



Totton and Eling Local Cycling and Walking Infrastructure Plan

Totton and Eling Town Council

ActivePlanning 2025

Contents

FOREWORD: CLLR CAROLINE RACKHAM	4
VISION	5
PURPOSE OF THIS PLAN	6
OVERVIEW AND SCOPE	7
What is a Local Cycling and Walking Infrastructure Plan?	7
Department for Transport LCWIP technical guidance (2017)	7
STAGE 1: DETERMINING SCOPE	8
About Totton and Eling	8
Geographical extent	9
Governance (for delivery)	10
Government cycling policy documents	10
Cycling and Walking Investment Strategy (CWIS) 2	11
Hampshire Local Transport Plan and Waterside Transport Strategy	12
Planning policy	14
Engagement with stakeholders	16
LCWIP structure	17
STAGE 2: GATHERING INFORMATION	18
Introduction	18
Demand for cycling: pct.bike	18
STAGE 3 NETWORK PLANNING FOR CYCLING	28
Introduction	28
Cycle flows (routes with highest current and future demand)	28
Barriers to cycling	35
Existing cycle infrastructure	37
Route identification and appraisal methodology	39
Design principles	46
Core network interventions – see Stage 6.	51
STAGE 4: NETWORK PLANNING FOR WALKING	51

Introduction	51
Core walking zones	52
Funnel routes	53
Walking network outside the Funnel Routes and Core Walking Zones	54
Visual surveys	55
Prioritisation	58
Design principles	58
Schemes: routes – see Stage 6 below.	59
Schemes: area based – See stage 6 below.	59
STAGE 4A: REMOVAL OF OBSTRUCTIVE BARRIERS AND IMPROVEMENTS TO MODAL FILTERS	59
Introduction	60
Myths	61
Method	62
Design principles	62
Map of barriers and modal filters	64
Barrier study outputs and prioritisation	65
Next steps	81
STAGE 5: COMPLEMENTARY MEASURES	81
Introduction	81
List of suggested measures	82
STAGE 6: PRIORITISATION	84
Cycling schemes (Stage 3)	84
Walking and wheeling schemes (Stage 4)	100
STAGE 7: INTEGRATION	120

Foreword: Cllr Caroline Rackham



I am delighted to introduce this Local Cycling and Walking Infrastructure Plan for Totton and Eling. As part of our Neighbourhood Plan, the document marks another step towards our town becoming more climate and health resilient as we help our residents choose to travel actively on foot and cycle.

I recognise active travel is a very sociable activity which builds and strengthens communities. A typical cycle ride might involve smiling and waving to friends as we pass them or stopping for a chat or a coffee and shopping locally, perhaps at our new local farmers' market. The West Totton Greenway already shows us people of all ages enjoy getting around on foot and cycle when they feel safe and invited.

Moreover, the investment can deliver complementary measures including new and replacement street trees and sustainable urban drainage schemes to reduce flood risk. These added value projects will directly benefit our residents.

We are excited for the future of our town and look forward to working with residents and stakeholders to deliver our shared vision.

Councillor Caroline Rackham

Vision



Active travel is our most sociable way of travelling. Walking, wheeling and cycling put us in contact with our neighbours and friends and helps build and strengthen communities.

We might wave and say hello as we pass each other, stop for a chat or even go for a coffee or lunch. Travelling actively helps our health and wellbeing as we get older and helps to protect us against long-term sickness.

Countries that invest very extensively in active travel also have the world's healthiest, most contented and happiest populations. There is no reason why this can't also be true locally.

As a town we want to encourage more people to join our active travel revolution, to harvest the joy and many benefits of getting around under our own steam, perhaps with electric power assistance.

However, we know our streets are far from ideal for active travel. Our pavements are narrow and not well maintained, and cycling on many of our streets feels dangerous.

This five-year plan sets out our ambition to combine investment in accessible infrastructure for walking, wheeling and cycling. If we can attract funding, we will be able to say we made Totton and Eling an even better place to live, to raise families and grow older.

Purpose of this plan

Totton and Eling Neighbourhood Plan establishes the town's ambitions for its future. The spatial land use plan determines where new homes and community infrastructure may be built in the town and establishes areas for nature recovery and conservation and green spaces. It includes design matters relating to buildings and the public realm, reflecting the community's wishes.

This Local Cycling and Walking Infrastructure Plan (LCWIP) is a supplementary neighbourhood planning document which provides several functions:

- Establishes prioritised infrastructure interventions to support walking, wheeling and cycling, to enable applications for funding and ensure active travel is incorporated in future infrastructure investment to the standard set out in Government design guidance (LTN1/20).
- Provides a 'shopping list' for CIL, s.106 and other funded expenditure.
- Establishes a Neighbourhood Plan policy and supporting text requiring the formation of 20-minute walkable neighbourhoods and spaces for active travel modes within and beyond new development.

Overview and scope

What is a Local Cycling and Walking Infrastructure Plan?

Local authorities are empowered by the Infrastructure Act 2014 to prepare Local Cycling and Walking Infrastructure Plans (LCWIPs) for their areas.

LCWIPs are built on a foundation of an objective assessment of existing and potential local demand for active travel, including the potential for active travel in favourable conditions. The assessment enables long lists of schemes to be narrowed down to priority schemes to be delivered within a nominal ten-year horizon with review after five years subject to funding.

Department for Transport LCWIP technical guidance (2017)

This LCWIP is informed by the (non-mandatory) Local Cycling and Walking Infrastructure Plans (Technical Guidance) published in 2017. The document provides very helpful advice and methodologies for gathering evidence to support staged strategies for delivery based on scheme identification and prioritisation over the LCWIP period.

Together with other Active Travel England tools the technical guidance has been used to identify and prioritise interventions for walking and cycling. Tools include the pct.bike open-source online modelling application which identifies and predicts demand for cycling under various scenarios.

Stage 1: Determining scope

About Totton and Eling

Totton and Eling is a civil parish covering the town of Totton and the small village of Eling south of Bartley Water. It is characterised as having a mainly suburban postwar pattern of development with some areas to the south of the railway line having more of an urban character with a mixture of Artisan Victorian housing and small shops.

Totton's streets are relatively wide, featuring grass verges and footways separated by grass from the main carriageways. There are some pinch points in the older parts of the town, particularly along Junction Road, Water Lane and part of Ringwood Road. These pinch points are characterised by poor quality narrow footways and narrow carriageways with very limited scope for change.

Beyond the town, to the north and west, there is open countryside featuring small fields, farms and public footpaths interspersed by ribbon villages, and ultimately the eastern edge of the New Forest National Park. To the east, the heavily protected River Test estuary divides the parish from Southampton.

To the north of Totton, new development has planning permission on fields in the neighbouring parish of Netley Marsh. Other neighbouring parishes are Copythorne, Ashurst and Colbury, and Marchwood.

Population profile

Data for this section has been collected from the 2021 Census.

Totton and Eling's population is a total of 28,657. Of this, 20% are aged below 15; 60% between ages 16 and 65; and between 18% and 22% of people aged 65 and over. The population is overwhelmingly "White", with just 1,000 individuals from other ethnic groups, the largest proportions of which are "Asian" (425) or "Black" (136).

Pockets of relative deprivation (recorded here as three dimensions of deprivation) are small and generally associated with established social housing estates, namely the Calmore estate; Water Lane near the college; an area north of Ringwood Road between Calmore Road and West Totton, Testwood (Stanley Road); and Hounslow. A pocket of deprivation can also be found in the town centre south of the railway line and along Rumbidge Street. The highest levels of deprivation (around 14%) are in the Calmore estate and a small cul-de-sac of housing south of Water Lane.

Population density is low across a large part of the town, with no area exceeding 12,642 people per square kilometre compared with areas of neighbouring Southampton with substantial inner-city pockets having over 32,000 people per square kilometre. It is fair to say the town is distinctly suburban or even semi-rural. The lowest population densities in fully built-out wards can be found in the town centre.

Profile information about cycling and walking to work can be found in Stage 2 (data).

Geographical extent

This LCWIP covers the extent of the routes shown in Figure 1. Some routes extend into neighbouring parishes, notably Colbury, Netley Marsh and Copythorne, and any investment there would be subject to the formation of appropriate partnerships.

Furthermore, there are links to the Waterside and New Forest National Parks draft LCWIPs including:

- A connection to prioritised route 320 from Totton to Ashurst, Lyndhurst and Christchurch
- A connection to prioritised route 120 from Totton to Winsor, Cadnam, Lyndhurst, Brockenhurst, Lymington and New Milton.

- A connection to prioritised and partly delivered route 260 from Totton to Eling, Marchwood, Hythe, Applemore, Langley and Calshot.
- A connection from Totton to Southampton via the largely delivered A35 Western Approach route 320.

Governance (for delivery)

Totton and Eling Town Council 'owns' this LCWIP as part of its Neighbourhood Plan. A partnership approach is anticipated between the town council and the anticipated new sub-regional unitary authorities as well as affected neighbouring parishes.

The town council may decide to prioritise and bring forward investments on land it owns for active travel, attracting funding from CIL, s.106 and other grant funding. Many 'quick win' schemes could be delivered using this method relatively low cost, including the removal or modification of access barriers across the network.

Government cycling policy documents

Government strategic direction on active travel is contained in Gear Change (2020) and Decarbonising Transport (2022). Publication of the documents broadly coincided with the establishment of the Department for Transport's new body for active travel, Active Travel England.

Led by commissioner Chris Boardman, the organisation provides extensive support, resources and guidance for practitioners in planning, designing and delivering active travel schemes in England. Active Travel England also acts as a statutory consultee for larger scale residential developments where new streets are proposed. Wales and Scotland have separate devolved arrangements.

Cycling and Walking Investment Strategy (CWIS) 2

The Government's second Cycling and Walking Investment Strategy (CWIS2) recognises that active travel produces some of the highest returns of any government investment in transport, at £5 returned for every £1 spent in the form of savings mainly to health services. The Department for Transport considers this a 'very high' return on investment.

CWIS2's ambitions by 2025 (noting the document will be reviewed in 2025) are to:

- Increase the percentage of short journeys in towns and cities that are walked or cycled from 41% in 2018-19 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 0.8bn stages in 2013 to 1.6bn in 2025.

The Government's policy ambition beyond 2025 is to make cycling the natural choice for short journeys, or as part of a longer journey (noting the latter is not currently measured):

- Increase the percentage of short journeys in towns and cities that are walked or cycled to 50% by 2030 and 55% in 2035.
- Deliver a world-class cycling and walking network in England by 2040.

Following publication of the first CWIS in 2017, government guidance recommended that local authorities should develop LCWIPs for their areas. While preparation of such a document is non-mandatory (and is not generally anticipated from town and parish councils), the new Government body Active Travel England is clear that authorities which

prepare them are well placed to make the case for future investment and would not receive funding without a LCWIP in place.

Hampshire Local Transport Plan and Waterside Transport Strategy

Hampshire Local Transport Plan

Hampshire Local Transport Plan (2024) provides the strategic policy direction for the delivery of local transport strategies. Strong emphasis is given to sustainable travel, particularly walking, cycling and public transport.

Waterside Transport Strategy

Totton and Eling are part of the Waterside Transport Strategy which is designed to deliver improvements in response to major housing and employment development proposals including ports and housing.

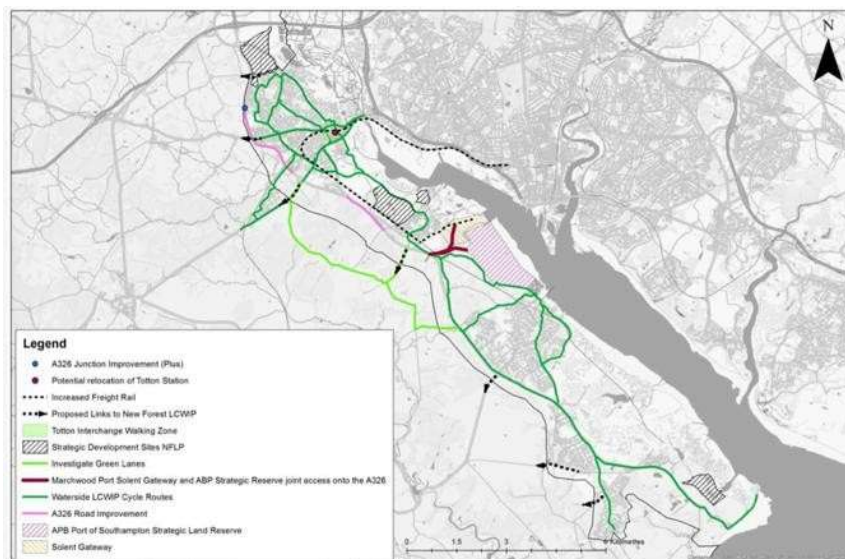


Fig. 1 Waterside Transport Strategy

Hampshire Waterside Transport Strategy is currently in draft, published on the County's website

<https://documents.hants.gov.uk/transport/WatersideTransportStrategy-ETE-DecisionDayReportAppendix.pdf> . It sets out a number of strategic transport schemes including the provision of active travel routes from Eling to Calshot.

The document recognises that conditions for walking and cycling are far from ideal, with an incomplete network for cycling and sections where pedestrians have no footways.

Several proposed schemes set out in Stage 5 of the draft plan are relevant to this LCWIP:

- Bus stop enhancements (incorporate into Totton LCWIP schemes, including accessible boarders and shelters)
- High quality strategic cycle route from Holbury to Redbridge (partially constructed, though reportedly not of good quality)
- Redbridge Causeway structural improvements including extension of shared use path on southern side (complete)
- Rushington Roundabout to Redbridge Causeway shared use paths (complete but not to LTN1/20 guidance)
- Waterside LCWIP £15m priority route and £20m secondary routes package (some parts complete but to reportedly variable standard)
- Totton regeneration masterplan / scheme
- Junction Road Level Crossing and “active modes” bridge (Network Rail investment commenced April 2025)
- 20-minute neighbourhoods. LCWIP will improve walking and cycling access to various local centres in Totton.
- A326 capacity improvements including “Goodies” junction signalisation (this LCWIP proposes cycle crossings associated with signalised crossing).
- Totton Station access to southern platform (complete)
- Totton Mobility Hub / public transport interchange.
- Walking and cycling routes to New Forest NP alongside NFNPA LCWIP.
- Modal filtering and green lanes
- New Marchwood railway station and multi-modal interchange (buses, walking, cycling).

Background population profiling has been briefly summarised from the document for the purposes of this LCWIP.

Planning policy

New Forest Local Plan

New Forest Local Plan is currently in the early stages of drafting. However, it is likely to allocate (or re-allocate) land for new housing, social infrastructure and employment to meet national targets and local needs.

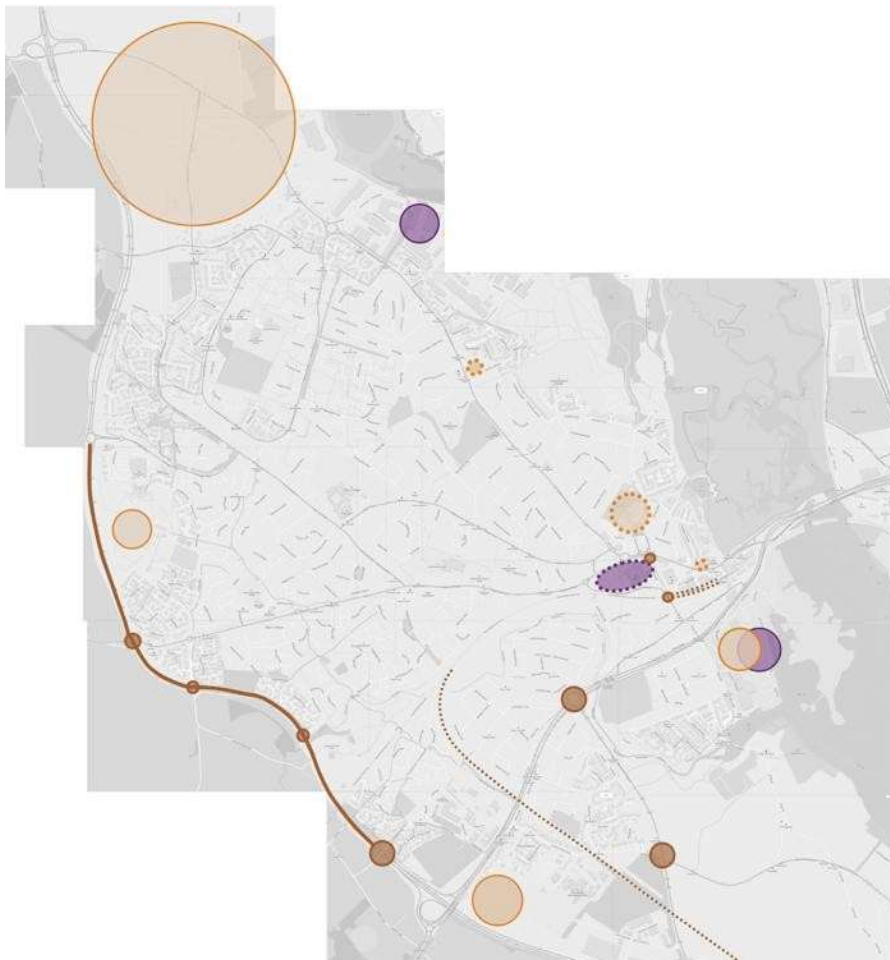


Fig 2: NFDC Local Plan and Waterside Transport Strategy – broad locations for new development and regeneration (light brown and purple circles) and transport improvements (lines and dark brown circles).

Several sites for new housing were allocated in the previous Local Plan, some of which now have planning permission and others which remain to come forward.

The new housing sites and anticipated freeport development will result in capacity improvements on the A326 Totton Bypass including proposed dualling of the section southwest of Totton and local

junction changes including conversion from roundabouts to signalised junctions, and the potential re-opening of the Totton to Fawley rail line to passenger traffic.

Capacity improvements have already been delivered at Rushington Roundabout together with some improvements to the cycleway between Redbridge Causeway and Hounslow.

Copythorne Parish Neighbourhood Plan

Copythorne Parish Council does not border Totton and Eling. However, it would be affected by a new route leading from Oleander Drive to Winsor via Tatchbury Lane and an existing footpath. This route connects to proposed route 120 in the New Forest.

There is currently no Neighbourhood Plan for the parish of Copythorne.

Netley Marsh Parish Neighbourhood Plan

Netley Marsh Parish Council borders Totton and Eling at the Totton Western Bypass. It includes the village of Netley Marsh and the large, allocated development area to the north of Totton. It would be affected by new core routes from Oleander Drive to Tatchbury Lane, Ringwood Road to Woodlands, and a secondary (non-core) route from Ashurst Bridge to Woodlands Road.

There is currently no Neighbourhood Plan for the parish of Netley Marsh; however, a Parish Plan was adopted in 2010 which mentions the absence of cycle infrastructure on the short section of the A336 between Woodlands Road and the start of the West Totton cycleway.

Ashurst and Colbury Parish Neighbourhood Plan.

Ashurst and Colbury Parish borders Totton and Eling at the A326 Totton Western Bypass. It includes Ashurst village and the smaller hamlet / village of Colbury. It would be affected by proposed core network routes from Hounslow to Colbury via Spicers Hill and the

West Totton to Ashurst and Lyndhurst route via Foxhills. The route through Foxhills is prioritised in the draft Waterside LCWIP.

There is currently no neighbourhood plan for the parish of Ashurst and Colbury.

Marchwood Parish Council

Marchwood Parish covers the village of Marchwood. It would be affected by the core route from Eling to Marchwood Road, which uses existing walking and cycling infrastructure, and the on-road route alternative via Trotts Lane, Long Lane and Hythe Road. Surrounding and to the north of the village are several allocated housing development sites.

There is currently no neighbourhood plan for the parish of Marchwood.

Engagement with stakeholders

Community engagement was undertaken by Totton and Eling Town Council in 2025 to gather ideas and feedback to inform further development of an initial “rough draft” of the LCWIP.

Engagement is ongoing until this plan is finalised and comprises:

- Confirmation or changes to the proposed active travel networks for cycling and walking in Totton.
- Confirmation or changes to the suggested cycling and walking infrastructure interventions in Totton and Eling.
- Confirmation or changes to the active travel schemes prioritised for the first ten years (to be reviewed in five years).

It should be noted the LCWIP is strategic and is produced in outline to assist the purposes of attracting funding and achieving political understanding and support. Individual scheme designs may differ from those presented here and would, in any case, be the subject of

further engagement and consultation. Furthermore, larger schemes costing in excess of £750,000 will, if they are to be funded by the Department for Transport, require a separate business case.

LCWIP structure

LCWIPs are guided by a technical document produced in 2017 which establishes six preparation stages and associated tasks. This LCWIP follows the stages, but it takes a slightly different approach to network appraisal based on local conditions.

- Stage 1 (this stage):
- Stage 2 Data. This LCWIP uses resources provided by Active Travel England to estimate existing and potential demand for cycling including routes with highest levels of existing and future demand for travel to schools and work.
- Stage 3: Network planning for cycling. An appraisal is provided of the existing network in terms of its connectivity, accessibility from where people live, hilliness and alternative routes.
- Stage 4: Walking.
- Stage 4a: Additional stage: quick wins and access barriers.
- Stage 5: Complementary measures.
- Stage 6: Prioritisation and outline costings.
- Stage 7: Integration with future policies including the Neighbourhood Plan. This LCWIP proposes some specific Neighbourhood Plan policies and supporting text.

Stage 2: Gathering information

Introduction

This stage uses Active Planning England's open-sourced pct.bike toolkit to identify existing and future patterns of walking and cycling based on 2011 and 2021 Census data. It provides a review of existing conditions and barriers to walking and cycling including road danger. It also provides a review of extant local transport policies in Local Plans, Local Transport Plans and the Waterside Transport Strategy.

Demand for cycling: pct.bike

About pct.bike

Pct.bike is Active Travel England's mapping tool used to estimate and map current and future demand for cycling in England, using the 2011 Census. The 2021 Census is not accurate as it was completed during the 2021 Pandemic lockdown.

- Lovelace, R, University of Leeds; Goodman, R; Aldred, A; Berkoff, N; Abbas, A; Woodcock, J: *Journal of Transport and Land Use the Propensity to Cycle Tool: and Open Source online system for sustainable transport planning*. January 2017.
- Goodman, A, Fridman Rojas, I; Woodcock, J; Aldred, R; Berkoff, N; Morgan, M; Abbas, A; Lovelace, R, 2019 in *Journal for Transport and Health: Scenarios of cycling to school in England and associated health and carbon impacts: Application of the 'propensity to cycle tool'*, March 2019.

The tool uses robust Census data and is a useful means of supportively showing approximately where demand is, or could be, highest. It also provides an indicative level of information about barriers that might lead to the construction of a new bridge or crossing, for example. However, the publishers are clear that it is only a tool and that local knowledge, including that from stakeholders and

intelligence about post-2011 urban development, should also be applied to define networks and investment.

Pct.bike outputs

The highest level 'current' pct.bike map shows us that between 3% and 5% of journeys to work in Totton and Eling are cycled. This percentage holds in the northwestern suburbs of neighbouring Southampton and the Waterside including Marchwood and Hythe. The outer suburbs have less cycling activity. The 'least cycled (3%)' are in the extreme north of Totton's urban area, and the extreme southwest of the town. The latter, from a local knowledge perspective, is surprising since the 1980s estates are well-provided for with a comprehensive greenway network.

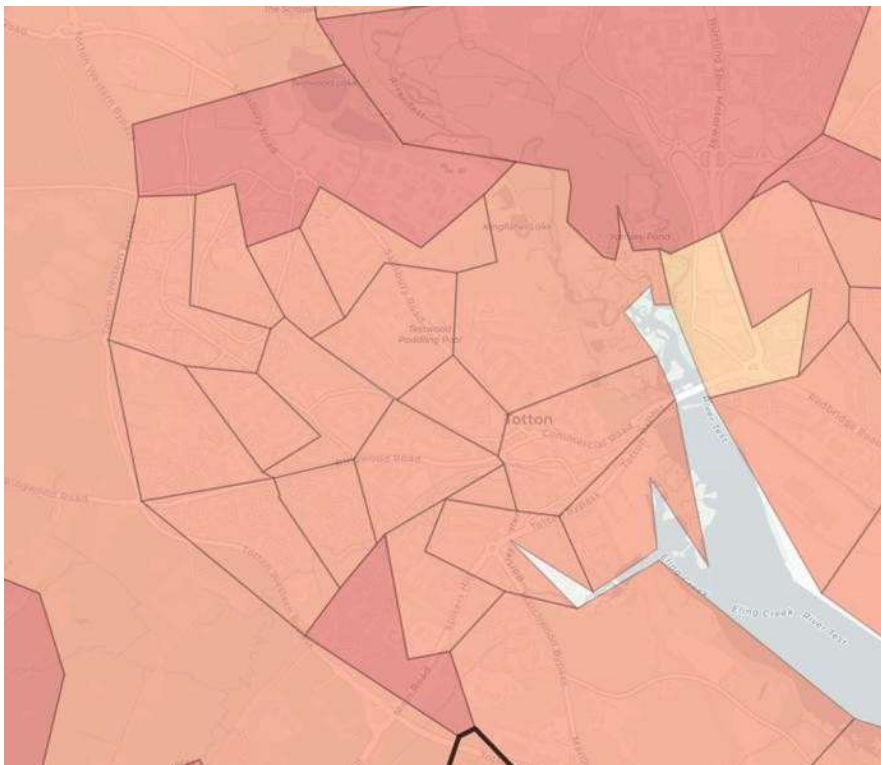


Fig. 3: Pct.bike showing wards in Totton where cycling activity is between 3% and 5%. The darker red areas at the edges of the town have 3% cycling.

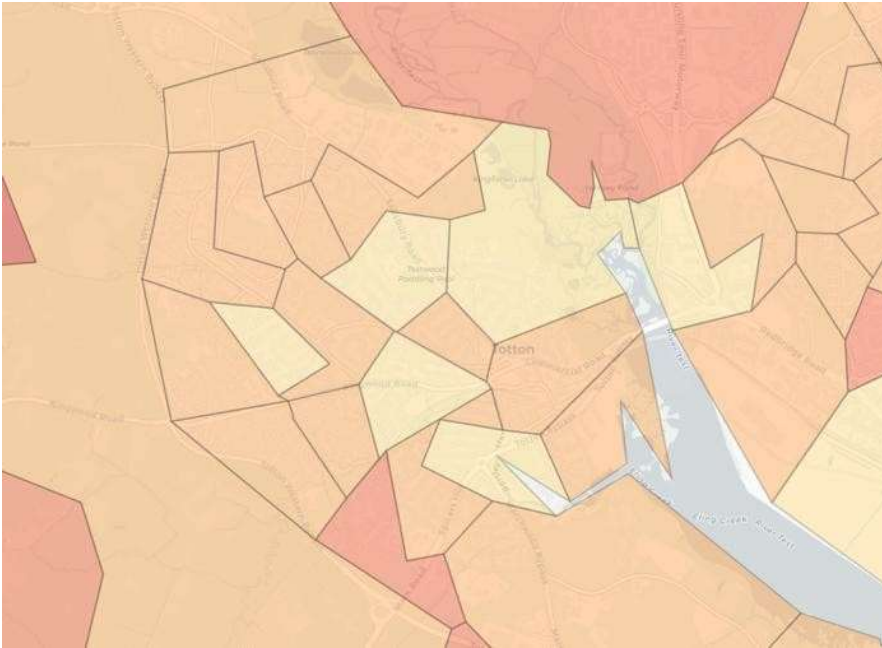


Fig. 4: Pct.bike showing the wards again with the 'near market' scenario, which is broadly described as those who are 'ready to cycle if the conditions are right'. The scenario would likely follow quite extensive investment in active travel infrastructure. In this scenario, the lighter yellow areas represent cycling to work levels of between 10% and 14%. It is of note that the Salisbury Road, Water Lane / Ringwood Road and Rumbridge Street / Spicers Hill corridors would provide funnels for cyclists going to Totton Town Centre or Southampton.

About DataShine

DataShine is an output of the ESRC BODMAS project which ran from 2013 to 2015 at University College London. It was established by Oliver O'Brien and James Cheshire (2016): *Journal of Maps* 12:4, 676-683 *Interactive mapping for large, open demographic datasets using familiar geographical features.*

Its granularity goes deeper than that of pct.bike and shows us where demand for cycling and walking is highest by household. For the purposes of this LCWIP, the darker orange colours show the concentration of existing cycling activity as a starting point for planning networks that may encourage a 'near market' of others with a similar demographic profile to take part.

DataShine outputs

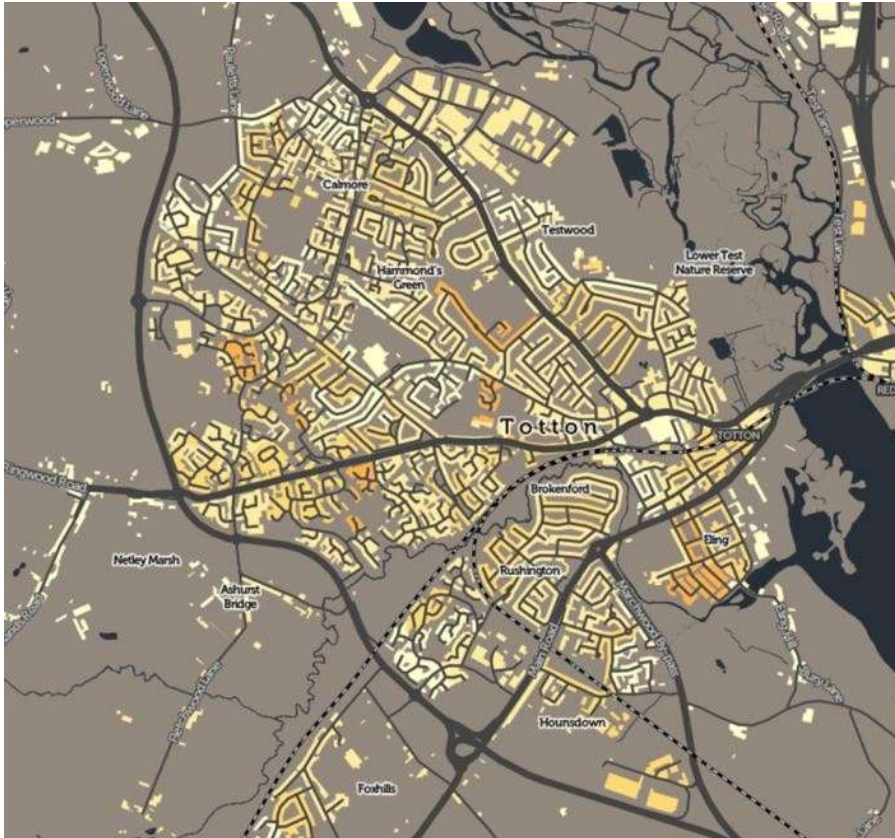


Fig. 5: DataShine output for cycling, with areas of higher potential demand coloured orange. Based on 2011 Census.

Cycling to work 2011: The above map shows relatively high demand for cycling in the areas shown in darker orange. Eling, parts of Hammonds Green and West Totton show up as having the highest levels of travel to work.

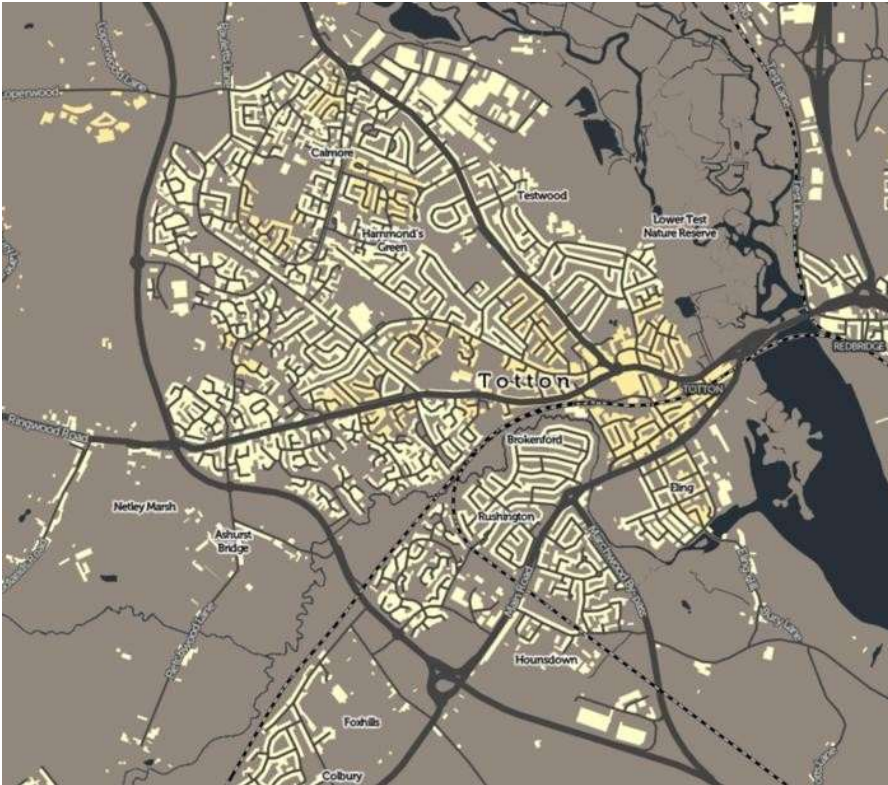


Fig. 6: Walking to work hotspots are mainly in the town centre, Eling, Water Lane, parts of West Totton and Calmore have between 6% and 10% of trips made on foot.

DataShine shows that between 6% and 10% of journeys to work are walked. The highest walking demand is focused on the town centre, Water Lane, Eling, the town centre end of Salisbury Road, and Calmore. There is a limited visual correlation between the location of social housing estates and walking.

2021 Census

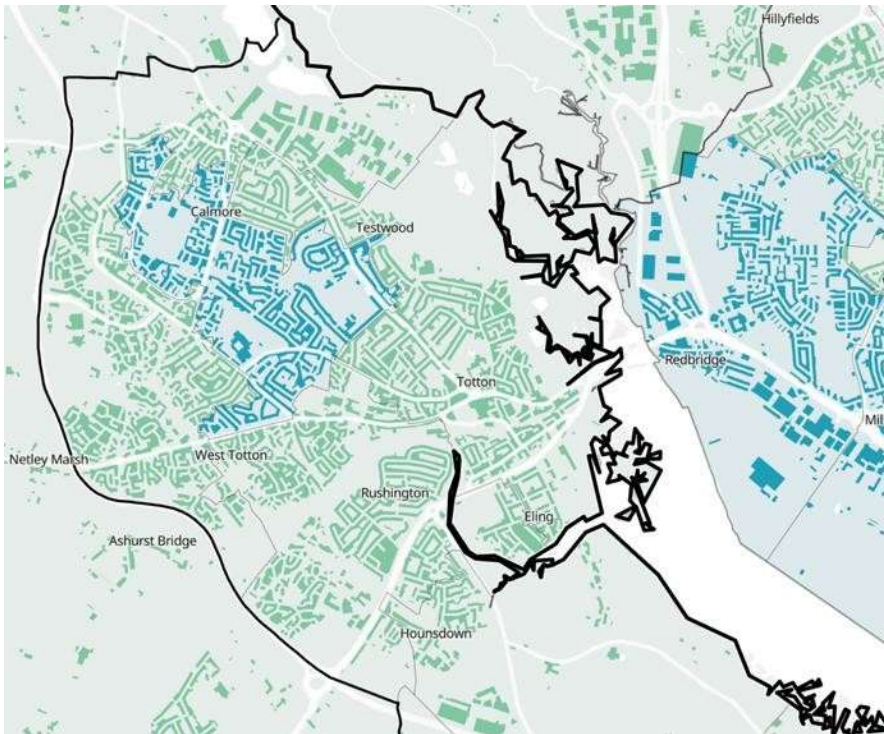


Fig. 7: Census 2021 output showing areas with highest demand for cycling (blue) at the time of the survey. Given the Covid-19 pandemic this should be treated with caution.

The 2021 Census was affected by the global COVID-19 pandemic in which up to 40% of respondents said they work at or mainly from home, and thus its value is limited.

Nonetheless it does provide an indicative idea of the percentage of people travelling by bicycle in different areas of Totton, with the Calmore and Testwood areas (shaded blue) having the highest cycle mode share. It is of note that areas previously having higher levels of cycling, including Eling, Hounslow, Rushington and parts of West Totton, have dropped away.

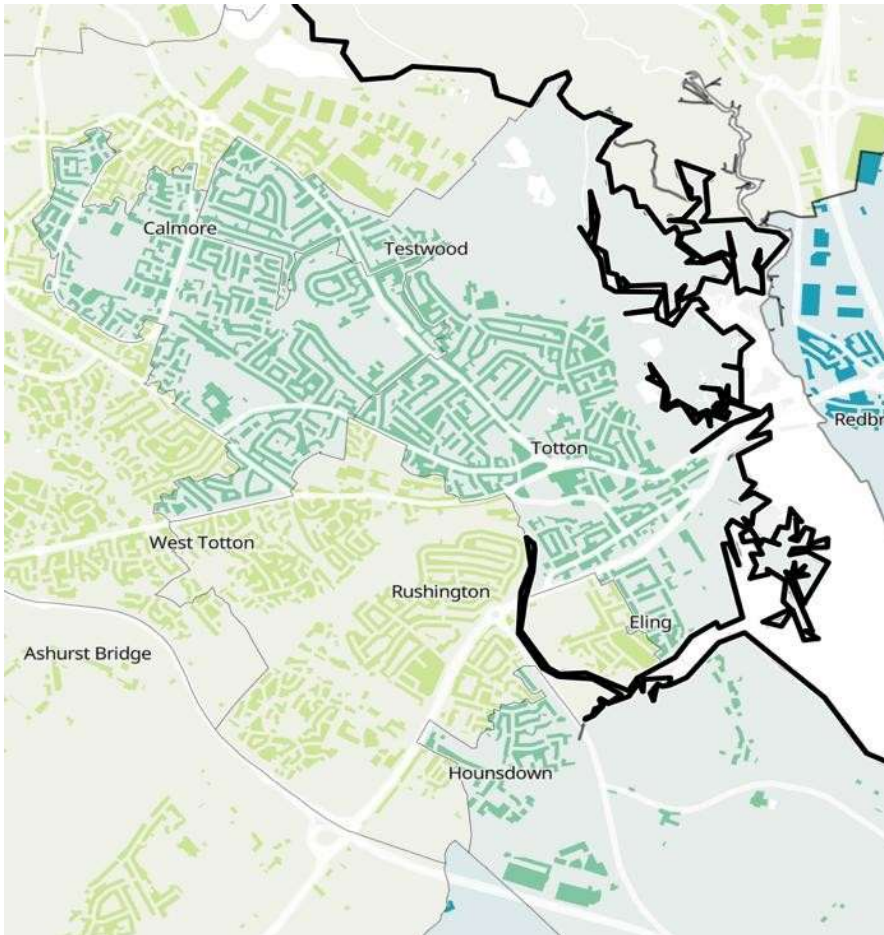


Fig. 8: Census 2021 output showing areas of highest demand for walking at the time of the survey. Given the Covid-19 pandemic this should be treated with caution.

The 2021 Census was affected by the global COVID-19 pandemic in which up to 40% of respondents said they work at or mainly from home, and thus its value is limited. Nonetheless it does provide an indicative visual idea of the concentrations of people travelling on foot in different areas of Totton, with the Calmore, Testwood, central Totton and Hounsdawn areas having the highest walked mode share. With the notable exception of Hounsdawn, this broadly visually correlates with the DataShine mapping output above.

Collision mapping

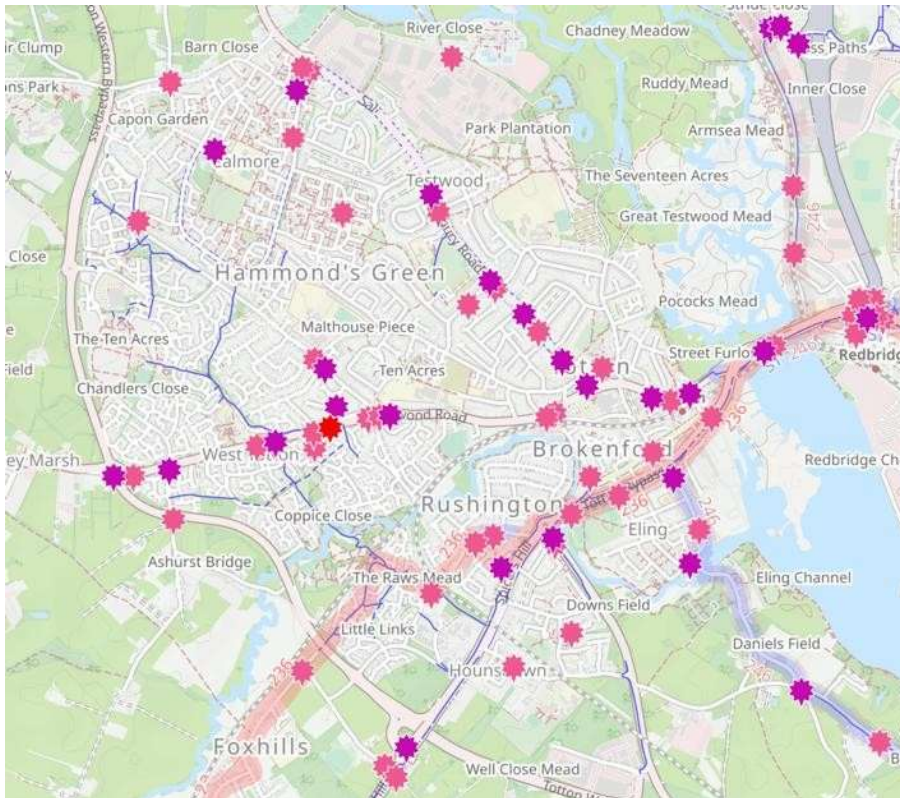


Fig. 9: CycleStreets collision mapping – cyclists. Darker colour is serious collisions; reds are fatal. Time period 2013-2023

CycleStreets.net maps cycle routes and collisions, drawing data from Stats-19, the standard Police database of collisions of all severities, from slight to serious. Collisions are broadly random with the exception that the majority (about 70% nationally) occur at junctions.

The map shows a linear relationship between major or busier roads and cycle collisions as well as concentrated clusters of collisions on various sections. Our opinion, based on local knowledge, is the locations of more serious collisions are no surprise: they correlate with wide or complex junctions, sections of road with higher traffic volumes and speeds and sections of road with poor forward visibility caused by gradients and long bends.

Often the collisions occur in spite of efforts to provide for cycling, indicating these efforts have been insufficient or they have increased cycling without implementing effective measures to reduce danger.

Examples of this are Salisbury Road where on-carriageway markings were installed to highlight the presence of cyclists, and Water Lane where traffic calming was introduced to reduce speeds. Both these interventions appear to have been insufficient to eliminate serious injury collisions.

However, the map does not show places people fear to cycle most – **subjective safety**. A route may be direct, but people don't cycle on it because they perceive a higher risk from motor vehicles. A classic instance of this is Ringwood Road between Bagber Road and Maynard Road. Pct.bike shows this link as one with relatively high demand in both the existing and near market scenarios. Yet, westbound at least, it is narrow, has an uphill gradient and poor forward sight lines for drivers. It feels unsafe yet there are few collisions, possibly because people avoid using it.

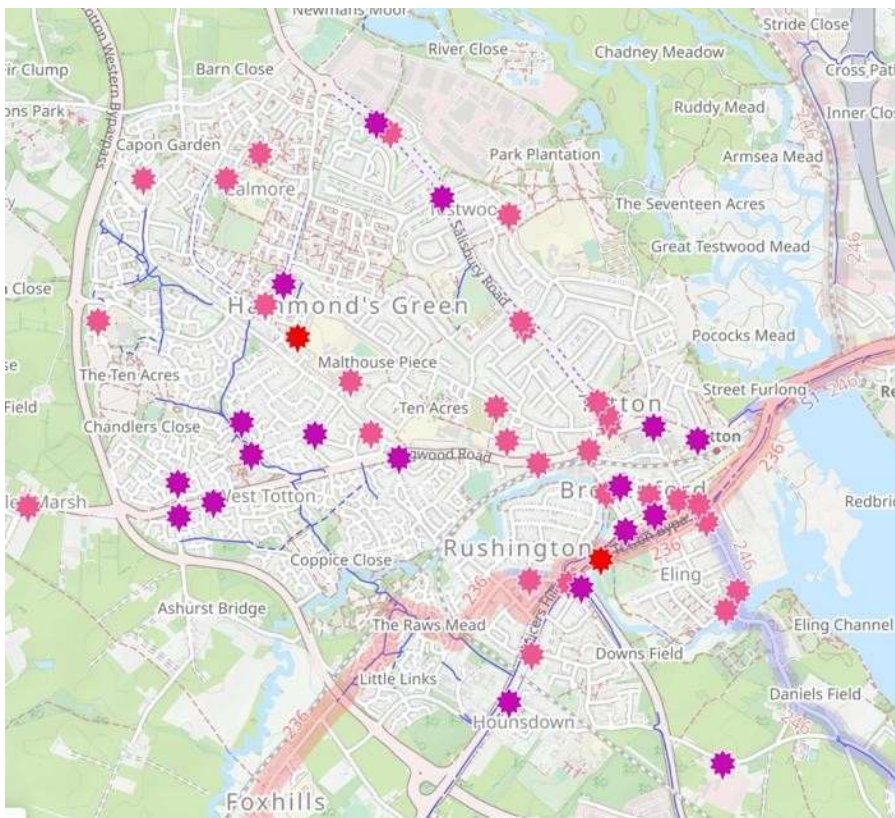


Fig.10: Pedestrian collisions 2013-2023 showing a pattern that is more dispersed away from the major and busy road network

For walking, the collision map shows a pattern of collisions that is more dispersed away from the main and busy road network, encompassing some quieter residential streets. This may be reflective of shorter journeys perhaps between residential dwellings (social journeys). However, there are clusters in and around the town centre (Salisbury Road and two serious injury collisions on Commercial Road) and particularly around Rumbridge Street where there are higher concentrations of both pedestrian activity and motor traffic. The pattern of collisions begins to show an area for more intensive interventions within and beyond a defined core walking zone.

The existing draft LCWIP does not pick up on the cluster of collisions around Rumbridge Street by including the area in its Core Walking Zone.

Stage 3 Network Planning for Cycling

Introduction

The visual data representations in the previous stage are used together with pct.bike cycle flows calculations below to identify linear routes that should be developed to connect networks of residential streets and provide direct links to the town centre and beyond.

In this stage, a core network is identified, with emphasis given to routes and sections of route where hard infrastructure interventions are needed to make cycling routes safe, connected, direct, comfortable and not too hilly to use. At the same time, opportunities to improve 'porosity' are identified, such as crossings over main road barriers between networks of quieter residential streets. Improved porosity will assist local 'non-commuting' journeys most typically made by women.

Cycle flows (routes with highest current and future demand)

Pct.bike uses Census 2011 data on origins and destinations of cycled trips to calculate cycle flows for the top n cycled trips in an area. These are represented either as straight-line connections between ward centres or as connections on the road network itself, represented in a heat map.

For the purposes of this appraisal, we have set pct.bikes to identify the top 200 most cycled routes to show the strongest alignments in the current and 'near market' scenarios defined by the Department for Transport.

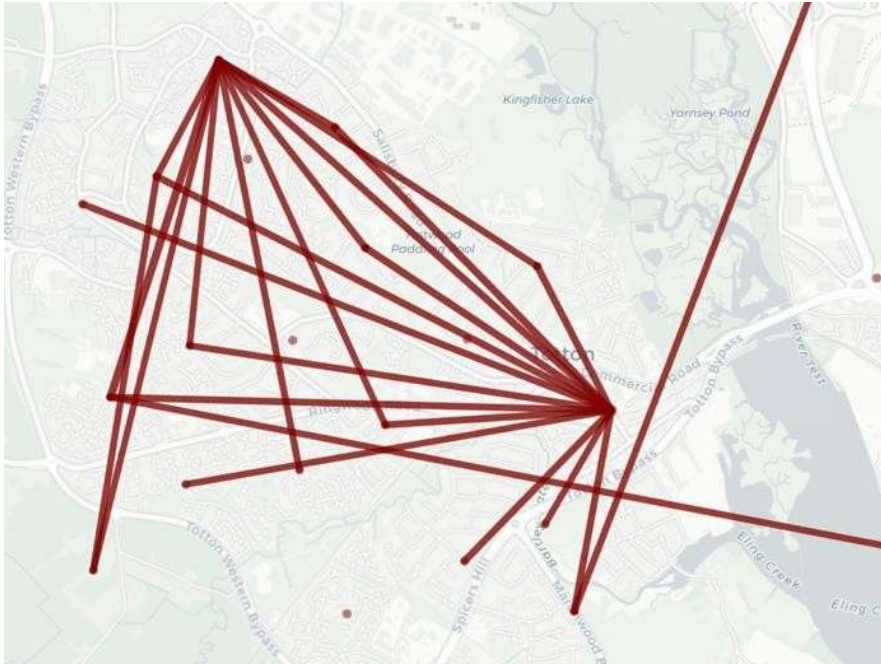


Fig. 11: Pct.bike showing the top 200 most cycled routes drawn from the Census 2011 Origin and Destination data centred on LSOA centroids. This shows a strong radial pattern from the main town centre and Calmore.

The straight-line map above shows clearly a radial pattern of cycled trips mostly originating in Calmore and focused on Totton town centre with other routes circumnavigating the town to the west. The quiet lane route going north-south through Eling does not show up because the selected area for analysis did not extend far enough south to connect with relevant ward centroids.

Geo-located mapping of most-cycled desire lines (below) shows the routes with the highest current demand, namely Salisbury Road, Water Lane and Ringwood Road in the north of Totton, with relatively strong demand existing on the lane through Eling and alongside the A35 Totton Bypass. The same exercise is repeated for the 2011 Census and DfT Near Market scenario as presented in pct.bike.



Fig. 12: pct.bike output showing routes with high (blue) and medium (green) potential demand for cycling to work – top 200 trips. Based on 2011 Census.

Pct.bike with 2011 top 200 linear direct trip desire lines converted from straight lines to on road. This shows approximately which streets are the focus of most demand. However, the level of granularity does not show us whether cyclists avoid using the routes and use parallel streets instead.

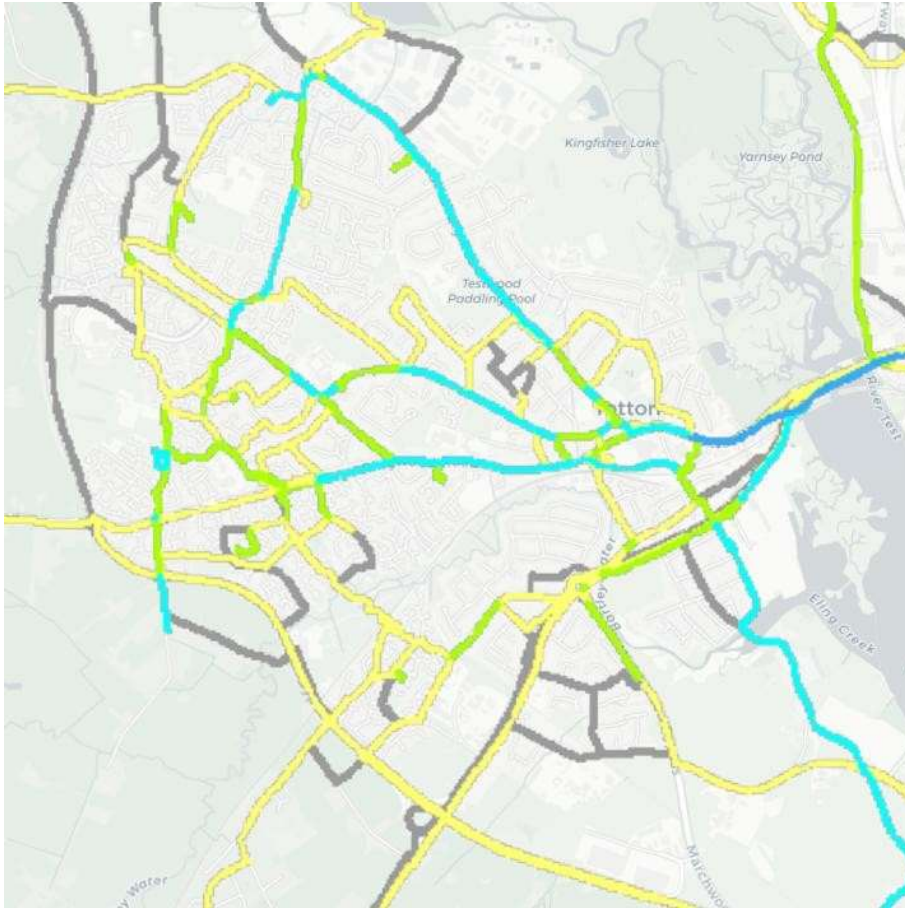


Fig. 13: pct.bike modelling output estimating cycle travel demand from the 'near market' of people who would most likely cycle if conditions were improved (blue lines). This shows clear demand on the Salisbury Road, Water Lane, Ringwood Road and Eling Lane corridors.

The above pct.bike map showing linear top 200 direct trip desire lines converted to on road, in the Near Market Scenario. The increased level of cycling correlates with changes of colour indicating more intensive use of some routes – note more intensive demand for cycling on Salisbury Road, Water Lane, Ringwood Road and the orbital West Totton route. However, some routes (such as Ringwood Road east of Bagber Road) would not be suitable for dedicated infrastructure. The radial pattern of cycling shows itself quite well in this map.

Potential network density is further enhanced by including journeys to and from schools. The following maps show an expanded network related mainly to secondary schools at Hounslow and Testwood, with the strongest colour flows through West Totton.

In the 'equality' scenario, cycling demand intensifies, particularly on the main cycling route to Testwood Secondary School. In both cases, there is evidence of cyclists using quieter streets and parks to access schools.

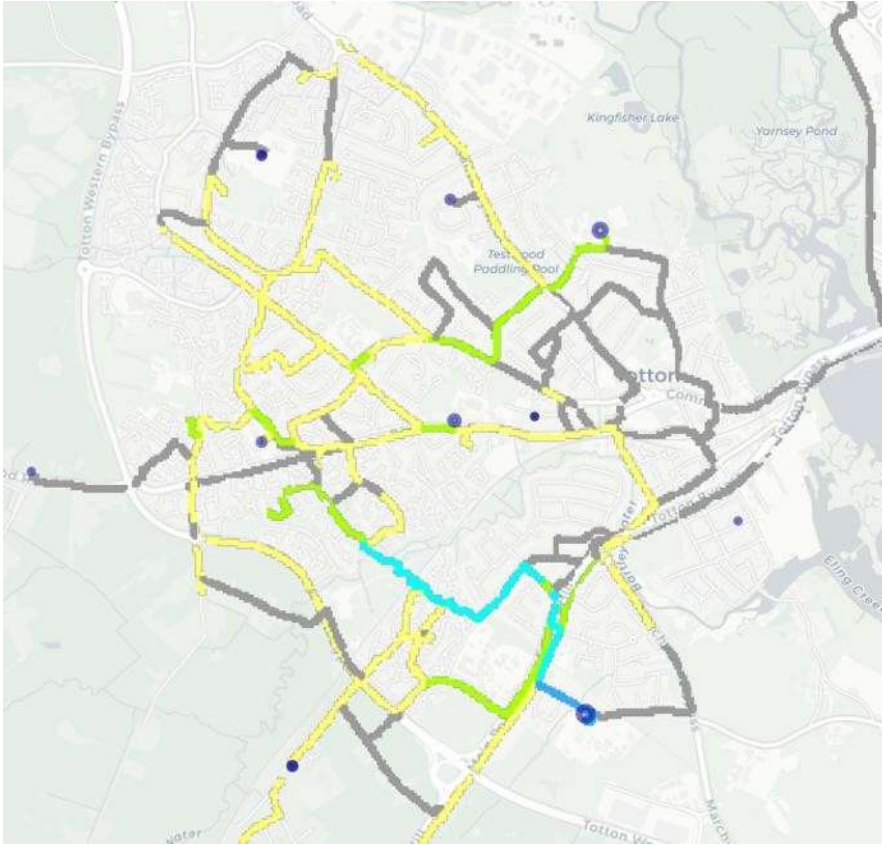


Fig. 14: pct.bike output showing demand for cycle travel to school based on hands-up surveys of pupils. West Totton Greenway is important.

The addition of origin-destination school travel data adds demand to routes which are not used by commuters. Note heavy use of routes from West Totton and use of the greenway network.

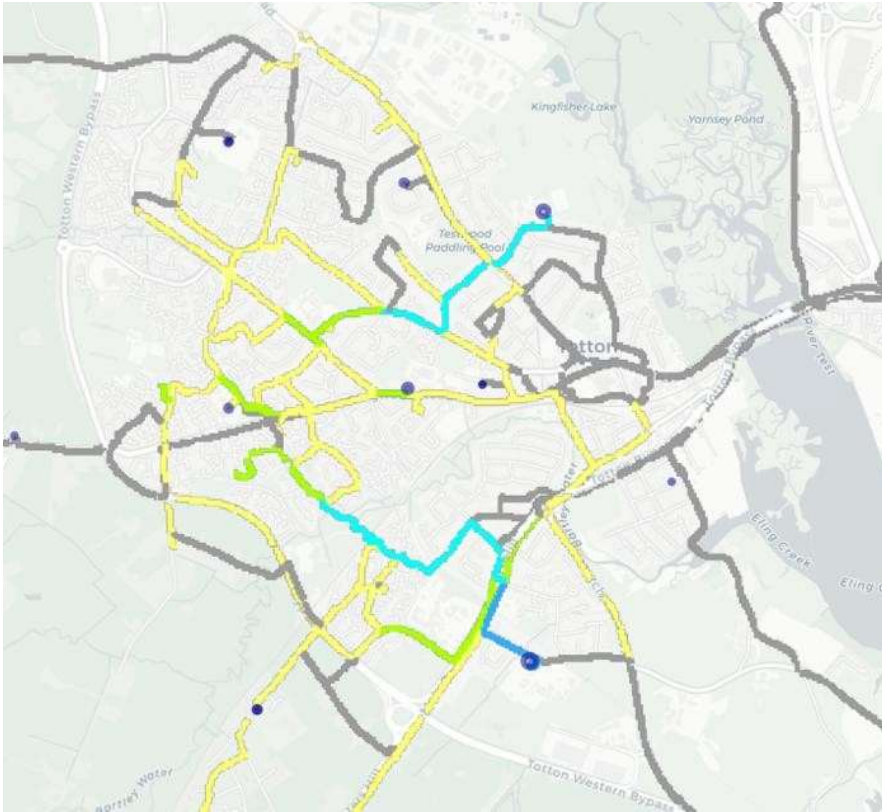


Fig. 15: pct.bike modelled prediction of cycling to school if cycling increased to the 2025 target. This includes increased demand for cycling to Testwood Secondary School. Note: CWIS3 is not yet published with new targets.

The above map again, showing the situation if cycling increased to the Government’s 2025 target. It confirms the routes with highest demand and adds cyclists to Testwood School, north of the town centre.

DfT counts

The Department for Transport undertakes annual counts at locations across the country including Totton. Some points are not counted each year so estimated annual daily (traffic) flows are provided. The latest data (2023) broadly confirms our assessment of demand, with the highest flows on Commercial Road (route 1), Salisbury Road (route 1) and Ringwood Road (route 3). It is likely Route 3 shows a higher flow because of the three schools and relatively recent construction of a wide shared use path.

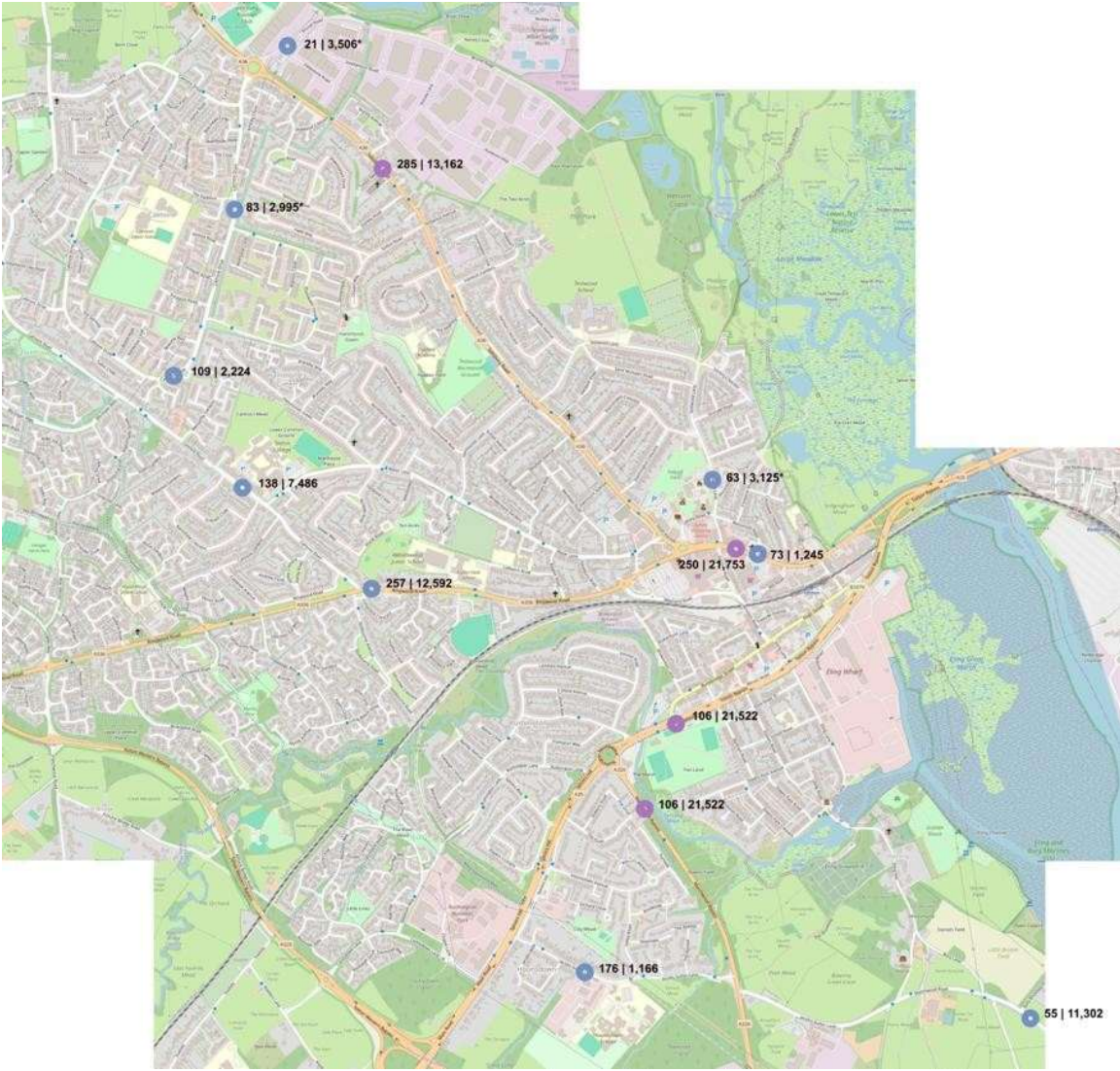


Fig. 16: Department for Transport automatic and manual traffic count points from which Annual Average Daily Traffic Flows (AADF) are derived.

Site number / location	Pedal cycles	AADF
Route 1 / 11 Redbridge Causeway to Brunel Road via Testwood Lane and Salisbury Road		
945364 Unclassified, minor Beaumont Road	73	1245
56960 A336 Commercial Road	250	21,753
Unclassified, minor Testwood Lane	63	3,125
3681 A36 Salisbury Road near barber's shop	285	13,162
945451 Unclassified local distributor Calmore Road	83	2,955

966412 Unclassified local distributor Brunel Road	21	3,506
Route 2 Water Lane to Hammonds Green and West Totton Greenway		
951843 Unclassified local distributor Calmore Drive.	109	2,224
945283 Unclassified local distributor Calmore Road near Water Lane	138	7,486
Route 3 Bagber Road to Woodlands Road via Ringwood Road		
48475 A336 Ringwood Road east of Calmore Road	257	12,592
Route 4 Redbridge causeway to Rushington and Foxhills / Ashurst		
16341 A35 Totton Bypass	65	39,362
Route 5 Hounslow to Colbury		
99870 A326 Marchwood Bypass	106	21,522
810251 Unclassified local distributor Jacob's Gutter Lane (south)	176	1,166
Route 6 Junction Road to Marchwood Road		
945259 Unclassified local distributor Marchwood Road east of Eling Lane	55 (note there may be more if 'behind hedges' cycleway not included in count)	11,302
Route 7 West Totton		
No relevant datapoints		

Barriers to cycling

Permeability

Totton and Eling's pattern of development has produced a relatively permeable network when compared with similar areas elsewhere (such as New Milton), but there are still challenges to overcome. The network comprises a mixture of connected streets and cul-de-sacs. Many of the cul-de-sacs are linked to a strategic greenway network with multiple opportunities for access from developed areas around them.

Connectivity is an issue in some places, most notably in networks of streets on the west side of Salisbury Road at Testwood, and due to incomplete development in West Totton.

Major roads

The major and busier roads in Totton are significant barriers to cycling both along them and across them, particularly in the town centre and across the A35 and A236 bypass roads.

Alongside these roads, LTN1/20 would require segregated cycle tracks to protect cyclists from other traffic while minimising conflicts with pedestrians.

Opportunities should be included to improve existing crossings and increase the number of crossings of major road and other linear barriers. These have been factored into the list of prioritised schemes with nominal costs applied.

Some sections of road have insufficient space for dedicated cycle infrastructure alongside them, namely:

- Ringwood Road between Bagber Road and Maynard Road (a relatively high demand link).
- Salisbury Road between Stanley Road and Testwood Roundabout
- Water Lane (entire length)
- Calmore Road (entire length except for a section between Michigan Way and Loperwood Lane).
- One side of several routes, notably Commercial Road east of Junction Road, Salisbury Road south of Hammonds Lane, Salisbury Road between Hamtun Gardens and Testwood Crescent, and Ringwood Road between Testbourne Avenue and Larchwood Avenue.

These sections have therefore been omitted from the network plan although reduced speed limits may assist some direct connectivity for cyclists with higher levels of skill and confidence.

There are also some sections where only shared use paths are achievable. In planning the network, we accept shared use paths will be a feature where there are low flows of both cycles and pedestrians, but there are instances where it will need to be used, either permanently or temporarily, to enable route continuity. These are:

- Salisbury Road between Sylva Crescent and Stanley Road.
- Salisbury Road outside the Testwood Surgery.
- Commercial Road between Mill Road and the McDonalds site.
- Junction Road (entire length)
- Eling Lane (entire length)
- West Totton (some lengths of the Greenway).

These sections are shown on the network plan together with other proposed shared use paths as blue lines.

Existing cycle infrastructure

Over time, shared use paths, cycle lanes and other measures have been introduced across Totton to enable access by cycle. These are of variable quality and effectiveness. The routes identified are:

- Salisbury Road. Junctions highlighted by 1.0m wide anti-skid treatments (mostly worn off). Low quality.
- Calmore. 1.5m advisory cycle lanes on part of Calmore Drive, between Blackwater Drive and Nutshalling Close (serving the infant school). Medium quality.
- Hammond's Green. Cycle route marked on Hammonds Green (street) and Calmore Drive. Good quality except for a substandard access barrier and missing dropped kerb at the northern end.

- Water Lane between Totton town centre and Hammonds Green. Poor quality due to the distance between vertical speed reducing features, the 30mph speed limit and volume of through traffic.
- West Totton greenway including a toucan crossing of Ringwood Road. This is of medium to good quality depending on location. It is not wide enough for comfortable shared use, and on most sections, segregation would be preferred. In some places, access barriers are a major impediment. There is an important spur (NCN route 236) to Ashurst and Lyndhurst.
- Totton bypass (A35) has shared use paths on one side between the Redbridge Causeway and Commercial Road or Rum Bridge, and on both sides where cycling routes from Rumbridge Street connect to Hounslow and Rushington. These are medium to poor quality, with the poorest quality found at the priority junction with Bartram Road.
- Hounslow has a mixture of on-street cycling and some shared use paths, the latter connecting the area with Rushington Roundabout to the east and Colbury to the west. Journeys to school are not facilitated other than via the shared use of a standard pedestrian subway on Spicer's Hill. This network is of medium to poor quality given the lack of segregation on the link to Rushington and Colbury, and the lack of vertical traffic calming measures in the Hounslow estates.
- The route between the Totton Bypass and Eling has been facilitated by improved surfacing and a build-out to reduce traffic speeds and improved visibility at its junction with Eling Lane, and a new toucan crossing of Marchwood Road. The route is of medium to high quality given the quiet route.

As part of the Waterside Transport Strategy, recent improvements have been made to the Redbridge Causeway, Totton Bypass, Rushington Roundabout crossings and a new toucan crossing of Marchwood Road at the southern end of Eling Lane. With some exceptions, this LCWIP generally specifies either no, or minimal additional investment to enhance the standard of what has been delivered.

- Calmore Drive advisory cycle lanes.
- Hammonds Green (with the exception of the access barrier to be modified or removed)
- Parts of the West Totton greenway (with the exception of access barriers to be modified or removed)
- The A35 Totton Bypass shared use paths (with the exception of prioritising junction improvements to minimise conflicts).
- Eling Lane (with the exception of the section between the A35 Totton Bypass and Eling Tide Mill where traffic calming measures are needed).

Route identification and appraisal methodology

Route identification and geographical extent

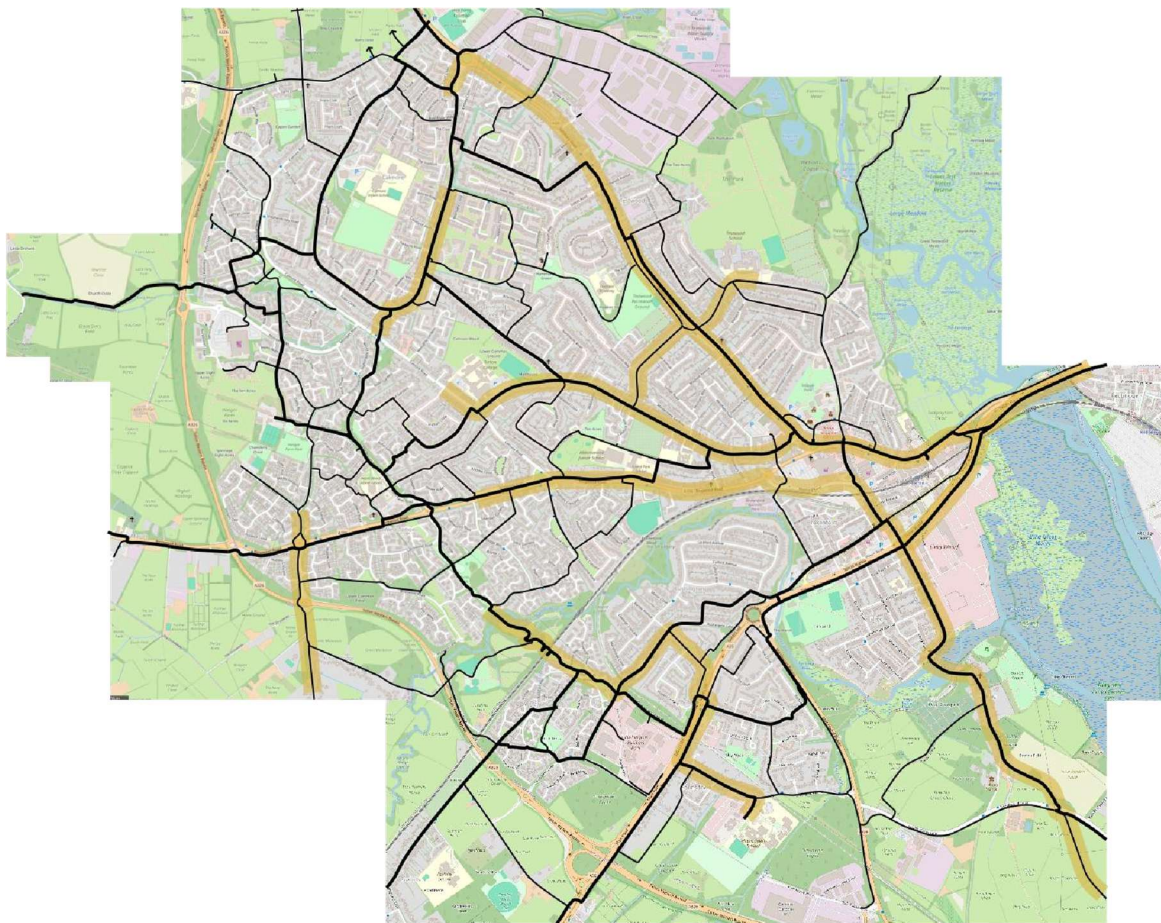


Fig. 17: whole potential cycle network showing routes identified as having highest potential demand (yellow highlighting).

Figure 17 above shows the potential extent of a complete network for cycling in Totton, and this also defines the geographical boundary of the LCWIP. Some areas lie outside the parish and would require further engagement with the neighbouring parishes.

In stages 2 and 3, we used pct.bike, DataShine and Census 2021 mapping to provide a clear visual representation of routes with highest existing and potential demand for journeys to work and school. Map xx above shows both the routes with highest demand and the geographical extent of this LCWIP.

From this we have identified the entire potential network for cycling giving good connectivity to the town centre and local services in the community, utilising:

- Major and busy roads
- Residential streets
- Greenways
- Other links and paths.



Fig. 18: Totton "core" cycle network which concentrates on routes with highest potential demand. See Appendix 1 for a larger map.

To narrow this down to the number of routes that would realistically be delivered in a timeline of 5-10 years, we have focused on the 'most used' general alignments derived from the pct.bike, DataShine and Census outputs (see yellow shaded routes in fig 17 above) and routes that require the most physical interventions to make them suitable for cyclists of all abilities and levels of confidence. These 'core network' corridors are:

- Route 1 Commercial Road from Redbridge Causeway to Salisbury Road
- Route 1 Salisbury Road corridor from Totton town centre to Calmore Drive (with route 11 as an interim quiet streets connection between the town centre and Testwood).
- Route 2 / 3 Water Lane and Ringwood Road to West Totton and Netley Marsh, incorporating West Totton centre.

- Route 4 Totton Bypass between Redbridge Causeway and Rushington Roundabout
 - Route 4 Totton Bypass to Ashurst via Rushington
 - Route 5 Totton Bypass to Hounslow and Colbury
 - Route 6 Totton Bypass to Eling and Marchwood, including a loop passing Sunnyfields Farm to Hounslow.
 - Route 7 The Greenway network in West Totton including the link from Oleander Drive to Winsor (potentially part of New Forest NPA LCWIP route 120).
 - Route 7 Greenway to Hounslow Secondary School.

These routes are numbered 1-7, with any spurs delivered having subordinate numbering, for example route 11 is the first 'branch' leading off route 1. Each segment or junction is numbered after a decimal point, for example segment 1.1 on the core network, or 11.1 for a subordinate route. At this stage we have only numbered subordinate routes where they are important for prioritisation purposes.

Segments are numbered according to a section having similar characteristics or being between numbered junctions. Junctions are numbered sequentially with the sections but identified using red numbers and markers.

It should be noted that significant stretches of route are not within highway land and would therefore not receive Active Travel England or Highway Authority funding. Different funding mechanisms would need to be found including CIL and s.106.

- The Department for Transport's network appraisal methodology identifies various conditions to consider when designing network alignments. However, in this case, local knowledge of routes combined with the availability of alternatives has been used to produce a network that is, on the whole:

the most direct available network responding to desire lines, with sections where infrastructure cannot be implemented excluded from the network.

- the flattest available network responding to desire lines, given that local topography is very gently rising from the southeast to the north of the town, and from the east to the west (responding to the River Test valley).

Infrastructure proposals are also based around local knowledge of conditions for cycling backed up by Department for Transport counts where these are available. In general, major roads are the focus for proposed heavy infrastructure where space is available, and residential streets provide further connectivity and interim routes as the network develops.

Confirming and modifying the initial route network Route confirmation is as follows:

- Route selection. A route selection tool has been developed by Active Travel England; however, extensive local knowledge has been used instead to identify a suitable network. The process of designing the network has been accompanied by a high-level appraisal of what kind of infrastructure is needed to make it suitable for cycling. Prioritisation is based initially on delivering the first schemes where there is likely to be highest demand because of streams of cyclists merging onto one route.
- Network density. As this is Totton and Eling's first LCWIP and there are few existing routes (of which none are designed to

- LTN1/20 standards), the technical guidance advises residents should be within 1,000m of their nearest cycle route. As the network develops, safe cycle routes should become available within 400m of anyone's home. The identified core network was tested to confirm that everyone in Totton could access a core route within 1,000m of their homes if it was fully developed. The extent to which they would have access to the core network within a 400m cycle ride was also tested.

Porosity. The network will be designed to maximise 'porosity' between areas of residential streets, overcoming barriers through measures such as crossings and barrier removal. The purpose of this assessment was to test the degree to which very local 'non-route' journeys could be undertaken following interventions, most typically by women. In the process of identifying and designing the core network, opportunities to improve connections have been identified and incorporated (shown on the map as double-headed arrows). The porosity objective can be prioritised through a list of quick wins which provide benefits beyond each individual small scheme's location.

Prioritisation

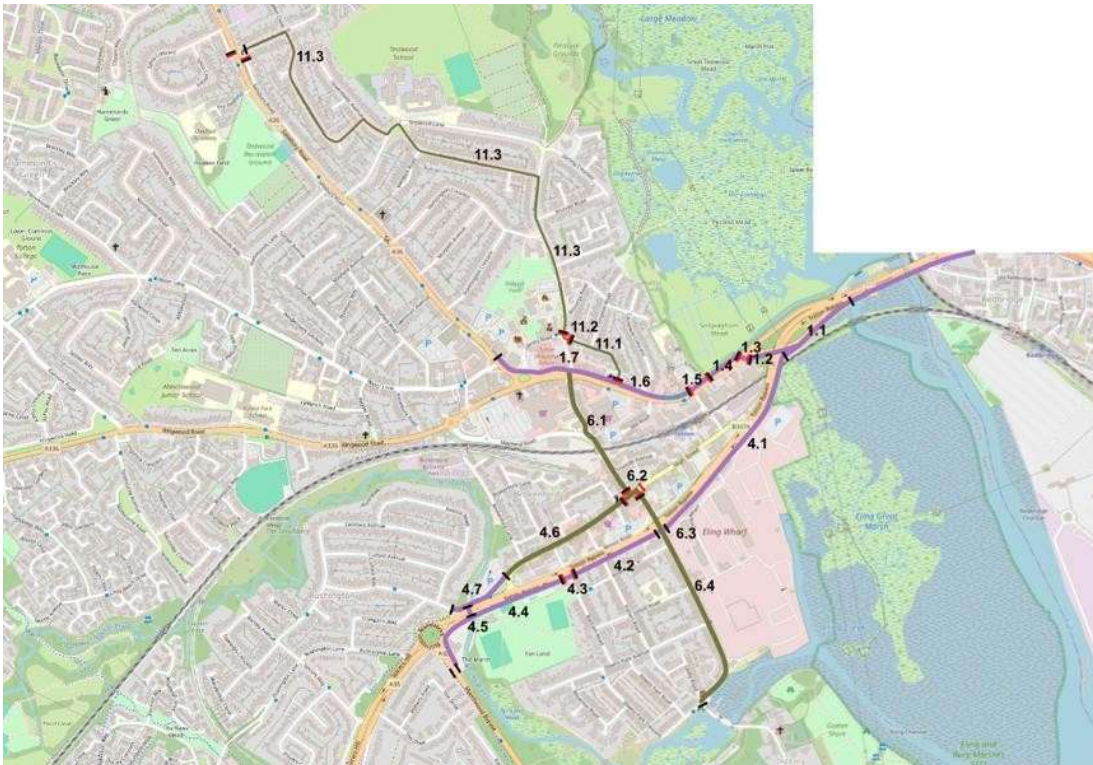


Fig: 19: First priority for delivery are the funnel routes identified above. Route 11.3 is an interim alignment for the section of Salisbury Road to be delivered in future phases.



Fig: 20: Future priorities are in the remainder of the core network.

Routes are prioritised as follows:

- Core 'Funnel' cycle routes where a number of other routes or connected networks of quiet streets converge (Fig xx above).
- Quick wins (barrier removal, dropped kerbs, etc) across the entire network.
- Other core routes where segregated infrastructure is required to meet LTN1/20, with routes having highest potential demand in the 'near market' scenario delivered first (Fig xx above).
 - Incidental opportunities to introduce school streets which make the journey to school safer using active travel modes.
 - Incidental opportunities to provide connectivity between cells of quieter streets as part of delivering the core network.
- Other cycling routes and crossings delivered through area-based schemes such as liveable neighbourhoods which restrict through traffic and speeds. Measures include bus gates and modal filtering.

Design principles

Speed Limit ¹	Motor Traffic Flow (pcu/24 hour) ²	Protected Space for Cycling			Cycle Lane (mandatory/ advisory)	Mixed Traffic
		Fully Kerbed Cycle Track	Stepped Cycle Track	Light Segregation		
20 mph ³	0					
	2000					
	4000					
	6000+					
30 mph	0					
	2000					
	4000					
	6000+					
40 mph	Any					
50+ mph	Any					

Notes:

1. If the 85th percentile speed is more than 10% above the speed limit the next highest speed limit should be applied
2. The recommended provision assumes that the peak hour motor traffic flow is no more than 10% of the 24 hour flow
3. In rural areas achieving speeds of 20mph may be difficult, and so shared routes with speeds of up to 30mph will be generally acceptable with motor vehicle flows of up to 1,000 pcu per day

Fig. 21: Table 4.1 from LTN1/20 sets out the basic parameters for providing segregated infrastructure.

Suggested infrastructure in this LCWIP sets out to be consistent with Government design guidance in LTN1/20 (Cycle Infrastructure Design). Listed measures are indicative only and further design work will be required to achieve optimum results.

- Cycle tracks should be provided alongside roads where motor traffic volumes exceed 2-4,000 vehicles per day in a 20mph speed limit area, or 0-1,000 vehicles per day in a 30mph area. On routes with a 40mph + speed limit, segregation should be the default. The first consideration should always be whether traffic volumes and speeds can be reduced to a level at which cycles and motor vehicles can share the carriageway. The Department for Transport provides mapped Annual Average Daily (traffic) flow (AADF) data at various points on the network.



Fig. 22: Kerb separated two-way cycle track with its own signals. Blackfriars Road, London.

- Wherever possible cycles and pedestrians should be kerb separated. Shared use paths built to a minimum width of 3m and wider in busier areas may be acceptable on sections with low volumes of cycles and pedestrians, such as at the edges of the town or in its rural hinterland. Shared use may also be acceptable as an interim measure or to enable continuity of a

route, covering sections where there is insufficient space for separation of users.

- Cycle tracks should be a minimum of 3m wide for two-way cycling (in Totton), or 2.3m wide for one way cycling to allow sociable cycling side by side or overtaking within the cycleway. A grass 'buffer' should be provided which is a desirable minimum of 0.5m in areas with a 30mph speed limit, or 1.0m wide in areas with a 40mph speed limit. This is not always achievable but should be the aim, with an absolute minimum buffer of 0.5m on roads with a 40mph speed limit. The grass acts not only as a visible boundary but also as a 'crud catcher', helping to keep grit and small pieces of glass off the cycleway.
- Cycles should be given priority over side road junctions, and this should be achieved using continuous cycleway / footway treatments, ramps, tighter corner radii, coloured surfacing and other clear warning to drivers that cyclists may be present and have priority.



Fig 23: A cycleway crossing a side road junction alongside a continuous footway. Drivers must give way to pedestrians and cyclists using this junction (Highway Code).

- At junctions, every effort should be made to ensure cyclists are visible and seen by drivers, especially on two-way tracks which introduce higher safety risks at junctions compared with one-way with-flow cycle tracks – this includes making approaches

straight and ensuring a visually unobstructed, clutter-free zone exists in the vicinity of junctions.

- Crossings will, where possible, be parallel zebra crossings. However, as the volume of motor traffic increases, so too will the type of control with signalisation and then grade separation preferred.
- Features such as bus stop bypasses (cycleways behind bus stops) may be necessary to enable continuity of a route. There are common complaints about the impact of such features on disabled people with visual impairments, however:
 - As in most things in life, compromises are necessary to enable designers to meet a complex web of requirements and objectives.
 - Without bus stop bypasses and other similar measures there can be no safe infrastructure for cycling, to the detriment of those who do not own cars, or who want to live a healthier lifestyle.
 - The need to have more people travel actively to avoid debilitating diseases including type 2 diabetes (which causes blindness) and more years lived in ill health is considered to have a very high importance which outweighs the minor issue of a few people abusing infrastructure which is provided in good faith. We would not seek to 'ban' road building or zebra crossings because some people don't want to behave properly.



Fig 24: Bus stop bypass. Efforts should be made to minimise conflict between cycles and pedestrians.

- Cycle track surfacing should be machine-laid, smooth and preferably coloured. Construction should be of a quality which enables the track to be long-lasting without the need for early resurfacing or other maintenance.
- Where there is insufficient space for a cycle track, alternative routes should be found. Compromises are inherent in cycle network design and so it may, for example, be necessary to provide a section of shared use path to access the alternative route. In general, an alternative route should either provide a direct connection to a dense area of development or not be more than 10% away from the most direct available route between places.
- On quieter routes away from major roads, speed limits of 20mph should be applied, with vertical traffic calming measures accompanied by SuDS and tree planting. The effect of the vertical measures is a physical restraint on motor vehicle speeds, and the landscaping features help to reduce the field of view so that drivers concentrate more on what is happening near to them.
- Much of the Totton network is connected by greenways and short sections of off-road path which may or may not be within

highway land. Compromises may be inherent in making these available for cycling but the best achievable outcomes with regard to the standards set out above should be sought.

Core network interventions – see Stage 6.

For maps and the list of cost-estimated schemes to be delivered with priority rankings, please see Stage 6 below.

Stage 4: Network planning for walking

Introduction

This stage establishes design principles for walking and wheeling, a walking and wheeling network linked to key walked trip attractors, and a central area core walking zone with routes radiating from it.

Data for walking is limited, and the scope of this free project does not include necessary pedestrian counts which would help identify priority schemes.

Further clarity is also needed about how Hampshire County Council, as highways authority, prioritises footway maintenance which can be combined with new (capital) works to deliver better value.

Therefore, we have omitted a priority list of specific schemes and indicated instead the core walking zone and a broader “priority corridors” approach. Even so we suggest footway maintenance is most likely to be directed to town centres, areas with high footfall such as school streets and local centres, and major roads.

Core walking zones

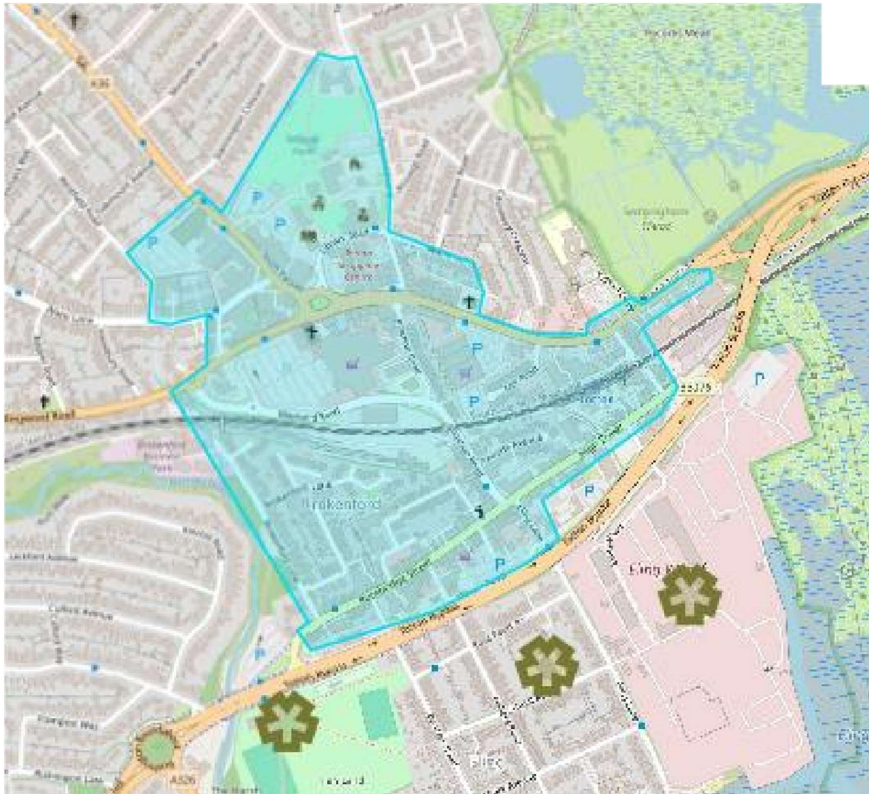


Fig 25: Core Walking zone covering the town centre and areas with higher concentrations of collisions.

Map Figure 25 above shows the suggested Core Walking Zone in Totton. This has regard to a general 400m distance from the central point to the outer boundary, but geographical circumstances and other considerations such as the need to address poor accessibility and clusters of collisions may dictate a longer or shorter radius.

Draft Totton and Waterside Local Cycling and Walking Infrastructure Plan shows a core walking zone extending across the main town centre only.

Because of the cluster of collisions in the Rumbridge Street area and the need for economic regeneration, we have extended the core walking zone to encompass the length of Rumbridge Street between both of its connections with the A35 Totton Bypass. Doing so brings the opportunity to prioritise public realm interventions that encouraged walked, wheeled and cycled visits that support independent businesses and reduce the dominance of motorised traffic.

With reference to the DfT technical guidance we anticipate routes within the town centre and Rumbridge Street area can be classified as “Primary walking routes” with some connecting “secondary walking routes”.

Funnel routes

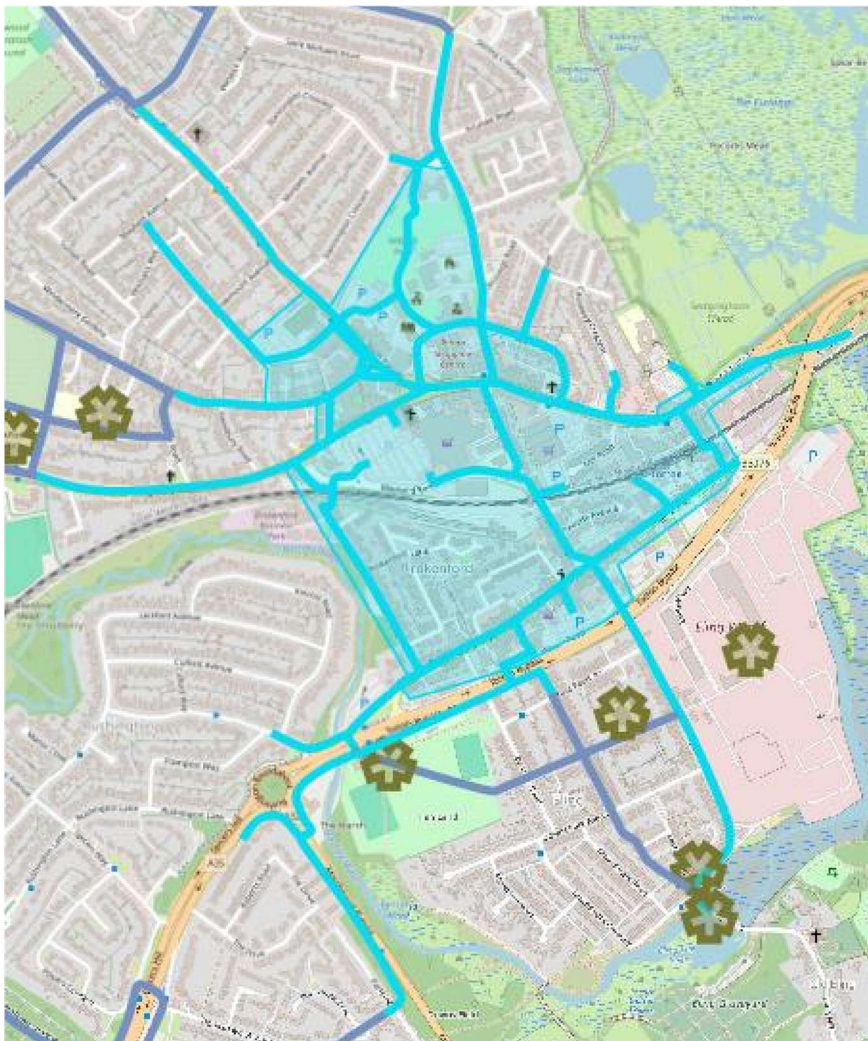


Fig. 26: Funnel routes – darker blue lines.

Map Figure 26 above shows as darker blue lines the network of Funnel Routes leading to the Core Walking Zone in Totton and Eling.

Barriers to walking are generally linear and include major roads which may be difficult to cross without assistance from controlled crossings, railway

lines, watercourses, footbridges without ramps or where ramps do not meet current standards, and dark / isolated paths which feel unsafe at night.

Leading into the core walking zone are several “funnel” routes. A funnel route is where several streets and paths converge, like tributaries, into a single street. Funnelling may be influenced by the presence of a barrier which has limited crossing points, causing a concentration of pedestrian traffic.

With reference to the DfT’s technical guidance we anticipate the funnel routes would be classified mainly as “secondary walking routes” with some “link footways”.

Walking network outside the Funnel Routes and Core Walking Zones

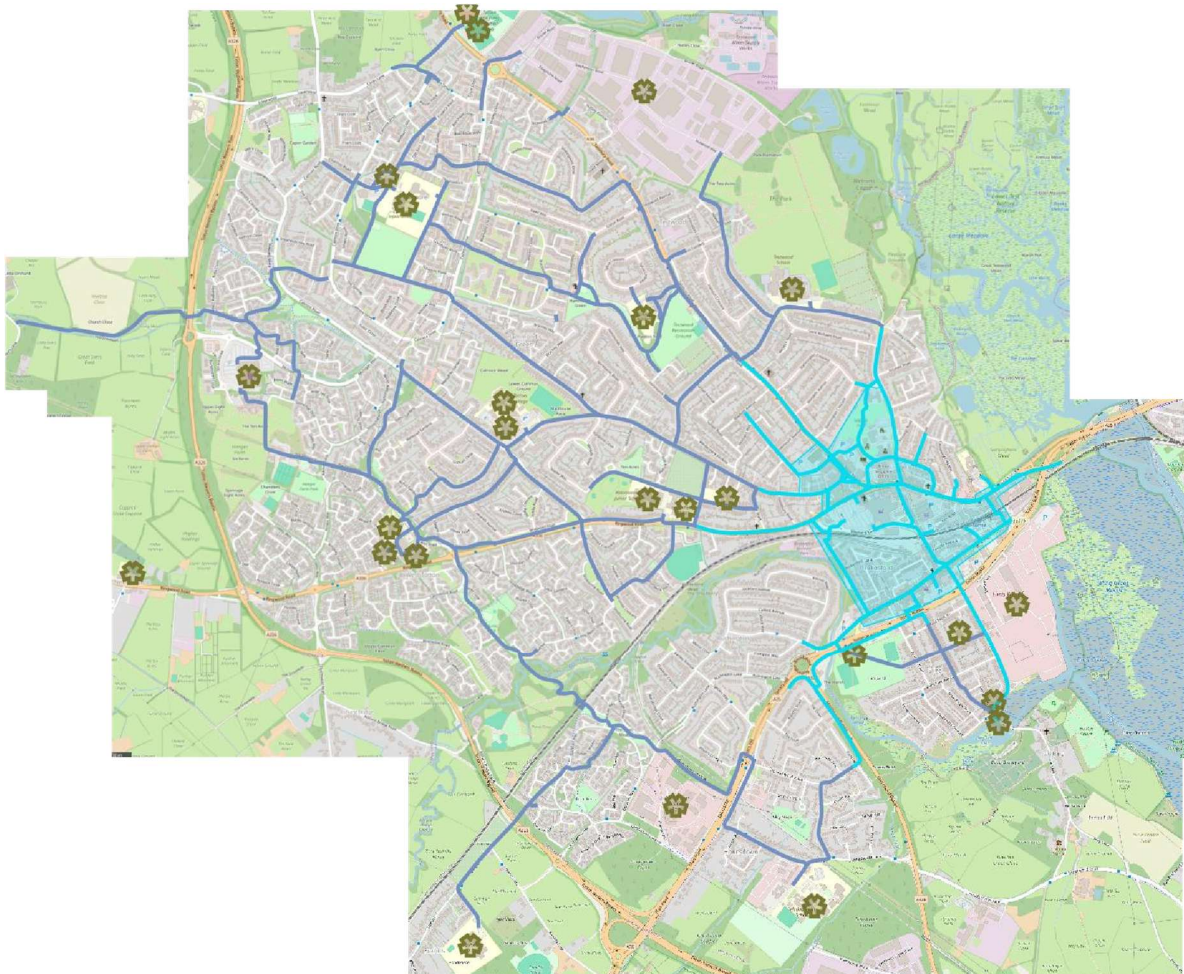


Fig 27: Wider walking network

Map Figure 27 above shows the extent of Totton's walking network including the funnel routes and core walking zones. It is derived from the cycle network with additional links where necessary. This is because investing in the cycling network is an opportunity to improve conditions for walking and wheeling on adjacent footways (and shared use paths where these are suggested).

It should be noted that some routes go through non-Highway land which is nonetheless owned by the public sector (mainly the town council). In a few places, third party private land may be required but this eventuality should be minimised.

With reference to the DfT's technical guidance we anticipate the walking network outside the core walking zone and funnel routes will be a mix of "secondary walking routes", "link footways" and "local access footways" – generally the lowest priority for investment, hence the need to bring their improvement forward by incorporating improvement measures alongside investment in proposed cycleways.

WRAT surveys (see below) have not been undertaken for the wider network.

Visual surveys

For routes within the Core Walking Zone and Funnel Routes we undertook a site visit based on the design principles established in this section.

This walked audit allows authorities to prioritise interventions based on the current condition of existing routes and approximately covers five key indicators:

- Attractiveness
- Comfort

- Directness
- Safety
- Coherence.

Our general assessment of links is subjective and based on key design requirements. Each segment is given a “poor”, “middling” or “high” ranking together with suggestions about what needs to be done to raise its standard to make it more accessible or acceptable.

“Poor” means a footway in the section generally has one or more of the following defects in relation to the ideal standard:

- Insufficient width, being below 1m for a significant distance or throughout the section.
- Narrow footway combined with heavy traffic – meaning close proximity to exhaust emissions and dust.
- Undulating surface due to driveway entrances, and / or excessive crossfall gradients.
- Missing or very poor standard of dropped kerbs, and most likely absent tactile guidance. Priority junction crossings may be significantly off the desire line.
- Surface in poor repair including patching, ruts, holes and other features which would make it uncomfortable or inaccessible for a wheelchair or buggy user.

“Middling” means the section has one or more of the following features in relation to the ideal standard.

- Sufficient width, above 1m but below 1.8m for most or all of the segment outside the town centre, or above 1.5m but below 2.5m within the town centre.
- Wider footways give some mitigation against heavy traffic and dust, or narrow footways with moderate to low traffic levels.

- Dropped kerbs with maximum 5mm upstand, or flush kerbs with substandard or worn tactile paving. Some crossings are off the natural desire line.
- Some limited availability of informal pedestrian crossing points supported, if required, by refuges. However, these may be of inadequate width.

“Good” means the section has one or more of the following features which mean work is not anticipated in the short to medium term save for isolated issues.

- A comfortable width, above 1.8m outside the town centre with a 1.5m clear path, or above 3m in the town centre.
- Grassed buffers and / or trees and shrubs provide relief from routes with higher volume of vehicular traffic.
- Footway has a flat surface which is a minimum of 1.5m from the back of the footway and a crossfall of not more than 1:40.
- All priority junctions have either:
 - Dropped kerbs and tactile paving on the desire line either to, or near to, the standards suggested in Inclusive Environments (having tails and 800mm depth of tiles from the kerb) and flush kerbs with no evidence of ponding, or
 - Continuous footway treatments which give priority to pedestrians crossing priority junction bellmouths with tightly drawn junction radii enforced by bell bollards, and no gradients / changes of level.
- Reasonably frequent provision of crossings appropriate to their location and traffic levels, including refuge islands with flush kerbs and tactile paving, zebra crossings, raised ‘courtesy’ crossings and signal-controlled crossings. These are generally on desire lines.

There are a wide range of considerations to include but we believe the above are a good starting point for investing in improvements.

To achieve excellence, we would anticipate the following:

- Seating provision at regular intervals.
- All pedestrian crossings to be direct rather than staggered, or with short waits and generous central waiting areas.
- Good lighting and consideration of forward sight lines and escape routes.
- Attractive public realm treatments that encourage people to spend time on affected streets.

For off-street routes (through parks, etc) we have made general comments about the accessibility and condition of paths.

Prioritisation

Routes are prioritised as follows:

- Within CWZ (all schemes) – blue shaded.
- Urgent maintenance (outside of this LCWIP).
- Where measures can be delivered alongside building cycleways.

Design principles

Minimum standards of design are established as follows and are also the standards against which existing pedestrian infrastructure has been assessed:

- Footways and crossings designed with wheelchair and mobility scooters in mind will also provide benefits for those Disabled people with other acute and often extremely painful conditions such as arthritis, difficulties balancing, which are exacerbated by undulating surfaces with steep gradients and crossfalls.
- Space for walking should be a minimum of 1.5m for short distances but otherwise in excess of 1.8m. Emphasis should be given to conditions that promote sociable walking.

- Crossfalls (the drainage gradient across the footway) should not exceed 1:40. This means driveways should be level at the point where pedestrians cross them.
- At priority junctions, first preference should be to provide a generous continuous footway with kerbs and tactile information arranged in such a way as to emphasise pedestrians' priority across the junction mouth. When TSRGD guidance allows, sideroad zebra crossings should be added to all priority junctions.
- Signalised pedestrian crossing phases should be provided at all signalised junctions, with a maximum wait time to favour walking and direct crossings preferred wherever feasible. If it is necessary to build two-stage crossings, any stagger should be designed to accommodate non-standard cycles which may be used by Disabled people as mobility aids. LTN1/20 provides further information about turning radii and space requirements.
- Crossing distances should be minimised by reducing lane widths, tightening junction geometry. Controlled and uncontrolled crossings should be provided between junctions as well as at junctions, so that a wheelchair user can cross the main road.
- Footway parking should be banned by local traffic management Orders. Otherwise, accessibility for pedestrians and particularly Disabled pedestrians and parents with buggies will be unacceptably compromised.

Schemes: routes – see Stage 6 below.

Schemes: area based – See stage 6 below.

Stage 4a: Removal of obstructive barriers and improvements to modal filters

Introduction

Schedule 19 to the 2010 Equality Act places a Public Sector Equality Duty on Local Authorities to continuously (a) design-out discrimination in the first place, and (b) 'eliminate' unlawful discriminatory infrastructure or redesign it in a way that considers the needs of all individuals regardless of their age, religion or belief, race, gender, gender reassignment, sex, sexual orientation, pregnancy or maternity, or Disability.

We have capitalised the word "Disability" to refer to the social model of disability in which the environments we create may exacerbate the problems of accessibility by reason of steps, avoidable steep gradients, crossfalls, barriers, uneven or undulating surfaces and so on.

Infrastructure for cycling and walking provides an opportunity to improve accessibility primarily for Disabled individuals; however, it is often the case that this is undermined by discriminatory 'access' barriers which are, in their implementation *without due regard* to the requirements of the Act, unlawful.

This very helpful video by Sustrans

<https://youtu.be/6hy7PTqcgQA> sets out the reasons why access barriers create accessibility problems, including the way they prevent or restrict access for Disabled people in wheelchairs, on adapted cycles, recumbents, trikes and mobility scooters.

It should be noted that Disabled people are entitled to make compensation claims if they can show they are inconvenienced by obstructive barriers and other features that make access difficult for them.

If barriers of any kind are required, they must be designed in such a way as not to exclude individuals, in this case mainly Disabled people whose mobility and enjoyment of infrastructure may be impaired or curtailed by the features. Disabled people include:

- People who have 'invisible' Disabilities, including arthritis pain, sensory impairments or limits on the distance they can walk due to their health or specific disability. Many in this group may prefer to use bicycles as mobility aids.
- People who have 'visible' Disabilities, including the need to use a mobility scooter, white cane, guide dog or wheelchair. These are people most readily identified as 'disabled' and who experience the greatest difficulty negotiating disabling environments.
- People whose visible or invisible Disabilities may be greatly eased by cycling, whether the cycles used are standard two-wheeled upright cycles, or tricycles, tricycle recumbents or other cycles specifically adapted to their needs. In many cases, Disabled people may find cycling significantly easier and less painful than walking. Pedestrian-only zones where cycling is banned may discriminate against these individuals hence it is important to consider cycles as mobility aids.

Guidance on the design or removal of barriers can be found in Local Transport Note 1/20 (Department for Transport 2020). The space requirements of non-standard cycles are included in the guidance to show how much turning and movement space is required. Space standards for larger cycles may be applied to wheelchairs and mobility scooters, too.

Myths

Barriers are normally installed to prevent anti-social motorcycle access to paths. However, Sustrans points out that motorcycles are not generally denied access since a determined motorcyclist will find other ways of accessing the route or a way of circumnavigating the barrier. The issue of anti-social motorcycling is something that should properly be dealt with by a combination of natural surveillance from other path users and occasional police patrols.

In the case of West Totton, there are many places where motorcyclists can easily access the network of greenways unimpeded in spite of the barriers.

However, some means of preventing general motor vehicle access is required in many circumstances, and bollards spaced at 1.6m centres are sufficient for this without affecting accessibility for path users.

Barriers are also installed to 'slow' people down on the approach to road crossings. This is understandable and it may be appropriate to retain half-barriers or increase the space between barriers to 3.5m with no overlap as a means of alerting people to the presence of a road.

However, it is strongly recommended that all crossing points are treated to ensure that drivers are aware of them, and speeds are reduced to improve anticipation and reaction. In some cases, cutting back vegetation is a recommended quick win to give drivers and pedestrians more of a chance to see each other.

Method

Barriers were identified during a cycled site visit to the main greenways and other identified barriered paths in West Totton and across Totton and Eling. Taking the Town Council's stated minimum gap distance between barriers as a starting point we measured each gap and the overlap between barriers and took a site photograph.

Design principles

LTN1/20 provides the geometric design of various types of cycles including their turning circles. The guidance may be applied to mobility scooters and wheelchairs since the recommended space standard will be wide enough. From this, the 'design cycle' represents

the largest type of non-standard cycle available on the market, which is:

- Length 2.8m (max)
- Width 1.2m (max)
- Outer turning radius 3.4m (max)
- Inner turning radius 0.1m (min) for two wheeled cycles, and 2.5m for cycles with three or four wheels.

Paragraph 1.6.1 bullet 16 in LTN1/20 states that access barriers and Cyclist Dismount signs **should not be installed** because they reduce the usability of routes for everyone, and they may exclude people riding non-standard cycles including cargo-bikes. Not everyone can dismount their cycles (easily), therefore asking people to dismount is not reasonable. Bullet 17 recommends the use of bollards combined, if necessary, with traffic regulation Orders that can be enforced.

This report therefore sets out measures that will meet the guidance without necessarily removing every barrier fence 'panel'. The definition of a 'panel' is one unit of barrier fence which can be installed independently or bolted to others. However, even where the recommendation is to remove just one barrier:

- A gap of 1.6m must be provided between each bollard, or a single bollard and one side of the path.
- A 1.6m gap must be provided between the end of the remaining barrier and the edge of the path, if one of a pair is removed,
- A bollard will always be preferred, but retaining the barrier will reduce costs.
- The chicane should result in a minimum distance between nonoverlapping barriers of 3.5m. The Town Council's current standard is 2m and not all barriers currently meet it.
- Reflective and Day-Glo (nighttime and daytime respectively) bands must be applied to bollards and barriers to improve their visibility to people with visual impairments, especially where street lighting is infrequent.

Map of barriers and modal filters

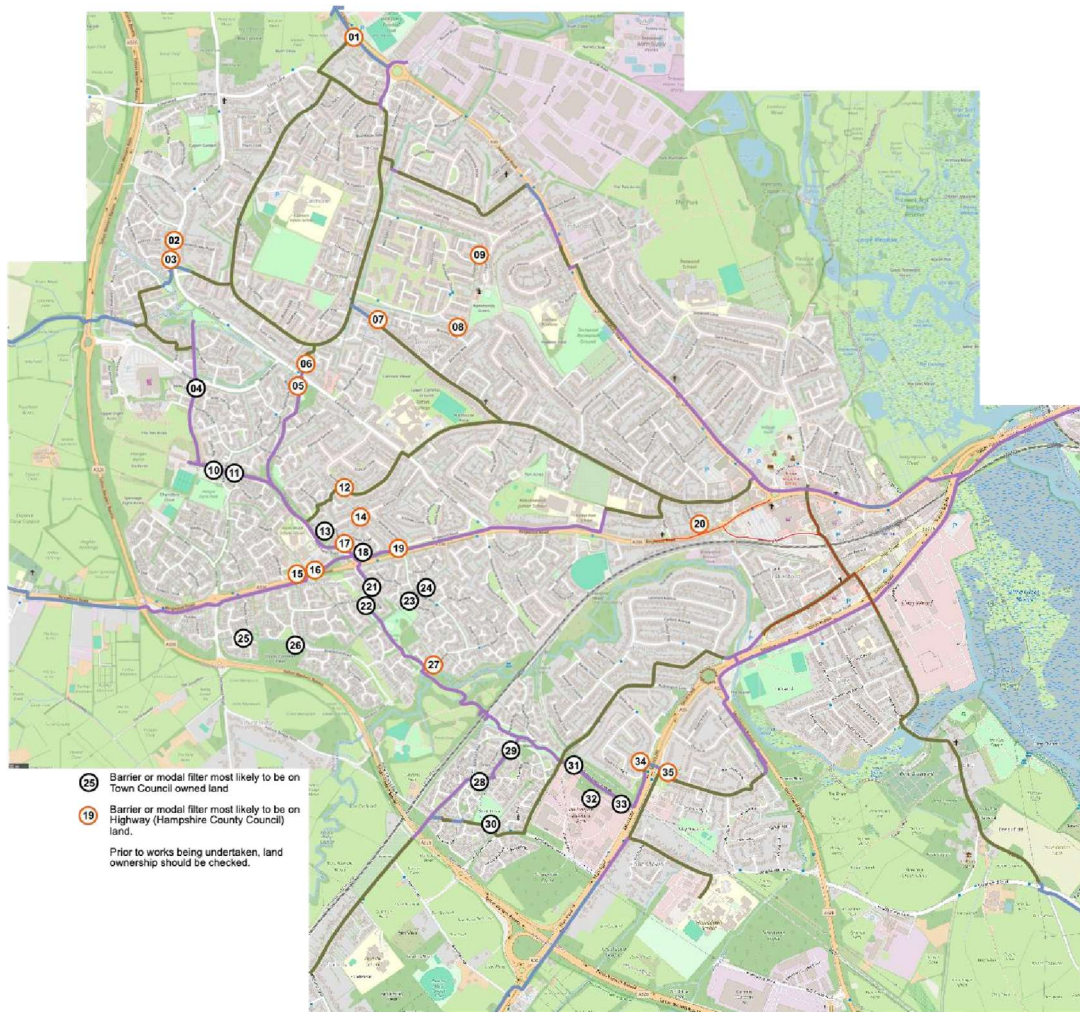



Fig 28: Map of existing barriers and modal filters.



Barrier study outputs and prioritisation

Site	Location and notes		Gap	Overlap	Priority	Recommended Treatment
01	<p>Opposite Aldi, Salisbury Road.</p> <p>On core cycle routes 1 and 2 (Calmore to central Totton via Salisbury Road and Hammonds Green respectively)</p> <p>Aldi have provided shared use paths to access their store but there is no dropped kerb to Cooks Lane.</p>		n/a	n/a	1	Install flush dropped kerb with corduroy tactile pavers and pave to new asphalt.
02	<p>On West Totton Greenway network crossing of Kathryn Close</p>		n/a	n/a	1	Remove CYCLISTS DISMOUNT sign

03	On West Totton Greenway network crossing of Amey Gardens		n/a	n/a	n/a	Remove CYCLISTS DISMOUNT sign
04	Michigan Way (west) On core cycle route 7 (West Totton Greenway) On main cycle route between West Totton and Calmore.		1.2m	0	1	Remove one of the barriers (ensure the hard path surface is continuous).
05	Calmore Road / Flowerdown Close crossing (west) On core cycle route 7 between West Totton and Calmore		2m	30cm	1	Remove both barriers and replace with single bollard, leaving a minimum 1.5m gap on at least one side of the bollard.



06	<p>Calmore Road / Flowerdown Close Crossing (east)</p> <p>On core cycle route 7 between West Totton and Calmore</p>		2m	50cm	1	<p>Remove both barriers and replace with single bollard, leaving a minimum 1.5m gap on at least one side of the bollard.</p>
07	<p>Hammonds Green north end.</p> <p>On core cycle route 2 from Water Lane to Calmore.</p>		1.2m	35cm	1	<p>Remove both barriers. Install bollard leaving a 1.5m gap on the left side as viewed from the photograph. Note underground services.</p>
08	<p>Brackley Way / Kilnyard Close</p> <p>Priority due to impermeable pedestrian network and need to improve access for Disabled pedestrians.</p>		52cm	0cm	1	<p>Remove both barriers and install a single bollard leaving a 1.5m gap between the bollard and the fence.</p>

09	<p>Honeywood Close</p> <p>Priority due to impermeable pedestrian network and need to improve access for Disabled pedestrians.</p>		86cm	20cm	1	Remove both barriers.
10	<p>Aikman Way (north)</p> <p>On core cycle route 7 between Hanger Farm and Hounsdawn.</p>		1.75m	50cm	1	<p>Remove staggered barrier nearest to bollards, retain bollards.</p> <p>Temporarily retain farthest barrier (from camera) until the road has been modified to prioritise cycles and pedestrians crossing.</p>


11	<p>Aikman Way (south)</p> <p>On core cycle route 7 between Hanger Farm and Hounslow.</p>		1.2m and 1.3m	50cm	1	Remove gate and replace with bollard leaving a 1.6m gap on at least one side of the bollard.
12	<p>Modal filter with no dropped kerbs for pedestrians or cyclists.</p> <p>On core cycle route 2 between Totton and West Totton.</p>		n/a	n/a	1	Install dropped kerbs and asphalt path


13	<p>Magpie Drive (west)</p> <p>On cycle route towards Ringwood Road (Goodies)</p>		1.2m	0cm	2	Remove both barriers
14	<p>Magpie Drive (east)</p> <p>On cycle route towards Ringwood Road (Goodies)</p>		1.1m	0cm	1	Remove both barriers. Install bollard to left of path as shown in image to prevent cars being driven through.



15	<p>Holland Road (west)</p> <p>On cycle route 3 towards Ringwood Road (Goodies)</p>		2.0m	50cm	2	Remove both barriers.
16	<p>Holland Road (east)</p> <p>On cycle route towards Ringwood Road (Goodies)</p>		2.0m	70cm	2	Remove both barriers.
17	<p>Magpie Drive (south)</p> <p>On core cycle route 7 between Hanger Farm and Hounsdawn.</p>		1.8m	60cm	1	Remove both barriers.


18	<p>Hazel Farm (east)</p> <p>On core cycle route 7 between Hanger Farm and Hounsdawn and route between Abbotswood Junior School and Netley Marsh.</p>		2.0m	0cm	1	Remove both barriers.
19	<p>Eastbound bus stop, Ringwood Road opposite Graddidge Way.</p> <p>On core route 3 between Forest Schools and West Totton (Goodies)</p>		n/a	n/a	n/a	<p>Move bus stop to west of greenway with new path giving access.</p> <p>Replace bollards with reflective bollards for safety at night.</p>
20	<p>Haselbury Road – south</p> <p>Modal filter has no dropped kerb to Ringwood Road</p>		n/a	n/a	2	Install dropped kerb



21	<p>Harold Close (north)</p> <p>On core cycle route 7 between Hanger Farm and Hounsdawn.</p>		2.0m	50cm	1	Remove both barriers. Cut back vegetation at road to improve sight lines.
22	<p>Harold Close (south)</p> <p>On core cycle route 7 between Hanger Farm and Hounsdawn.</p>		2.0m	50cm	1	Remove both barriers. Cut back vegetation by road to improve sight lines



23	<p>Graddidge Way crossing (east)</p> <p>On West Totton Greenway network.</p>		2.0m	90cm	3	<p>Remove barrier nearest to camera. Retain other barriers.</p> <p>Cut back vegetation to improve intervisibility.</p>
						<p>Improvements are needed at the crossing point to reduce road danger.</p>
24	<p>Graddidge Way crossing (west)</p> <p>On West Totton Greenway network.</p>		1.9m	1.0m	2	<p>Remove both barriers.</p> <p>Improvements are needed at the crossing point to reduce road danger.</p>

25	<p>Roundhouse Drive (east)</p> <p>On West Totton Greenway network.</p>		2.0m	40cm	2	Remove both barriers.
26	<p>Briarwood Drive crossing (west)</p> <p>On West Totton Greenway network.</p>		2.0m	30cm	2	<p>Remove both barriers and install a bollard leaving a 1.5m gap on at least one side.</p> <p>Cut back vegetation to improve sight line.</p> <p>Safety improvements required at crossing point.</p>

27	<p>Myrtle Drive</p> <p>The unmade track and lack of accessible dropped kerb acts as a barrier to access.</p> <p>Route provides access to core cycle route 7 between Hanger Farm and Hounslow.</p>		n/a	n/a	1	<p>Install hard surfaced path (3.0m) and flush dropped kerb with appropriate ladder tactile paving to mark the transition between the carriageway and footway without indicating a crossing point.</p>
28	<p>Ibbotson Way</p> <p>On core route 4 between Foxhills and West Totton</p>		2.0m	50cm	1	<p>Replace barriers with bollard leaving 1.6m between bollard and one side of path.</p>

<p>29</p>	<p>Ibbotson Way (north end of path)</p> <p>Part of route 4 between Foxhills and West Totton near its junction with route 7.</p>		<p>1.2m</p>	<p>1.0m</p>	<p>1</p>	<p>Replace barriers with bollard leaving 1.6m between bollard and one side of path.</p>
<p>30</p>	<p>Ibbotson Way path, southern end near Cocklydown Roundabout</p>		<p>1.0m</p>	<p>1.0m</p>	<p>2</p>	<p>Remove inner barrier.</p> <p>Install dropped kerb to carriageway</p>

31	<p>Wally Hammond Way / Rushington Lane crossing south of railway bridge.</p> <p>Part of route 7 (West Totton Greenway)</p>		1.2m	0m	1	<p>Remove one of the two gates or secure in open position.</p> <p>Clearer demarcation of crossing would improve safety</p>
32	<p>Wally Hammond Way / Chapel Lane</p>		1.5m	0m	2	<p>Remove one of the two barriers.</p>

33	<p>Wally Hammond Way / A35.</p> <p>On route 7 (West Totton Greenway)</p>		1.5m	0m	1	Remove one of the two barriers.
34	Hounslow subway (W)		1.2m	0m	1	Address gradient to subway, widen path and designate as cycleway. Remove barrier nearest to camera.

35	<p>Hounslow subway (East, looking south)</p> <p>On route 7 (West Totton Greenway) at junction with route 5 (Hounslow to Colbury).</p>		2.2m	0m	1	<p>Widen path and replace barriers with two bollards leaving a 1.6m gap.</p> <p>Install dropped kerb accessing hatched area on carriageway.</p>
35	<p>Hounslow subway (East, looking north)</p>		1.2m	0m	1	<p>Remove barriers.</p>



Next steps

We recommend the Town Council undertakes the following actions:

- Prior to any works, confirm the Town council owns the land on which the barriers are situated. Other owners may be implicated, including New Forest District Council (Calmore Estate) and Hampshire County Council (Highways land). Maps showing highway land extents are available from Hampshire County Council.
- Obtain quotations from a contractor to (a) remove substandard barriers as indicated above; and (b) install any new bollards.
- We suggest each site will cost an average maximum of £200 including the removal of each barrier, localised remediation (filling in holes left behind by barrier removal) and installation of bollards. A new bollard may cost a further £200.



Stage 5: Complementary measures

Introduction

This LCWIP concentrates on infrastructure giving emphasis to improving conditions for walking, wheeling and cycling. In this additional brief stage, we set out some potential complementary avenues to explore further based on experience of other local authorities.

Complementary measures refer to additional activities designed to raise awareness of and promote the use of the active travel infrastructure. It may also include the engagement stages of the

LCWIP and opportunities to promote active travel as part of other events, such as a regular street market.

List of suggested measures

Measure	Example
Delivery of mobility hub as described in Waterside Transport Strategy.	www.como.org.uk provides a map of mobility hubs either delivered or committed with funding, including Andrew Road / Huntingtree Park Halesowen (delivered) and Southampton (committed).
Free e-bike loans for a month with the subsidised option to purchase.	Luton Borough Council, London Borough of Hackney.
Free loan of child carrying equipment such as seat attachments and trailers to suit children of all ages	An initiative of social enterprise CarryMe Bikes in Hackney, London.
Cyclists' breakfasts: Breakfasts of croissants and coffee provided for commuting cyclists on one or two mornings each year.	Volunteer action by various cycling organisations co-ordinated or supported by the local authority.
School, hospital and business "Modeshift" and Living Streets programmes to promote walking, wheeling and cycling	Initiatives run by Brightwayz in Kettering including an award-winning scheme at Kettering General Hospital.
School cycling or walking 'buses'	Christchurch schools' bike bus initiative set up and run by the school and parents.
Inclusive cycling scheme using adapted non-standard cycles to widen participation in cycling.	PedALL, New Forest, a community inclusive cycling charity supported by the NHS, SCARF and Colton Care, funded by the National Lottery Community Fund, Sport England and British Cycling. Wheels for Wellbeing, London, with similar aims and objectives.

Social prescribing	Local GP surgeries encouraged to prescribe active travel rather than hand out drugs. Active travel has a preventative and improvement effect compared with drugs which merely control symptoms with no inputs from patients, leading to other conditions.
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Stage 6: Prioritisation

Cycling schemes (Stage 3)

Map Figure18 shows the entire core cycling network which is the focus of prioritised schemes over the five-to-ten-year horizon of this LCWIP.

The following table sets out, section by section (with sections including individual junctions) the proposed measures together with an estimate of cost for routes given a 1a, 1b or 2a priority only. These are presented in order of priority, with schemes at the top of the list to be delivered first.

However, this does not prevent “later” schemes coming forward where there are specific opportunities such as s.106 and CIL developer funding.

All sections *except* those with a grey background are wholly or mostly within highway land. Sections with a grey background are on land mostly owned or managed by Totton and Eling Town Council and are most likely to benefit from s.106 and CIL funding.

Cost assumptions

Cost estimates are very approximate for the purposes of estimating a general budget and based on an internet search of other LCWIPs and scheme costings. Further work is required to develop concept designs and provide square metre costings including any initial high level site observations about underground services and obstructions / constraints.

Because the accuracy of costings cannot be assured, only schemes to be delivered as priority 1a, 1b and 2a are cost-estimated.

We have used the following rough assumptions as a general guide:

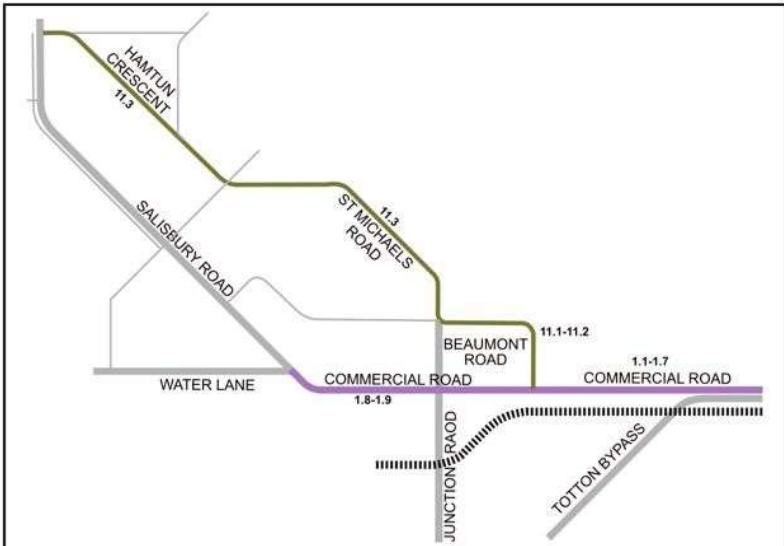
- New high-quality flagship cycleway with public realm measures including footway improvements estimated at £1.8m per kilometre, or £1,800 per metre (cost applied to completely new sections of route numbered 1.1-1.14 between Redbridge Flyover and Testwood Recreation Ground).
- New basic quality or improved existing cycleway, or conversion and widening of existing footway to form segregated paths, or new footway £125 per square metre. Cycleways and shared use paths are assumed 3m wide, and footways 2m wide.
- Priority junction treatments and speed tables are assumed to cost £20,000 each.
- Sinusoidal humps and modal filters are assumed £10,000 each.
- Removal or modification of unlawful access barriers assumed £400 each including more suitable replacement barriers.
- Zebra crossings are assumed £40,000 each.
- Toucan or parallel signalised crossings are assumed £70,000 each not including paths leading to them.
- Modifications to a signalised crossing are assumed £30,000 each.
- New signalised junctions are assumed £300,000 each.
- Traffic management Orders are assumed £8,000 each.
- Other costs given are nominal estimates.

Priority level 1: funnel cycle routes (1-5 years)

1a = schemes on 'near market' scenario higher demand sections, town centre streets, and road danger reduction priorities.

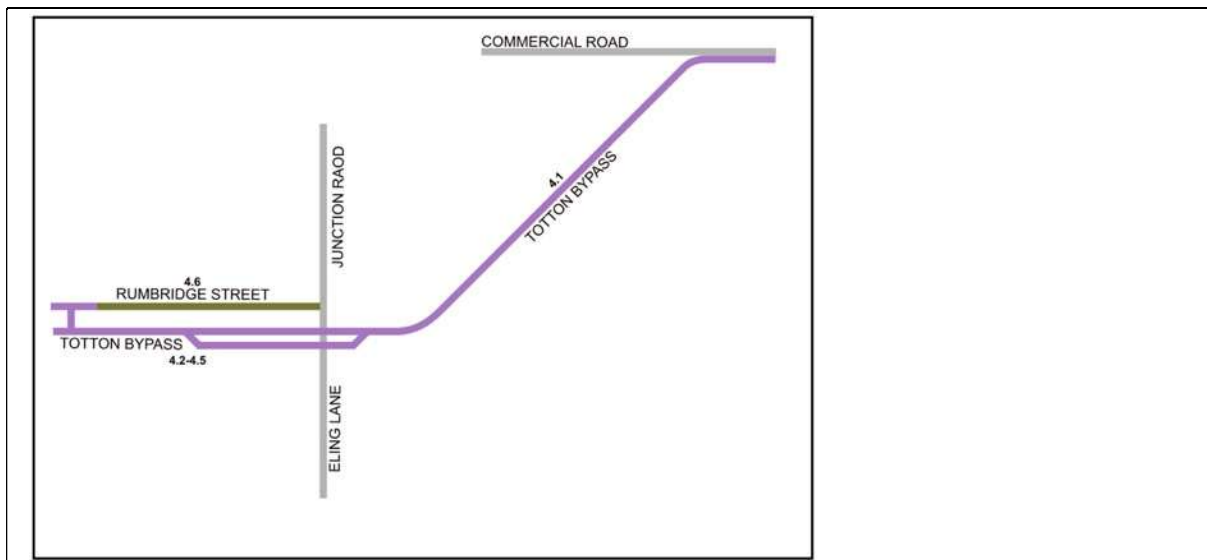
1b = other schemes on funnel cycle routes.

Section	Existing conditions (with general reference to LTN1/20) and / or existing cycle infrastructure	Suggestion Cycling <i>Walking and wheeling</i>	Pty	Length (m)	Cost £k
Redbridge to Testwood via town centre					



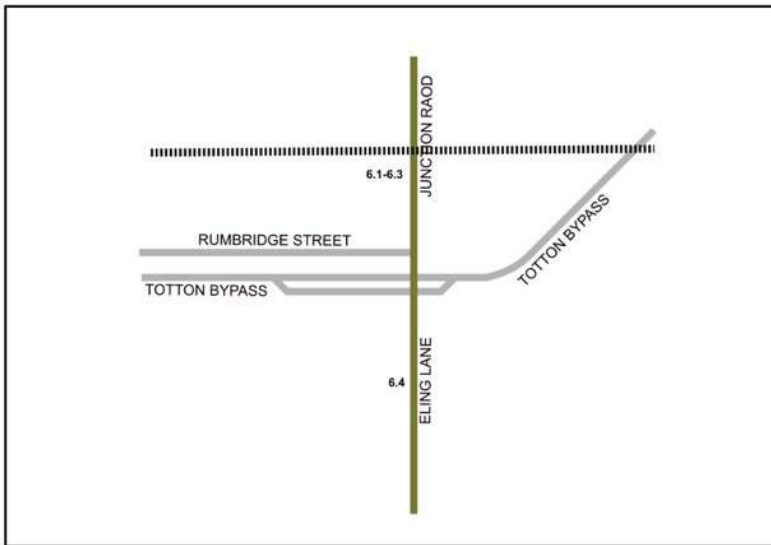
1.1	Shared use path onto Red Bridge.	Provide segregated 3.0m flagship two-way cycleway. <i>Provide segregated 2.0m footway.</i>	1a	400	720
1.2	Shared use path beneath flyover.	Provide segregated flagship 3.0m two-way cycleway. <i>Provide segregated 2.0m footway.</i>	1a		
1.3	Existing informal crossing over busy road with high volume of fast moving motor traffic.	Widen crossing to allow two-way cycle flows, with cycles giving way to motor vehicles. Reduce carriageway speed limit to 30mph. Cycles to cross one lane on each half of crossing (introduce break in eastbound bus lane and narrow westbound lane). <i>Provide segregated 2.0m section of footway on island.</i>	1a		
1.4	Substandard Jug handle turn to access route to Southampton and narrow footway in verge with inset bus stop.	Provide segregated 3.0m flagship two-way cycleway and bus stop bypass. <i>Provide segregated 2.0m footway.</i>	1a		
1.5	Busy priority junction with conflicts between	Provide signalised junction associated with "McDonalds	1a	-	250
	motor vehicles turning in / out and continuing along main carriageway. Unsuitable for cycling on carriageway.	Drive-Thru" facility <i>incorporating cycle and pedestrian crossing phase.</i>			

1.6	Two-way carriageway carries high volumes of motor traffic all day. Requires segregation of cycles.	Provide segregated 3.0m flagship two-way cycleway. One section will require some third-party land and may need to be shared use in the interim. <i>Provide segregated 2.0m footway.</i>	1a	580	1044
1.7	Adjacent carriageway splits into two, with 3.5 traffic lanes in total. Unsuitable for cycling with motor traffic.	Cycle crossing associated with possible re-opening of northern arm at Junction Road and installation of bus gate (note this is one of several scenarios being tested in the Masterplan) <i>Provide segregated pedestrian crossing</i>	1a		
1.8	Adjacent carriageway and roundabout are busy, and location requires segregated cycle infrastructure. Library Road and the service road are suitable for cycling.	Two-way flagship cycle track crossing possible closed Library Road and signalisation of the roundabout (note this is one of several scenarios being tested in the Masterplan). Resurface service road and allow contraflow cycling. <i>Provide resurfaced segregated 2.0m footway.</i>	1a		
1.9	Pedestrian crossing to Water Lane provides a connection across the busy Salisbury Road which is not suitable for cycling in the carriageway.	Convert crossing to a parallel cycle and <i>pedestrian</i> crossing. Widen the existing one-way street to allow cycle contraflow to Water Lane.	1a	-	
11.1	Quiet service road with occasional motor vehicles, one-way. Suitable for cycling.	Introduce cycle contraflow associated with existing false one-way. 20mph speed limit. <i>See Walking for pedestrian measures</i>	1a	-	
11.2	Quiet street suitable for cycling	Reduce size of junction and raise junction to incorporate continuous footways. Use bollards to prevent vehicle overrun on flush footways. 20mph speed limit.	1a	-	30
11.3	Quiet street suitable for cycling (busier during school drop off / pick up times)	20mph speed limit and wayfinding logos painted on carriageway.	1a	-	50
Redbridge causeway to Rumbridge					



4.1	Narrow shared use path alongside busy dual carriageway	Redesignate as cycleway. No further treatment anticipated in this LCWIP.	1a	-	5
4.2	Narrow shared use path behind houses and also on grade separated bypass adjacent to busy dual carriageway.	Redesignate as cycleway. No further treatment anticipated in this LCWIP.	1b	-	5
4.3	Dangerous conflictual junction where cyclists expected to cross side road bellmouth with busy high speed traffic adjacent movements and no assistance.	Improve safety at junction with Bartram Road. Consider two stages with triangular island.	1a	-	50
4.4	Shared use path adjacent to busy dual carriageway, no buffer.	Introduce 3.0m cycleway segregated from pedestrian footway with 1.0m buffer.	1b	400	150
4.5	Toucan crossing in two stages with reasonably wide central waiting area.	Reduce wait time at existing toucan crossing. No further changes anticipated in this LCWIP	1b	-	5
4.6	Busy narrow carriageway with dominant motor traffic flows in west to east direction. Conflicts with on-street parking (in spite of generous car park to rear of frontages).	Consider one way operation east of Winsor Road, with cycle contraflow and inset parking bays. Introduce 20mph speed limit throughout and parking restrictions to west of Winsor Road.	1b	-	10 (study)
5.1	Toucan crossing (new) associated with new bus lane.	Reduce wait time at existing toucan crossing. No further changes anticipated in this LCWIP	1b	-	5

Junction Road to Eling Lane



6.1	Busy north-south route through Totton with one section to be converted for bus use. No space for cycle infrastructure.	Introduce 20mph speed limit (Order and signage). <i>Widen footways where possible; consider incorporating third party land where available</i>	1a	-	8
6.2	Busy staggered priority junction with dominant flows north to south and west to north. No space for cycle infrastructure.	Consider changing priorities associated with one way operation on Winsor Road and Rumbridge Street, or other measures to improve safety at this junction.	1a	-	10 (study)
6.3	Build-out provided as part of changes to cycle route. Occasional intense traffic volumes with vehicles going south when released from level crossing on Junction Road.	Introduce priority crossing for cycles crossing Eling Road (redesignated as cycleway)	1a	-	10
6.4	Straight section of road with no speed reduction measures. Currently unsuitable for cycling without segregation but could be suitable with motor traffic speed reduction.	Introduce 20mph speed limit and sinusoidal speed humps. Give priority to traffic turning right into Rose Road to reduce conflicts between cyclists travelling north and drivers turning right without looking.	1a	-	60

Priority Level 2: routes leading to funnel cycle routes (5-10 years with isolated sections to be delivered in 1-5 years)

2a = schemes on 'near market' scenario higher demand sections

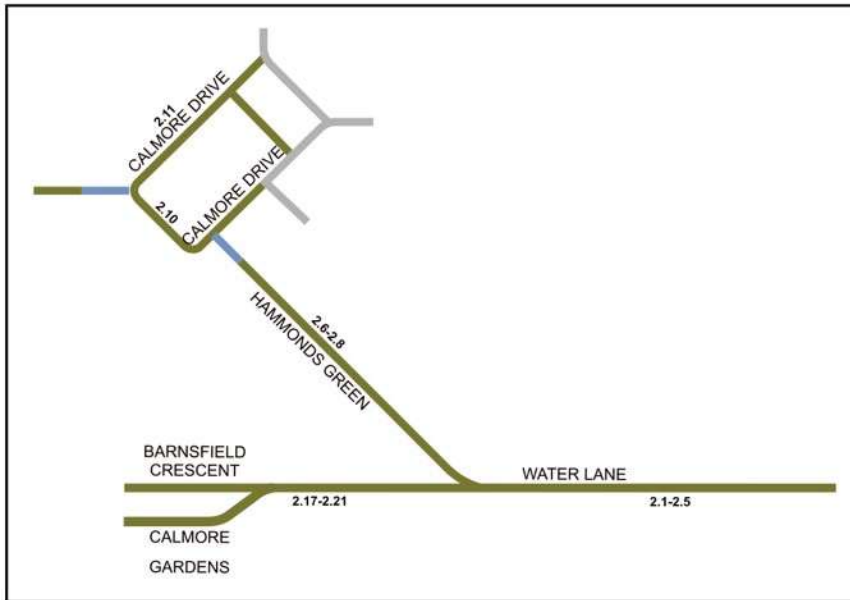
2b = other schemes on cycle routes or with good interim provision.

Section	Existing cycle infrastructure	Suggestion Cycling <i>Walking and wheeling</i>	Pty	Length (m)	Cost £k (sections prioritised 1a or 1b only)
Water Lane to Calmore Drive					
1.10	Salisbury Road width is within "critical width" in which drivers close-pass cyclists without entering opposite lane. Unsuitable for cycling with traffic. Worn markings on road Worn markings on road	Short section of shared use path by surgery (constrained space)	2a	552	993
1.11		Reduce size of junction and provide pedestrian and cycle crossing across junction mouth (set back)	2a		
1.12		Fill in bus stop and install accessible boarder. Introduce high quality segregated cycleway and footway (2.5m + 1.8m). Replant any removed trees, doubling total.	2a		
1.13		Toucan crossing Introduce pedestrian and cycle crossing over Testwood Lane arm. No further changes to toucan crossing in this LCWIP.	2b		
1.14	Worn 1057 and red antiskid markings on road	Introduce high quality segregated cycleway and footway (2.5m + 1.8m). Replant any removed trees, doubling total.	2a	177	664
1.15		Mark as cycle route, resurface if necessary.	2a	-	10
1.16	Signal junction with pedestrian phase	Add ASL on Hamtun Gardens arm with pre-signal for cycles.	2a	-	1
1.17	Service road layby, one way northbound,	Resurface service road and mark as northbound cycle	2a	-	70

	with parking both sides. Wide grassed verge with footways adjacent to Salisbury Road.	route. Provide southbound cycle track in existing verge and introduce signal head to facilitate cycle crossing to Hamtun Gardens. Provide cycle parking for shops and additional SuDS landscaping (trees, planting).			
1.18	Footway in wide verge with trees. Note: verges under pressure from parking.	Widen existing footway into verge and reduce carriageway width to accommodate 2.5m segregated path and 0.5m buffer connecting to a new continuous foot / cycleway across the mouth of Sutton Road. Incorporate new parking bays leaving 6.2m clear carriageway. Remove and replant trees or allow for pinch points.	2a	100	375
1.19	Footway with limited verge space and none. Limited space.	Widen existing footway into verge and reduce carriageway to accommodate 3m shared use path and 0.5m buffer connecting to Stanley Road.	2a	100	375
1.20	Quiet residential street.	20mph speed limit and wayfinding logos painted on carriageway.	2a	-	10
1.21 1.22	Narrow footbridge over drainage channel	If possible, widen the footbridge and provide a shared use path across it to the existing garage court on the north side.	2a	-	50
1.23	Access road leading to garage court.	Provide clear signage and jughandle turn to enable safe access to the route from Calmore Drive.	2a	-	30
1.24	Quiet estate distributor road with bus services.	Introduce cycle-street with advisory cycle lanes and single 3.2m central vehicle lane.	2a	-	20
1.25	Priority junction	Provide parallel raised zebra crossings on both Calmore Drive arms leading to segregated cycleway. <i>Pedestrian zebra crossings</i>	2a	-	50
1.26	Footways in wide verges.	Segregated cycleway <i>Parallel pedestrian crossing</i>	2a	130	49
1.27	Footways in wide verges. Roundabout with wide flares which encourage its use at speed.	Modifications to roundabout to reduce vehicle entry and exit speeds and facilitate crossings (cycles to give way). Install over-run areas for large HGVs and buses. <i>Parallel pedestrian crossings.</i>	2a	80	30

1.28	Footway in grassed verge of varying width.	Widen existing footway to 3.0m and designate as shared use path. Extends into northern development area.	2b	-	-
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Commercial Road to West Totton via Water Lane



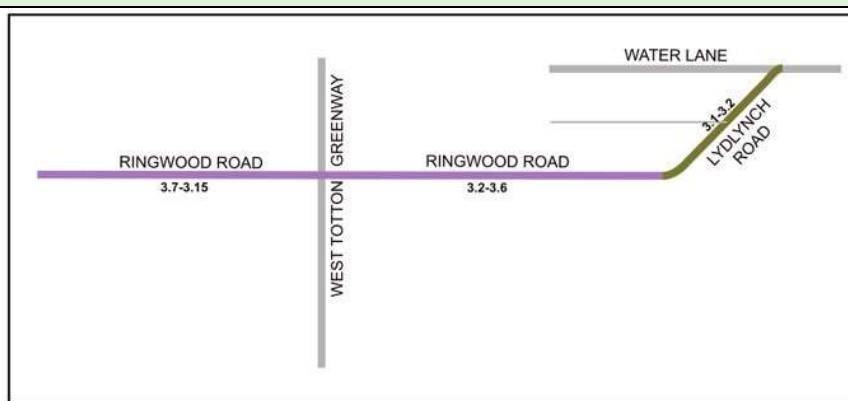
2.1	Speed tables and cycle logos	Add intermediate sinusoidal humps. Consider bus gate.	1a	372	140
2.2	Speed table	No change	2a	-	0
2.3	Speed tables and cycle logos	Add intermediate sinusoidal humps.	2a	-	20
2.4	Speed tables and cycle logos	Add intermediate sinusoidal humps.	2a	-	20
2.5	Jug handle turn from Water Lane to Hammonds Green.	Reduce size of junction. Retain jug-handle and mark crossing point.	2a	-	30
2.6	Residential street and shared surface.	Reposition cycle logos in centre of street and sign as 'cycle street'.	2a	-	5
2.7	None (except existing shared use path leading south)	Resurface and convert to shared use path.	2a	-	50
2.8	None	Provide parallel pedestrian and cycle crossing to access cycle lanes (and future segregated cycleway on Calmore Drive)	2a	-	30
2.9	1.5m advisory cycle lanes and signs advising drivers to use cycle lanes to pass. No parking restrictions.	Interim measures: Widen cycle lanes to leave single motor vehicle lane of 3.2m. Re-provide coloured surfacing at junction mouths. Introduce parking restrictions.	2a	-	10

		Long term view to segregated cycle track in verge.			
2.10	Advisory cycle lanes across junction mouth.	Junction treatment including radii tightening to link to section 2.13.	2a	-	30
2.11	Advisory cycle lanes as far north as Calmore Infant School	Interim measures: Widen cycle lanes to leave central motor traffic lane of 3.2m and extend. Re-provide coloured surfacing at junction mouths. Introduce parking restrictions.	2a	-	10

		Long term view to segregated cycle track in verge.			
2.12	None	Introduce advisory cycle lanes to leave 3.2m central lane on Calmore Drive. Connect quiet Cooks Lane route to section 1.28 by Aldi superstore (requires dropped kerb).	2a	-	10
2.13	Short linking road connecting the Calmore estate with Calmore Road.	Introduce 2.0m advisory cycle lanes each way, truncated 20m short of give way lines onto Calmore Drive.	2a	-	5
2.14	Short linking road connecting the Calmore estate with Calmore Road. Wide junction radius at Calmore Road leading to drivers failing to see cyclists on inside of bend.	Introduce parallel pedestrian and cycle crossings on Calmore Drive and Calmore Road, with new access to greenways. Consider changing give way markings and traffic management measures at junction of Calmore Drive and Calmore Road to address sight lines.	2a	-	100
2.15	Greenway (2.5m shared use paths)	Provide dropped kerb onto Jessica Crescent.	2a	-	2
2.16	Quiet residential street	Resurface carriageway.	2a	-	10
2.17	Local distributor road, busy at times (school pick up and drop off, commuting times). Bus route.	Add further speed tables and sinusoidal humps on Water Lane. 20mph speed limit.	2a	-	40

2.18	Buses have difficulty turning right from Calmore Road into Water Lane due to narrow junction envelope.	Introduce wider junction (build into college land) to facilitate buses. Introduce cycle crossing and short section of shared use path connecting to Barnsfield Crescent and Calmore Gardens.	2a	-	100
2.19	Quiet residential street	No treatment required	2a	-	0
2.20	Modal filter with no dropped kerbs.	Addressed as quick win above	2a	-	5
2.21	Quiet residential street.	No treatment required except wayfinding.	2a	-	1

Water Lane to Netley Marsh

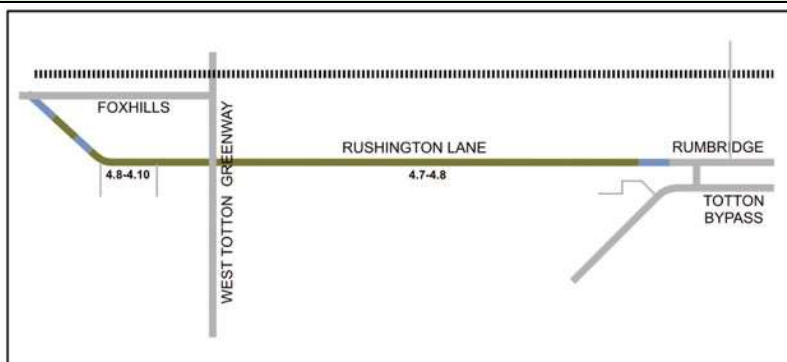


3.1	Residential street. Busy at school drop off / pick up times.	Consider school street treatment and modal filter on Bagber Road.	2a	-	20
3.2	Narrow alleyway between residential development and school.	Third party land required to provide segregated cycleway between school and adjacent housing (following existing alley).	2a	95	36
3.3	Shared use path running behind bus stop and alongside informal parking by Ringwood Road.	Reorganise existing informal car parking to provide segregated cycleway. Note steep crossfall. Convert existing pedestrian crossing to toucan crossing, with lead in cycleway from Bramtoco Way	2a	405	152
3.4	Toucan crossing on Calmore Road arm	Provide segregated cycle and pedestrian crossings on all arms. <i>Provide desire line connection from the junction to the Ringwood Road service road.</i>	2a	-	100

3.5-3.11	40mph speed limit west of Calmore Road.	Amend speed limit on Ringwood Road to 30mph.	2a	-	10
3.5	Shared use path	<p>Re-route shared use path behind bus stop near Coblands Avenue and replace lost woodland.</p> <p>Long term scheme (not priced): provide full segregation with 1.0m planted hedge buffer alongside Ringwood Road.</p> <p><i>Provide improved informal crossing, preferably with an island, to access the shared use greenway network on the south side of Ringwood Road and a connection across the green strip of land between the A337 and Ringwood Road service road.</i></p>	2a	100	375 New paths 15 <i>Informal crossing</i>
3.6	Shared use paths and toucan crossing over Ringwood Road.	Provide improved and more direct crossings at roundabout on Ringwood Road connecting to route 7	1a	-	150
3.7	Shared use path between backs of shops and Ringwood Road with connection to West Totton centre.	Widen to 5m and provide tactile delineator.	2b	-	-
3.8	Ringwood Road with 40mph speed limit.	Provide new parallel crossing (signalised or zebra) over Ringwood Road. Reduce speed limit to 30mph.	2b	-	-
3.9	Shared use path on north side of Ringwood Road	Widen footway on south side of Ringwood Road to 5m with tactile delineator and address gradients either side of Tendring Care Home driveway.	2b	-	-
3.10	Shared use path ends at roundabout on northern arm.	Reduce entry and exit flares from roundabout to single lane and tighten geometry. Provide crossings on all sides. Pedestrians and cyclists to give way to motor vehicles.	2b	-	-
3.11	Footway in verge.	Widen footway to 5m with buffer and tactile delineator (shared use for short linking section). Mark route across entrance to Goodies car park.	2b	-	-

3.12	Footway crosses Totton Western Bypass and connects to service road.	Introduce parallel cycle and pedestrian crossing at new signalised A326 junction. Cycles continue along service road.	2b	-	-
3.13	Service road leading to footway in verge.	Utilise service access road and widen existing footway to shared use, utilising hatched areas from centre of main carriageway for extra space where necessary.	2b	-	-
3.14	Existing informal crossing with no central island – busy at school pick up and drop off times.	Install parallel pedestrian and cycle crossing with short spur to Woodlands Road.	2b	-	-
3.15	Footway in verge and against third party land boundaries.	Widen existing footway to provide shared use path going west towards Cadnam. Some segregation would be desirable around the school and church.	2b	-	-

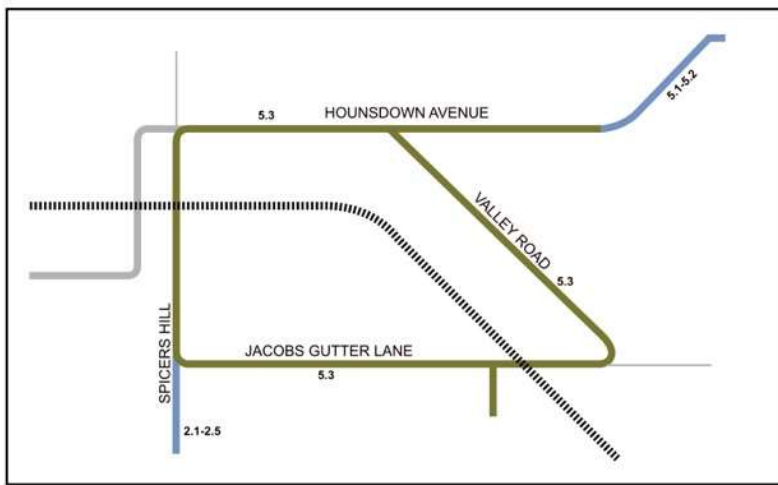
Rum Bridge towards Ashurst



4.8	Signed cycle route on quiet streets.	Tighten radius of Cocklydown Roundabout. No further changes in this LCWIP.	2a	-	-
4.9	Shared use path	No changes in this LCWIP	2b	-	-
4.10	Shared surface access road	No changes in this LCWIP	2b	-	-
4.11	Shared use path	Widen to 5m and install tactile delineator. Raise crossings and introduce cycle and pedestrian priority.	2a	566	212

4.12	Quiet road	<p>Replace existing worn-out speed tables by Foxhills School.</p> <p>Consider introducing school street measures and additional traffic calming with 20mph speed limit and wider footways.</p> <p>Consider modal filter (bus and cycle gate) in the vicinity of the school for use during school street hours or permanently.</p>	2a	-	100
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Rushington Roundabout to Ashurst



5.2	Shared use path (new)	No changes in this LCWIP (new)	2a	-	0
5.3	Quiet residential streets. Some speeding likely.	<p>Introduce 20mph speed limit and traffic calming plus SuDS and tree planting.</p> <p>Consider closing off slip from Spicers Hill with all traffic accessing Hounsdow via Marchwood Bypass.</p>	1a	1080	500
5.4	Shared use path splits to segregated path	Improve existing part segregated path with full segregation and reduced gradients.	2b	-	-
5.5	Shared use path	Widen shared use path where necessary.	2b	-	-
5.6	Toucan crossing	Retain in this LCWIP	2b	-	-
5.7	Pedestrian footway in verge.	Widen to 3.0m and designate shared path towards Ashurst.	2b	-	-

Eling Hill towards Marchwood

6.5	Signed cycle route on quiet lane	No changes in this LCWIP	2a	-	5
6.6	Toucan crossing (new)	Introduce modal filter on Eling Lane	2a	-	10
6.7	"Behind the hedges" shared use path	Widen to segregated use as new development comes forward and extend along Jacob's Gutter Lane towards Hounslow.	2a	2000	750

West Totton core route prioritised in this LCWIP (5-10 years)

1a = Highest modelled demand route between West Totton and Hounslow subway (mostly school travel)

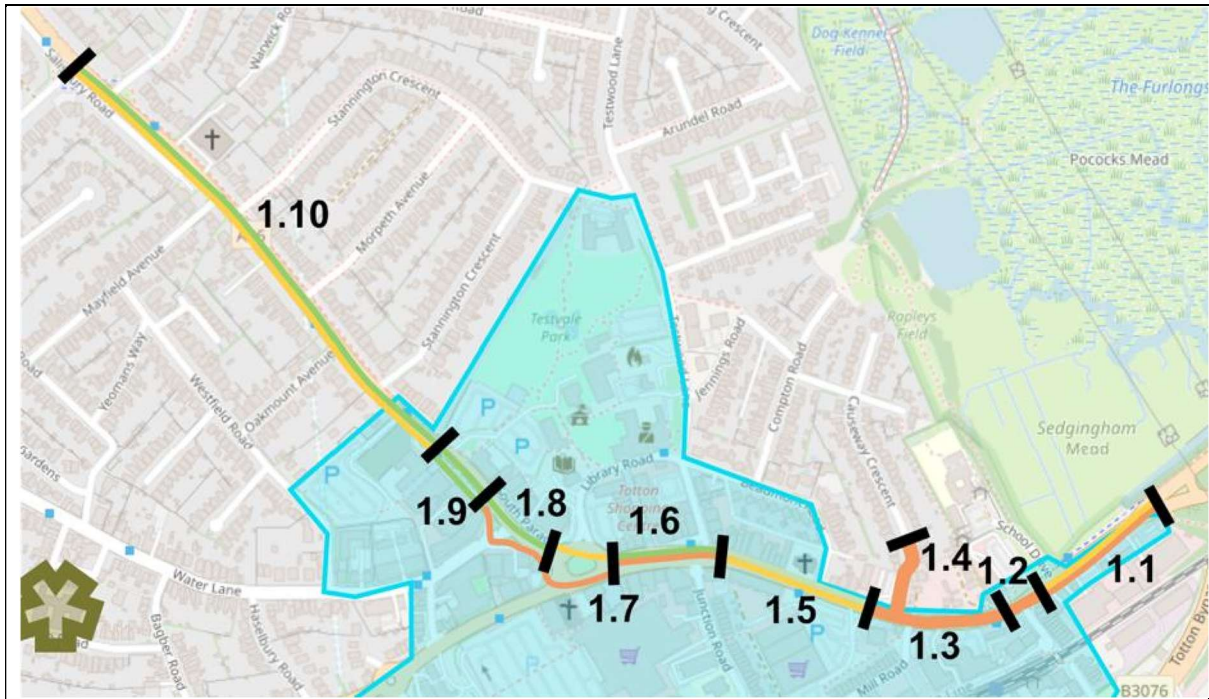
2b = Remainder of West Totton route

Section	Description	Suggestion	Pty	Length (m)	Cost £k
Hounslow (Spicer's Hill) to Winsor					
7.1	Shared use path through subway	Minor changes to improve sight lines and ensure accessibility (given high cost of adding a new subway).	1a	-	10
7.2	Sub-standard shared use path alongside dualled A35 with no buffers. Narrow at railway overbridge.	Widen shared use path into carriageway (reducing carriageway lanes by approximately 0.5m in total). Install guard railing with crud guard where there are gaps.	1a	133	50
7.3	Shared use path	Improve lighting	1a	-	30
7.4	Shared use path	Introduce segregated cycleway (widen path to 5m with tactile divider). Restrict vehicle access along Rushington lane to cycles and buses only.	1a	229	86
7.5	Shared use crossing	Raise existing uncontrolled crossing, widen to segregated use, and give priority to pedestrians and cyclists.	1a	-	10
7.6	Shared use path rising to railway bridge on embankment	Widen shared use path or segregate within constraint of existing embankment.	1a	-	30

7.7	Wooden pedestrian bridge in poor repair with cyclists dismount	Bridge requires replacement with accessible structure – consider Network Rail modular FLOW curvilinear bridge with segregated cycle and pedestrian provision (no lifts).	1a	-	1000
7.8	Shared use path (greenway)	Widen to 5m and segregate using tactile delineator.	1a	791	
3.6	Cycle crossing (toucan)	Amend north south alignment to desire line across arms of modified roundabout.	1a		See 3.6 above.
7.9	Shared use path (greenway)	Widen to 5m and segregate using tactile delineator. Raise crossing at Rufus Gardens and give priority to pedestrians and cyclists.	1a	850	319
7.10	Shared use crossing	Provide direct raised parallel zebra crossing. Remove barriers.	2a	-	50
7.11	Shared use path	Minor improvements to access from Flowerdown Close.	2a	-	20
7.14	None	Route not available until site is developed	-		0
7.15	Shared use crossing	Install raised parallel zebra crossing (see also quick wins)	2a	-	30
7.16	Shared use path (greenway)	Retain unchanged	2a	-	0
7.17	Short section of shared use path	<i>Redesignate shared use path as footway. Wayfinding.</i>	2b	-	5
7.18	Muddy public footpath between hedges. Largely impassable in winter.	Upgrade public footpath to provide shared use hard surfaced link to Tatchbury Lane (part of NFNPA Route 120)	2a	900	338

Walking and wheeling schemes (Stage 4)

Section	Good Middling Poor	Reasons for middling or poor	Suggested remedy including isolated suggestions for “good” sections.
Within CWZ			
Route 1			



Route 1 east to north, southern side

1.1		Surface in poor state of repair. Indistinct footway.	Resurface footway to level standard throughout including flush kerbs and tactile delineators. Add 1no. seat.
1.2		Wide bellmouth junction and poor sight line around side of building. close to carriageway. Inadequate informal crossing. Bus stop narrows footway to <1m and is not accessible.	Continuous footway treatment and bus stop accessibility improvements.

1.3		Footway in poor repair on east side of Lidl junction. Mill Lane and Lidl junction – conflicts, lack of tactile paving, lack of pedestrian priority.	Resurface footway. Continuous footway treatment of Mill Lane and modifications to Lidl junction to give priority to pedestrians (e.g. zebra crossings, geometric changes). Add 1no. seat.
1.4	Applicable eastbound only		
1.5		Footway constrained behind layby parking. Below 3m town centre standard. Bus stop remote from town centre core and unpleasant to access.	Remove layby to enable widening of footway. Consider introducing half inset bus stop bay and shelter as part of interchange.
1.6		Southern footway bounded by heavy traffic lanes and parking bays making it unpleasant for walking. Generally, in reasonable repair; however private accesses have kerbed priority over pedestrians.	Continuous footway treatments and resurfacing as part of any future quality public realm scheme. Widen footway as part of town centre road design and landscaping changes. Add 1no. seat.
1.7		Crossings substantial distance away from desire line (west to north): nearest crossing is the Asda pelican crossing.	Bring pedestrian routes onto desire lines as part of any future public realm scheme. Improve landscaping and general feel of the streetscene.

1.8		Footways adjacent to heavy traffic. Missing sections of footway on	Improvements to footways as part of any future public realm scheme. Address desire lines in short term
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		desire line across Water Lane junction mouth.	with accessible paths and crossings.
1.9		Very wide bellmouth junction giving access to car park.	Tighten bellmouth junction and provide priority crossing for pedestrians as part of cycleway scheme. Infill bus stop and provide bus stop to an accessible standard as part of cycleway scheme.
1.10			Add 2no. seats

Route 1 north to east, northern side

1.10		Footway undulates for driveways.	Reprofile and resurface to provide level footway throughout. Add 2no. seats if space is available.
1.9			Provide bus stop to accessible bus stop standard.
1.8			Address severe crossfall at entry to roundabout.
1.7		Existing informal crossing of Library Road arm is narrow with no pedestrian priority. Drivers pick up speed leaving the roundabout.	Close Library Road to motor traffic as part of any future public realm scheme.
1.6			

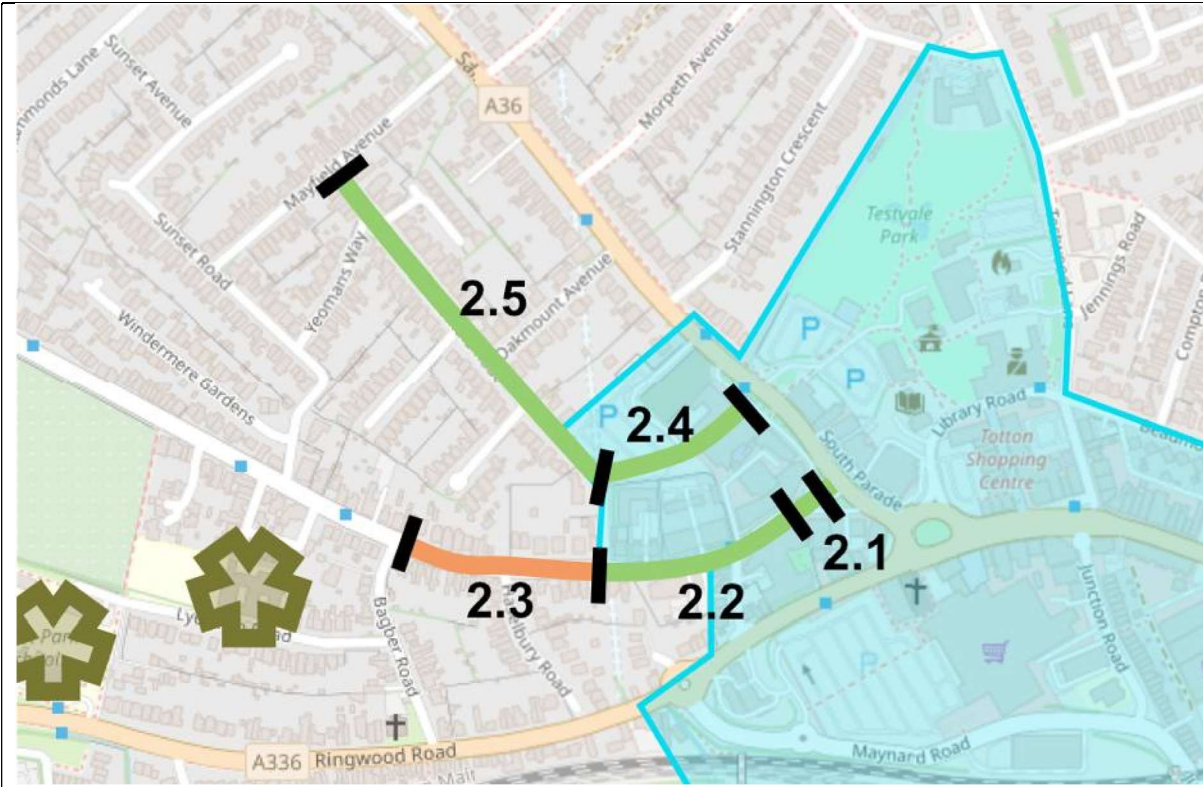
1.5			
1.4		Narrow alleyway with poor surface and low sense of safety	Resurface and improve lighting.
1.3		Crossing of Beaumont Road off desire line with worn tactiles.	Continuous footway / cycleway treatment.

		Footway of sufficient width in part then narrows to 1.5m or less on corner approach to McDonald's junction.	Improvements as part of flagship cycleway: 2m minimum flat (1:40 max crossfall) machine laid surface with accessibility provisions.
1.2		McDonalds and school junction in poor state of repair. Conflicts with motor vehicles entering and leaving both sites.	Introduce signalised junction as part of flagship cycleway with pedestrian crossing provision giving access on north side of Commercial Road and to Station Road North. Provide new footway on north side as part of flagship cycle route scheme.
1.1			

Route 11

Route 11 (both sides of the road and through the park)

11.1		Footways of insufficient width; sections in poor repair by entrances to service roads. Absent tactile paving at junctions	Widen at least one of two footways into verge. Pave short section of service road to prevent future damage.
11.2		Footways of insufficient width and quality	Widen where possible; otherwise undertake routine maintenance.
11.3		Footways meet minimum general standard and there is a good pedestrian	Close Library Road south of library to motorised
		crossing. Improvements including tactile paving, dropped kerbs and resurfacing needed south of library.	traffic and introduce public realm improvements.
11.4		Route for pedestrians across car park is indistinct and requires maintenance in places.	Mark footway and make repairs where necessary.
11.5			
11.6		Footways adequate. Junctions require some treatment.	Tighten radii at Arundel Road and Jennings Road and include dropped kerbs and tactile paving to Inclusive Design.
Route 2			



Route 2 east to west or north, southern side (Water Lane) or western side (Westfield Road).

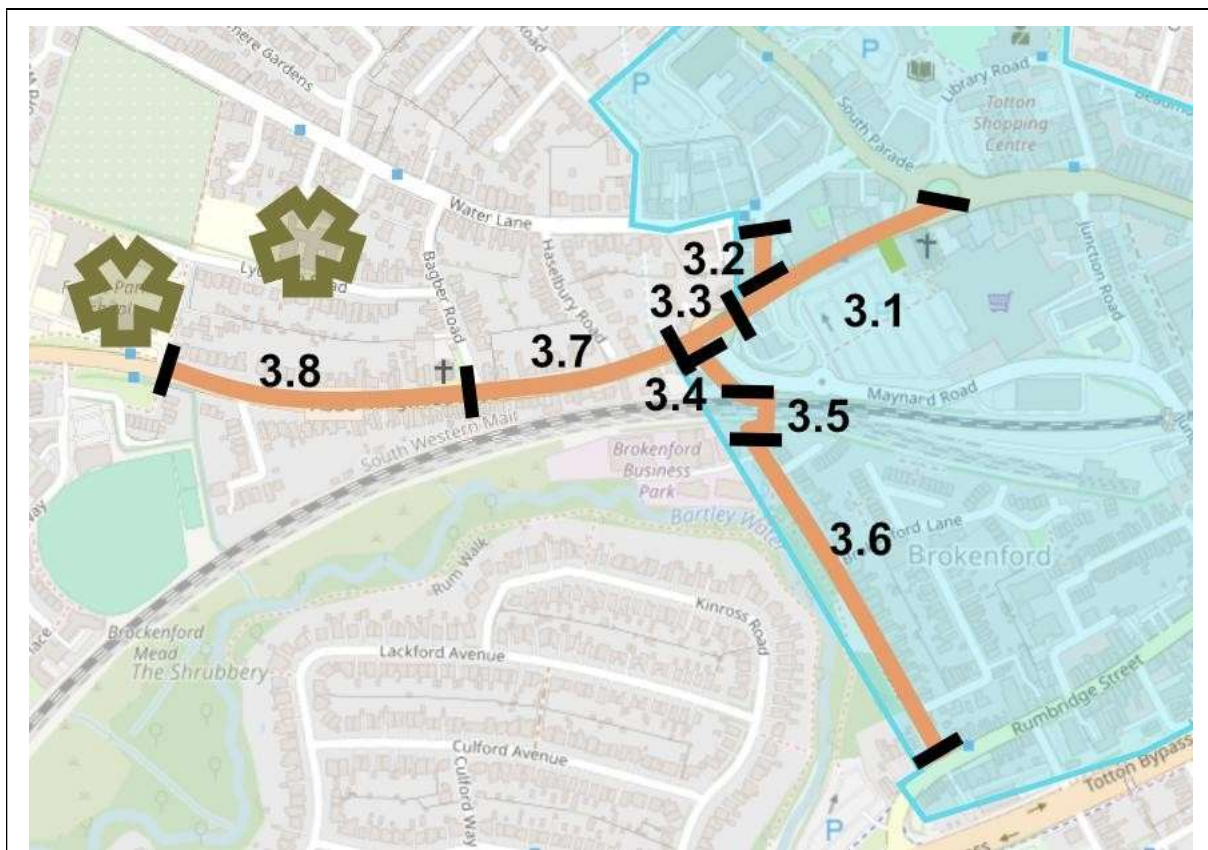
2.1			
2.2			

2.3		Footway narrow in places and has some crossfalls steeper than 1:40. Generally meets width standard of 1.8-2m.	Resurface ensuring flat footway across private accesses. Install missing tactiles and flush kerbs, ideally with continuous footway treatment.
2.4			
2.5			

Route 2 north or west to east, northern side (Water Lane) or eastern side (Westfield Road)

2.5			
2.4			

2.3		Footway width less than 1m in places.	Widen northern footway and provide regular access points (dropped kerbs). Widen southern footway to 1m where possible.
2.2			
2.1			
Route 3			



Route 3 East to west or north to south (southern or eastern footway)

3.1		<p>East of crossing: Poor quality narrow (<2m) footway by pelican crossing with significant crossfall gradient in places, bounded in part by guard railing.</p> <p>West of crossing: footway widens and passes behind bus stop bay.</p>	<p>Reprofile footway and widen at eastern end as part of wider public realm scheme.</p> <p>Partially infill bus stop layby and introduce accessible bus stop features.</p> <p>Retain crossing and reduce wait times (currently >30 seconds).</p>
3.2		<p>Short cul-de-sac dominated by vehicular movements and parking. No footways except at each end, and no dropped kerbs at the southern end to give</p>	<p>Incorporate in wider public realm improvements. In the short term provide dropped kerbs to access the footway and a modal filter at the southern end for cycles to access Ringwood Road.</p>

		<p>access to Ringwood Road footways.</p>	
3.3		<p>Steep crossfall at filling station entrance and exit. Tactiles are provided at the roundabout but have no tails. It is hard for pedestrians to predict motor vehicle movements around the roundabout to enable crossing the exit arm. Central reservation is too small.</p>	<p>Reprofile dropped kerb crossings to provide flat footway at filling station. At roundabout tighten geometry and increase size of central refuge at roundabout. Consider zebra crossing and single lane entry to roundabout.</p>

3.4		Footway behind trees gives access to railway footbridge.	Consider potential scope for introducing shared use ramped access to bridge, if there is sufficient length in the path and enough land to provide a switchback ramp system.
3.5		Footway to pedestrian railway footbridge.	Consider potential scope for introducing shared use ramped access to bridge, if there is sufficient length in the path.
3.6		Very narrow and inconsistent footway on Brokenford Lane. Any widening would need compensatory widening of carriageway to accommodate parking.	Widen footway to 1.5m and compensate with wider carriageway or create shared space with clear pedestrian priority.
3.7		Footway uneven and narrow (1.5-1.8m), becoming narrower (1.5m) towards western	Reprofile footway to flatten and widen where possible to minimum of 1.5m

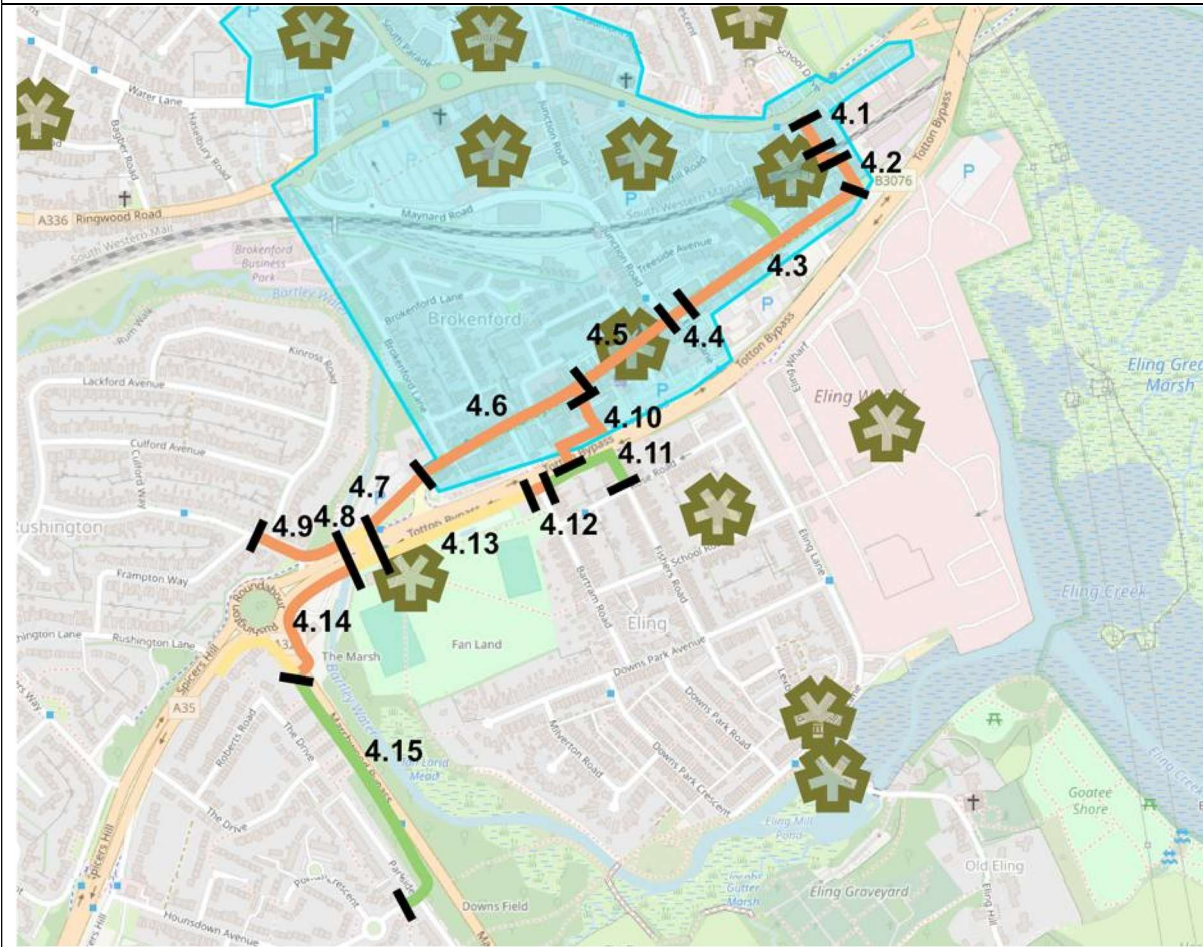
		end of segment. Significant crossfall at all driveway entrances.	(noting narrow carriageway).
3.8		Footways narrow and rising behind line of informal gravelled verge parking.	Possibly no scope for widening without significant objections. Resurface to smooth and flat.

Route 3 West to east or south to north (northern or western footway)

3.8		Footway width varies between 1.5m and 2m and is situated behind informal parking bays or driveways with steep crossfalls. Gravel has spread across the path making it less accessible.	Consider formalising the parking bays and reinstate the footway to minimum width standard – noting the level difference between carriageway and footway.
3.7		Footway width varies between 1.5m and 2m and has steep crossfalls at driveways.	Reprofile with flat surface and widen where possible to a minimum of 1.8m. Introduce continuous footway treatment at Bagber Road and a modal filter admitting cycles at Haselbury Road.
3.3		Footway varies between 1.5m and 2m and is relatively flat. At the roundabout pedestrians are taken off the desire line to cross a small unadopted cul-de-sac.	Reprofile with flat surface and straighten desire line at the roundabout by tightening the northern entry / exit flares.
3.1		Deep inset parking bay reduces footway width to <1.5m. Turning head at Popes Lane promotes	Partially infill parking bay to enable widening of footway to 1.8m. Redesign Popes lane turning head to

		domination of space by motor vehicles and leaves footway of <1.8m.	reduce domination by motor vehicles and introduce a modal filter permitting cycles to access Ringwood Road. Dropped kerbs associated with the filter should ramp up to the footway which continues level across it.
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Route 4



Route 4 east to west, southern or eastern footway as applicable

4.1		Very narrow footways, dominated by vehicle parking.	Consider shared space treatment due to low volume of motor traffic.
4.2		Very narrow footways, dominated by vehicle parking.	Consider shared space treatment due to low volume of motor traffic.

			Potential redevelopment sites.
4.3		Very narrow and uneven footways, steep crossfalls. The footways are inaccessible for mobility scooter and wheelchair users. Pedestrians obliged to cross the road to continue their journey. Missing dropped kerbs.	Provide at least one footway to the minimum 1.8m standard. All junctions to have continuous footway. If pedestrians are to cross, this should be on a raised zebra crossing to obviate the need for excessive crossfall.
4.4		Wide junction which is difficult to cross. High volume of north-south motor traffic when the level crossing opens, causing delay to pedestrian journeys.	Reconfigure the entire junction including consideration of a micro one-way system for Rumbridge Street and changed priorities incorporating pedestrian crossings. Widen footways as part of the scheme and create a focal point / place as a gateway to Rumbridge Street and Eling.

4.5		Variable width footways with old resurfacing treatment breaking up in places. Narrow sections unsuitable for wheelchair and mobility scooter users. Entire street is dominated by vehicle movement and parking – there is an empty car park behind the frontages.	Reduce the carriageway and widen and level the footways. Provide limited stop loading bays with longer term parking moved to the purpose-built car park. Incorporate public realm features.
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4.6		Wider footways in variable condition, including steep crossfalls and missing dropped kerbs. Junctions need continuous footway treatment.	Resurface to level.
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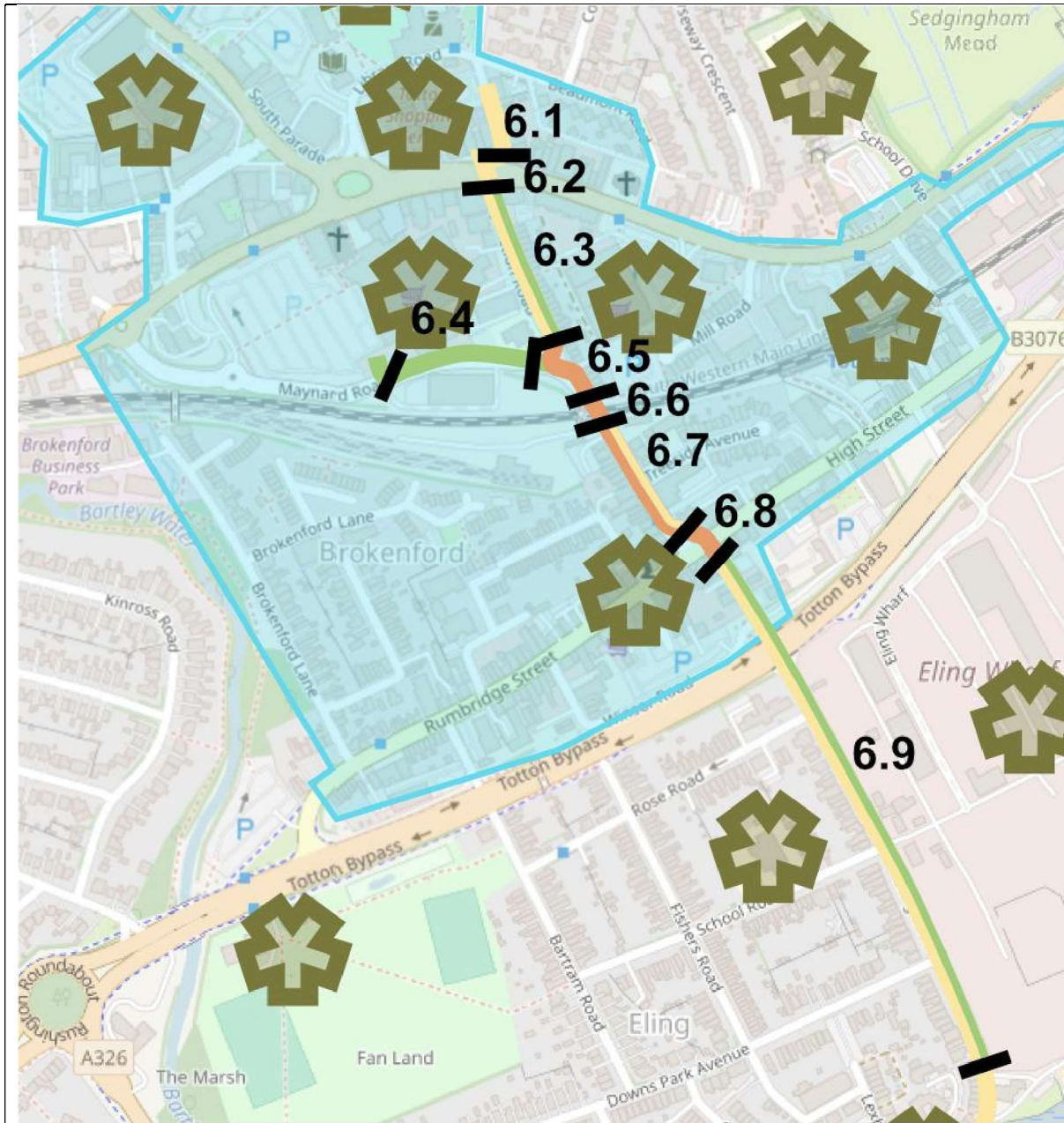
4.7		Wide footway >3m with cobbled areas over car park entrance and at dropped kerbs. Covered in road debris (small stones, glass).	Introduce grass buffer where possible. Replace stone setts with smooth surface.
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4.8		Staggered crossing has adequate dimensions for shared use.	Requires some refurbishment to improve its appearance and resolve localised issues. Reduce pedestrian wait time.
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4.9		<p>Footway-cycleway adequate width. Some issues with encroaching vegetation.</p> <p>Junction with Rushington Avenue is quite wide and it is hard for eastbound pedestrians to predict turning movements.</p>	<p>Tighten geometry of junction to Rushington Avenue. Consider introducing a short left turn filter from the A35, continuous footway and zebra crossing.</p>
4.10		<p>Footbridge does not meet Equality Act standard – ramps are stepped and too steep for wheelchair / mobility scooter access.</p>	<p>Replace footbridge with longer ramps (1:20) or introduce at-grade signalised parallel cycle pedestrian crossing.</p>
4.11			
4.12		<p>Junction with Bartram Road is dangerous –</p>	<p>A wholesale re-design of this junction / crossing is</p>

		<p>encouraging high speed turning and removes priority for pedestrians and cyclists (noting Highway Code changes). Poor sight lines for pedestrians approaching from west and turning movements that are hard to predict.</p>	<p>required. For pedestrians, the crossing needs to be in two stages with a triangular island. For cyclists, it may be better to build a cycle route across the recreation ground as part of a design to overcome the restricted sight lines.</p>
4.13		<p>Adequate footway width. Eastern section is too narrow for shared use.</p>	<p>Infill the westbound merge lane which is not fully utilised (on-site observation would need to be extended to confirm).</p>

4.14		Footway is wide, over 5m except on the southwest and southeast corners adjacent to the roundabout carriageway. Carriageway debris (glass, small stones) on the footway.	Introduce grass buffers where possible to capture carriageway debris. Widen the path at the pinch points and approaching the Marchwood Bypass signalised crossing by reallocating carriageway space or purchasing third party land.
4.15		New.	Consider linking paths from adjacent estate to access bus stop.
Route 4 west to east, northern or western footway as applicable.			
All as above			



Route 6 north to south (eastern footway)

6.1		Footways sufficiently wide and reasonably level. On the west side there is no natural surveillance.	
6.2		Existing staggered crossing has adequate central waiting area.	Future preference for a single stage crossing over a single carriageway (or carriageway divided by a median acting as a two stage informal crossing).

			Current plans to introduce a bus gate may change the pedestrian crossing.
6.3			
6.4			
6.5		Pedestrian crossing is some distance from the desire line, and there is no desire line crossing over the Junction Road priority junction.	Tighten the Junction Road priority junction entrance and provide footway and dropped kerbs (noting use of the entrance by HGVs supplying ASDA supermarket, and buses in the new scheme). Provide a new informal crossing closer to the desire line.
6.6		At the level crossing the path is <1m wide.	Network Rail is currently refurbishing the level crossing. North of the crossing, reallocate limited carriageway space to widen the footway to 1.0m minimum for a short distance.
6.7		Southbound footway is adequate for the most part, however sections could be widened: - At the substation - At HCC's offices.	Widen the footway by moving third party (public) boundaries back at the level crossing (south side) and by HCC's offices.
6.8		See segment 4.4	

6.9		Footway is adequate.	Some minor works required to improve the
			dropped kerbs at the Eling Wharf access.
6.10		Footway disappears between the entrance to the Anchor Public House and the rear yard of the Tide Mill gift shop, at which point a bollard obstructs the usable footway width.	Mark and resurface a footway behind the existing bollards connecting with the short section of path running alongside the Tide Mill. Relocate the existing bollard to remove that obstruction.
Route 6 south to north (western footway)			
6.10		No continuous footway on northern side.	
6.9		Footway is in poor condition with undulations and steep crossfalls for driveways and missing tactiles. Footway is narrow (<1.5m) south of Down's Park Drive and north of School Road	Sufficient space exists in the carriageway to widen the footway to 2m. Amend kerbs and gullies, level and resurface to a 1:40 crossfall.
6.8		Existing informal crossing of Rumbridge Street arm is close to the desire line.	Introduce zebra crossing as part of revised traffic movements on Rumbridge Street (possible one-way loop).
6.7		Narrow footway against open private forecourts (total amounts to wider footway).	Widen footway into private forecourts, possibly via agreement with landowners. Prohibit forecourt parking.

6.6		Very narrow (<1.5m) footway adjacent to crossing. Footbridge does	Network Rail is currently refurbishing the level crossing, so measures are uncertain.
		not meet Equality Act standards.	
6.3		Footway has undulations and raised kerbs at private accesses.	Take up and resurface footway to remove crossfalls and kerb upstands.

Stage 7: Integration

This Cycling and Walking Infrastructure Plan is a daughter document of Totton and Eling Neighbourhood Plan. It is also relevant to the forthcoming Totton Town Centre Masterplan.

We consider the plan to be part of the Neighbourhood Plan suite of documents and is therefore material to planning decisions made in the town. The extent of this materiality includes:

- An expectation that relevant major developments in (and around) Totton and Eling will make financial and infrastructure contributions to delivering the network as a means of mitigating the impacts of trip generation, including expanding the core network into new development sites.
- A Town Council policy expectation that all new active travel infrastructure meets Government guidance in LTN1/20 where practicable, with reasons given for any departures from this standard.
- A Town Council policy expectation that all new walking schemes, including those associated with delivering the cycling network, will be consistent with the Department for Transport's Inclusive Mobility Guidance and other advice on walking which gives emphasis to designing for accessibility on foot, wheelchair and by people with sensory disabilities.
- A Town Council policy expectation delivered through planning conditions that new development of all sizes shall incorporate conveniently located, easily accessed, dedicated secure cycle storage including storage for non-standard cycles as appropriate.

Supporting Neighbourhood Plan policies are hereby drafted (to be updated following its editing for inclusion in the Plan):

The Town Council will promote improved accessibility for pedestrians, wheelchair, mobility scooter and visually impaired users and cyclists across Totton and Eling by supporting:

- **The safeguarding, expansion and delivery of the network of routes and associated infrastructure set out in the Local Cycling and Walking Infrastructure Plan, known as Totton and Eling Active Travel network, which includes suggested connections to neighbouring parishes.**
- **Removal or modification of physical barriers to walking, wheeling and cycling.**
- **Delivery of accessible bus stops which enable bus drivers to draw right up to the kerb and deploy wheelchair ramps.**
- **Local improvements and additions to the town's network of Local Centres to include a range of services available within 15 minutes' walk, wheel or cycle of where people live.**
- **Provision of cycle parking to serve local shops and community infrastructure and other key destinations, including provision for e-bikes, cycle hire and nonstandard cycles.**
- **Provision of convenient, accessible cycle parking in new development.**

Consistent with the National Planning Policy Framework, this vision-led transport policy is designed to help mitigate the ongoing and likely further trip generation effects of existing and new development in Totton and Eling while supporting improved safety, quality of life and the health of our current and future residents and those who visit and work in Totton and Eling. The policy is likely to be consistent with vision-led transport planning in the emerging New Forest District Council Local Plan.

The policy also responds to concerns expressed in the neighbouring New Forest National Park Local Plan policy SP54

about the impact of increased (car) trip generation on the New Forest National Park arising from development outside its boundary. To this end, the LCWIP reasonably includes proposed routes extending into neighbouring parishes.

Working in collaboration with neighbouring parishes, the New Forest District Council and Hampshire County Council, the Town Council will continuously seek opportunities and funding to deliver Totton and Eling Active Travel Network.

Developers will be expected to set out in their Design and Access Plans, detailed application drawings, transport strategies and design codes how they will deliver connected, direct routes for pedestrians, including Disabled pedestrians, and cyclists to existing and new community infrastructure and other trip attractors, how any infrastructure aligns with LTN1/20, and where and how secure cycle storage will be provided so it is convenient and accessible.

Developers will also be expected to show in the detailed parts of their planning application drawings where new bus stops will be located and how they will be designed to be accessible to wheelchair users by enabling drivers to pull up to the kerb and being connected to the pedestrian network.