Pell Frischmann

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1 Introduction

Pell Frischmann has been commissioned by North Northamptonshire Council (NNC) to develop a Local Cycling and Walking Infrastructure Plan (LCWIP) for the Wellingborough and Rushden area. Support has been provided by Brightwayz, a local active travel engagement social enterprise who have led on the public engagement and consultation exercises throughout the development of this LCWIP.

1.1 What is a LCWIP?

A LCWIP is an evidence-based plan for improving walking and cycling and includes a list of prioritised improvements, which will take different timescales to implement (short term - less than 3 years, medium term - 3-5 years, long term - more than 5 years). When implemented, these improvements will make it easier for people to choose cycling (by all bike types) and walking (including wheeled users) for all or part of their journeys in the area. This is an evolving plan that will guide spending of future funding over the next ten years.

1.2 Why are LCWIP's important?

LCWIP's are important as they enable the local authority to identify prioritised cycling and walking infrastructure improvements for future investment. They ensure that consideration is given to cycling and walking both within local planning, and transport policies and strategies, and demonstrate a commitment to future challenges including air quality, health and road safety. They also allow the local authority to strengthen local partnerships with National Highways (NH) and other local stakeholders including developers who can be supportive in providing funding or delivering infrastructure to enable greater walking and cycling.

Figure 1-1: Importance of LCWIP's

1.3 Developing the Wellingborough and Rushden LCWIP

This plan has been developed in consultation with local stakeholders to reflect local views. Department for Transport (DfT) technical guidance on producing LCWIPs has also been followed[1]. This approach ensures this LCWIP aligns with national and local ambitions, as set out in DfT's Gear Change vision document and the North Northamptonshire Big 50 Vision (2023). These aim to address the climate emergency and transform our streets by making cycling and walking the natural choice for short journeys or as part of longer journeys.

[1] Department for Transport, Local Cycling and Walking Infrastructure Plans Technical Guidance for Local Authorities, 2017, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/908535/cy cling-walking-infrastructure-technical-guidance-document.pdf

The DfT guidance sets out the six stages to developing a LCWIP which includes:

Figure 1-2: LCWIP Process

1.4 North Northamptonshire Greenway Strategy

The North Northamptonshire Greenway Strategic Masterplan (approved in August 2024) sets out over 350km of routes connecting settlements within North Northamptonshire and neighbouring authorities. The Masterplan follows the DfT LCWIP guidance, creating a wider LCWIP covering rural locations across North Northamptonshire. There are a number of proposed Greenway routes that intersect with our proposals in Wellingborough and Rushden and therefore this document should be read in conjunction with the Greenway Strategy to understand the wider extents and connections that are being proposed. Some Greenway routes, in particular the Wellingborough to Rushden route, are further developed than would be deemed appropriate in a LCWIP document. Due to this, and the differing strategic nature of the Greenway Strategy compared to this urban LCWIP, they have not been included within the prioritisation of this routes set out in this document. However, the Greenway Strategy as a whole forms a part of this LCWIP in understanding the importance of the last mile connections into the urban areas.

1.5 Report Structure

This remaining chapters of this LCWIP are detailed as follows:

- Chapter 2: Stage 1 – Determining Scope
- Chapter 3: Stage 2 – Gathering Information
- Chapter 4: Site Visit Findings
- Chapter 5: Stage 3 – Network Planning for Cycling
- Chapter 6: Stage 4 – Network Planning for Walking
- Chapter 7: Stage 5 – Prioritising Improvements
- Chapter 8: Stage 6 – Integration and Application

2 Stage 1: Determining Scope

The first stage is to determine the geographical extent of the LCWIP and outline the governance arrangements.

2.1 Geographical Extent of LCWIP

Stakeholder workshops were undertaken in Wellingborough in April 2023 and Rushden in September 2023 with local stakeholders including officers from North Northamptonshire Council (NNC), local councillors and local interest groups. These workshops sought out views on the geographical extent of the LCWIP and began to identify barriers and opportunities to movement in Wellingborough and Rushden.

The geographical extent of the Wellingborough & Rushden Area LCWIP covers Wellingborough, Rushden, Higham Ferrers and surrounding villages as shown in **Figure 2-1**, with a strong focus on improvements in Wellingborough and Rushden. The study area does not form a 'hard' boundary and key attractors and generators outside of the study area remain in consideration whilst undertaking the analysis of potential walking and cycling trips. However, it is likely that the greatest potential for increasing walking and cycling trips will be within the key urban centres of Wellingborough and Rushden.

2.2 Governing Arrangements

Since Northamptonshire County Council was split into two unitary authorities in April 2021, the governance arrangements and delivery are important considerations for this project. The LCWIP delivery model has been established, with NNC acting as the leading local authority. Representatives from West Northamptonshire Council (WNC) were also involved throughout the project, providing historic inputs, technical guidance and local knowledge.

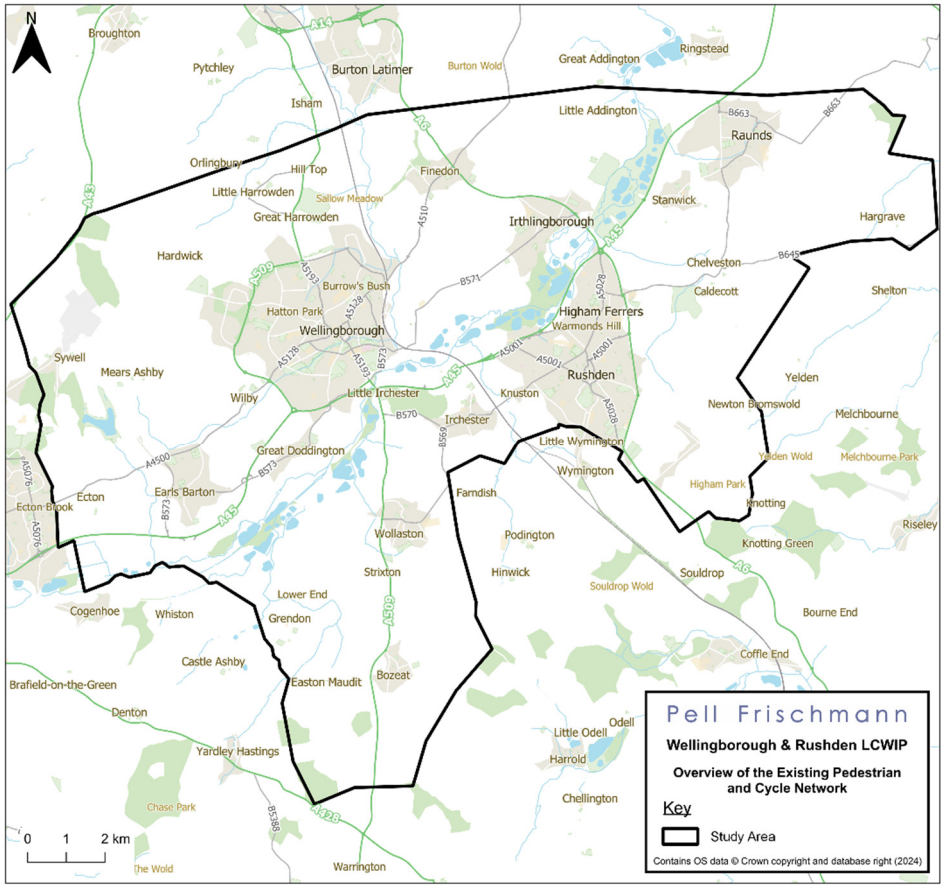


Figure 2-1: LCWIP Study Area

2.3 Stakeholder Engagement

Between 5th June and 3rd July 2020, Northamptonshire County Council undertook an exercise to understand people's views for making the streets in Northamptonshire better for walking and cycling. This identified existing barriers and issues that local people experienced across Northamptonshire.

Figure 2-2: Stakeholder Workshop 1

The first LCWIP stakeholder workshop was undertaken in April 2023 to identify the geographical extent of the LCWIP and to identify existing barriers to walking and cycling within Wellingborough and Rushden. Stakeholders attended from across the area, providing valuable local knowledge and experiences to help identify key trip attractors and generators.

Engagement with key stakeholders throughout the development of this LCWIP has enabled a sense of ownership and buy-in which is critical to the delivery of the Wellingborough & Rushden Area LCWIP. **Table 2-1** presents the engagement activities that have taken place throughout the development of this LCWIP. More detailed information regarding the outputs from the stakeholder workshops as well as the public engagement events led by Brightwayz, can be found in **Appendix A** and **B** respectively.

Table 2-1: Stakeholder Engagement

Engagement Activity	Attendees	Purpose of the Engagement
Commonplace[2]	-	Between June 2020 and July 2020, people across Northamptonshire were able to submit ideas via Commonplace outlining their views on existing walking and cycling and suggesting improvements for the future.
Stakeholder Workshop 1	15	To help define the geographical extent of the LCWIP and identify trip generators and attractors.
Face to face initial engagement events	56	Initial public engagement events took place to gather views and experiences of local people about their existing barriers to walking and cycling. Five events were held at: Rushden Lakes, Nene Courtyard, Asda Rushden, Wellingborough Eco Group, Irthlingborough Parson's Green
Stakeholder Workshop 2	20	Stakeholder workshop to review routes that had been identified to be audited and suggest additional routes to be reviewed on site.
Face to face engagement events	36 (at events) 157 responses online	Two engagement events were held during the engagement period in May 2024 including in Wellingborough Town Centre and Rushden Lakes.
Stakeholder Workshop 3: Route prioritisation	9	Stakeholder workshop to review route proposals and undertake an exercise to identify the prioritisation of routes.
Public Consultation	-	Public consultation on this LCWIP is due to begin in September 2024.

[2] Safer Streets Northamptonshire: https://saferstreetsnorthamptonshire.commonplace.is/en-GB/map/map?cid=5efc70fb3632ab3e057d6ba4

3 Stage 2: Gathering Information

Stage 2 of the LCWIP process identifies the existing walking and cycling patterns, potential future journeys and a review of local policies and strategies. This stage is intended to give a clear understanding of the existing conditions to help identify improvements in Stages 3 and 4.

3.1 Policy, Strategy and Guidance Context

This section sets out a summary review of the national, regional and local policies, strategies and guidance and their relevance to this LCWIP.

Reviewing these relevant documents provides wider context and rationale for the scheme to make the case for investment.

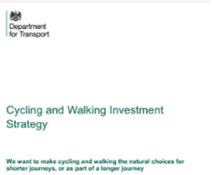
3.1.1 National Policy

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

Gear Change outlines a bold vision for cycling and walking in the UK. Prioritising active travel, it emphasises ambitious goals to make cycling and walking safer, accessible, and more attractive options for daily journeys. The strategy focuses on substantial funding, infrastructure enhancements, and collaboration with local authorities.

Gear Change aims to create a cultural shift, promoting healthier and more sustainable modes of transportation. The document demonstrates the importance of public involvement, data-driven decision-making, and the integration of active travel into broader transport strategies for a greener and more active future.

Cycling and Walking Investment Strategy (DfT, 2023)



The second Cycling and Walking Investment Strategy (CWIS2) aims to promote sustainable transport in the UK, emphasising walking and cycling. Launched in 2023, it outlines a £2 billion plan to enhance infrastructure, safety measures, and accessibility for cyclists and pedestrians across England.

CWIS2 focuses on improving active travel networks, integrating cycling and walking into urban planning, and encouraging more people to choose these modes of transportation. Its objectives include reducing traffic congestion, promoting health and wellbeing, and combating climate change by reducing carbon emissions.

3.1.2 Regional Policy

Active Travel Strategy: The Ambition (England's Economic Heartland, 2022)

The Active Travel Strategy outlines the initial aspirations for active travel within England's Economic Heartland (EEH). EEH's active travel ambition is:

T*o create an exemplar active travel network and culture that encourages mode shift for both shorter journeys and for the first and last mile of longer journeys.*

To achieve this ambition, EEH has outlined the objective of increasing the proportion of short, leisure and first mile/last mile journeys made by active travel. In order to achieve this several activities have been included such as research and gap analysis for the network, monitoring and evaluation and the introduction of pilot schemes.

3.1.3 Local Policy

North Northamptonshire Greenway Strategy (NNC, 2023)

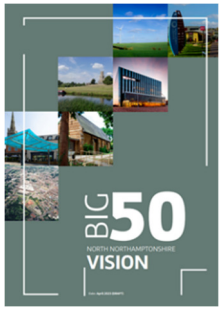
The North Northamptonshire Greenway Strategy is a strategic masterplan comprising of over 350km of routes connecting to settlements within North Northamptonshire and in neighbouring authorities.

Vision: *The North Northamptonshire Greenway will be a strategic rural network of safe, largely traffic free routes suitable for walking, wheeling and cycling, connecting settlements, employment, leisure and tourism destinations across North Northamptonshire and beyond.*

Objectives:

- Enable people to choose to walk, wheel or cycle for a range of trip purposes including school, commuting, every day and leisure trips.
- Deliver an accessible, inclusive active travel network in line with current design standards in terms of coherence, directness, safety, comfort and attractiveness.
- Improve the tourism offer across North Northamptonshire, with connected market towns, nature reserves and tourism sites and circular routes.
- Improve the vitality of North Northamptonshire's towns, aiding local businesses by improving access for commuters and shoppers.
- Provide safe routes to schools.

North Northamptonshire Big 50 Vision (NNC, 2023)

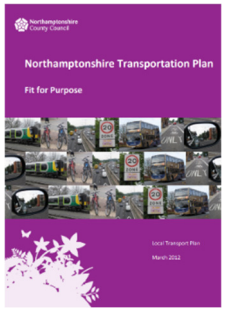


The North Northamptonshire Big 50 Vision was published by North Northamptonshire Council (NNC) in 2023. It sets out NNC's vision and ambitions for sustainable growth which they hope to achieve by 2050. The three priorities identified by NNC to achieve this vision are:

- Proud Place
- Prosperous Place
- Proactive Place

The vision includes the requirement of improvements in public and sustainable transport, particularly in more rural areas, reducing carbon emissions from transport and improving connectivity through a variety of transport options. Through this, NNC hope to reduce car dependency and traffic.

Northamptonshire Local Transport Plan (NCC, 2012)

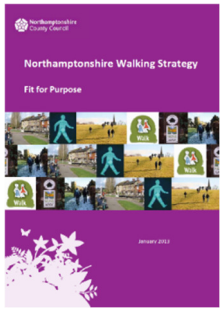


The Northamptonshire Local Transport Plan was published by the former Northamptonshire County Council (NCC) in 2012, setting out the aims and objectives for transport in Northamptonshire. There are six main objectives of the plan which include:

- **Fit for the future** – creates a transport system that supports and encourages growth.
- **Fit for the community** – delivers a transport system that helps to maintain and create safe, successful and strong communities.
- **Fit to choose** – ensure that the people of Northamptonshire have the information available to be able to choose the best form of transport for each journey.
- **Fit for economic growth** – a transport system that supports economic growth, regeneration and a thriving local economy.
- **Fit for the environment** – delivers a transport system that minimises and wherever possible reduces the effect of travel on the built, natural and historic environment.
- **Fit for best value** – prioritising what we spend money on and how it can be beneficial for the county as a whole.

A key priority of this document is Priority 2 which aims to make public transport and cycling more attractive and encourage and incentivise low-carbon travel. In order to achieve this the introduction of a high-quality Northamptonshire Arc Transit network was proposed. Initiatives include smartcards, rural accessibility solutions, and improved cycling infrastructure.

Northamptonshire Walking Strategy (NCC, 2013)



The Northamptonshire Walking Strategy is a daughter document to the Northamptonshire Transportation Plan. The aim of this document is to:

To improve the pedestrian environment to encourage more people to walk for short utility journeys and recreation to enable modal shift.

The document outlines a vision to enhance walking as a preferable travel choice for short journeys. The strategy focuses on walking's role in an integrated transport system, emphasising its health and environmental benefits. It promotes the economic advantages of a cleaner environment and commits to creating pedestrian-friendly infrastructure for accessing work, education, and leisure.

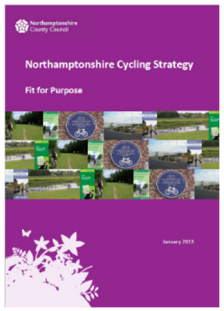
The Councils aims to encourage walking through practical initiatives, recognizing its positive impact on personal fitness, reduced stress, and local business turnover. The document specifically addresses walking infrastructure on the highway network, focusing on inclusivity for various users.

Northamptonshire Cycling Strategy (NCC, 2013)

The Northamptonshire Cycling Strategy is another daughter document to the Northamptonshire Transportation Plan. The aim of this document is to:

Increase the number of people choosing to travel by cycle for trips under 5 miles through a combination of improvements to the on and off-road cycling environment, promotion and training.

The document discusses the benefits of increased cycling, such as reduced congestion, lower carbon emissions, and healthier communities. Faced with substantial population growth, the strategy addresses the challenge of rising traffic levels by promoting cycling for short trips. Overcoming perceived barriers, particularly safety concerns, is crucial to encouraging cycling as an inexpensive, environmentally sustainable mode of transport with substantial health benefits. As with the Walking Strategy, the Cycling Strategy also focuses on inclusivity and outlines measures to facilitate a shift toward cycling.



Wellingborough Town Transport Strategy (NCC, 2015)

The Wellingborough Town Transport Strategy is a daughter document to the Northamptonshire Transportation Plan which sets out the vision for transport in Wellingborough to 2031 to support the town's economic prosperity and wellbeing as it grows. The key objectives of the strategy that align to this LCWIP include:

- Encourage a shift towards sustainable transport.
- Enhance modal choice and create connected communities in the town by improving the public transport, walking and cycling environment for all and in doing so promote healthier lifestyles.
- Support the regeneration of Wellingborough as a destination for retail, leisure and employment activity through improved transport links to enhance its economic competitiveness and growth.

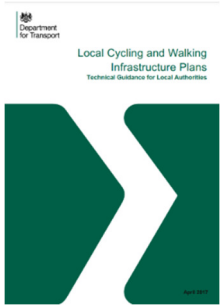
Northamptonshire Rights of Way Improvement Plan 2020-2030 (2020)

The Rights of Way Improvement Plan (2020-2030) outlines a decade-long strategy to enhance public rights of way. Focused on sustainable access, the plan aims to:

- Provide a rights of way network infrastructure maintained to an acceptable standard through the efficient use of available resources.
- Provide an accurate and up to date Definitive Map and statement.
- Provide a safer, more connected and accessible network for all.
- Protect the network and influence development.
- Promote greater use of the network and increase availability of information.

Key objectives include addressing barriers, engaging the public, and leveraging technology for efficient management. The plan aligns with broader goals of fostering recreation, tourism, and biodiversity while recognising the importance of collaboration between stakeholders and local communities for successful implementation and ongoing improvements.

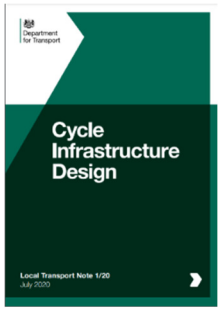
3.1.4 Guidance



Local Cycling and Walking Infrastructure Plans (LCWIP) Guidance (DfT, 2017)

The 2017 LCWIP Guidance by the UK's Department for Transport provides a framework for local authorities to develop comprehensive plans promoting cycling and walking. Encouraging collaboration and public engagement, the guidance highlights the integration of active travel into broader transport strategies.

LCWIPs aim to identify and address local barriers, improve infrastructure, and enhance connectivity for cyclists and pedestrians. The guidance underscores the importance of data-driven decision-making and outlines the steps for creating effective, locally tailored plans to foster a safer, more accessible environment for cycling and walking within communities.



LTN 1/20: Cycle Infrastructure Design (DfT, 2020)

LTN 1/20 provides guidance on designing effective cycling infrastructure. It prioritises a user-centric approach, emphasising safety, accessibility, and connectivity. The document outlines design principles for cycle lanes, junctions, and crossings, encouraging consistency and clarity in infrastructure planning.

LTN 1/20 aims to create a cohesive and interconnected network that accommodates cyclists of all abilities, promoting cycling as a viable and safe mode of transportation. The guidance underscores the importance of stakeholder engagement, data collection, and ongoing evaluation to ensure the effectiveness of implemented cycling infrastructure.

The Highway Code (DfT, 2022)

The 2022 edition of The Highway Code by the UK's Department for Transport provides essential rules and guidelines for road users. Emphasising safety, the code outlines updated regulations for drivers, cyclists, and pedestrians, incorporating advancements such as electric scooters. Key elements include prioritising vulnerable road users, clearer guidance on junctions, and promoting environmentally friendly transportation.

The code encourages mutual respect among road users, highlighting the shared responsibility for road safety. Regularly updated to reflect evolving transport trends, The Highway Code serves as a comprehensive reference for navigating roads, promoting adherence to rules and fostering a safer and more inclusive road environment.

3.1.5 Summary

The reviewed policies and strategies emphasise a strong commitment to promoting active travel and creating sustainable, inclusive, and attractive travel options. Key themes include prioritising walking and cycling as preferred choices, creating safe and interconnected active travel networks and enhancing infrastructure. As well as fostering healthier and greener transportation modes, integrating active travel into broader transport strategies, and encouraging public involvement and data-driven decision making.

Local initiatives focus on making walking and cycling more appealing, proposing high quality transit networks, rural accessibility solutions, and improved cycling infrastructure. Additionally, guidance underscores collaborative planning and stakeholder engagement for effective implementation.

3.2 Existing Conditions

Data from a range of sources has been collated to undertake this baseline analysis to help inform the development of this LCWIP. Census (2011 and 2021), Propensity to Cycle Tool (PCT) and collision data has been used alongside Google Maps to support this analysis.

3.2.1 Transport Network

The section below describes the local transport network within the study area.

3.2.1.1 Highway Network

The key roads that run through the study area are the A45, A6 and the A509. These routes are shown in **Figure 3-1**.

The A45 is operated and maintained by National Highways and forms part of the Strategic Road Network (SRN) connecting Thrapston and Northampton via Higham Ferrers, Rushden and Wellingborough.

The A6 connects Higham Ferrers and Rushden to Kettering and Bedford. It also forms a part of the eastern boundary of Rushden and Higham Ferrers. The A6 provides connections to other key A roads such as the A45 and the A14, which provide connections to the motorway network.

The A509 forms the western boundary of Wellingborough, connecting to Kettering and the A14 to the north and Milton Keynes and the M1 to the south.

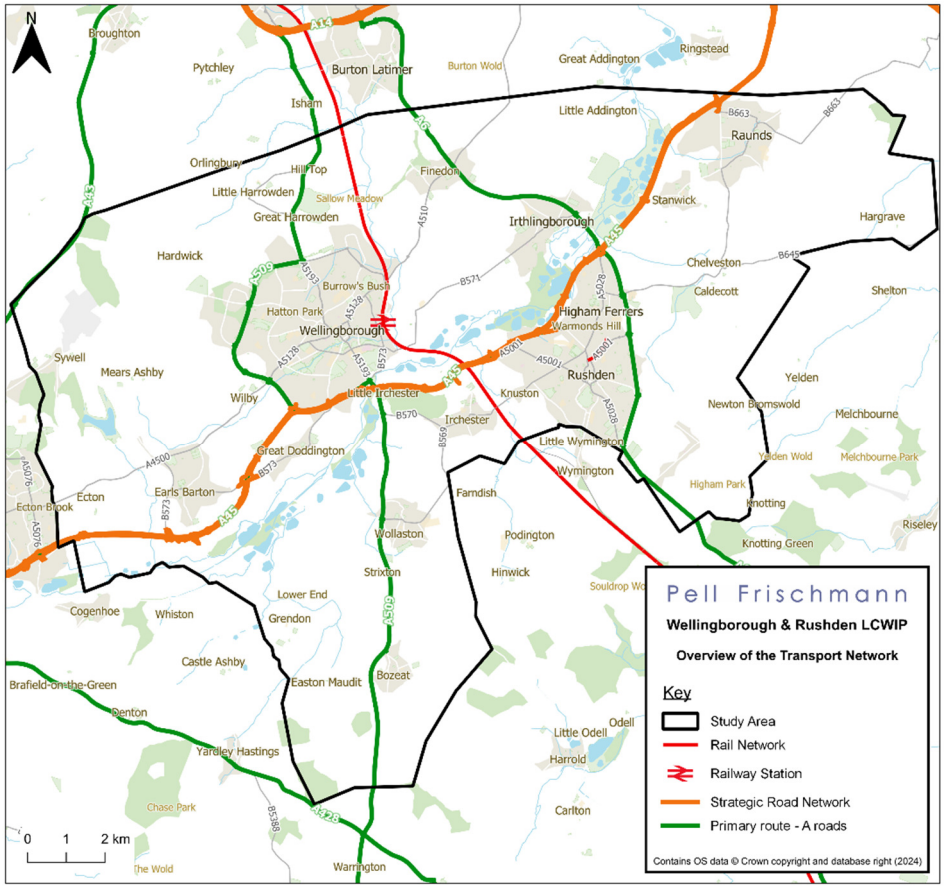


Figure 3-1: Transport Network – Highway Network

3.2.1.2 Cycling and Walking Network

The existing cycle and pedestrian network in the study area is mapped in **Figure 3-2**. This shows the location of off-road cycle routes, shared use walking/ cycling routes, public right of way footpaths and controlled crossings.

The existing cycle network has been identified and mapped from the Northamptonshire Cycle Maps[3] for Wellingborough, Rushden, Higham Ferrers, Irthlingborough, Raunds and Stanwick. This was supplemented with information from OpenStreetMap and Google Maps.

The map shows that there are gaps in cycling routes in particular connecting into Wellingborough and Rushden. Within Wellingborough there are also gaps for walking and cycling in the east and within Rushden there are gaps in provision to the south and west.

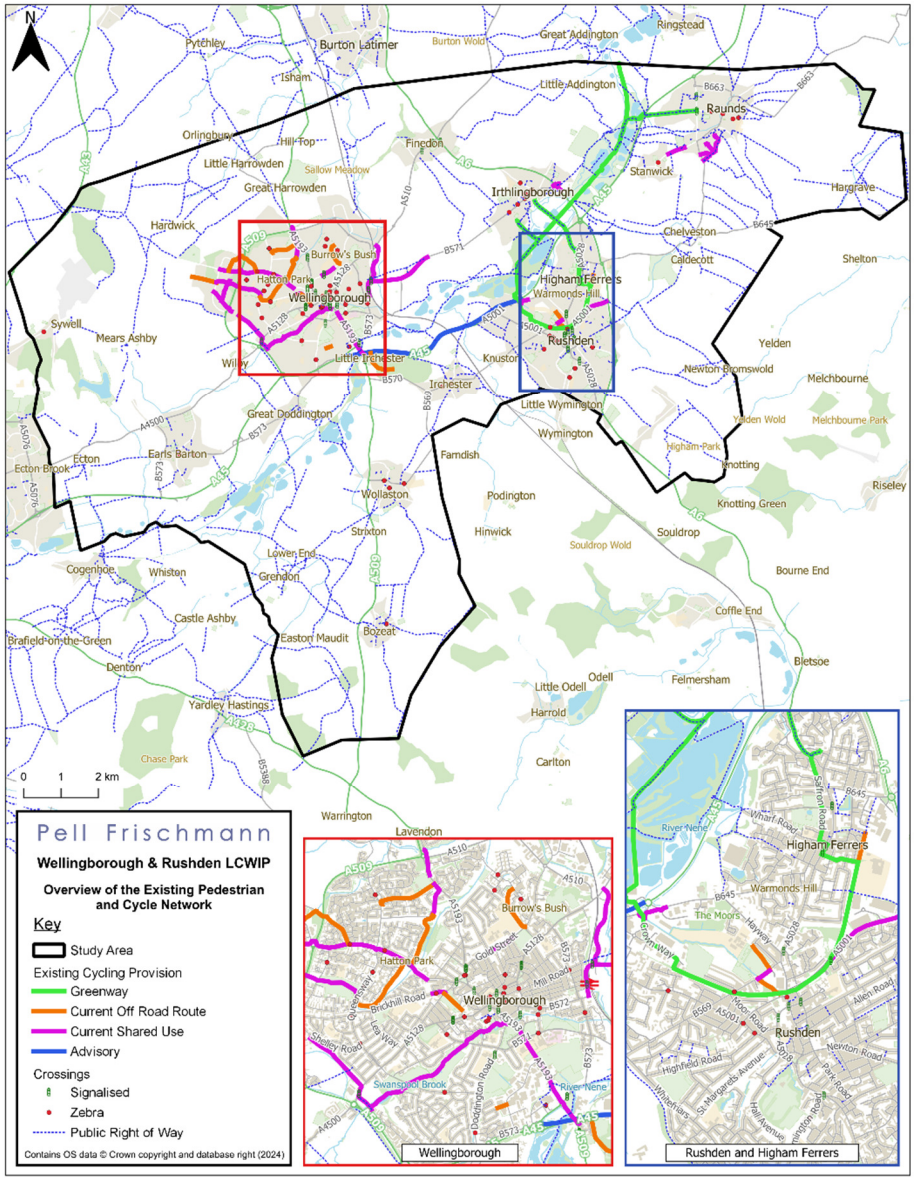


Figure 3-2: Existing pedestrian and cycle network

[3] Northamptonshire Cycle Maps - https://www.smartmovenorthamptonshire.net/cycle-maps

3.2.1.3 Committed Development Schemes

Figure 3-3 shows the committed development schemes within the study area.

These committed developments have been identified using the North Northamptonshire Joint Core Strategy 2011-2031[4]. Included on the map are:

- Wellingborough North Sustainable Urban Expansion (Glenvale Park)
- Wellingborough East SUE (Stanton Cross)
- Rushden East SUE
- Irthlingborough West
- Warth Park, Raunds – Employment
- Rushden Lakes – Retail and Leisure
- Land at Nene Valley Farm, Rushden – Employment
- Park Farm Way, Wellingborough – Residential
- Appleby Lodge, Wellingborough – Employment
- West End, Raunds

These sites have the potential to contribute to a significant increase in trips on the network. In order to adhere to NNCs aspiration to reduce the number of car trips for new developments, viable alternative methods of travel should be available such as walking and cycling.

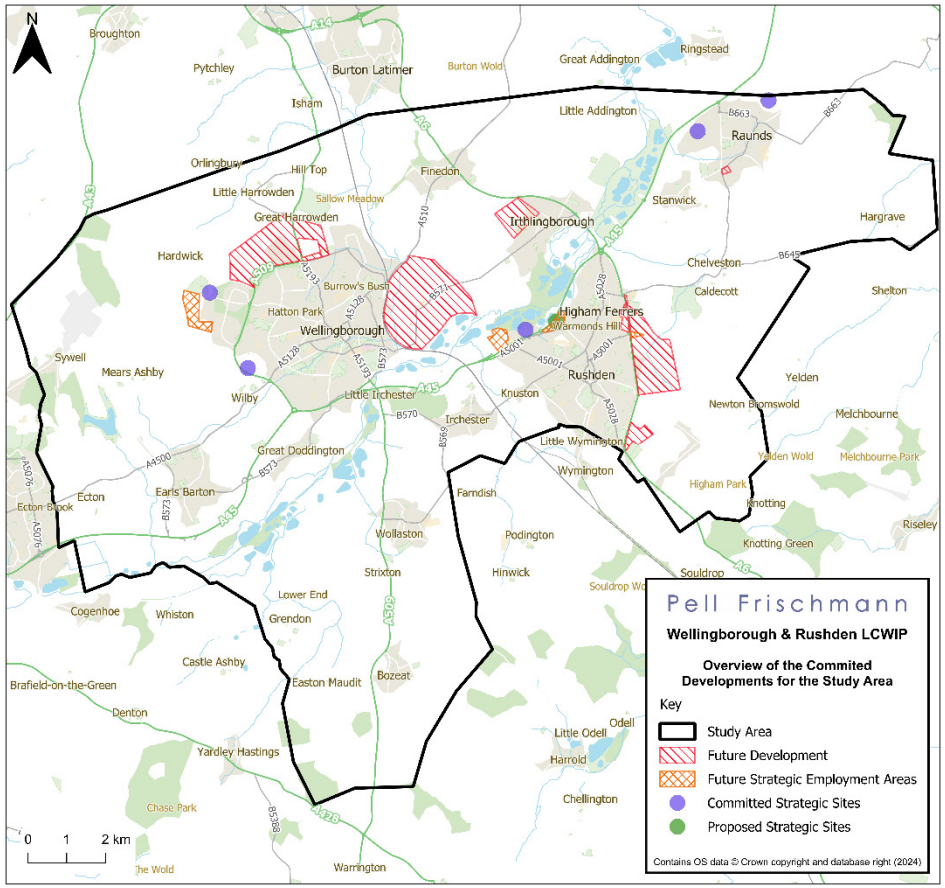


Figure 3-3: Committed Developments

[4] North Northamptonshire Joint Core Strategy 2011-2031 Adopted July 2016

3.2.2 Travel Patterns

The information shown on **Figure 3-4**, shows the percentage of travel to work trips made by bicycle based on the 2011 census. Due to the Covid-19 national lockdown resulting in many people working from home on the date of the 2021 census, data from the 2021 census might not be as reflective of current travel behaviours as many people have returned to work. As a result, it was felt that Travel to Work data from the 2011 census would be more representative of current travel to work behaviours; however, it should be acknowledged that this data is now 13 years old and travel patterns have changed and evolved. Traffic count data has been reviewed and has provided an indication on the overall travel patterns across North Northamptonshire and as a result, travel to work covers a small proportion of the overall trips on the network (approximately 20%).

Shown below for context is the regional and national mode share values for travel to work for cycling as well as that for the study area from the 2011 census:

- England – 1.9%
- Northamptonshire (prior to the administrative boundary changes) – 1.3%
- Study area – 0.9%

Due to the rural nature of a large part of the study area the level of cycle usage for travel to work purposes does not vary much within the study area. The majority of the study area has cycling levels between 0 – 1.5%, which is lower than both the regional and UK mode shares for cycling. Within Wellingborough itself there are a small number of areas which have between 4 – 5%.

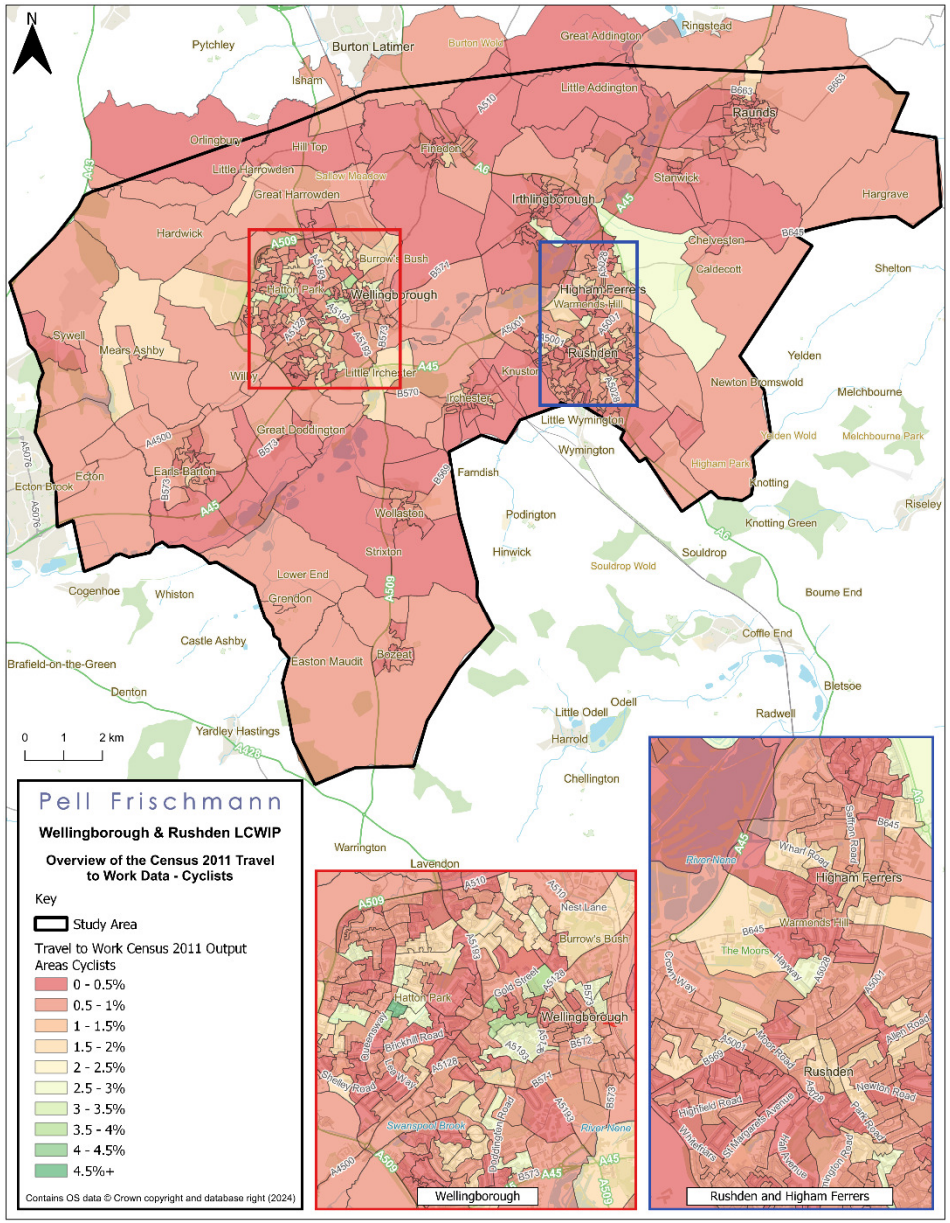


Figure 3-4: Census 2011 Travel to Work – by bike

Figure 3-5 shows the percentage of travel to work trips made on foot based on the 2011 census. For the purposes of comparison, the regional and national mode share values for travel to work for walking as well as that for the study area from the 2011 census are shown below.

- England – 6.3%
- Northamptonshire (prior to the administrative boundary changes) – 6.1%
- Study area – 6.5%

Travel to work on foot in the study area is somewhat similar to cycling as the areas with the higher percentage modal share tending to be closer to the town centres of Rushden and Wellingborough. However, the percentage share of walking trips is not consistent across both towns.

For Wellingborough the higher proportion of walking trips appears to be contained within the south-eastern part of the town. A potential reason for this is the large number of employment areas in this part of Wellingborough, with both the Isebrook Hospital and Castlefields Retail Park being in this area, making walking a viable option for those living there. The northern part of the town sees a lower percentage of walking trips as this area is largely residential and the travel distance to some of the employment areas is too far.

A similar pattern is shown for Rushden as the areas closest to the town centre, particularly to the south, have increased levels of walking to work due to the close proximity to the town centre.

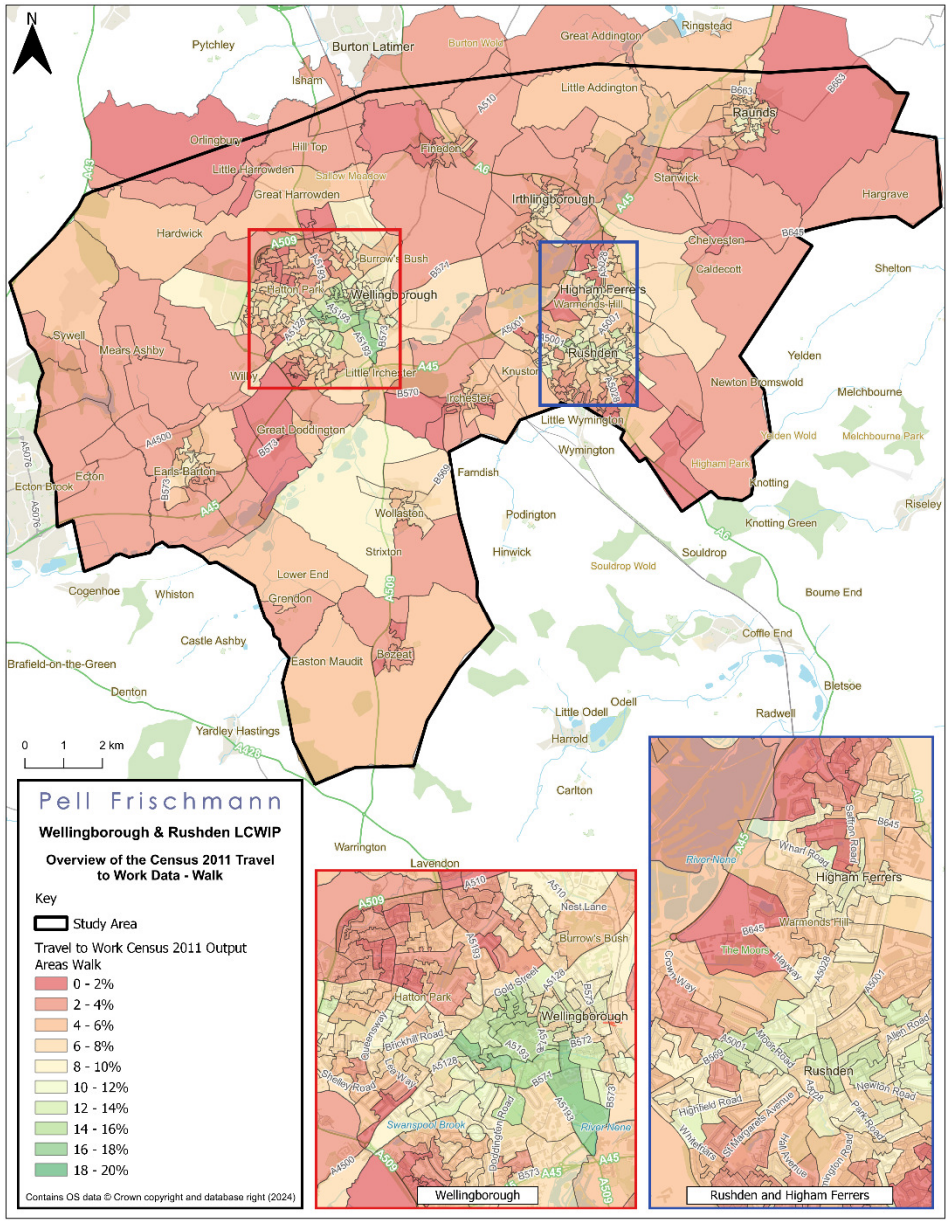


Figure 3-5: Census 2011 Travel to Work – On Foot

Figure 3-6 shows the percentage of travel to work trips made by car based on the 2011 census. For the purposes of comparison, the regional and national mode share values for travel to work by car as well as that for the study area from the 2011 census are shown below.

- England – 37.1%
- Northamptonshire (prior to the administrative boundary changes) – 47.7%
- Study area – 48%

Again, due to the rural nature of the study area, greater numbers of people travel to work by car with the majority of the study area having a car mode share between 45 - 60%, which is higher than the UK average.

By comparing these maps with the Indices of Multiple Deprivation (IMD) maps shown in **Section 3.2.7**, these areas also appear to have a lower IMD rank compared to the rest of the study area. These areas could therefore be prioritised in the route identification stage.

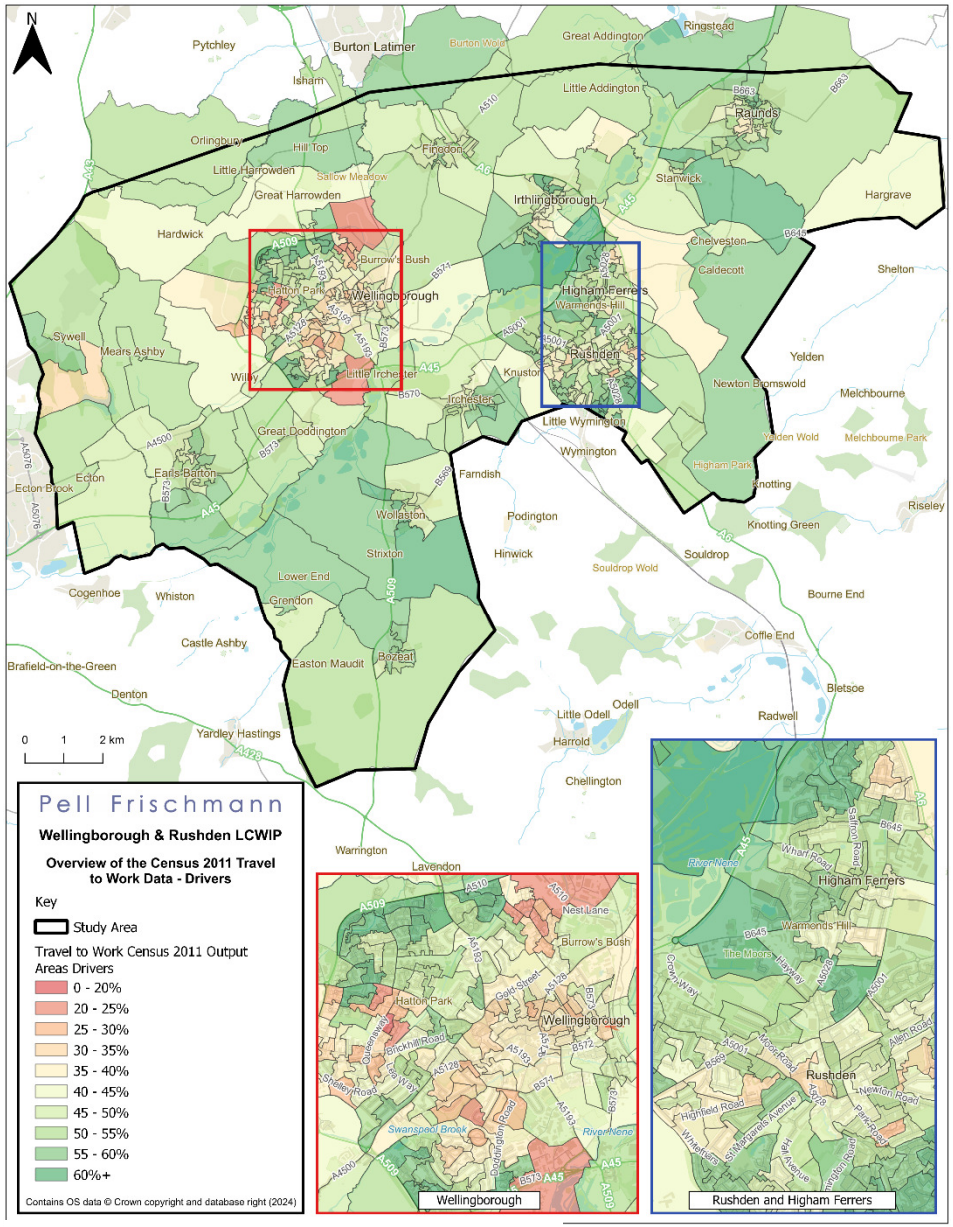


Figure 3-6: Census 2011 Travel to Work – by car

Figure 3-7 shows the percentage of households that do not have access to a car or van. Data from the 2021 census has been used here as the data was less likely to feel the impact of the Covid pandemic.

Despite this information being from the 2021 census there is a similar pattern to the data shown in **Figure 3-6**. Areas to the north of Wellingborough town centre appear to have a larger percentage of households which have access to a car/ van. This correlates with the data in **Figure 3-6** that shows that these areas have increased trips made to work by car.

In addition, the areas to the south of Rushden town centre appear to have a lower percentage that have access to a car compared to other parts of Rushden. Again, this correlates with the data from the 2011 census in that these areas have a lower number of trips made to work by car.

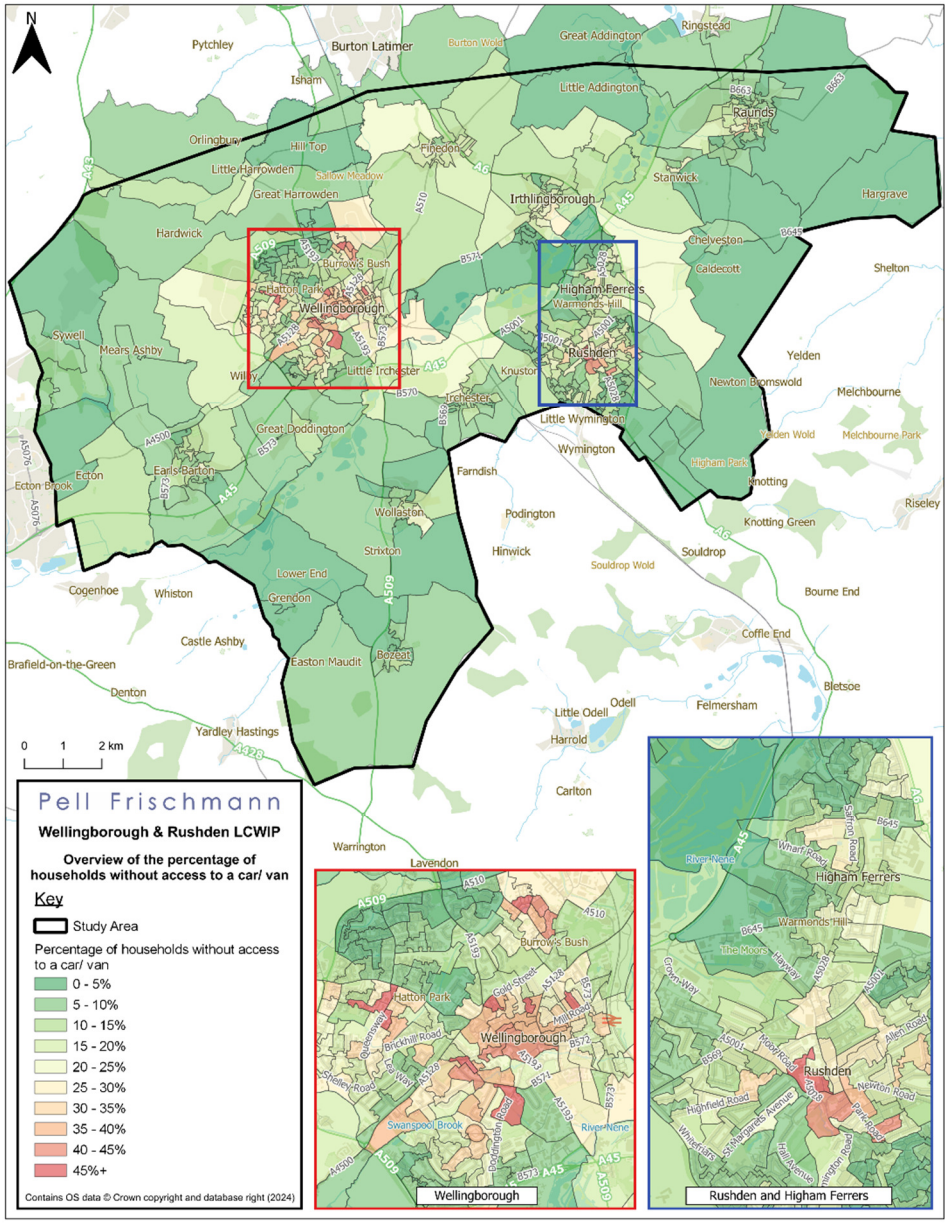


Figure 3-7: Census 2021 – Households without access to a car/ van

3.2.3 Trip Generators

The key trip generators and attractors are shown in **Figure 3-8** across the study area.

The identification of key trip generators can help to identify where people want to travel and help identify key routes for improvements as part of the Network Planning stage of this LCWIP. This exercise was undertaken during the first stakeholder workshop, with key stakeholders helping to identify key trip attractors and generators.

The data shown on this map includes:

- Existing and future employment and retail areas
- Hospitals
- Transport interchanges
- Primary and secondary schools, colleges and university campuses
- Sports stadiums
- Museums
- Local centres, including those located in the SUEs

Information from the North Northamptonshire Joint Core Strategy was also included here which identified areas that will experience growth over the coming years. Zoomed in versions of **Figure 3-8** showing Wellingborough and Rushden/ Higham Ferrers are shown on **Figure 3-9** and **Figure 3-10** respectively.

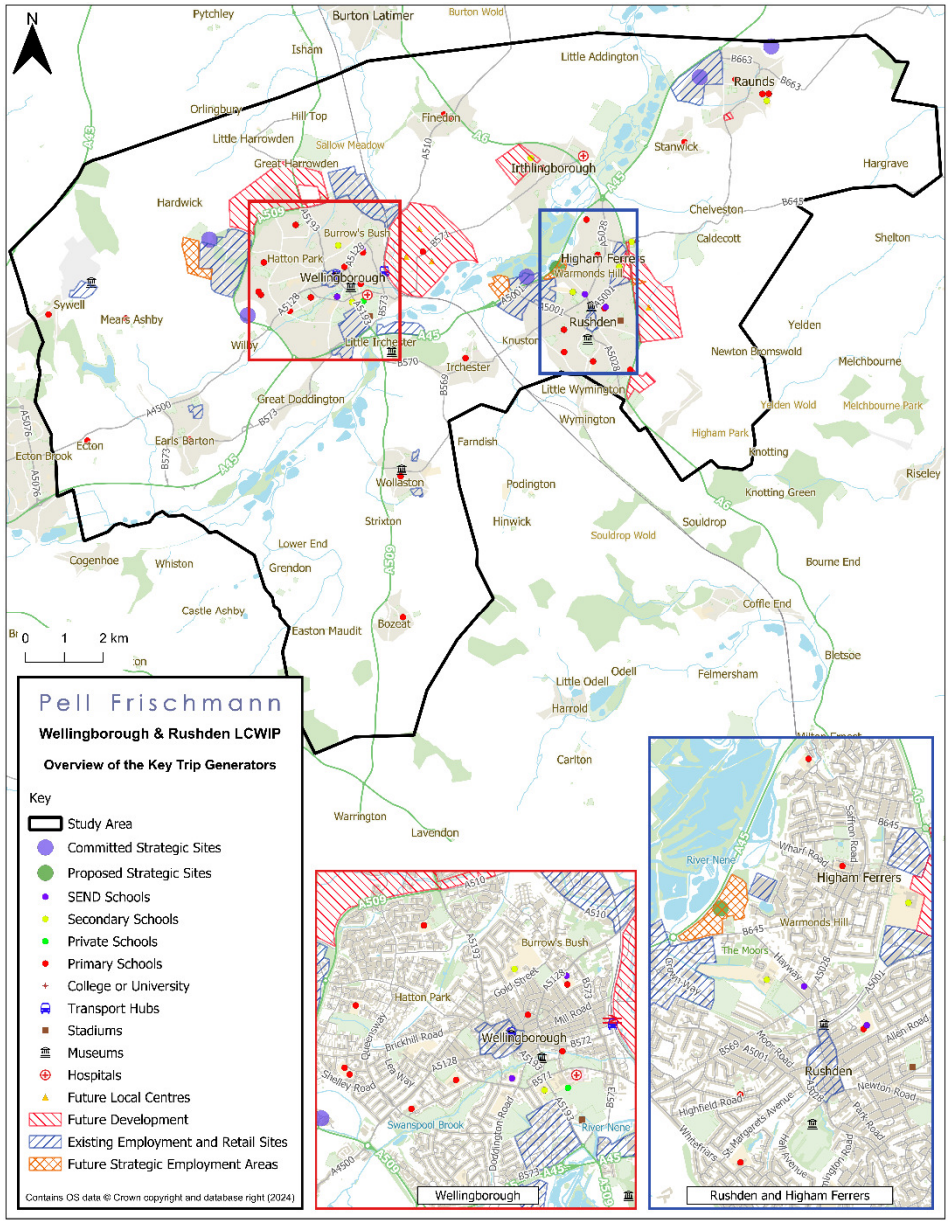


Figure 3-8: Key Trip Generators

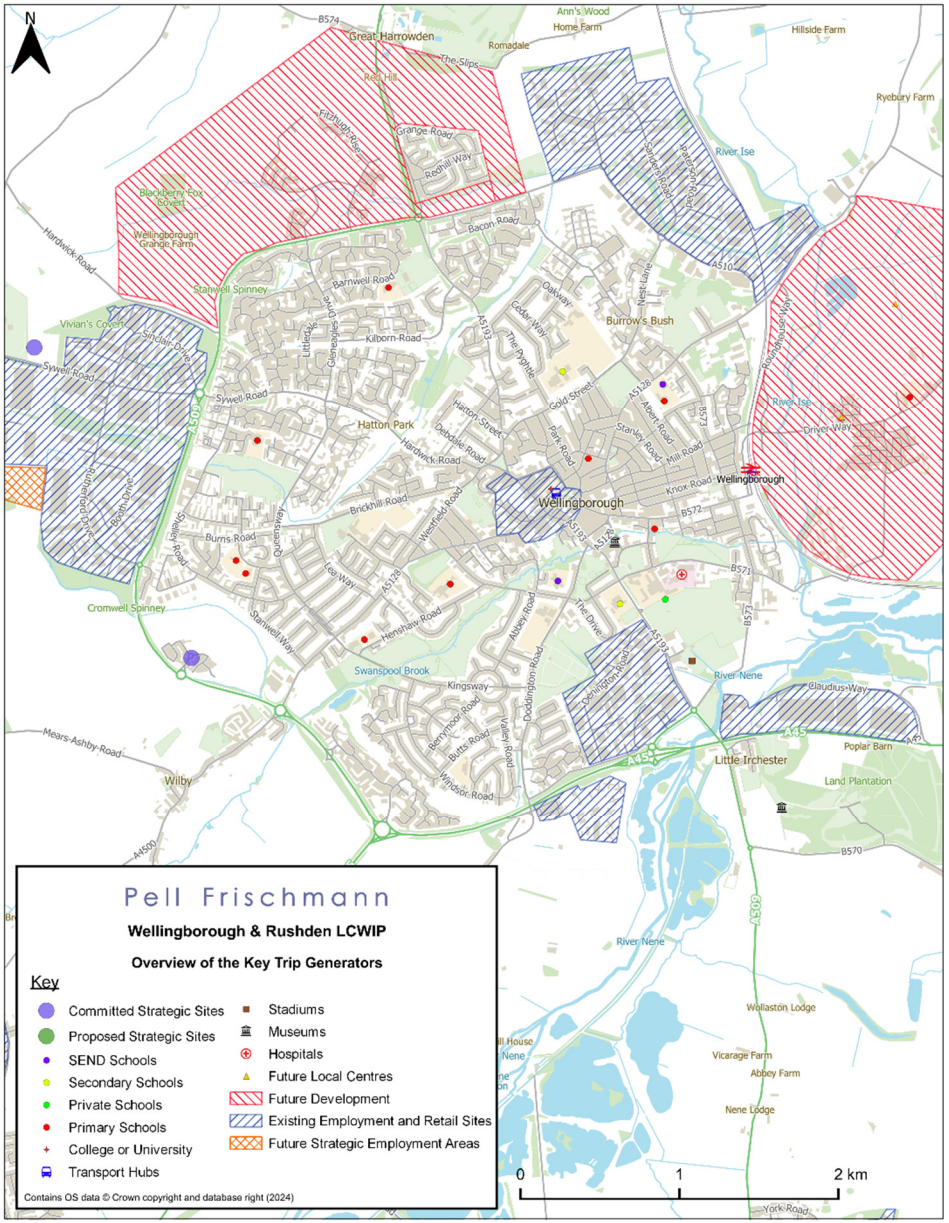


Figure 3-9: Key Trip Generators for Wellingborough

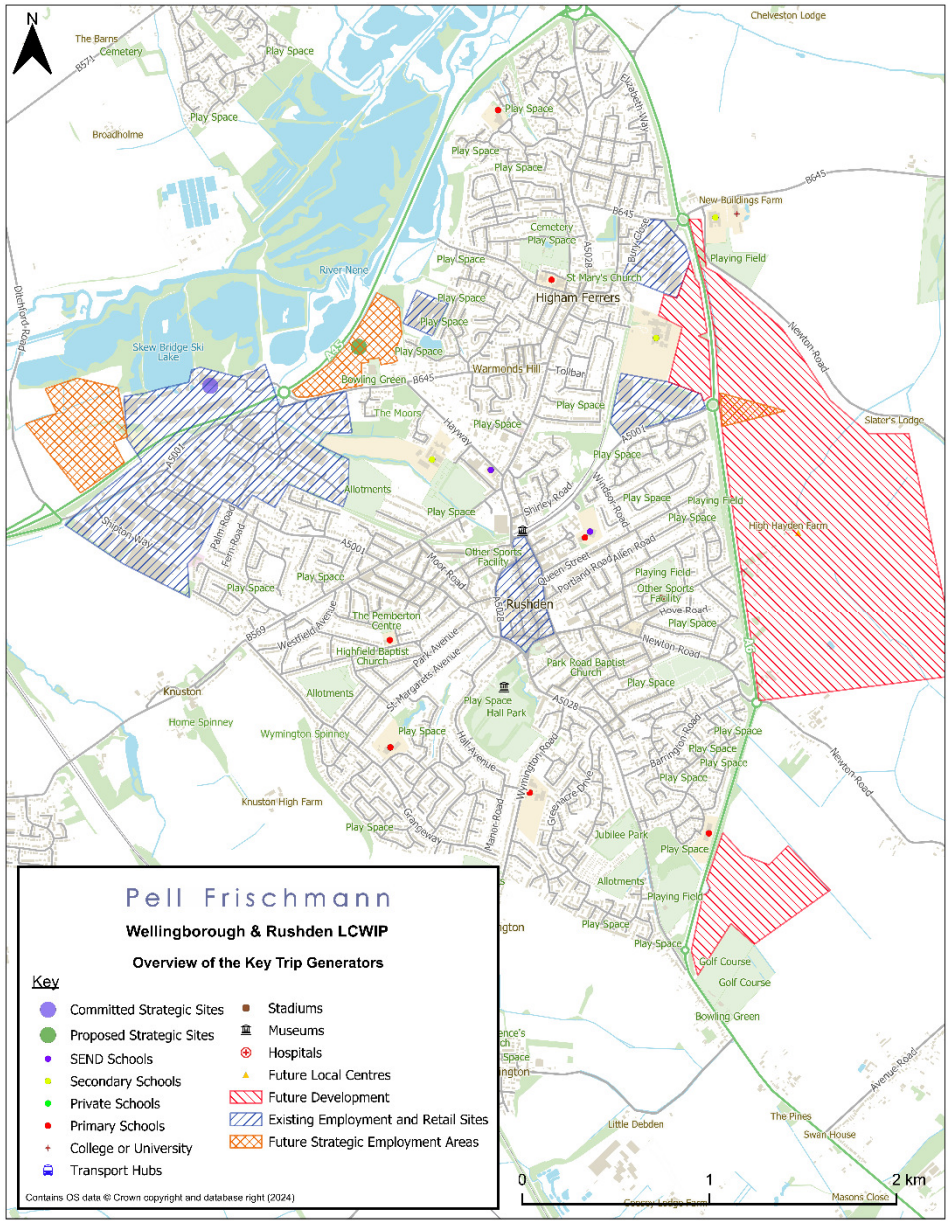


Figure 3-10: Key Trip Generators for Rushden and Higham Ferrers

3.2.4 Propensity to Cycle Tool

To aid local authorities throughout England in developing LCWIP's, the Department for Transport commissioned the development of the Propensity to Cycle Tool (PCT)[5]. Specifically developed for transport planners and policymakers, the PCT serves as a valuable resource for prioritising investments and interventions to promote cycling. It addresses the fundamental question of identifying areas where cycling is already prevalent and pinpointing locations with the highest potential for future growth in cycling.

The PCT consists of two datasets: one derived from travel to work journeys recorded in the 2011 census and the other from travel to school journeys documented in the 2011 National Schools census. For the purpose of this LCWIP, the data from the 2011 census regarding travel to work has been used.

The PCT can be used for the development of a LCWIP in two distinct ways. Firstly, the PCT can be strategically applied to illustrate the cycling prevalence within a larger region, such as a local authority area or a designated study area. Secondly, the PCT can be employed at a more granular level, estimating the potential cycle count on a specific link within the highway network.

The PCT included various scenarios for predicting future cycle demand, including:

- The baseline 'Census 2011' scenario relies on the journey to work patterns of cycle commuters documented in the 2011 census. This dataset captures the residence and workplace locations along with the corresponding number of cycle commuters. The PCT creates desire lines based on fast or quiet routes between origin and destination pairs.
- The 'Government Target' scenario is built on potential cycle flows if the UK Government successfully doubles cycling by 2025, using the 2011 census figures as a baseline. This scenario has two sub-scenarios, 'Near Market' and 'Equality,' with similar results. Therefore, only the 'Government Target Near Market' scenario is presented in the subsequent analysis.
- The 'Go Dutch' scenario explores the potential future cycling demand if people in the study area were as inclined to cycle as the Dutch, assuming they had comparable infrastructure. However, adjustments are made for terrain and trip distance. In the Netherlands, on average, 26.7% of trips are made by bicycle, a figure fifteen times higher than the 1.7% in England and Wales. The 'Go Dutch' scenario identifies areas where cycling could become the natural choice for journeys if suitable infrastructure and a cycling culture similar to that in the Netherlands were present. This scenario is likely to reveal new priorities by considering the potential untapped demand for cycling.

The origins and destinations are categorised by Lower Super Output Area (LSOA), offering a comprehensive understanding of overall cycle commuting patterns within the study area. While the PCT effectively identifies current cycle movements and potential future demand, it exclusively focuses on travel to work journeys, omitting other trip types like those to schools or leisure facilities. A limitation also arises from its reliance on existing land use data, neglecting considerations for future development sites or new locations post-2011. Furthermore, it doesn't represent cycle journeys with both start and finish points within the same LSOA.

Due to these limitations cycle numbers appear to be low for the study area. Further analysis was undertaken using cycle counts which gives a more realistic representation of the cycle counts in the study area. Therefore, the PCT information should only be used as to highlight which routes are more frequently used throughout the area and the actual cycle numbers are reflected in **Section 3.2.5**.

The section below describes each PCT scenario for the study area, analysing the outcomes in the context of this LCWIP.

[5] Propensity to Cycle Tool - https://www.pct.bike/

3.2.4.1 2011 Census Scenario

Figure 3-11 shows the cycle trips assigned to the fastest legally cyclable routes based on 2011 census data.

For this scenario the PCT estimates that while the majority of links have under ten journeys to work undertaken by bicycle, there are several key routes that have been highlighted. The highest flows are shown to be along Hardwick Road and Nest Lane in Wellingborough and along sections of Washbrook Road and Higham Road in Rushden. These trips are likely to connect into the respective town centres.

The PCT also highlights key routes between towns such as between Irthlingborough and Higham Ferrers and Irchester and Wellingborough.

It is important to highlight that the PCT tool automatically allocates cycling flows to the road network by considering the origins and destinations of trips at the LSOA level. While this offers a valuable indication of popular routes, the actual paths taken may vary in reality due to highway conditions and traffic levels. Additionally, the mapped routes use population-weighted centroids instead of precise origins and destinations.

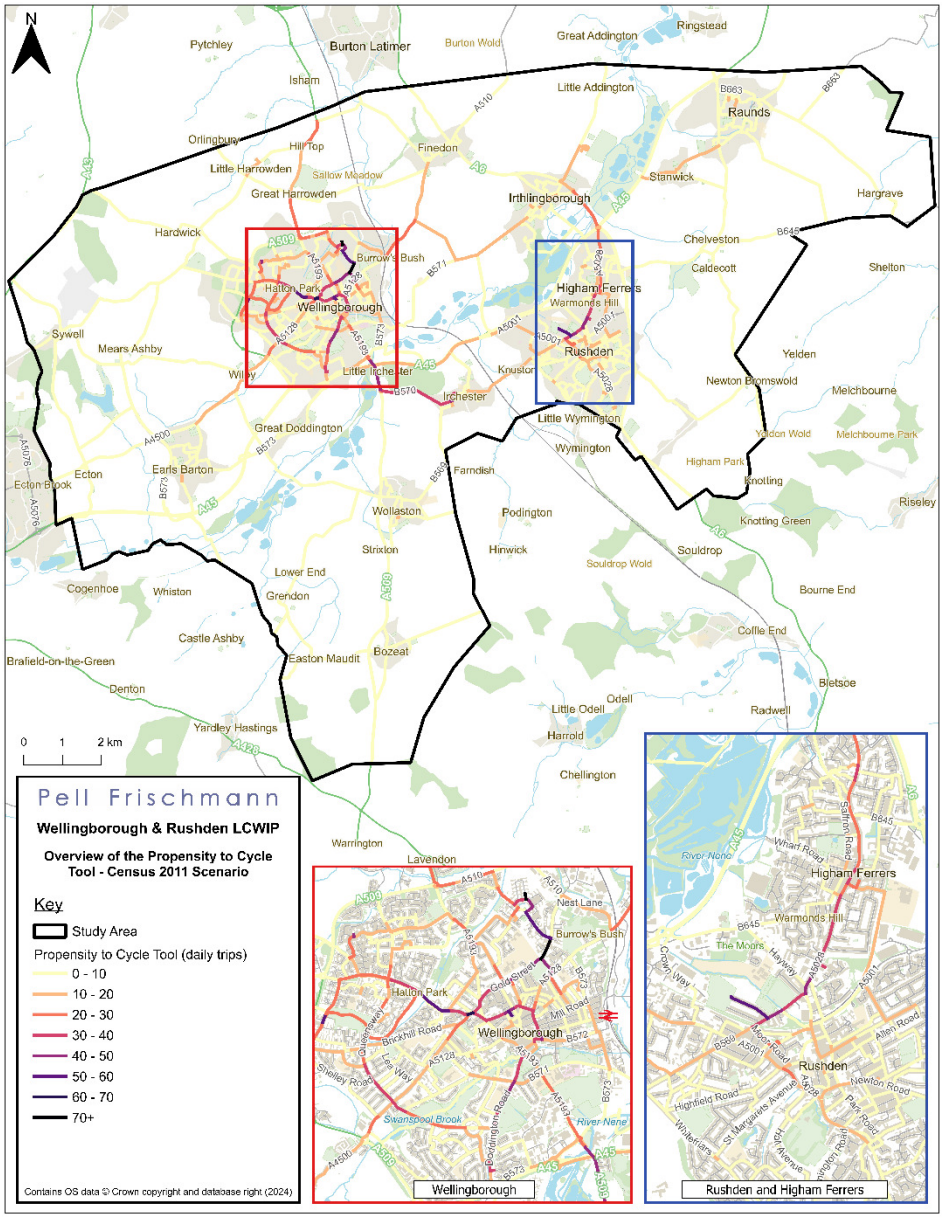


Figure 3-11: Propensity to Cycle Tool – Census 2011 Scenario

Government Target Scenario

Figure 3-12 shows the potential cycle flows if the government targets to double cycling by 2025 were met. For this scenario, the cycle mode share, as identified by the 2011 census travel to work flows, are uplifted in line with the below targets:

- Government Target (Equality): Equitability across age, sex and other socio-demographic groups.
- Government Target (Near Market): Cycle usage increases as a function of trip distance and hilliness, plus a number of socio-demographic and geographical characteristics.

Figure 3-12 shows the Near Market Government Target scenario, however the analysis of both scenarios showed very similar outputs.

In this scenario, there is a general uplift across the study area however there is a greater increase in trips within Wellingborough and Rushden. Due to the study area being largely rural, cycling levels are low in general, further highlighting the increase in Wellingborough and Rushden.

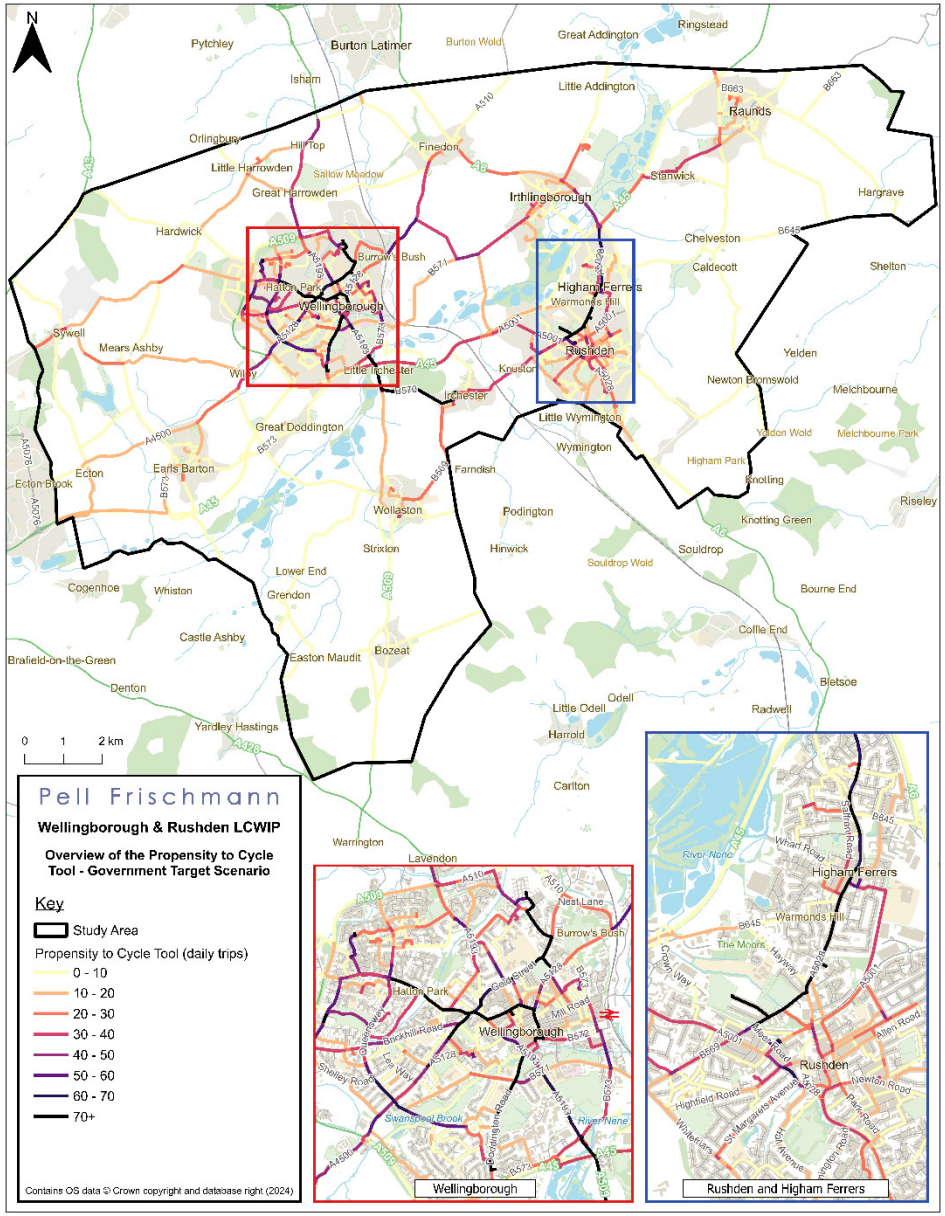


Figure 3-12: Propensity to Cycle Tool – Government Target Scenario

3.2.4.2 Go Dutch Scenario

Figure 3-13 shows the 'Go Dutch' scenario. The 'Go Dutch' scenario explores the potential future cycling demand if people in the study area were as inclined to cycle as the Dutch, assuming they had comparable infrastructure.

The pattern of increase in potential cycling trips appears to be the same as the previous scenarios in that the greatest number of trips are contained within Wellingborough and Rushden, with some routes in Wellingborough and Rushden having several hundred cyclists per day. The main routes with the highest number of cyclists in this scenario are Irchester Road, Washbrook Road, and Higham Road in Rushden. In Wellingborough the routes with the most potential for increasing cycling are Hardwick Road, Broad Green, Nest Lane and Gold Street.

There is also an increase in the number of trips from villages connecting into Wellingborough. For example, from Little Harrowden, Finedon and most notably Irchester.

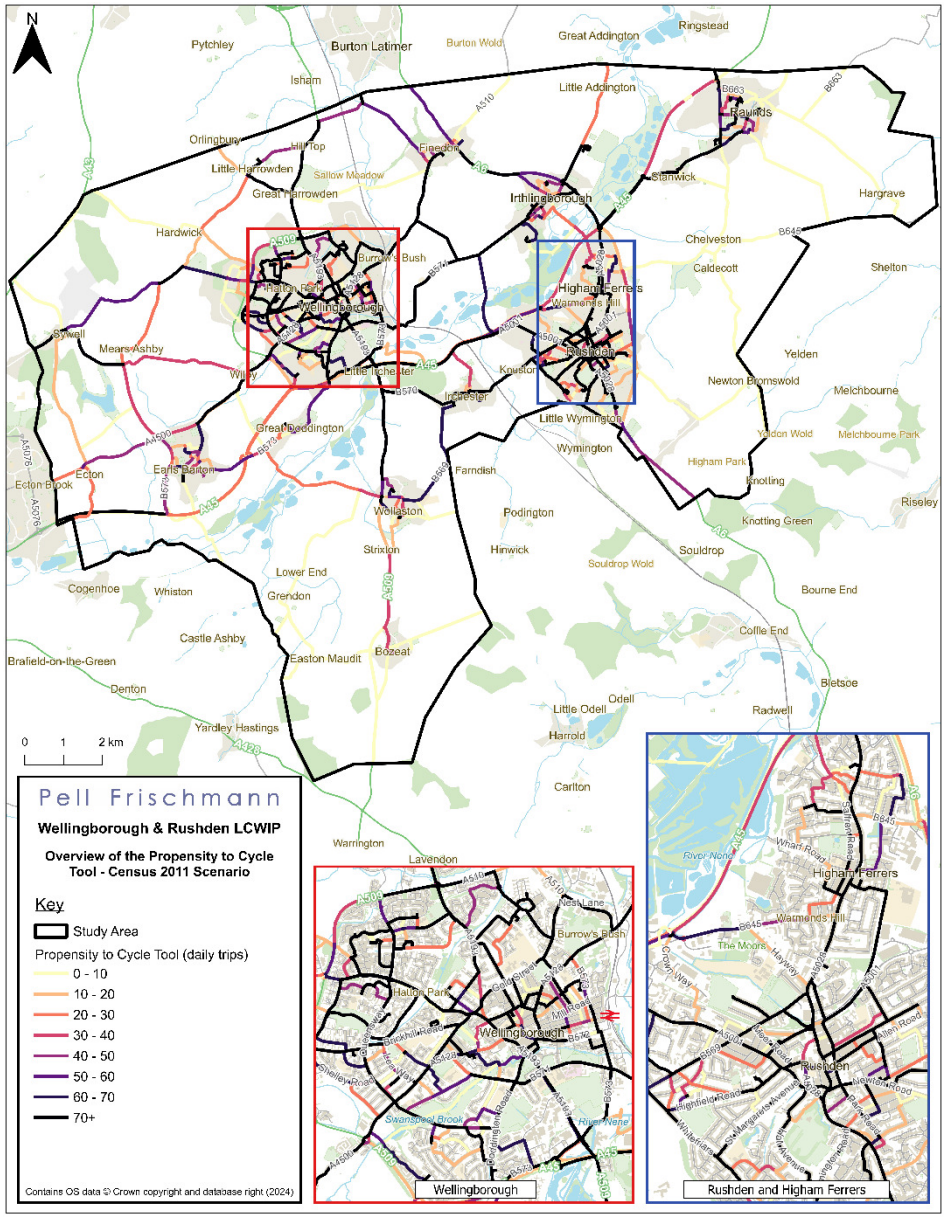


Figure 3-13: Propensity to Cycle Tool – Go Dutch Scenario

3.2.5 Daily Cyclist Observations

Due to the limitations with the PCT, actual cycle counts have been analysed to show a more accurate representation of cycle numbers within the study area, particularly Wellingborough.

Daily cycle observations provide a firm understanding of the current use of existing cycle paths and routes, with data collated for six locations within Wellingborough. **Figure 3-14** shows the location of the observation sites, with **Figure 3-15** presenting this data as a daily average per month. Half of the observation sites lie on the current shared use/ off road paths between Wellingborough and the Park Farm Industrial Estate, suggesting that most of the data collected in these locations will be people commuting to work. The other observation sites cover three main routes into Wellingborough from the outer edges of the town, covering the Croyland Cycleway, London Road, and Harrowden Road routes.

Despite the short sample size, the Park Farm Way underpass (north) site observed the highest number of cyclists during this period, peaking in May 2020, with a daily average of 241 cyclists using this route, and then again in August 2021, with a daily average of 219 cyclists. All other observation sites experienced a peak in May 2020, lining up with the relaxation of the Coronavirus pandemic restrictions, permitting people to leave the house for outdoor recreation (beyond exercise). This peak suggests that there was an increase in using cycling as a way to get out of the house, proving that with encouragement, more people will use the facilities that exist. As is assumed, in the winter months of December and January cyclist observations reduce as the weather becomes less suitable for cycling.

Figure 3-14: Wellingborough Cyclist Observation Sites

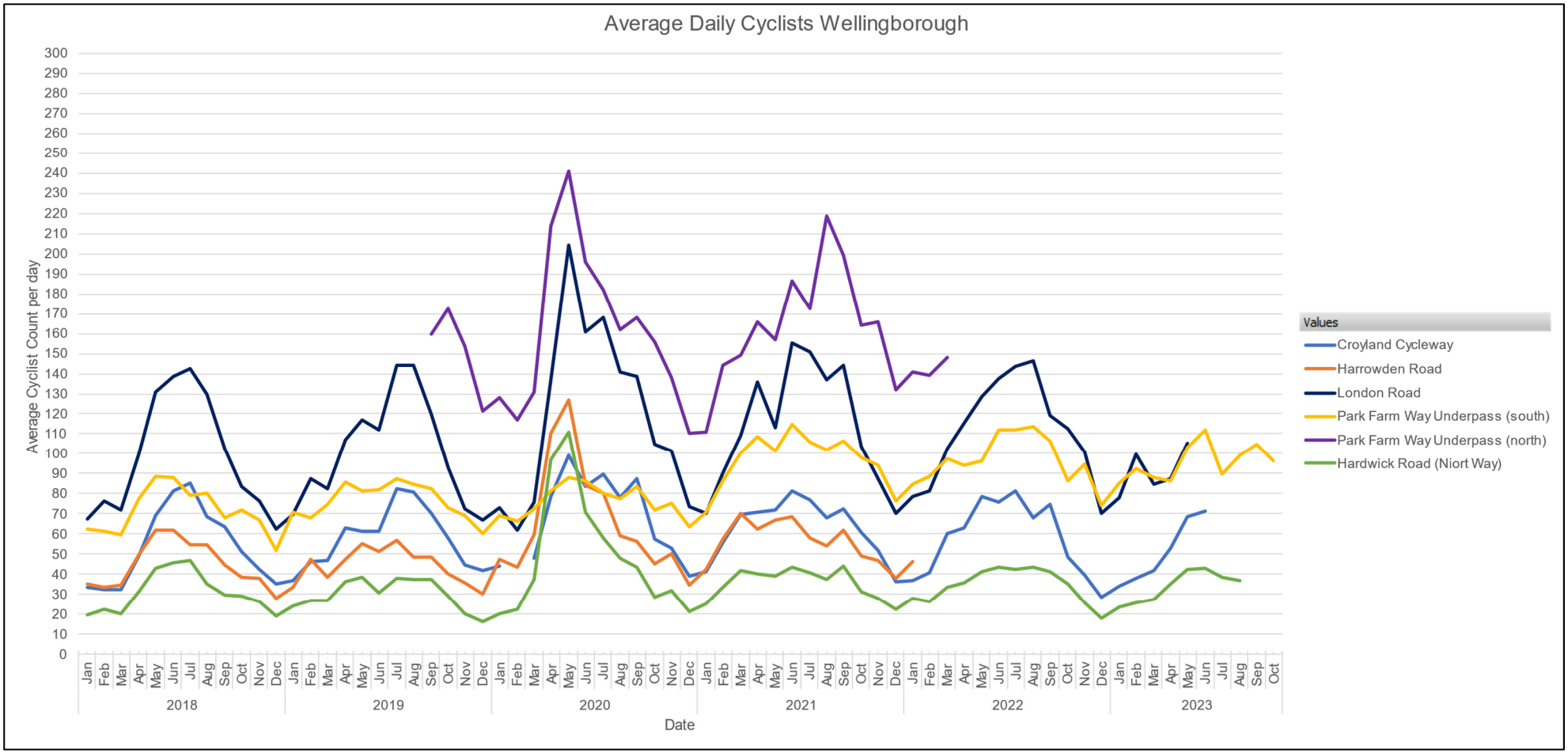


Figure 3-15: Average Daily Cyclist Observations - Wellingborough 2018-2023

3.2.6 Collision Analysis

Collision data involving pedestrians and cyclists for the five-year period from August 2018 to July 2023 has been collated and analysed for the extent of this LCWIP. In total, 262 collisions, including four fatal (1.5%), 72 serious (27.5%) and 186 slight (71%) severity collisions took place during this time period. 151 (57.6%) of the collisions involved a pedestrian casualty and 109 (41.6%) of the collisions involved a cycle casualty. There were also an additional two collisions (0.8%) that involved both a pedestrian and cyclist. All four of the fatal collisions involved a pedestrian but do not form a pattern of collisions. The collisions are shown for the overall study area in **Figure 3-16**. A breakdown of the collisions for Wellingborough and Rushden is shown in **Figure 3-17** and **Figure 3-18** respectively.

Overall, collisions appear to be grouped around the busier roads which head towards Wellingborough and Rushden town centres.

Several collision patterns have been identified which include areas or roads in which multiple collisions have occurred. The analysis shows that there is no common causality of the collisions, however consideration for additional safety measures at these locations will be considered if walking and cycling measures are proposed.

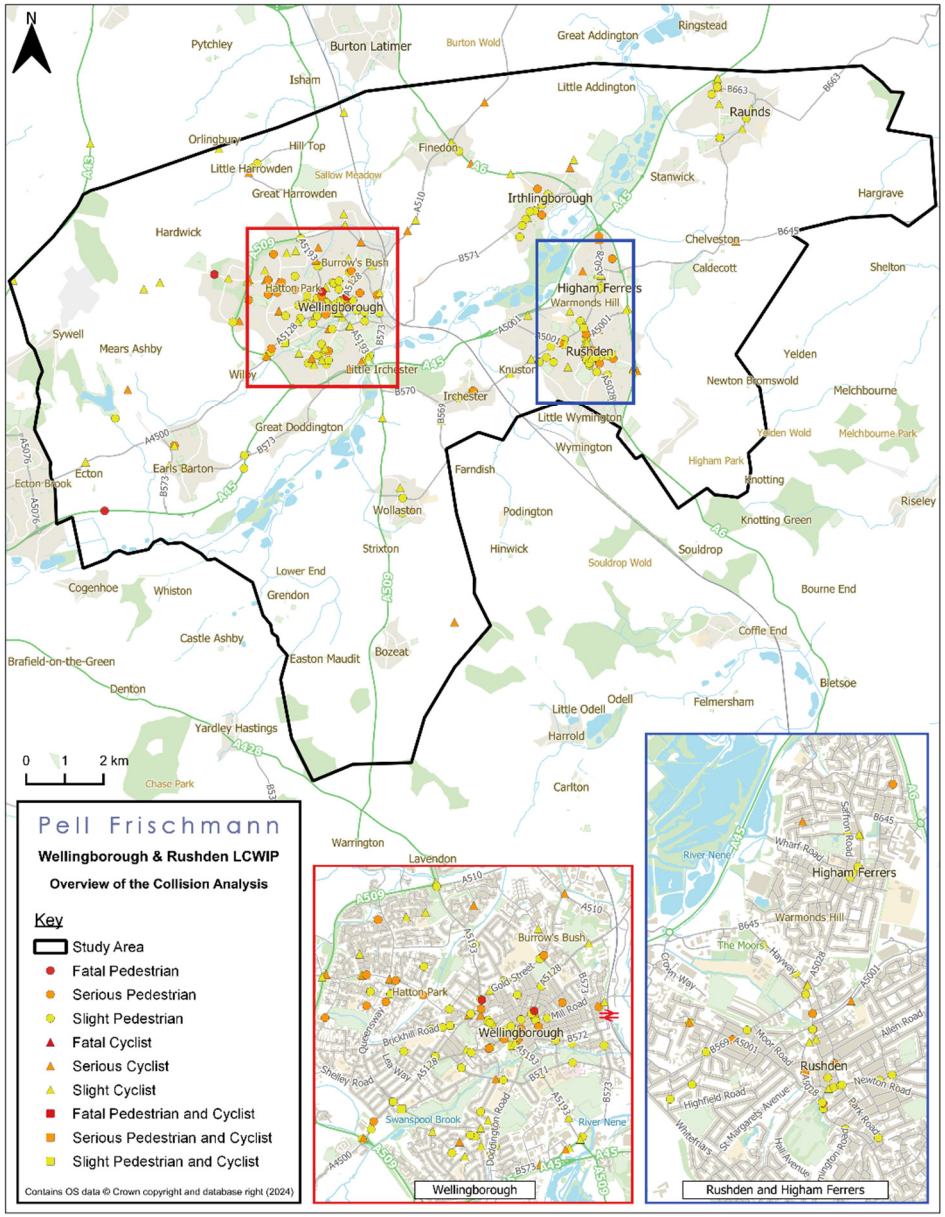


Figure 3-16: Collision analysis August 2018 – July 2023

Figure 3-17: Collisions in Wellingborough

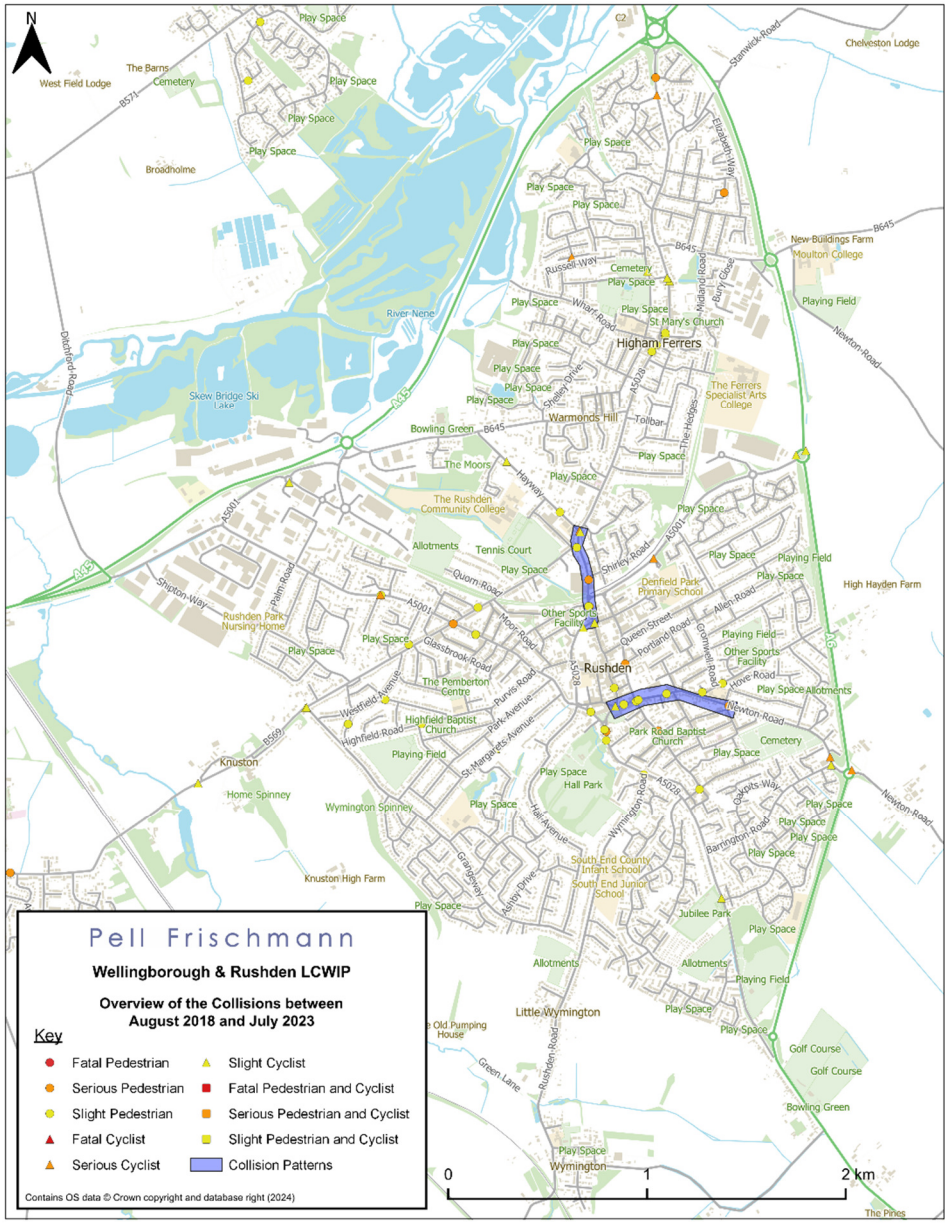


Figure 3-18: Collisions in Rushden and Higham Ferrers

The collision patterns identified include:

- Hardwick Road between Meadway Drive and Torrington Road
- A5193 between Gold Street and Doddington Road
- Cannon Street between Regent Street and Newcomen Road
- The junction of Nest Lane/ Cross Road/ Gold Street
- High Street – Irthlingborough
- Higham Road between Hayway and Duck Street
- Newton Road between Church Street and Hove Road

These patterns along with the number and severity are shown in **Table 3-1**.

Table 3-1: Collision Patterns – Number of collisions

Collision Pattern	Ped Fatal	Ped Serious	Ped Slight	Cyclist Fatal	Cyclist Serious	Cyclist Slight	Total collisions
Hardwick Road between Meadway Drive and Torrington Road	0	3	0	0	2	2	7
A5193 between Gold Street and Doddington Road	1	2	6	0	0	3	12
Cannon Street between Regent Street and Newcomen Road	1	1	2	0	0	0	5
The junction of Nest Lane/ Cross Road/ Gold Street	0	1	3	0	0	0	3
High Street – Irthlingborough	0	0	5	0	0	1	6
Higham Road between Hayway and Duck Street	0	2	2	0	1	3	8
Newton Road between Church Street and Hove Road	0	1	4	0	0	1	6

The collision analysis has also been broken down into the number of collisions occurring each year over the five-year period between 2018 and 2023. These values are shown in **Table 3-2** and **Table 3-3**.

Between 2019 – 2022 the number of collisions involving pedestrians appears to be on a downward trend. 2020 saw the highest number of collisions involving cyclists over the five-year period. It could be inferred that this was due to a change in travel behaviours brought on by the pandemic and an increased number of cyclists out on the roads.

Table 3-2: Number of collisions per year involving pedestrians

Severity	2018*	2019	2020	2021	2022	2023*	Total	Average
Fatal	0	0	1	1	2	0	4	0.8
Serious	4	3	10	6	8	4	35	7
Slight	15	28	18	19	17	15	112	22.4
Total	**19**	**31**	**29**	**26**	**27**	**19**	**151**	**-**

Table 3-3: Number of collisions per year involving cyclists

Severity	2018*	2019	2020	2021	2022	2023*	Total	Average
Fatal	0	0	0	0	0	0	0	0.0
Serious	4	8	9	8	4	4	37	7.4
Slight	6	17	20	10	16	3	72	14.4
Total	**10**	**25**	**29**	**18**	**20**	**7**	**109**	**-**

*These years have limited data – 2018 (August to December) and 2023 (January to July).

3.2.7 Demographics

3.2.7.1 Indices of Multiple Deprivation

The Indices of Multiple Deprivation shows relative measures of deprivation for small geographical areas (LSOAs) throughout England.

These measures are derived from seven distinct domains of deprivation:

- Income
- Employment
- Education
- Health
- Crime
- Barriers to Housing and Services
- Living Environment

By collating data from the LSOAs, IMD generates an overall relative deprivation measure. This approach recognises that, deprivation cannot solely be determined by low income, allowing for the identification and consideration of areas where multiple deprivation factors coexist.

Figure 3-19 shows the IMD deciles for the study area based upon their Deprivation Rank in relation to the rest of the UK. It can be seen that there are some areas within Wellingborough that are among the 20% most deprived in the UK in 2019. These areas are located to the west and north of Wellingborough town centre. Conversely, the rural areas surrounding the towns of Wellingborough and Rushden are generally in decile seven, the 40% least deprived category.

Mapping the IMD deciles within the study area can support the identification of walking and cycling improvements. Investing in active travel to improve accessibility can improve access to education and skills for individuals without a car.

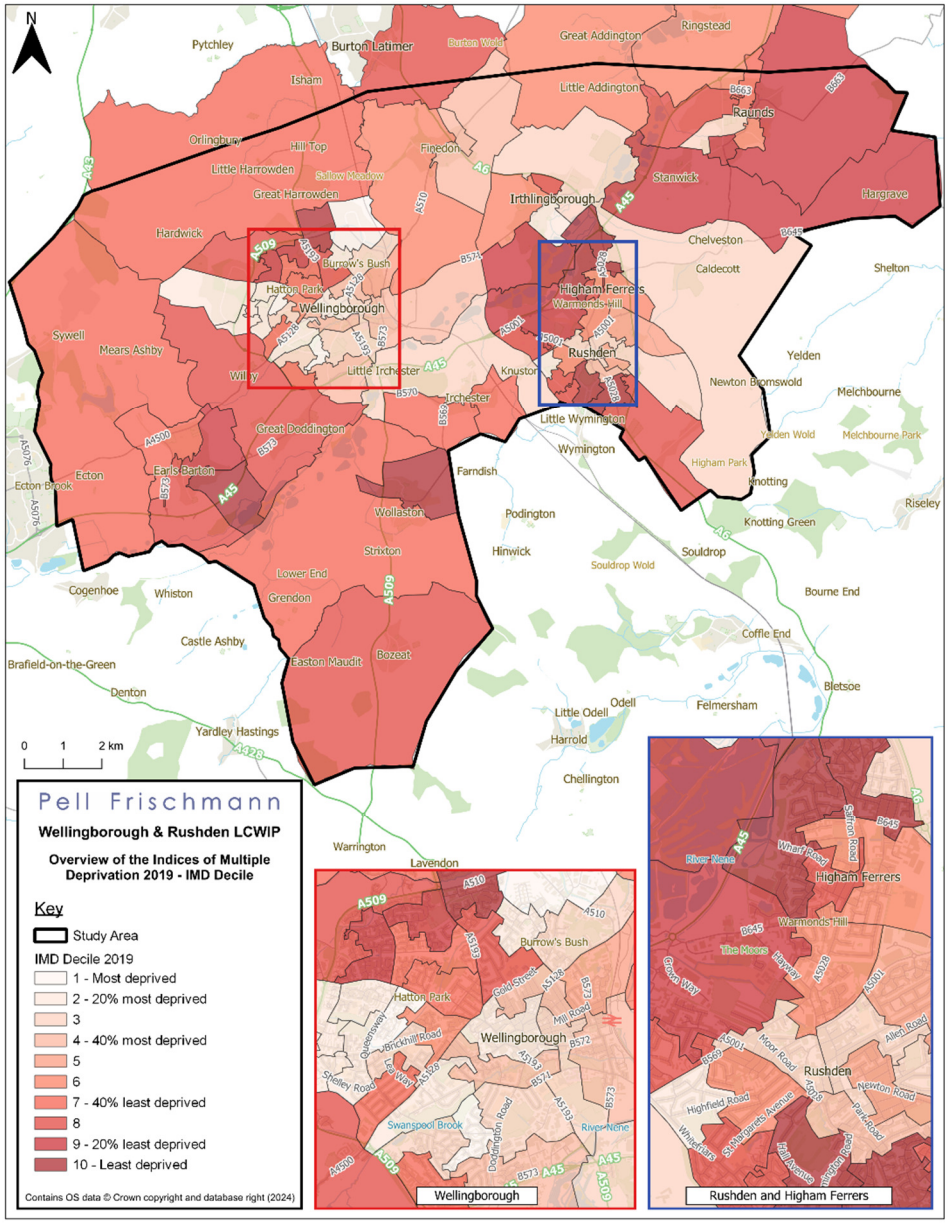


Figure 3-19: Indices of Multiple Deprivation 2019 Deciles

3.2.7.2 Health Deprivation

Figure 3-20 shows the Health Indices of Deprivation (IoD) for the study area.

As stated above, the Health Index of Deprivation (Health IoD) constitutes just one component of the overall IMD. The maps show that there is a correlation between areas that have lower Health IoD and areas that fall within the more deprived deciles overall. This is illustrated by comparing the maps shown in **Figure 3-19** and **Figure 3-20**.

Identifying areas with low Health IoD can help support investment towards walking and cycling improvements, promoting greater engagement in active travel and, consequently, leading to improved health and wellbeing benefits for local residents.

3.3 Summary

The information gathered and analysed during this stage will be used to inform and identify potential walking and cycling routes and improvements within the next stages of the LCWIP process. Mapping of the data shows visually where there are existing gaps in the provision of walking and cycling infrastructure as well as identifying where people currently travel and any future developments that people are likely to want to travel to in the future.

The analysis has highlighted particular routes connecting into Wellingborough and Rushden where there is a lack of high-quality walking and cycling provision and improvements could be made. In addition, IMD and health deprivation values have identified areas which could benefit from investment in walking and cycling such as areas to the east and south of Wellingborough town centre and to the east of Rushden town centre.

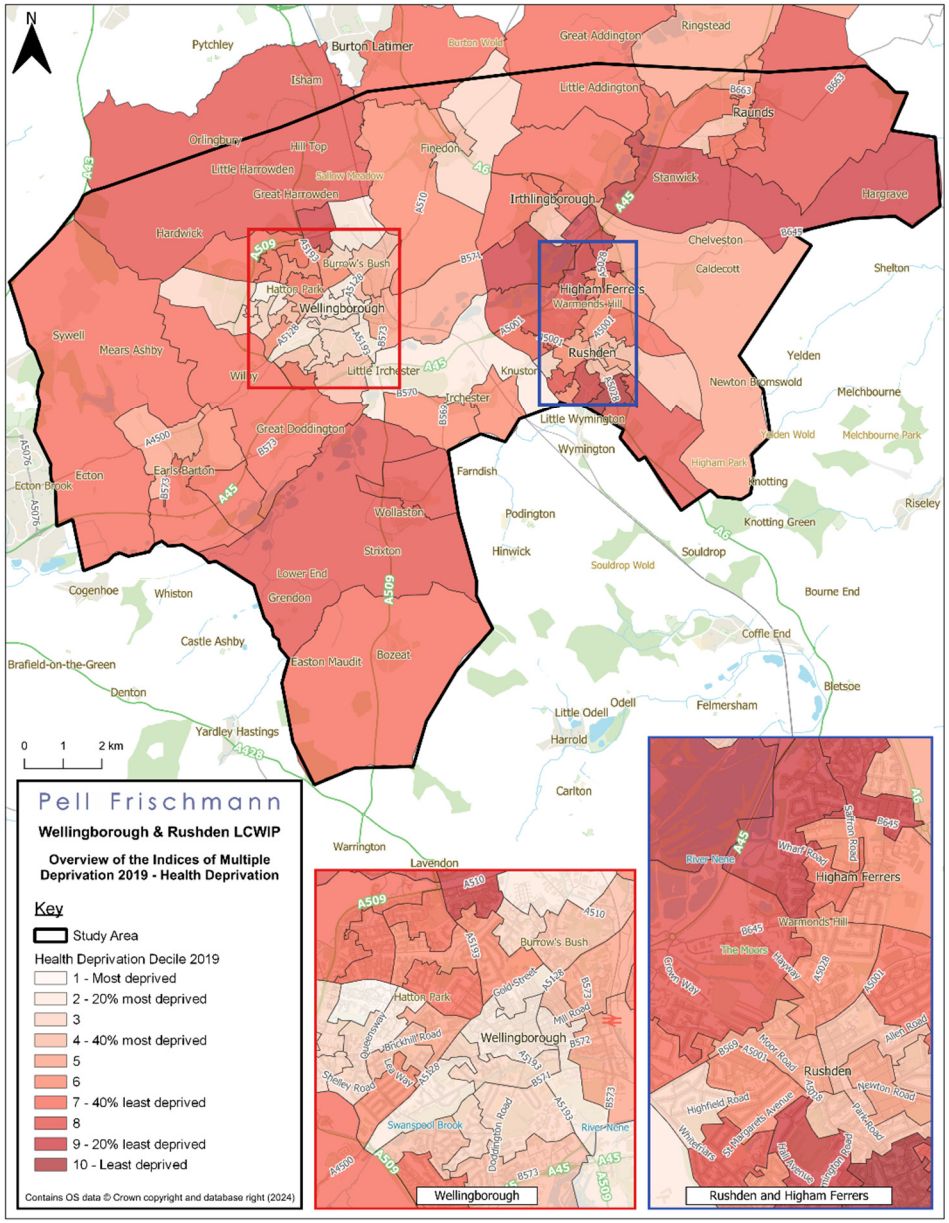


Figure 3-20: Health Index of Deprivation 2019

4 Site Visit Findings

Using the data collated during Stage 2 and the feedback received from the second stakeholder workshop, which is provided in **Appendix A**, routes to audit on site were identified. These routes are illustrated in **Table 4-1**. Three site audits were undertaken to assess the existing walking and cycling provision on each of the identified routes and identified possible improvements that could be delivered. The three site audits were undertaken in two groups: a cycling group and a walking group with representatives from Pell Frischmann, North Northamptonshire Council, Brightwayz and West Northamptonshire Council. Details of the area covered on each of the site audits is shown in **Table 4-1**.

Table 4-1: Site Audits

Date	Walking/ Cycling	Area Covered
4th March 2024	Walking	Wellingborough
	Cycling	Wellingborough, Finedon and Irthlingborough
11th March 2024	Walking	Rushden
	Cycling	Rushden, Wollaston, Stanwick and Raunds
13th March 2024	Walking	Wellingborough and Raunds
	Cycling	Wilby, Mears Ashby, Earls Barton

The following sections set out the findings from both the walking and cycling audits which helped identify improvements proposed in this LCWIP.

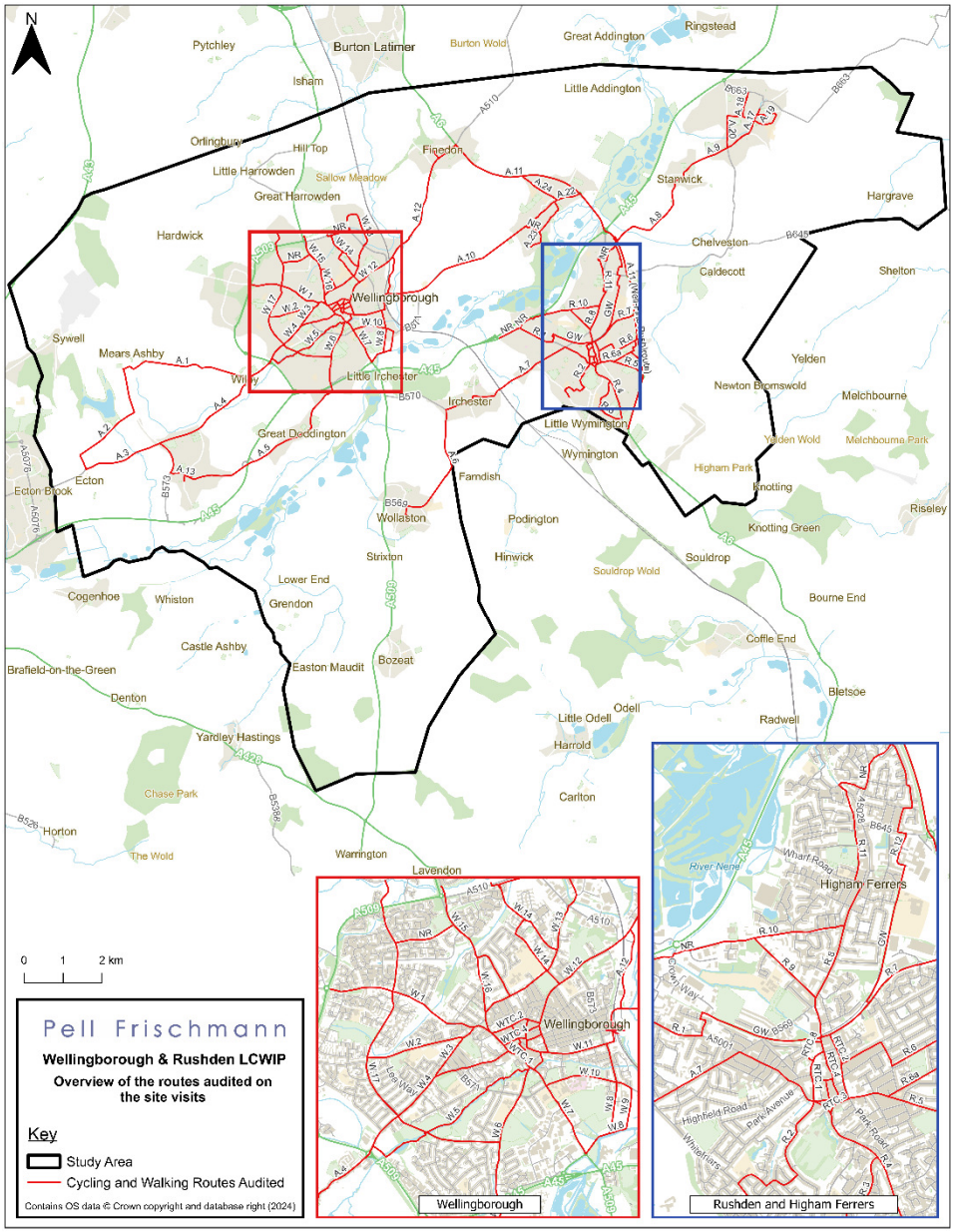


Figure 4-1: Walking and Cycling routes audited

4.1 Cycle Route Audits Findings

The cycle audits were undertaken across three days in March. A GoPro camera was used to record the experience and provide comments on the existing infrastructure and conditions, and potential improvements that could be made. **Table 4-2** below outlines some of the common comments made during the cycling audits. Some example photos of the common problems observed on site are shown in **Figure 4-2**.

Table 4-2: Summary of the comments made on site (cycling)

	Comment Category	Examples
A	Barriers	Excessive bollards and chicanes which are difficult to navigate particularly for larger bikes, cargo bikes or those with mobility aids.
B	Maintenance issues	Poor carriageway and footway surfacing that could result in injury to pedestrians and cyclists. Overgrown vegetation that narrows the space available for active travel users
C	Missing/ inconsistent or substandard infrastructure	Poor existing crossings, footways that end, and an absence of crossing facilities at pedestrian/ cycle desire lines.
D	Narrow footway/ cycleway	Existing footways/ shared use sections which are narrow and cannot accommodate the pedestrian or cycle demand.
E	Parking on the footway/ cycleway	Evidence of footway parking in particular on streets with terraced housing and around businesses.
F	Signage/ wayfinding incorrect/ missing or redundant	Unclear signage to state whether a footway is still shared use or not. Wayfinding may be absent.
G	Unattractive as an active travel user	Highly trafficked roads, issues with speeding, and roads which are difficult to cross.
H	Other comments	Narrow carriageway and long cycle times at signals for pedestrians and cyclists.

Figure 4-2: Examples of observed problems

The DfT's Route Selection Tool (RST) was also used to assess and compare potential cycle routes for inclusion in the network. The RST scores each link on a scale of 0 and 5 (5 being the highest) against the core design outcomes shown in **Figure 4-3** below. Attractiveness is not included within the assessment tool as it is not deemed to be a deciding factor between routes.

Figure 4-3: Core Design Outcomes

The RST was only used for three routes that were potentially challenging and where a possible alternative route was available to compare results, including:

- Embankment (W.8) and Proposed Greenway (parallel to Embankment) (W.9)
- Finedon Road (W.12) and Nest Lane & Gold Street (W.13)
- The Pyghtle (W. 15) and Harrowden Road (W.16)

The images shown in **Figure 4-4** show the comparison between Embankment (W.8) and the proposed Greenway route (W.9).

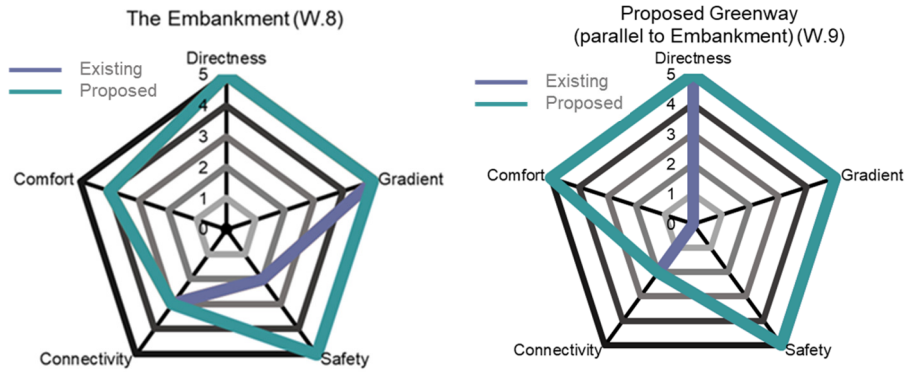


Figure 4-4: RST – Embankment (W.8) vs Proposed Greenway (parallel route) (W.9)

The graphs show that both routes have potential to score highly and should therefore both be considered at the next stages of development.

Figure 4-5 shows the comparison between Finedon Road (W.12) and Nest Lane and Gold Street (W.13). The graphs show that there is limited potential to improve cycling provision on Finedon Road due to constraints and therefore the alternative route on Nest Lane has been taken forward.

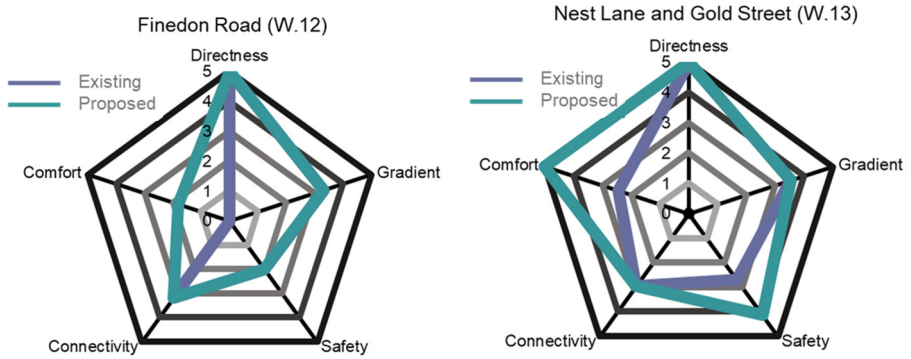


Figure 4-5: RST – Finedon Road (W.12) vs Nest Lane (W.13)

Figure 4-6 shows the comparison between The Pyghtle (W.15) and Harrowden Road (W.16). As The Pyghtle shows to score higher in most design outcomes, this route has been taken forward within this LCWIP.

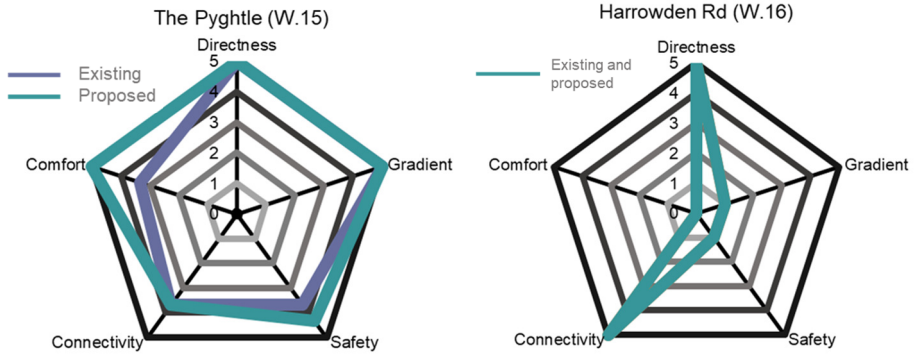


Figure 4-6: RST – The Pyghtle (W.15) vs Harrowden Road (W.16)

4.2 Walking Audits Findings

During the site audits, walking assessments of the routes shown in **Figure 4-7** were undertaken using the DfT's Walking Route Audit Tool (WRAT). The WRAT scores each of the routes based on the five key principles: attractiveness, comfort, directness, safety and coherence.

Each of the principles were scored on a scale of 0-2 against the following criteria:

- 0 = poor provision
- 1 = provision which is adequate but should be improved if possible
- 2 = good quality provision

A breakdown of the routes that were audited and the scores that were given are shown in **Table 4-3** through to **Table 4-5**. Maps of the audit results for Wellingborough and Rushden are shown **in Figure 4-8** and **Figure 4-9** respectively.

A score of 70% or above is considered a minimum level of provision overall. Any routes that scored less than this and any factors that scored 0 should be used to identify where improvements are required.

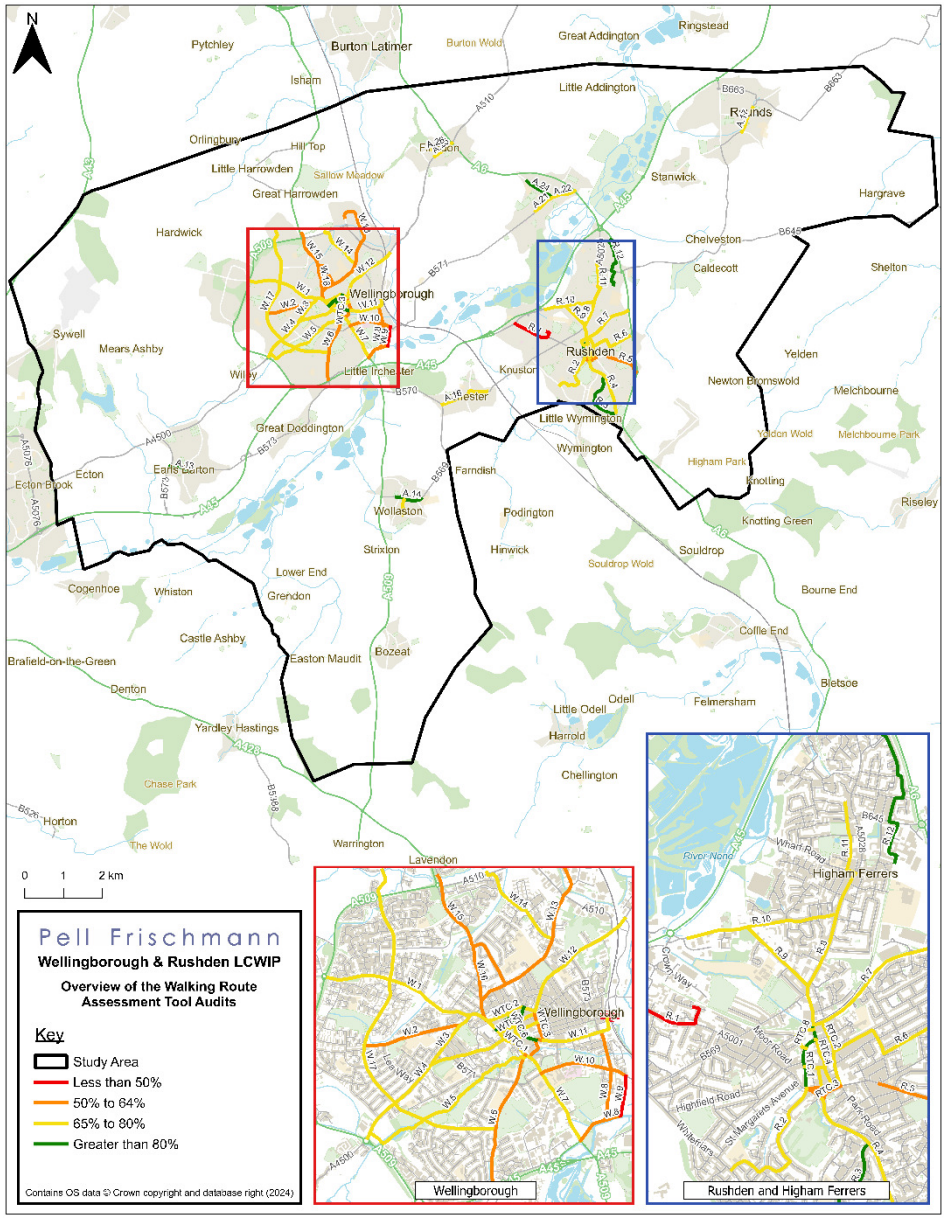


Figure 4-7: Overview of the WRAT Audits

Table 4-3: WRAT scores - Wellingborough

Route	Description	Score	Pass/ Fail
WTC.1	**Wellingborough town centre - A5193, Silver St and High St**	**68%**	**Fail**
WTC.2	**Wellingborough town centre – Gold St, Hardwick Rd**	**71%**	**Pass**
WTC.3	Victoria Rd, Castle Way	60%	Fail
WTC.4	A5128, Church St, Alma St	79%	Pass
WTC.5	Midland Road	82%	Pass
WTC.6	Herriotts Ln, Pebble Ln	73%	Pass
WTC.7	Cambridge St	75%	Pass
WTC.8	Great Park St	82%	Pass
WTC.9	Salem Ln, Queen St	83%	Pass
W.1	**Hardwick Road**	**71%**	**Pass**
W.2	**Brickhill Road**	**63%**	**Fail**
W.3	Westfield Road	66%	Fail
W.4	**Northampton Road**	**69%**	**Fail**
W.5	**Croyland Cycleway**	**69%**	**Fail**
W.6	**Doddington Road**	**63%**	**Fail**
W.7	**A5193, London Rd**	**76%**	**Pass**
W.8	**Senwick Rd, Embankment**	**61%**	**Fail**
W.9	Proposed Greenway/ Parallel to Embankment	38%	Fail
W.10	**Irthlingborough Road**	**58%**	**Fail**
W.11	**Midland Rd**	**75%**	**Pass**
W.12	Finedon Road	77%	Pass
W.13	**Gold St, Sanders Rd**	**63%**	**Fail**
W.14	**Nest Farm Road**	**77%**	**Pass**
W.15	**Harrowden Rd**	**50%**	**Fail**
W.16	A5193 cont.	57%	Fail
W.17	**Queensway/ Kingsway**	**70%**	**Fail**

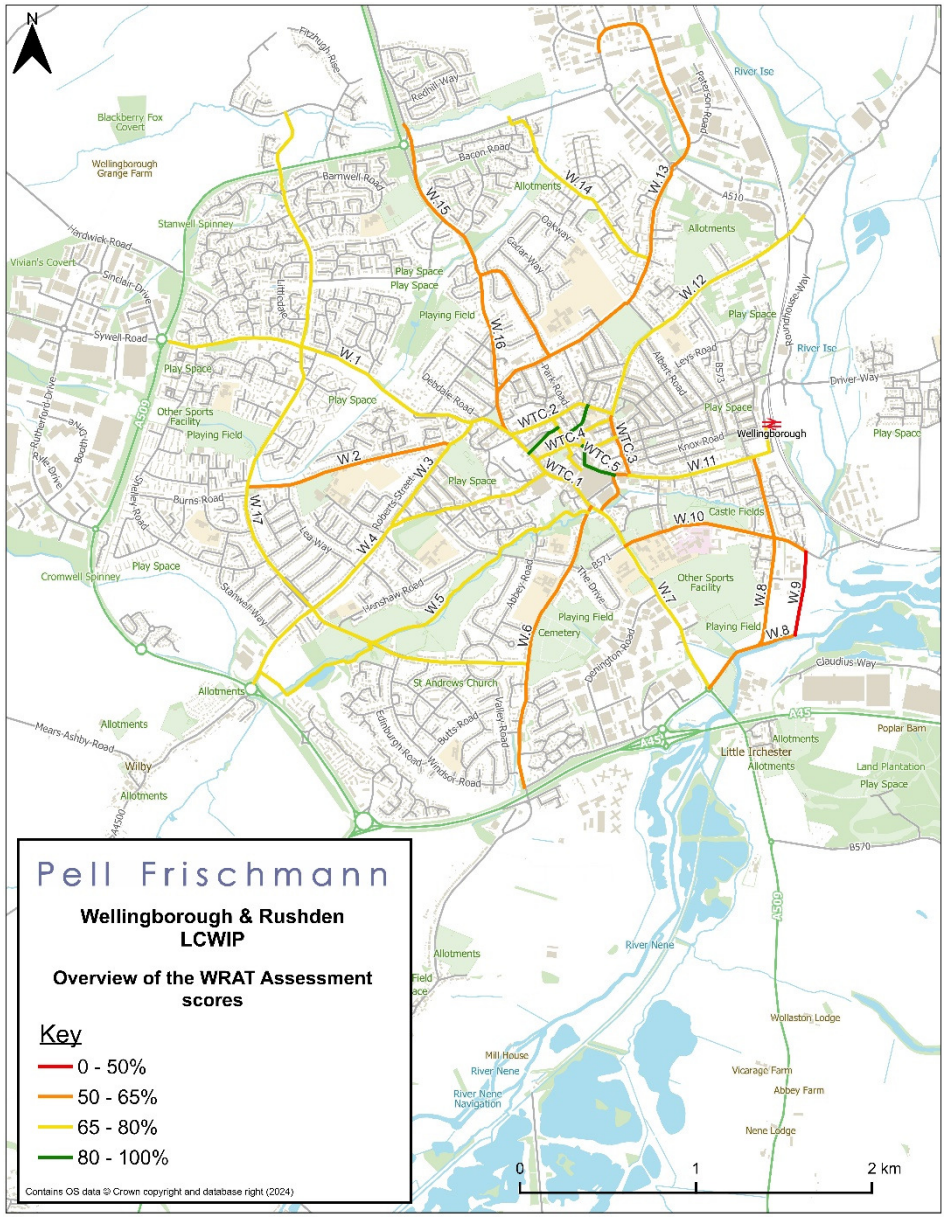


Figure 4-8: WRAT Scores - Wellingborough

Table 4-4: WRAT scores – Rushden and Higham Ferrers

Route	Description	Score	Pass/ Fail
RTC.1	**Duck Street**	**84%**	Pass
RTC.2	**Rectory Road**	**69%**	Fail
RTC.3	**A5028**	**50%**	Fail
RTC.4	**High Street**	**77%**	Pass
RTC.5	**College Street**	**71%**	Pass
RTC.6	**Alfred Street**	**73%**	Pass
RTC.7	**Church Street**	**63%**	Fail
RTC.8	**Station Road**	**73%**	Pass
R.1	**Wellingborough Road**	**32%**	Fail
R.2	Hall Avenue	68%	Fail
R.3	Greenacre Drive	89%	Pass
R.4	**Bedford Road**	**69%**	Fail
R.5	**Newton Road**	**61%**	Fail
R.6	**Path parallel to Blinco Road**	**79%**	Pass
R.7	**John Clark Way**	**79%**	Pass
R.8	Higham Road	69%	Fail
R.9	Hayway	68%	Fail
R.10	Northampton Road	67%	Fail
R.11	Saffron Road	75%	Pass
R.12	Elizabeth Way, Philip Way	86%	Pass

Table 4-5: WRAT Scores – Other areas

Route	Description	Score	Pass/ Fail
A.13	West Street, Broad Street (Earls Barton)	83%	Pass
A.14	Irchester Road (Wollaston)	87%	Pass
A.15	Howard Road (Wollaston)	75%	Pass
A.16	Station Road and Wollaston Road (Irthlingborough)	77%	Pass
A.17	**Brook Street (Raunds)**	**67%**	**Fail**
A.21	**High Street (Irthlingborough)**	**68%**	**Fail**
A.22	Station Road (Irthlingborough)	69%	Fail
A.24	Finedon Road (Irthlingborough)	85%	Pass
A.25	Wellingborough Road (Finedon)	68%	Fail
A.26	High Street (Finedon)	75%	Pass

Figure 4-9: WRAT Scoring – Rushden & Higham Ferrers

4.3 Summary of Site Visit Findings

Using the findings from the site audits and the WRAT assessments, the longlist of routes that had been identified and audited were sifted to produce a shortlist of routes to take forward and develop walking and cycling proposals for which are highlighted in blue in **Table 4-3** through to **Table 4-5**. Some routes were

sifted out at this stage for a number of reasons, including:

- Route scored over 70% on the WRAT (e.g. WTC. 4 to 9 and R.3)
- Routes were too constrained i.e. would require the removal of trees, insufficient land within the highway boundary (e.g. W.3)
- Existing provision that would compete with this route i.e. the existing Greenway (e.g. R8, R11 and R12)
- Proposed as a Core Walking Zone (e.g. A.17, A.21 and A.25)
- Another suggested route provided a more appropriate alternative route.

The following chapters set out the proposed cycling and walking networks in Wellingborough, Rushden and the surrounding areas. It is important to note that although these chapters have been separated into cycling and walking improvements, as per the LCWIP guidance, all route proposals have been developed to consider both walking and cycling improvements together to ensure a joined up approach. Additionally, Core Walking Zones (CWZ) are proposed, which consider walking improvements within towns and villages which are outlined in **Chapter 4**.

It is also important to consider these proposals for walking and cycling in conjunction with the proposals set out within North Northamptonshire Greenway Strategy, in particular the Wellingborough to Rushden Greenway and the Ise Valley Greenway. The existing and proposed Greenway is shown on the plans, to provide a joined up outlook on network planning.

5 Stage 3: Network Planning for Cycling

5.1 Introduction

It is important to understand where people want to travel and build upon the information gathered in Stage 2. This section outlines the work undertaken to identify the network plan for cycling.

5.2 Cycle Desire Lines

Following the identification of significant trip attractors, with the majority focused in the centres of Wellingborough and Rushden, cycle desire lines can be identified and mapped to show the routes of key interest and significance. Cycle desire lines show the overall significance each route has within the wider network, and can be categorised as the following:

- Primary: Routes that link large residential areas to key trip attractors, such as a town centre, can assume a higher flow of people cycling.
- Secondary: Medium flows of cyclists can be forecasted for routes that link residential areas to trip attractors such as schools or employment sites.
- Local: Desires lines that connect onto primary or secondary desire lines are forecast to have much lower flows of cyclists, mainly used for local cycle trips.

Figure 5-1 shows primary routes include the A509 connecting the A45 in the south of Wellingborough with the north of the town. This also includes the arterial routes of the A5193 and A5128, as well as Finedon Road, connecting Wellingborough with Finedon, all meeting in Wellingborough town centre. Secondary routes are the medium flow arterial routes, including Hardwick Road and Doddington Road, whilst also identifying Queensway as a key secondary route linking residential areas with schools and employment sites.

Figure 5-2 shows that for Rushden and Higham Ferrers, the A6 is identified as a primary route along with the A5028 and A5001, linking Rushden with the A45. Several medium flow secondary routes link Rushden with surrounding areas such as Irchester, Stanwick, Cheverton and Newton Bromswold. Most of the local routes within Rushden connect directly onto the primary desire lines, without the use of a secondary route.

A distance catchment area of 5km and 10km was calculated to show a reasonable distance most people will choose to cycle for more local trips. It is however noted that some people will choose to travel greater distances. A 5km radius is shown by the area filled in blue, with the 10km radius shown in purple, with the selected central point for **Figure 5-3** next to the Church Street Bus Interchange, Wellingborough, and for **Figure 5-4** on the High Street and Queen Street junction, Rushden. Both points were selected as central points for the towns, in order to cover both leisure trips as well as ones that may be made for commuting reasons.

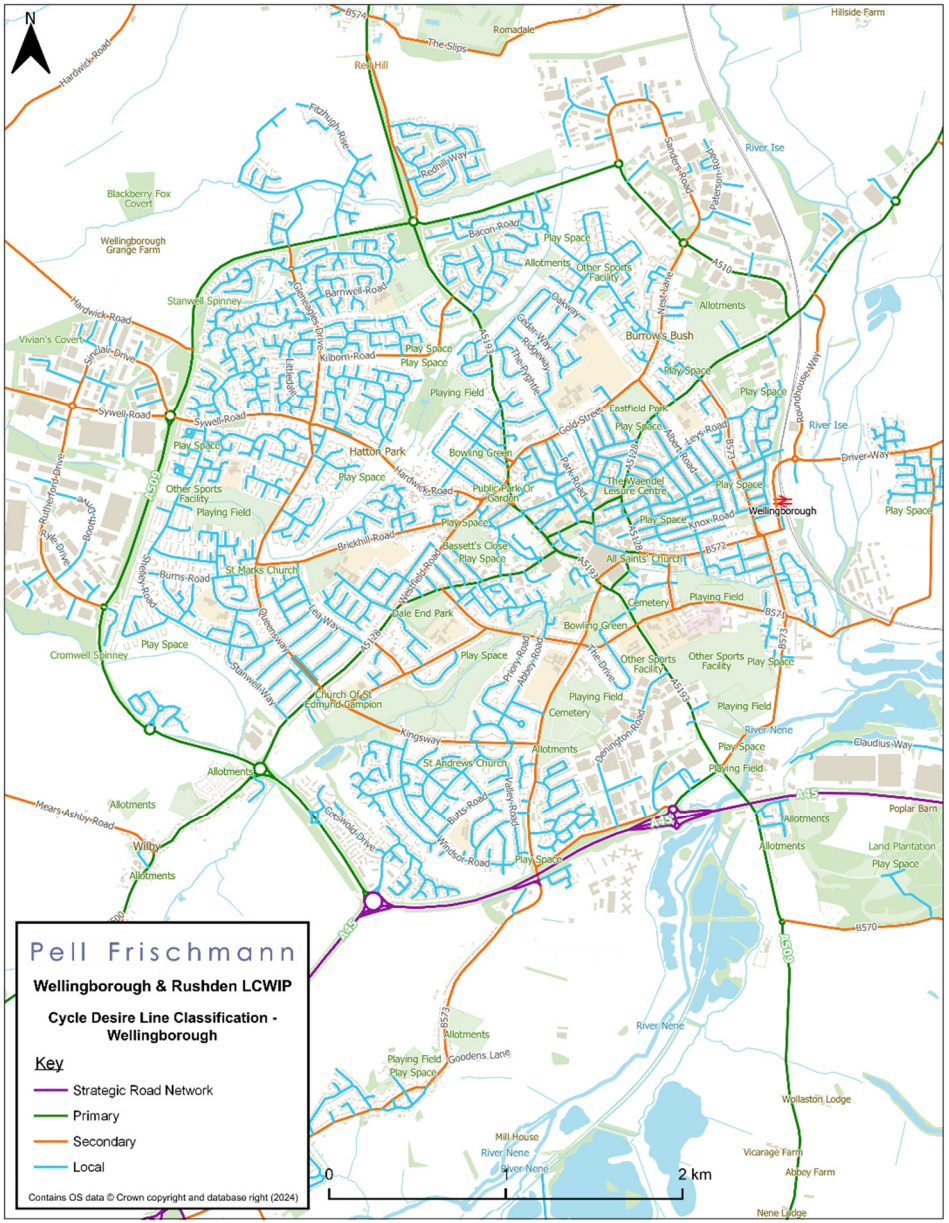


Figure 5-1: Cycle Desire Lines Classification - Wellingborough

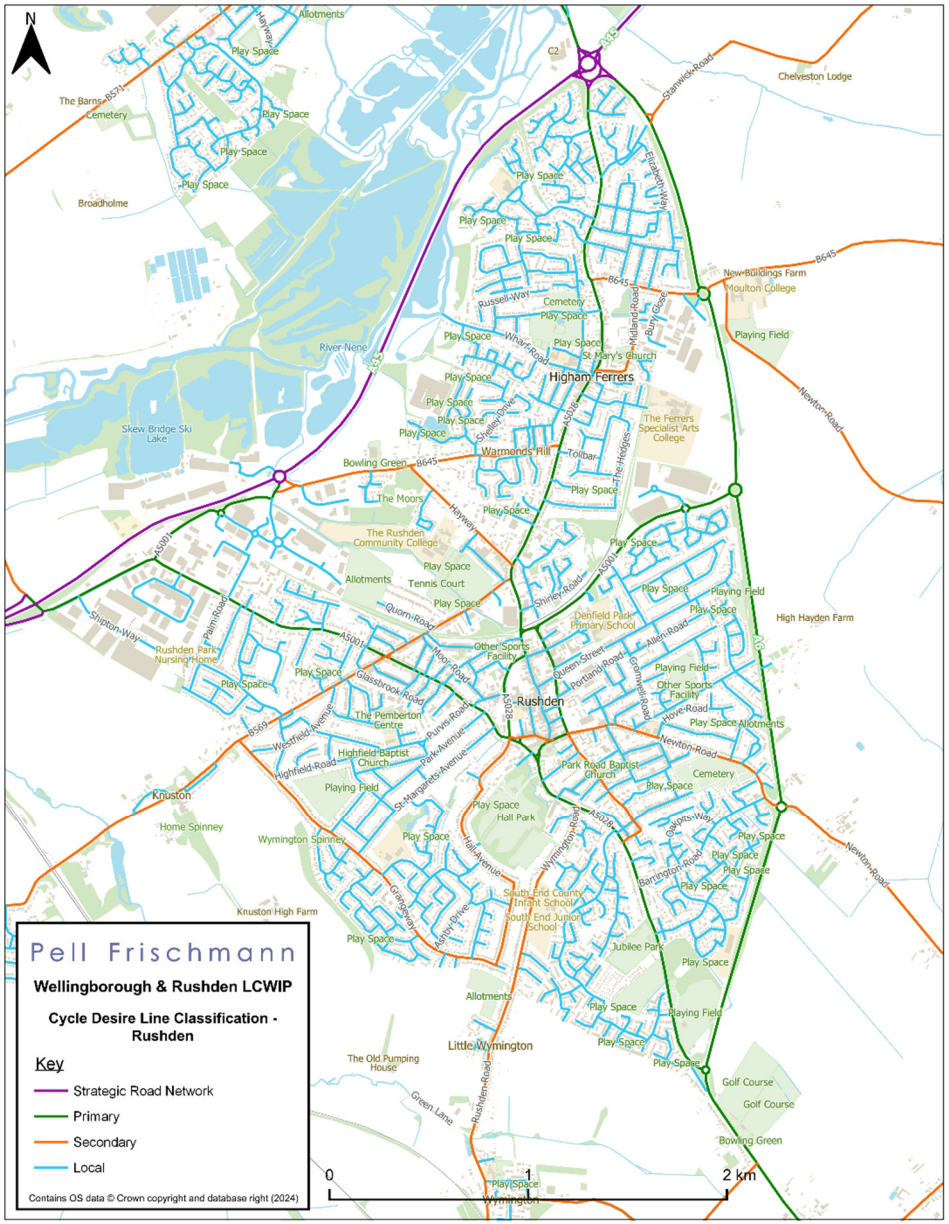


Figure 5-2: Cycle Desire Lines Classification - Rushden and Higham Ferrers

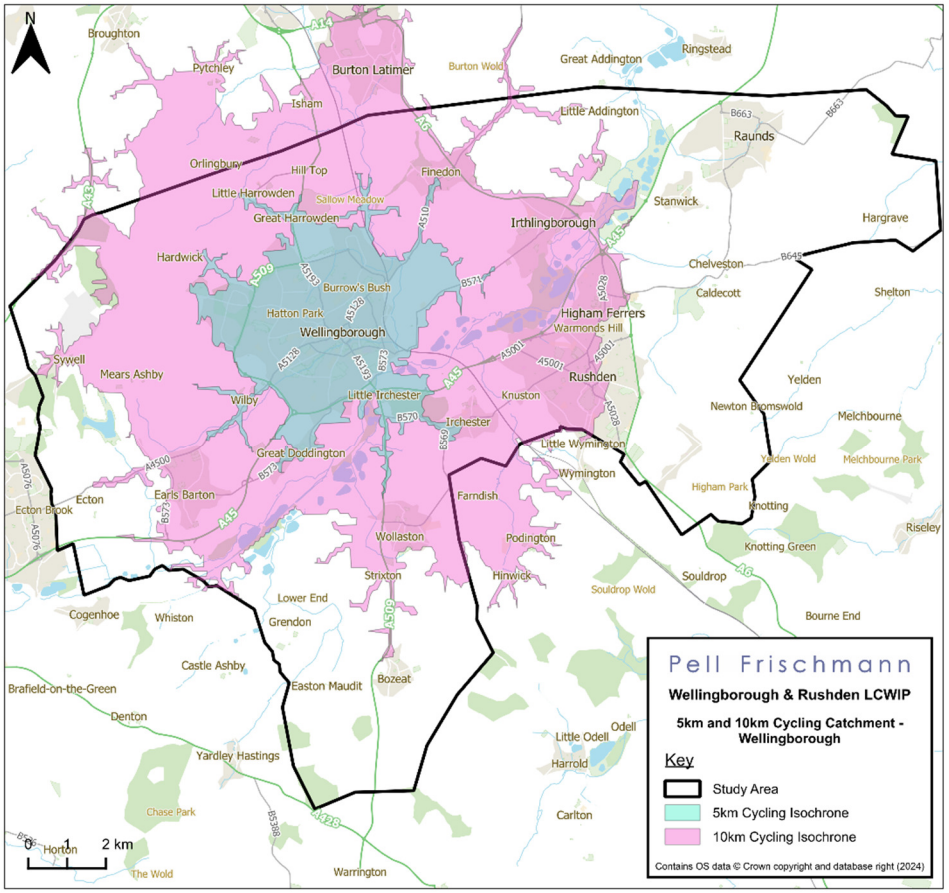


Figure 5-3: 5km and 10km Cycling Catchments - Wellingborough

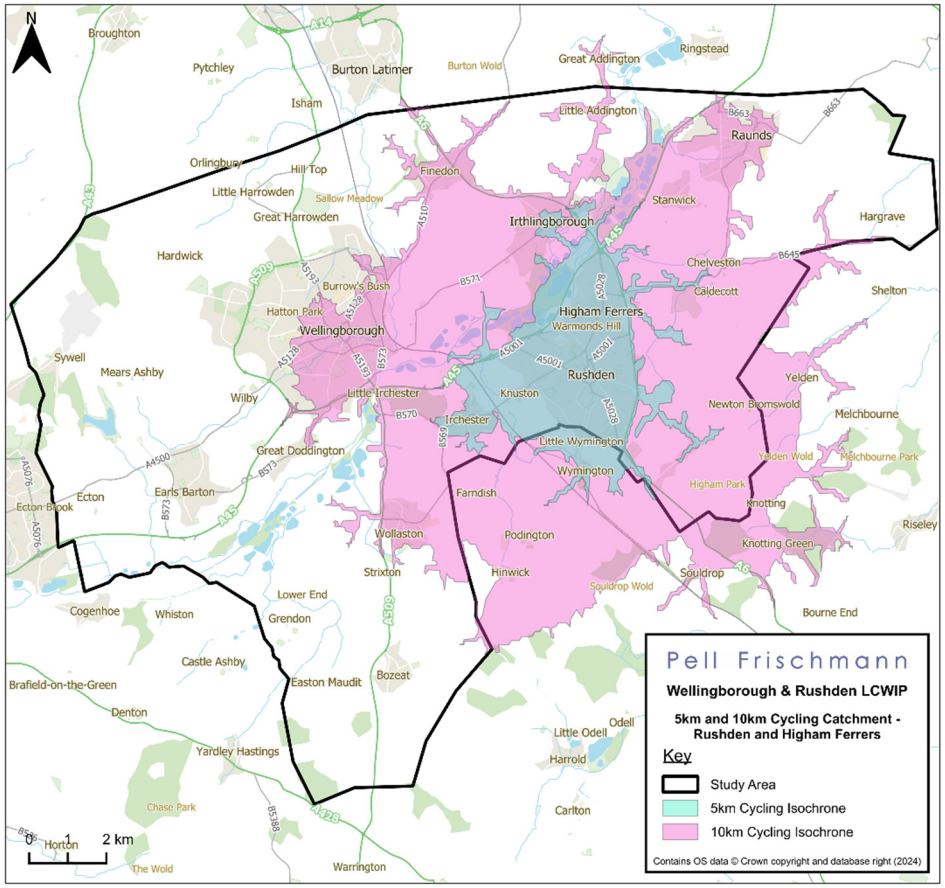


Figure 5-4: 5km and 10km Cycling Catchments - Rushden and Higham Ferrers

5.3 Proposed Cycling Improvements

Following the site visits in March 2024 and review of the comments collated on site, proposals were developed to address the issues that were identified. Examples of the different types of interventions that have been proposed are illustrated in **Figure 5-6**. The proposals that have been developed include a wide range of interventions such as:

- **A)** Segregated cycleways – pedestrians and cyclists are fully separated from each other and from general traffic.
- **B)** Shared use – Pedestrian and cyclists share the same space but are separated from general traffic.
- **C)** Quiet mixed traffic streets – cyclists and general traffic share the carriageway and speed limits are reduced to 20mph.
- **D)** Contraflow cycle lanes - cyclists are separated from general traffic and travel in the opposite direction to general traffic.
- **E)** Uphill only cycleways – one-directional cycleway that is separated from general traffic to allow cyclists space to travel uphill.
- **F)** Improved cycle crossings – including toucan crossings were pedestrians and cyclists use the same crossing and parallel crossings where pedestrians and cyclists are separated as they cross.

Plans outlining each of the route proposals are shown in **Appendix C** and have been developed to address the major barriers to cycling that were identified through the baseline assessment, site visits and stakeholder feedback. The proposals are high-level but are considered feasible based on initial observations and desktop measurements and are in line with LTN 1/20 and LCWIP guidance. Any route identified within this LCWIP to be taken forward will require further feasibility assessment and detailed design to be undertaken.

All of the routes have also been developed in conjunction with the proposed Greenway routes, with some connecting directly with the Greenway. **Figure 5-6** shows an overview of the routes identified as part of this LCWIP and their interaction with the existing and proposed Greenways. A brief description of each route is provided in **Table 5-1** and the full annotated proposals are illustrated in **Appendix C**.

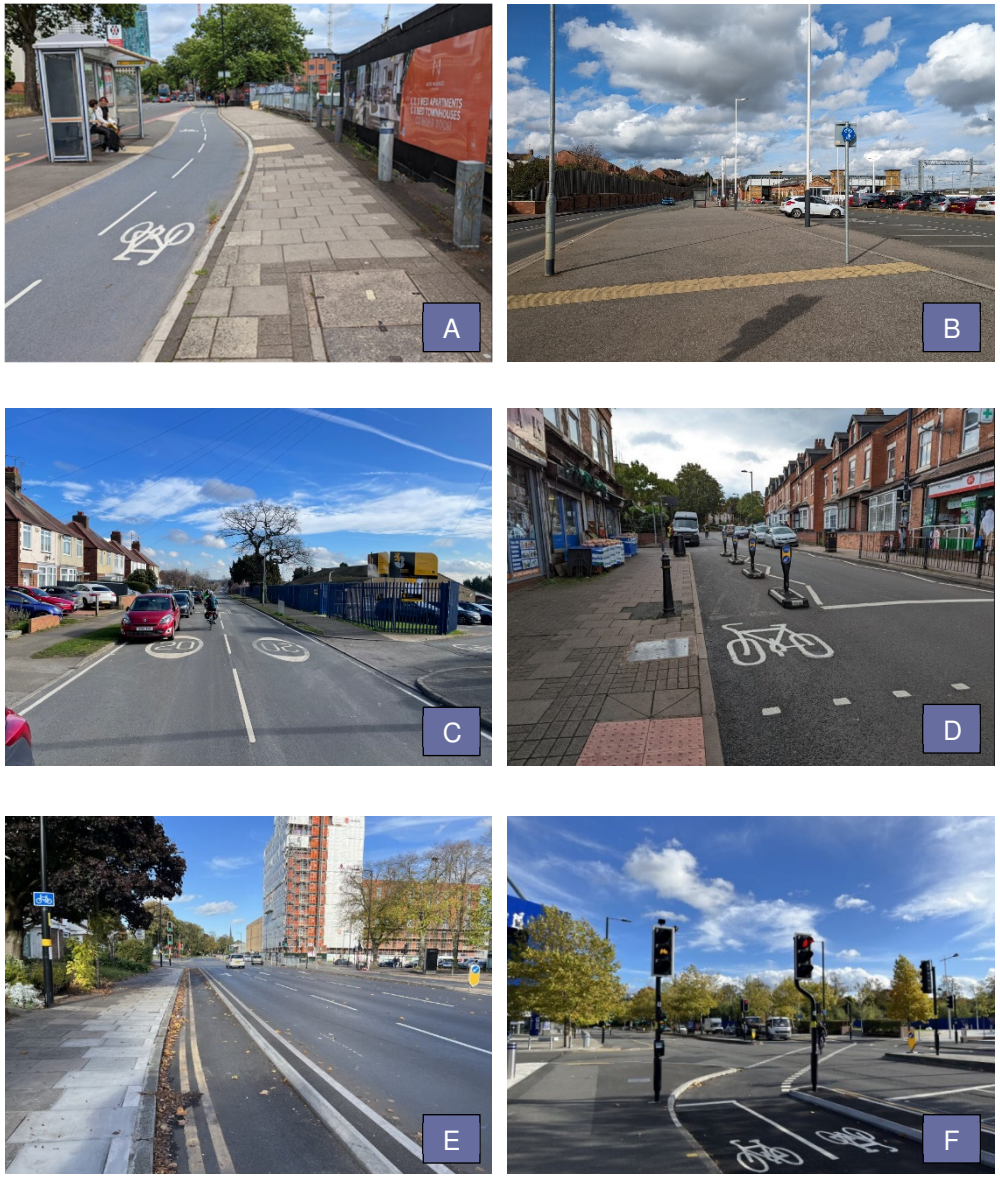


Figure 5-5: Examples of proposed cycling improvements

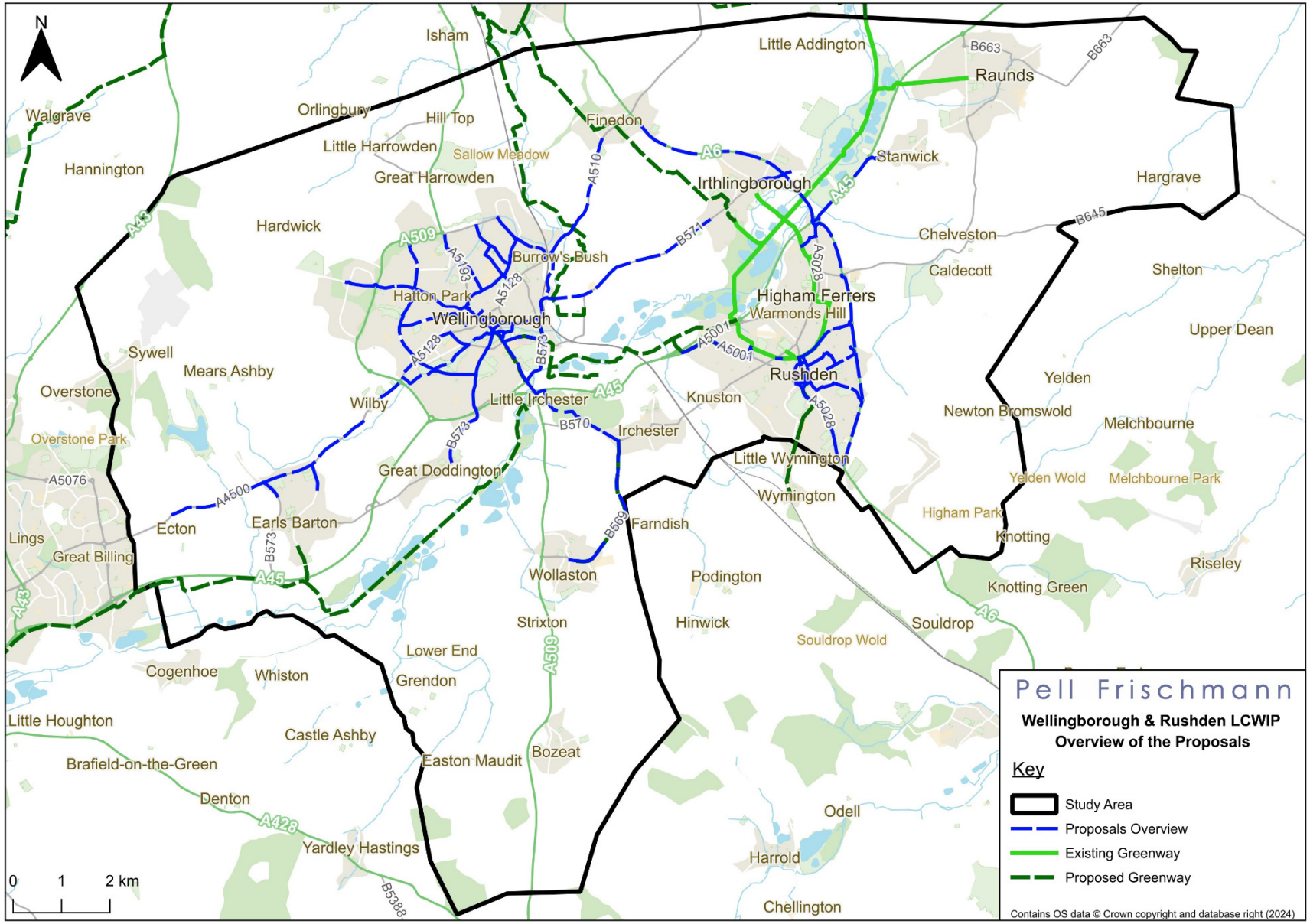


Figure 5-6: LCWIP proposals and connections to the existing and proposed Greenway

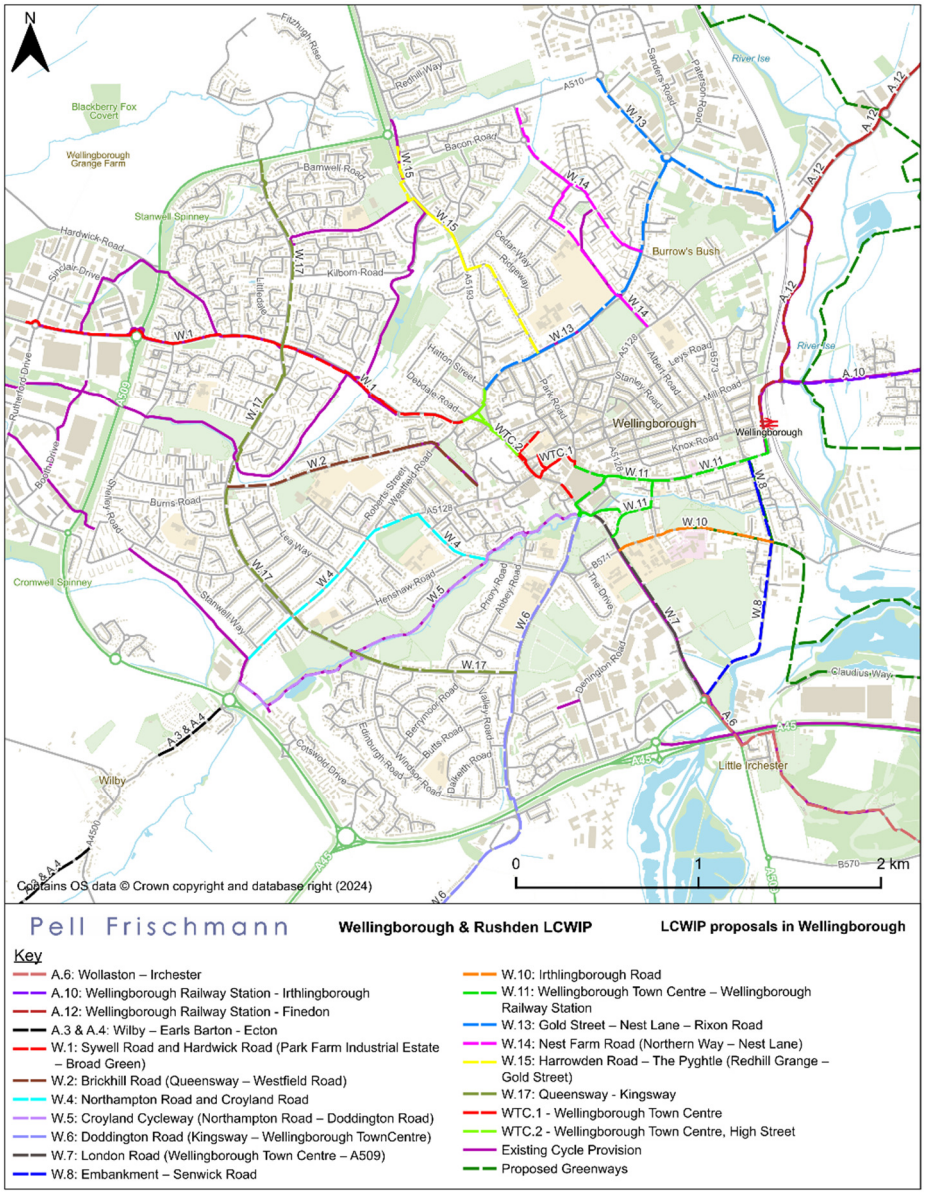


Figure 5-7: LCWIP Proposals in Wellingborough

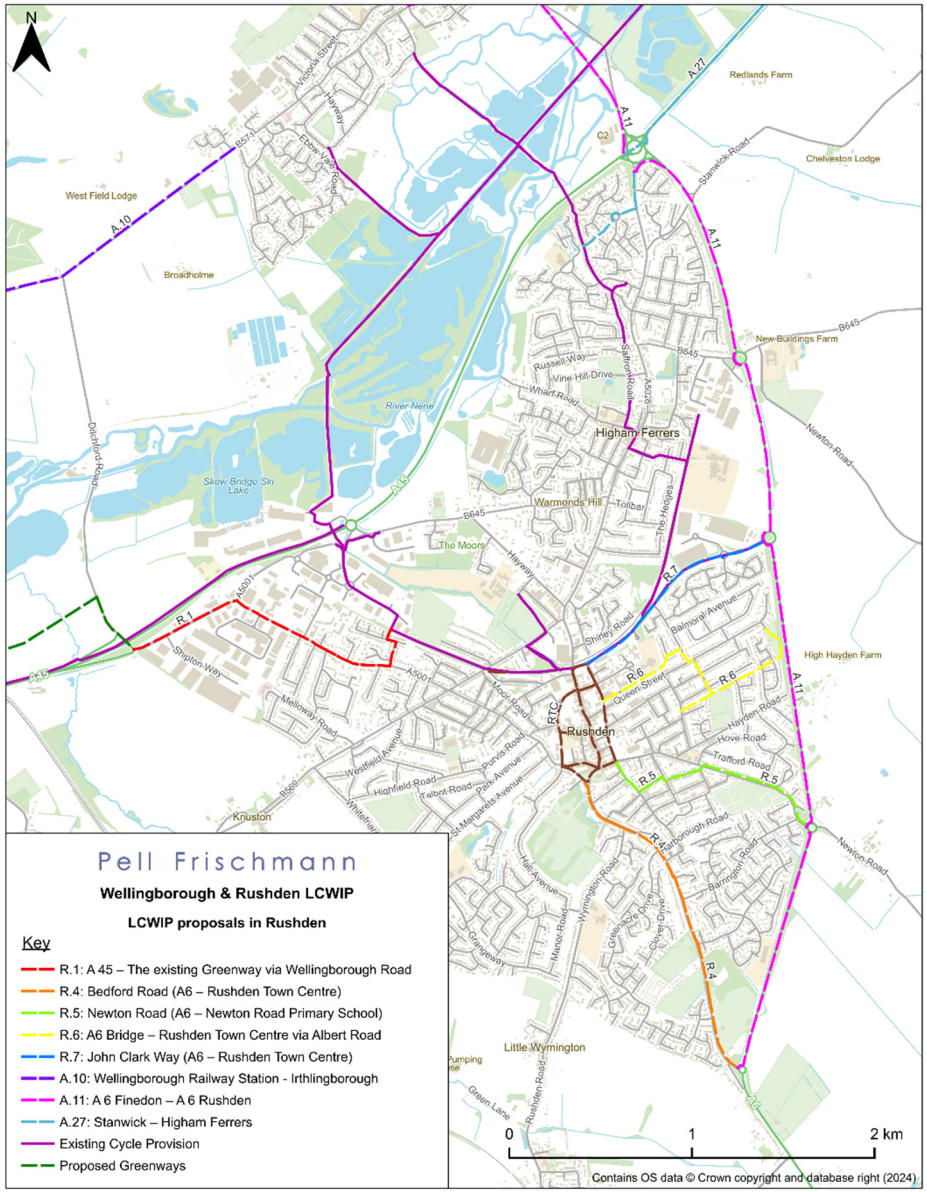


Figure 5-8: LCWIP Proposals in Rushden and Higham Ferrers

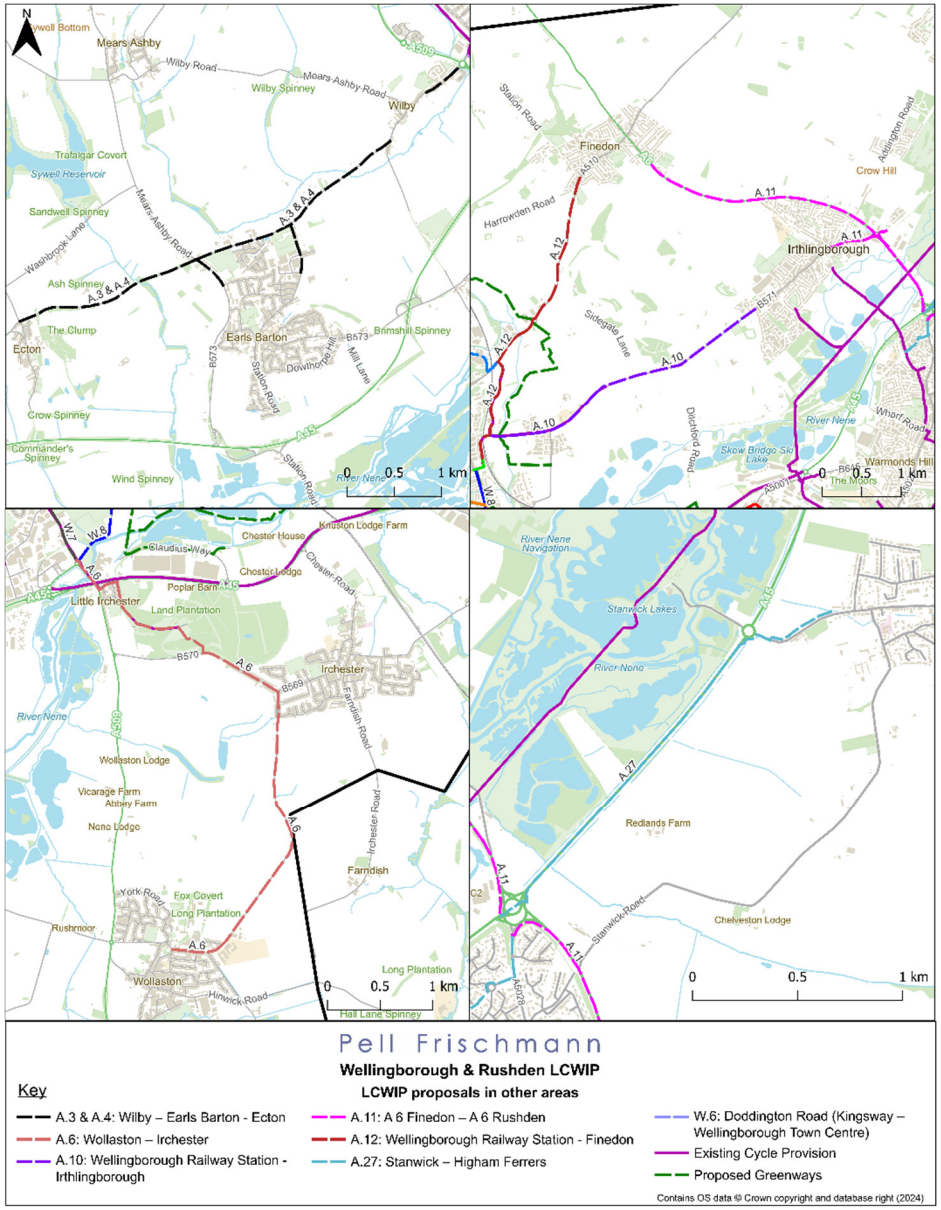


Figure 5-9: LCWIP Proposals in other areas

Table 5-1: LCWIP Proposals

Route ID	Road Name	Description
WTC 1	Wellingborough Town Centre	Two-way segregated cycleway, cycle signal priority, widened footways and improvements to pedestrian crossings.
WTC 2	Wellingborough Town Centre – Broad Green	Segregated cycleway, contraflow cycleway, rationalising parking, improvements to pedestrian/ cycle crossings, widened footways and junction improvements.
W.1	Sywell Road and Hardwick Road (Park Farm Industrial Estate – Broad Green)	Upgrading shared use to a segregated cycleway, improvements to pedestrian/ cycle crossings, junction improvements, removal of redundant street furniture, access improvements and shared use widened.
W.2	Brickhill Road (Queensway – Westfield Road)	Two-way segregated cycleway, access improvements, junction improvements, parking restrictions and improvements to pedestrian crossing.
W.4	Northampton Road and Croyland Road	Two-way segregated cycleway, one-way segregated cycleway, reduced speed limit, cycle priority junction, improvements to pedestrian/ cycle crossings, removal of redundant street furniture and EV charging facilities.
W.5	Croyland Cycleway (Northampton Road – Doddington Road)	Improvements to lighting, access improvements, improvements to pedestrian/ cyclist crossings.
W.6	Doddington Road (Kingsway – Wellingborough Town Centre)	Two-way segregated cycleway, improvements to pedestrian/ cyclist crossings and shared use facilities.
W.7	London Road (Wellingborough Town Centre – A509)	Two-way segregated cycle track, one-way segregated cycle track, access improvements, shared use widened, improvements to pedestrian/ cycle crossings and junction improvements.
W.8 & W.10	Embankment – Senwick Road – Irthlingborough Road	Two-way segregated cycle track, improvements to pedestrian/ cycle crossings, junction improvements, access improvements and reduced speed limit.

Route ID	Road Name	Description
W.11	Wellingborough Town Centre – Wellingborough Railway Station	Two-way segregated cycle track, junction improvements, improvements to pedestrian/cyclist crossings, relocated parking bays, shared use facilities, rationalised parking and a quiet mixed traffic street.
W.13	Gold Street – Nest Lae – Rixon Road	Two-way segregated cycle track, one-way segregated cycleway, parking inset bays, improvements to pedestrian/ cycle crossings, shared use facilities and an active travel bridge (parallel to road).
W.14	Nest Farm Road (Northern Way – Nest Lane)	Segregated cycle track, quiet mixed traffic route, improvements to pedestrian/cyclist crossings, reduced speed limit, improvements to footways, shared use facilities and junction improvements.
W.15	Harrowden Road – The Pyghtle (Redhill Grange – Gold Street)	Two-way segregated cycle track, improvements to pedestrian/ cycle crossings, widened footways, shared use facilities, reduced speed limit and a quiet mixed traffic street.
W.17	Queensway - Kingsway	Two-way segregated cycle track, improvements to pedestrian/ cycle crossings, widened and upgrading pedestrian bridges, junction improvements and inset parking bays.
RTC 1	Rushden Town Centre	Two-way segregated cycle track, junction improvements, improvements to pedestrian/ cycle crossings, pedestrian and cyclist zone, access restrictions, rationalised parking, shared use facilities
R.1	A45 – The existing Greenway via Wellingborough Road	Two-way segregated cycle track, improvements to pedestrian/ cycle crossings, junction improvements, shared use facilities, quiet mixed traffic street and access improvements.
R.4	Bedford Road (A6 – Rushden Town Centre)	Two-way segregated cycle track, improvements to pedestrian/ cycle crossings, shared use facilities, junction improvements, shared use widened and access improvements.
R.5	Newton Road (A6 – Newton Road Primary School)	Segregated cycle track, quiet mixed traffic routes, reduced speed limit, improvements to pedestrian/ cycle crossings, formalised parking facilities.

Route ID	Road Name	Description
R.6	A6 Bridge – Rushden Town Centre via Albert Road	Improvements to pedestrian/cyclist crossings, improvements to shared use facility, quiet mixed traffic route, improvements to footways, access improvements, removal of cycle restrictions and upgrading an existing bridge to LTN 1/20 standards.
R.7	John Clark Way (A6 – Rushden Town Centre)	Two-way segregated cycle track, junction improvements, improvements to pedestrian/ cycle crossings, improvements to PRoW and an LTN 1/20 compliant footbridge.
A.3 & A.4	Wilby – Earls Barton - Ecton	Two-way segregated cycle track, one-way segregated cycle tracks, cycle priority junction, relocation and improvements to existing roundabout, junction improvements, improvements to pedestrian/cyclist crossings
A.6	Wollaston – Irchester	Two-way segregated cycle track, improvements to pedestrian/ cycle crossings, quiet mixed traffic street, utilise existing off-road shared use facility, junction improvements, rationalise parking and reverse the direction of chicane.
A.10	Wellingborough Railway Station - Irthlingborough	Extension of existing shared use facility.
A.11	A6 Finedon – A6 Rushden	Two-way segregated cycle track, one-way segregated cycle track, reduced speed limit, improvements to pedestrian/ cycle crossings, shared use facilities, improvements to PRoW and an LTN 1/20 compliant footbridge.
A.12	Wellingborough Railway Station - Finedon	Two-way segregated cycle track, shared use facility and improvements to pedestrian/ cycle crossings.
A.27	Stanwick – Higham Ferrers	Two-way segregated cycle tracks and improvements to pedestrian/ cycle crossings.
Raunds CWZ	Raunds	Improvements to pedestrian/cyclist crossings, a raised junction and access improvements.
Irthlingborough CWZ	Irthlingborough	Improvements to pedestrian crossings and reduced junction width.
Finedon CWZ	Finedon	One-way cycleway, junction improvements, quiet mixed traffic street, improvements to pedestrian/ cycle crossings and widened footways.

6 Stage 4: Network Planning for Walking

This chapter outlines the walking improvements proposed. As walking measures have been considered holistically as part of the cycling measures in **Chapter 5** above, this chapter will outline the Core Walking Zones (CWZ) and key walking routes only.

6.1 Core Walking Zones and Key Walking Routes

Using the same significant trip attractors used when developing the cycle desire lines, a walking route network has been created for both Wellingborough and Rushden, following the guidance that this should be a minimum of 400m in diameter, equivalent to approximately a 5-minute walk.

Additionally, it is recommended that key walking routes are identified up to a 2km radius, approximately a 30-minute walk, from the edge of the core walking zone. On average, most people choose to walk up to 2km for a local trip; however, it is known that some people will choose to walk further.

Figure 6-1 shows the core walking zones and 2km additional radius for Wellingborough and Rushden. The 2km radius stretches north to the A509 and south to Windsor Road encompassing most of Wellingborough (within the A509) and in Rushden, the 2km radius covers most of Rushden and the southern section of Higham Ferrers.

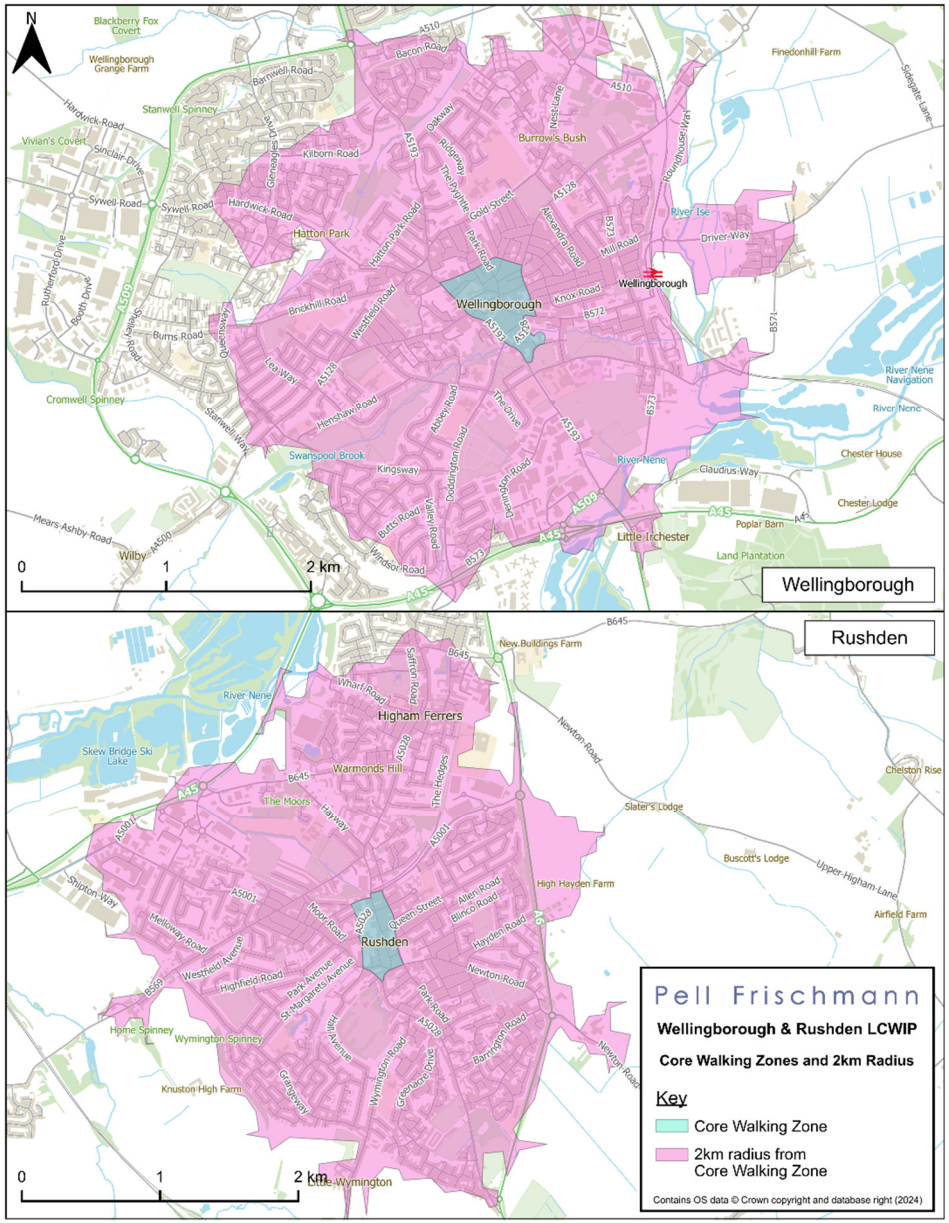


Figure 6-1: Core Walking Zones and 2km walking radius

In addition to this, a walking hierarchy map showing the different roles each road within the 2km radius has been identified and mapped for both Wellingborough and Rushden in **Figure 6-2**. The four main categories are:

- Primary/ Prestige Walking Routes: very busy areas of town, with high footfall, acting as main pedestrian routes.
- Secondary Walking Routes: Medium usage routes through local areas, providing direct access onto primary routes as well as to busier areas such as shops and industrial estates.
- Link Footways: Providing the link between local, more residential, areas and the secondary routes.
- Local Access Footways: Low usage pedestrian footfall, usually smaller estate roads and cul-de-sacs.

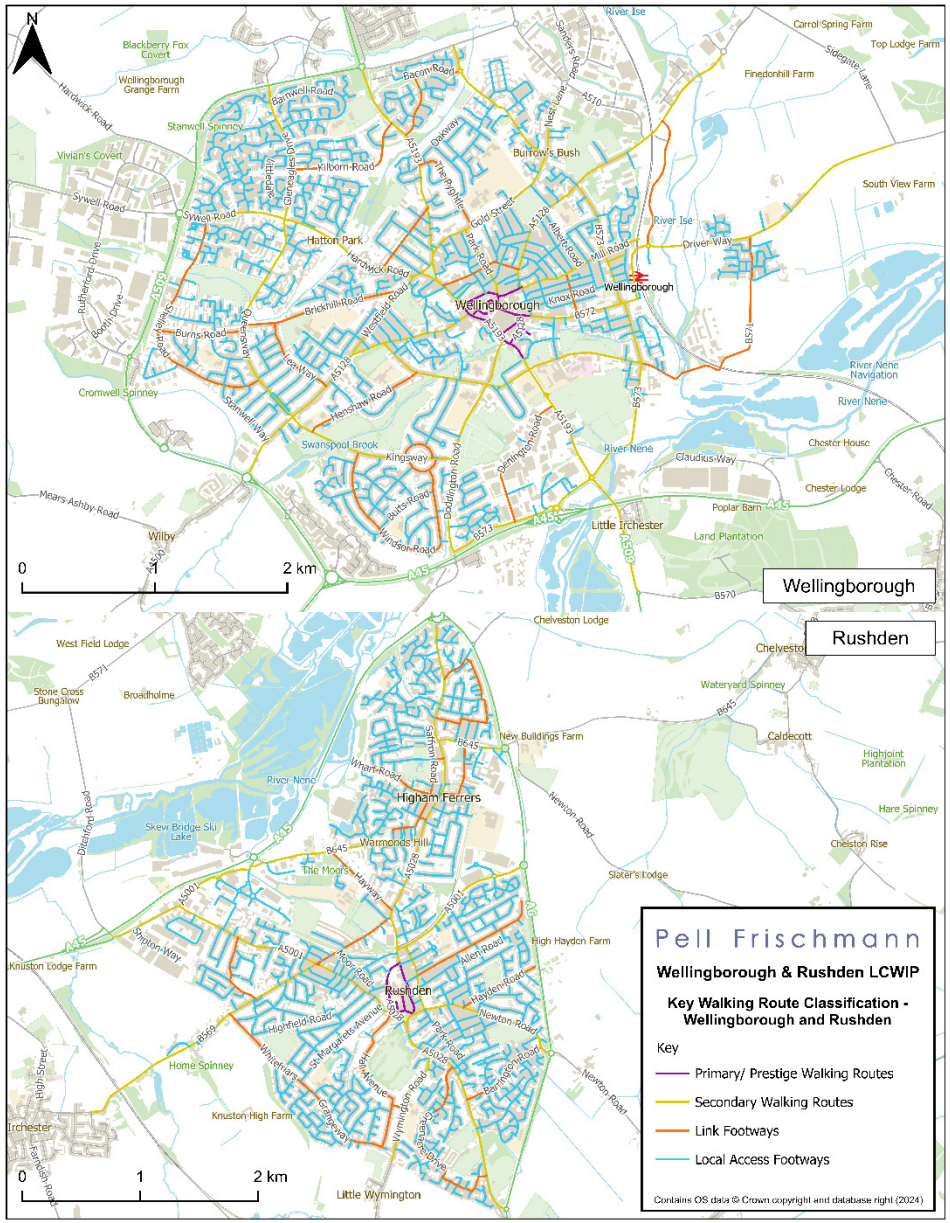


Figure 6-2: Key Walking Route Classifications for Wellingborough and Rushden

6.2 Core Walking Zones

Using the trip generators and data collated in Stage 2, and the observations from the site visits, five Core Walking Zones have been identified. Core Walking Zones are considered areas consisting of a number of walking trip generators located close together such as town centres. In this case, Core Walking Zones have been identified in Wellingborough and Rushden and have also been included in the cycling proposals (WTC.1, WTC.2 and RTC).

Three additional Core Walking Zones have been identified in nearby villages as illustrated in **Figure 6-3** including:

- Irthlingborough
- Raunds
- Finedon

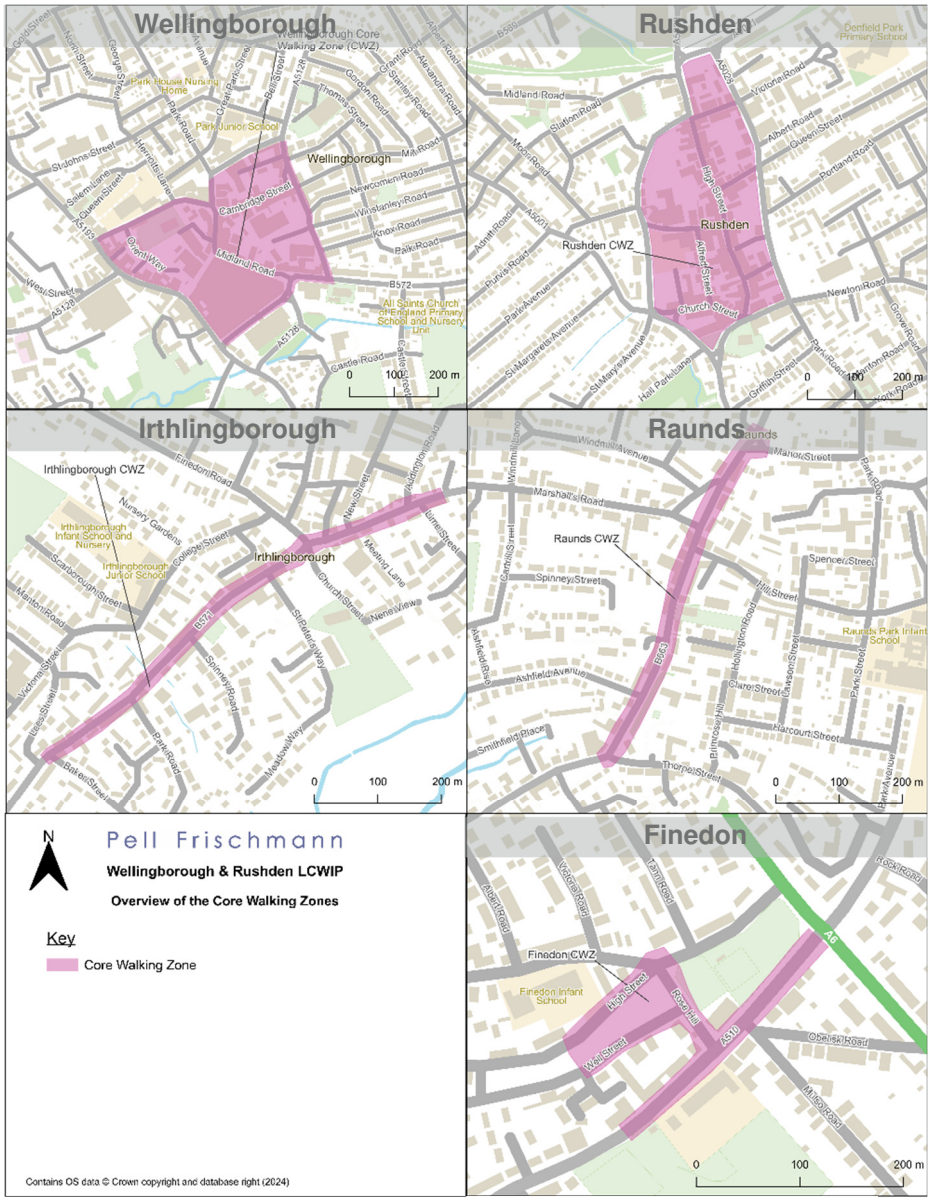


Figure 6-3: Core Walking Zones

6.3 Proposed Walking Improvements

Walking route improvements have been proposed along all of the routes suggested within this LCWIP as well as in the proposed Core Walking Zones.

Figure 6-4 outlines some proposed walking improvement measures that could be delivered in the CWZs.

A) Toucan crossing – a signalised crossing that allows pedestrians and cyclists to cross together

B) Parallel crossings – similar to a zebra crossing but pedestrians are separated from cyclists.

C) Raised crossings – A crossing that is raised in order to slow traffic and improve pedestrian crossings.

D) Raised junctions – A raised section of carriageway, used to slow traffic and improve pedestrian crossings.

E) Dropped kerbs – A feature to facilitate non-stepped access, usually between the footway and carriageway.

E) Tactile paving – Paving that helps people with sight impairments to read the street environment by using changes in texture or colour.

Figure 6-4: Examples of proposed walking improvements

7 Stage 5: Prioritising Improvements

The fifth stage of the LCWIP process sets out a suggested approach to prioritising walking and cycling infrastructure improvements. This process involves:

- Developing timescales for delivery over short, medium and long term
- High-level appraisal and costing schemes
- Prioritising improvements considering effectiveness, cost and deliverability

The key output of this stage is a joint prioritised programme of cycling and walking infrastructure improvements.

7.1 Prioritisation

The LCWIP guidance recommends that infrastructure improvements be prioritised into three categories:

- **Short term** (typically <3 years) – improvements that can be implemented quickly or are under development.
- **Medium term** (typically <5 years) – improvements where there is a clear intention to act, but delivery is dependent on further funding availability or other issues (e.g. detailed design, securing planning permissions, land acquisition).
- **Long term** (typically >5 years) – more aspirational improvements or those awaiting a defined solution.

These timescales however are subject to change depending on available funding streams.

7.1.1 Prioritisation Criteria & Methodology

A bespoke prioritisation criteria was developed based on recommendations from the LCWIP guidance and with inputs from NNC. Each route was assessed against the criteria and scored on a scale of 0 to 2. The prioritisation criteria can be seen on **Figure 7-1**.

Figure 7-1: Prioritisation Criteria

Each criteria was given a weighting based on its importance which helped to develop a prioritised list of schemes. A total of 31 route proposals were developed with **Table 7-1** presenting the top 15 ranked routes. The complete prioritisation table showing the scores for each route and their associated timeframe can be found in **Appendix D**.

The routes prioritised in **Table 7-1** have ranked highly as they are likely to impact the greatest number of people, were favoured in the public and stakeholder engagement and provide improved connectivity to key destinations.

Following the initial prioritisation a timeframe was assigned to each of the routes based on the total score the route received and the cost of the proposed route indicating the likely complexity to deliver. Further information regarding the indicative cost for each route is available in **Section 7.1.2**.

Table 7-1: Top 15 proposed routes

Route	Location	Total Score	Rank	Timescale
W.4	Northampton Road and Croyland Road	1.47	1	Medium
W.2	Brickhill Road (Queensway – Westfield Road)	1.39	2	Medium
W.5	Croyland Cycleway (Northampton Road – Doddington Road)	1.37	=3	Short
W.7	London Road (Wellingborough Town Centre – A509)	1.37	=3	Medium
W.10	Irthlingborough Road	1.29	5	Short
WTC.2	Wellingborough Town Centre – Broad Green	1.26	6	Medium
W.11	Wellingborough Town Centre – Wellingborough Railway Station	1.19	7	Medium
R.7	John Clark Way (A6 – Rushden Town Centre)	1.18	8	Medium
R.6	A6 Bridge – Rushden Town Centre via Albert Road	1.14	9	Short
RTC.1	Rushden Town Centre	1.1	=10	Medium
R.1	A45 – The existing Greenway via Wellingborough Road	1.1	=10	Medium
WTC.1	Wellingborough Town Centre	1.09	12	Long
A.10	Wellingborough Railway Station - Irthlingborough	1.06	13	Long
R.5	Newton Road (A6 – Newton Road Primary School)	1.05	=14	Long
A.11	A6 Finedon – A6 Rushden	1.05	=14	Long

7.1.2 Costs

Initial high-level costings have been undertaken to estimate the capital cost of each of the 31 routes. To develop the cost estimates, a range of standard unit costs for different types of interventions was applied. These costs are based on 2024 Q1 prices.

Costs for the proposed intervention have been included:

- Cycle Superhighway (two-way physically segregated)
- Mixed Strategic Cycle Route
- Remodelled major junction (cycling piggybacking on traffic measures)
- 20mph zone (without traffic calming measures)
- One way cycle route
- Major road puffin crossing (also Toucan)
- Estate road puffin crossing (also Toucan)
- Street lighting
- Relocate/ remove barriers (pair of barriers)
- Footway widening into existing carriageway (1m widening)
- New shared use footway/ cycleway (4m wide – including 1m buffer)

The following assumptions have been made when calculating these cost estimates:

- Various sources for the cost estimates have been used but all have been scaled to Q1 2024 prices using the Bank of England inflation calculator.
- Where a 'Cycle Superhighway' (two-way physically segregated) is proposed, the cost of side road treatment and priority for pedestrians and cyclists at junctions has been included in unit rate per km.
- Where proposing shared use, the costs would be covered by either introducing new footways or widening existing as opposed to the higher cost of a 'Mixed Strategic Cycle Route'. However, where further works e.g. raising of parapets, earthworks or the removal of vegetation is required the 'Mixed Strategic Cycle Route' costs have been used.
- A 44% risk allowance has been included within each route cost in line with the stage of development of these proposals.
- All costs are exclusive of VAT
- All costs are exclusive of maintenance and renewal costs

The total estimated cost for each proposed route is shown below in **Table 7-2**.

Table 7-2: High-level cost estimates

Route number	Location	Total Cost (Q1 2024) (rounded to the nearest £10k)
WTC.1	Wellingborough Town Centre	£1,710,000
WTC.2	Wellingborough Town Centre – Broad Green	£1,410,000
W.1	Sywell Road and Hardwick Road (Park Farm Industrial Estate – Broad Green)	£5,520,000
W.2	Brickhill Road (Queensway – Westfield Road)	£2,920,000
W.4	Northampton Road and Croyland Road	£3,910,000
W.5	Croyland Cycleway (Northampton Road – Doddington Road)	£460,000
W.6	Doddington Road (Kingsway – Wellingborough Town Centre)	£6,140,000
W.7	London Road (Wellingborough Town Centre – A509)	£2,680,000
W.8	Embankment – Senwick Road	£3,470,000
W.10	Irthlingborough Road	£430,000
W.11	Wellingborough Town Centre – Wellingborough Railway Station	£3,860,000
W.13	Gold Street – Nest Lane – Rixon Road	£8,210,000
W.14	Nest Farm Road (Northern Way – Nest Lane)	£2,520,000
W.15	Harrowden Road – The Pyghtle (Redhill Grange – Gold Street)	£1,130,000
W.17	Queensway - Kingsway	£9,820,000
RTC.1	Rushden Town Centre	£5,670,000
R.1	A45 – The existing Greenway via Wellingborough Road	£3,590,000
R.4	Bedford Road (A6 – Rushden Town Centre)	£4,150,000
R.5	Newton Road (A6 – Newton Road Primary School)	£1,740,000

Route number	Location	Total Cost (Q1 2024) (rounded to the nearest £10k)
R.6	A6 Bridge – Rushden Town Centre via Albert Road	£240,000
R.7	John Clark Way (A6 – Rushden Town Centre)	£3,070,000
A.3 & A.4	Wilby – Earls Barton - Ecton	£7,550,000
A.6	Wollaston – Irchester	£5,380,000
A.10	Wellingborough Railway Station - Irthlingborough	£3,190,000
A.11	A6 Finedon - A6 Irthlingborough - A6 Rushden	£15,040,000
A.12	Wellingborough Railway Station - Finedon	£2,280,000
A.27	Stanwick – Higham Ferrers	£3,000,000
Raunds CWZ	Raunds	£800,000
Irthlingborough CWZ	Irthlingborough	£280,000
Finedon CWZ	Finedon	£490,000

8 Stage 6: Integration and Application

The final stage of the LCWIP process considers how the Wellingborough & Rushden Area LCWIP should be integrated into local policy, strategies and plans, and how it can be used to support future funding applications. This LCWIP should align with any future planning and transport policies including the emerging Local Transport Plan.

8.1 Funding Mechanisms

This LCWIP sets out the case for future funding for cycling and walking infrastructure in the Wellingborough and Rushden area. There are a number of different potential sources of funding that may be available to contribute towards walking and cycling infrastructure improvements, which may include but are not limited to:

- Developer contributions (Town and Country Planning Act 1990 Section 106)
- Active Travel Fund
- Active Travel Capability Fund
- Local Transport Fund
- Integrated Transport Block
- Local authority ring fenced funding

8.2 Reviewing and Updating

In line with other transport plans, it is envisaged that the Wellingborough & Rushden Area LCWIP will need to be reviewed and updated approximately every four to five years to reflect progress made with implementation. It may also be updated if there are significant changes in local circumstances, such as the publication of new policies or strategies, major new development sites, or new sources of funding.

Appendix A Stakeholder Workshop 2 Outputs

Appendix B Stakeholder Engagement Report

Appendix C LCWIP Proposals

Appendix D Prioritisation Table