

West Northamptonshire Council

Towcester Local Cycling and Walking Infrastructure Plan

Draft Technical Report for Consultation

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1 Executive Summary

PJA has produced this Local Cycling and Walking Infrastructure Plan (LCWIP) on behalf of West Northamptonshire Council. The LCWIP aims to inform future investment in walking and cycling in and around Towcester, and takes account of the significant changes that Towcester is undergoing, including;

- The development of a residential-led Sustainable Urban Extension in the region of 3,000 dwellings
- The construction of an A5 relief road
- The development of large warehouse-type employment sites to the north of the town centre off the A43.

The plan does not consider Towcester in isolation, and also looks at links to other nearby settlements which are within potential cycling distance, with the aim of improving connectivity to these outlying villages.

The LCWIP contains analysis of background information and the policy context to identify areas that are most likely to benefit from improvements to active travel infrastructure. This evidence was discussed with a panel of key stakeholders throughout the process to ensure the robustness of the analysis, and to develop key routes both within Towcester, and to three outlying villages - Greens Norton, Blisworth, and Silverstone. The connection between Towcester and the proposed development north of the A43 was found to be a key priority for stakeholders.

Based on the evidence and stakeholder feedback, priority routes were audited using the DfT's Walking Route Assessment Tool (WRAT) and cycling Route Selection Tool (RST). High level interventions for each of the routes/areas have been developed with reference to the Local Transport Note 1/20 Design Guidance.

The plan highlights the potential for area-wide improvements to create better conditions for walking and cycling in the town centre, such as rationalisation of parking, and improved wayfinding, which may be introduced relatively quickly. More substantive improvements, such as a new grade separated crossing of the A43 in order to connect to the proposed employment sites are also identified.

The adoption of the LCWIP will help direct future active travel funding and develop a coherent and high-quality cycling and walking network for Towcester.

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2 Introduction

2.1 Introduction to study

PJA has produced this Local Cycling and Walking Infrastructure Plan (LCWIP) for Towcester on behalf of West Northamptonshire Council. The LCWIP process provides an evidence-led network plan so that future investment in cycling and walking infrastructure can be informed by a coherent vision of how cycling and walking can contribute to the overall transport mix in the area.

The LCWIP process involves:

- Scoping;
- Data collection and analysis, including the use of:
 - Propensity to Cycle (PCT) tool;
 - 'Everyday Trip' analysis for walking and cycling within Towcester;
 - Other analysis including Terrain, Air Quality, School Travel Data, Walking and Cycling Isochrones;
- Network development and site auditing for walking and cycling networks, including:
 - Identification of core walking zone and key walking routes;
 - Identification of cycle routes within Towcester and routes to surrounding settlements;
 - Route audits (using Route Selection Tool (RST) and Walking Route Assessment Tool (WRAT));
 - Identification and prioritisation of proposals within Towcester;
- High-level cost estimates;
- Stakeholder engagement at various stages of the project to review the analysis and ensure the plan is informed by local knowledge and aligns with other local priorities.

Two key strands were identified to support West Northamptonshire Council's ambitions to increase levels of walking and cycling in and around Towcester:

- Walking and cycling measures within Towcester itself;
- Routes to key surrounding settlements from Towcester ('inter-urban routes').

2.2 Report structure

The report reviews existing relevant policies and plans and details the comprehensive spatial analysis and audit work undertaken to develop the LCWIP. Findings are presented from each of the individual project strands including the core LCWIP for walking and cycling within Towcester, as well as routes to surrounding settlements. It concludes with a recommended approach for the overarching delivery of the project.



3 Study context

This chapter summarises the context for this study, with particular focus on the policy framework and major developments proposed in the area.

3.1 National policy context

3.1.1 Cycling and Walking Investment Strategy 2 (2023)

The Government's Cycling and Walking Investment Strategy (CWIS1) was published in 2017 and contained the following objectives:

- increase the percentage of short journeys in towns and cities that are walked or cycled from 41% in 2018 to 2019 to 46% in 2025;
- increase walking activity, where walking activity is measured as the total number of walking stages per person per year, to 365 stages per person per year in 2025;
- double cycling, where cycling activity is measured as the estimated total number of cycling stages made each year, from 0.8 billion stages in 2013 to 1.6 billion stages in 2025; and
- increase the percentage of children aged 5 to 10 who usually walk to school from 49% in 2014 to 55% in 2025.

CWIS2 (2023) articulated this ambition by incorporating Gear Change, which outlines four themes developed by the Government that need to be taken into consideration in order to achieve a modal shift towards walking and cycling. These themes are:

- Better streets for cycling and people;
- Cycling at the heart of decision-making;
- Empowering and encouraging Local Authorities; and
- Enabling people to cycle and protecting them when they do.

The policy document sets out the vision for England being a walking and cycling nation and explores the important benefits of increasing cycling and walking such as; challenging societal issues including air quality, combating climate change, improving health and wellbeing, addressing inequalities, and tackling congestion.

The policy stresses the need for high quality cycle infrastructure in order to encourage mode shift towards cycling. It emphasises the need for a connected cycle network, and for it to be easy to use for people of all ages and abilities.

3.1.2 Gear Change and LTN 1/20 (2020)

The national policy context for active travel changed significantly in 2020 with the Department for Transport's (DfT) publication of 'Gear Change' and the accompanying Local Transport Note 1/20



'Cycle Infrastructure Design'. These two documents outline significant changes for the future of transport planning and design in the UK and the prioritisation of measures that encourage increased levels of walking and cycling.



Gear Change

The Cycling and Walking Plan for England, 'Gear Change: a bold vision for cycling and walking', was published on 27 July 2020. The plan sets out the government's shift in transport policy: to prioritise active travel over single-occupancy private vehicles.

The plan set the following vision:

"Places will be truly walkable. A travel revolution in our streets, towns and communities will have made cycling a mass form of transit. Cycling and walking will be the natural first choice for many journeys with half of all journeys in towns and cities being cycled or walked by 2030."

The plan recognises the need to take action to tackle the barriers to active travel, providing better quality infrastructure to make sure people feel safe and confident cycling. To receive government funding for local highways investment where the main element is not cycling or walking improvements, there will be a presumption that all new schemes will deliver or improve cycling infrastructure to the new standards unless it can be shown that there is little or no need for cycling.



The plan also recognises the need to reduce rat-running on residential side streets through more low traffic neighbourhoods (LTNs) as well and creating cycle, bus and walking corridors by closing a limited number of main roads to through traffic except for buses and access.

LTN 1/20 – Cycle Infrastructure Design

The Cycle Infrastructure Design Guidance – Local Transport Note 1/20 – establishes much higher standards for cycling infrastructure, including geometric requirements.

Rather than a strict set of standards or a "one size fits all" approach, LTN 1/20 encourages designers to consider the context when designing cycling infrastructure. For example, it identifies what level of protection from motor traffic is appropriate based on the speed and volume of traffic, noting these are not fixed. For example, it makes specific reference to physical and legal measures to control access and motor vehicles' speeds, and notes that such measures can bring wider environmental benefits by reducing noise, air pollution and traffic danger. It notes:

"Encouraging through-traffic to use main roads can provide benefits for pedestrians and residents, particularly children and vulnerable adults, as well as enabling cycling. This can be achieved through implementing measures such as turning bans, one-way streets, and by mode filtering...These measures also have the benefit of making short journeys quicker on foot or cycle compared to driving, providing a disincentive to using a car for short trips."

3.1.3 Local Cycling and Walking Infrastructure Plans (LCWIPs) (2017)

LCWIPs were first set out in the government's Cycling and Walking Investment Strategy (CWIS). LCWIPs are intended to provide local authorities with a long-term approach for developing walking and cycling networks, ideally over a ten-year period. The development of an LCWIP should include desktop analysis of existing and future behavioural trends, site auditing of existing conditions for walking and cycling, and prioritisation of recommended design measures. The key outputs from an LCWIP are:

- Network Plan for Walking and Cycling identifying preferred cycling routes and walking zones for development;
- Programme of prioritised infrastructure improvements; and
- Report summarising the work undertaken to inform the LCWIP network development.

The DfT's LCWIP guidance provides a recommended approach to developing LCWIPs. However, their intention is that LCWIPs respond to local conditions and requirements to improve walking and cycling networks.

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3.2 Local policy context

This section briefly summarises the policy framework for the local area and outlines how this might influence the LCWIP.

3.2.1 South Northamptonshire Local Plan (Part 2) (2020)

Adopted in July 2020, South Northamptonshire Local Plan (Part 2) covers the period up to 2029 and sits alongside the West Northamptonshire Joint Core Strategy Local Plan, both being a part of the development plan for Towcester. The WNJCS ensures strategic development within the whole of Northampton Borough together with several Sustainable Urban Extensions (SUEs) that are located within adjoining parts of South Northamptonshire and Daventry Districts. Within South Northamptonshire, strategic development is directed to the Rural Service Centres of Brackley and Towcester which makes it a great place to live, work, and invest.

The policies summarised below are relevant to the study:

- **Policy RET1 Brackley and Towcester Town Centres** within the town centres of Brackley and Towcester, the council will support development where it is appropriate in terms of scale, type and design, and consistent with other policies in the area. Proposals will be supported where it is appropriately located in employment and housing provision.
- Policy AL1 Land at Bell Plantation, Towcester located to the north of Towcester on land associated with and including the Bell Plantation and adjoining the A43 and A5, Bell Plantation development site provides for 35ha of mixed employment generating development together with 6ha of land for creation of a Towcester Town Football Club home ground. A variety of employment types will be sought to reflect the need for diversity and resilience in the local economy as expressed in the council's economic growth strategy.
 - An integrated, coordinated, and comprehensive planning approach will be taken for the site and a masterplan must be prepared, in consultation with the local planning authority and the local highway authority, Towcester Town Council and other statutory undertakers prior to the submission of a planning application covering the whole site. Access and transport within this area has set out the following rules:
- i) Access to the employment site to be from A5;
- Access to the football club site to be provided by the developer of the employment site or from a new separate access from the A5 and provision of an unfettered road access point to the edge of the football club site;
- iii) Good accessibility to public transport services should be provided for, including contributions to the cost of diverting existing routes through the site or to support existing local services and promote sustainable travel;



- iv) A transport assessment and travel plan will be required to assess the transportation implications of the proposed plan and to identify appropriate mitigation measures; and
- v) Provision of new footpath and cycleways that link to existing networks and safe crossing points on the A43.
 - Policy AL2 Land at Woolgrowers Field, Towcester located to the north of Towcester bounded by the A5 to the east and Towcester Road and the A43 to the south, Woolgrowers Field development site provides for 4.5 hectares of mixed employment generating development. A variety of employment types will be sought to reflect the need for diversity and resilience in the local economy as expressed in the council's economic growth strategy.
 - An integrated, coordinated and comprehensive planning approach will be taken for the site and a masterplan must be prepared, in consultation with the local planning authority and the local highway authority, Towcester Town Council and other statutory undertakers prior to the submission of a planning application covering the whole site. Access and transport within this area has set out the following rules:
- i) Access to the employment site to be from A5 and/or the Greens Norton Road;
- Good accessibility to public transport services should be provided for, including contributions to the cost of diverting existing routes through the site or to support existing local services and promote sustainable travel;
- iii) A transport assessment and travel plan will be required to assess the transportation implications of the proposed plan and to identify appropriate mitigation measures; and
- iv) Provision of new footpath and cycleways that link to existing networks and safe crossing points on the A43.
- **Policy AL3 Land at Tiffield Lane, Towcester** located to the north of Towcester and the A43, the Tiffield Lane development site provides for 21ha of new mixed employment generating development.
 - An integrated, coordinated and comprehensive planning approach will be taken for the site and a masterplan must be prepared, in consultation with the local planning authority and the local highway authority, Towcester Town Council and other statutory undertakers prior to the submission of a planning application covering the whole site. Access and transport within this area has set out the following rules:
- A new roundabout facility will be provided at the junction of the A43 and the Northampton Road (Hulcote Turn) and the layout of the proposal will enable the closure of the central reservation turn at the Tiffield Lane junction in order to improve road safety on the A43;
- ii) Provision of new footpath and cycleways that link to existing networks and safe crossing points on the A43.

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3.2.2 West Northamptonshire Joint Core Strategy Local Plan (Part 1) (2014)

The West Northamptonshire Joint Core Strategy Local Plan (Part 1) (WNJCS) (adopted 2014) outlines the following housing delivery requirements for Towcester District excluding Northampton related development area:

Settlement	Delivery requirement	Completions 2011– 2018	Commitments 2019– 2029	Residual
Brackley	2,160	915	1,213	32
Towcester	2,650	362	1,797	491
Rural Areas	2,360	1,821	916	-377
Total	7,170	3,098	3,926	146

 Table 3-1: Housing delivery against actual and planned delivery requirement outlined in South Northamptonshire

 Local Plan (Part 2)

The Joint Core Strategy contains several policies relevant to the study:

- Policy S5 Sustainable urban extensions outside the existing urban areas, the plan will be focused on sustainable urban extensions to the urban areas, including 2,100 dwellings and 10.8 HA employment in Towcester South.
- Policy C1 Changing behaviour and achieving modal shift- The council plans to promote more sustainable ways of traveling by -
 - Providing access by walking, cycling and public transport to key facilities and services.
 - Promoting use of walking, cycling and public transport over private car trips.
 - Provision of effective cycling networks across existing urban and rural area linked to key transport interchanges.
- Policy C5 Enhancing local and neighbourhood connections the connections within urban areas, between neighbourhoods and town and district centres and the rural hinterlands of West Northamptonshire with their most accessible service centre, will be strengthened by measures including:
 - Improvements to cycling networks and cycle parking;
 - Securing and enhancing urban and rural walking networks; and
 - Sustaining or improving existing demand responsive transport, particularly in rural areas, to fill key gaps to the scheduled network and enhancing the network where gaps presently exist.
- Policy T1 The spatial strategy for Towcester The role of Towcester as a rural service centre will be supported and enhanced by other developments such as housing, employment and retail, with relevant set of rules to the plan such as:
 - The regeneration of Towcester Town Centre, principally through the mixed-use development of the Moat Lane area (as set out in policy T2);



- Additional services and facilities provided through the regenerations of the town centre and the Towcester South sustainable urban extension;
- Delivery of an A5 relief road and complementary sustainable transport measures to improve air quality and reduce congestion in the town centre;
- Supporting the protection and improvement of the facilities provided at Towcester racecourse (see policy T5);
- Towcester Racecourse is identified through Policy T1 of the WNJCS as a strategic location for the 'protection and improvement of facilities at the Racecourse'. WNJCS Policy T5 builds on the aspirations laid out in Policy T1 by further supporting the intensification of uses at Towcester Racecourse, including the development of additional leisure, recreational, tourism and exhibition facilities. The position of the racecourse has evolved since the adoption of the Part 1 Plan. However, the Local Planning Authority recognise the site's position as a significant regional sporting facility, and its potential to re-assert itself as a national centre for horse and greyhound racing. Associated facilities at the site could also be more widely used as a conference and wedding venue.
- Policy T2 The Town Centre and Moat Lane regeneration area Within the boundary of the Moat Lane regeneration area and the town centre, the plan will provide:
 - Civic and community transport facilities, including for tourist, leisure and linking cultural facilities;
 - Premises to enhance the vitality of the town centre; and
 - The preservation and enhancement of Bury Mount scheduled ancient monument, the conservation area and the town centre's heritage assets.
- Policy T3 Towcester South Sustainable Urban Extension The boundary of the Towcester South sustainable urban extension is shown on the policies map. The plan, along with dwellings, employment, schools, leisure and retail, will make provision for:
 - Construction of in the region of 3,000 dwellings
 - 2 Primary Schools
 - 2 mixed use local centres with local retail
 - The construction of the A5 relief road;
 - Improvements to the A43 junctions;
 - Transport plan that respects the landscape setting including Easton Neston registered park and garden, listed buildings and nearby conservation areas;
 - An integrated transport network with sustainable transport modes including access to Towcester Town Centre;

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- Flood risk management including surface water management and from all other sources;
- Safeguarding and enhancement of Towcester's green infrastructure network; and
- Safe routes for pedestrians and cyclists.
- **Policy T4 Transport improvements for Towcester** to support accessibility and sustainable transport within Towcester, the local authorities will:
 - Support improvements to the connectivity of Towcester with the wider A43 network including enhanced public transport connections with Silverstone, Northampton and Milton Keynes;
 - Support the extension of the walking and cycling network to connect the new development to the town centre;
 - Secure junction improvements to the A43;
 - Promote walking and cycling within the town as an alternative to car journeys; and
 - Review parking provision across the town.
- Policy T5 Towcester Racecourse the plan which would align with Towcester Racecourse involving the development of additional leisure, recreational, tourism and exhibition facilities will be supported, subject to meeting the following criteria:
 - Vehicular access to the site shall be from the A5 using either of two existing access points. A transport assessment will be required to ensure that any increase in traffic generation can be satisfactorily accommodated;
 - Existing footpaths should be retained;
 - Appropriate landscaping schemes will be required to be submitted and approved by the local planning authority as part of any development proposal;
 - The provision of an integrated transport network with sustainable transport modes including access to Towcester Town Centre;
 - Safeguarding and enhancement of Towcester's green infrastructure network.

3.2.3 Northamptonshire Transportation Plan (2012)

The Northamptonshire Transportation Plan was adopted in March 2012 and is the overarching strategy document that sets out what the former Northamptonshire County Council's strategic aims and goals are for transportation in Northamptonshire. The Transportation Plan states that its overall aim is to create a network that is 'fit for purpose', "delivering exactly what Northamptonshire needs to be able to function plus what it needs to be able to grow, no more and no less."

It identifies several objectives: the future, community, choice, economic growth, environment, and best value.

One of the priorities identified in the plan is to make public transport and cycling more attractive and encouraging and incentivising low-carbon travel and the policies to improve walking and cycling include:

- Strategic Policy 2 We will support the introduction of effective and attractive sustainable transport options that will encourage lasting modal shift in Northamptonshire. We have set two targets for modal shift, based on 2001 Census journey to work data, to achieve by 2031: A reduction of 5% in single occupancy car journeys to work from the existing built-up areas of the towns A reduction of 20% in single occupancy car journeys to work from new developments.
- Strategic Policy 3 We will ensure that all new developments are well connected by public transport and walking, cycling and motor vehicles routes, to the existing transport network or one that can be reasonable expected to be created this will allow ease of movement between the development and existing built-up areas and provide access to employment and key services.
- Strategic Policy 12 We will work with communities to identify initiatives as part of an integrated approach to road safety that will aim to reduce casualties and take opportunities to support healthier lifestyles through active travel, promoting modal shift, the Safer Routes to School Programme and walking and cycling schemes.
- **Strategic Policy 14** We will work with partners to improve the walking, cycling and public transport infrastructure to make options available for people to travel in Northamptonshire.

3.2.4 Northamptonshire Cycling Strategy and Northamptonshire Walking Strategy (2013)

The Northamptonshire Cycling Strategy and the Northamptonshire Walking Strategy were both adopted in January 2013. They set out the overarching vision for cycling and walking respectively within Northamptonshire and the strategy to achieve it.

The strategy is one of the series of thematic daughter documents to the Northamptonshire Transportation Plan adopted in 2012. The Towcester Town Transport Strategy is one of several spatial daughter documents and is also relevant to this study as transport is a key theme.

The vision for cycling covers both shorter, local utility journeys as well as leisure purposes. The strategy recognises the potential for more cycling to bring significant benefits including reducing congestion, cutting carbon emissions, creating healthier communities and contributing to economic prosperity.

The cycling strategy acknowledges that current cycling levels are low with cycle mode share for journeys to work around 2% but notes there is significant potential:

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"The compact nature of the towns and in most cases relatively flat topography, presents significant potential to increase cycling trips within the major towns through addressing key missing links and junction treatment. In addition, there are opportunities, if sufficient funding became available, to develop inter-urban links between the main towns and from smaller outlying settlements. The town networks are complemented by the National Cycle Routes 6 and 50 which run north to south through the county, which are used on the whole as leisure routes."

The cycling strategy includes a few high-level policies and design standards regarding the width of facilities which generally align with current guidance in LTN1/20.

It is envisaged that walking should be the mode of choice for journey under 1 mile but also for access to public transport, given its benefit in personal and public health, environment, economy and community.

The policy context suggests a decline in walking overall, with the proportion of trips made by walking down from 25% to 20% between 2007 and 2010. Walking to access education has the highest level of mode share (about 40%) but is still lower than the car mode share.

3.2.5 Oxford-Cambridge Arc Spatial Framework

In the 2020 budget, the government committed to developing, with local partners, a spatial framework for the Oxford-Cambridge Arc, an area that spans the five ceremonial counties of Oxfordshire, Northamptonshire, Buckinghamshire, Bedfordshire and Cambridgeshire. In February 2021 the Ministry of Housing, Communities & Local Government (MHCLG) published a policy paper "Planning for sustainable growth in the Oxford-Cambridge Arc: an introduction to the spatial framework" to set out the Government's plan for developing the spatial framework.

It notes that, by focusing on the strategic opportunities for growth and environmental improvement that cross local administrative boundaries, it is intended that the plan will:

- Support long-run sustainable economic growth across the area;
- Help to make the area a brilliant place to live, work and travel in for existing residents and future communities alike;
- Support lasting improvements to the environment, green infrastructure and biodiversity.

For example, the policy paper states it will enable a more integrated approach to planning for new transport infrastructure alongside new development to support better, more sustainable planning and growth at the local level. This includes promoting sustainable transport, improving first and last mile connectivity around transport hubs, and better connecting communities, employers, employees, businesses, cultural attractions, nature and universities, including through public transport, cycling and walking.



3.2.6 Towcester Town Transport Strategy

The former Northamptonshire County Council published the Towcester Town Transport Strategy in 2013. The document sets out the transport challenges for Towcester which include the reduction of single-occupancy car trips and increase the use of sustainable transport.

The delivery plan identifies several improvements which are now under way, including the A5 relief road and signalisation of A43 junctions. Measures to deter use of the A5 through the town centre are also identified as important considerations, that should be implemented at the same time as the relief road construction.

Walking and cycling improvements are outlined in a delivery plan, including the assessment of walking routes in order to prioritise improvements. An indicative cycle network is outlined, with a prioritised list of routes for improvement – see Figure 3-1 for the proposed cycle network.





Figure 3-1: Towcester Town Transport Strategy Network

3.2.7 Towcester Masterplan Vol 1 and 2 (2011)

Adopted in 2011, the Towcester Masterplan Vol 1 and 2 are established by South Northamptonshire Council, setting out the direction of growth for Towcester up to 2026, with the goal of healthy, green, historic, sustainable, community-focused, inclusive, accessible, vibrant, entrepreneurial and digitally connected.





Figure 3-2: Towcester Concept Masterplan envisioning Towcester in 2026 (Towcester Masterplan Vol 1, 2011)

The masterplan demonstrates the foundations for renewal of Towcester and for ensuring the town maintains its high quality of life, retaining its traditional feel as a Market Town, whilst securing new growth and modern facilities. In line with places policies for Towcester (T1-5), Towcester Masterplan Vol 1 and 2 puts through an ambitious vision for public realm and active travel within the town centre area, Moat Lane, Towcester South, Towcester Racecourse, as well as links to parks and garden by placemaking, provision of active travel/public realm facilities and removal of vehicle dominance in the area.

Opportunities identified in the Towcester Masterplan to address the negative impacts of its heavy traffic flow through transportation strategy include:

- Provision of an A5 relief road and the subsequent de-trunking of the A5 within Towcester Town Centre;
- Expansion of walking and cycling routes between residential areas and the town centre.
- Towcester Masterplan Vol 2 identifies the following key opportunity sites that will link to LCWIP's placemaking:

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Site Ref	Site Location	Timeframe
TA	Moat Lane	Short/Medium
ТВ	Market Square	Short/Medium
TC	Towcester Lanes	Medium/Long
TD	Sponne School and Magistrates Court	Short/ Medium/ Long
TE	Towcester South SUE	Short/ Medium/ Long
TF	Land at Wood Burcote (New Town park)	Short/Medium
TG	Towcester Racecourse	Short/Medium
TH	Southern Gateway	Medium/Long
TI	Northern Gateway	Short/Medium
TJ	Wood Burcote Industrial Estate	Short/Medium
ТК	Islington Road	Medium/Long
TL	Springfields	Short/Medium
TM	New bus facilities	Short/Medium

Table 3-2: Key opportunity sites with details of their likely end use (Towcester Masterplan Vol 2, 2011)



Figure 3-3: Key opportunity sites within Towcester (Towcester Masterplan Vol 2, 2011)



The masterplan outlines key delivery actions. Those relevant to the LCWIP are summarised in Table 3-3: Towcester Masterplan Actions.

Action Ref	Description
TC3	Consider the recommendations from the Towcester Transport Strategy as to the preferred location of a relief road and associated transport improvements to remove traffic from the A5 and the town centre;
TC4	Support proposals for de-trunking of the A5 to remove the heavy traffic from the town centre;
TC20	Investigate options for making the junction of Meeting Lane and Richmond Road a more obvious entrance to the town's retail area, e.g. an archway sign on Meeting Lane to attract attention and encourage pedestrian movement through to Watling Street;
TC30	Provide public realm improvements to Market Square and Towcester Lanes by providing and maintaining attractive street furniture and paving;
TC34	Physical improvements to the northern and southern gateways of the town centre to improve linkages between the commercial uses and the town centre;
TC40	Provision of secure cycle storage in town centre;
TC42	Encourage cycling and walking as an alternative form of transport to the town centre;
TC42	Explore the option of a one-way system along Richmond Road/Pomfret Road and Queens Road to reduce congestion primarily associated with school traffic;
TC43	Realign pedestrian crossings with Sponne Shopping Centre and Meeting Lane;
TC51	Improve public areas by providing and maintaining attractive street furniture and paving;
Т6	Improve environment of Market Square and Moat Lane as areas with opportunities as a tourist destination;
TM1	Improve the legibility of pedestrian and cycle routes within existing and new development by providing direct, attractive and well-lit connections with good natural surveillance that link to the town centre;
TM2	Enhance the environment for pedestrian and cyclist within town and introduce shared surfacing to reduce speeds and the dominance of the car;
TM3	Create links within new development to ensure accessibility between key opportunity sites and the existing urban fabric;
TM4	Provide covered, visible a secure cycle racks in the town centre;
TM5	Explore the potential to create safe and attractive pedestrian and cycle linkages to other nearby settlements, e.g. Greens Norton, Stoke Bruerne and Blisworth;
TM13	Promote walking and cycling to reduce the number of residents using town centre parking;
TM16	Commission a study to investigate cost and location of a relief road to remove traffic from the A5 through the town centre;
TM17	Complete the development of the relief road;
TM18	Upgrade the northern and southern gateways and adjacent land as the key entrances into the town;
TM19	Provide a clear and effective signing strategy from the strategic highway network (A43/A5) and provide clear directional signage relating to specific land uses, public amenities and attractions within the town;
TM20	Following completion of the relief road, write a Development Brief for the town centre to include traffic calming;

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Study contex	
Action Ref	Description
TM21	New road infrastructure must be delivered to ensure that it meets the growth aspirations of Towcester, relieves the A5 through the town centre, connects development sites in a coherent fashion, provides alternatives for sustainable transport and high quality pedestrian and cycle facilities and does not create additional capacity problems on the strategic road network (A43);
TM22	Upgrade and maintain existing roads;
TM23	Secure developer contributions for new highway infrastructure through the Community Infrastructure Levy and S106 obligations and future local transport strategies;
TM24	Consider promoting a one-way system along Richmond Road, Pomfret Road and Queens Road to reduce congestion primarily associated with school traffic;
TM25	Ensure cohesive links between the existing town and new development sites. Ensure comprehensive accessibility between all sites and where appropriate, the use of Grampian Conditions to ensure cohesiveness.
H5	Provide the relevant physical and social infrastructure to complement the residential development.
EV1	Ensure that new development contains well-managed green corridors and is surrounded by a green edge so that it is linked closely with the surrounding countryside;
ED7	Create links to education provision at Silverstone circuit;
ED8	Provide safe routes to schools by the provision of sustainable travel plans for all current and future schools;
HS4	Support the links between healthcare and healthy living through the investment in leisure and recreation facilities and promotion of walking and cycling;
CL9	Provide pedestrian routes and cycle-ways through and around Towcester;

Table 3-3: Towcester Masterplan Actions

4 Towcester LCWIP

4.1 LCWIP process overview

The DfT technical guidance for authorities developing an LCWIP sets out a methodical approach to the planning and delivery of cycling and walking infrastructure. It breaks down the process into six steps. These can be viewed in Table 4-1 below.

LCWIP stage	Name	Description
1	Determining Scope	Establish the geographical extent of the LCWIP, and arrangements for governing and preparing the plan.
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.

Table 4-1: LCWIP stages from DfT technical process guidance

LCWIPs should be evidence-led and comprehensive. An LCWIP should identify a pipeline of investment so that over time, a complete cycling network is delivered at an appropriate geography (see step 1 - determining scope) and that walking and cycling improvements are delivered coherently, within core walking zones. The goal of an LCWIP should be to grow the use of cycling and walking, which means looking at routes and areas where more people could choose these modes in preference to other means of travel. Therefore, an LCWIP should consider travel demand regardless of mode, rather than looking just at existing walking and cycling trips.

4.2 Stakeholder Engagement

Local Cycling and Walking Infrastructure Plans (LCWIPs) were introduced to support the Cycling and Walking Investment Strategy (CWIS) by enabling local stakeholders to identify and prioritise infrastructure improvements that will make walking and cycling the choices for shorter journeys or as part of a longer journey.

Realising the ambition of the CWIS will take sustained investment in cycling and walking infrastructure and partnership working with local bodies, the third sector and the wider public and private sector to build a local commitment to support this national Strategy. Stakeholders are therefore fundamental to generation and delivery of the LCWIP.

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Stakeholders were identified by officers at West Northamptonshire Council and included;

- West Northamptonshire Councillors and Officers
- Parish Councillors
- National Highways
- British Cycling
- The Ramblers
- British Horse Society
- Save Towcester Now (Residents Group)
- South Northants Active Travel Association (SNATRA)

Stakeholder engagement has taken place throughout the development of this LCWIP with workshops at three key stages:

- 1 At the start of the process to help identify key issues and opportunities for walking and cycling within Towcester, key settlements to link to, and wider issues to address through the LCWIP.
- 2 Following the data analysis to sense check the findings, review key desire lines and agree the draft network to audit.
- 3 Following site visits to agree the proposed design recommendations and discuss priorities.

The stakeholder workshops provided a good forum for discussion of key priorities for different interest groups, and particularly provided useful information on the development proposals north of the A43, and local concerns and priorities associated with these plans. The attendance of National Highways at the workshops helped ensure good links with the proposed A5 improvements through the town centre.

4.3 Local context

This section of the report outlines the characteristics of the study area, in terms of the population and physical characteristics of the area, and the existing transport network and movement patterns.

4.3.1 People and Place

Population

Towcester has a population of 11,500, but is currently experiencing significant growth, with the construction of the Sustainable Urban Extension to the south of the town, which will add in the region of 3,000 homes to Towcester.

Towcester is the main local centre for a large number of nearby villages, particularly Greens Norton and Tiffield, which are both within 3km of the town centre, and Silverstone, which is slightly further afield, lying 5km to the southwest.

Figure 4-1 shows the population density around Towcester, highlighting key villages around the town, and showing that the population within the town is mainly concentrated to the west of the A5, just south of the town centre, and also off the Northampton Road around the Shires housing development. The Easton Neston estate to the east of the A5 has constrained development of the town in this direction.

Figure 4-2 shows the change in population in the study area between the 2011 and 2021 census. While the area to the north of Towcester (Tiffield, Gayton, the Shires) has seen decline of 3.5% - 4% of its population over the decade from 2011 to 2021, the population has surged in the south, as the SUE is constructed and populated.



Figure 4-1: Population density of Towcester 2021





Figure 4-2: Towcester area population changes over the decade (2011-2021)

Deprivation

The study area is relatively prosperous, with most areas in the least deprived 50% of the country. Some parts of the town, centred on the Burcote Road, are more deprived, in the 50% most deprived areas of the country. Figure 4-3 shows the Index of Multiple Deprivation for the study area.





Figure 4-3: Indices of multiple deprivation in Towcester (2021)

Car ownership in the Towcester area is high, with most households having access to at least one car. Car ownership is by no means universal, however, with some areas close to the centre of Towcester having between 25-45% of households with no access to a car. The northern rural areas tend to be the most car dependent with less than 1% of households without access to a car. Figure 4-4 shows the distribution of households with no access to a car.





Figure 4-4: Households with no access to a car, 2021 Census

Development

Substantial development proposals are likely to change the shape of the town and how it operates. Figure 4-5 shows the development around Towcester that is planned and under construction.

The area to the north of A43 includes development proposals for employment sites at Local Plan sites AL1, AL2 and AL3, including warehouse/distribution centres, car showrooms and other employment. The land at AL1 also includes proposals for a football ground for Towcester Town FC.

The area to the south of Towcester is a residential-led Sustainable Urban Extension, with in the region of 3,000 new homes, plus two new schools, green spaces and local retail proposed. The SUE includes the construction of an A5 relief road, which will link the A5 at Heathencote, to the A43 at a new junction south of Brackley Road. The relief road will provide a means for through traffic on the A5 to avoid Towcester town centre, and also provide access to development on the south side of Towcester.





Figure 4-5: Proposed future development of Towcester

Terrain

The area within the town is mostly flat with slight variations in topography, but little in the way of elevation that would impact route or mode choice.

Away from the town centre towards the outlying villages, the terrain becomes more rolling, particularly in the direction of Silverstone. While major roads including the A43 tend to follow the valleys, rural roads in particular can have fairly significant gradients in this area, which may impact on the willingness of people to cycle some journeys. The increasing prevalence of e-bikes can limit the impact of gradients on route choice by providing riders with motor assistance where required.





Figure 4-6: Terrain map of Towcester region

Air Quality

Major roads around Towcester town affect the air quality. Heavy traffic on these routes is responsible for poor air quality which creates health issues like chronic lung and heart conditions and other cardiovascular diseases. Children and the elderly are vulnerable to these pollutants which can reduce life expectancy. The annual mean particulate matter concentration is represented in Figure 4-7. PM 2.5 concentrations are notably high along the Brackley Road corridor between the A43 and A5 – a busy road which also serves the Sponne High School and is a key pupil travel route.





Figure 4-7: Towcester PM 2.5 Concentrations (As of 2019)

4.3.2 Transport and Movement

Towcester is situated approximately 12km southwest of Northampton, on the A5 Watling St, close to the junction of A43 dual carriageway. The A5 passes through the centre of Towcester, and, as part of the Strategic Road Network, experiences heavy traffic throughout the day. The A43 is a major east-west corridor between the Midlands and Solent. The A43 around Towcester is a highspeed dual carriageway which skirts the town, whereas the A5 is a single carriageway road, functioning as the High Street as well as a strategic through route.

Towcester does not have a railway station, with the nearest stations being Northampton to the east, or Wolverton to the south. Many people also choose to railhead from the larger station at Milton Keynes. The West Coast Main Line runs north-south between Towcester and Northampton, but lacks a station that effectively serves Towcester.

Severance

Both the A5 and A43 create severance for movement in and around Towcester – it is only possible to cross the A43 at a few designated locations where signalised crossings exist at junctions. Public

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rights of way do cross the road in several places, but as these are uncontrolled crossings, they are seldom used by pedestrians, cycles or equestrians.

The A5 is a lower speed, and single-carriageway road, but high traffic volumes mean that this road still causes significant severance in the town centre where pedestrian and cycle flows are higher. The construction of the A5 relief road is expected to substantially reduce the traffic levels through the town centre.

The West Coast Main Line and M1 motorway run between Towcester and Northampton, and while active travel links this far out of Towcester are not within the scope of this LCWIP, the severance impact of these major barriers will be a factor in the development of the wider active travel network.



Figure 4-8: Towcester region severance

The region surrounding Towcester is generally accessible by cycle, with many surrounding villages within a 30-minute catchment of the town. Silverstone to the southwest, and the outskirts of Northampton to the northeast are within a comfortable cycle for most people. Figure 4-9 shows the approximate cycle catchments from the centre of Towcester.





Figure 4-9: Cycling Isochrone of Towcester

As a small town, the distances within Towcester are easy for most people to walk – even taking into account the expanding footprint of the town, few areas are more than a 20-minute walk from the town centre. Figure 4-10 shows the approximate walking catchment from the centre of Towcester, showing the relatively compact nature of the town. The racecourse and Easton Neston estate to the east of the town centre act as barriers to development of the town, which has naturally spread in other directions.





Figure 4-10: Walking Isochrone of Towcester

Collisions

Analysis of collisions involving pedestrians and cyclists in the study area (Figure 4-11) shows that a cluster of casualties have occurred in the town centre, on the A5 corridor. This is where pedestrian footfall is highest, but the street is shared with heavy motor traffic volumes. Footways on this section of the A5 are often narrow, bringing pedestrians into close proximity of traffic.





Figure 4-11: Pedestrian and Cycle Collisions, 2017-2022

4.4 Network plan for Cycling and Walking

The Propensity to Cycle Tool (PCT) (www.pct.bike) is a nationwide model that identifies where increases in the rates of cycling can be expected through the provision of better infrastructure. It uses census travel to work data and school travel data and looks at trip distances to see where there may be scope for more short journeys to be undertaken by cycling. The PCT is a critical tool in the development of the LCWIP cycling networks and provides a framework of demand for identifying the location of future desire lines for cycling. It should be noted, however, that the PCT uses 2011 census data. Whilst attempts has been made to incorporate population changes because of developments since 2011, the result should still be supplemented by more recent and local knowledge, not to be overly reliant on the adjusted PCT outputs.

4.4.1 Propensity to Cycle Tool commute layer

The PCT commute layer provides scenarios for forecasting future levels of cycling which range in ambition from the 'Government Target' (based on doubling cycling set out in the 2014 draft Cycling Delivery Plan), 'Gender Equality' (where women are as likely as men to cycle), 'Go Dutch' (uses Dutch propensities to cycle) up to the 'E-Bike' scenario (builds on the 'Go Dutch' assumptions but

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also takes account of the role that electrically assisted cycles can play in facilitating longer distances and hillier routes). For the purposes of Towcester's LCWIP, the e-bike scenario was used to reflect slightly hilly and rural nature of Towcester where e-bikes are likely to need to play an important role in enabling more cycling. The PCT outputs provide two representations of the scenario:

- Straight-Line Networks (Figure 4-12) shows direct paths between population centroids (origins) and destinations, which gives an overview of the key desire lines for cycling flows.
- Applied Networks (Figure 4-13) the second stage applies the straight desire line to the
 existing road network to provide a more detailed summary of where increased cycle flows
 would take place on the local road network. In areas like Towcester where the road network
 is relatively sparse, the applied network plans should be used with caution, as the routes
 may not reflect the true desire lines, but can be useful in highlighting some key corridors.



Figure 4-12: PCT E-bike scenario straight line network





Figure 4-13: PCT E-bike scenario applied network

The PCT analysis indicates that there is high potential for cycling to the south of Towcester towards Silverstone – where the Silverstone Motor Racing Circuit is home to a significant number of businesses, and to the northwest towards Greens Norton. The analysis also highlights potential demand towards Blisworth to the northeast, and onward towards Northampton. The longer cycle trips enabled by increased e-bike use may mean that cycle trips into Northampton centre become more viable.

Along with these potential inter-urban cycling routes, the analysis shows great potential for shorter cycle trips (and walking trips) within the town itself. Census 2011 Origin-destination data suggests around 25% of people living in Towcester also work in Towcester¹. Given the size of the town, a considerable proportion of commuting trips and most everyday trips within Towcester could be made on foot or by cycle by many people, so there are clear patterns of demand between the residential areas to the south and west, and the town centre. The development of the Sustainable

¹ Using Census 2011 WF01BEW – Location of usual residence and place of work (OA level) table. Towcester here are defined as the following 34 2011 output areas: E00138872, E00138876-E00138889, E00138892-E00138899, E00138902, E00138903, E00169289-E00169296, E00169309.

Urban Extension to the south, and employment sites to the north will extend demand for these internal trips for walking and cycling.

4.4.2 Propensity to Cycle Tool schools layer

The PCT schools layers uses 2011 National School Census travel-to-school data. The schools layer extends and complements the Commute layer by putting a greater emphasis on local trips in residential areas as opposed to arterial routes into city centres. The schools layer can therefore help plan for cycling (and walking) at the neighbourhood level and is often a better proxy for local trips than the Commute layer for 'everyday' trips.

As with the Commute layer, the schools layer has a range of scenarios for forecasting future levels of cycling, including the 'Government Target' (which represents a doubling of school cycling nationwide to 3.7%), 'Go Cambridge' (based on cycling levels among school children in Cambridge (21.5%)) and 'Go Dutch' (based on travel to school trips in the Dutch Travel Survey (41%)). The 'Go Dutch' scenario has been selected for Towcester's LCWIP as it provides the most ambitious scenario (Figure 4-14).

Figure 4-14: PCT- Go Dutch Scenario

The analysis shows there is significant demand for school travel along similar corridors to the commuter demand. Within the town centre, Brackley Road is a clear corridor of demand, serving the Sponne School, and the residential streets to the south of Brackley Road indicate significant demand towards the primary schools in this area. Further afield, there is evidence of school travel demand between Towcester and Silverstone, and between Towcester and Greens Norton.

4.4.3 Pupil postcode data

The school census data is now a relatively old dataset, and new schools have been constructed since this data was collected. Separate analysis was therefore undertaken using current school locations and pupil postcodes to indicate potential routes to schools. The pupil postcode data provides a current snapshot of where pupils attending each school in Towcester and surrounding settlements live which can be analysed to identify routes with highest demand. It can be particularly useful in planning walking routes where there is often a lack of data.

The pupil postcode data for all schools was aggregated using GIS analysis to create a heatmap showing the routes with highest demand (Figure 4-15).

Figure 4-15: Routes to school, based on shortest route

The postcode data indicates strong demand for pupil travel along several of the corridors already identified through the PCT analysis, but also highlights demand to the new Marie Walker Primary school to the south. A spine route of demand between the new schools and the residential area south of Brackley Road is evident, and there is significant demand towards Silverstone.

4.4.4 'Everyday' trips analysis

As noted above, one of the limitations of the PCT Commute layer is the lack of detail on short 'everyday' trips that account for around two-thirds of short journeys such as shopping, visiting friends or going to the doctor. While the PCT Schools layer and the pupil postcode data analysis above addresses this lack of detail to a certain extent, PJA has developed an additional layer of analysis to further understand the potential for short journeys by cycling which is particularly useful in smaller towns and rural areas such as Towcester.

In order to determine the key desire lines for 'everyday' walking and cycling such as to work, school and the shops, the spatial relationship between key origin and destinations was analysed. First, a 0.5km² hexagon grid was applied and origin clusters of LSOA centroids and future housing development with 100 or more residential dwellings were identified (Figure 4-16). Most of the future development involving employment zone and mixed-use housing is located near the north and south of the town centre respectively.

Figure 4-16: Everyday trips- Origins

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Second, two classes of destinations were identified (Figure 4-17)

- Class 1: key employment sites, local, town and village centres
- Class 2: education (primary and secondary schools), healthcare facilities (hospitals, GP practices, dentists), community centres, leisure facilities, supermarkets etc.

Figure 4-17: Everyday Trips - destinations

Origin–destination desire lines were created from each origin centroid to the nearest Class 2 destination, and to all Class 1 destinations between 2km and 5km. Clustering analysis was used to cluster desire lines together and select the routes with the highest demand for 'everyday cycling'. The greatest demand is for the routes towards Greens Norton, Silverstone, Caldecote and Blisworth.

The Everyday Trips analysis considers a variety of journey types, so desire lines for different journey lengths are considered;

• Walking Trips (0-2km)

- Cycling Trips (2-5km)
- Cycling Trips (5-8km)

Figure 4-18 shows the clusters of desire lines for everyday trips under 2km – which can be considered walkable within Towcester. The clustered desire lines show demand for everyday walking trips between the residential areas to the south and west, and the town centre. Demand is less clear in the north of the town, where residential populations are lower, but there is evidently some demand to retail destinations in this area.

Figure 4-18: Everyday Trips desire lines (up to 2km)

Figure 4-19 shows the desire lines for longer walking trips or short cycling trips to everyday destinations. This clearly shows the demand from further afield, with clear potential demand from Greens Norton, Silverstone and Paulerspury on the A5. Demand for longer internal trips is also clear, for example from the southern part of the SUE to the employment and retail destinations in the north.

Figure 4-19: Everyday Trips desire lines (2-5km)

Analysis of longer journey potential, from between 5 and 8km (Figure 4-20) indicates demand between Towcester and Blisworth and Roade, as well as further demand towards Silverstone, and to rural areas to the north and west. The large census zones in these more rural areas means that the desire lines indicated are a rough aggregate of several smaller village destinations, and the lines are more indicative than in more densely populated areas.

Figure 4-20: Everyday Trips desire lines (5-8km)

Route identification and prioritisation for audit

Based on the above analysis, a core walking zone and priority walking and cycling routes were identified for audit using the Route Selection Tool (RST) set out in the DfT LCWIP process guidance, and the Walking Route Assessment Tool (WRAT). The routes for audit comprise the town centre routes and three inter-urban routes. All routes were agreed with stakeholders at the second stakeholder workshop, and were assessed on site.

Town centre routes

Given the small scale of the town, (the vast majority of housing is within a 20 minute walk of the town centre, see Figure 4-10), the network within the town is considered as both a walking and cycling network, with the assessment of the network covering both modes.

Inter Urban Routes

Following the analysis of background information, and in agreement with the stakeholder group, four inter-urban destinations were selected for audit in addition to the network in the town centre;

- Silverstone
- Greens Norton
- Blisworth
- Tiffield

The network for audit is shown in Figure 4-21.

Figure 4-21: Prioritised Routes for RST

4.5 RST audits methodology

4.5.1 RST audit methodology

The Route Selection Tool (RST) is an appraisal methodology that allows practitioners to determine the best route to fulfil a particular straight-line corridor, referencing against existing conditions and the shortest available route. It considers five important criteria that determine the quality of a cycling route (directness, safety, gradient, connectivity, and comfort) plus junction safety. Along with other information collected during the LCWIP development, the RST audit then helps inform

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recommendations for improvements along each corridor. The RST divides routes into shorter sections which should reflect changes in the character and layout of the alignment.

- Directness: Compares the length of cycle route against the equivalent vehicle route with cycle routes that are shorter than the vehicle is scored positively for directness. Higher scores can be achieved through the introduction of modal filters or routing cyclists through parks/open spaces to provide a more direct connection.
- Gradient: Identifies the steepest section of route within the proposed alignment with gradients that exceed either 5% in gradient and/or 50m in length scoring lower.
- Connectivity: Records the number of individual cycle connections into a section of route. Routes should aim to have >4 connections per km.
- Comfort: Assesses the space available for cycling and the quality of surfacing with a preference for protected cycle facilities of >3m (bi-directional) or >2m (uniflow).
- Critical Junctions: Assesses several critical junction design issues including vehicle flows, protection from vehicular traffic, wide junction splays, and junction geometries.

The RST outcomes are recorded as Red/Amber/Green, showing the overall score across the categories.

More information the RST can be found in the DfT LCWIP Guidance suite of documents.²

4.5.2 RST Audit Findings

The RST identified a number of key themes, many of which also impact walking:

- Constrained space in the town centre the A5 passes through the town centre which brings heavy traffic into the heart of the town. The highway in the town centre is too narrow to comfortably accommodate this volume of traffic, creating an unpleasant and unsafe environment for people on foot and on bikes. The relief road which is currently under construction will remove some of this through traffic, allowing some reallocation of space to active modes.
- **Kerbside parking-** Parking is one of the critical issues in Towcester, with on street parking occupying a large proportion of the kerbside, limiting space for other uses. On constrained sections of the highway network for example the A5, and Brackley Road, parking occupies valuable street space, and pavement parking impacts on space for cycle infrastructure. Parking is currently free of charge all across Towcester, on street as well as in council-run car parks. A review of parking arrangements could help rationalise parking and create space for other uses.

² <u>https://www.gov.uk/government/publications/local-cycling-and-walking-infrastructure-plans-technical-guidance-and-tools</u>

- Severance caused by busy roads, and new relief road- The A43 Towcester bypass is a high-speed road with limited crossing points which creates significant severance to the north and west of Towcester. The A5 also experiences heavy traffic which limits the opportunity to cross the road, and brings heavy traffic including HGVs into close proximity to pedestrians and cyclists in the town centre.
- Lack of cycle infrastructure Some busier roads in and around Towcester have shared use cycle paths most notably the A43 between Northampton Rd and the Blisworth junction, and the A413 in Silverstone, but the network is fragmented and often not up to the standard that is expected with the latest guidance. The greenway networks provide good traffic-free connectivity around the town, but in some areas need improvements to cater for all users effectively.
- **Wayfinding** While the greenway paths and quieter streets/rural lanes provide a good network of low traffic routes for walking and cycling, navigation of the network can be challenging, with little signage in place making it unclear where some routes lead, meaning some viable routes may be missed by potential users.

The RST outputs are summarised in Figure 4-22.

Figure 4-22: RST Audit Summary

4.6 Walking Route Audit Tool (WRAT) methodology

The rationale of developing a network plan for walking is to improve and extend the quality and coverage of the existing walking network to enable more people to walk for everyday trips. The development of the walking network is based upon the identification of 'Core Walking Zones' (CWZ) which represents areas that are expected to contain key walking trip generators and therefore likely to create higher levels of footfall (see Figure 4-24). As well as reviewing walking conditions within the CWZ itself, the site audits review conditions on the key walking routes into the CWZ. This ensures that the wider connectivity and permeability of the CWZs is considered during the network

The Walking Route Audit Tool is divided into several categories for analysis and uses a Red Amber Green (RAG) scoring technique:

• Attractiveness: Considers the impact of maintenance, traffic noise, pollution, and fear of crime upon the attractiveness of a route.

- **Comfort**: Reviews the amount of space available for walking and the impact of obstructions upon walking such as footway parking, street clutter and staggered crossings.
- **Directness**: Assesses how closely pedestrian facilities are aligned with the natural desire line and accommodating the crossing facilities are for pedestrians to follow their preferred route.
- Safety: Focusses on the impact of vehicle volumes and speeds and interaction with pedestrians.

• **Coherence**: Focuses on the provision of dropped kerb and tactile information for pedestrians. More information the WRAT can be found in the DfT LCWIP Guidance suite of documents.³

4.6.1 WRAT Audit Findings

The WRAT audit identified a number of issues within Towcester town centre:

- High traffic volume and noise along the A5 the proximity of high traffic volumes to pedestrians in the town centre creates an unappealing environment for pedestrians to linger on the high street.
- Pavement Parking/street clutter pavement parking on key links, particularly the A5 and Brackley Road, creates obstructions for pedestrians, and can make the main road through Towcester inaccessible for some users. Even where parking is not impacting on space availability, narrow pavements in the historic centre make navigation of the footway difficult, especially for people with reduced mobility.
- Lack of crossing provision in key locations missing crossing points in some key locations, again on the A5 and other busier links, reduce the coherence of the walking network, and can encourage the use of cars for journeys that could be made on foot.
- Missing/poorly located dropped kerbs/wide junctions while dropped kerbs are reasonably common at side roads in Towcester, the location of the dropped kerbs is not always conducive to easy navigation for pedestrians, often requiring a deviation from the desire line. Several examples of wide junctions were observed, which encourage high vehicle turning speeds and require pedestrians to be in the carriageway for greater distances.
- Rural roads with no pedestrian provision some more rural roads within the town (e.g. Burcote Rd) have no pedestrian infrastructure, and high-speed limits, discouraging use of the lanes by pedestrians.
- Lack of surveillance the greenway networks provide excellent connectivity for pedestrians, but a lack of lighting and natural surveillance may discourage use after dark and from people walking alone.

The WRAT audit outputs are summarised in Figure 4-23.

³ <u>https://www.gov.uk/government/publications/local-cycling-and-walking-infrastructure-plans-technical-guidance-and-tools</u>

Figure 4-23: Towcester WRAT Map

4.7 Proposed Network and Design Recommendations

Based on the findings from the RST and WRAT audits, outcomes of the site visits, and feedback from stakeholders, the proposed networks for walking and cycling have been developed and are outlined in Figure 4-24 to Figure 4-26. Design recommendations were made for walking and cycling routes within town centre. Key design recommendations are informed by LTN1/20 and vary depending on conditions including traffic volumes and speeds and any constraints.

Proposed interventions are outlined in the design recommendations booklet in Appendix C.

Figure 4-24: Core Walking Zone and Town Centre Walking/Cycling Network

Figure 4-25: Town Centre Cycling Network

Figure 4-26: Inter-Urban Route Network

4.8 Costings

A high-level costing exercise has been undertaken for the network, based on costs for undertaking similar improvements elsewhere. The details of this costing exercise are outlined in Appendix E and summarised in Table 4-2.

Route	Point costs	Link costs	Total
Town Centre total	£6,220,500	£5,712,068	£11,932,568
Greens Norton	£290,000	£802,531	£1,092,531
Blisworth	£152,500	£1,593,838	£1,746,338
Tiffield	£145,000	£120,316	£265,316
Silverstone	£789,000	£2,900,789	£3,689,789
Total ¹	£7,597,000	£11,129,542	£18,726,542

Table 4-2: Costing Summary

4.9 Prioritisation

Stage 5 of the LCWIP process aims to prioritise the improvements to the network, identifying the schemes with higher priority, and those which may be longer term ambitions.

The prioritisation exercise draws out which schemes may be deliverable in the shorter term, and which may yield greater benefits. Where funding is restricted, the town centre, rather than interurban routes are most likely to deliver the greatest benefits, serving a larger population, and availability of funding through regeneration or other contributions is likely to be greater, so the prioritisation is restricted to the of the town centre routes where it will provide most value.

The prioritised list may be used as the basis for reviewing funding applications or developer contributions.

4.9.1 **Prioritisation approaches**

The LCWIP Guidance outlines a suggested approach to prioritisation, but notes that this approach should be tailored to suit the local context. Three main factors are typically considered in prioritisation;

- Effectiveness how much the improvements might contribute to active travel trips, considering current conditions, and the potential for new trips.
- Policy Alignment with policies, including around planning, health, and other schemes.

¹ All design interventions and therefore costs are provided at a very high level. Works have not been done to identify delivery issues such as the movement of utilities, etc. These therefore do not form part of the costing estimates. Overheads such as preliminaries, contract, contingency, optimism, design and project management are also not included. Costs are itemised at a high level as per the LCWIP guidance and previous PJA project experiences.

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In addition, the cost of the interventions is a key consideration. This is considered as a separate item as funding may be drawn from different sources with various requirements.

4.9.2 Towcester Prioritisation Approach

The town centre improvements have been clustered into geographic or thematic groups as follows:

- 1 A5 North Links from the northern extent of the National Highways scheme past the Bell Plantation access on the A5
- 2 Old Tiffield Rd incorporating improvements to the Shires, and links across the A43 to the development sites
- 3 Northampton Rd the Northampton Road corridor between the A5 and Hulcote Turn
- 4 Brackley Rd Corridor the Brackley Rd west of the A5 including Springfields link to the leisure centre
- 5 A5 Corridor the A5 between the Old Tiffield Road and Heathencote
- 6 Spine Route to Schools a route linking the schools in Towcester with the main residential areas
- 7 Greenways other new and existing greenway links
- 8 Quietways other on-carriageway quiet links that do not form part of the spine route to schools.

They have then been prioritised using a series of criteria agreed with WNC Officers, the criteria are;

- **Routes to School** how effectively the route/clusters can improve links for primary and secondary school sites.
- Routes to Employment Development Sites how effectively the routes/clusters can provide active travel links to new employment sites, especially to the north of the A43.
- **Routes to new residential/leisure facilities** how well the routes/clusters can improve active travel links to new residential and leisure locations.
- Alignment with desire lines how effectively the routes/clusters align to the desire lines outlined in the PCT and everyday trips analysis.
- **Road Safety Improvements** alignment with clusters of pedestrian and cycle collisions, and potential improvements in these locations.
- **Deliverability** the potential ease of delivering the improvements, including the complexity of the interventions, and space available for the measures.

A simple 1-3 scale has been used for each of the criteria, with higher scores indicating a higher level of priority, and the routes ranked according to the total. The prioritisation calculations are shown in Appendix D and summarised in Table 4-3.

Route	Rank
Spine Routes to School	1
A5 National Highways Corridor	2
Quietways	2
A5 North	4
Old Tiffield Rd	4
Brackley Rd	4
Greenways	7
Northampton Rd	8

Table 4-3: Prioritisation summary

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5 Conclusions and recommendations

This chapter briefly summarises the key recommendations for the Towcester LCWIP and the interurban routes. Figure 5-1 summarises the town and inter-urban routes to help illustrate their combined geographic scope. The plan helps to illustrate how the routes would have a significant impact upon the quality of walking and cycling facilities in Towcester and the wider area, and in promoting alternatives to driving. The recommendations are intended to provide an initial framework for delivery; the precise timescales and prioritisation of measures will depend upon future funding and opportunities.

Figure 5-1: Proposed Town and Inter-urban cycle network

The analysis demonstrated that a combined walking and cycling network was the most appropriate approach for Towcester due to its compact, walkable nature. The construction of the A5 relief road, and significant residential and employment developments around the town mean that there is a major opportunity for generating modal shift towards active travel in Towcester.

The purpose of the wider connectivity assessment was to identify and demonstrate that there are potential routes to develop in the future as cycling routes between Towcester and surrounding settlements. This study has identified four links to nearby villages to ensure that the network reaches into the surrounding settlements which depend on the services, schools and employment in Towcester, increasing active travel connectivity across the wider area. The proposed routes to Blisworth and Silverstone link directly, or have the potential to link, to routes identified in other neighbouring LCWIPs, forming part of a wider network across West Northamptonshire. The routes identified could be delivered in their entirety or could be used to inform localised improvements as opportunities arise such as during planned maintenance of routes or junctions or to inform discussions about developer contributions during the planning process.

Appendix A Plans

Appendix B Walking and Cycling Audit Tables

Appendix C Design Recommendations Booklet

Appendix D Prioritisation

Appendix E Costings