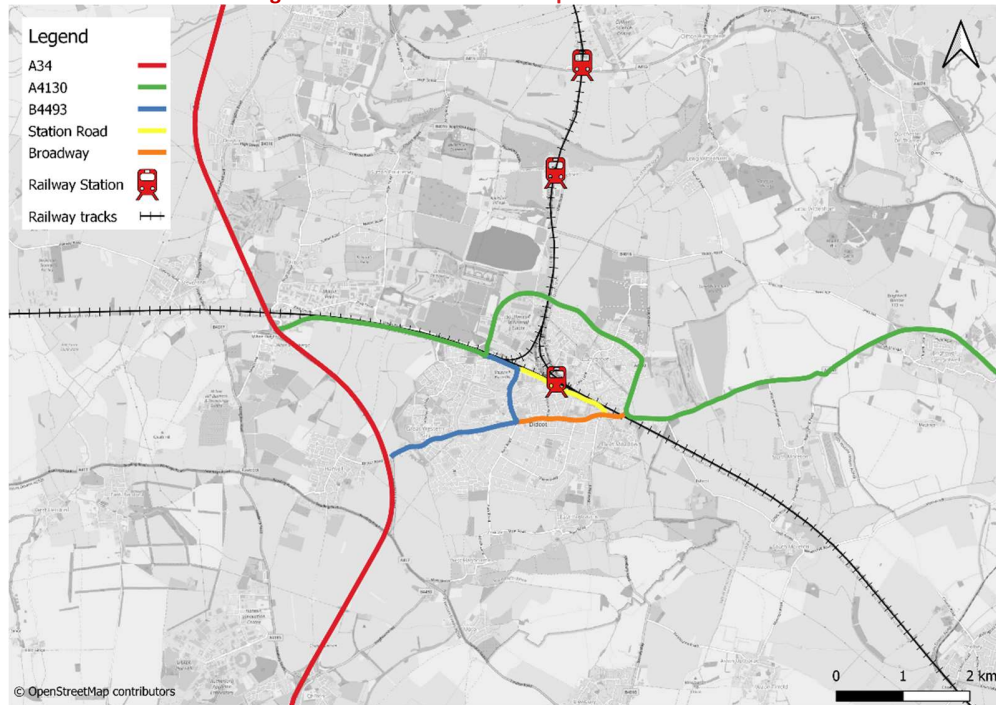
Figure 11. Didcot bus route map



3.3 Road Network

- 3.3.1 As previously stated, Didcot is situated to the east of the A34, which is part of the Strategic Road Network. The A4130, which connects to the A34 via the Milton Interchange, runs into Didcot parallel to the Great Western Railway line and then circulates the perimeter of the Southmead Industrial Estate and Ladygrove residential area.
- 3.3.2 As previously stated, the main roads running through Didcot, the A4130, B4493, Broadway and Station Road, are all under pressure at peak times, and opportunities are being sought to promote a mode shift in favour of walking and cycling.
- 3.3.3 The LCWIP will need to consider how these roads can be effectively included in the walking and cycling network, whether as routes themselves, or in ensuring that they do not cause points of severance.
- 3.3.4 A map illustrating key aspects of the transport network in Didcot is shown in Figure 12.

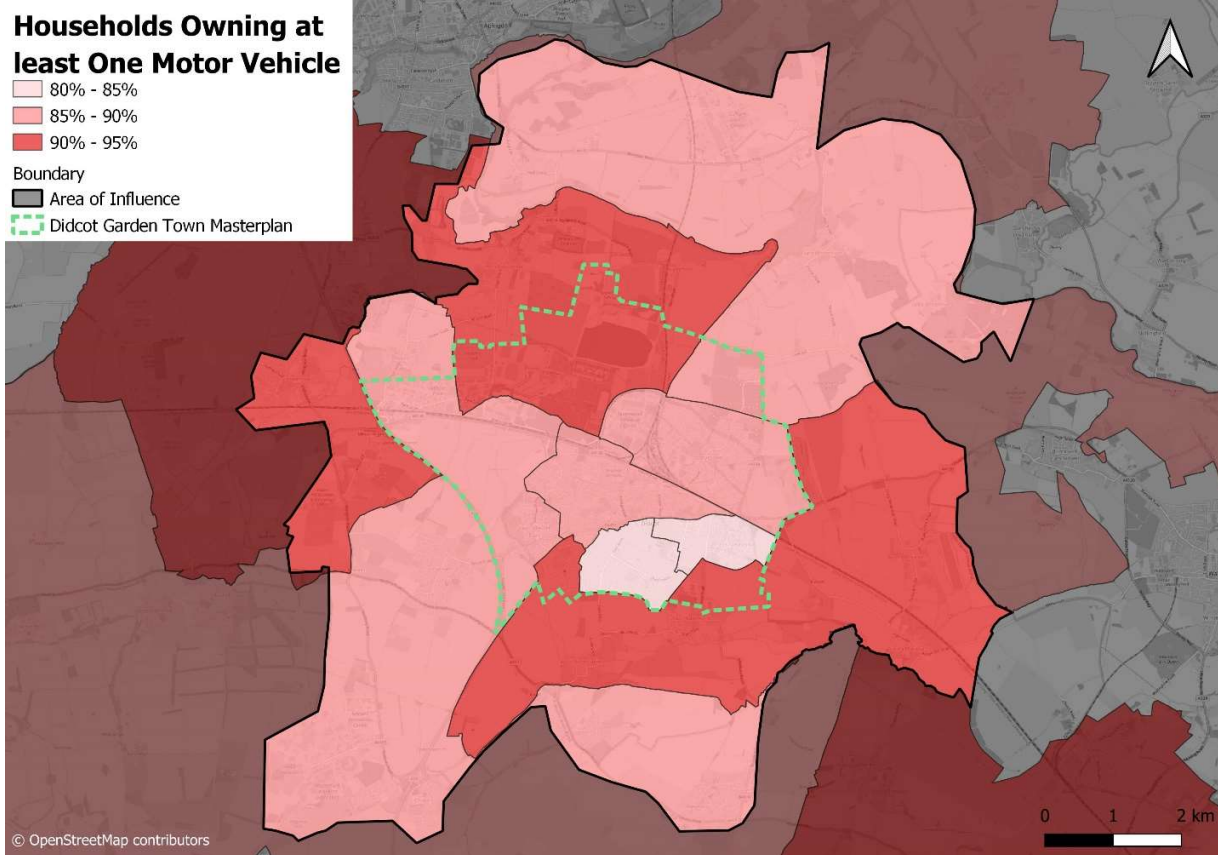
Figure 12. Didcot transport network



3.4 Car Ownership

3.4.1 According to the 2021 Census, Didcot town centre has a lower car ownership level than the wider area of influence, with two MOSAs recording the lowest percentage of households with at least one car (80% and 83%). All other MSOAs record higher car ownership level, with up to 92% of households with at least one car.

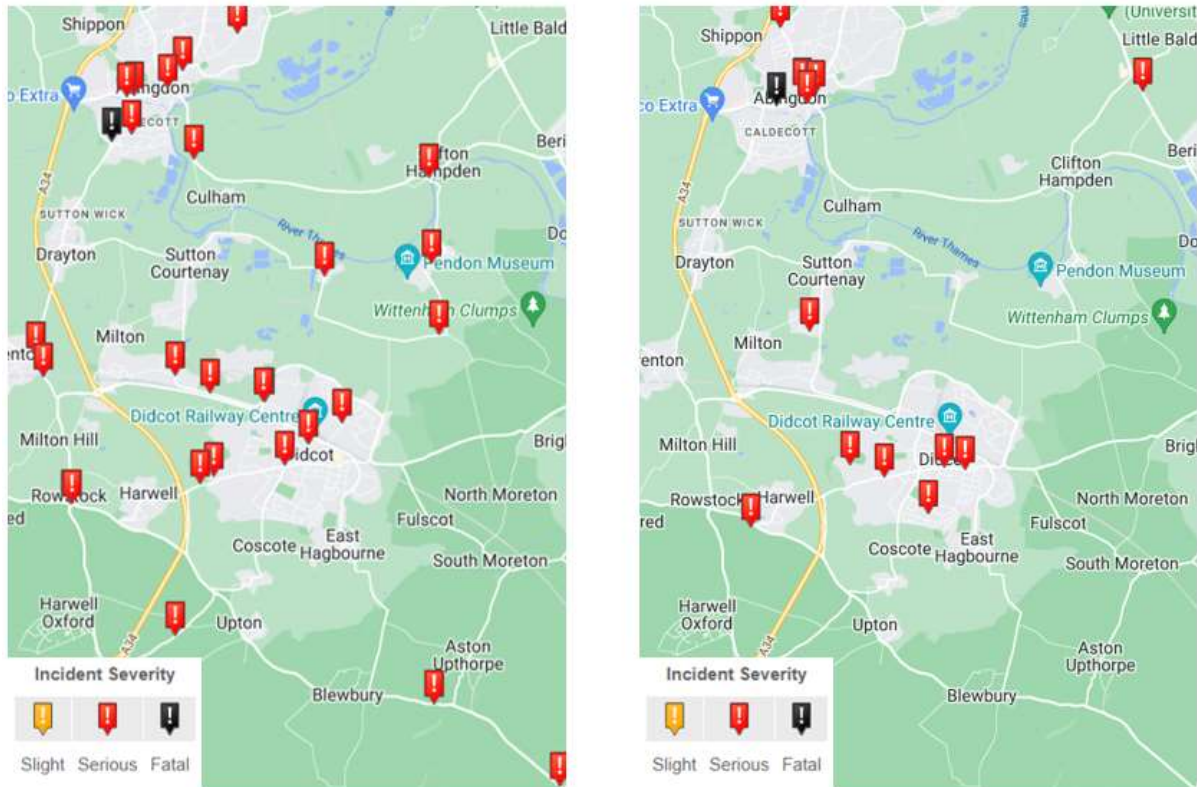
Figure 13. Percentage of households that own at least one car by Middle Layer Super Output (MSOA) in Didcot



3.5 Collisions

- 3.5.1 Collision data for cyclists and pedestrians is summarised in Figure 14. This data is taken from the Crashmap database for the 5-year period 2017-21. Data screening has been limited to fatal and serious injuries only, to assist in identifying local cluster patterns. Slight accidents are nonetheless an important indication of dangers which may put people off walking and cycling.
- 3.5.2 There were a total of 24 reported cycle casualties and 15 pedestrian casualties in this period. The only notable clusters were outside of the LCWIP study area and towards Abingdon. It is worth noting that many minor collisions and near misses often go unreported. Crashmap does not take account of these, but it is worth considering that they do play a significant role in deterring people from active travel.

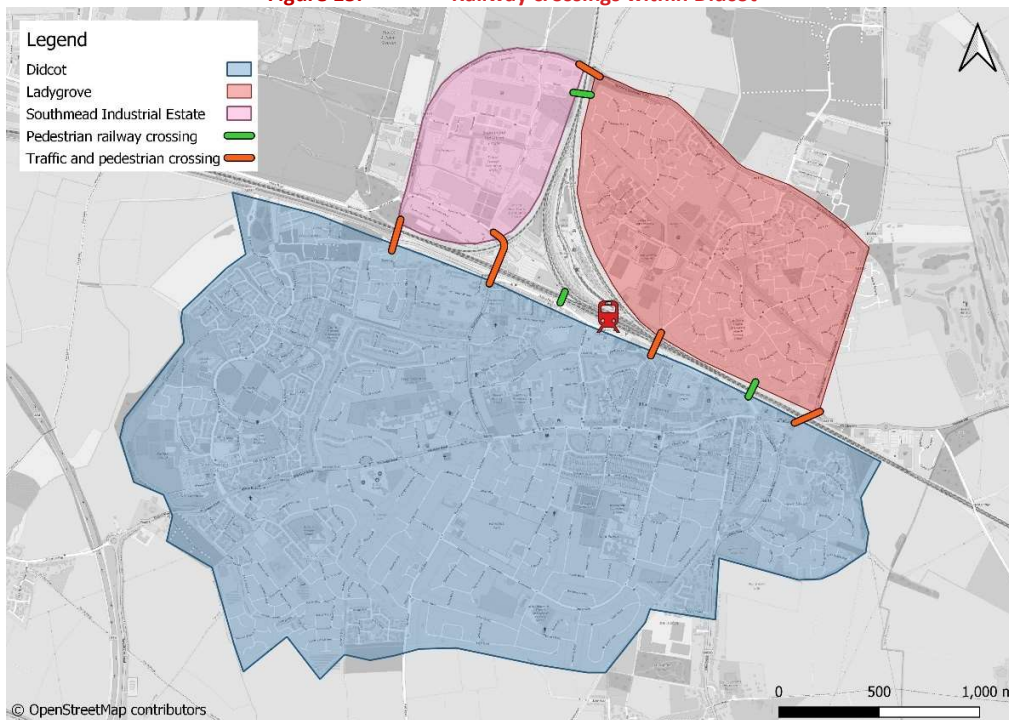
Figure 14. Collisions resulting in a cyclist casualty (left) and pedestrian casualty (right)



3.6 Walking Network

- 3.6.1 The town of Didcot has a dense network of streets in a relatively compact, mainly residential area, facilitating easy walking journeys, aided by the generally flat topography. Footways around the town are mixed in quality, the majority follow the route of the road network with limited solely pedestrianised areas. The central section of the town, comprising the core retail area is primarily centred around car travel with only a small area dedicated to pedestrians.
- 3.6.2 As can be seen from Figure 15, Didcot can be split into three sections by the railway. Much of the town is located south of the Great Western Railway, whilst to the north, the residential area of Ladygrove and Southmead Industrial Estate are separated by the railway line to Oxford.

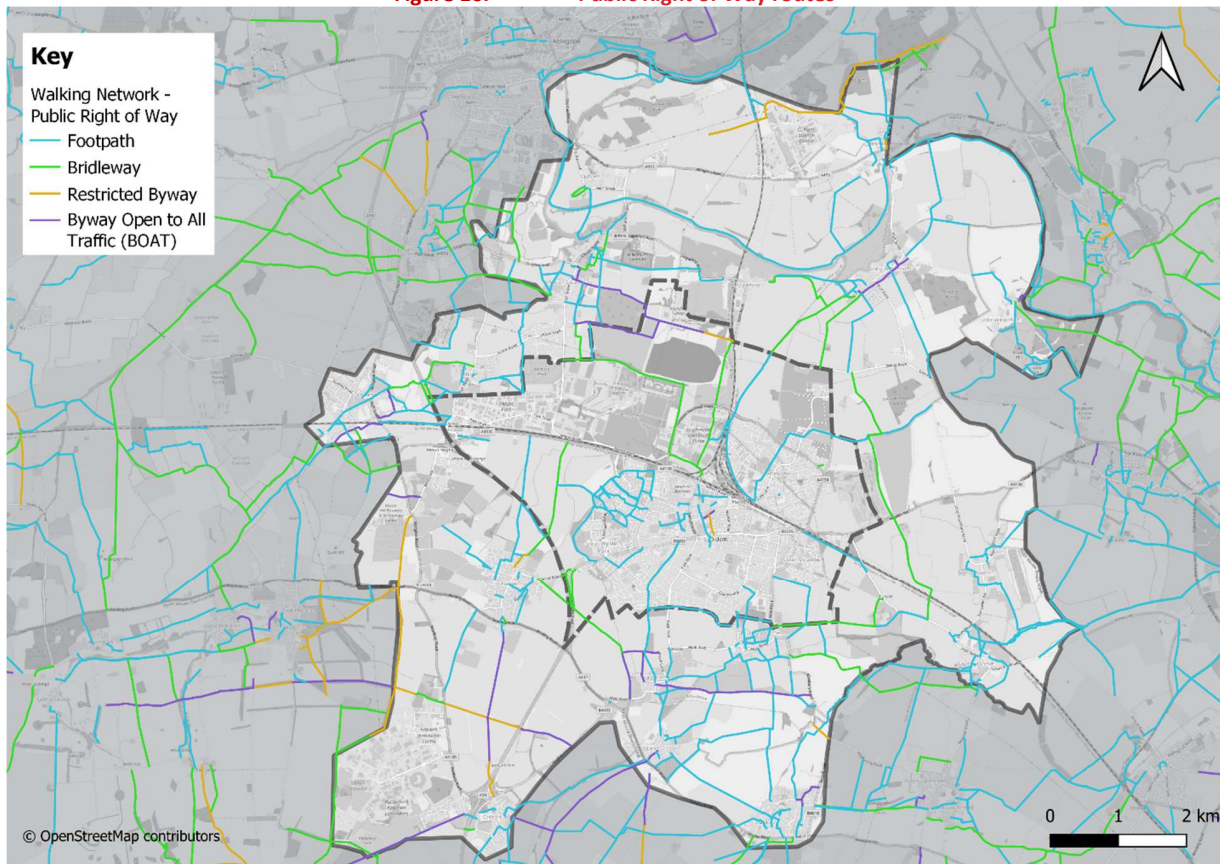
Figure 15. Railway crossings within Didcot



- 3.6.3 Outside of the town centre the density of the walking network reduces, and the most direct routes may often require walking alongside the busy roads that lead in and out of the town centre with no footway.
- 3.6.4 Beyond Didcot, some of the surrounding villages considered in this LCWIP have off-road pedestrian links to the towns, although Public Right of Way footpath quality is varied and often not direct. Footway quality within the villages is also varied, in places they are wide and separated from the carriageway by grass verges, in others they are narrow, or are only in place to one or neither side of the carriageway.
- 3.6.5 Off-road bridleways and byways are also available both for people walking and cycling. Similarly to the footpaths, their quality and maintenance status varies. In some cases, they may only be accessible by off-road cycles with tyres suitable for poor conditions. The Public Right of Way network around Didcot is shown on the map in Figure 16, some of the routes identified in this LCWIP utilise sections of these PROWs as seen in later section of this document and appendices.

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Figure 16. Public Right of Way routes



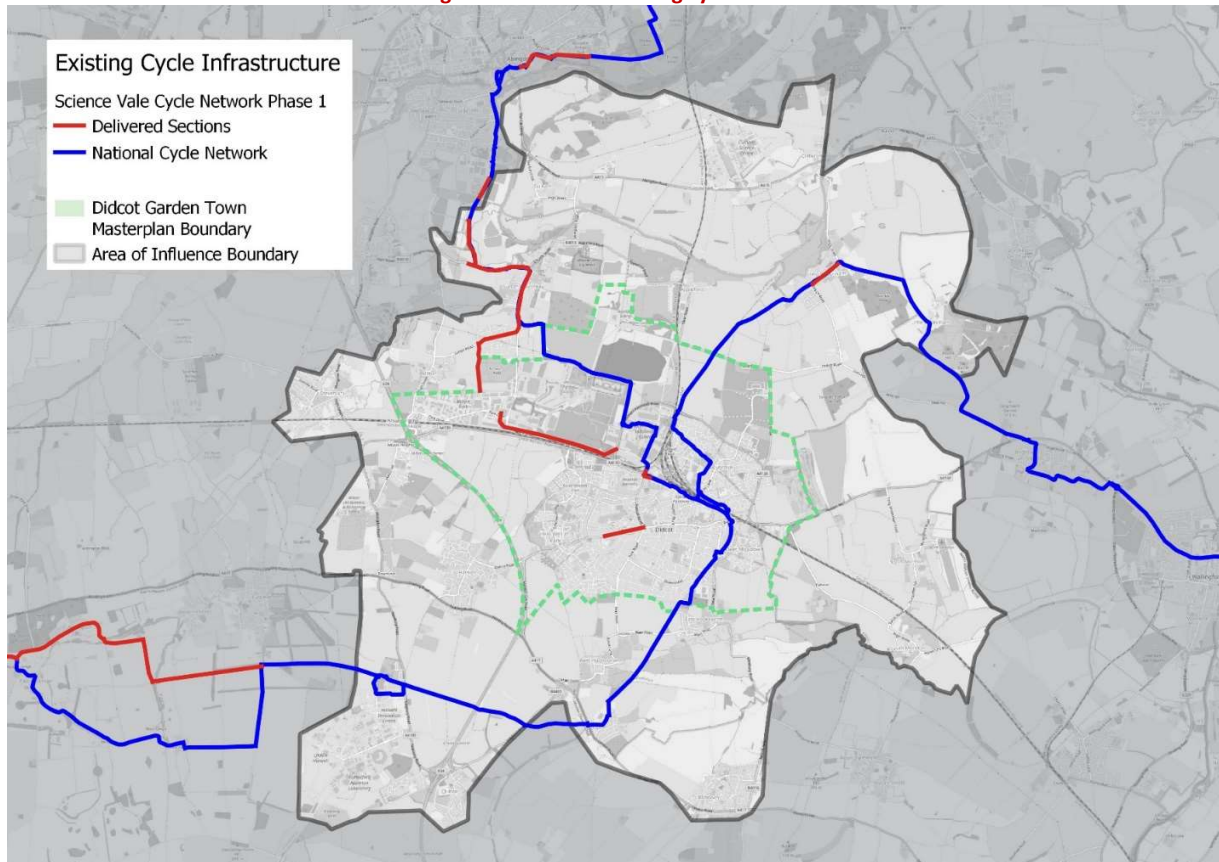
3.7 Cycle Network

3.7.1 Some of the existing Didcot cycle infrastructure is highlighted in Figure 17 which shows the Sustrans National Cycle Network Routes and delivered sections of the OCC Science Vale Cycle Network Phase 1 project. Note that the plan below is not an exhaustive compilation of all cycle infrastructure in the area. It illustrates that whilst there are three distinct routes into the town centre, the majority of Didcot and the area of influence is lacking cycling infrastructure. There are various sections of cycle infrastructure around the LCWIP area, with notable continuous routes of NCN5 and NCN 544. However, despite there being cycling facilities throughout Didcot, there is a lack of connection between these routes, including a lack of radial connections between the town centre and peripheral areas. Much of the town centre and more rural areas are missing infrastructure.

3.7.2 In terms of cycle parking, a Cycle Hub in Didcot Parkway station, delivered in 2021, provides good quality cycle parking. The hub has a capacity of 600 parking spaces within two tier racks, provides cycle repair facilities and space for non-standard cycles.

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Figure 17. Existing cycle routes



National Cycle Network Routes

3.7.3 Sustrans are the custodians of the National Cycle Network and in 2018 they published the ‘Paths for Everyone’ report which summarises the recommendations resulting from a comprehensive audit and review of the entire Network. Sustrans’ vision is a UK-wide network of traffic-free paths for everyone, connecting cities, towns and countryside, loved by the communities they serve. The two main priorities are to make the Network safer and more accessible for everyone.

3.7.4 The National Cycle Network Routes serving Didcot are listed in Table 3.

Table 3. Didcot National Cycle Network

Route Number	Description
5	Route 5 begins in Reading and follows the northern half of the Thames Valley cycle route as it crosses the Chiltern Hills. It then passes through Wallingford, Didcot and Abingdon on the way to Oxford.
544	The route into Didcot is a former railway line. This 18km route links between Harwell and Wantage via Didcot and provides a traffic-free/low-traffic alternative to the main road network.

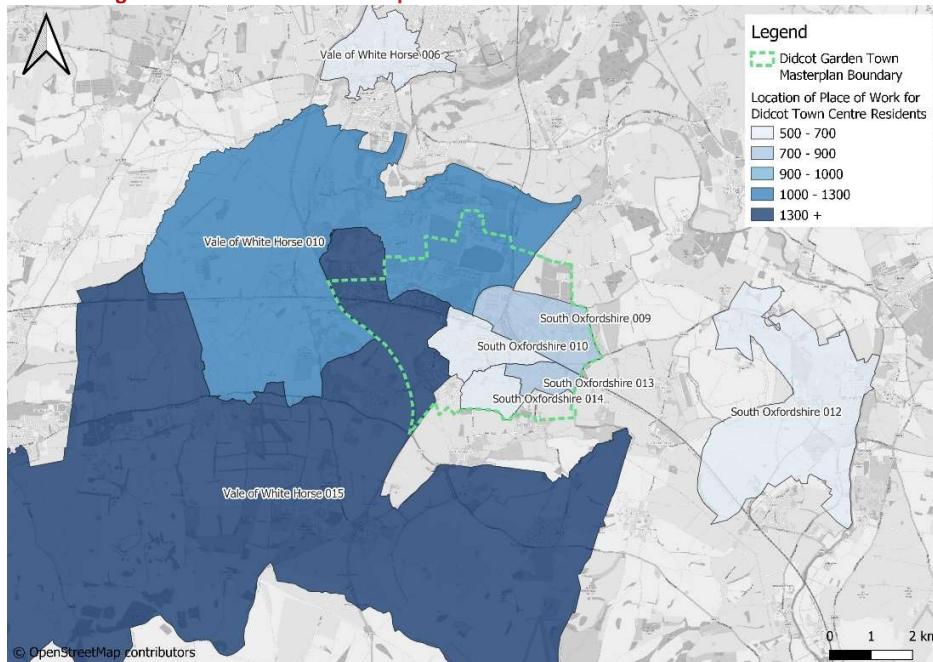
3.8 Travel Habits

- 3.8.1 The most consistent measure of modal split is the journey to work which is reported every 10 years in the Census. Census 2021 data is not being utilised for journey to work data in this analysis as at the time of data collection the UK was still subject to Covid lockdown restrictions and working from home was recommended. Therefore the 2011 Census collected travel to work data by mode and by district.
- 3.8.2 The total inflow of people coming to Didcot town centre (MSOA South Oxfordshire 009, 010, 013 and 014) for work was 2,418, while the total outflow was 7,706. Furthermore, a number of residents (2,948) remained in the town centre to work. The locations where the majority of Didcot town centre residents work is depicted in the Table 4 and Figure.

Table 4. Location of place of work for Didcot town centre residents

LOCATION	NUMBER OF COMMUTERS
Vale of White Horse MSOA 015	1,564
Vale of White Horse MSOA 010	1,006
Vale of White Horse MSOA 006	612
South Oxfordshire MSOA 012	517

Figure 18. Location of place of work for Didcot town centre residents

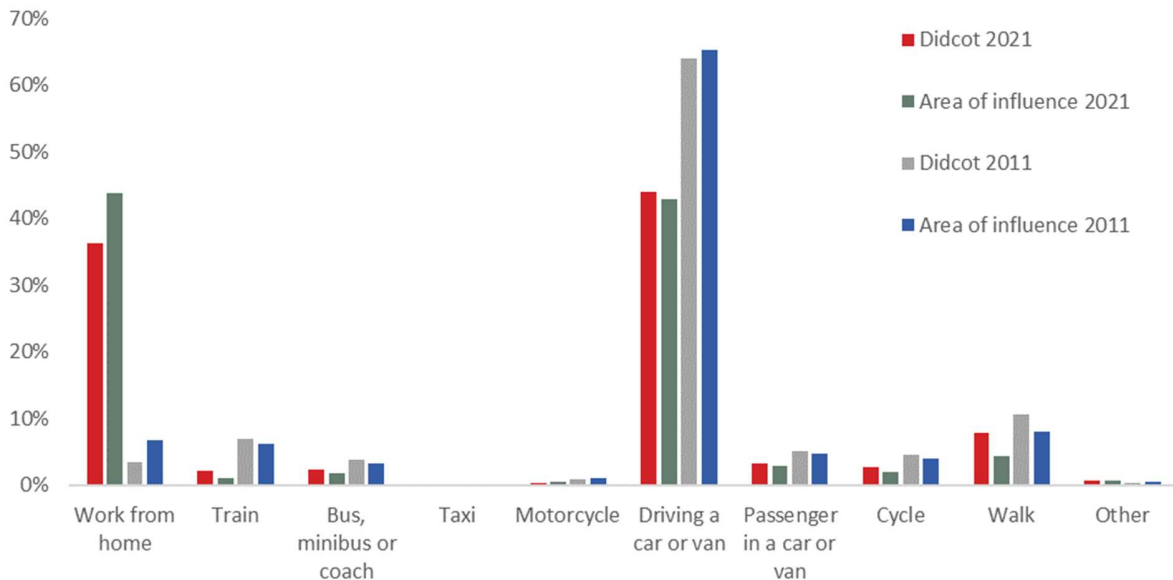


- 3.8.3 As can be seen in Table 4, the majority of residents work in VOWH MSOA 015 and 010; Harwell Science and Innovation Campus is located within VOWH MSOA 015 and Milton Park is located within VOWH MSOA 010 and 015.
- 3.8.4 A breakdown of how people travel to work in Didcot and the area of influence, according to the 2011 and 2021 Census, is depicted in Figure 19. In both 2011 and 2021, travelling to work in Didcot was predominantly undertaken by driving a car or van (64% in 2011 and 44% in 2021) as well as for people who live within the defined area of influence (65% in 2011 and 43% in 2021).
- 3.8.5 As can be seen in both Didcot and the area of influence, between 2011 and 2021, driving a car or van to travel to work has decreased by around 20%, however, this is in part due to the increase in people who were working from home during COVID-19 restrictions. Between 2011 and 2021 people working from home increased from 3% to 35% in Didcot and 7% to 44% within the area of influence.
- 3.8.6 According to the 2021 Census, the percentage of people that walk and cycle to work is 8% and 3% within Didcot, 4% and 2% within the area of influence and 8% and 2% within England and Wales. 2021 levels have slightly reduced since the 2011 Census, where the percentage of people that walk and cycle to work in 2011 was 11% and 5% within Didcot, 8% and 4% within the area of influence and 11% and 3% within England and Wales.
- 3.8.7 A breakdown of how people travel to work in Didcot and the area of influence, according to the 2021 Census, is depicted in Figure 19. Travel to work in Didcot is predominately undertaken by driving a car or van (44%); this is slightly higher for people who live outside of Didcot within the defined area of influence (43%).

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3.8.8 The current percentage of people that walk and cycle to work is 3% and 8% within Didcot, 2% and 4% within the area of influence, and 8% and 2% within England and Wales

Figure 19. Method of travel to work (2021)



3.9 Walking and Cycling Mode Share

3.9.1 The DfT has set a goal of half of short trips in cities and towns to be made by walking and cycling by 2030, but according to 2021 Census data, walking and cycling makes up only a small percentage of total trips to work in Didcot. As is shown in Figure 19, the current percentage of people that walk and cycle to work is 3% and 8% within Didcot, and 2% and 4% within the area of influence.

3.9.2 As the majority of travel to work journeys do not fall under the “short trip” category mentioned in the DfT goal, only travel to work journeys under 5km should be considered. As shown in Table 5, amongst short journeys under 5km within Didcot and the area of influence, cycling makes up 9% of the total mode share whilst walking makes up 20%. Even amongst journeys under 5km, driving is still the most common mode of travel with 58% of the total mode share.

3.9.3 Amongst all journeys under 10km, driving makes up 80% of the total mode share, walking makes up 7% and cycling only 4%. These distances could be easily completed by cycling, given relatively short journey times, with a 5km journey equating to a 15 minute cycle, and 10km being a 30 minute cycle. Whilst a 5km walking journey would take over an hour at an average walking speed (4.8km/hr), many shorter journeys that could be walked are also likely to be driven, noting that at an average walking speed around 2km can be covered in 25mins.

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Table 5. Travel to work mode share including distance

METHOD OF TRAVEL	ALL DISTANCES	UNDER 5KM	UNDER 10KM
Public transport (Train/Bus)	6%	5%	3%
Car	75%	58%	80%
Bicycle	4%	9%	4%
On foot	7%	20%	7%
Other	7%	8%	5%

3.9.1 The Active Lives survey from 2019-21 shows that the proportion of adults that cycle for travel at least once per month is 7.4% in South Oxfordshire and 9.9% in Vale of White Horse. The proportion of adults that walk, however, for travel at least once per month is 28.8% in South Oxfordshire and 30.4% in Vale of White Horse. This is similar to the proportion of adults that cycle for travel at least once per month in the South East of England Region, which is 6.5%, as well as the proportion of adults that walk for travel at least once per month, which is 33.8% in the South East³. South Oxfordshire and Vale of White Horse also has a very similar proportion of adults who do any walking or cycling, for any purpose compared to the average for the South East of England Region as shown in Table 6.

Table 6. Proportion of adults who do any walking or cycling for any purpose

LOCATION	ONCE PER MONTH	ONCE PER WEEK	THREE TIMES PER WEEK	FIVE TIMES PER WEEK
South Oxfordshire	82.7	75.5	52.3	35.1
Vale of White Horse	83.8	77.7	50.0	35.4
South East Region	81.6	74.7	48.6	35.7

3.9.2 South Oxfordshire and Vale of White Horse also has a very similar proportion of adults who do any walking or cycling, for any purpose compared to the average for the South East of England Region.

³ <https://www.gov.uk/government/statistical-data-sets/walking-and-cycling-statistics-cw>

3.10 COVID-19 Impact

- 3.10.1 The COVID-19 pandemic and associated lockdowns and restrictions have fundamentally changed day-to-day life for almost everyone. The impacts on transport have been particularly profound, with the number, type and mode of trips changing. Whilst some changes were likely temporary reactions to the situation, some are likely to become permanent changes to the way people travel.
- 3.10.2 According to research conducted by SYSTRA⁴; 17% of full and part time workers in 2020 stated they wanted to work from home more once COVID-19 travel restrictions were lifted. Reasons cited were saving the commute time and cost, and wanting a better work-life balance. This suggests that a hybrid model will likely become the most common habit. Similarly, a reduction in business trips will likely be a further key consequence of the pandemic, with over two-thirds of people believing virtual meetings will replace some, or all, face-to-face interactions.
- 3.10.3 Changes in journey habits are reflected in traffic data for Oxfordshire. Motor vehicle traffic decreased by 26% in 2020 compared to 2019⁵. It has since then increased, but in 2022 was still below, pre-pandemic levels, according to DfT data. Public transport patronage has also seen a significant reduction as a result of the pandemic. In Oxfordshire trips per annum went from 40.7 million in 2019/20 to 11.7 million in 2020/21.⁶ Currently, bus patronage stands between 80% and 85% of pre-Covid levels.⁷
- 3.10.4 The likely long-term impacts of COVID-19 on transport can be summarised as:
- A reduction in the number of commuting trips;
 - Fewer trips in the traditional peak hours, but more during the day;
 - Changes in patterns of commuting as people rethink where they live and when they travel;
 - A reduction in business trips as meetings increasingly take place virtually;
 - A reduction in individual retail trips, but an increase in retail deliveries;
 - A prolonged reluctance to use public transport amongst a minority of people and consequent increase in private car usage; and
 - An increase in walking and cycling trips amongst some people.
- 3.10.5 Because the exact nature of these changes cannot be easily determined, and they are likely still being formed, the development of the LCWIP will need to account for this changing behaviour as best as possible.

⁴ <https://www.systra.com/uk/news/passengers-say-they-could-make-fewer-trips-after-pandemic/>

⁵ <https://roadtraffic.dft.gov.uk/local-authorities/142>

⁶ <https://www.gov.uk/government/statistical-data-sets/bus-statistics-data-tables#local-bus-passenger-journeys-bus01>

⁷ Oxfordshire Enhanced Partnership Plan and Scheme (2023): <https://www.oxfordshire.gov.uk/sites/default/files/file/roads-and-transport-policies-and-plans/OxfordshireEnhancedPlan.pdf>

3.11 Conclusions

3.11.1 Whilst Didcot has some good road network connections, its current cycling network is not coherent, direct, safe, comfortable and attractive. Didcot has residential, key services and major employment sites all within easy cycling distance (for many people) of the Didcot Parkway transport hub and town centre. Along with its flat topography, Didcot’s density and compactness suggests that cycling levels could be locally increased with an improved and coherent network locally.

3.11.2 However, although there is potential to increase walking and cycling usage, this may be threatened by the delivery of new housing and employment development if high quality walking and cycling provision is not put in place to allow people to rely on active travel to move in and around Didcot. The severance caused by the railway lines, River Thames and major road networks also create significant challenges to improved walking and cycling facilities in the area.

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4. DEVELOPMENT OF THE CYCLING NETWORK

4.1 General

4.1.1 The third stage of the LCWIP process sets out the recommended steps for mapping a future cycling network and identifying infrastructure improvements. This chapter sets out the findings from the evidence collected and analysed for the information gathering stage of the LCWIP (Stage 2) and illustrates initial network development tasks (Stage 3). These findings will aid in the identification and prioritisation of a cycling network in Didcot.

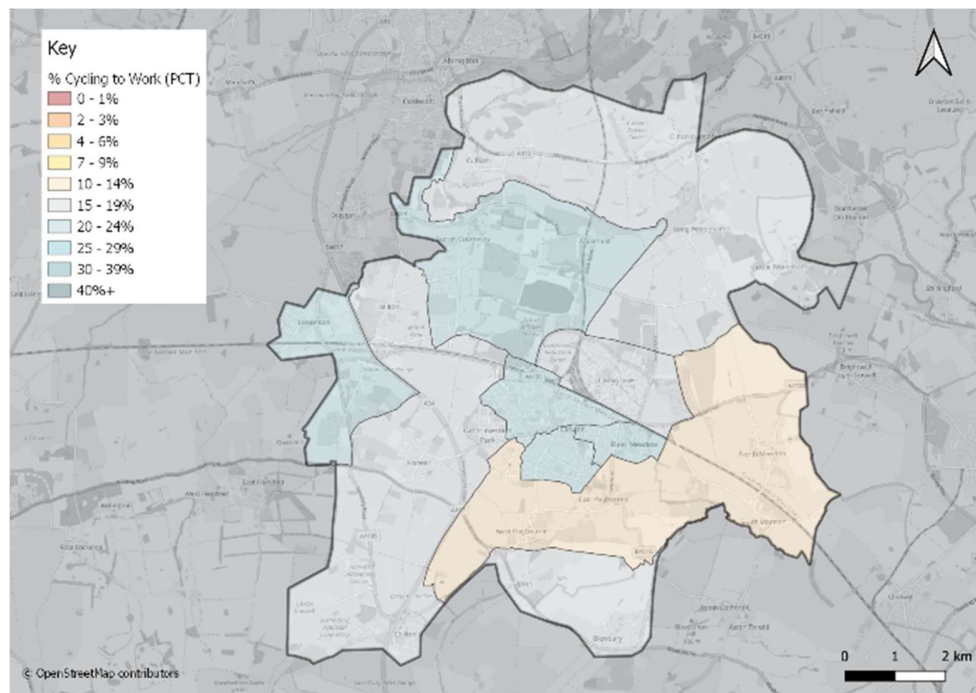
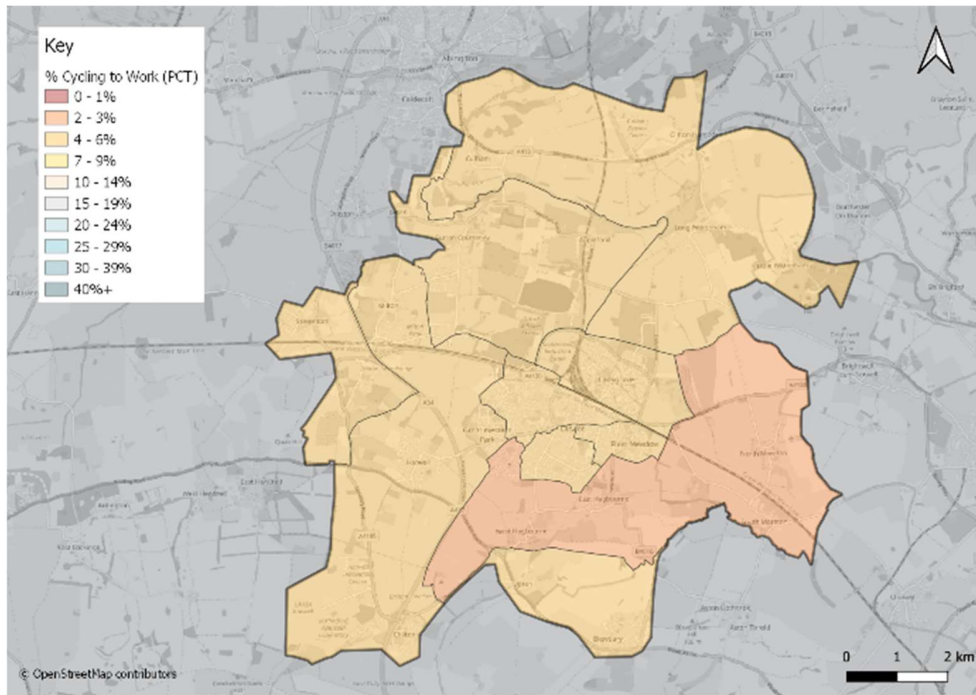
4.2 Propensity to Cycle Analysis

4.2.1 The Propensity to Cycle Tool (PCT) is a strategic planning tool that provides forecasts of the levels of cycling in a given area compared to the current under various scenarios of change. These range from meeting the Government Target in the Cycling and Walking Investment Strategy of doubling the numbers of people cycling, to an ambitious “Go Dutch” scenario in which cycling levels equivalent to the Netherlands are reached in England and Wales. The PCT can also be used to estimate future mode share for cycling along specific corridors that can be achieved through new infrastructure. The Tool has several shortcomings such as it being limited to commuting and school trips with no account of future growth sites or new infrastructure. Data are also based on LSOAs (Lower Super Outputs Areas), resulting in origin and destination of trips assigned to misleading points (the LSOA centroids). Trips within rural LSOA,s, which can be quite large, are also lost. The source of the data is updated every 10 years. Additionally, the tool currently uses 2011 census journey data. Although there are several shortcomings, the LCWIP guidance strongly recommends the use of this tool .

4.2.2 Figure 20 below shows the comparison between current cycling levels and those that would be forecast under the “Go Dutch” scenario. The comparison illustrates the scale of potential cycling that is currently being suppressed by an absence of high quality infrastructure, as well as varying cultural and social attitudes towards cycling as a method of travel.

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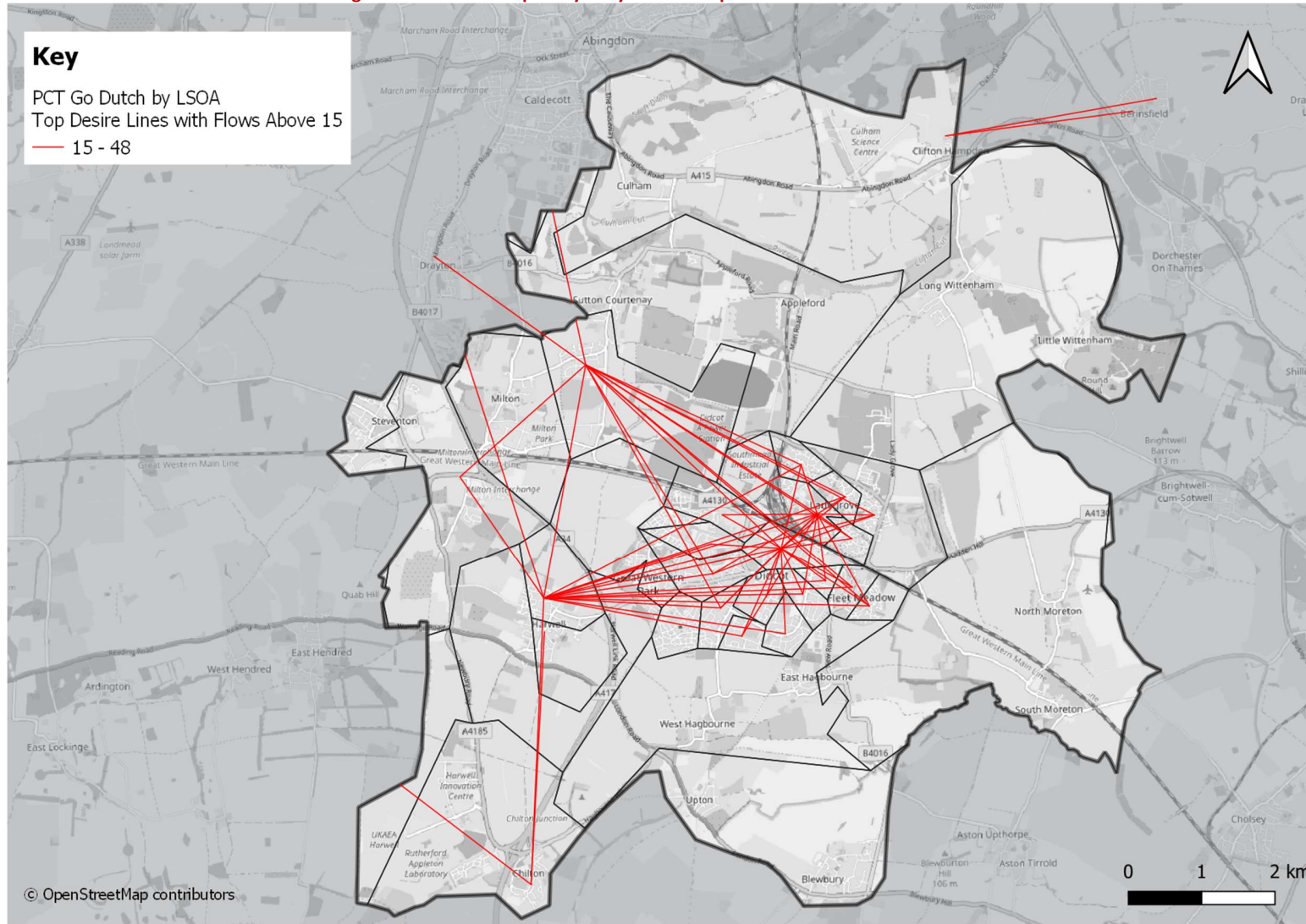
Figure 20. Current (top) and PCT “Go Dutch” scenario (bottom) levels of cycling in Didcot



- 4.2.3 DfT’s LCWIP technical guidance recommends the use of the PCT to map trip origins and destinations (trip generation), identify desire lines for cycle trips (trip distribution) and allocate trips to specific routes (trip assignment). As such, the PCT has been used as a “starting point” for cycling network planning tasks.
- 4.2.4 The outputs from the PCT are expressed in terms of one-way daily cycling flows, and the outputs can be shown as:
- **Straight Lines** - representing the desire lines or origin-destination pairs. Each line has information showing the distance between the origin-destination point, how many commuters in total take this route, how many of these commuters currently cycle and what the propensity for cycling is.
 - **Route Network** – aggregates all the cycling flows using the shortest distance between locations mapped onto the road network. This prioritises the most direct routes. More analysis will be conducted to identify the most cycle-friendly routes.
- 4.2.5 Figure 21 illustrates the desire lines of one-way commuting trips where flows are above 15 cyclists per day at Lower Layer Super Output Area (LSOA) level. This provides an indication where most people would wish to cycle to under the PCT ‘Go Dutch’ scenario. These lines identify the connections, that if served by a high quality cycle infrastructure, would have the most cycle to work trips in Didcot. As would be expected, they show a concentration in trips to employment centres, particularly towards central Didcot, Harwell Science and Innovation Campus, and Milton Park (noting the below explanation of LSOA centroids).
- 4.2.6 The centroids (centre points) of LSOAs are used as origins and destinations, as such the desire lines may not start or end on the actual trip generators when compared to the base map imagery below. Another limitation of these desire lines is that the future projection does not take into account future growth of employment areas, as well as any growth in population post-2011

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Figure 21. Propensity to cycle tool outputs for the 'Go Dutch' Scenario



4.2.7 Figure 22 illustrates the commuting to work cycling flows for the PCT Go Dutch scenario, resulting from the projection on the network of the corresponding desire lines shown in Figure 21. This process finds the shortest, least hilly route on the road network and assigns all potential travel to work cycling trips to this. It does not consider if there is, or is not, available cycling infrastructure, or any off road routes, for example through parks. This process shows potential demand for cycling trips along Milton Road, the B4493 and Marsh Lane, leading to South Moreton, and routes towards Abingdon.

4.2.8 The links with the estimated highest potential cycling demand are:

- Abingdon to Didcot, via Sutton Courtenay;
- Harwell to Didcot town centre;
- Steventon to Didcot town centre; and
- Didcot town centre to Wallingford.

4.2.9 Trips generated by employment areas such as Milton Park, Harwell Science and Innovation Campus and Culham Science Centre are not among the highest because:

- the number of commuting trips to the relevant LSOAs at the time of the Census 2011 were not as high as they would be now; and
- there is a mismatch between the actual site locations and the PCT assigning cycling flows to the site across multiple routes.

4.2.10 Trips to and from school can also be added to this potential trip analysis, as has been done in Figure 23, which shows the travel to school cycling flows from the PCT Go Dutch scenario. The links with the highest potential school cycling demand, as estimated by the PCT, are located in the south of Didcot Town centre.

Figure 22. PCT 'Go Dutch' Scenario Cycle Commuting Flows

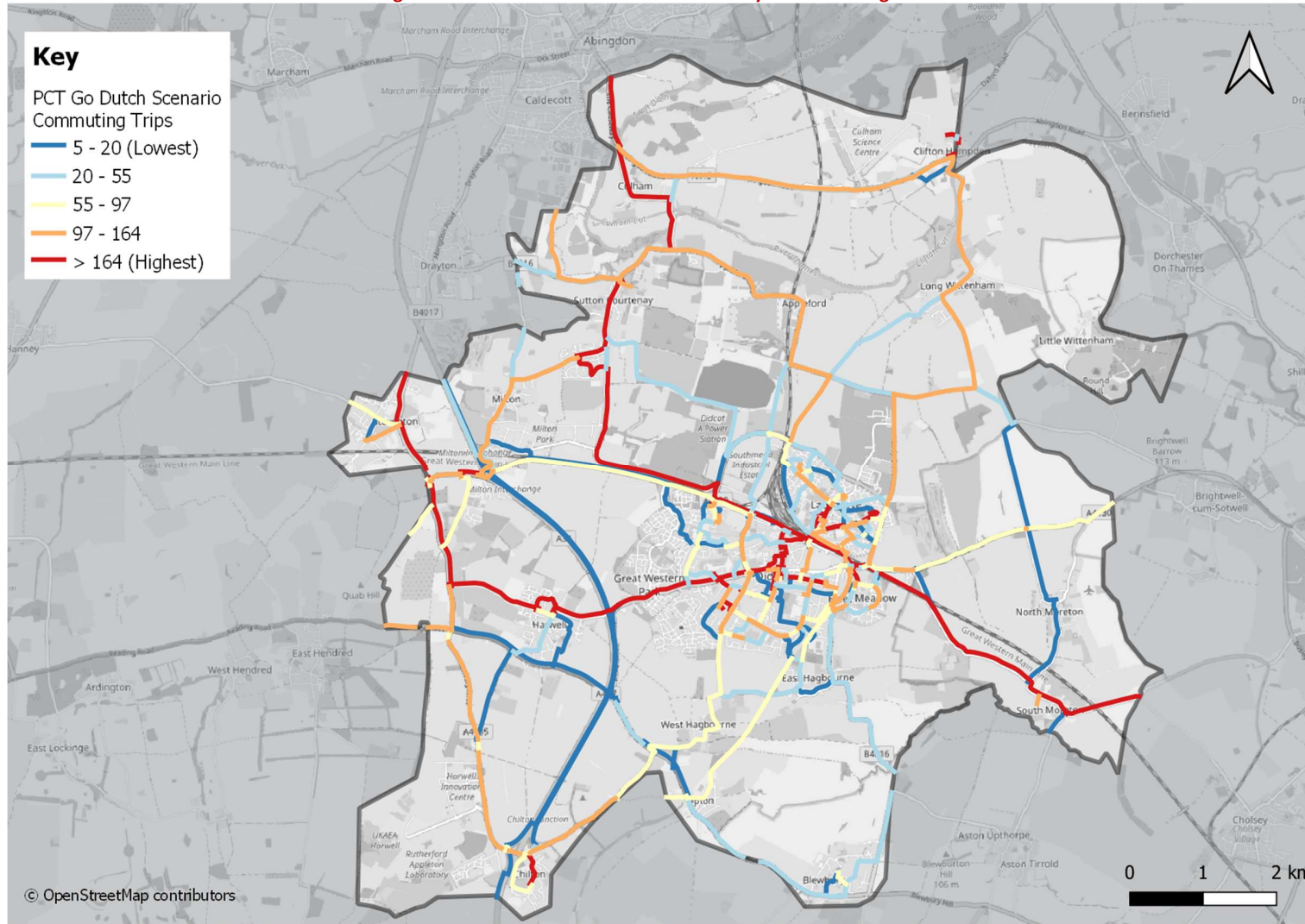
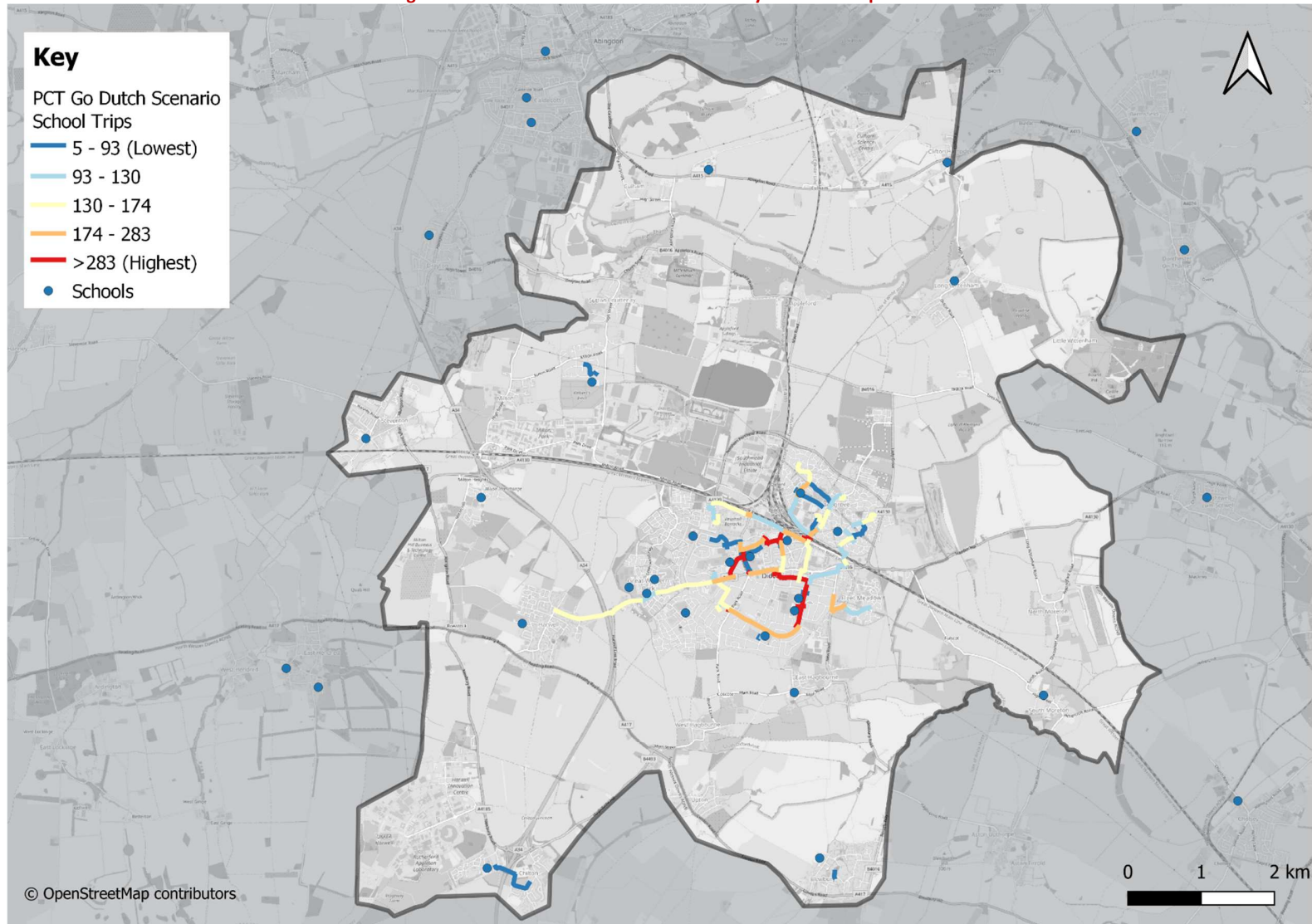


Figure 23. PCT 'Go Dutch' Scenario Cycle School Trip Flows



4.3 Origin and Destination Analysis

4.3.1 The PCT provides an overview of existing and potential cycling trips related to commuting to work or school. However, nationally commute trips make up only 20% of total cycle trips. There are a wide range of other trips that people will make by cycling, many of these to visit other destinations, but also those made solely for the pleasure of cycling. This section considers the potential demand for these trips in Didcot as well as examining the origin and destinations of them.

4.3.2 The identification of demand for the strategic network started with the mapping of the main origin (key residential areas and future residential developments) and destination points across the area with significant trip generators included, as well as future development sites that would influence people’s travel behaviour:

- Town centres;
- Transport hubs (a.k.a mobility hubs e.g. railway stations)
- Surgeries and hospital;
- Leisure facilities and entertainment spaces;
- Supermarkets;
- Healthcare facilities;
- Parks and greenspaces; and
- Future development sites.

4.3.3 Figure 24 and Figure 25 show the key origins and destinations in Didcot. To plot origins across the Didcot LCWIP study area each LSOA was given a centroid with sense checks performed to ensure that the centroids were plotted in rational residential areas that clusters of journeys are likely to begin from. To clearly identify key future desire lines, the largest future employment sites were selected and plotted from the local plan alongside consideration with origin centroids to the largest housing development sites. Table 7 below outlines the housing site development incorporated into the O-D analysis, noting that the number of dwellings for each site is subject to change, and may only show the dwelling number allocated in a Local Plan period instead of the full site capacity.

Table 7. Local Plan Sites

LOCAL PLANNING AUTHORITY	SITE	APPROXIMATE DWELLINGS
South Oxfordshire	Land adjacent to Culham Science Centre	2100
	Didcot North East	2030
	Ladygrove East	642
	Hadden Hill	74
	The Orchard Centre	300
	Didcot Gateway	274
	Vauxhall Barracks	300
	Great Western Park	2587

LOCAL PLANNING AUTHORITY	SITE	APPROXIMATE DWELLINGS
	Land south of A4130	166
	Western Village Plotlands, East Hagbourne	74
Vale of White Horse	East Sutton Courtenay	200
	Land at Didcot Road, GWP	760
	Land to the west of GWP Valley Park	2550
	North West Valley Park	800
	Milton Heights	400
	Land north of Grove Road, Harwell	200
Total		13457

Figure 24. Origin-Destination Analysis – Origins Map

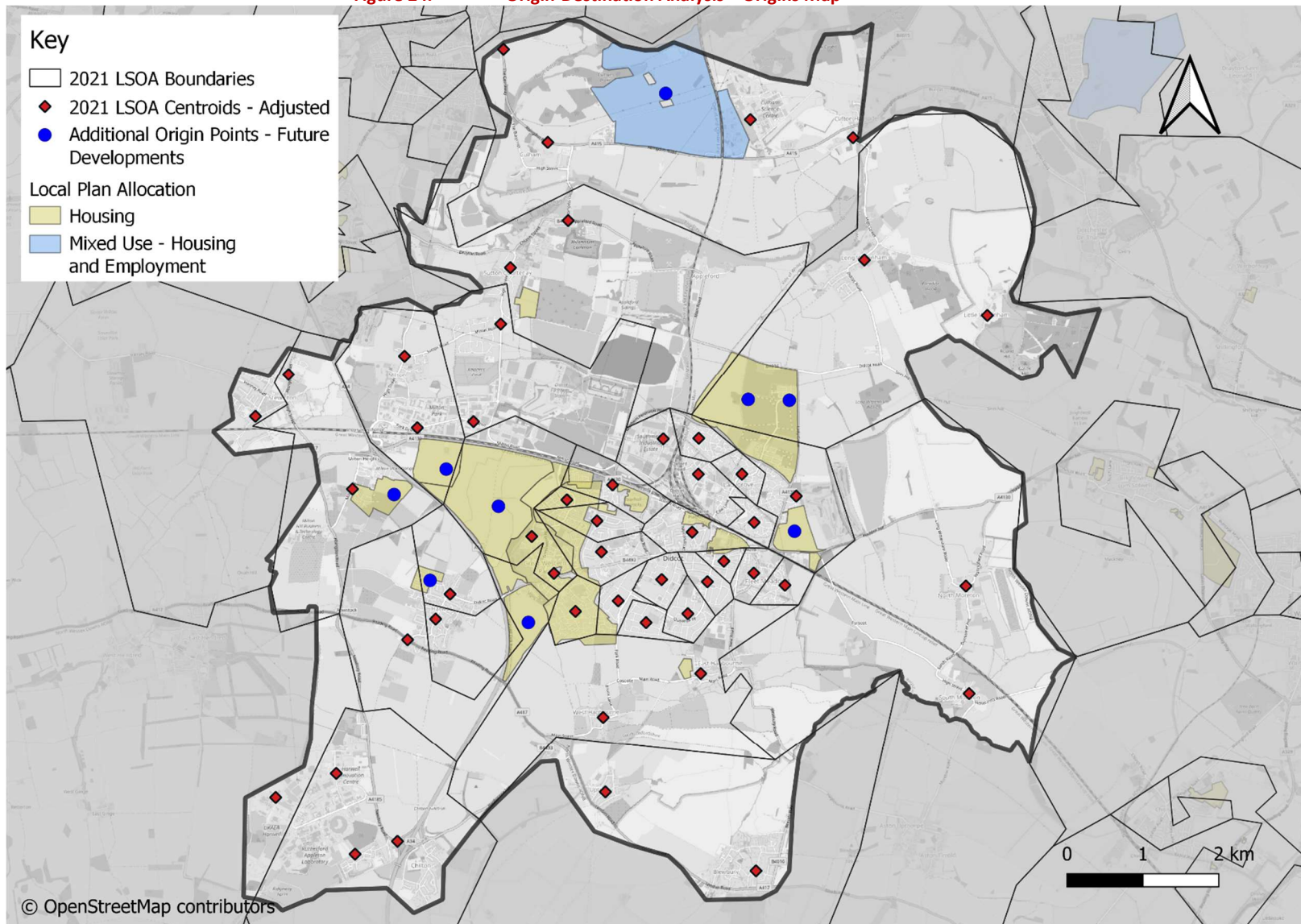
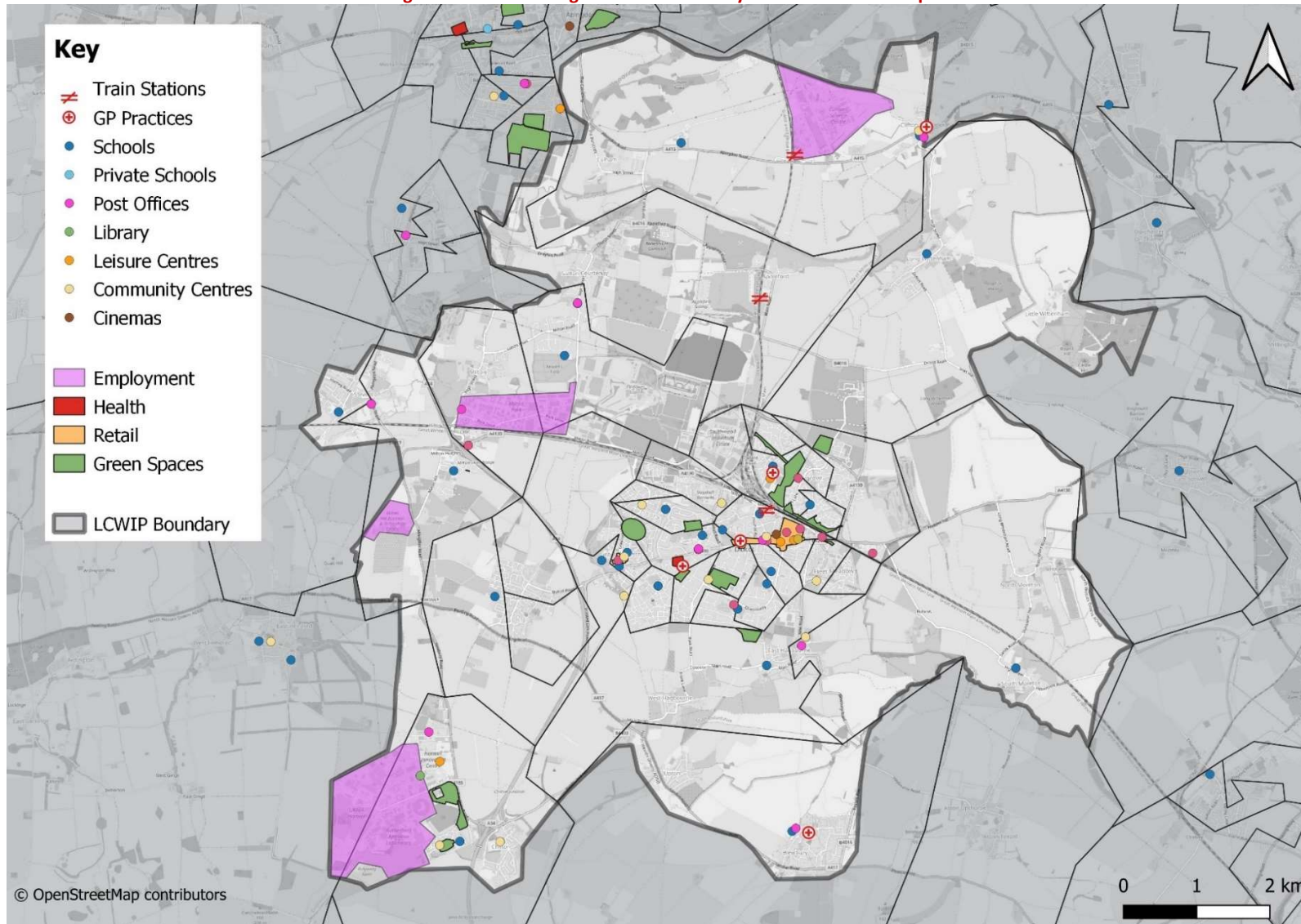


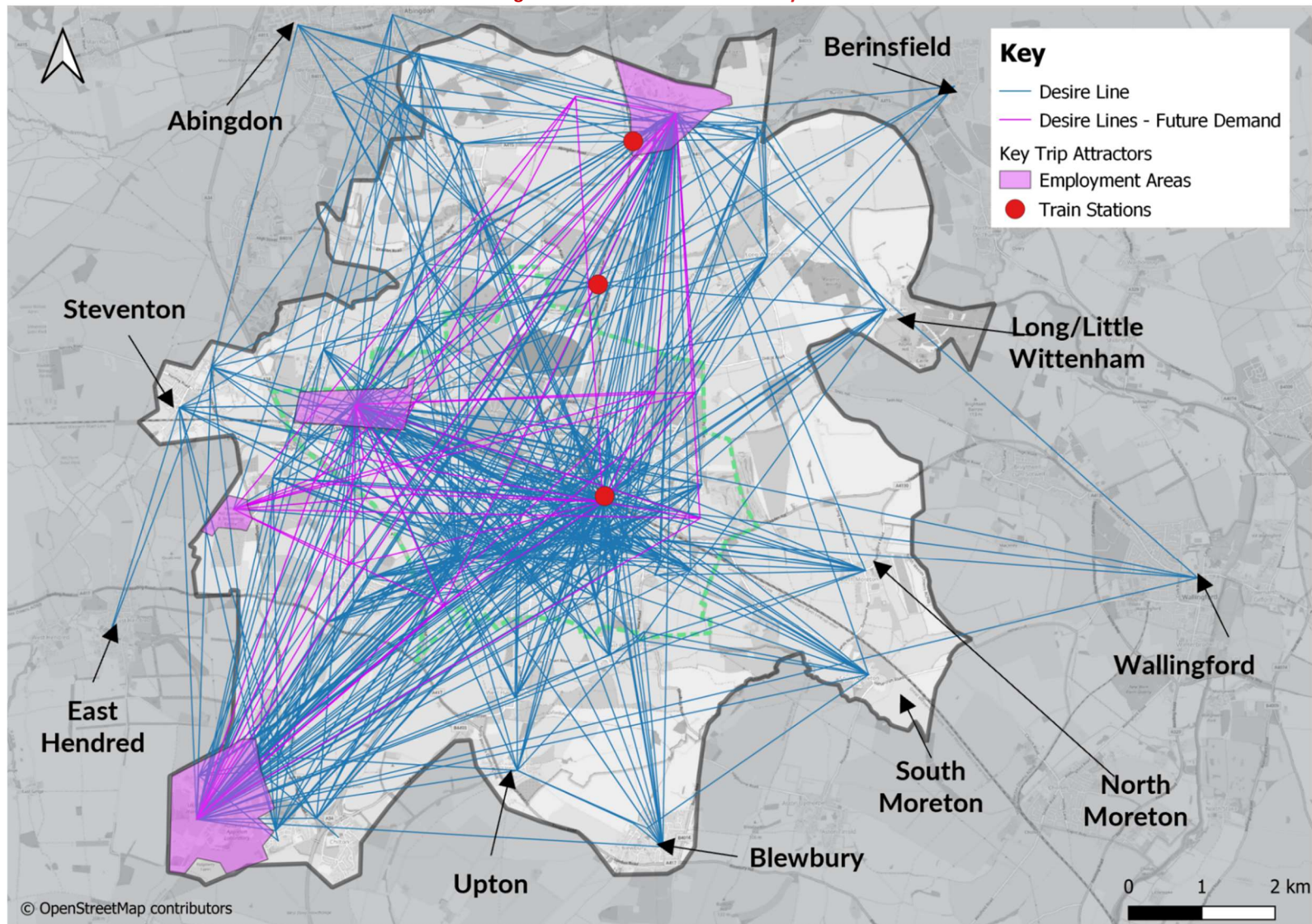
Figure 25. Origin-Destination Analysis – Destinations Map



4.4 Desire Lines Analysis

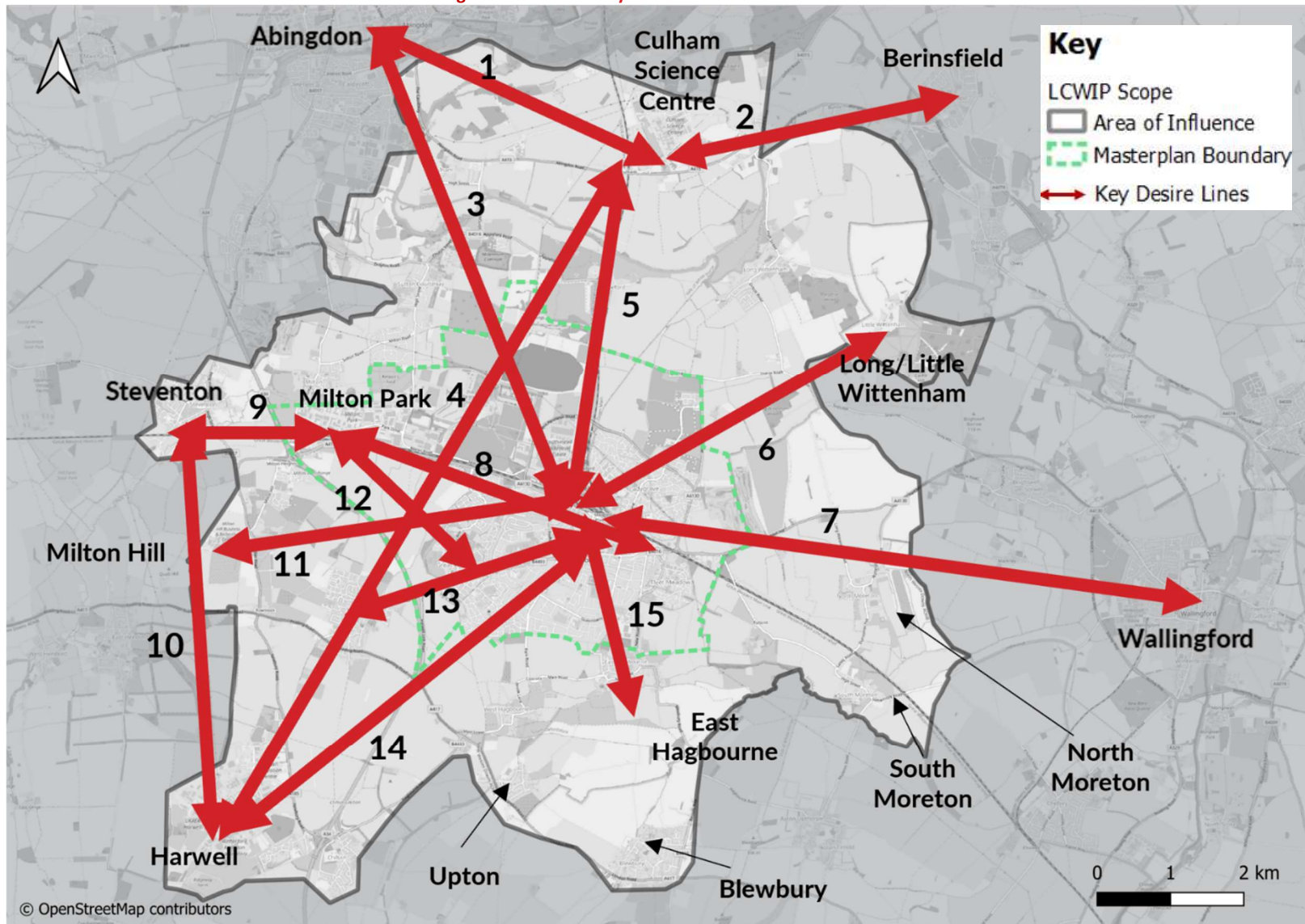
- 4.4.1 A desire line represents a connection between two places people are likely to travel, in this case their home and one of the identified destinations. Whilst it is not possible to represent all potential desire lines, especially those related to chained trips (where a person visits multiple destinations), the most popular desire lines can be predicted by connecting each origin to the closest example of each destination type. So for each residential centroid, a line has been drawn connecting it to the closest park, shopping area and other key destinations.
- 4.4.2 Destinations that will mostly attract commuting trips will be excluded from the analysis as they are already covered by PCT, **Milton Park, Milton Hill, Harwell Science and Innovation Campus and Culham Science Centre** have been included, to factor in future growth and importance of these areas. In these cases, desire lines from each origin centroids to each of the four employment areas have been plotted, as residents are drawn to all of the key employment areas, and not just to the closest ones as it happens for other non-commuting destinations (e.g. local shops, GP surgeries, schools). Desire lines for trips originating from areas where future development is planned have also been plotted. The map resulting from the desire line analysis is shown in Figure 26.
- 4.4.3 Figure 26 then shows the origins connected to destinations. Every origin connects to the nearest destination of that category. For large trip attractors such as Didcot Parkway Railway Station, desire lines have been plotted to every origin under that scenario. This process illustrates all the possible non-commuting desire lines as well as some potential future commuting and non-commuting desire lines based on the locations of the largest planned housing and employment developments.

Figure 26. Desire Line Analysis



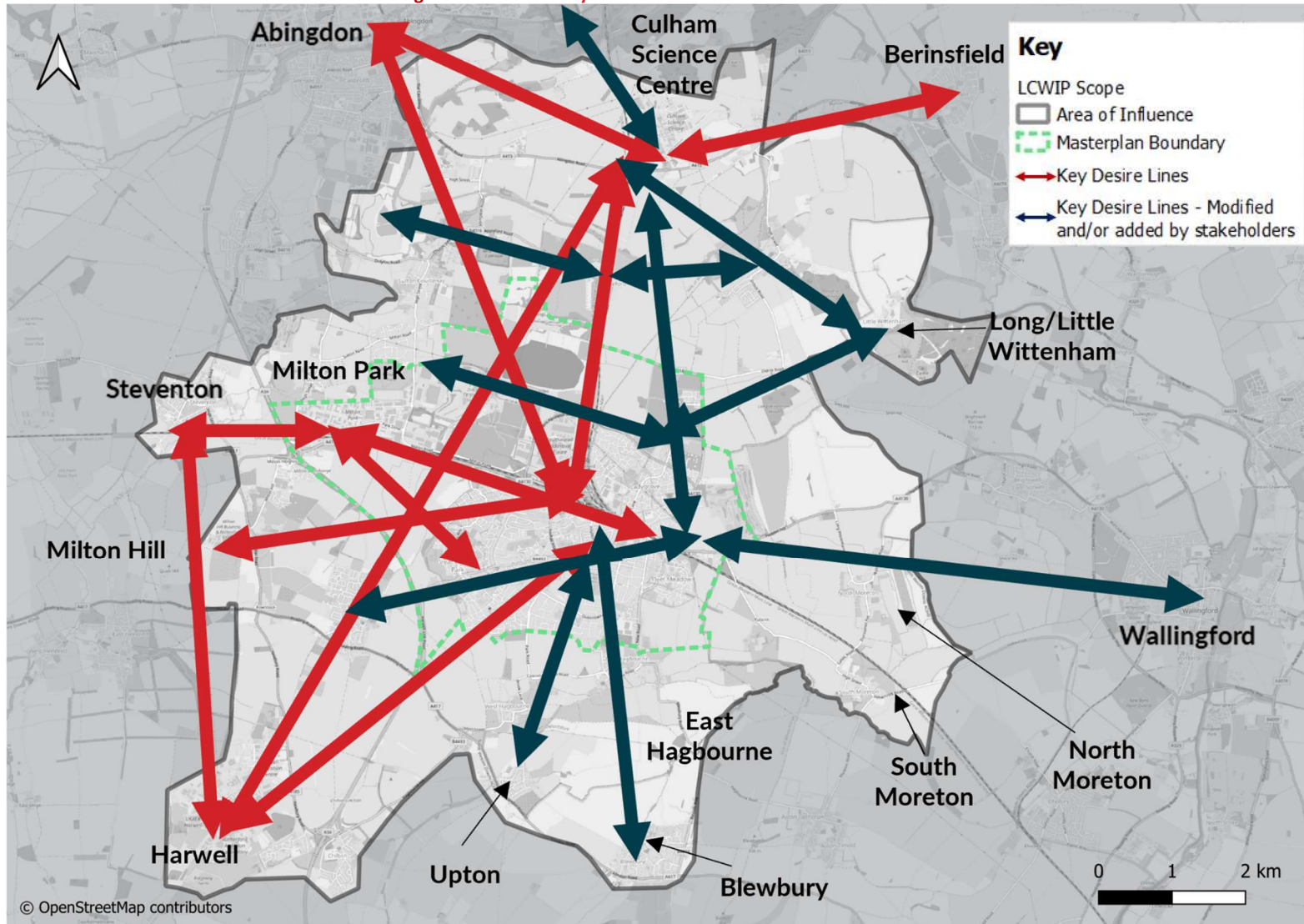
4.4.4 The connections where desire lines overlap or are in parallel are likely to represent corridors where there is the highest potential level of cycling demand. 15 key desire lines have subsequently been identified from the origin-destination analysis. These key desire lines, shown in Figure 27, do not take into account input from stakeholders or any other feedback received

Figure 27. Key Desire Lines



4.4.5 The 15 key desire lines identified from the origin-destination analysis have been modified and integrated to take into account of stakeholder feedback received during the steering group meeting held in March 2023. Original arrows from the previous step are shown in red, whereas modified and/or additional arrows are shown in dark blue in the map.

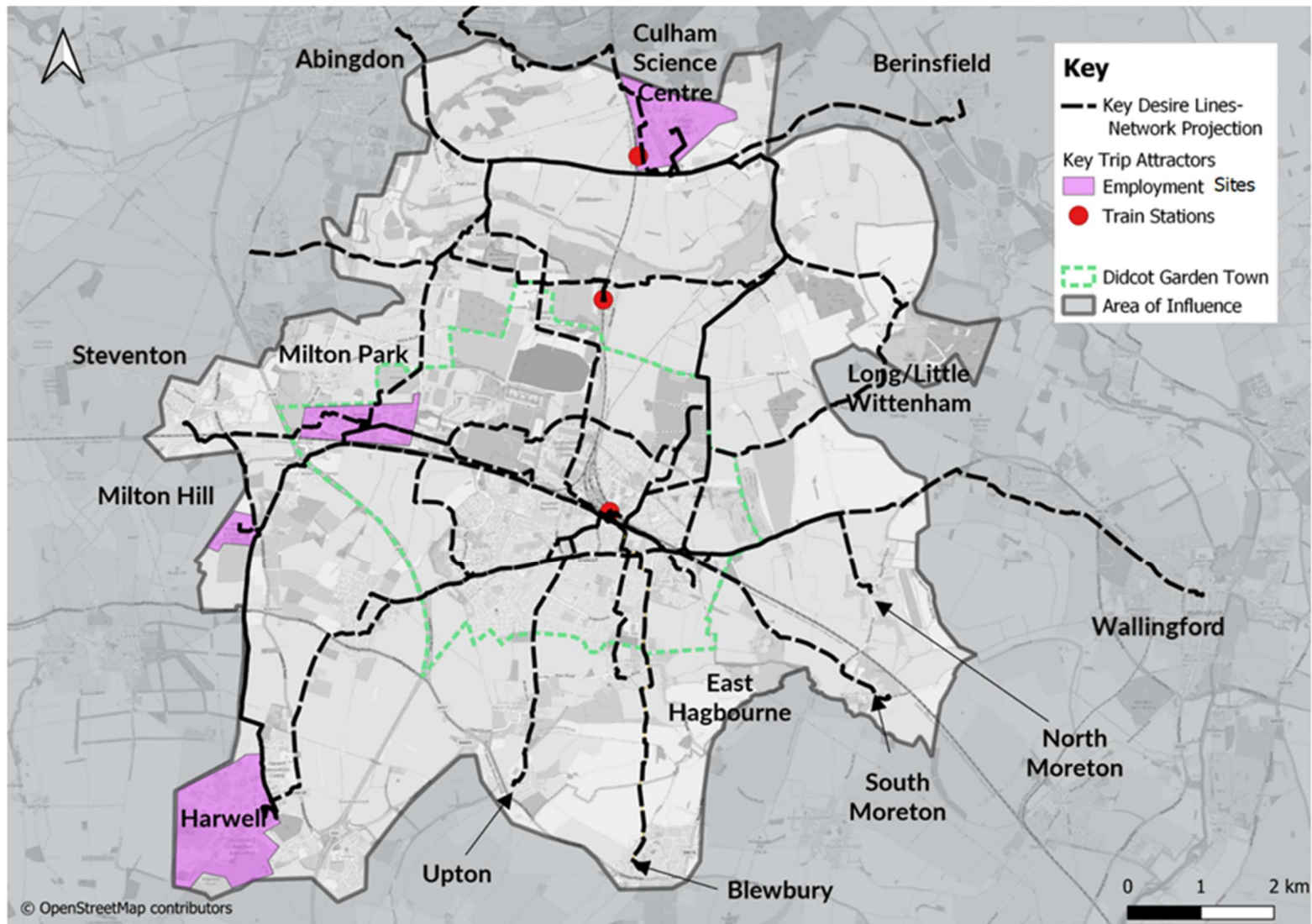
Figure 28. Key Desire Lines after stakeholder feedback



4.5 Desire network

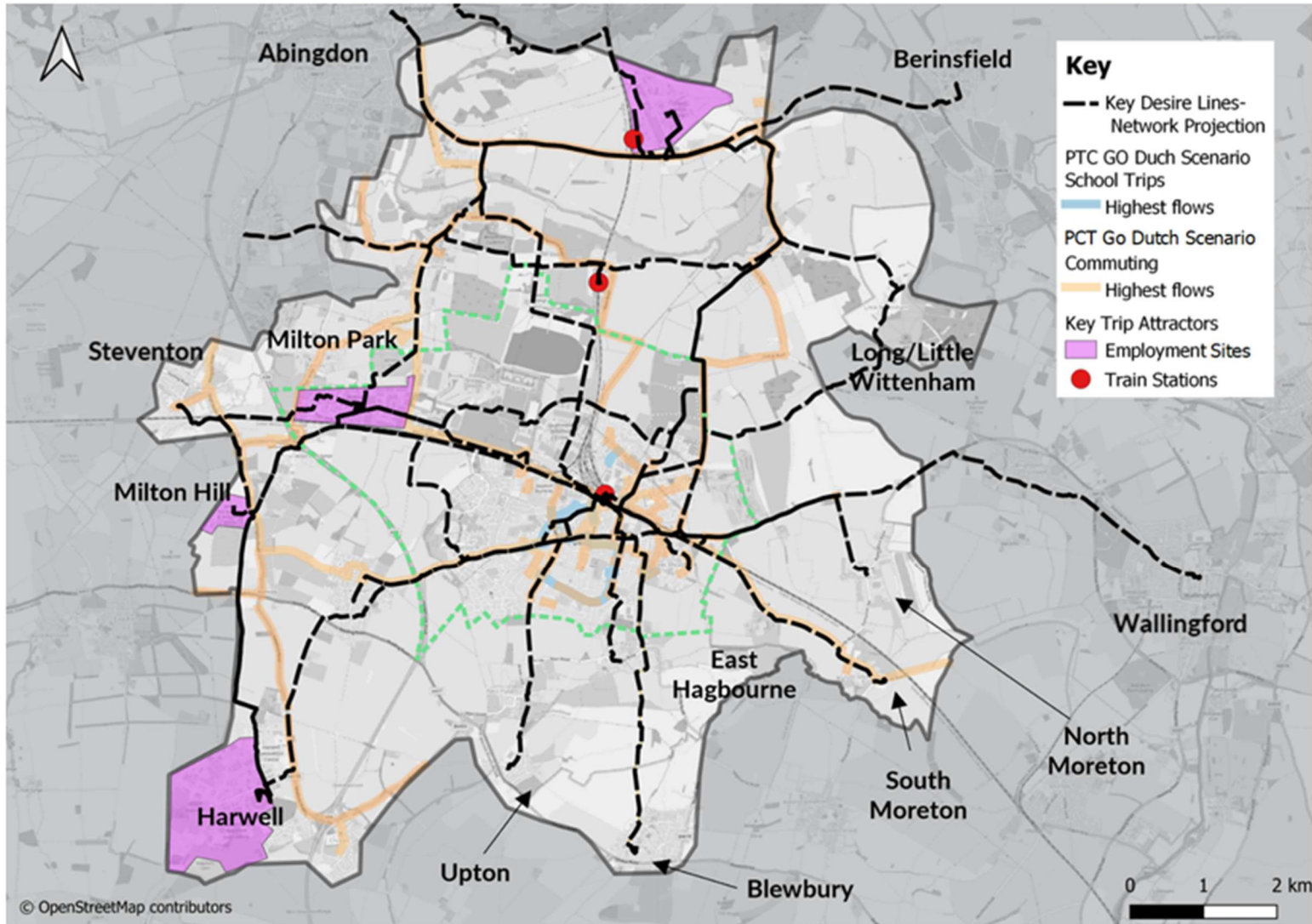
- 4.5.1 The corridors identified by the PCT analysis and the origin-destination analysis have been mapped onto the road network in GIS using the shortest possible route to illustrate what the straight-line network would look like when mapped to the road network across Didcot.
- 4.5.2 Figure 29 illustrates the required desire line network implied by the origin destination analysis, when each key corridor is assigned to the shortest route on the available network.

Figure 29. Key desire lines network projection



- 4.5.3 The desire line network from the origin-destination analysis, can be combined with the most popular routes as suggested by the PCT analysis. This provides the networks shown in Figure 30.
- 4.5.4 The map result from the combination of the OD analysis and the PCT data show a representation of the routes where there is likely to be the highest potential for cycle demand based upon analysis, and advice from our steering group, of where people are currently cycling and the places they are likely to cycle to and from.
- 4.5.5 Whilst this is indicative of all the links that may receive high cycle demand, it does not offer a logical or deliverable network. It is therefore necessary to rationalise it to create a draft of the desire cycle network for the LCWIP.

Figure 30. O-D analysis and PCT data projection



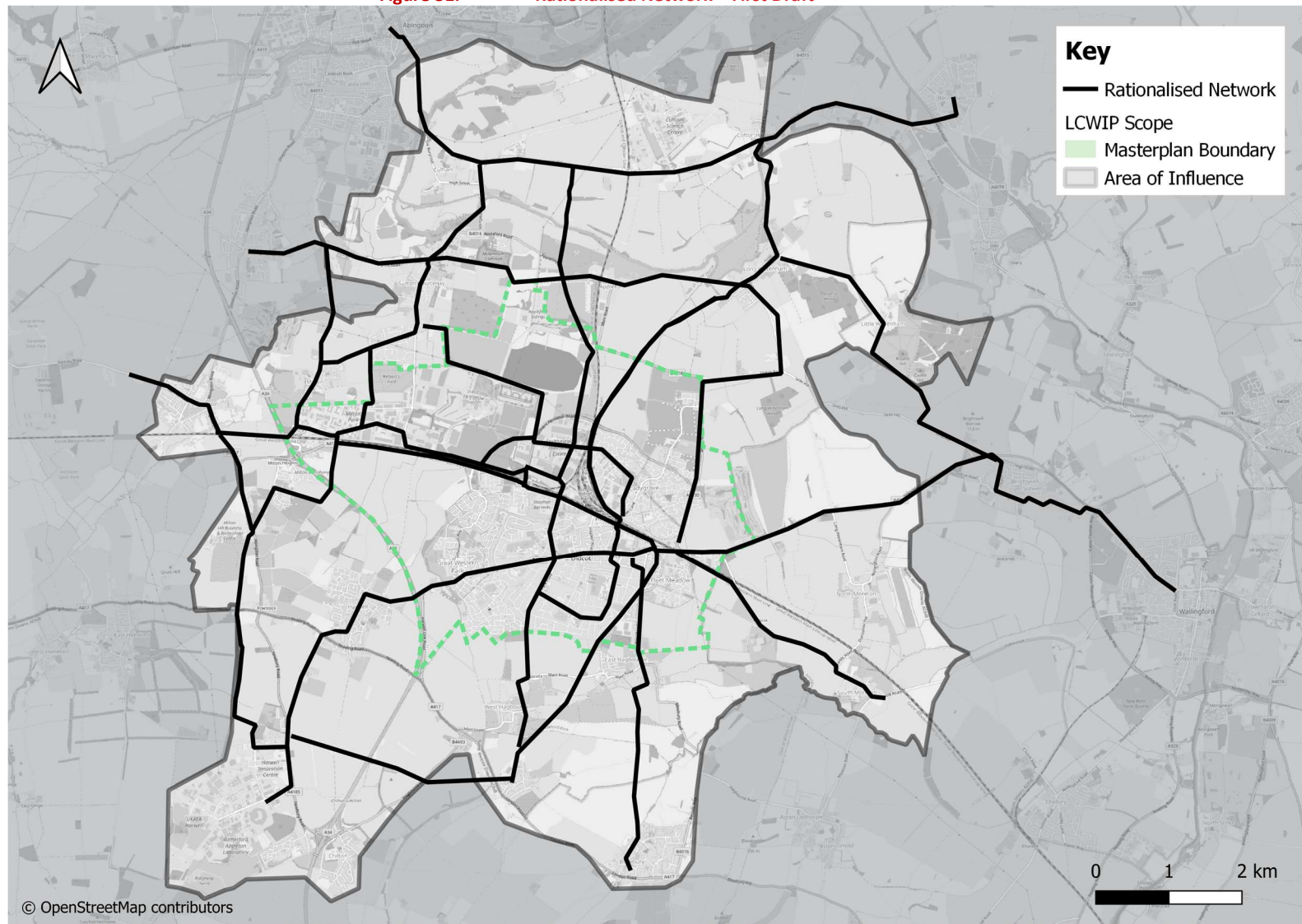
4.6 Network rationalisation and prioritisation

4.6.1 The key steps in the network rationalisation process are:

- **Removing parallel routes** – where routes run in parallel close together it is unlikely that both are required;
- **Removing isolated or short links** – some routes are not connected to the rest of the network, or create very small branches and thus would not be part of a core cycling network;
- **Completing missing gaps** – some sections have gaps, likely due to small variations in PCT demand, these have been filled in;
- **Add local connections** – complete obvious gaps in network to ensure all neighbourhoods are linked to the network.

4.6.2 The resulting network adheres to the LCWIP principles of connecting key origins and destinations, reflecting where people are most likely to cycle and ensuring that majority of the population is within 400m of the network. The first draft of the rationalised network is shown in Figure 31.

Figure 31. Rationalised Network – First Draft



4.6.3 The first draft of the rationalised network was then discussed with stakeholders to identify missing corridors and links. The draft network was then updated to include existing cycling infrastructure and proposed interventions, and routes were classified into:

- **Primary routes** – to destination locations (e.g. linking a large residential area to the town centre) in the most direct way. High walking and/or cycling flows are forecast along these routes. These routes are often classified roads which may require significant investment in walking and cycling infrastructure to achieve these high flows.
- **Secondary routes** – Routes with local importance, typically linking trip generators such as education and employment sites, linking primary routes to one another or providing less direct alternatives to primary routes. Medium walking and/or cycling flows are forecast along these routes.
- **Restricted** - Routes which are not currently accessible for both walking and cycling. These routes have some sort of (physical, legal or temporal) restriction (e.g. cycling is not permitted, the route is opened only at certain times or the route is on private land). Where appropriate, steps should be taken to remove these restrictions and to reclassify these as primary or secondary routes. (No restricted routes have been identified in the study area).
- **Future** - Routes which do not currently exist. This set of routes includes both routes which have been secured and are expected to be delivered, and aspirational routes (e.g. river crossings and links through private land) which have not yet been formally secured. The alignments of these aspirational routes are subject to change and the links shown on the network map are indicative only.
- **Cross border links** – links connecting to trip attractors outside LCWIP area of influence

4.6.4 A public consultation was then undertaken on the LCWIP network and detailed proposals (Stage 2 consultation). Comments received were reviewed and changes were made to the network map accordingly, if appropriate (see Appendix F for full report on public consultation and changes made). The resulting network is shown in Figure 32 , and replicated in Appendix B in higher quality.

4.6.5 Initially, 24 primary routes were identified as part of the LCWIP process. Five additional primary routes have been identified following the feedback received during the Stage 2 consultation.

Figure 32. Didcot LCWIP Cycle Network

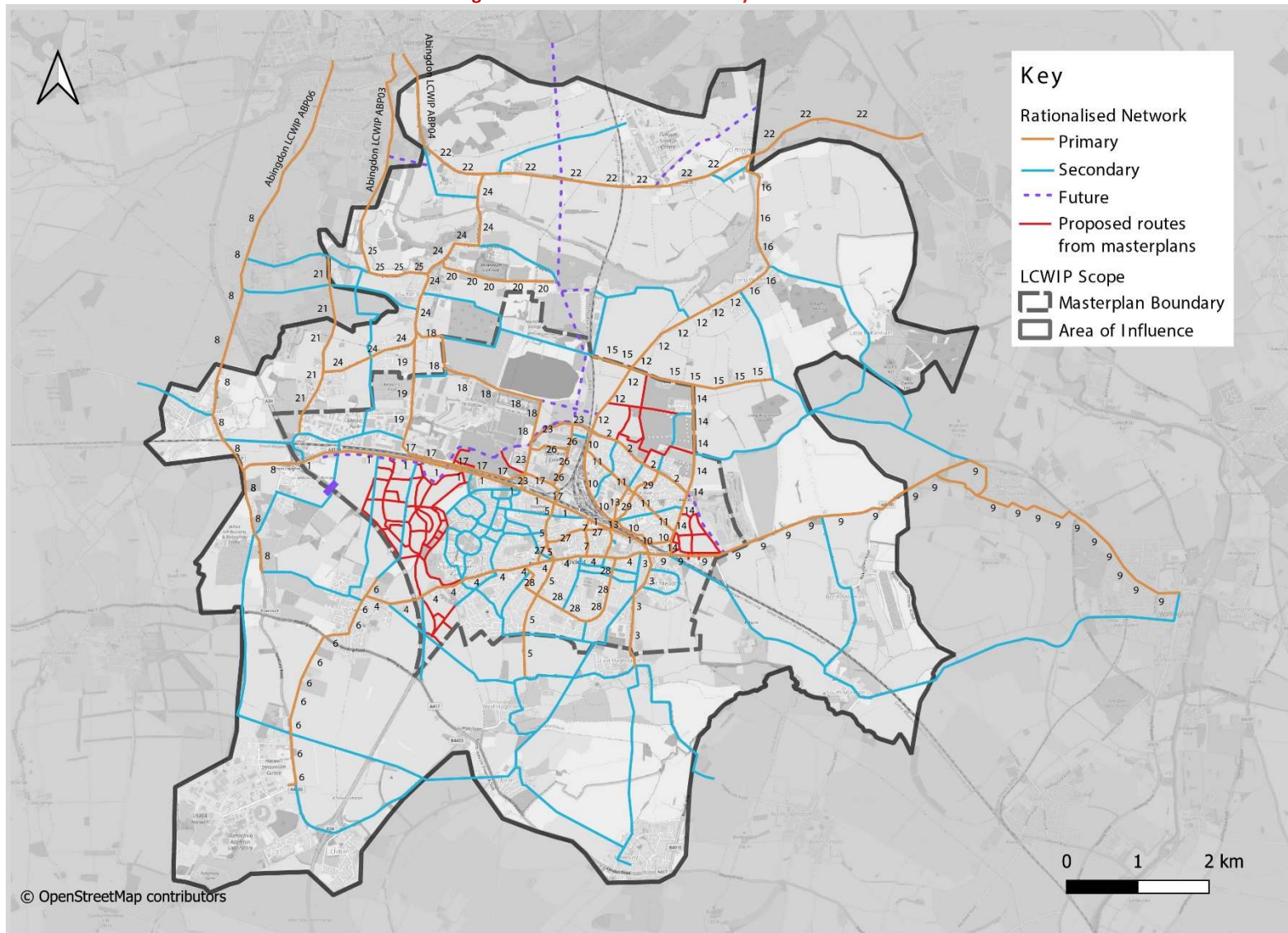


Table 8. Primary Routes

ROUTE	DESCRIPTION
1	A4130 from Milton Interchange along B4493, Station Road, Hitchcock Way to Jubilee Way Roundabout
2	A4130 from Ladygrove Bridge to junction with Abingdon Road
3	Jubilee Way Roundabout to East Hagbourne, via NCN544 and New Road
4	Jubilee Way Roundabout to Harwell Village via Broadway and B4493
5	Foxhall Road from roundabout with Station Rd to Coscote via Park Rd
6	Harwell Village to Harwell Science and Innovation Campus, via The Winnaway
7	Haydon Rd
8	Abingdon Rd (A4130) from junction with Grove Rd to Milton Interchange and to Steventon (and onwards to Abingdon via B4017)
9	Jubilee Way Roundabout to Wallingford via Hadden Hill (A4130)
10	Ladygrove Park Route
11	Ladygrove Central Route
12	Ladygrove Bridge to Long Wittenham, via Moor Ditch (NCN5)
13	Cow Lane Underpass and Ladygrove NCN5
14	A4130 Abingdon Road (from roundabout with Hadden Hill) and B4016 Ladygrove
15	B4016 from Main Road (Appleford) and Sires Hill to Didcot Rd
16	Long Wittenham to Clifton Hampden via High Street
17	Basil Hill from roundabout with Station Road along Milton Rd to roundabout with Park Drive
18	NCN5 Route between Frilsham Street, Sutton Courtenay, to A4130/Hawksworth Roundabout
19	Sutton Courtenay Road (and Lane) from roundabout with Park Drive, along Harwell Rd, to mini roundabout with High Street, Sutton Courtenay
20	Sutton Courtenay to Appleford via The Green, Churchmere Road, Church Mill Road, Millennium Common path and Public Rights of Way to B4016
21	Milton Road, from Drayton Road to Milton Park via High Street
22	Abingdon Rd, A415, from The Burycroft to Berinsfield

ROUTE	DESCRIPTION
23	A4130 Manor Bridge (Mendip Heights roundabout) to Ladygrove Bridge
24	Milton Village to Culham Village via Sutton Rd, Milton Rd, High Street, Church Street, Appleford Rd, Abingdon Rd, Tollgate Rd
25	Sutton Courtenay to Abingdon via Drayton Rd and Peep-O-Day Ln
26	Southmead Industrial Estate (Collet, Hawksworth and NCN5)
27	Lydalls Road, Lydalls Close, Manor Crescent
28	Mereland Rd, Queensway, Park Close, Norreys Rd and Drake Avenue
29	Cow Lane Underpass to North East Didcot via Cow Lane and Mersey Way

5. DEVELOPMENT OF CORE WALKING ZONES

5.1 General

5.1.1 The first stage of the development of a walking network is to identify the Core Walking Zones (CWZ). The LCWIP guidance recommends that:

- CWZ's should consist of a number of walking trip generators that are located close together - such as a town centre or business parks.
- An approximate five minute walking distance of 400m should be used as a guide to the minimum extents of CWZ's.
- All pedestrian infrastructure should be deemed as important within the CWZ.
- Once the CWZ has been identified, the important pedestrian routes (Wider walking Zone and other walking links) that serve them should then be located and mapped.

5.1.2 A dataset showing current and potential walking demand, similar to the PCT for cycling, does not exist for walking. The LCWIP guidance states that core walking zones should be identified that contain a high number of trip generators, along with key walking routes that link to these from up to 2km distance.

- Didcot Town Centre has therefore been identified as the **Core Walking Zone (CWZ)** for the walking network development. The area roughly matched the area covered by the Central Corridor project triangle to the south of Station Road and Hitchcock Way, to the North of Broadway.
- The **Wider Walking Zone** covers most of the Garden Town area, with the exception of Milton Park, due to its geographical separation from Didcot town centre for those on foot.
- **Wider Walking Routes** outside the CWZ provide links from residential areas within the core LCWIP area to Didcot Town Centre, and Milton Park to Didcot Parkway Station.
- Links outside the Wider Walking Zones are technically outside of the LCWIP remit, but they could be considered for option development if required, especially if they match with identified cycle routes, as improvements can be carried over simultaneously.

5.1.3 The origin-destination mapping in the previous chapter has been used to inform the development of the walking network map through identifying walking trip generators in Didcot. After feedback from the steering group was received, the walking network was updated to provide a greater focus to walking routes to schools. The LCWIP walking network is shown in Figure 33, and the Core Walking Zone is shown in Figure 34. Note that other ongoing projects (such as 'Didcot Central Corridor') will propose improvements to walking routes within the core walking zone, enabling future revisions of the LCWIP to include more detailed proposals.

Figure 33. Core Walking Zone and wider walking routes

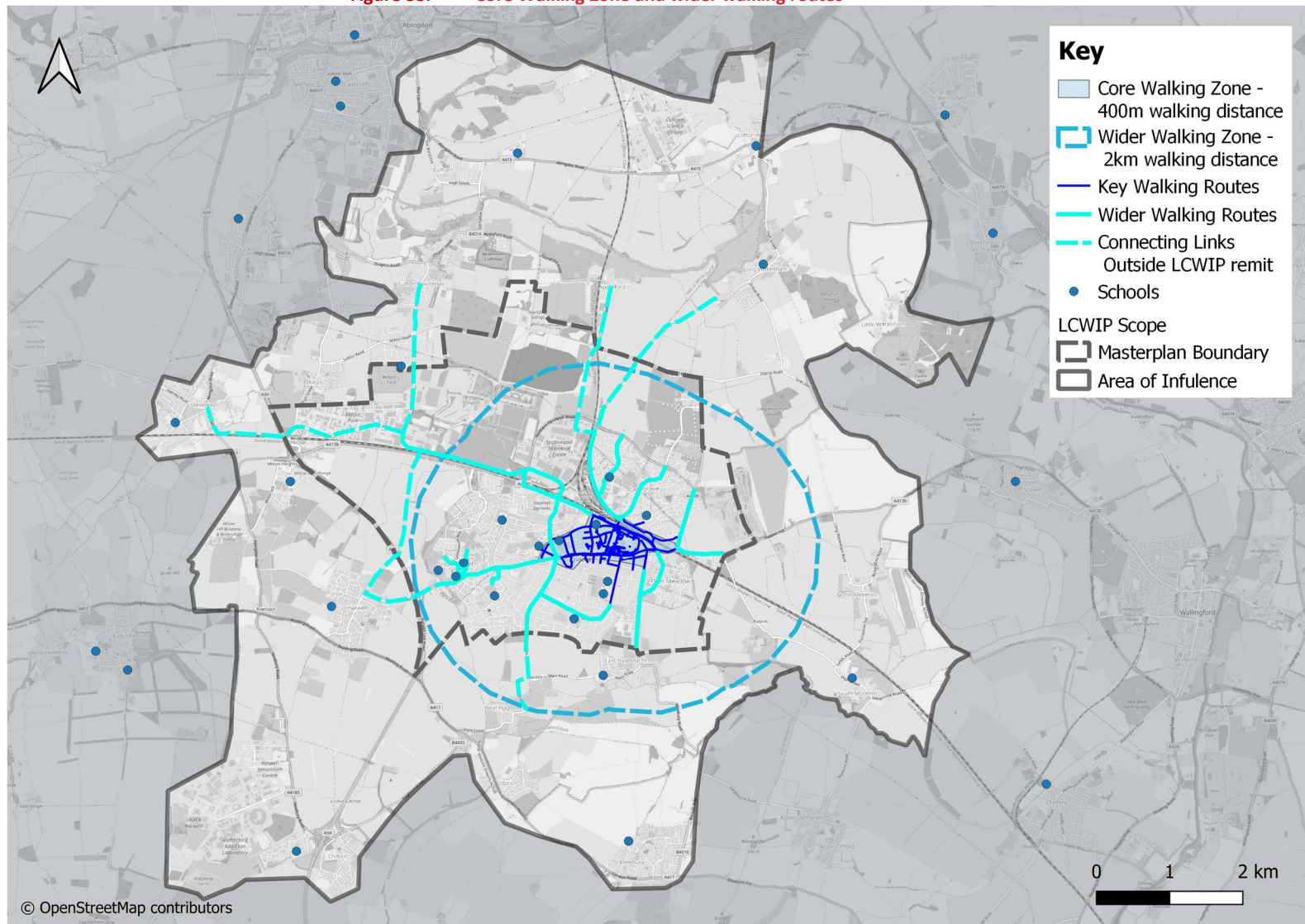
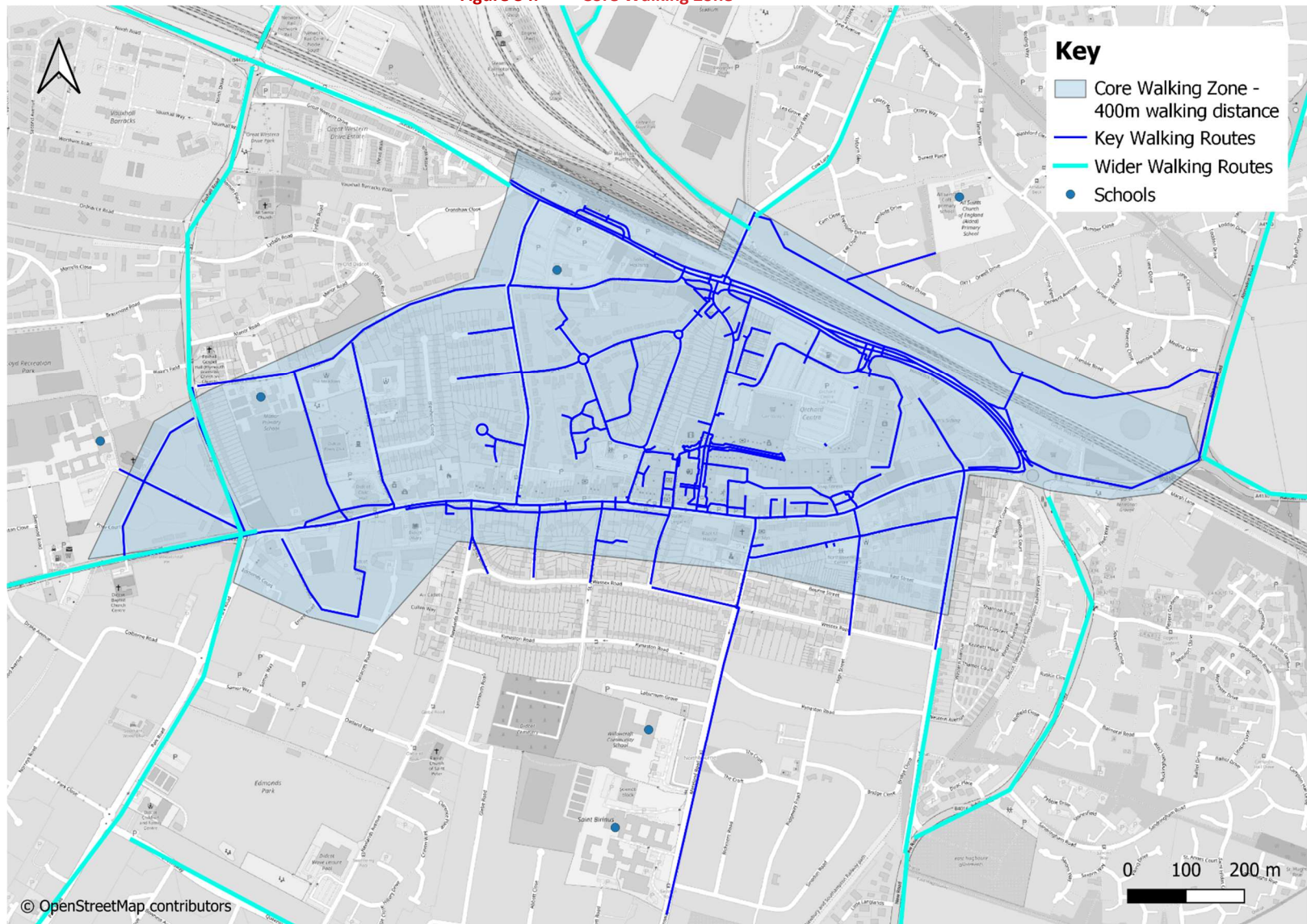


Figure 34. Core Walking Zone



6. CYCLE ROUTES AUDITS AND INTERVENTIONS

6.1 General

6.1.1 While the LCWIP guidance suggest that all the **primary routes** (see paragraph 4.6.3 for definition of Primary and Secondary, Restricted and Future routes) identified through the LCWIP process should be audited, due to the scale of the Didcot network and of the resources available, this could not be achieved within an adequate timeframe. Therefore, South Oxfordshire District Council, Vale of White Horse District Council and Oxfordshire County Council officers were engaged via a workshop session to identify the routes to be taken forward for auditing as a priority (called **priority routes**), based on existing officer knowledge of the area.

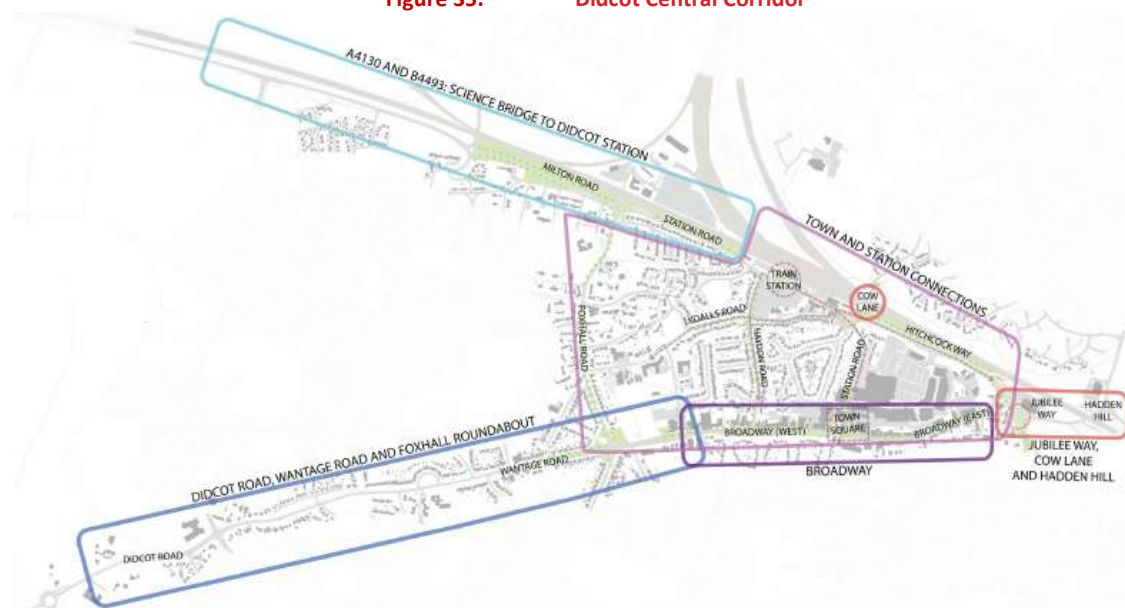
6.1.2 As a result, primary routes were audited, with the exception of sections consistent with the following criteria:

- Routes where interventions had recently been delivered;
- Routes affected by existing projects/plans, including, but not limited to, routes in Didcot Town Centre as part of the Didcot Central Corridor scheme;
- National Cycle Network sections audited by Sustrans;
- Routes on Public Rights of way (assumed not LTN 1/20 compliant due to surface quality), and
- Primary routes added to the plan as a result of Stage 2 consultation. These will be considered for audit during the next LCWIP review.

6.1.3 The sections of primary routes that were audited are referred to in the report as priority routes. However, a prioritisation process for routes will later be required that will consider the whole network, and not just the priority routes audited.

6.1.4 The Didcot Central Corridor (DCC) scheme, described in Section 2 of this report, includes plans to improve cycle links and connectivity in the town centre. As options to improve cycling in the area are currently under development within that project scope, routes in within the DCC geographic area have not been audited.

Figure 35. Didcot Central Corridor



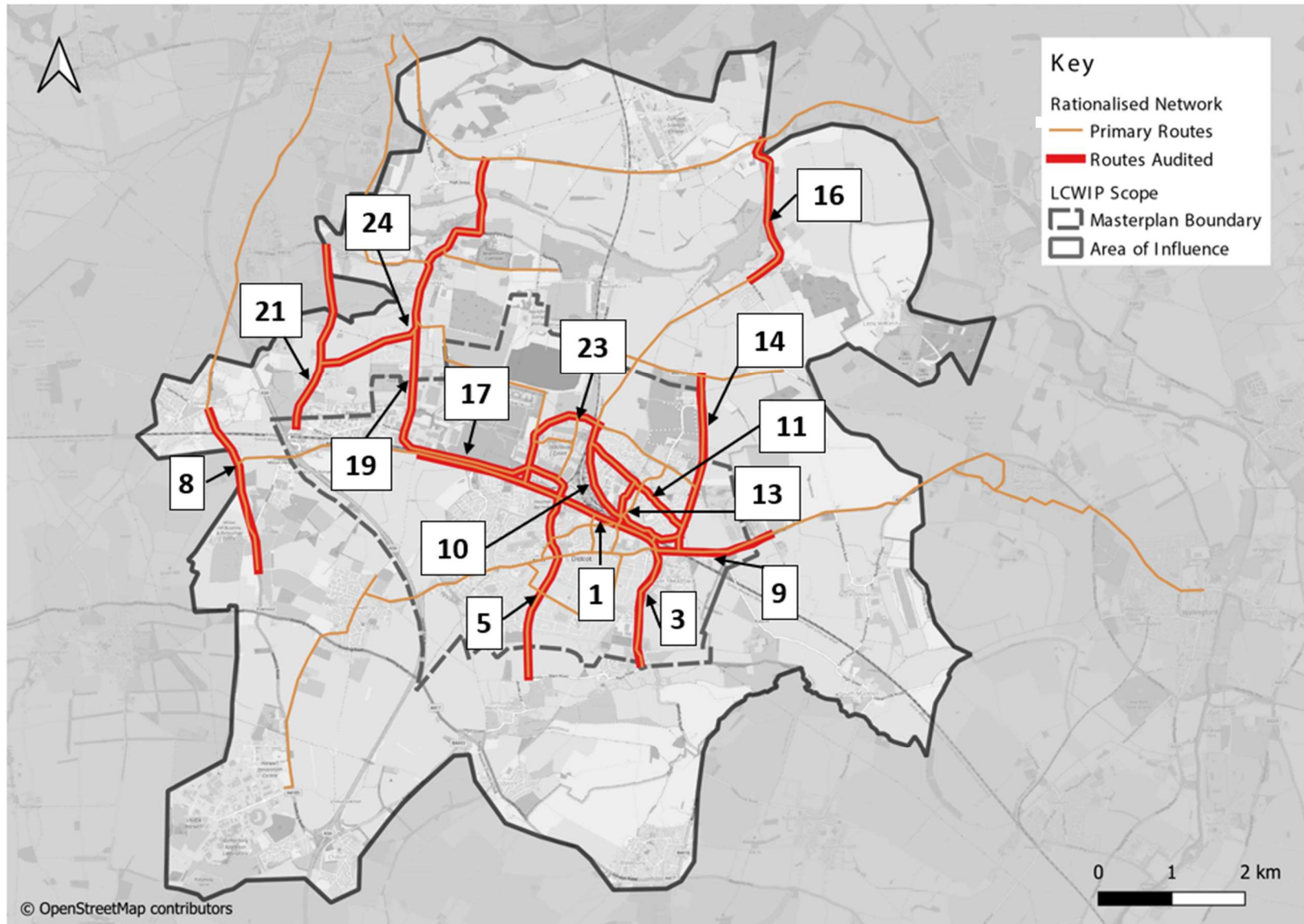
6.1.5 Following the review process, 15 of the 24 primary cycling routes initially identified have been selected for the audits, as shown in the table and map below .

Table 9. Priority cycling routes for audits with lengths

ROUTE	DESCRIPTION	LENGTH (KM)
1	A4130 from Milton Interchange along B4493, Station Road, Hitchcock Way to Jubilee Way Roundabout	2.598
3	Jubilee Way Roundabout to East Hagbourne, via NCN544 and New Road	1.526
5	Foxhall Road from roundabout with Station Rd to Coscote via Park Rd	2.554
8	Abingdon Rd (A4130) from junction with Grove Rd to Milton Interchange and to Steventon (and onwards to Abingdon via B4017)	2.357
9	Jubilee Way Roundabout to Wallingford via Hadden Hill (A4130)	1.584
10	Ladygrove Park Route	1.909
11	Ladygrove Central Route	1.728
13	Cow Lane Underpass and Ladygrove NCN5	0.678
14	A4130 Abingdon Road (from roundabout with Hadden Hill) and B4016 Ladygrove	2.393
16	Long Wittenham to Clifton Hampden via High Street	2.243
17	Basil Hill from roundabout with Station Road along Milton Rd to roundabout with Park Drive	2.646
19	Sutton Courtenay Road (and Lane) from roundabout with Park Drive, along Harwell Rd, to mini roundabout with High Street, Sutton Courtenay	1.382
21	Milton Road, from Drayton Road to Milton Park via High Street	2.621
23	A4130 Manor Bridge (Mendip Heights roundabout) to Ladygrove Bridge	1.632
24	Milton Village to Culham Village via Sutton Rd, Milton Rd, High Street, Church Street, Appleford Rd, Abingdon Rd, Tollgate Rd	3.294

6.1.6 Routes audited as a result of this selection process are shown in the map below.

Figure 36. Overview of routes audited



6.1 Cycling Audits Methodology

- 6.1.1 The auditing process seeks to understand whether the identified routes are of a suitable standard for cycling, and how comparable they are to LTN1/20 standards and if not, which elements need to be improved. Routes were audited using the DfT guidance to ensure consistency. A dedicated DfT tool, the Route Selection Tool (RST), was utilised to assist with the audits.
- 6.1.2 The tool scores routes against five criteria to determine their existing suitability, safety and comfort for cycling. Each route is assigned a score between 5 (the highest score) and 0 (the lowest). The five assessment criteria are:
- **Directness** – the length of the route compared to the corresponding shortest motor vehicle route
 - **Gradient** – how steep the route is
 - **Safety** – whether there is physical segregation from motor traffic, and if not, the speed and volume of motor traffic. Also takes into account lighting and passive surveillance
 - **Connectivity** – how well connected the route is to the surrounding area
 - **Comfort** – how much space is dedicated to cycling, the quality of the surface material and its condition and whether the space is shared with substantial volumes of motor traffic or pedestrians
- 6.1.3 In addition to the above criteria, critical junctions were also identified as part of the audit process. Critical junctions are defined as those that have characteristics that pose a hazard to cycling due to their size, lack of segregation, high speeds or high volumes of traffic.
- 6.1.4 Barriers along the audited routes and on access points to the routes have also been reviewed. While barriers are often meant to stop unauthorised vehicles from accessing a route, such as mopeds or motorcycles, in many cases they exclude some legitimate users from accessing the cycle network, especially people using nonstandard cycles and mobility aids. In such cases, barrier removal or redesign of barriers to make the routes accessible is considered.

6.2 Audits key findings

- 6.2.1 The main issues identified during the audits were:
- Lack of segregated infrastructure for cyclists and pedestrians leads to poor scores against safety and comfort along many routes;
 - Maintenance issues along the routes including overgrown vegetation, poor drainage, and poor surface qualities which require fixing;
 - High traffic volumes and speeds along many of the routes with no segregated facilities along many A roads, speed reduction and traffic calming measures are required;
 - Narrow pavements causing conflicts with other cyclists and pedestrians along major routes;
 - Junctions that have not been designed to allow for the safe movements of cyclists; and
 - The shared use facility along Milton Road is narrow, potentially bringing pedestrians and cyclists into conflict. The same potential conflict was noted for the narrow facility near Didcot Station (Station Road).

- 6.2.2 The audit also identified a number of opportunities within the existing network:
- The off-road routes around the Ladygrove estate scored highly due to being segregated facilities;
 - Good connectivity to other roads and the National Cycle Network;
 - Low gradients with no steep routes present; and
 - Good lighting and passive surveillance for many of the routes.
- 6.2.3 It is also important to note that there were a total of 57 critical junctions identified within the routes. Addressing safety concerns at these junctions will be key to improving the scores of these routes and providing safer and attractive routes for local cyclists.
- 6.2.4 A summary of the results of the cycling audits is shown below in Table 10. Routes have been ranked from the ones having the highest average score (less need for interventions) to the ones with the lowest average score (more need for interventions) across all the scoring categories. The cycle routes have been ranked using the LCWIP 'Route Selection Tool' (RST), which assesses the suitability of a route against a set of core design outcomes.
- 6.2.5 The RST uses five criteria to assess how well a route meets the core design outcomes, with scoring ranging from 5 being the highest and 0 being the worst. The criteria are as follows:
- Directness;
 - Gradient;
 - Safety;
 - Connectivity; and
 - Comfort.
- 6.2.6 The number of critical junctions is also recorded. A critical junction is defined as one that is hazardous for cyclists. Route scores are averaged across all criteria to give an overall route rating.

Table 10. Cycling route audit summary table: Priority (audited) cycling routes with lengths

Route	Location	Length	Directness	Gradient	Safety	Connectivity	Comfort	Average
1	A4130 from Milton Interchange along B4493, Station Road, Hitchcock Way to Jubilee Way Roundabout	2.598	5.00	5.00	4.13	2.82	1.16	3.62
3	Jubilee Way Roundabout to East Hagbourne, via NCN544 and New Road	1.526	5.00	5.00	2.46	5.00	1.10	3.71
5	Foxhall Road from roundabout with Station Rd to Coscote via Park Rd	2.554	5.00	5.00	0.58	3.68	0.00	2.85
8	Abingdon Rd (A4130) from junction with Grove Rd to Milton Interchange and to Steventon (and onwards to Abingdon via B4017)	2.357	5.00	4.23	0.63	4.74	0.62	3.04
9	Jubilee Way Roundabout to Wallingford via Hadden Hill (A4130)	1.584	5.00	5.00	1.94	5.00	0.39	3.47
10	Ladygrove Park Route	1.909	4.00	5.00	5.00	5.00	2.00	4.20
11	Ladygrove Central Route	1.728	5.00	5.00	4.78	5.00	2.67	4.49
13	Cow Lane Underpass and Ladygrove NCN5	0.678	5.00	5.00	4.27	5.00	2.46	4.35
14	A4130 Abingdon Road (from roundabout with Hadden Hill) and B4016 Ladygrove	2.393	5.00	5.00	1.30	3.08	1.30	3.14
16	Long Wittenham to Clifton Hampden via High Street	2.243	5.00	4.38	1.36	2.39	1.42	2.91
17	Basil Hill from roundabout with Station Road along Milton Rd to roundabout with Park Drive	2.646	5.00	4.25	3.96	2.13	3.92	3.85
19	Sutton Courtenay Road (and Lane) from roundabout with Park Drive, along Harwell Rd, to mini roundabout with High Street, Sutton Courtenay	1.382	5.00	5.00	3.99	5.00	0.00	3.80
21	Milton Road, from Drayton Road to Milton Park via High Street	2.621	5.00	5.00	0.37	4.37	0.00	2.95
23	A4130 Manor Bridge (Mendip Heights roundabout) to Ladygrove Bridge	1.632	5.00	5.00	0.00	4.39	0.00	2.88
24	Milton Village to Culham Village via Sutton Rd, Milton Rd, High Street, Church Street, Appleford Rd, Abingdon Rd, Tollgate Rd	3.294	5.00	5.00	1.32	5.00	0.00	3.26

6.3 Sustrans National Cycle Network Audit findings

6.3.1 Some sections of the identified Primary routes overlap with the National Cycle Network (NCN) managed by Sustrans. These are regularly audited and maintained by Sustrans, as such they have not been audited for the development of the LCWIP. Results of an audit undertaken between 2015 and 2016 by a team of independent surveyors (Sustrans) have been used to inform concept designs on such sections.

6.3.2 Issues identified along the two routes include:

- Poor surface;
- Narrow sections and access points;
- Steep access ramps;
- Poor crossing provision and lack of dropped kerbs; and
- High traffic volumes and speed of the road sections.

6.3.3 The Paths for Everyone 2018 report (Sustrans, 2018) concludes that insufficient and inconsistent funding for maintenance has been a significant contributing factor to the inconsistent experience for users of the NCN. Growing the NCN is not a priority for Sustrans unless there are vital missing sections or there is the opportunity to deliver a new traffic-free connection. It is considered that the very poor on-road sections that have high traffic flows need the most urgent attention. This would include improving junctions and crossings and providing segregated cycle routes where there is the available road width or re-routing the Network to a more appropriate corridor.

6.3.4 Subject to funding, the districts and county council will work with Sustrans to improve the local and wider National Cycle Network, in line with the priorities recommended in the Paths for Everyone report. This will focus on:

- Re-routing sections that cannot be improved due to limited road width onto new segregated or quiet-way routes;
- Reducing the speed limit on quiet-way sections to 20mph in built-up areas and 40mph in rural areas;
- Improving safety at crossing points on the highway;
- Ensuring path widths and surfaces are built for everyone;
- Removal or redesign of barriers that prevent access by bikes, cargo bikes and nonstandard cycles, wheelchairs; mobility scooters and when pushing a buggy;
- Improving signage and wayfinding particularly where the Network links to other local walking and cycling routes; and
- New routes that fill the gaps in the Network.

6.3.5 As a result of the recommendations of the Paths for Everyone report, Chilton Road in Upton, Oxfordshire, part of National Route 544, was temporarily closed to motorised vehicles from August 2020. After a positive response to a public consultation, Oxfordshire County Council decided to make the road closure permanent (Paths for Everyone, 3 Years On, 2021) .

6.4 Identifying cycling improvements

6.4.1 The results of the audit have informed the process of identifying which interventions will be required in order to improve the routes to make them safer and more attractive for cycling.

6.4.2 A range of potential interventions have been identified that could be utilised to create improved conditions for cycling and bring routes in to compliance with LTN 1/20 guidance. The most suitable intervention will be determined by the locations and issues identified but a range of potential measures are outlined below:

- Segregated shared use facilities;
- Reductions in the speed limit (mainly where traffic calming measures cannot be implemented);
- Traffic calming measures;
- Resurfacing of routes;
- Widening of off-road routes;
- Improved maintenance on off road cycle paths to reduce encroachment by vegetation;
- Making improvements at critical junctions by modifying existing crossings or installing new ones;
- Widening and improving off carriageway cycle paths to encourage cyclists to use off carriageway provision and reduce conflict with motor vehicles or pedestrians; and
- Considering restricting motor vehicle through traffic in residential roads to create lower traffic conditions more suitable for cycling.

6.4.3 In addition to the above standard engineering measures there are a range of other measures not necessarily within the remit of this LCWIP that could be considered by the councils in order to help support increased cycling locally:

- Delivery of additional and better quality cycle parking that is covered and secure wherever possible. Conveniently located and secure cycle parking will complement the improved cycle network by reducing concerns about the ability to park at key destinations and security;
- Ongoing general maintenance of existing assets. General maintenance of existing active travel assets in Didcot has been raised during both rounds of consultation and confirmed during audits, and is one of the biggest issues affecting the existing network. However, capital funding, which the LCWIP will help securing, is not suited to deliver ongoing maintenance;
- Improved wayfinding through consistent and well placed signage will significantly aid the development of the Didcot cycle network and encourage further use. Wayfinding for cycling should be developed as part of an area-wide wayfinding strategy, aimed at improving the awareness residents and workers have of their town and at aiding visitors in getting around;
- Audit of barriers that do not conform to standards;
- Development of holistic traffic reduction strategies.

6.4.4 The audit process was used to identify where interventions were required to bring the cycle routes up to the standards required by LTN 1/20. Early stage concept designs for each of the identified priority cycling routes are provided in Appendix D. Indicative costings for these are provided in Appendix E.

6.4.5 It is noted that there are many locations in the Didcot area where issues exist (for example missing dropped kerbs or tactile paving) that have not been specifically identified; these issues are too numerous to map and list in full in this first version of the LCWIP, but targeted consideration will be given to these issues as and when opportunities arise (for example when a larger scheme in the vicinity is being progressed, or when a relevant planning application comes forward).

7. WALKING ROUTES AUDITS AND INTERVENTIONS

7.1 General

- 7.1.1 The identification of the walking audits was conducted in collaboration with the team working on the Didcot Central Corridor project. Due to the overlap between the Central Corridor area and the LCWIP Core Walking Zone, it was decided to take forward the audit and subsequent intervention development of four sections of key walking routes (named Priority Walking Routes) within the identified Core Walking Zone, aligning with the Gateway Spine.
- 7.1.2 The Gateway Spine runs along Station Road/Hitchcock Way and is a primary focus for both the Didcot Central Corridor and Didcot LCWIP to improve links from the Didcot Parkway mobility hub with Didcot Town Centre, employment, education and greenspaces. The results of the walking audits were used to identify possible interventions that could improve the environment for pedestrians.
- 7.1.3 A meeting with the Didcot Central Corridor Team was held before the final review of the LCWIP document, to identify plans that could be included in the LCWIP at this stage. However, no definitive decisions about the DCC options had been made at that stage so proposals from that project could not be included in this version of the LCWIP. Future LCWIP revisions could be updated with proposals that result from the ongoing work on projects such as DCC.

7.2 Identifying walking improvements

- 7.2.1 Some examples of the type of interventions that have been considered for the next stage of designing improved routes are summarised below:
- Improving footway surfaces;
 - Narrowing of the carriageway at junctions to enable safer, quicker and easier crossing for pedestrians;
 - Improvements to tactile paving to assist pedestrians with visual impairments;
 - Removal of on street furniture in order to potentially widen the footpath;
 - Widening of existing footpaths which do not conform to recommended standards; and
 - Trimming of vegetation which is protruding onto footway surfaces.
- 7.2.2 A reduction in traffic flows to reduce noise and pollution are also key to improving the pedestrian environment but are more complex to deliver and cannot easily be delivered within the scope of this LCWIP process. However, this LCWIP process has identified tangible improvements to the identified walking routes which should in turn lead to an increase in walking amongst Didcot residents, workers and visitors.
- 7.2.3 As previously mentioned for cycling improvements, there are a range of other measures not necessarily within the remit of this LCWIP that could be considered by the council in order to help support increased walking locally, including ongoing general maintenance of existing infrastructure and a wayfinding strategy.
- 7.2.4 Early stage concept designs for each of the identified priority walking routes are provided in Appendix D.

8. PRIORITISATION OF PROPOSALS

8.1 Introduction

8.1.1 The guidance from the DfT recommends that the infrastructure improvements proposed in an LCWIP should be prioritised into three categories:

- short term improvements (typically requiring less than three years to deliver),
- medium term improvements (typically requiring between three and five years to deliver), and
- long term improvements (typically requiring more than five years to deliver).

8.1.2 A variety of prioritisation methodologies have been used across LCWIPs within Oxfordshire, and in other counties. OCC Officers advised that the Didcot LCWIP should follow the Abingdon LCWIP, where a detailed prioritisation process which scores multiple factors was not undertaken in the first version of the LCWIP, with the intention instead that identified improvements will be dynamically assessed in response to funding opportunities using the latest information available. This enables sections of routes to be packaged into proposals that better meet the funding opportunity objectives e.g. the sections of two routes that meet at a junction could be required to be packaged as a single scheme to address a funding opportunity, but not the entire length of both routes. The prioritisation score of both the full routes individually could be lower (or higher) than if the two routes in full were scored together, which could also score differently to the packaged scheme of just sections of the two routes that meet at the junction. OCC Officers advise that they are considering how to deal with the prioritisation process within LCWIPs across Oxfordshire.

8.1.3 The project team required Systra to propose an example Multi-Criteria Assessment Framework (MCAF) that could be considered as a starting point, modified, and potentially later used in updated versions of this and other LCWIPs. The Didcot LCWIP working group discussed potential factors that could be considered in an MCAF seeking to prioritise LCWIP interventions. The example prioritisation MCAF is described in the sections below.

8.2 Timescale Categories

8.2.1 The proposals listed in Appendix E: Programme of Walking and Cycling Infrastructure Improvements have been prioritised into these timescale categories. The table below provides a brief description of the criteria for each category.

Table 11. Criteria for categorising proposal timescales

	TIMESCALE	CRITERIA
Short Term	Less than 3 years	Improvements which can be implemented quickly (relatively low cost, with few barriers to delivery) or which are already under development. Delivery within or close to this timescale is dependent on securing funding rapidly upon adoption of the LCWIP.
Medium Term	3 to 5 years	Improvements where there is a clear intention to act, but delivery is dependent on further funding availability or other issues (which may mean that

	TIMESCALE	CRITERIA
		some of these improvements take longer than 5 years to deliver).
Long Term	More than 5 years	More aspirational improvements, which will require significant funding and may not yet have a clearly defined solution. Most major primary route improvements fall into this category. These are generally the improvements which will have the greatest impact, but which are the most difficult and costly to implement.

8.3 Example Prioritisation Multi-Criteria Assessment Framework

8.3.1 As suggested by the LCWIP guidance, priority should be given to improvements that are most likely to have the greatest impact on increasing the number of people who chose to walk and cycle, and therefore provide the greatest return on investments. Evidence of such benefits will strengthen the case for further investment. In addition to this, evidence of benefits on other policy areas, such as improvements to health and social inclusion, or evidence of public support defined through the engagement process can be also taken into account.

8.3.2 The below example of a Multi-Criteria Assessment Framework (MCAF) seeks to create a method of assessing different considerations across multiple schemes. It could enable comparisons of relative priorities of route network improvements.

8.3.3 The below factors were in part informed by discussions with the Didcot LCWIP steering group, and from the DFT LCWIP Technical Guidance. Additional factors could be included in an MCAF, as required.

- Increase in people walking and cycling – routes serving existing or new development and predicted cycling flows from PCT
- Road safety improvements – routes serving collision hotspots (CrashMap)
- Network cohesion - routes contributing to network cohesion
- Supporting developments – routes serving new developments
- Supporting school trips
- Serving deprived areas – deprivation according to Index of Multiple Deprivation 2019
- Public acceptability – according to stage 1 and 2 consultation results
- Dependence on other schemes

8.3.4 An example scoring system for each criteria is reported below:

- Increase in people walking and cycling:
 - 1 point for routes serving new developments
 - 2 points for routes serving existing developments/residential areas
 - 3 points for routes serving existing development and having a high predicted cyclist flows on PCT
- Road safety:
 - 1 point for routes without any collision hotspots
 - 2 points for routes with at least one or two collision hotspots
 - 3 points for routes with more than two collision hotspots
- Network cohesion:

- 1 point for routes not currently linking to existing cycle infrastructure
- 2 points for routes linking to existing cycle infrastructure
- 3 points for routes connecting cycle infrastructure currently disjointed
- Supporting developments:
 - 1 point for routes supporting walking and cycling from future developments
- Supporting school trips:
 - 1 point for routes serving schools
- Serving deprived areas
 - 1 point for routes serving areas of low deprivation
 - 2 points serving routes in areas of medium deprivation
 - 3 points for routes serving areas of high deprivation
- Public acceptability:
 - 1 point for routes with low support from the public
 - 2 point for routes with medium support from the public
 - 3 point for routes with high support from the public
- Dependence on other schemes:
 - 1 point for schemes depending from one or more major infrastructure scheme
 - 2 points for schemes depending from smaller infrastructure or network schemes
 - 3 points for schemes not depending on other schemes

8.3.5 It is recommended that before use, the scoring mechanism is sensitivity tested to understand the impacts of different weightings on the final prioritisation results. It is noted that some factors are arguably applicable to all routes e.g. the entire LCWIP network supports school trips, and so further considerations would be recommended.

8.3.6 The below is an example prioritisation scoring table that could be used:

Table 12. Example prioritisation table

			Effectiveness			Policy			Deliverability		Total score
Route	Description	Cost	Forecast increase in people walking and cycling	Road Safety Improvements	Network Cohesion	Supporting Development	Supporting School Trips	Serving Deprived Areas	Public Acceptability	Dependence on other schemes	
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											

8.4 Delivery

- 8.4.1 It is anticipated that the proposals listed in Appendix E: Programme of Walking and Cycling Infrastructure Improvements will generally be implemented in this order: short term, then medium term, then long term improvements. As more information becomes available, future reviews of the LCWIP could identify which schemes will be directly delivered by development proposals, noting their implementation will be as and when the relevant triggers are met (as set out in the legal agreements which secure them).
- 8.4.2 The crucial factor which will determine the order of delivery will be the availability and the source(s) of funding and resources to undertake feasibility studies, design work, and finally delivery. It may be appropriate (depending on the funding source) to group a number of proposals together into a larger package of works (especially where these proposals apply to a continuous route or to routes which are directly connected to one another). The timescales set out in Appendix E: Programme of Walking and Cycling Infrastructure Improvements are therefore subject to change.
- 8.4.3 Note that this is a generalisation, and prioritisation of the proposals set out in the LCWIP will be adjusted dynamically in order to respond to funding opportunities. There are a number of proposals (e.g. new river crossings and proposals requiring acquisition of land) which fall later in the proposed order of delivery as set out above (i.e., in the 'long term' timescale and the 'other proposals' category), but which are considered to have very high potential for positive impact on the walking and cycling network. Inclusion of these major proposals in these categories does not imply that these proposals are not important infrastructure improvements but recognises that there are significant challenges to be overcome in order to deliver them.
- 8.4.4 All of the proposals listed in Appendix E: Programme of Walking and Cycling Infrastructure Improvements are considered to be of significant value, and delivery of all proposals relevant to a forthcoming development site should be sought in line with the Community Infrastructure Levy (CIL) Regulations 2010.
- 8.4.5 The proposals made in this LCWIP are subject to revision or removal as scheme development work progresses and more information becomes available regarding the deliverability of these proposals. Additional proposals may also be added over the lifetime of the LCWIP in response to new information.
- 8.4.6 Where appropriate (especially when designing improvements to routes on or adjoining existing public rights of way where equestrians have access), consideration should be given to the potential impact of the proposals made in the LCWIP on equestrians. Complementary improvements for conditions for horse riding should be made where possible and care should be taken to minimise any detrimental impact for equestrians.

9. NEXT STEPS

- 9.1.1 The concept designs (Appendix D) will be used during the next phase of the LCWIP process to help inform future work on those schemes (subject to funding) which would include further stakeholder engagement. As noted on the concept designs, further information such as highway boundary reviews and topographical surveys would be required to determine the exact space available.
- 9.1.2 As well as providing a basis for the preparation of bids for funding from central government for the development and delivery of active travel schemes, the LCWIP provides a wish-list of active travel infrastructure improvements to which local funding sources (most notably developer contributions or direct delivery) should be applied. The prioritisation of schemes in the LCWIP will be adjusted dynamically in order to respond to funding/delivery opportunities.
- 9.1.3 As and when the proposals in the LCWIP are funded and progressed, significant changes to the local transport network will be subject to further public consultation on a scheme-by-scheme basis.
- 9.1.4 Note that the omission of an infrastructure improvement from this first version of the LCWIP will not preclude Oxfordshire County Council from seeking that improvement in the event that it is deemed appropriate for the developer of a particular site to provide.
- 9.1.5 The LCWIP was developed with considerable assistance from – and engagement with – a steering group of local stakeholders. Similar engagement will be undertaken during future reviews of the LCWIP.
- 9.1.6 The Didcot LCWIP is a ‘living document’, which will be reviewed regularly in order to ensure that it reflects any significant changes in local circumstances (including changes to the relevant policy and guidance set out in section 2), as well as to reflect progress made with implementation of the original proposals.
- 9.1.7 Future reviews of this LCWIP could:
- incorporate the outcomes of ongoing projects such as the Didcot Central Corridor scheme;
 - undertake audits of additional sections of the network;
 - propose additional interventions to add to Appendix E – Programme of Walking and Cycling Infrastructure Improvements;
 - review the suggestions received in the Stage 2 consultation marked as “To be considered for inclusion through the LCWIP review process” to determine if they could be included;
 - further develop the example prioritisation methodology; and
 - review the progress of delivery of improvements identified in the LCWIP.

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