Local Cycling and Walking Infrastructure Plan

2019 – 2029

Version Control –

V2.4 – 27/11/2019

WARRINGTON
Borough Council

Local Cycling and Walking Infrastructure Plan – Contents

1) INTRODUCTION 5
- 1.1 Why have we produced a LCWIP? 5
- 1.2 Structure 6

2) WARRINGTON'S TRANSPORT CHALLENGES 9
- 2.1 How people travel in Warrington? 9
- 2.2 Warrington's Transport Challenges 11

3) ACTIVE TRAVEL IN WARRINGTON 14
- 3.1 Introduction 14
- 3.2 Warrington's Active Travel Network 14
- 3.3 Committed Active Travel Schemes 20
- 3.4 Existing Patterns of Walking and Cycling 21
- 3.5 Cross-Boundary Active Travel Trips 26
- 3.6 Road Safety 27
- 3.7 Barriers to Walking and Cycling 27

4) CYCLING – OUR OPPORTUNITY 30
- 4.1 Why cycling? Why now? 30
- 4.2 The Opportunity 30
- 4.3 Network Planning for Cycling - Where are the 'cyclable trips'? 33
  - Major Trip Attractors 33
  - Future Development Opportunities 34
  - Identifying Barriers to Movement 34
  - Cycle-Rail Integration 36
  - Propensity to Cycle Analysis 37
  - Clustering 37
  - Desire Lines 38
- 4.4 Who are the potential cyclists? 40

5) ENABLING CYCLING 44
- 5.1 Core Design Outcomes 44
- 5.2 The Proposed Cycle Network 45

6) DELIVERING THE CYCLE NETWORK 54
- 6.1 Introduction 54
- 6.2 Using the Planning Process 54

6.3 Scheme Delivery 54
6.4 Ensuring Good Quality Design – Active Travel Proofing 55
6.5 Maintenance & Monitoring 57
7) ENABLING WALKING 59
7.1 Introduction 59
7.2 The Opportunity 59
7.3 Basic design Principles 61
- Accessible Network 61
- Safe and Secure Network 62
- Intuitive Network 63
- Quality Network 63
7.4 Transformative Design Principles 64
Reducing Severance: Connecting Our Low Traffic Neighbourhoods 64
Warrington Town Centre (Core Walking Zone) 66
Walking to Enable Public Transport 68
Walk to School 68
8) PROMOTING ACTIVE TRAVEL 70
9) PROPOSED LCWIP DELIVERY PLAN 72

Section 1:

Introduction

1) INTRODUCTION

1.1 WHY HAVE WE PRODUCED A LCWIP?

Walking and cycling are the two most sustainable and accessible methods of transport. We want walking or cycling to be the first choice for everyday journeys in Warrington.

To ensure that we are taking the right approach to identifying and delivering the improvements that are necessary to enable more walking and cycling in Warrington we have developed a Local Cycling and Walking Infrastructure Plan (LCWIP).

A LCWIP is a long-term approach to developing comprehensive local cycling and walking infrastructure and will help us achieve three key objectives for the network:

Serves the highest levels of current walking and cycling trips.

Enables the highest levels of 'walkable' and 'cyclable' trips to be realised.

Provides for areas expecting the highest growth in population and employment.

Warrington is growing. Over the past ten years we've created new jobs, built new homes and attracted new investment. We are one of the highest economically performing areas in the UK but are experiencing significant traffic congestion on many of our key roads during peak hours.

The built form of Warrington, past and future, makes a compelling case for strategic network planning for walking and cycling:

Over the last 40 years Warrington has grown from a town with a population of 70,000 people to a town of over 200,000 people.

After its designation as a New Town in the 1960's the town grew rapidly, but the premature closure of the New Town meant essential infrastructure, including active travel provision, was never completed to a high standard.

Different parts of Warrington were built at different times and the different designs following the prevailing fashions mean that permeability and thus accessibility is vastly different in different areas.

Warrington's Proposed Submission Version Local Plan proposes significant housing and employment growth across the Borough. This provides a once in a generation opportunity to plan significant new areas of the town with active travel as a first principle.

Warrington's continued success as a place to both live and work is dependent on a transport network that is safe, convenient, and reliable for users of all transport modes. Without a transformational change to the way that we travel we risk Warrington becoming a less desirable place for people to live and invest in.

We have a statutory duty to produce a Local Transport Plan (LTP). The LTP helps us to address current and future local transport issues by providing a framework for decisions on future investment.

The 4th edition of the LTP affirms that we should be seeking a modal shift away from the current high levels of car use towards greater use of more sustainable travel modes. Warrington should be a place where significantly more people choose to walk and cycle, allowing them to live healthier lifestyles. This requires a transformational change in the transport offer that is currently available to residents.

Through this LCWIP we will tackle many of the crucial infrastructure related issues that are currently preventing people from walking and cycling in Warrington.

The term 'cyclist' throughout this document refers to any one person who chooses to use a cycle as a mode of transport (including as a mobility aid). This includes children, elderly and inexperienced cyclists, as much as 'commuter' cyclists who tend to be adults who cycle on a regular basis. It also includes those benefiting from electrically-assisted pedal cycles (e-bikes).

When referring to "pedestrians" or "walking" it is intended that this refers to wheelchair, mobility scooter users as well those with prams and pushchairs. When a place works well for people in wheelchairs it works for everyone.

1.2 STRUCTURE

Walking and cycling as modes of transport have many similarities, however the LCWIP process outlines separate approaches to planning and identifying walking and cycling improvements. It was considered that the different nature of the two modes requires separate approaches to be adopted for improving the infrastructure for walking and cycling.

Walking and cycling both generally have two main purposes - utility and leisure:

- Utility walking and cycling involves making a journey for the main purpose of doing an activity at the journey's end, such as work, education or shopping.
- Leisure walking (including running) and cycling, whether undertaken independently, as part of social activities or within competitive sport.

Whether for utility or leisure purposes, all forms of active travel deliver substantial environmental, health, social and wider community benefits.

The LCWIP focuses on providing fit for purpose walking and cycling infrastructure as a means of everyday transportation, from point A to B to access employment, education and retail, and leisure opportunities. The scope to enable more leisure cycling trips within Warrington should however be considered fully within planned infrastructure.

The structure of this LCWIP is as follows:

- Sections 2 and 3 provides a background to transport in Warrington, highlighting relevant policy documents, examining previous and current trends in walking and cycle use and looking at the existing active travel infrastructure in the Borough;
- Section 4 provides the 'Evidence Base' upon which the cycle network is to be developed. It looks at the different potential markets for new cycle trips, and builds up the different layers of information which are required in order to produce a network of routes;
- Sections 5 and 6 outlines infrastructure interventions which are most likely to result in more people cycling in Warrington and complimentary measures to ensure that cycle trips are enabled;
- Sections 7 looks at the different opportunities to increase walking trips and outlines infrastructure interventions to enable more people to walk more often; and
- Section 8 presents a programme of promotion focusing on the means of communicating Warrington's walking and cycling infrastructure to the different target markets identified.

Section 2:

Warrington's Transport Challenges

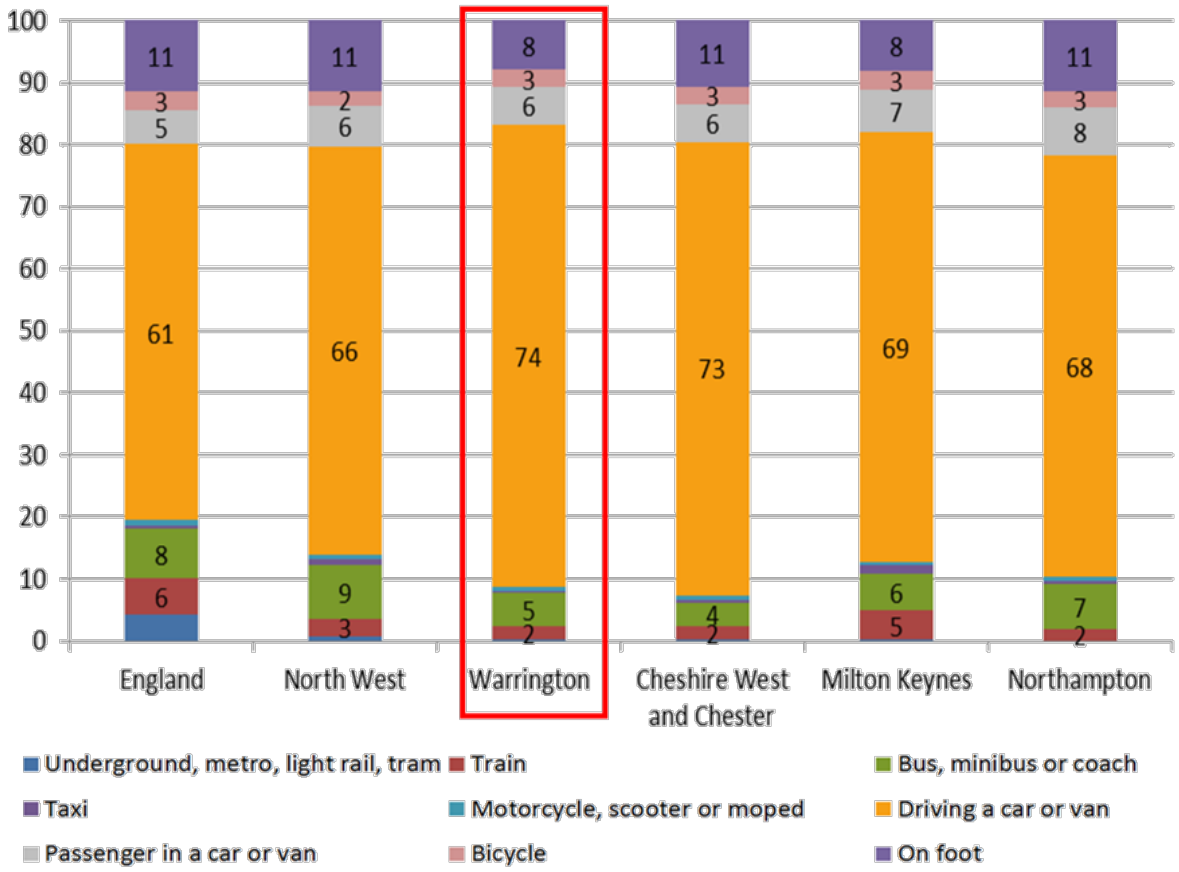
2) WARRINGTON'S TRANSPORT CHALLENGES

2.1 HOW PEOPLE TRAVEL IN WARRINGTON?

Transport is an essential part of our lives as it connects us with jobs, education, healthcare, shopping and a wide range of leisure activities. It is a key component of the economy as it links businesses with their workers, customers and clients, whilst providing for the delivery of goods.

Transport shapes our neighbourhoods and influences our lifestyles. Our choice of transport impacts on us as individuals and on our wider environment.

The travel to work modal split from 2011 Census data shows that nearly three quarters of Warrington residents (74%) drive to work. This high car dependency figure is the highest in the North West and is far higher than the national picture.



Warrington also has very high car ownership levels (81%) and this is also well above the 74% national average. There is an overreliance on the private car as a mode of transport in Warrington.

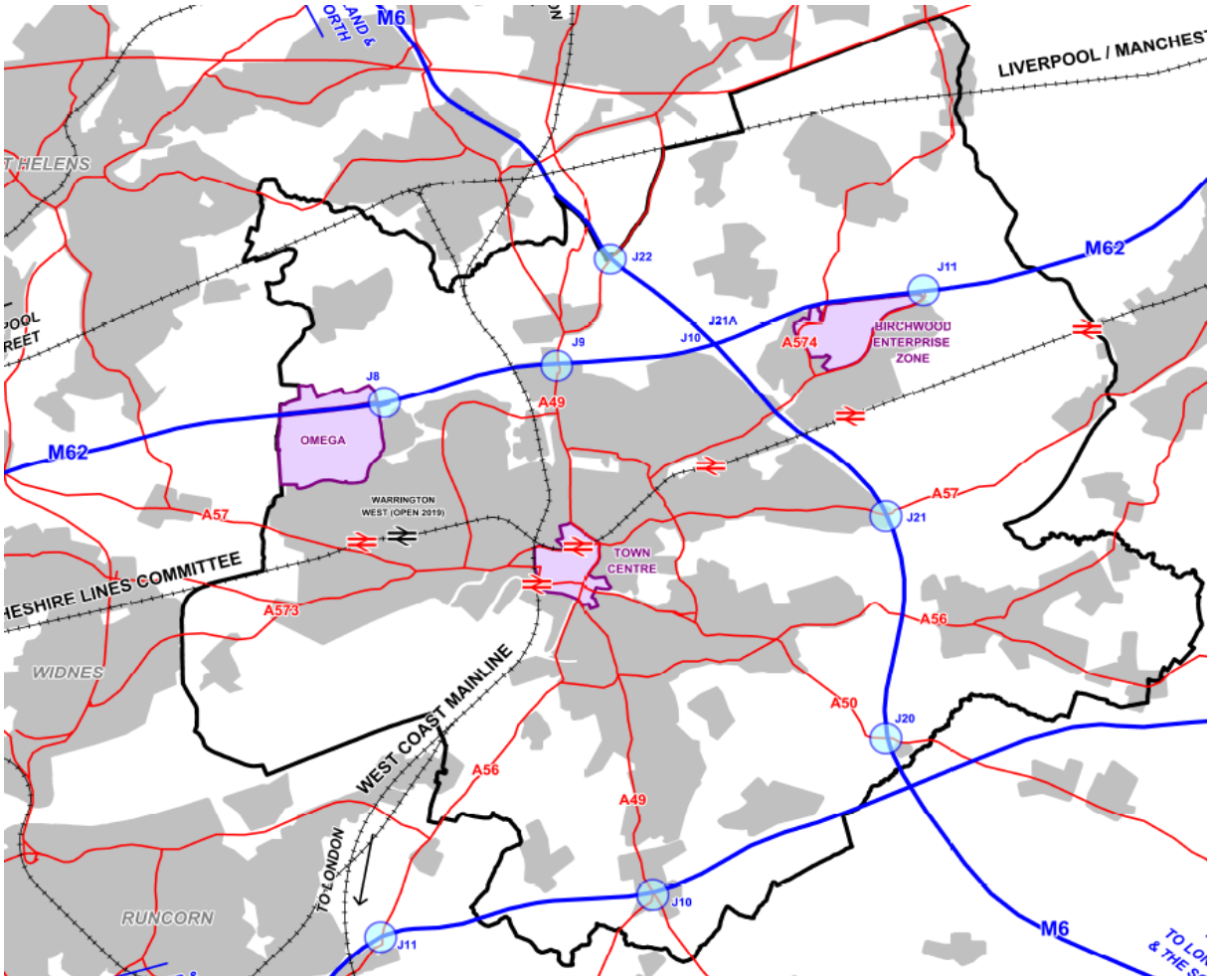
It is a well-documented fact that cars make poor use of available street space and offer a less efficient means of travel compared to walking and cycling.

Motorised transport is also a major cause of harm to the environment including air pollution, noise and its impact on the living environment.

In addition, Warrington's high car dependency is noted in the council's Public Health Annual Report (2017) as an underlying cause of a variety of poor health indicators such as obesity, heart disease and mental health.

The dominance of the car in Warrington has led to the subordination of other travel modes and serious congestion problems within the town. This is compounded by the limited number of crossings across the River Mersey, Manchester Ship Canal and West Coast Main Line, and the frequent diversion of traffic through the town whenever there is an incident on the surrounding motorways (M6, M62 and M56).

The road hierarchy in Warrington is shown below:



Many of the principal roads in Warrington (shown in red) are heavily trafficked, although they do often provide the most direct route between trip origins and destinations and are therefore used by more confident cyclists as the quickest route between destinations.

The road layout developed around the Town Centre to cope with the growing traffic has resulted in a very car dominated urban environment featuring large multi-armed roundabouts and dual carriageways which are very pedestrian and cycling unfriendly.

Many roads in Warrington have been designed for cars, and not for people. Main roads and busy junctions disrupt journeys, and make walking and cycling less enjoyable, less convenient and less safe.

Public Transport – Walking and cycling in Warrington should also be an attractive option for the first and last mile of a person's longer journey, for example by improving integration with public transport and providing the first or last 'mile':

- **Rail:** Nationally, rail use is growing and this trend is evident in Warrington with a 20% increase in patronage across Warrington's six rail stations between 2013/14 and 2017/18.
- **Bus:** Warrington's Own Buses (WOB) is the main bus provider within Warrington. Many services are centred on Warrington Interchange providing a circular route from the Town Centre. This provides good access to the Town Centre, but travel across the Borough is less convenient and generally requires interchange in the Town Centre.

Public transport services benefit from more customers if people can easily walk or cycle to a stop or station.

2.2 WARRINGTON'S TRANSPORT CHALLENGES

Without a transformational change to the way that we travel we risk Warrington becoming a less desirable place for people to live and invest in.

We want to create a Warrington that is not dominated by car movements and where streets provide a space for people that is pleasant to be in. The following set out how enabling walking and cycling can be the solution to many of our transport challenges:

Addressing Car Dependency and Congestion

- The car is the travel mode of choice in Warrington and dominates the highways network. To address congestion there is an underlying need to reduce the number of journeys made by car, and increasing the levels of cycling and walking in Warrington is one way to do this.

Grow Bus Patronage and Continue the Trend in Rail Usage

- Many journeys require more than one mode of transport. If we are to encourage people to use sustainable modes for their journeys it is important that the interchange between modes at key locations is as seamless as possible.

Improving Air Quality and Reducing Transport Noise

- Vehicle emissions are the main local source of air pollution. It is vital that we aim to improve health by reducing air quality related transport emissions. This can be done by reducing the number of vehicles on our roads.

Transport Inequalities in Warrington

- The existing transport situation is not the same across the whole borough and for all sections of our community. For example, whilst Warrington as a whole is a car dominated place, with the number of households with no car lower across the borough (19%) than the England national average (26%), the converse is true for Inner Warrington, where car ownership is much lower than it is in the more suburban and rural areas of the borough.

Making Warrington Accessible for All

- It is a myth that disabled people don't (or can't) cycle. Many streets require improvement to the latest accessibility standards so that Warrington's residents can live more independently.

Supporting Growth

- The level of housing and employment growth across the Borough in the Proposed Submission Version Local Plan will result in significantly more trips being made to, from, and within Warrington. To be able to accommodate the increased number of trips there is a critical need to increase cycling and walking as alternative modes of transport.

The following sections sets out the opportunity that is available and how we will create an attractive, high standard, user-friendly environment for walking and cycling trips.

Section 3:

Active Travel in Warrington

3) ACTIVE TRAVEL IN WARRINGTON

3.1 INTRODUCTION

We are not starting from scratch. Work is well underway improving and expanding Warrington's offer for active travel. Warrington's walking and cycling networks have developed over time as funding has become available and as development has come forward. Successful cycling schemes have been delivered through the Council's LTP capital programme which comprises schemes from the annual Integrated Transport Block (ITB) allocation.

In the recent past we have used the Local Sustainable Transport Fund (LSTF) to fund a number of new strategic cycle routes, including the Westbrook to Dallam Greenway and a traffic free route between Daresbury and Warrington.

Section 106 developer contributions have also supported the development of our network, particularly at strategic sites such as Omega and Birchwood.

3.2 WARRINGTON'S ACTIVE TRAVEL NETWORK

The current Warrington cycling network consists of a combination of on and off road routes. Currently, there are over 40 miles of surfaced segregated cycle paths, 18 miles of unsurfaced paths and over 23 miles of shared use paths alongside roads.

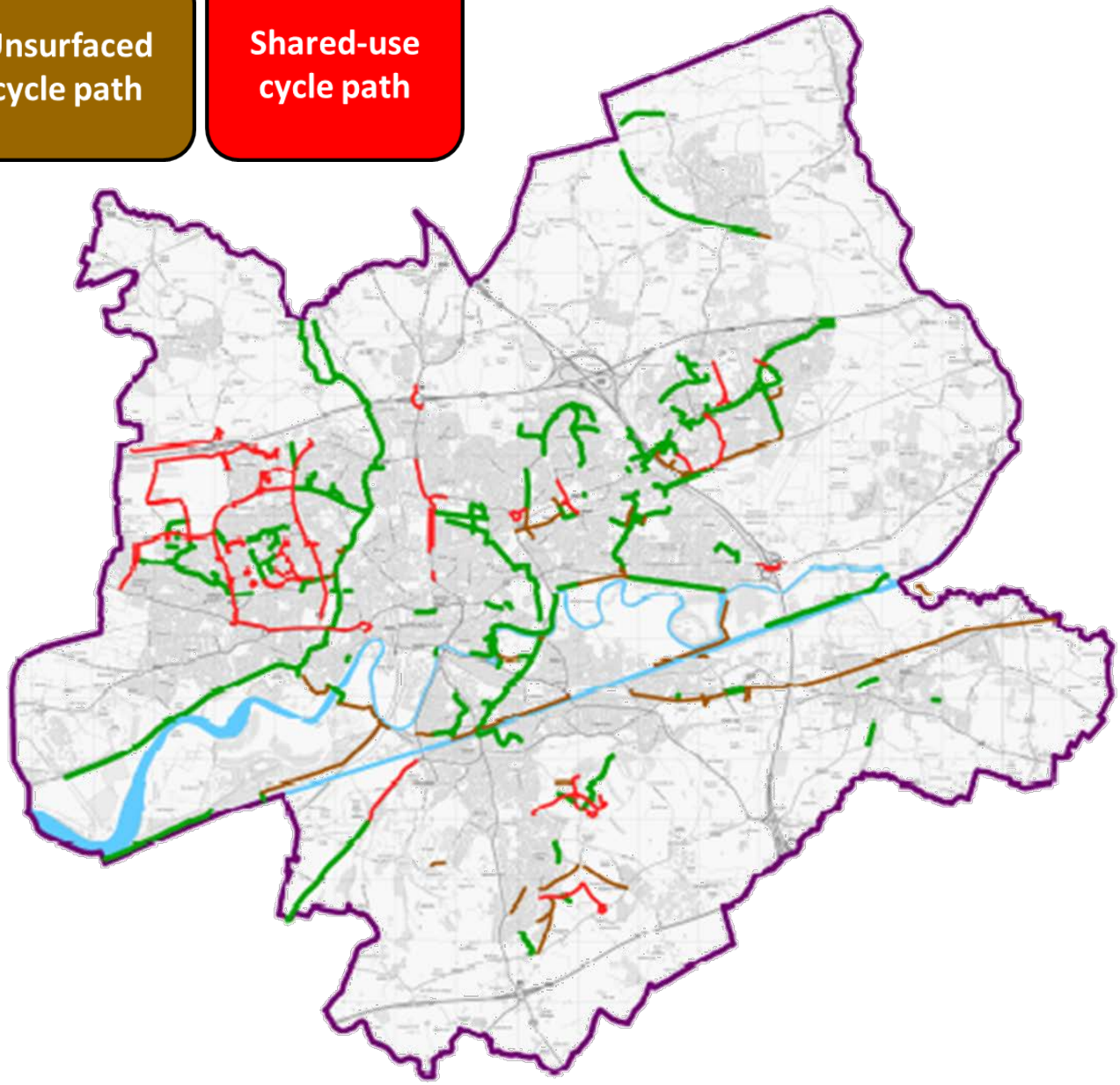
The current network is in many regards good and in places the foundations for a high quality network for active travel are there, but there are gaps in network coverage and variations in quality.

Our Existing Network

Tarmac surfaced cycle path

Unsurfaced cycle path

Shared-use cycle path



'Greenways' are a key element of our walking and cycling network, particularly for providing for leisure trips. The term is used to describe a largely off-road and traffic free network of 'attractive' routes for getting around on foot, in a wheelchair or mobility scooter, on a bike and where appropriate on horseback.

The Greenway network within the Borough includes the following routes:

- Trans-Pennine Trail;
- Whittle Brook;
- River Mersey Towpaths;
- Westbrook to Dallam;
- Sankey Canal Trail;
- Woolston New Cut and Woolston Park.

The best known of these is the Trans Pennine Trail. This forms part of the National Cycle Network (NCN) and provides a long-distance signed route from Southport to Hornsea. Roughly three quarters of the Trail through Warrington is on traffic free paths. From Warrington, the route provides a connection to Widnes in the west and through Lymm and onwards towards Altrincham in the east.

The north-south route through Sankey Valley Park is also an important greenway link providing cross boundary connections to the Trans Pennine Trail and Halton in the south and St Helens in the north. There is an aspiration to include this route within the National Cycle Network.

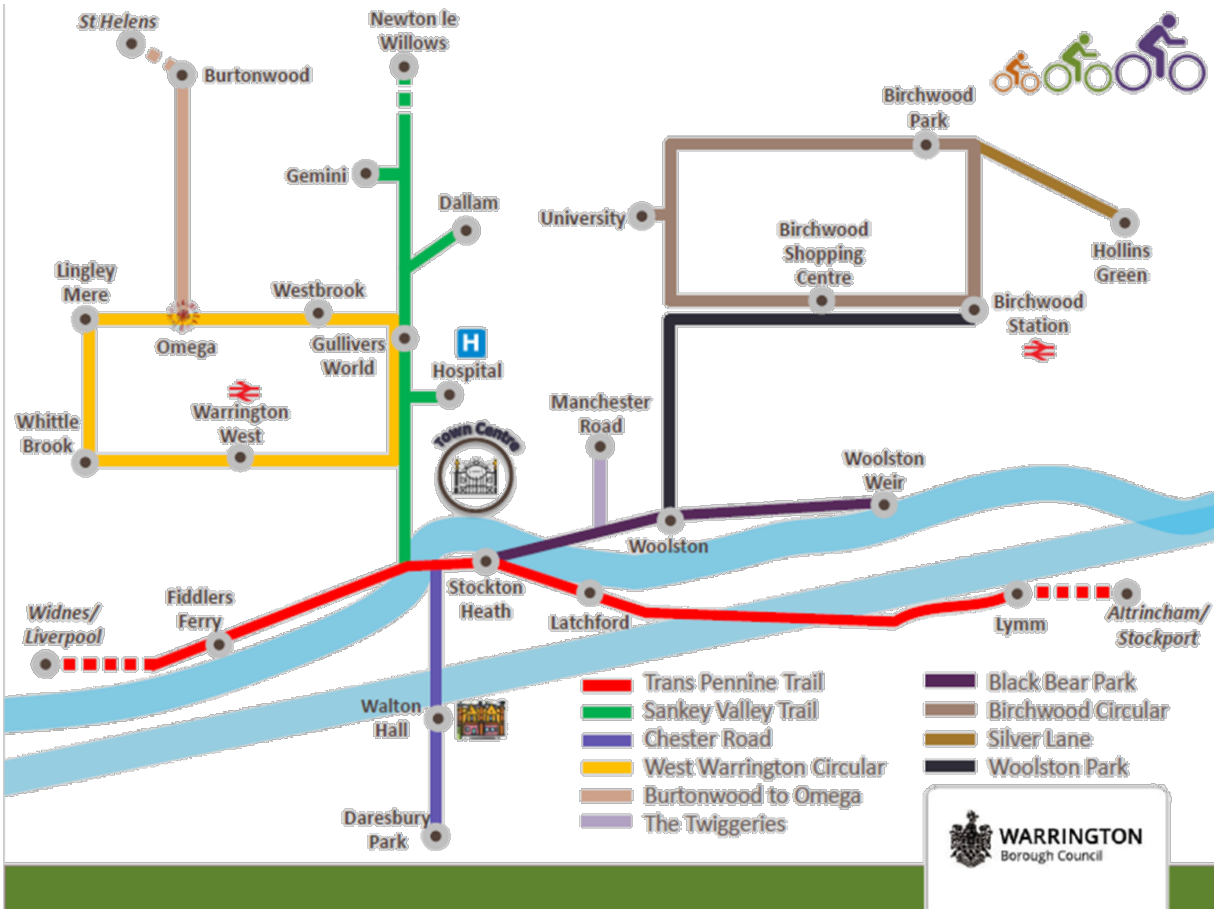
This greenway network has been the focal for much of the recent active travel investment, opening up key open spaces and connecting communities. For example, the Westbrook to Dallam greenway is an example of Council investment to provide a new high quality path constructed through an area of open space offering an attractive off-road route for cyclists of all abilities.

The Bridgewater Canal Towpath is currently a public right of way for pedestrians only and its condition is of generally poor standard. The Bridgewater Canal Trust is seeking to upgrade this to a permissive shared route (The Bridgewater Way) for both pedestrians and cyclists. If successful, this will provide a useful off-road route linking Warrington with neighbouring areas in Wigan, Trafford, Halton, Salford, Cheshire East and Cheshire West and Chester.

Shared use paths – There are also many existing shared use paths which form an extensive neighbourhood route network across parts of Warrington. Some of these are on purpose built footway/cycleways such as Lingley Green Avenue in Great Sankey, Admirals Road in Birchwood and Witherwin Avenue in Appleton.

Many new-town roads were not provided with any footways and over the years the highway verges on these routes have been retrofitted with a shared use path adjacent to the road. For example, the new path constructed on Cromwell Avenue near the Gemini retail park.

In places, the combination of shared use paths and greenways provide a good network of traffic free or very lightly trafficked routes:



On-road – Although compared to other urban areas the extent of on-road facilities in Warrington are limited, where these are in place this provision is often focused largely on links (the stretches of road between junctions).

Low Traffic Neighbourhoods – Most walking and cycling across Warrington takes place on quiet streets where people live. Street layouts that create slow speed, low traffic environments are good for people wishing to cycle or walk.

Across Warrington there are high quality examples of 'filtered permeability' schemes, where a direct route for walking and cycling is not open to motor traffic, which create favourable conditions for active travel.

Having measures in place to ensure that traffic uses appropriate routes is an important factor in improving road safety, and has wider benefits in terms of improving air quality, and improving the local environment. As such, within many residential areas across Warrington, such as Callands and Fairfield, area wide traffic calming initiatives have helped discourage rat-running.

In 2014, we completed implementing 20mph speed limits on the majority of residential roads and the Town Centre, where the greatest interaction between traffic and vulnerable road users would be expected. 20mph speed limits and zones for residential developments have also been adopted as a design standard in the planning process.

Sat-nav apps increasingly route vehicles off strategic roads and onto our residential streets to shave seconds off a journey. That means many previously quiet roads in Warrington are becoming increasingly busy and hostile for the people who live on them.

There is huge potential to go further with the protection and creation of low traffic neighbourhoods and expand the coverage wider across the Borough.

Signing – Recognising that the legibility and function of some existing routes require improvement we recently undertook a project to improve wayfinding across our network. This included the creation of our first strategic signed walking and cycling route, the Birchwood to Sankey Way, a signed 8 mile route connecting Great Sankey to Birchwood.

Public Cycle Parking – Within Warrington Town Centre alone there are over 350 publicly available cycle parking areas spread across the two rail stations, retail facilities and the general public realm.

Smarter Travel Choices describes a range of targeted approaches designed to help people to become less car dependent. The ambition is to reduce the number of car trips by providing greater awareness of sustainable travel choices.

The Council provides a Workplace Travel Advisory Service to businesses to inform and promote sustainable travel choices, working with employers and employees to understand the barriers to making more sustainable journeys and where possible instigate change. In addition, jobseekers also receive advice on their travel options to different job destinations which can increase their employment opportunities.

The Council's School Travel Advisory Service supports the existing and growing needs of schools within Warrington, and delivers some of the elements of the current Sustainable Modes of Travel Strategy.

The provision of Bikeability child cycle training has been a major success in Warrington. Professionally delivered training is offered free-of-charge to every 9 – 13 year old child in their school and between 2007 and 2018 over 22,000 pupils were successfully trained.

The main promotional tool to support cycling is Warrington's Cycle Map. This has been developed with the help of many partners, and is regularly reviewed and updated when new routes are built.

3.3 COMMITTED ACTIVE TRAVEL SCHEMES

Work is currently well advanced to enable delivery of three key projects funded by the Cheshire & Warrington LGF3 Growth Deal:

- Strategic route on Chester Road approaching the Town Centre (Indicative value – £900,000;
- Shared use neighbourhood route between Omega and Burtonwood village (Indicative value – £1.6m); and
- Enhanced strategic greenway route along the Trans Pennine Trail (TPT) between Latchford and Chester Road (Indicative value – £750,000).

Chester Road

Omega to Burtonwood

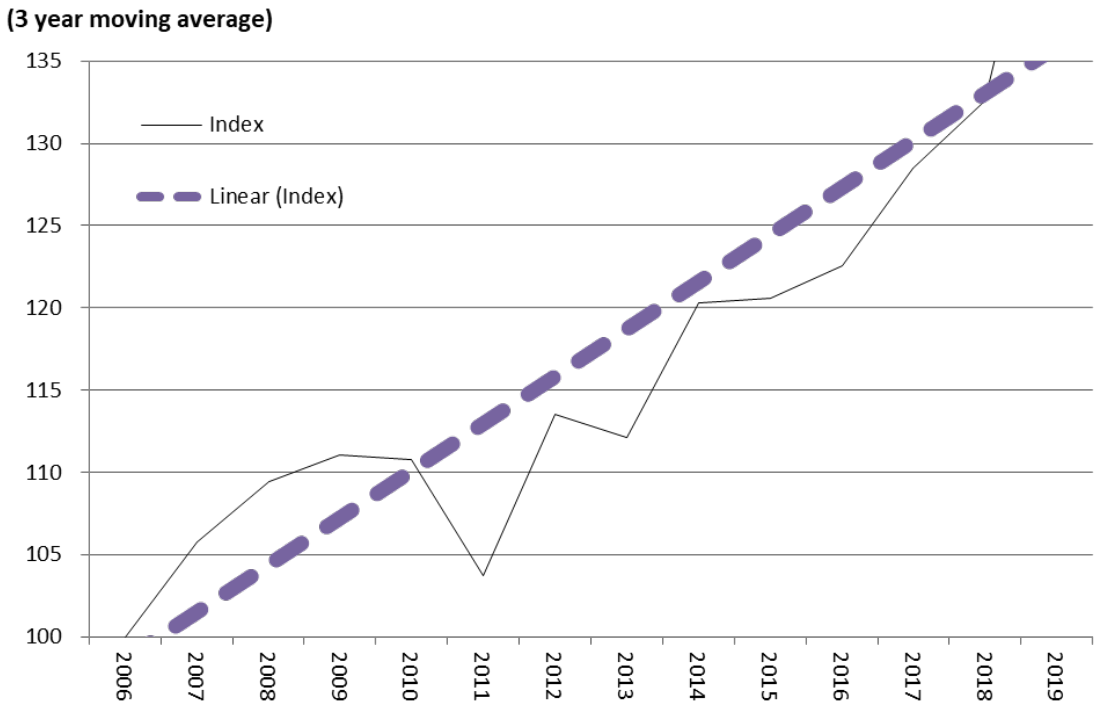
Trans Pennine Trail

The forthcoming Integrated Transport Block (ITB) 2019/20 programme of Active Travel improvements, with a total value of around £300,000, is expected to deliver schemes within Sankey Valley Park, Woolston New Cut, and Howley Lane/Black Bear Park alongside a programme of accessibility improvements, cycle parking, vegetation clearance and signing enhancements across the Borough. Additional ITB themes such as bridge maintenance, road safety and traffic signals, further increase expenditure on Active Travel related schemes.

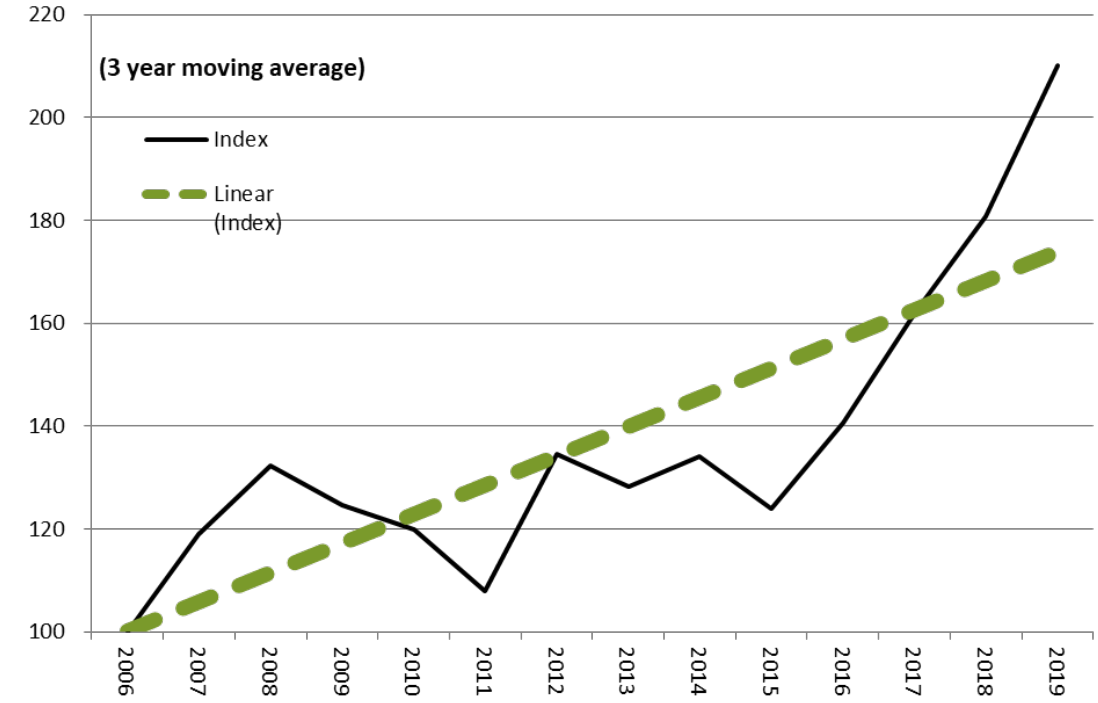
3.4 EXISTING PATTERNS OF WALKING AND CYCLING

Walking and cycling flow trends in Warrington are monitored annually by using data recorded at several survey locations across the Borough. The latest surveys were undertaken in June 2018 at 40 'Greenway' and 'Radial' locations, a number of which provide a time series of data going back to 2004.

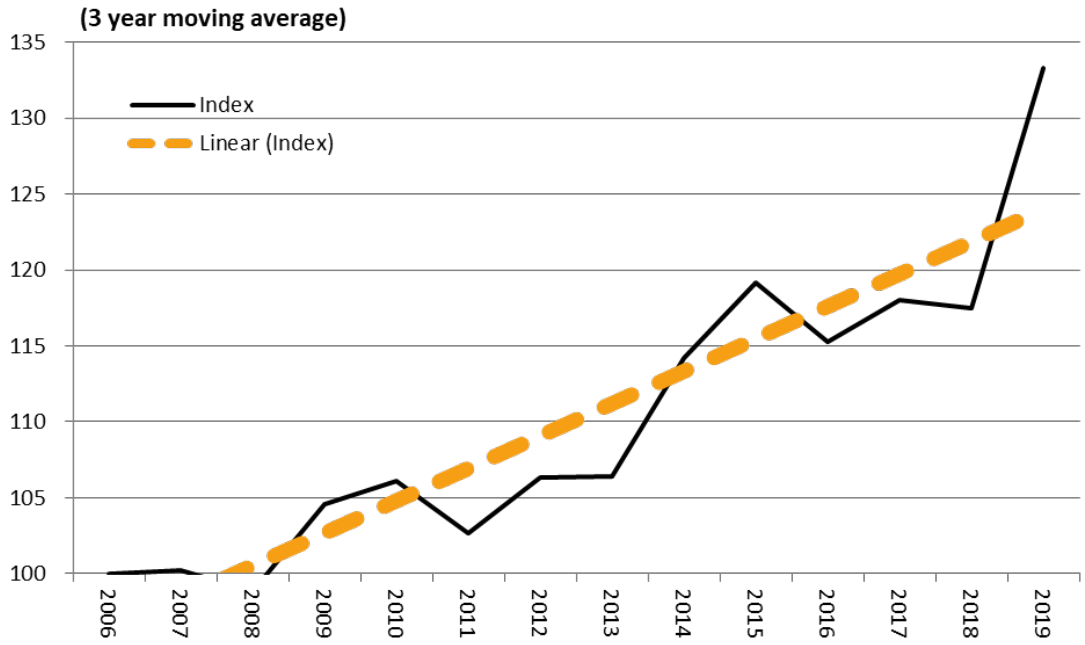
The data from the past surveys show a steady increase in cycling since 2004, with 35% more cyclists on our surveyed routes in 2019.



Data shows that there has been a substantial increase in cycling on 'greenway' routes since 2004 with over 70% more cycle trips on these routes since 2004.



A smaller increase (around 25%) has been seen on radial routes, many of which do not incorporate segregated cycle provision away from traffic, such as Manchester Road and Wilderspool Causeway.



On some key routes in Warrington, the level of cycling is already at a significant level:

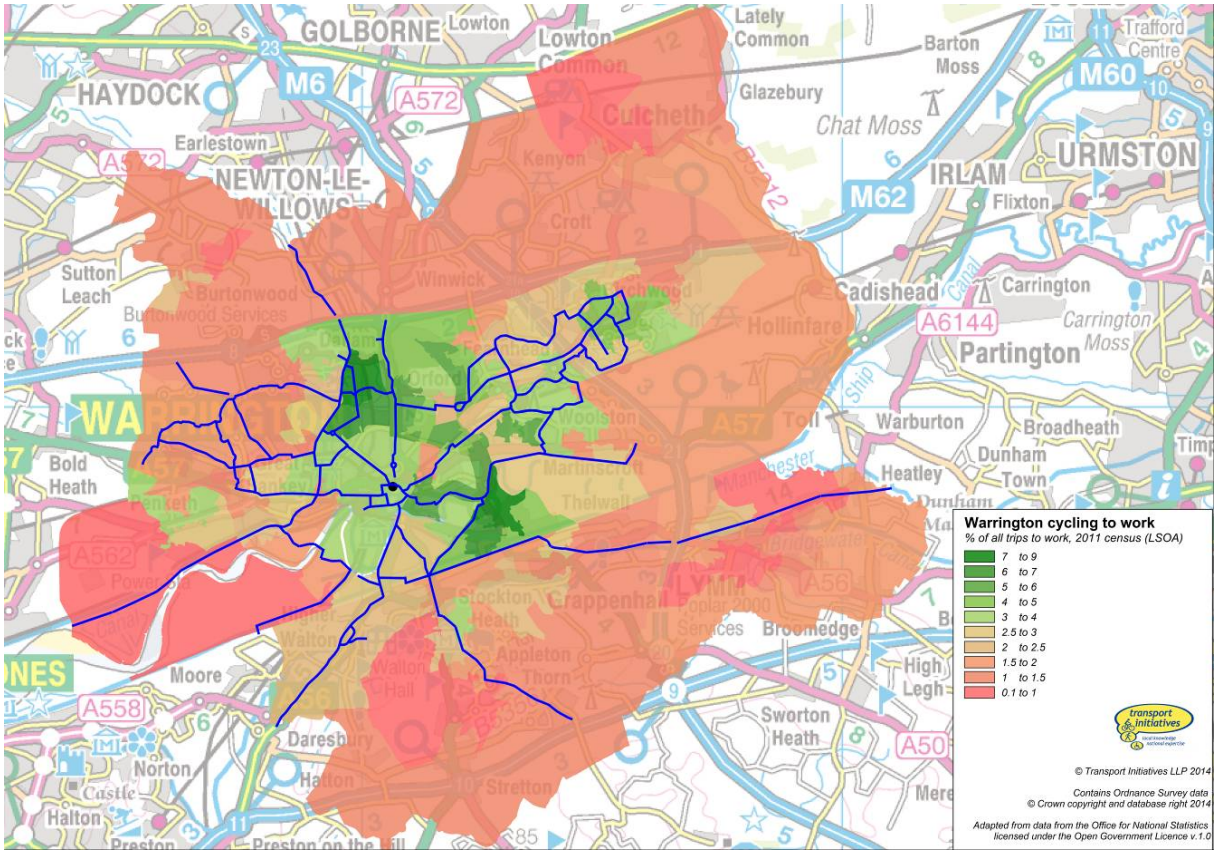
- Liverpool Road – 650 cycle movements per day.
- Kingsway Bridge – 900 cycle movements per day.
- Winwick Street – 500 cycle movements per day.

Also of note is at least 1 in 5 of the surveyed cycle trips across Warrington occurred outside 7am-7pm period. This is notable at many employment sites such as Woolston and Omega where many companies operate on fixed shift patterns.

Data shows that cycling in Warrington is increasing. Where investment have been made, such as in greenway routes, the positive outcomes are clear.

Whilst it is helpful to use data from existing cycling, we need to consider where people would like to travel but currently don't because an attractive route is not available. This is where we need to target our efforts. Footway cycling on certain routes, particularly on the main radial routes to/from the Town Centre, is common. This is a clear indication of suppressed demand for cycling on these routes and represents a strong demand for more suitable infrastructure.

Travel to Work – Cycle to work data was analysed for the Warrington area:



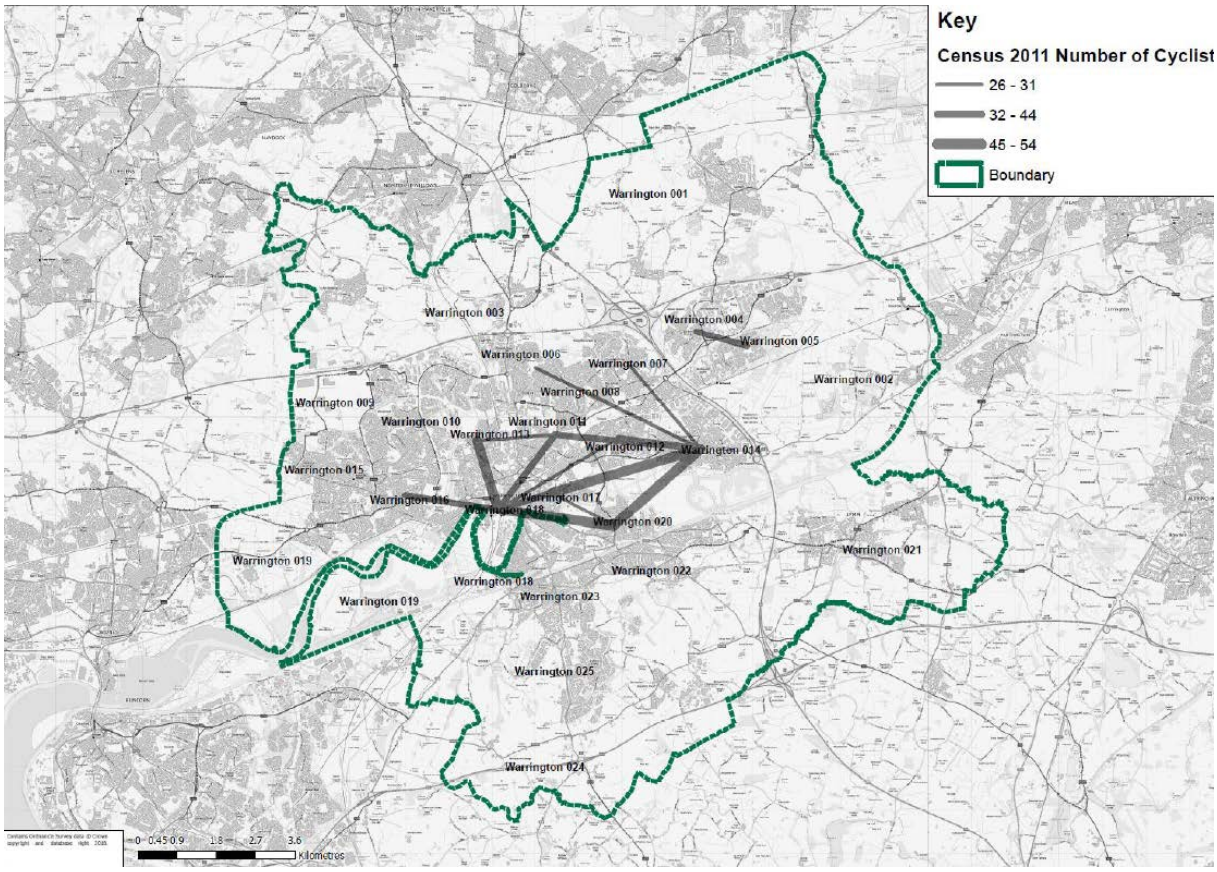
The amount of cycling in Warrington varies significantly between different parts of the Borough, from less than 1% to nearly 9% of trips to work (2011 Census). It is noted that most of the wards with the highest levels of cycling are found in the inner areas of Warrington.

It should be noted that Travel to Work census statistics excludes students and crucially those who cycle for less than half of their total journey (for instance, to the station). This means that the data underrepresents the true level of cycling in Warrington.

Propensity to Cycle Tool/Principal Corridors of Demand – The national Propensity to Cycle Tool (PCT) is a freely-available online resource that has been designed to help with the strategic planning of cycling networks. It shows transport planners and policy-makers where to build cycling infrastructure to increase levels of cycling and have the greatest benefits.

Cycle movements are based on trips between the Census (2011) output areas that people worked and resided in at the time. It has limitations as it is derived from commuting trip data only, does not take into account new developments (i.e Omega in Warrington) and excludes cycle-rail trips where cycling is not the main mode. However it is a useful tool to indicate current and future cycle movements which, together with local knowledge, can inform the planning of new routes.

The top 20 'existing' cycle movements in Warrington were identified and plotted as a starting point for understanding the existing desire lines for cycle trips.



This highlighted how the key movements are into the Town Centre and to/from Woolston and Latchford. The absolute numbers for each route are however low.

Travel to work data is the statistic that we have the most data available. However, if we are striving for mass change to active travel modes, we need to consider the everyday transportation needs of people, rather than just the daily commute. Commuting represents a relatively small proportion of trips.

Although only 2.8% of Warrington residents cycle to work as their main mode of travel, more people cycle in the Borough when other trips and more infrequent cycling are accounted for.

Data collected through Sport England's nationwide survey 'Active Lives' provides detailed and reliable insight into the physical activity habits of Warrington residents:

Proportion of adults that walk and cycle, by frequency and purpose 2017-2018

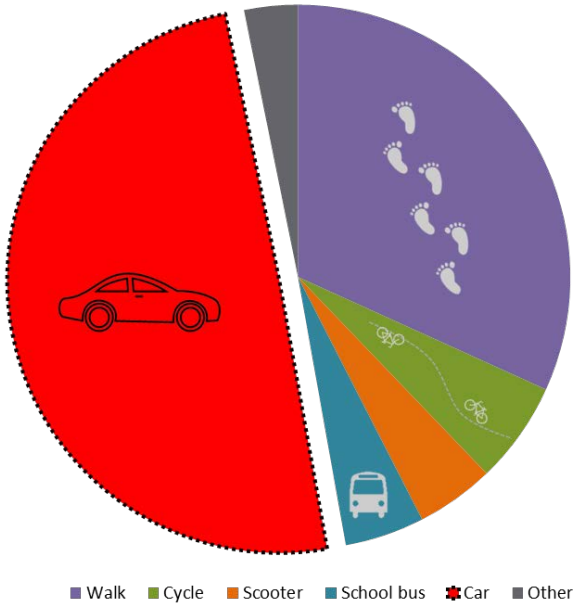
At least:	Once per month	Once per week	Three times per week	Five times per week
Cycling (%)				
Any	18.7	10.6	5.8	2.6
Leisure	15.0	7.7	2.4	1.1
Travel	7.4	5.4	3.2	1.5
Walking (%)				
Any	77.1	69.0	38.7	26.4
Leisure	62.5	48.4	22.6	14.9
Travel	46.5	37.8	18.1	12.3

Department for Transport Statistics
Tables CW0302/3

These statistics cover the time period mid-November 2017 to mid-November 2018.
"Leisure" in this table refers to walking or cycling for the purpose of health, recreation, training or competition, not to get from place to place. Results are grouped according to the area where respondents live, which may not be the same as the area where they walk or cycle.

Travel to Schools/College - Travel associated with education generates a substantial number of trips. Children can get their daily dose of physical activity without even thinking about it, just by walking or cycling their journey. Getting the next generation to fall in love with walking and cycling will form a key part of the LCWIP strategy.

Method of travel to school (Key Stages 1&2)



September 2018
WBC Data

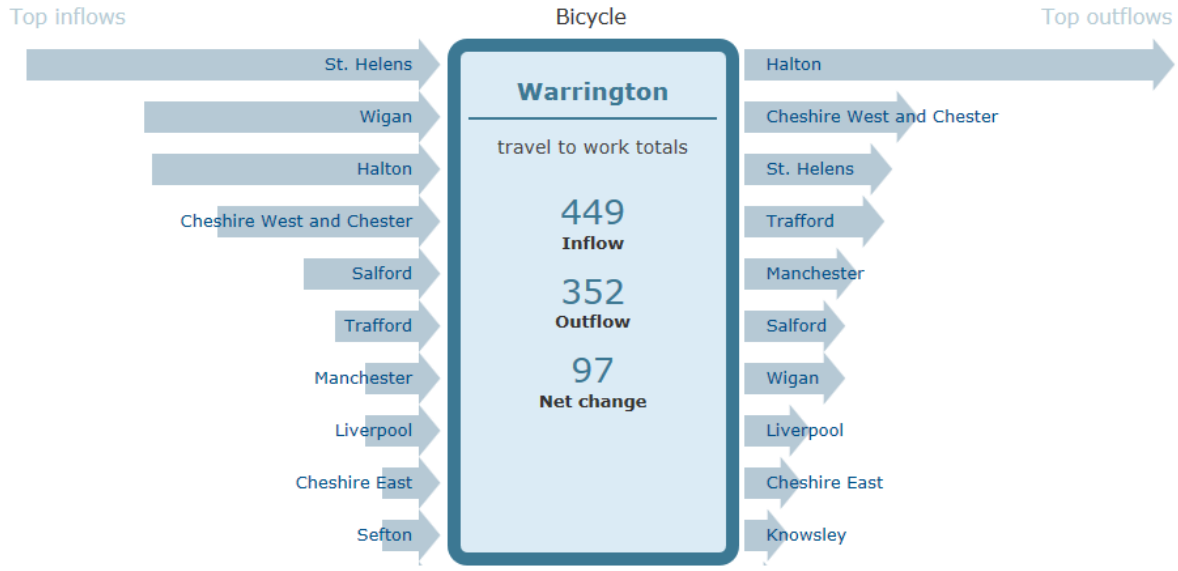
Enabling more walking and cycling trips to be made to education sites is an important aspect of LCWIP.

3.5 CROSS-BOUNDARY ACTIVE TRAVEL TRIPS

Warrington Borough Council share a boundary with 7 other unitary local authorities with various long-distance routes such as the Trans Pennine Trail and the Sankey Valley Trail crossing multiple administrative areas.

Unsurprising given the central location of Warrington, Census data identifies that a substantial proportion of people travel (all modes) into Warrington to work (49,172) from neighbouring Boroughs. Commuting results in a daily net population increase of 14,179 in Warrington.

However, only a very small proportion (449) of these 'inward' trips is however made by bike:



We will continue to work with our neighbours on the development of our LCWIP to ensure high quality cross boundary connectivity. It is however important to acknowledge that a larger proportion of residents travel to work within the relatively compact extents of Warrington (50,422).

3.6 ROAD SAFETY

The safety of people cycling, in terms of actual (number of collisions) and subjective (how safe a journey feels) clearly have an impact on the attractiveness of walking and cycling in Warrington. Concern about safety on the roads is a key barrier to people getting on their bikes and travelling on foot.

Warrington has seen significant improvements in road safety over the last 10 years with a 36% reduction in collision occurrence resulting in a 43% reduction in casualties.

Nationally, only 6% of deaths and 14% of serious injuries are amongst cyclists, although over four times as many pedestrians (25%) are killed in road collisions. In Warrington the picture is slightly better as only 11% of all killed or seriously injured casualties are pedal cyclists and 14% are pedestrians.

44% of Warrington's pedestrian casualties are represented from the 6 to 18 age band. The age band that appears to present the greatest risk of being a pedestrian casualty is 10 to 18.

A key point to emphasise is that the data does not pick up junctions and routes which are potentially hostile to cyclists and pedestrians or there is a perception of danger, to the effect that people avoid using them.

As such, the key distinction to be made is between the number and rate of collisions. If people avoid using a junction, it may have a low number, but high rate of collisions per journey walked or cycled.

3.7 BARRIERS TO WALKING AND CYCLING

In 2017 the council hosted a series of stakeholder summits to gain feedback on a range of transport topics. The first of these focussed on active travel, stakeholders were asked what the barriers were for replacing short car journeys with a walk or cycle trip. Concerns about safety, lack of knowledge of routes and the dominance of the car making walking and cycling unwelcome in some areas were identified as key barriers.

Many busy junctions and routes in Warrington can feel like hostile places, intimidating to people travelling by cycle and on foot. On any journey – to school, to work or to the shops – the route is only as good as its weakest link.

Along with many other authorities nationally, the Council takes part in the annual National Highways and Transport Network public satisfaction survey. This data details the satisfaction of Warrington residents with the provision, location and condition of active routes and facilities.

The most pertinent results for walking and cycling are outlined below, based on overall satisfaction measures:

97% agreed that 'pavements' are important
75% agreed that 'cycle routes/lanes/facilities' are important
93% agreed that 'reducing traffic' is important
90% agreed that 'traffic pollution' is important

49% were satisfied with 'pavements' in Warrington
32% were satisfied with 'cycle routes/lanes/facilities' in Warrington
27% were satisfied with the 'reduction of traffic' in Warrington
24% were satisfied with 'traffic pollution' in Warrington

There is clearly a need to improve existing active travel infrastructure and reduce this general perception so that public confidence and awareness is improved.

Section 4:

Cycling - Our Opportunity

4) CYCLING – OUR OPPORTUNITY

4.1 WHY CYCLING? WHY NOW?

By giving people a true alternative to the car, we will tackle many of our health, congestion and air quality issues in one go. The delivery of a fit for purpose cycle network is not anti-car; it is about giving people an attractive alternative, especially for short journeys.

Cars occupy a lot of space on our highway network and represent the most inefficient use of highway space. Enabling active travel is the cheapest, least disruptive way to improve capacity quickly.

A high proportion of car borne short trips is also an indication that many people in Warrington are being less active which has clear implications for their health and wellbeing.

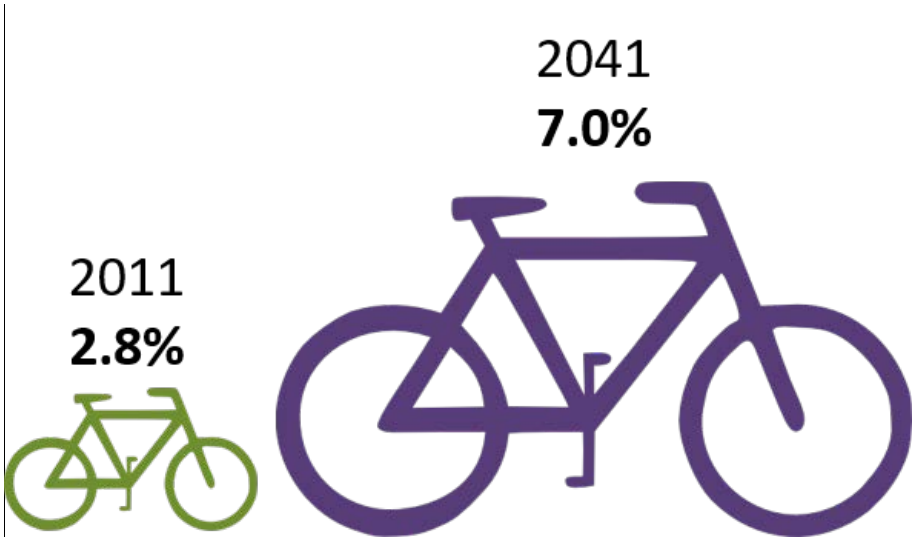
Cycling has acknowledged positive physical and mental health benefits. As a result physical exercise through cycling for everyday trips has been described as a 'wonder drug' and active travel allows people to build physical activity in to their everyday routines.

4.2 THE OPPORTUNITY

There are clearly areas of the Borough where current cycle levels are particularly low, and particular junctions where sight of a cyclist is a rarity. However, there is a saying that *'it's hard to justify a bridge by the number of people swimming across a river"* and this holds for cycling in particular.

This section presents the results of analysis carried out to better understand the potential to increase travel by bike in Warrington, in terms of what type of trips, places and people offer the best opportunities.

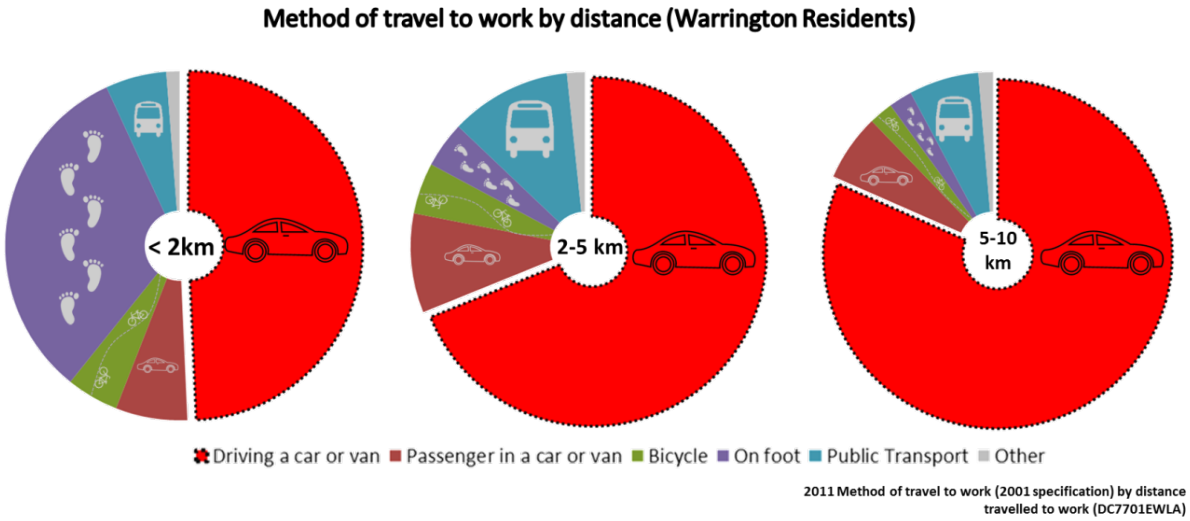
Data from the 2011 Census shows that 2.8% of Warrington's residents cycle to work. Our target is to have 7% of residents cycling to work by 2040. If we want to meet this target and ease the burden of traffic we really need to make it easier for people to use other means of transport.



This means having two and a half times more people regularly using their bike to get to work. This will not happen overnight, and will not occur without significant and sustained intervention. However, as this section will emphasise, whilst the growth target is ambitious, it is eminently attainable.

The first step in testing the opportunity is to examine current travel patterns, including the origin, destination and length of short car trips, to gain a better understanding of the potential for cycling across the Borough.

Purely in terms of travel to work, most short journeys are still made by car:



These car trips contribute to congestion on the roads, poor air quality, and contribute to poor health caused by inactivity.

A majority of working-age residents in Warrington commute less than 5km in length, a highly cyclable distance.

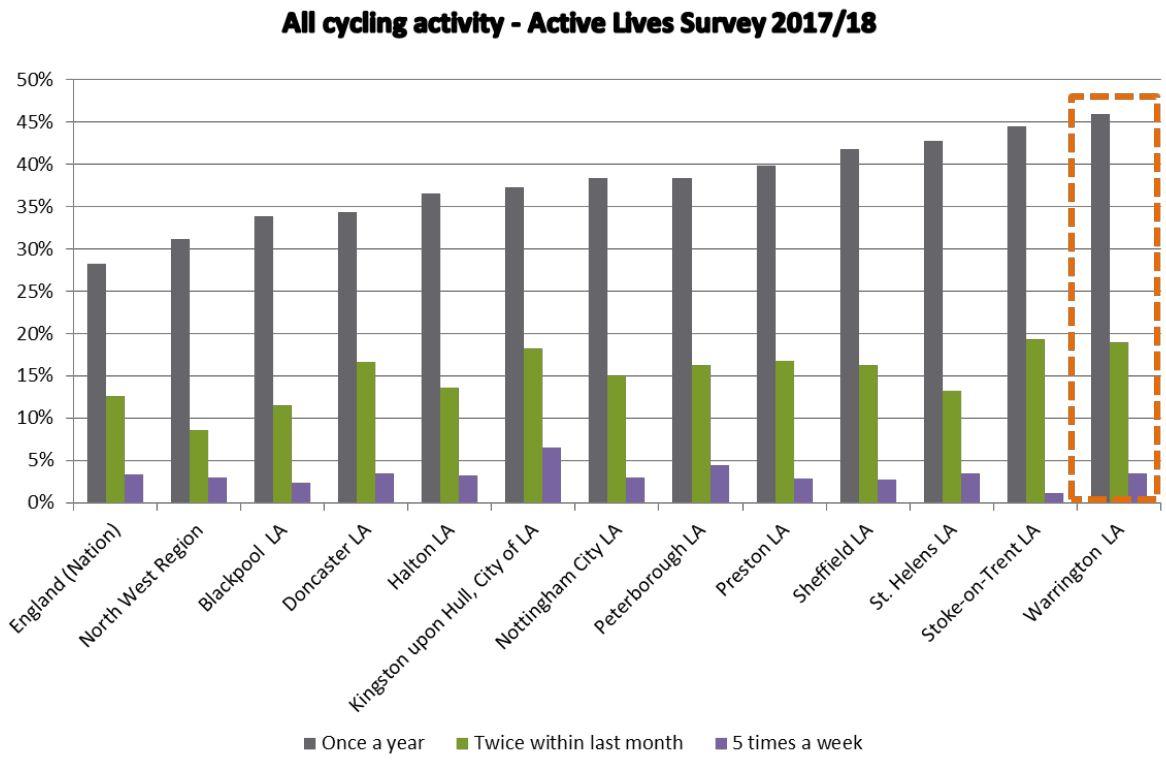
We can predict future demand for high quality cycle infrastructure to some extent by current cycle levels and in some areas a good indication is also provided by counting the number of people cycling on footways or pushing their bike at difficult points.

Better yet, we can count the number of people making short journeys in cars. Those are the people we need to serve. Many discussions about cycling are dominated by people who are already cycling. We need to start enabling those that currently drive.

Not everyone can cycle – but many more people could. It is clear from the data that we need to get people thinking about shorter journeys.

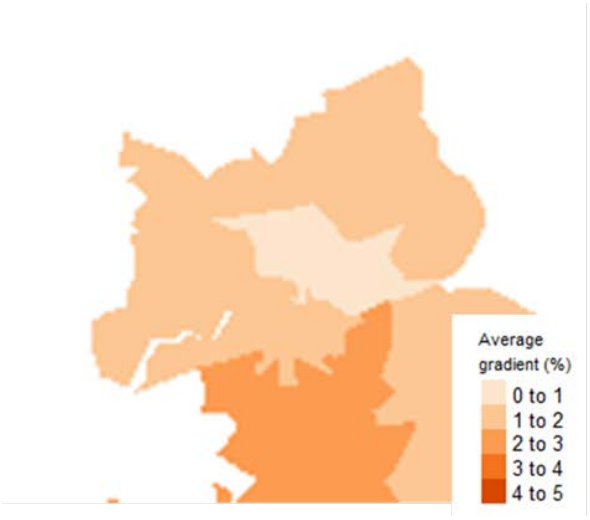
Unless the high quality infrastructure is in place to enable cycle trips, they simply won't occur. We need to predict, provide and enable.

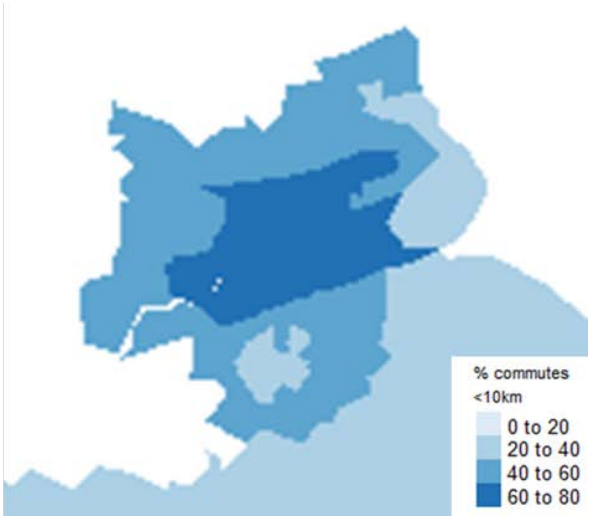
A section of Warrington's population has never cycled and some may never but almost half already do. 46% of the adult population have cycled within the last year, an impressive proportion that is well in excess of the national average and surpassing comparable settlements.



However, one of our primary issues is frequency. For many, whilst the concept of cycling is fine, it is an infrequent activity only. We wish to bring about 'everyday cycling'. A good starting point to increase cycling in Warrington would be to enable existing cyclists to cycle much more and for a wider range of journeys.

The images below, obtained from the Propensity to Cycle Tool, show the proportion of commuters in each zone with a fast route commute distance less than 10km (calculated excluding people with no fixed workplace) and the average hilliness of the fastest routes used by commuters living in each zone.





Warrington's compact size and fairly flat terrain offers a great opportunity for local journeys, currently made my car, to be made by cycling.

4.3 NETWORK PLANNING FOR CYCLING - WHERE ARE THE 'CYCLABLE TRIPS'?

This section presents what the latest datasets, forecasts and models show about potential corridors and locations where current and future cycling demand could justify future investment.

- MAJOR TRIP ATTRACTORS

All trips have an origin and a destination. The DfT guidance states that LCWIPs should be evidence-led. It adds that identifying demand for a planned network should start by mapping the main origin and destination points across the geographical area to be covered by the LCWIP.

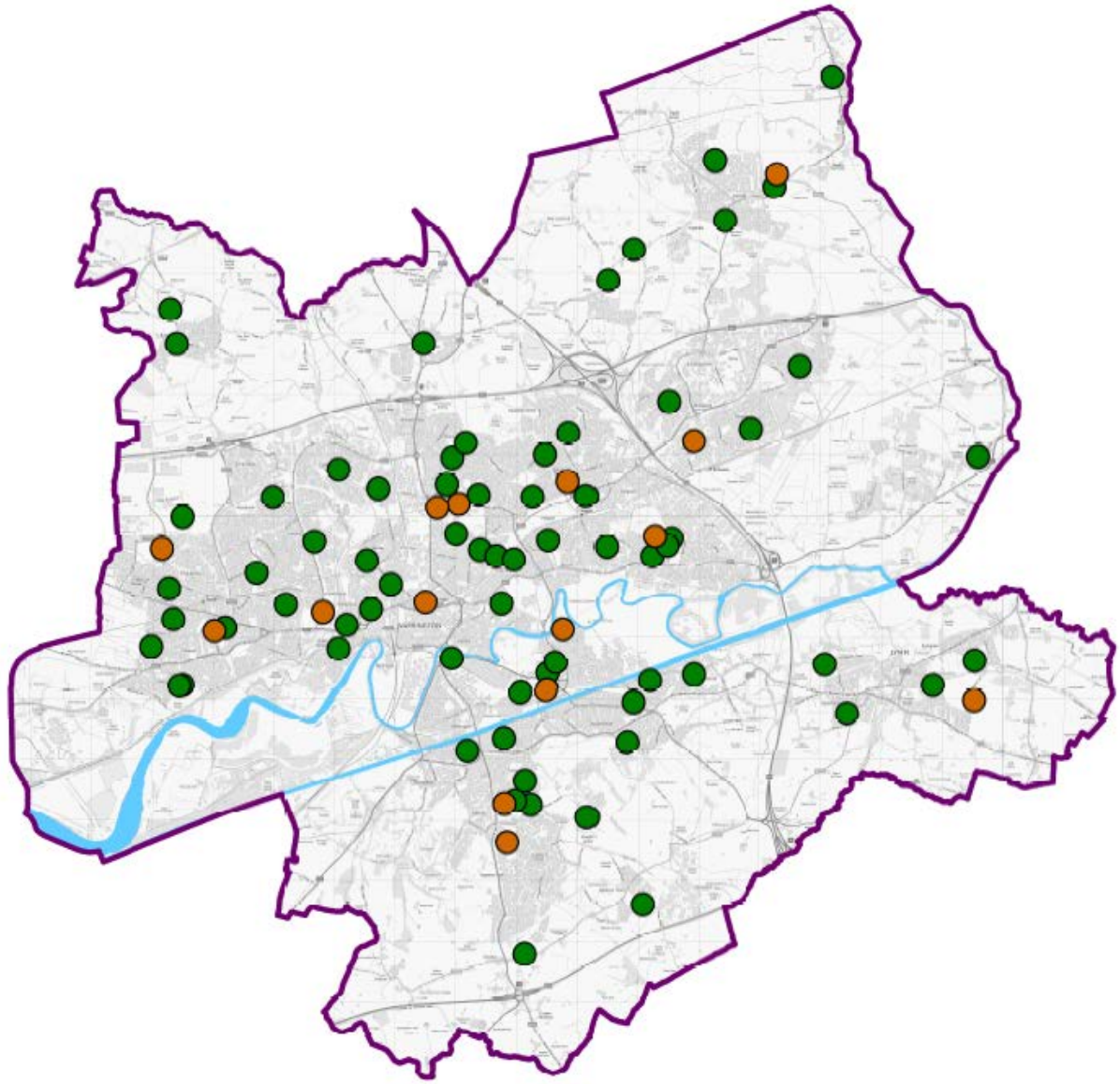
A variety of major trip attractors within Warrington have been identified through site assessments, assessments of relevant data and consultation with key stakeholders. These strategic locations attract a significant number of trips, and as such they could have the potential to attract a sizeable number of future cycling trips.

The DfT guidance identifies that it may be appropriate to include only the most significant trip generators. Some types of destination were excluded (eg schools, individual retail stores) to create a manageable number of destinations.

Major **employment** sites were identified using Office of National Statistics Workplace Zones combined with Census 2011 journey to work data to identify employment numbers in each workplace zone. Proxy nodes were located to denote the significant employment areas identified through the data. These were typically town or district centres or business/commercial/industrial sites. **Town and District Centres** were not mapped on their own as they are covered by the other trip generators, predominantly retail. The following retail areas were plotted:

- Golden Square
- Birchwood
- Cockhedge
- Culcheth
- Honiton
- Knutsford Road
- Lymm
- Stockton Heath
- Gemini
- Junction Nine
- Westbrook

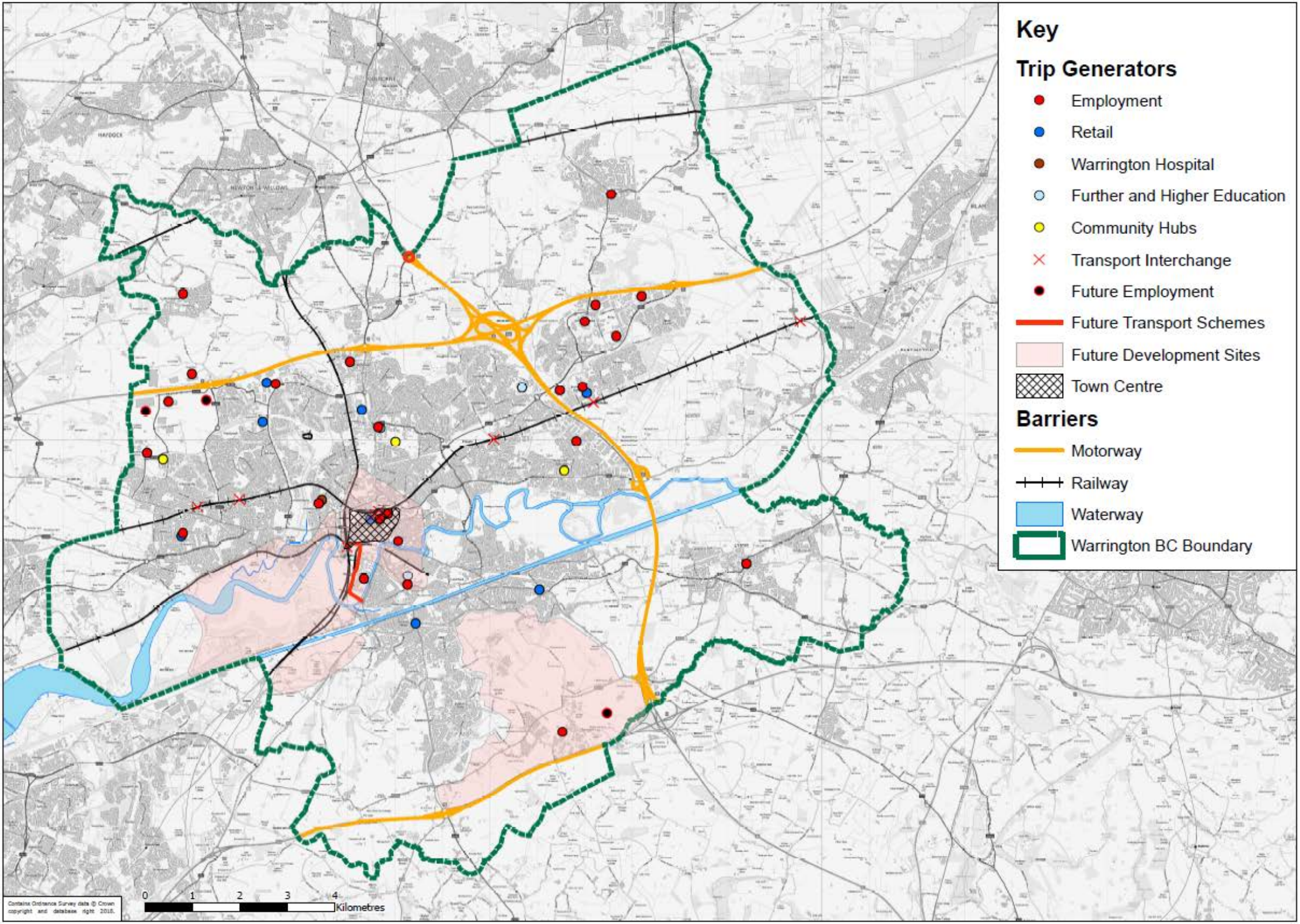
Schools - There are a large number of primary schools in Warrington, which are spread throughout the multiple residential areas. Secondary schools are located more sporadically in the Borough, while there are only three further education establishments.



It was decided to not include primary and secondary schools at the strategic level, but to focus on the larger educational trip generators including Warrington & Vale Royal College, Priestley College and the University of Chester's Warrington Campus. Primary and secondary schools will be considered when we look at local connectivity to ensure that there are appropriate connections within local areas and to the strategic network.

This approach was also applied to **healthcare establishments and community facilities**. Warrington Hospital and Hubs at Orford, Great Sankey and Woolston have been considered from a strategic level, with smaller healthcare (such as GP surgeries) and community (such as libraries) sites reintroduced when looking at local connectivity.

The **transport interchanges** identified include all railway stations (Central, Bank Quay, Birchwood, Padgate, Warrington West, Sankey for Penketh and Glazebrook) and Warrington Bus Station.


Key
Trip Generators
Employment
Retail
Warrington Hospital
Further and Higher Education
Community Hubs
Transport Interchange
Future Employment
Future Transport Schemes
Future Development Sites
Town Centre
Barriers
Motorway
Railway
Waterway
Warrington BC Boundary
0
1
2
3
4
Kilometres
Contains Ordnance Survey data © Crown copyright and database right 2018.

- FUTURE DEVELOPMENT OPPORTUNITIES

It is also important to identify future changes to transport and land use that may be completed within the timescale of the LCWIP.

The emerging Local Plan is proposing around 20,000 new homes and 360ha of employment land. It will ensure that walking and cycling are fully incorporated in any spatial planning policies for the Borough.

For locations where a significant growth in population is expected additional nodes have been created to represent future journey origins, and likewise destination nodes for major proposed employment sites. This identify where there is likely to be a future requirement for the Borough's cycling network to penetrate. New developments will also offer significant opportunities to improve or increase the network of facilities for cyclists through the planning process.

No matter how sustainable this development is, it'll create vehicle trips. However, it is predominantly the unsustainable use of existing development that drives local congestion in Warrington. We need to reduce total vehicle trips from existing areas of the Borough. A comprehensive, high quality and well used walking and cycling network will support and enable the growth aspirations of the Borough.

- IDENTIFYING BARRIERS TO MOVEMENT

Barriers to movement were identified to understand how they may impact on potential cycle movements. The existing Warrington cycling network is strongly influenced by several constraints and barriers both natural and man-made. These include:

- The three road crossings of the River Mersey and single footbridge;
- The five crossings of the Manchester Ship canal, four of which are subject to daily opening and constrained width;
- Two main railway line; and
- A busy road network that is difficult to cross (including the motorways).

When combined, these barriers segment Warrington. This is particularly the case within the Town Centre:

Warrington – The Last Mile

The last mile of journeys into Warrington town centre has regularly been identified as a key barrier in encouraging people to walk and cycle into, and within, the town centre.

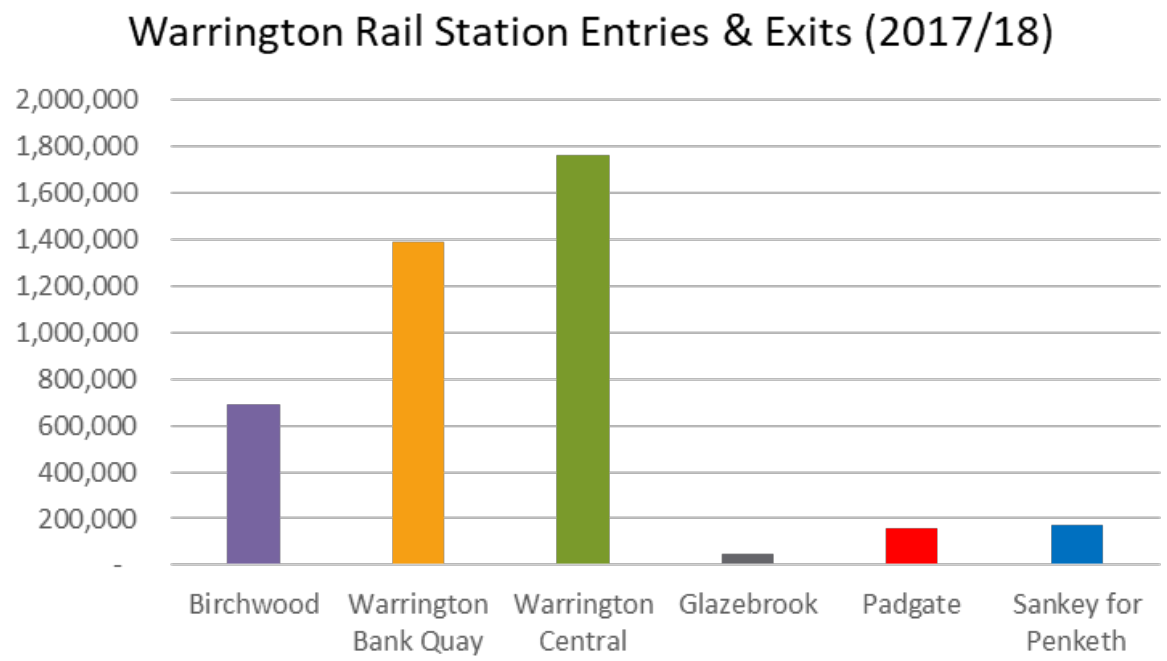
The road layout has been developed to cope with the growing traffic, and has resulted in a very car dominated urban environment featuring large multi-armed roundabouts and dual carriageways.

This results in a limited number of crossing points for pedestrians, and a very unpleasant cycling environment. These barriers are often mentioned by local people as reasons for why they prefer not to cycle into the town centre.

If we are to successfully support a large increase in the number of people travelling into the centre Warrington on foot, on cycle, or by bus we need to make ensure that we create a safe environment that supports reliable journey times for these modes.

- CYCLE-RAIL INTEGRATION

There has been a 20% increase in patronage across Warrington's six rail stations between 2013/14 and 2017/18. A seventh station in West Warrington will be opened in December 2019 with direct services to Liverpool and Manchester provided within the December 2019 timetable.



The level of cycle-rail integration (combining cycling with rail) in Warrington presents unrealised potential.

To quantify this potential we have calculated the number of people (based on 2011 Census) who are within a 3km cycle of each station:

Rail Station	Workplace Population	Residential Population
Sankey for Penketh	6,908	34,009
Warrington Bank Quay	33,569	39,053
Warrington Central	36,438	47,185
Padgate	16,107	51,271
Birchwood	12,893	9,735
Glazebrook	304	1,529

The identification of routes to/from rail stations and the ability to capture these active travel trips as part of longer journeys will form an important part of the plan. Enabling active travel to rail stations can enhance the attractiveness of rail as a means of travelling to key commuter destinations such as Liverpool and Manchester.

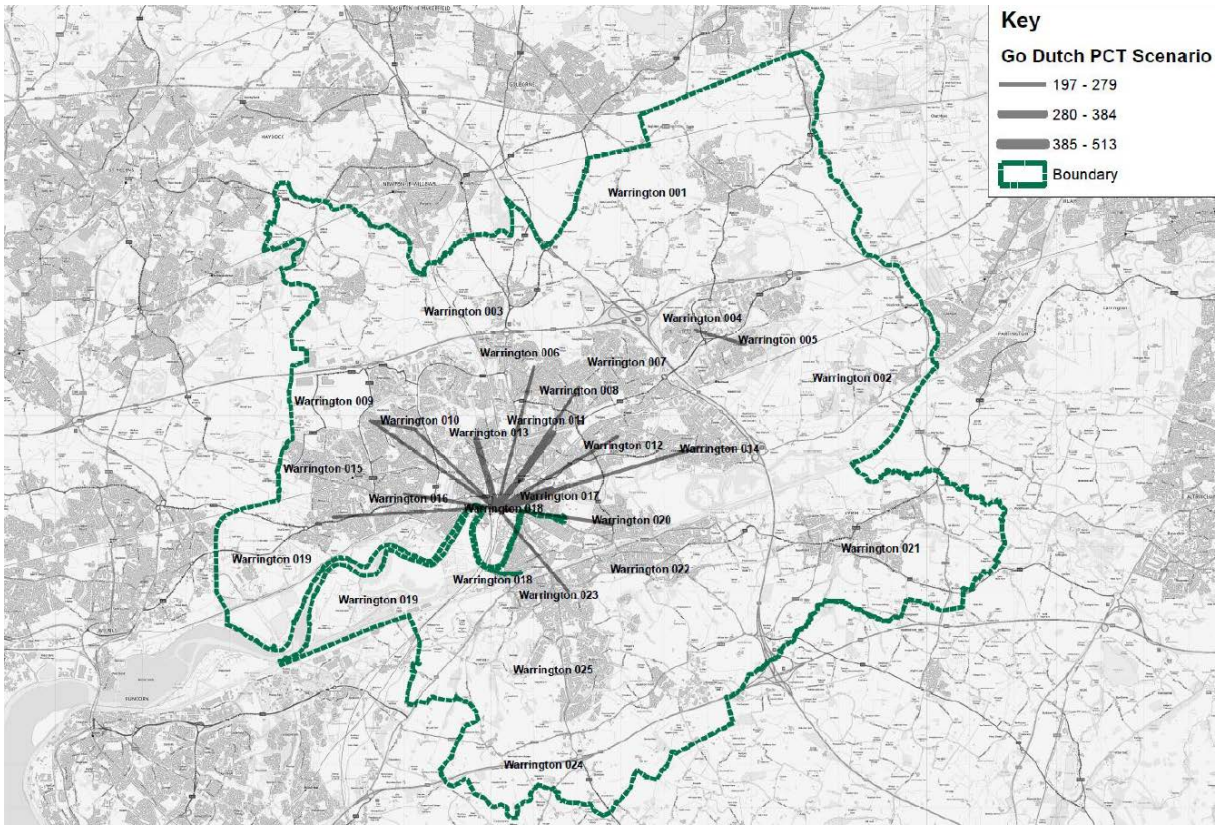
- PROPENSITY TO CYCLE ANALYSIS

As introduced in Section 3, the Propensity to Cycle tool (PCT) comprises an interactive map that shows the current distribution of commuter cycling trips in Warrington.

Crucially, it also predicts potential future cycling trips under different potential future growth scenarios. The PCT allows us to look at where cycling flows go, and which parts of the route network might be busiest. It provides numerical and graphical outputs, including estimated increase in numbers of cyclists in an area, along straight 'desire' lines and along routes.

The 'Go Dutch' scenario provides a simulation of what cycling levels would look like if an area have the same infrastructure and cycling culture as the Netherlands. It is emphasised that 'high quality infrastructure' and 'bike culture' feed each other.

The scenario generates desire lines based on trips that could be expected to be made by bike should this infrastructure and culture be in place, while considering current trip patterns and levels of hilliness. The 'Go Dutch' scenario was used to estimate potential future cycle demand to align with our ambitious vision for cycling within the Borough.



Projected movements are concentrated round the Town Centre with six out of the top seven movements being to/from or within the Town Centre area.

The scenario also identifies potential for a high number of potential cycle movements wholly within Lymm, Birchwood and Woolston.

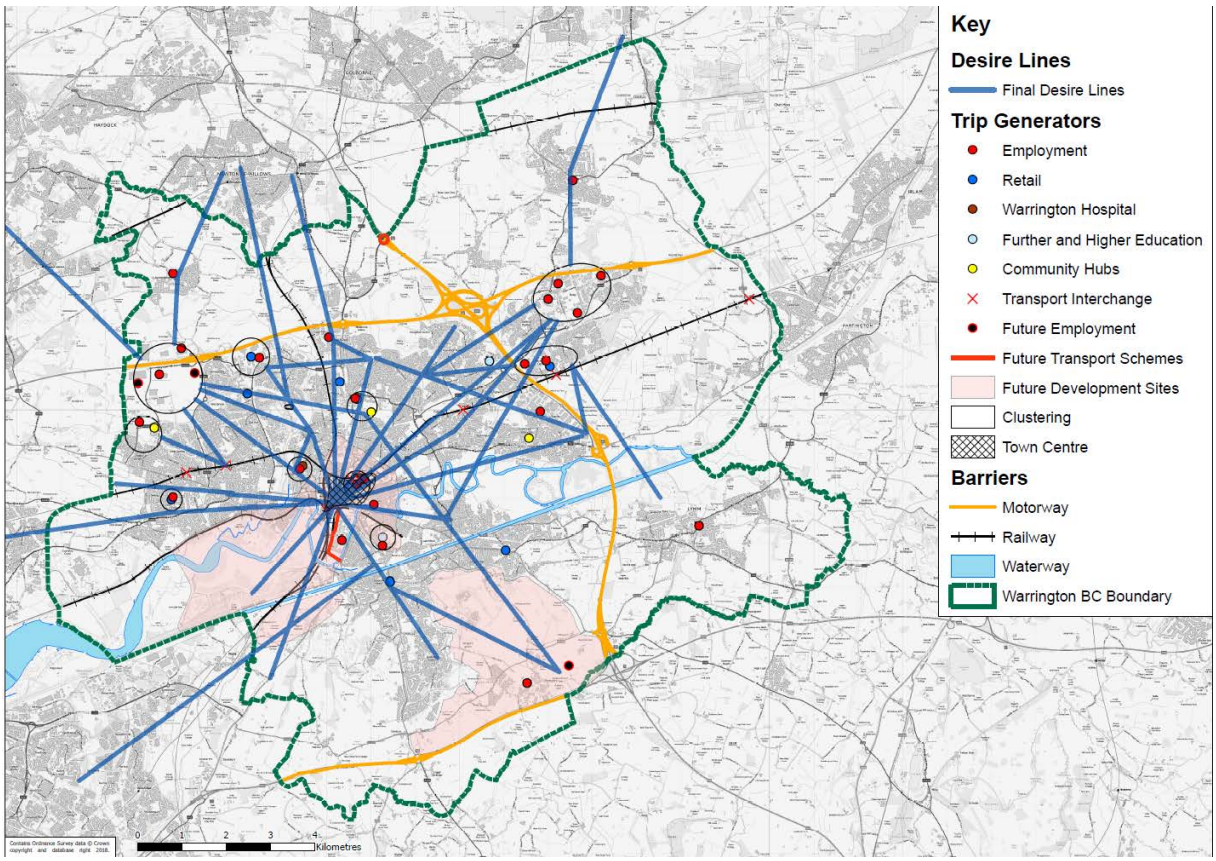
- CLUSTERING

Once the significant trip origin and destination points were identified and mapped, the next step is clustering. This involves grouping trip generators within proximity to each other into clusters allowing for the identification of significant trip generation. However, it is vital that it is acknowledged the clustering exercise doesn't exclude some trip types, including:

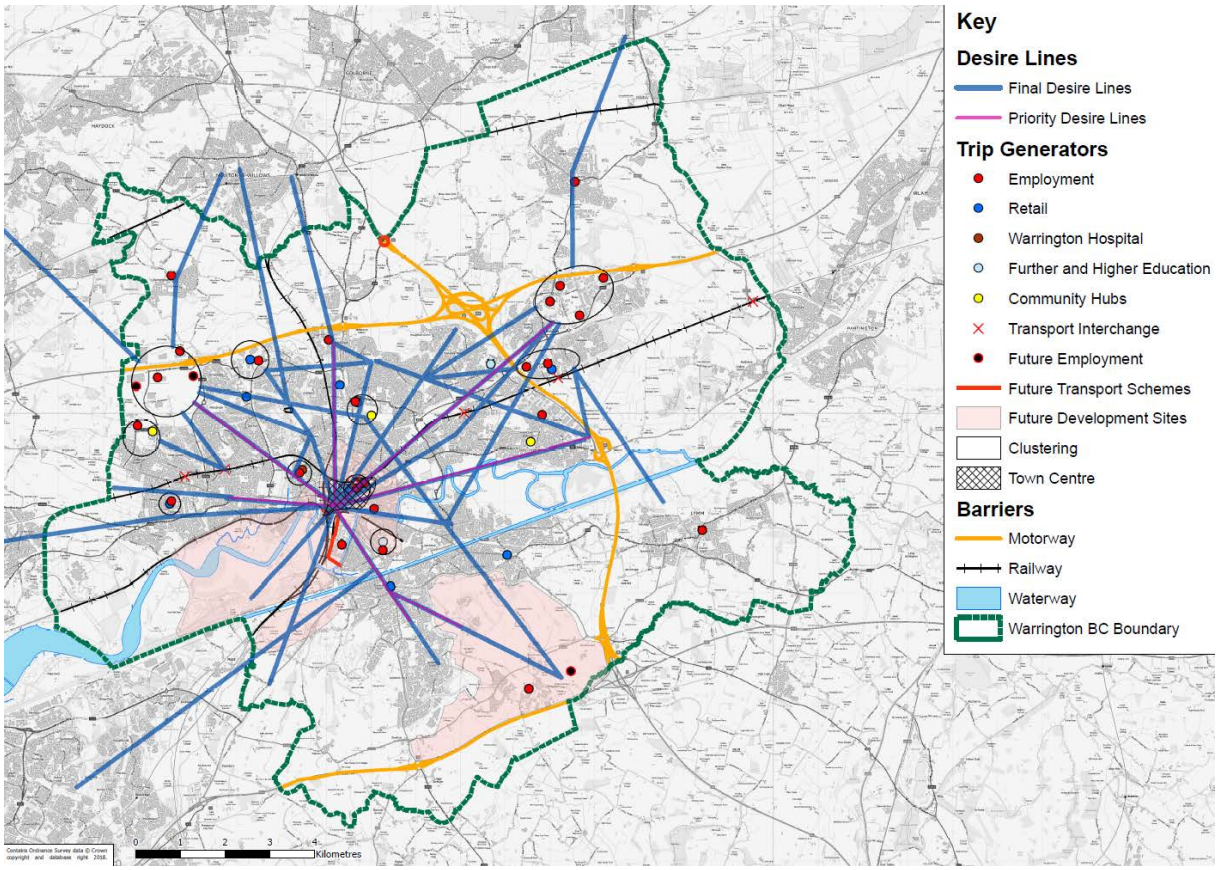
- **Leisure/Recreation –** Much focus of the LCWIP is centered on catering for utility trips but leisure cycling will not be neglected as it has been shown that this can encourage future utility trips as well as providing huge health benefits.
- **Cross Boundary –** Although the LCWIP focus on shorter trips within the urban area, desire lines for longer trips, such as those to/from neighbouring authorities are also present. Travel between Warrington and neighbouring authorities is important and will need to be considered as part of improvements to the cycling network.

- DESIRE LINES

With the trip generators, barriers and clusters identified, the next step is to plot direct (i.e currently do not link directly to existing roads or pathways) desire lines between the trip generators and trip generator clusters to identify the links that the cycle network needs to provide.



The purpose of identifying priority desire lines at this stage is to provide focus with regards to identifying routes to meet the maximum number of potential trips. The priority desire lines effectively form corridors within which preferred route alignments and improvements will be identified.

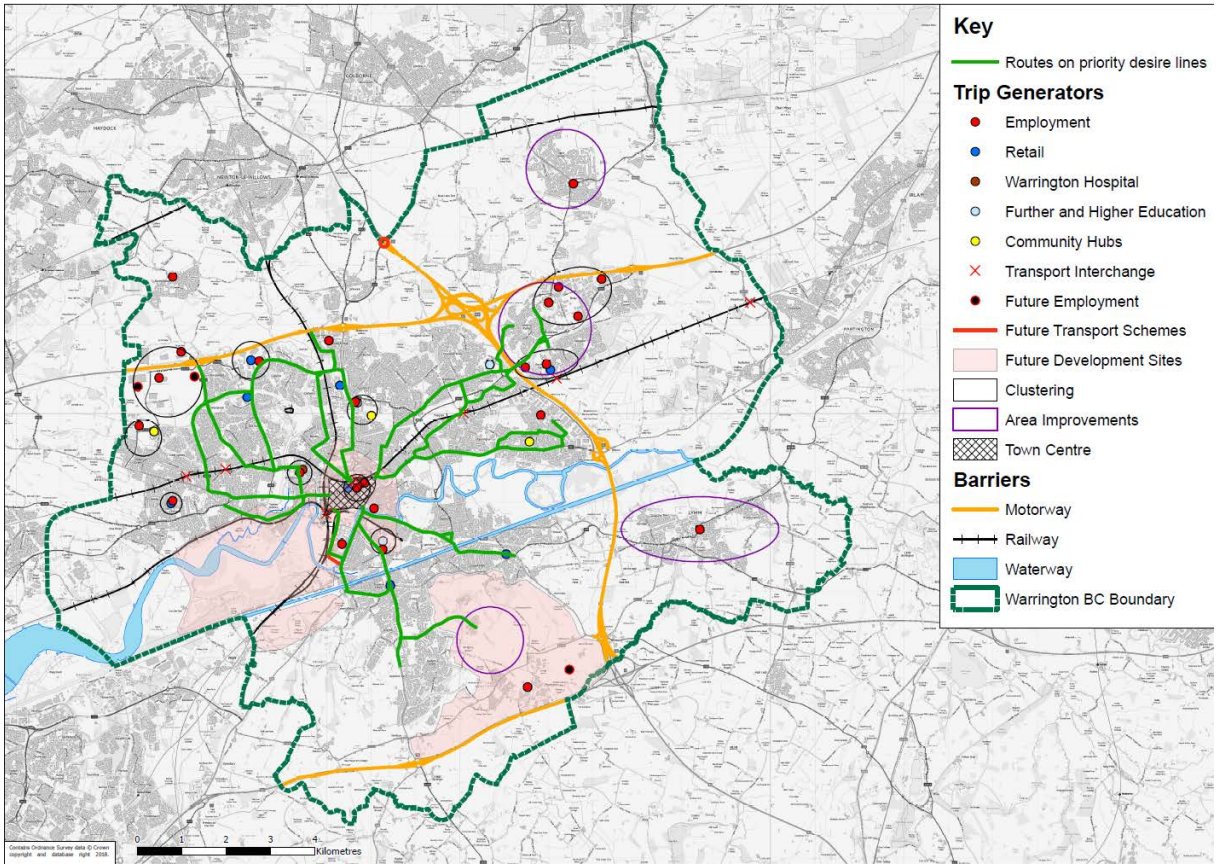


Primary corridors were included in where there are high flows of cyclists forecast along desire lines that link large residential areas to trip attractors:

- Movements to and from the Town Centre were identified due to the concentration of economic activity and for connections to the rail network;
- Connectivity to significant strategic employment sites at Omega, Birchwood, Winwick Quay and Appleton Thorn with desire lines to both sites from the Town Centre and the communities in between.

With the priority desire lines identified, we need to convert into routes. The approach involved identifying the most direct route based on the existing highway network.

Due to the complex nature of cycle network routing within the Town Centre, the routes at this stage extend to the edge of Town Centre only. The Town Centre has been identified as a specific area for further detailed movement analysis for all modes within which a key principle would be improving cycle and walking movements.



In addition to the priority routes, areas were identified where a package of improvements would be appropriate to facilitate local cycling trips. This approach is influenced by the significant potential for short cycle trips within these communities at a local level.

Section 5 and 6 indicates how we intend to transform these desirable routes into safe routes, which include reallocating road space, providing and enhancing greenway corridors and/or quietway corridors.

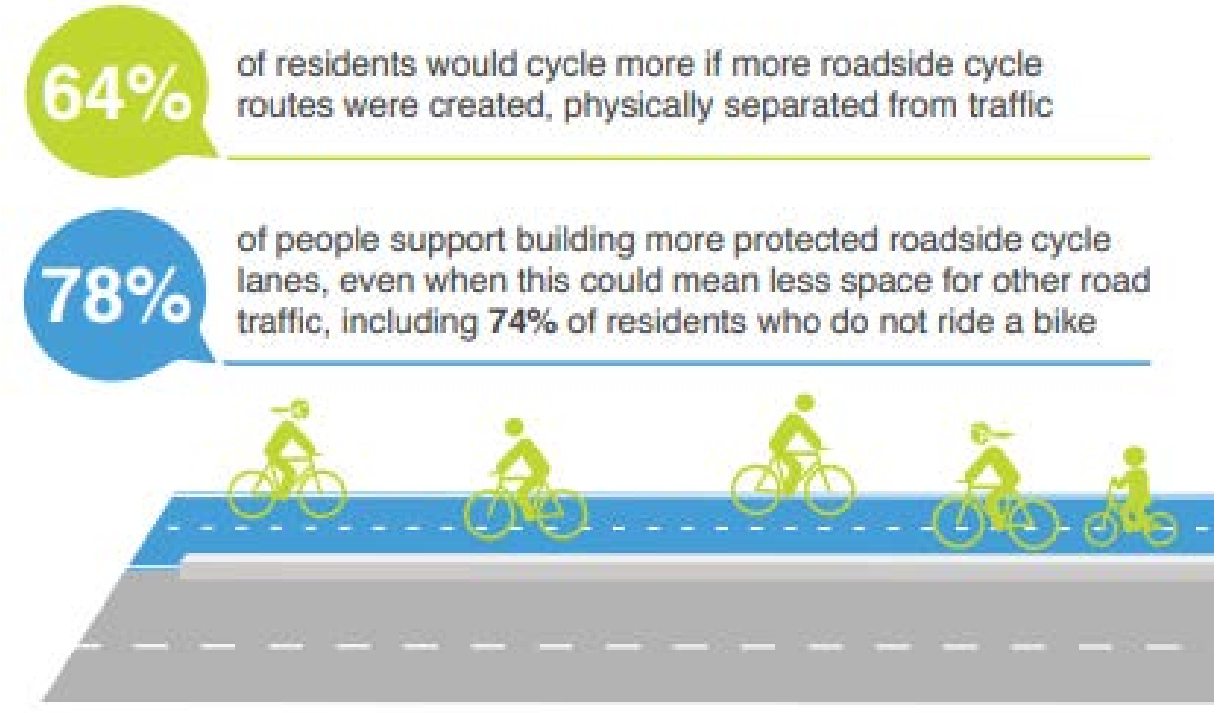
4.4 WHO ARE THE POTENTIAL CYCLISTS?

We have now identified the locations of potentially cyclable car trips but a cycle network is very different for different users and needs to take account of preferences. Cyclists have differing levels of confidence and experience:

- Some will find it easier to cycle around the Borough as they have the confidence and experience to deal with heavier and faster traffic flows.
- At the other end of the spectrum there will also be those cyclists who may find sections of the road network particularly difficult to negotiate.

In 2016, 62% agreed that “It is too dangerous for me to cycle on the roads” (The British Social Attitudes Survey). This rises to 68% for non-cyclists, the people we’re aiming for.

The 2017 'BikeLife' survey commissioned by Sustrans found that:



For many people, cycling with busy traffic is hugely off-putting. A systematic review carried out found this particularly puts off women, and probably also older people and those riding with children (Aldred et al 2017).

People's willingness to cycle can be categorised as shown in the diagram below. Whilst it can be accepted that there will always be those who will not cycle for personal or perhaps practical reasons, there is a large number of people who can cycle and would cycle more given the right conditions. The Active Lives surveys note that nearly 46% of Warrington adults have cycled at least once a year. This suggests that there is a huge potential target audience for cycling.

Section 4:

Enabling Cycling - The Plan

5) ENABLING CYCLING

Based on an evidence led approach as outlined in Section 4, the development of a network plan will identify core cycling corridors in Warrington. This network needs to be appealing, pleasant, easy to use and safe to increase cycle numbers. Cycle routes only work if they connect places people want to go. The network infrastructure identified in this section will help people make journeys to work, school, shops and for other utility trips as well as for leisure.

5.1 CORE DESIGN OUTCOMES

Cycling is not walking and it is not driving. It is a distinct mode which requires distinct design details. We want our network to be usable by a competent 12 year old, meaning that it will be easy, accessible and a pleasant experience.

New cycle facilities must be designed to cope not just with existing levels of use, but with the future we are planning.

5.2 THE PROPOSED CYCLE NETWORK

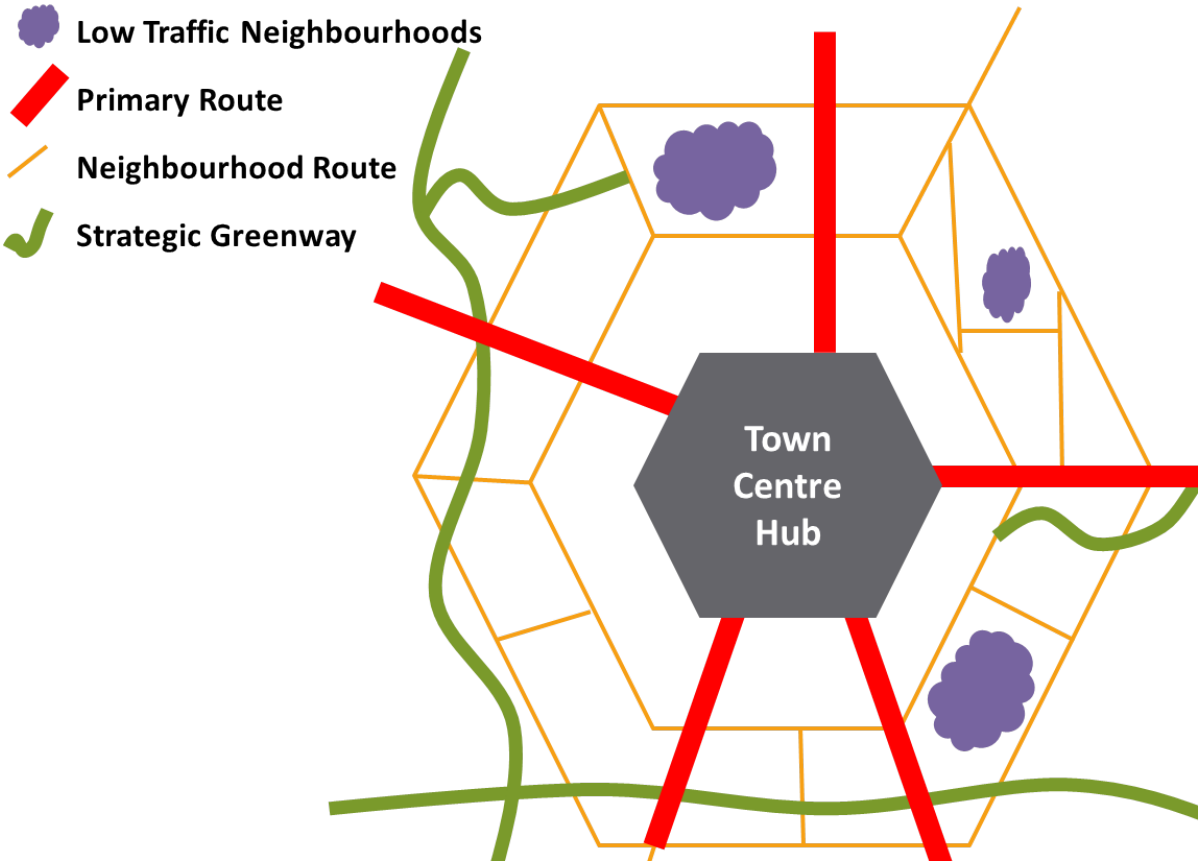
We do not propose dedicated cycle infrastructure everywhere.

On key routes, led by evidence of existing and potential trips, we will seek to provide direct high quality cycling infrastructure.

On quieter residential roads we will seek to ensure that the street environment enables cycling.

We will create a network (ideally meeting a 400m by 400m density) of dedicated space for cycling; creating corridors that link key places of employment, leisure, public transport and residential areas. The proposed cycle network is formed around three guiding principles of making it connected, easier and safer to travel by bike.

The proposed network will bring a good quality cycle route within the reach of most people within the Borough and include both high quality, segregated routes to and from the Town Centre, as well as a network of quiet streets and off-road greenway paths, so that cyclists can choose the route that suits them best. To facilitate this, a range of different categories of cycle infrastructure are planned based on the differing types and needs of people who cycle and trip type.



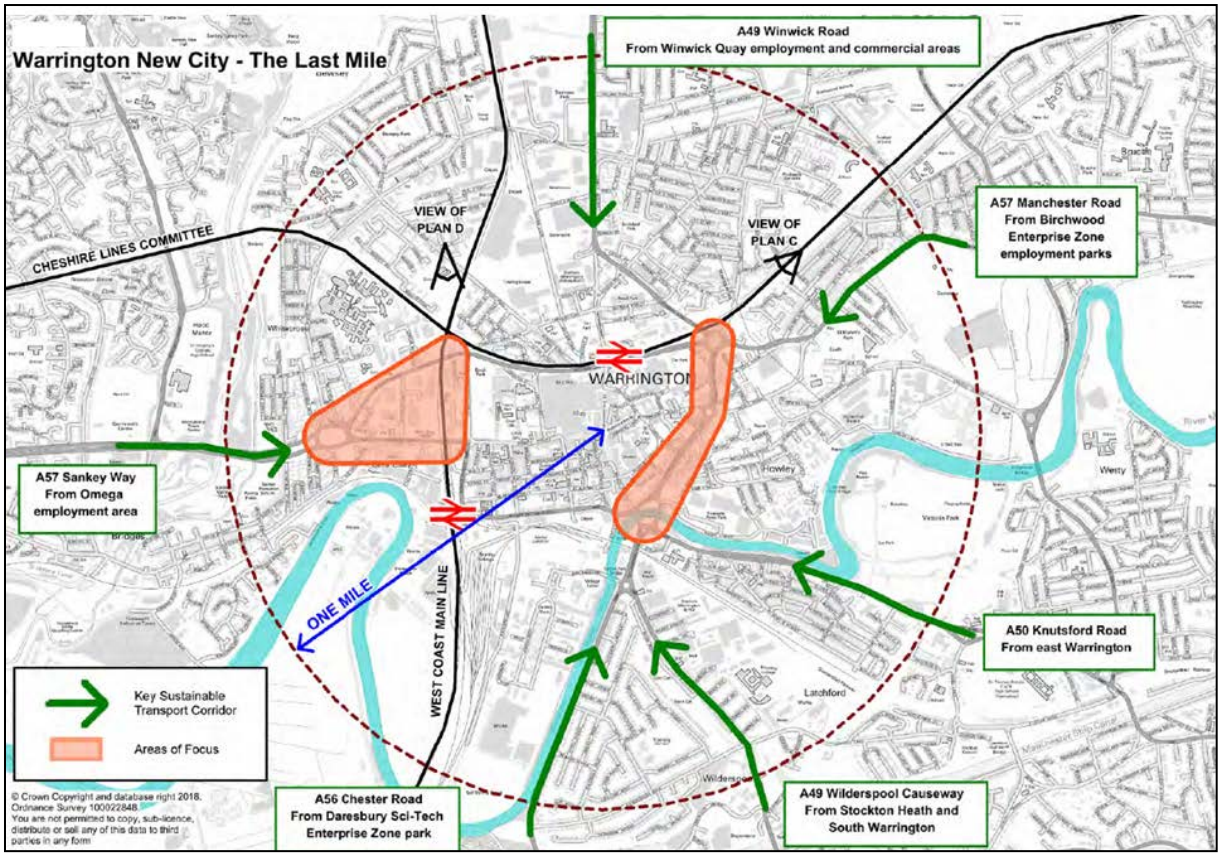
Cycle movements are not confined to a network but the network has been developed so that cycling can be enabled on key desire lines, especially where cycling is inhibited on our main transport corridors.

The proposed approach is for the primary, neighbourhood and strategic greenway cycle corridors to act as core routes for the highest volumes of cycle journeys, from which branches connect to nearby facilities, such as schools, which are often located on side streets or cul-de-sacs.

The cycling network has however not been produced in isolation, with concurrent development of a programme of walking infrastructure improvements with intrinsic links anticipated during delivery, recognising the areas of potential conflict and the differing requirements of each mode.

Town Centre Hub – The issue of the 'last mile' into Warrington Town Centre is a key barrier to being able to cycle towards and through the Town Centre.

Improving the 'last mile' of journeys into the Town Centre for pedestrians, cyclists and buses has therefore been identified as a priority. Our aspiration is to provide high quality and fit for purpose transport infrastructure that will make walking, cycling and public transport the obvious way to get to, from, and through Warrington Town Centre.



Major transport improvements such as the Centre Park Link and the Western Link aim to reduce traffic levels within the Town Centre. This release of road space should be captured for use by walking and cycling.

The "Last Mile" study will be commissioned later in 2019 to identify a Town Centre Masterplan and a package of measures to help meet our accessibility and connectivity objectives. This will receive financial support from the Cheshire and Warrington Local Enterprise Partnership.

The Last Mile project will focus on improving the most acute issues which are experienced on the last mile of sustainable travel trips to key destinations in Warrington Town Centre. The priority corridors for investment are shown in Plan B and described below:

- From the East, the A49 corridor, which forms part of the Major Road Network (MRN), creates a substantial barrier for bus and cycle movements into and across the Town Centre. This is particularly acute at the Cockhedge and Dial Street roundabouts. Warrington Central station is one of the important destinations which would be reached by improvements on this corridor.
- Further south on the A49, the Bridgefoot Gyratory crossing of the River Mersey and Brian Bevan Island create an intimidating and unappealing environment for cyclists. Improvements to this approach to the Town Centre will support the delivery of the Warrington Waterfront and the South East Garden Suburb developments that are proposed in the draft Local Plan. Warrington Bank Quay Station is an important destination within the corridor with its national and regional rail connections.
- From the West, the A57 connects the Town Centre to Great Sankey and Chapelford Urban Village. On this corridor the large, congested Sankey Green Roundabout creates a barrier for walking and cycling trips, and crossings of the West Coast Mainline on Liverpool Road and Priestley Street create pinchpoints entering and leaving the Town Centre for and cyclists.

This will support our ambition to grow the Town Centre and make it more accessible to residents, visitors and workers. A more pleasant environment around the Town Centre will help with inward investment and business confidence as well as attracting new visitors. As the Town Centre is the focal point for many cross-Warrington journeys then removing the transport barriers around the Town Centre will help with the ambitions of the Council to support cycle journeys.

Strategic Greenways – These are completely traffic free routes through parks and open spaces providing pleasant and attractive places for everyone to cycle.

Much of this network already exists, albeit the quality in places is indifferent. In places the greenways feel as if they have not been maintained regularly since they were built, and the network in places has an air of isolation.

Warrington's extensive green infrastructure, its network of green spaces and parks, is an economic resource as well as a resource for nature conservation and wildlife. It is a key component of Warrington's quality of life and image.

New greenway routes are planned within the Infrastructure Development Plan (IDP) as part of the emerging Local Plan.

The Warrington Means Business regeneration framework for the Borough also identifies a number of prominent aspirational routes such as those to be integrated as part of the following developments: Warrington Waterfront, Port Warrington and additional routes into and connecting the Omega north and south sites.

The identified national HS2 cycle way also offers an opportunity to connect parts of our existing off road cycle network into a prominent piece of national infrastructure and to improve cross boundary links.

It is a myth that disabled people don't (or can't) cycle. There is however currently a number of physical, financial and attitudinal barriers that prevent more people from taking up cycling. In many places, particularly on our greenway network, there are examples of infrastructure that disable people from utilising and benefiting from otherwise accessible routes.

We will undertake a programme of improvements to improve surface condition and width, visibility, accessibility and signing on existing greenway routes.

There are also existing cycle routes which form an extensive neighbourhood route network in some areas of Warrington.

Neighbourhood Routes are defined as continuous routes segregated from traffic that may be shared with other non-vehicular users. In general, these would be shared use paths which are at least 3m wide which follow the line of a highway and often benefit from street lighting.

Many of the roads constructed within the New Town estates of Warrington were built with grass verges and no pavements. During the 1990's many had wide pavements provided and many of these have since been re-designated as shared use routes. For example along Lingley Green Avenue in Great Sankey and Admirals Road in Birchwood.

Where some roads were not provided with any pavements, then over the years these have been retrofitted with a new shared use path adjacent to the road. For example Cromwell Avenue near Gemini retail park. This work will continue with the retrofitting of existing roads and/or the construction of new routes within new developments, such as those within the Omega employment park. Improvements will also be made to existing routes, improving continuity and providing additional priority at crossings.

These local routes allow people in neighbourhoods to access local destinations such as shops, secondary schools, and to access the primary routes for longer journeys.

Primary Routes – Arterial cycle routes in and out of the Town Centre with protected space for cycling is the essential starting point for improving Warrington's cycle network.

The speed and intensity of traffic on these corridors is typically too high to enable cyclists to safely integrate with traffic, and as such, the aim will be to provide priority for cycling with segregated, dedicated and safe paths and spaces for people to cycle separated from traffic.

Primary Routes have been defined based on their propensity to increase cycle trips with a focus on the journeys between the Town Centre and suburban destinations. These are high quality integrated corridors that radiate out from the Town Centre hub that use, or follow, the main arterial transport routes.

Key elements of these corridor routes are likely to include:

- Remodelled junctions and provision of cycle facilities physically separated from general traffic or signalised cycle-only movements;
- Various measures to increase the separation of cycles from other traffic: 'wands', cycle tracks between pavement and carriageway height (hybrid) and kerb-separated cycle tracks; and
- Bi-directional cycle tracks between 3.0m and 4.0m wide on one side of a carriageway. Various mitigation measures to be incorporated to minimise the risks entailed by cycles travelling in the opposite direction to which one would expect, particularly at junctions and pedestrian crossings.

Proposed Scheme by Leicester City Council

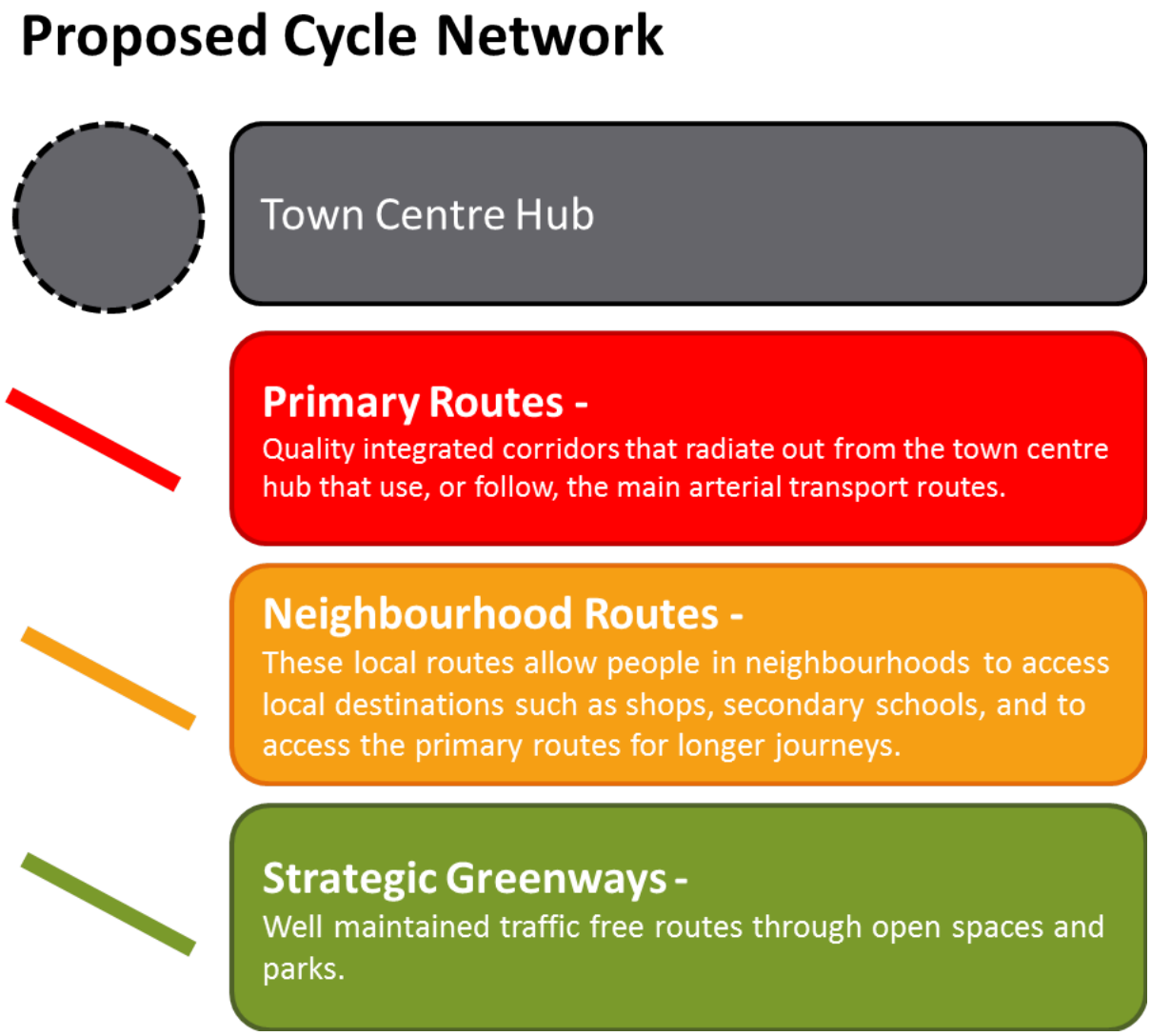
- At bus stops, we will look to introduce 'bus stop bypasses', routeing cycles through the footway, around the back of bus stops.

Lewes Road, Brighton (DfT Case Study)

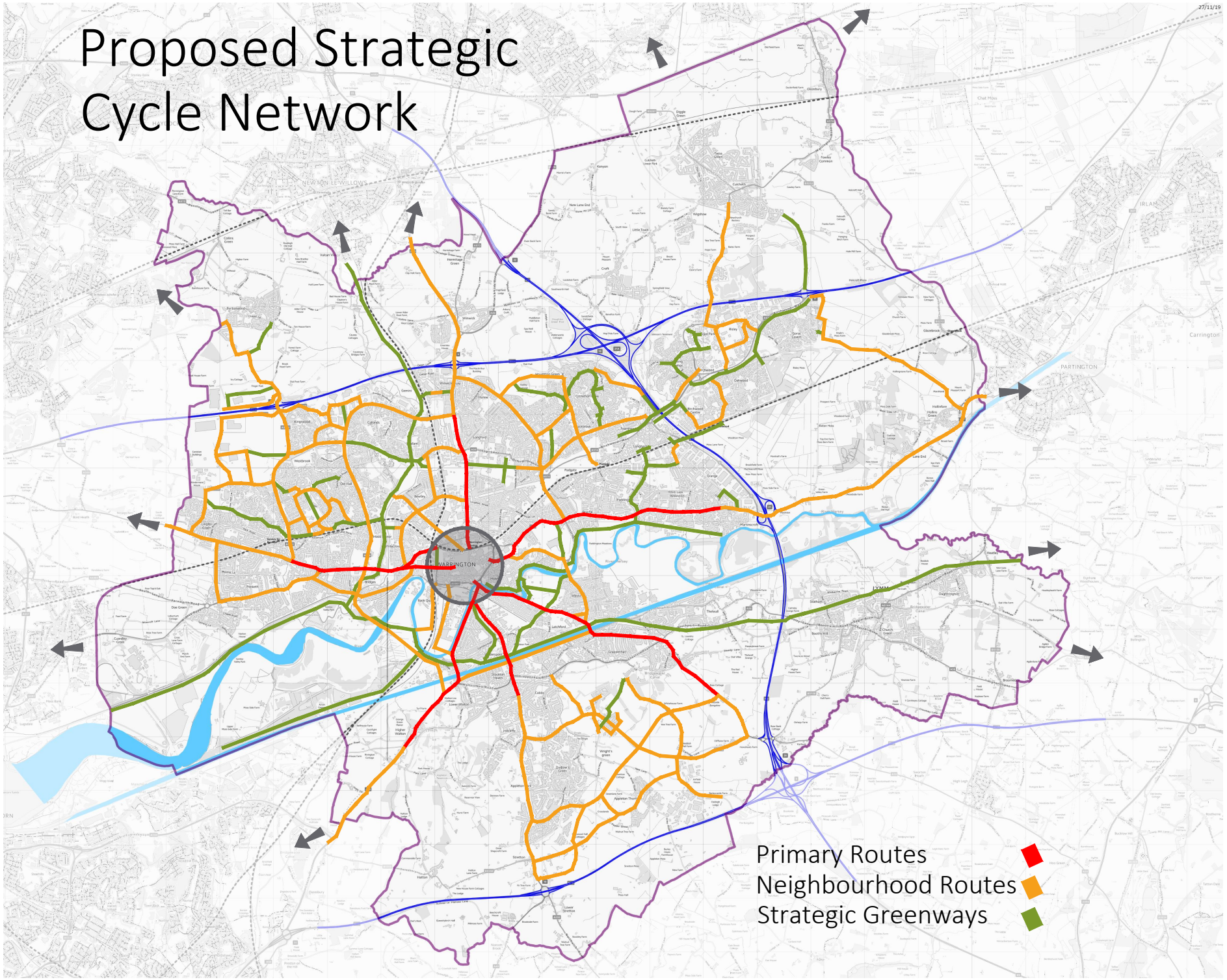
On highly trafficked routes, only distinct and separate provision for cycle traffic can ensure the creation of attractive and comfortable infrastructure for cyclists.

Currently, there are no routes in Warrington which match the definition of a primary route as set out. This is one of the primary ambitions of the LCWIP and LTP4 and allows us to raise the bar on the standard of cycle provision across the Borough.

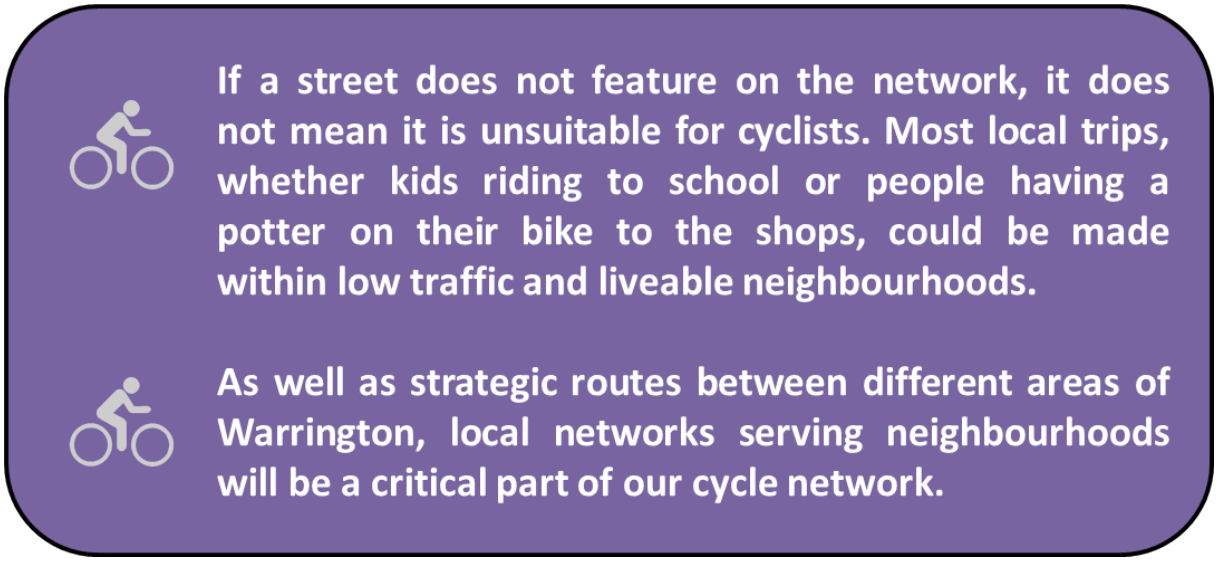
The proposed network would allow a transformational increase in cycling provision and will go some way to improving Warrington as an attractive place to live.



Proposed Strategic Cycle Network



Low Traffic Neighbourhoods



Many of our residential streets were laid out before cars came to dominate the roads and were not intended to carry heavy through traffic. Heavy traffic kills social interaction and we will promote schemes to put the 'right traffic on the right roads'.

In Warrington certain streets have been closed to through traffic for decades, resulting in better quality of life for residents and enabling walking and cycling. There are however many more neighbourhoods in Warrington which should be very lightly trafficked and benefit from low speeds.

A "mesh" of quiet streets will provide the glue between the aforementioned three part route hierarchy and allow people to make direct, safer and comfortable routes to their destinations. Low traffic neighbourhoods are key to ensure that people can cycle safely from their front door to where they want to go.

Removing rat running (non-local traffic which permeates through residential areas in order to save time by cutting out congested main roads or junctions) is a key part of creating low traffic neighbourhoods and conditions that are conducive to people walking and cycling. In most instances, making an area more attractive for cycling doesn't need to exclude cars but should reduce their dominance.

These low traffic neighbourhoods will utilise quiet streets, cut-throughs (e.g. cycle bypasses or traffic-free areas) and most will initially require relatively inexpensive intervention.

Some will however require interventions including reducing traffic volumes or speeds on roads and the provision of filter points, which allow for movement of people walking or on bike but do not allow through motor traffic.

We will implement an active programme of restricting rat-running through residential areas. Traffic travelling through the area should be kept on main roads instead. It sounds like a radical ask – but it's common sense. We will create networks of quieter streets where children play out, neighbours catch up, air pollution is lower, and walking and cycling are the natural choice for everyday journeys.

Section 6:

Delivering the Cycle Network

6) DELIVERING THE CYCLE NETWORK

6.1 INTRODUCTION

Delivery of key elements of this cycle network is dependent on available funding. A variety of funding sources are available to us, but at time of publication there is no specific government funding for delivering LCWIPs.

The identified infrastructure will be delivered via a variety of mechanisms, including delivery by the Council and its partners and through development proposals. As well as its own internal resources, the Council will pursue external funding, particularly given that many of the proposed actions will have positive benefits for many stakeholders.

An audit was undertaken of the existing infrastructure in areas identified as being key to providing a high quality network to serve existing and potential cycle journeys. Gaps in provision, suitable schemes and additional links were then identified.

Based on this audit we will develop a programme of works, including specific 'cycling' projects as well as improvements secured as part of new developments, regeneration projects and wider schemes, and will proactively identify funding opportunities.

6.2 USING THE PLANNING PROCESS

There are ambitious plans for growth in Warrington as set out in the Draft Local Plan. This will bring new houses and new jobs to the Borough and a further increase in the overall population in the town. The Local Plan provides a once in a generation opportunity to plan significant new areas of the town with active travel as a first principle. This, and all subsequent reviews of the Local Plan and its associated documents will include the role of Active Travel in enabling the growth in population and jobs.

We can also influence the Active Travel arrangements through the Development Control Process. Transport for Warrington officers are consulted routinely on planning applications. All relevant planning applications should be accompanied by a Travel Plan (TP) which outlines the developer's proposals for walking and cycling infrastructure that will be built as part of the scheme.

The proposed cycle network aims to identify network development opportunities arising from planned developments and allocations within the Council's Local Plan.

It is envisaged that this plan will be integral in the negotiation of developer contributions for new walking and cycling infrastructure, as part of future developments in the Borough.

6.3 SCHEME DELIVERY

We will prioritise and focus on improvements that will help to enable cycling on journeys under 5km. These will help us to convert some of those car journeys that are less than 5km in length into cycle trips.

Excess road space for vehicular traffic suggests that the environment is for motor vehicles. In most locations, carriageway widths of 3.0m provide enough width for all general traffic to use lanes effectively. To successfully deliver the cycle network, reallocation of space may be necessary.

Typically this will involve one or more of the following:

- Filtered permeability, e.g. road closures (with exemptions for pedestrians and cyclists);
- Removal of one or more general traffic lanes;
- Reduced width of general traffic lanes;
- Removal or relocation of car parking.

The reallocation of road space from motor vehicles to active travel modes makes an important statement about the relative priority of different transport users.

As and when junctions and streets are scheduled for improvement (such as structural maintenance), we will assess the needs of cyclists and include high quality cycling provision where possible to improve priority for cyclists.

We will strive to ensure that, wherever appropriate, new road schemes and changes to existing roads infrastructure will be designed and implemented to reflect the needs of cyclists and a placemaking approach.

We will work towards designing and implementing new infrastructure identified in the cycle network, with detailed design and route alignments taking account of public consultations as part of wider schemes.

A full feasibility study for each route will be needed to determine the precise interventions needed through the corridor, to define the exact routes and more accurate costings.

6.4 ENSURING GOOD QUALITY DESIGN – ACTIVE TRAVEL PROOFING

Cycle-proofing' is cycle-policy-speak for the idea that cycle-friendliness should be designed in at the outset when planning any road or traffic scheme new development or even planned highway maintenance works. We need to ensure that changes work to support people who currently drive but would like to walk and cycle more.

Interim Advice Note 195/16 Cycle Traffic and the Strategic Road Network give requirements and advice regarding designing for cycle traffic for the Strategic Road Network (SRN).

Away from the Strategic Road Network (SRN) no law or standard currently exists in the UK that defines the dimensions of cycling provisions. Unlike some local authorities, WBC does not have adopted design guidance for cycle infrastructure.

The Active Travel (Wales) Design Guidance, Transport for the West Midlands Cycle Design Guidance and the Nottingham City Cycling Design Guide are resources that contain best practice and recommendations for designing high quality cycling infrastructure.

They provides advice on the design, construction and maintenance of active travel networks and infrastructure, and alongside emerging guidance including national guidance, will be used to inform development of our network.

The implementation of modern fit-for-purpose infrastructure will be achieved by engaging with planning, highway engineers, and design staff through training on the use of the best design guidance.

Cycle Parking - Within Warrington Town Centre there are over 350 publicly available cycle parking spaces. We will continue to increase and improve the attractiveness of cycle parking across the Borough, including provision to accommodate non-standard cycles.

Example Wayfinding (Left – Broxap Cycle Shelter/ Right – Hull Public Realm)

Signing and Wayfinding - Walking and cycling journey times are often overestimated. We will review and expand cycle signing as the network expands.

Example Wayfinding (Left – 'Trueform' Totem Sign / Right – Quietway Route Signing)

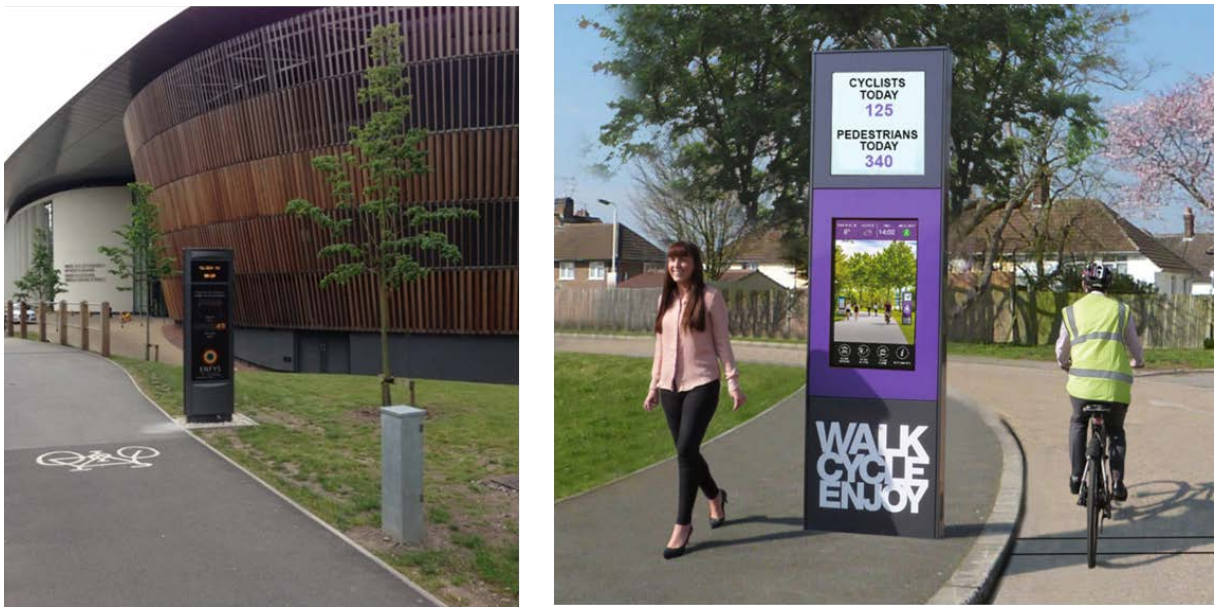
It is important that all signage and wayfinding information across the whole of Warrington is consistent.

6.5 MAINTENANCE & MONITORING

As important as building a route itself is maintaining it properly afterwards. The value of an enhanced network of facilities is greatly reduced if the network is not maintained, and this is an issue which has suffered in Warrington as revenue budgets become more stretched.

Arrangements for proper maintenance should be included in considering the design detail. Active travel corridors need special consideration in terms of maintenance. We will implement an ongoing programme for monitoring and maintaining the cycle network. This will include regular sweeping, surface repairs, gritting in cold weather, drain clearance and lighting repairs.

Monitoring and evaluating the benefits of investment in delivering the cycle network will be critical, and will enable us to make the case for future investment in our streets. Monitoring will be carried out for individual schemes and the whole programme of network improvements.



Example Monitoring Totems (Left – Cardiff / Right – Waltham Forest)

Section 7:

Enabling Walking

7) ENABLING WALKING

7.1 INTRODUCTION

As active transport modes, many of the benefits of walking and cycling are shared, and very often improvements for one will affect the other as large parts of the two networks overlap. For example, pedestrians and cyclists are often in close proximity and may share routes and crossings.

Walking trips are however generally shorter than cycling trips with longer trips being enabled through high quality access around public transport stops and interchanges.

In most places a comprehensive network which accommodates most pedestrian trips already exists. Warrington is well provided with paths and footways which offer an extensive network of routes many of which are traffic free and follow greenways and make use of open spaces and parks.

However, main roads which tend to be the most direct routes often have a poorer physical environment including narrow pavements with overgrown vegetation, infrequent crossing points and uneven surfaces. People may be deterred from using them due to severance issues eg need to cross busy roads or because the facilities are poorly designed or maintained.

The main focus of the LCWIP is therefore to improve and in some cases extend the existing walking network in order to encourage people to make more short trips on foot.

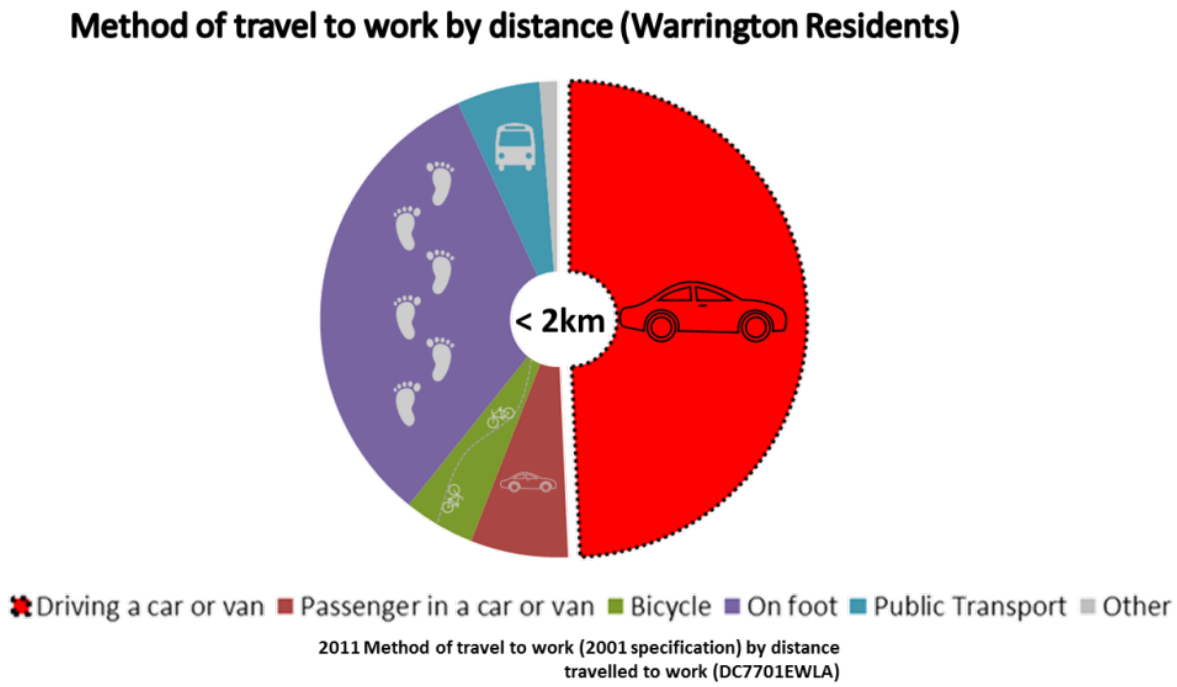
References to “people walking” are made throughout this section, but this should be taken as shorthand to include people using wheelchairs and mobility scooters as well as those using pushchairs or even children using scooters.

Walking on the wider PRoW network is covered under policies and schemes within the Rights of Way Improvement Plan.

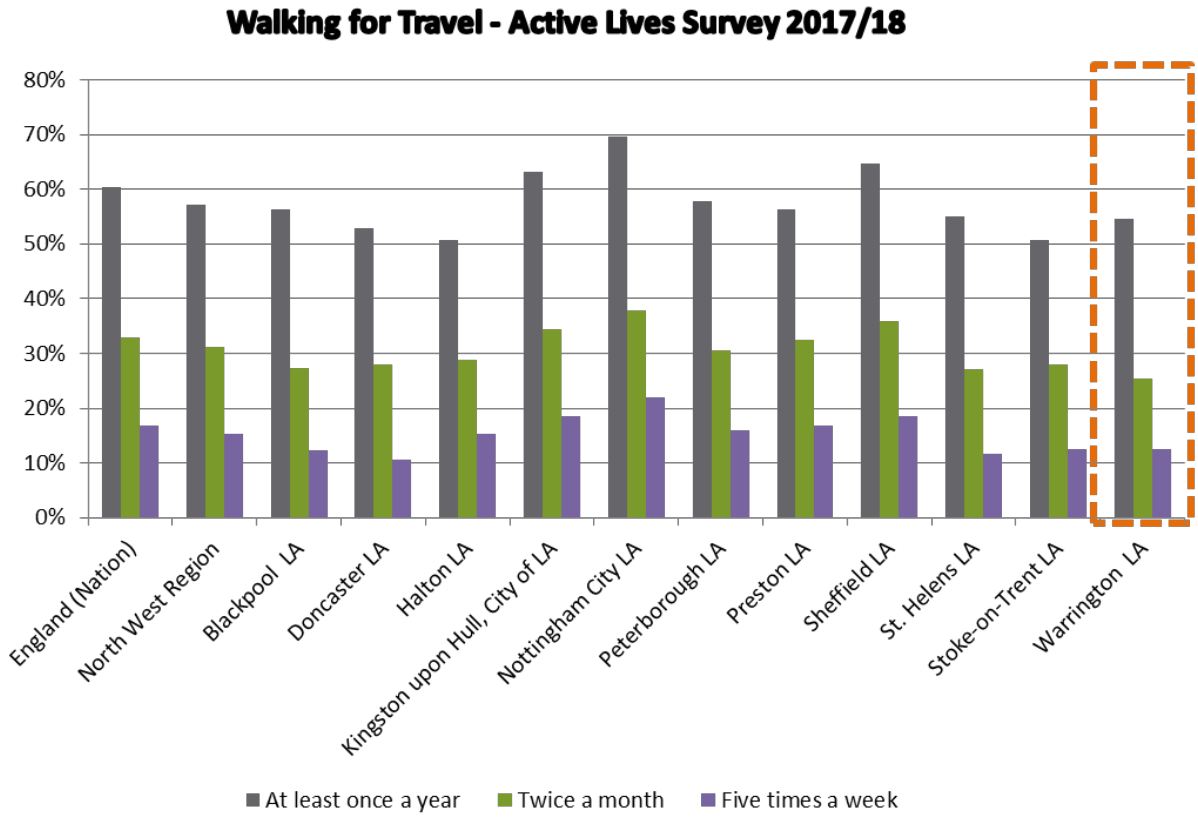
7.2 THE OPPORTUNITY

This section presents the results of analysis carried out to better understand the potential to increase travel on foot in Warrington, in terms of what type of trips, places and people offer the best opportunities.

As has been noted in section 3, many of the car trips driven in Warrington are very short, less than 2km in length. This distance is not only easily cycleable but for most people is well within their capability to walk. A reasonably healthy person should be capable of walking 2km in around 20-25 minutes.



Yet Warrington's performance as regards the numbers of people walking is not good. From the national Census it is noted that only 7.7% of Warrington's residents walk to work compared with 10.7% nationally. Also, from the annual Active Lives Surveys it is noted that only 55% of Warrington residents walked as a means of travel at least once a year compared with 60% nationally and 57% in the North West region.



Department for Transport Statistic: Tables CW0302/3
Sports England

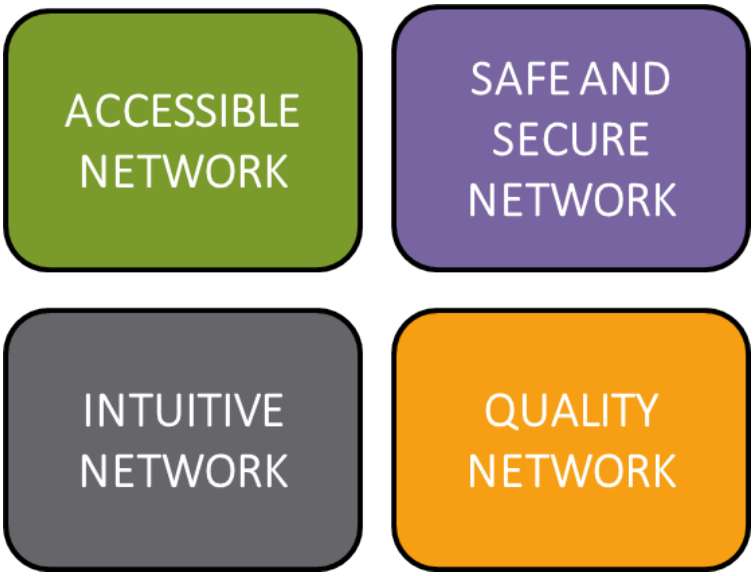
The journey to a local primary school or to the local shops, are examples of journeys where people could be walking rather than using the car.

The British Social Attitudes Survey shows that only 23% disagree that many short journeys currently made by car could just as easily be made on foot.

This is the underlying principle of the opportunity for Warrington. Every time somebody chooses to walk rather than travel by car, it's a win for Warrington.

7.3 BASIC DESIGN PRINCIPLES

A number of factors affect the propensity to walk but if walking is made difficult, people are less likely to do it – particularly if they don't have to. We need to make it easy and safe for people to follow the route that they want. The basic design principles behind our walking strategy are as follows:



- ACCESSIBLE NETWORK

The highway environment has evolved over many years and although new schemes and developments should have dropped crossings incorporated as standard, the majority of the roads and footways in the Borough were built many years ago when there was little or no consideration for the needs of people with mobility difficulties.

Warrington's population is getting older and more people have long term illnesses and conditions. Many streets require improvement to the latest accessibility standards so that Warrington's residents and visitors can live more independently.

8.4% of Warrington residents described their day to day activities being limited a lot by a health condition or disability. An additional 8.9% described their day to day activities being limited a little.

At many locations across the Borough full height kerbs present a significant barrier to mobility. At locations where pedestrians are expected to cross, dropped kerbs should be provided.

Existing networks should be upgraded where practical towards during maintenance or improvement schemes. Section 106 developer contributions may also be available in specific locations to support this activity.

We will continue our ongoing programme of footway reconstruction and routine footpath maintenance which makes paths more usable.

We will continue our ongoing programme of drop kerb crossing provision and new footpaths to address severance issues and ensure continuity for pedestrians.

- SAFE AND SECURE NETWORK

Well designed, responsive pedestrian crossings can benefit all road users. Everybody should be able to cross the road safely, directly and without delay. Crossings should be positioned in the right place and give everyone enough time to cross the road.

Maximum waiting time for signalised crossings varies. Evidence has shown that after 30 seconds of waiting at a crossing encourages risky behaviour such as crossing before the green man comes on. Signalised crossings should prioritise people on foot with short wait times and comfortable crossing times.

We will continue our ongoing programme of improvements to existing signalised crossings.

Footways are provided for pedestrians. Encroachment by vehicles parking or loading reduces the comfort and ease of use of footways, forces pedestrians into the carriageway to pass vehicles (especially people using wheelchairs and pushchairs).

We will work with the police and civil enforcement officers to penalise inconsiderate or illegal behaviour including 'pavement parking'.

Concerns relating to personal security can discourage people from walking, particularly after dark. There are a wide range of factors which impact on this issue which the Council has some influence on including:

- The existence and quality of street lighting
- Vegetation and tree cover which can make some paths unpleasant places to walk
- Subways and underpasses which are in remote locations and are therefore unattractive to use.

We will consider personal security issues as part of the design process for any new transport project.

- INTUITIVE NETWORK

There are many Warrington residents and visitors who are unfamiliar with walking routes in Warrington. As a result the walking distance horizons are very short as people don't know how to get to places which are actually very close.

The fear of getting lost in an unfamiliar area is a barrier to walking, especially when pedestrian routes are not directly between places of interest.

Clear signing on the highway and walking network is a key tool in this respect. The use of fingerpost signs to indicate key destinations is particularly important and whilst there are already good examples of this in the Town Centre there is a need to expand these signs into other areas.

A review of fingerpost signing across the Borough will be undertaken with an emphasis on key destinations such as the Town Centre, transport interchanges and to educational establishments.

Of equal importance is the need to provide maps, both printed and online, which show people how they can walk to their chosen destination. The Warrington cycle map is of equal benefit to pedestrians as well as to cyclists and this will be reviewed to enhance its usefulness to both active modes of travel.

The Warrington Cycle Map will be continually reviewed to ensure its usefulness to pedestrians as well as cyclists.

- QUALITY NETWORK

The propensity to walk is influenced not only by distance, but also by the quality of the walking experience. A 20-minute walk alongside a busy highway can seem endless, yet in a rich and stimulating street, such as in a town centre, it can pass without noticing.

The removal of street clutter, including redundant signing, benefits the pedestrian by reducing confusion and creating a more attractive walking environment.

Although guardrail can be useful in limited circumstances, it is visually and physically intrusive, and reduces the width of available footway.

Electric vehicle (EV) charging points installed on footways could prove hazardous for some pedestrians. All footways should remain as accessible as possible. We will ensure that all new EV charging points provide adequate clear footway width. Unless there are special site circumstances, all new chargers should be installed on build outs in the carriageway.

We will actively explore opportunities to de-clutter streets of unnecessary street furniture.

7.4 TRANSFORMATIVE DESIGN PRINCIPLES

In addition to the programme of Borough wide improvements, due to the physical size of Warrington, it was considered important to identify specific areas for targeted improvement to the pedestrian realm, rather than implement isolated schemes on a borough-wide basis. It is proposed to focus on the following areas:

- Low Traffic Neighbourhoods;
- Warrington Town Centre;
- Access to Public transport interchanges; and
- Access to schools and colleges.

- REDUCING SEVERANCE: CONNECTING OUR LOW TRAFFIC NEIGHBOURHOODS

As described in section 5.3 “Low traffic neighbourhoods” are groups of residential streets, bordered by main or “distributor” roads (the places where buses, lorries, non-local traffic should be), where “through” motor vehicle traffic is discouraged or removed. Applying this approach benefits both walking and cycling.

The creation of low traffic neighbourhoods can deal with residential and local streets, but we know that many trips, even short ones, pass across a number of ‘cells’. These are often severed by busy roads.

Some of our major roads create both psychological and physical barriers to pedestrian movement with limited at-grade crossing. A lack of adequate pedestrian crossings has the ability to create severance and discourage active travel choices.

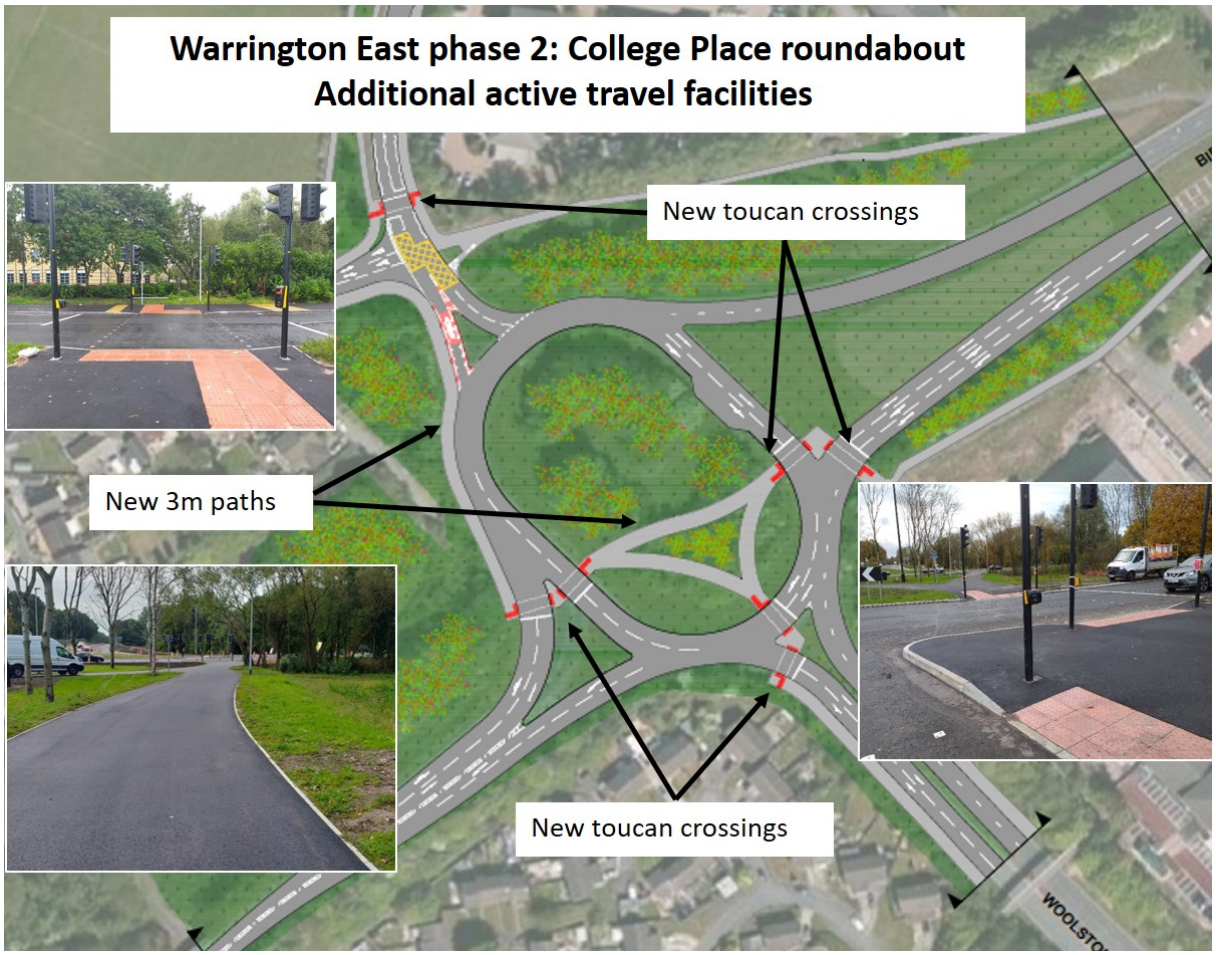
Busy urban junctions without adequate pedestrian facilities increase the likelihood that pedestrians will be injured while crossing the road, or at least intimidated. The quality, provision or absence of crossing points also affect people’s ability and desire to walk in the first place.

Peterborough (DfT Case Study)

Once we've set up one low traffic neighbourhood, by placing crossings cleverly on main roads, we can join it to the next one and the next one, so anyone can walk easily across several low traffic neighbourhoods, from home to school, or work, or the station.

We need to ensure that crossings are sufficient in number and direct, avoiding diversions or unnecessary delays. Major junctions of key classified roads should have controlled pedestrian crossings to accommodate desire lines.

We have been successful in providing pedestrian crossing facilities as part of major schemes in recent years, for example as part the Warrington East Phase 2 project (www.warrington.gov.uk/WE2) which was part funded by Local Growth Fund resources.



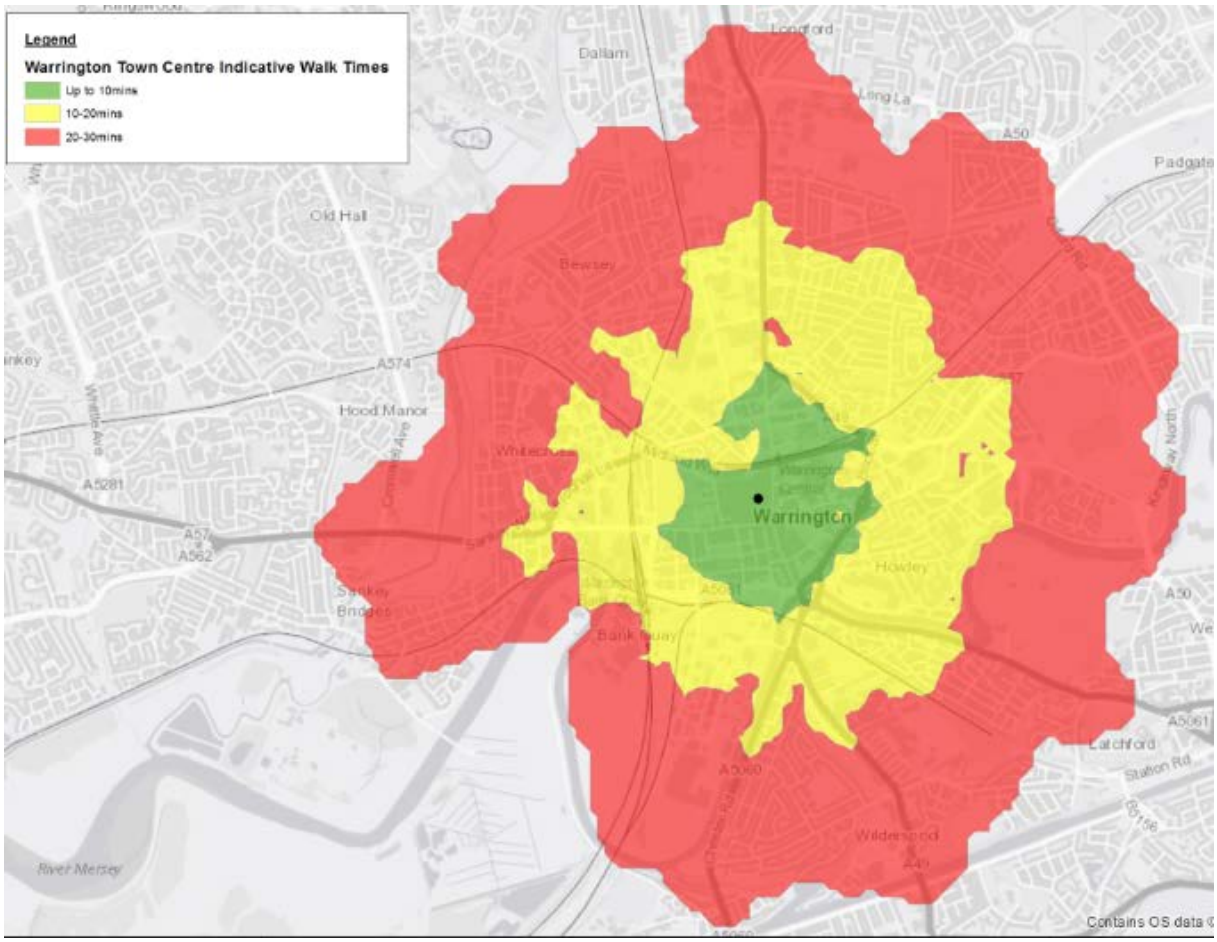
College Place roundabout – new crossings and paths

We will continue to identify opportunities to reduce severance between neighbourhoods, and between the origins and destinations of potentially 'walkable' trips.

We shall ensure that caution is exercised when using existing pedestrian flows as a guide to demand. Low pedestrian flows may be an indication of people being intimidated by traffic or finding it difficult to cross and therefore are not crossing the road.

- WARRINGTON TOWN CENTRE (CORE WALKING ZONE)

Residential development and more people living in Warrington's Town Centre is fundamental to our Local Plan. This will drive vitality, activity and foot-flow, reinforce Warrington's sense of place and enable regeneration as well as providing new homes for local people. It will change the face of the Town Centre.



The key streets in the Town Centre have already been successfully pedestrianised and enhanced to a high quality. We have also extended environmental improvements to some of the adjoining streets – Lower Bridge Street and the Cultural Quarter.

With its excellent public transport connectivity the Town Centre will be a focus for new businesses development – putting business at the heart of Warrington.

The delivery of this major change programme in the heart of Warrington means that there needs to be a step change in street purpose and design. A substantial redesign of the Town Centre is required to make it genuinely excellent for pedestrians. We have to realign our thinking when it comes to pedestrian infrastructure in the Town Centre.

We will reduce the number of vehicles (except buses) driving through the core of the Town Centre.

- WALKING TO ENABLE PUBLIC TRANSPORT

Attractive walking links are also needed at key origins and destinations to enable longer journeys using public transport. Our ambition is to create an environment where more residents can consider Door to Door sustainable integrated journeys within and beyond the Borough, rather than using a private vehicle for longer trips.

Measures can be relatively straight forward and low cost and could include additional or enhance crossings of busy roads, new footpath links, clearer signing, and better lighting.

The forthcoming 2019/20 programme of Active Travel improvements is expected to deliver schemes to improve accessibility on walking routes to and from Warrington West Station.

- WALK TO SCHOOL

The walk to and from school should be safe, calm and free of pollution. Over 50% of children currently walk to school in Warrington though in line with national trends noted in the National Travel Surveys this figure has been falling. There are many factors associated with this issue and not all are related to improving the walking environment.

Factors such as more working parents, larger school catchments areas and the growth in the personal security fears has reduced the number of children walking to school. Yet school children are the commuters of the future and this issue should be addressed head on.

It follows that as regards the physical walking environment a greater emphasis will be placed on measures which provide a safer route to school (as well as having wider community benefits). Again, these could include a mixture of new or improved crossing points, widened or improved pavements, and better lighting. Each school will have its own specific requirements and this would be strongly influenced by the school travel plans and road safety plans already in existence.

We will work in partnership with all schools in order to carry out an accessibility review of their approaches and the development of an accessibility plan.

Section 8:

Promoting Active Travel

8) PROMOTING ACTIVE TRAVEL

Improvements to infrastructure alone will not be sufficient to get people out of their cars on school trips, work trips and leisure outings. Smarter travel choices interventions will be needed, particularly to persuade people that journeys have become easier.

Evidence shows that complementing infrastructure with practical support and promotion achieves greater levels of uptake in walking and cycling and ultimately better value for money from investment.

A significant element of delivering the plan will be a package of home and work-end smarter travel measures. These will be critical to encouraging take-up and continued use.

Our programme will include:

- Awareness and communication – a marketing plan to raise awareness of the emerging network, which will feature positive messaging, using case studies and happy, healthy images. We will use social media as well as conventional techniques to change the traditional perception of cycling to encourage a positive and confident growth in uptake. The main promotional tool to support cycling is the Warrington's Cycle Map. This can be found at www.warrington.gov.uk/cyclemap.
- Cycle training and organised rides – Many people never learn to ride a bike and others never ride once they are adults. Also, for many people, a lack of confidence and feelings of vulnerability are common reasons for not cycling. Training can give new or less confident cyclists the help that they need to give cycling a try. A scheme of group and one-to-one training sessions will be established, from learn-to-ride to advanced, and organised rides will help to raise confidence and promote new routes.
- School travel planning – In 2017/18, nearly 82% of all 10 year olds in Warrington received Bikeability training. Bikeability is 'cycling proficiency' training for the 21st century, designed to give the next generation the skills and confidence to ride their bikes. Bikeability not only ensures young people can cycle safely but also demonstrates to them the value of cycling more often.
- Workplace Travel Planning – WBC will work with employers to help them develop travel plans to promote sustainable travel. Marketing, promotional and training support will be offered to businesses along improved routes.
- Travel planning at major trip attractors – in addition to workplaces and schools, we will seek out opportunities to promote the network at key destinations, events and trip attractors, including shopping centres, in the Town Centre, at organised events and even within new housing developments.
- Cycle hire – many people, especially those living in apartments, don't have the space to store a bicycle. To enable them to and get around without a car and experience the many benefits cycling has to offer, we will continue to investigate opportunities for a cycle hire scheme.

Section 9:

Proposed LCWIP Delivery Plan

9) PROPOSED LCWIP DELIVERY PLAN

Parts of the LCWIP network already exists with cycling and walking infrastructure that is generally fit for purpose. Other parts have existing infrastructure in need of an upgrade, whilst the remaining locations will require entirely new infrastructure.

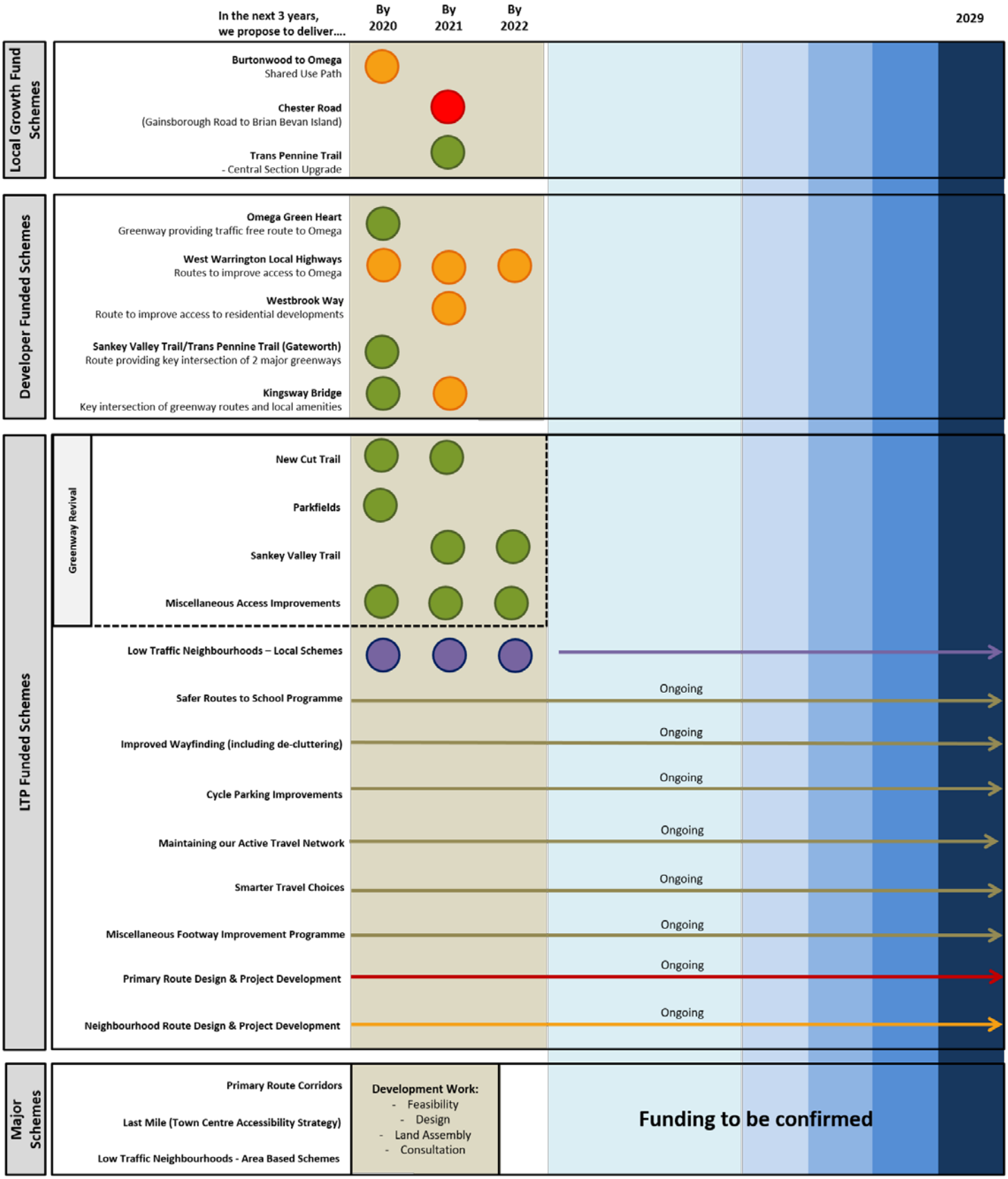
There is significant amount of work to be done to implement the improvements to deliver our network. The LCWIP covers a period of 10 years throughout which routes proposed for the network are planned to be rolled out for design and implementation.

The Warrington LCWIP Delivery Plan reflects the existing work programmes which are funded through the Council's LTP capital programme and amounts to over £500,000 a year. In the first 2-3 years this is being supplemented by £1.7 million from the Cheshire and Warrington LGF3 Growth Deal to deliver three large active travel projects. The challenge will be to maintain and increase this level of expenditure for the life of the LCWIP, i.e. to 2029, so that the aspirational network can be delivered.

The LCWIP delivery programme will be reviewed on an annual basis to reflect the development of the planned schemes and the availability of new funding.

A summary of the current programme is provided overleaf.

LCWIP Programme



Enabling Active Travel in Warrington
Our Proposed Plan

Walking and cycling brings cheaper travel, better health, better air quality, increased productivity, increased footfall in shops, better community and lower congestion, and it creates vibrant and attractive places and communities.

Warrington's compact size and fairly flat terrain offers a great opportunity for local journeys, currently made my car, to be made by cycling or on foot. We can and should be ambitious for the future of walking and cycling in Warrington.

Enabling more people to walk and cycle short journeys doesn't mean everyone will be forced to walk and cycle. Not everyone can – but many more people could.

We need to deliver a network, through provision of high quality infrastructure, to enable walking and cycling.

Our proposed approach to deliver this transformative change is to:

- Provide a network of primary, neighbourhood and strategic greenway cycle corridors to act as core routes for the highest volumes of journeys;
- Improve the 'last mile' of journeys into the Town Centre for pedestrians and cyclists; and
- Create networks of quieter streets where children play out, neighbours catch up, air pollution is lower, and walking and cycling are the natural choice for everyday journeys.

WARRINGTON
Borough Council