Appendices Contents

Appendix 1: The Case for Walking and Cycling

Health and Wellbeing

It is widely accepted that active travel, such as cycling and walking, can have a direct benefit for health. In England, physical inactivity causes around 37,000 preventable and premature deaths per year amongst people aged 40-79 years. It has been found that 68% of men and 58% of women are obese, and the direct annual cost to the NHS of physical inactivity is £900 million (1). Cycling and walking can be easy ways for people to build physical activity into their everyday lives.

Increased levels of cycling and walking for both commuting to work and school, and for leisure, particularly amongst young people, can play an important role in addressing obesity.

In addition, cycling and walking are increasingly associated with reducing the risks of a number of long term medical conditions, including coronary heart disease, stroke, cancer, and type 2 diabetes.

In Stockport, 42.3% of adults and 86.4% of 15 year olds are not physically active enough to maintain their health in the medium to long term (as measured against the Chief Medical Officer for England's guidance). Over 21% of children in Reception class are either overweight or obese, and this increases to almost one in three (31%) by Year 6 (2).

Health Benefits of walking and cycling

Increasing how much someone walks or cycles increases their overall level of physical activity, leading to associated health benefits. These include:

- Reducing the likelihood of being overweight or obese
- Reducing the risk of coronary heart disease, stroke, cancer, and type 2 diabetes.
- Keeping the musculoskeletal system healthy.
- Promoting mental wellbeing.
- Allowing the avoidance and counteracting of the effects of air pollution.
- Walkers and cyclists, compared to people in cars, are more easily able to choose routes that are less polluted.

(1) Active By Design (2014)
(2) Dr. Watkins, Director of Public Health for Stockport

Health and Wellbeing

Recent research published by Glasgow University in 2017 concluded that: “Cycle commuting was associated with a lower risk of cardio vascular disease, cancer and all cause mortality. Walking commuting was associated with a lower risk of cardio vascular disease independent of major measured confounding factors. Initiatives to encourage and support active commuting could reduce risk of death and the burden of important chronic conditions.” (3)
In Stockport, cancer, heart and lung disease account for 74% of early deaths (aged under 75) per year, and at least 80,000 people in Stockport have one or more long term health conditions including hypertension, diabetes, heart disease and chronic obstructive pulmonary disease (COPD). (4) Cycling and walking can play a role in reducing the incidence of such conditions by contributing to more healthy and active lifestyles.

The benefits of walking and cycling to mental health are also well established, and there is an increasing body of evidence identifying a link between walking and a reduction in long-term cognitive decline and dementia. (5)These benefits are increased if activities take place in green areas, (6) with which Stockport is well supplied (45% of the borough is green belt, and there are over 100 parks) and which form significant parts of the Walking and Cycling network (Trans Pennine Trail, Peak Forest Canal, Goyt Valley Way / Alan Newton Way). This is of particular relevance to Stockport with its increasingly ageing population.

Pedestrians and Cyclists on the TPT at Kings Reach

(3)Celis-Morales et al BMJ 2017,357,1456
(4)Stockport Joint Health and Wellbeing Strategy 2017-2020
(5)Health Economic Assessment Tools for Walking and Cycling, World Health Organisation (2014)
(6)Parliamentary Office of Science and Technology POSTnote 538 October 2016

Social:

An over-reliance on cars to travel around and between local areas can contribute to social isolation, and walking and cycling are a way of improving accessibility for all communities.

The walking charity Living Streets(7) identifies that residents of walking friendly neighbourhoods are less likely to be depressed or to have poor mental or physical health, and that increased walking in a neighbourhood is associated with better perceptions of safety and greater social interaction

Cycling and walking can be a more economically viable transport option for those who might otherwise have their travel options restricted, particularly those groups of the population with low rates of car ownership, such as low income earners, the unemployed, the elderly, and those under 18 years of age. In Stockport, 1 in 5 households do not have access to a car, rising to 1 in 2 in some areas of the borough.

Successful Stockport-based community-led projects that have promoted walking and cycling include: Sustainable Living in The Heatons, Stockport Community Cycling Club, and CeraCycloan.

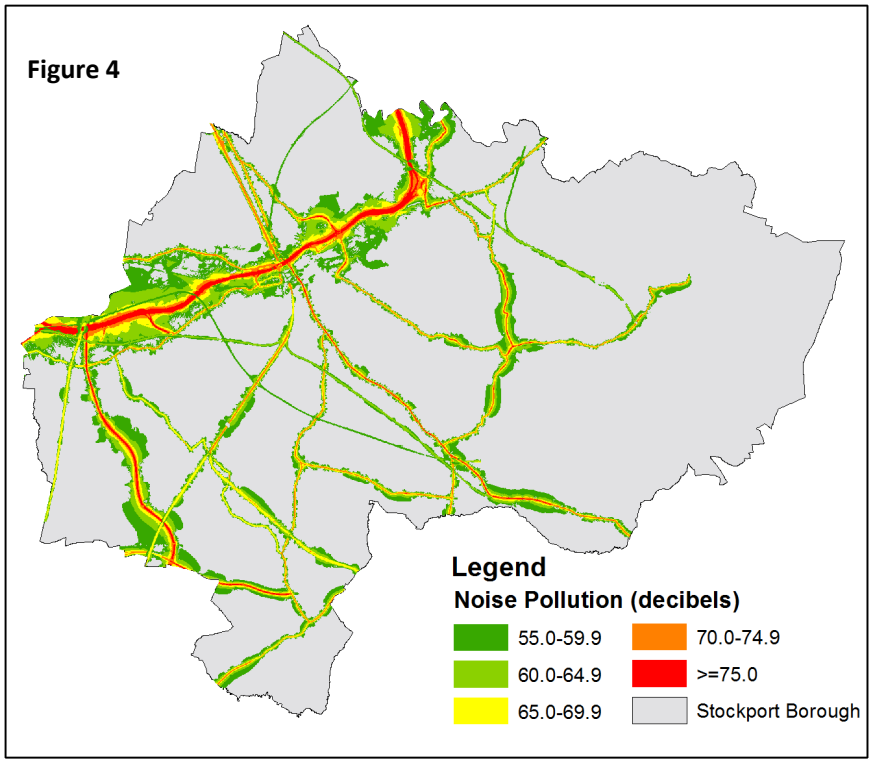
Cycling and walking can play a significant role in supporting inclusive growth by ensuring that all groups are able to access jobs and services.

A growth in walking and cycling has potential to address issues of social inequality and division because:

- Streets where there is a high level of walking and cycling encourage people to meet and talk.
- Walking and cycling are the two most affordable means of travelling and so are available to everyone.
- Higher levels of walking and cycling can make a neighbourhood feel safer, reducing both traffic hazards and levels of anti-social behaviour
- When walking and cycling infrastructure improvements are made, there is an increase in the ‘feel good’ factor for the local community.
- Many walking or cycling-related community projects are able to enhance social cohesion.

(7)Living Streets: Making the case for investment in the walking environment - available at: http://www.livingstreets.org.uk/professionals/making-the-case-for-investment-in-the-walking-environment

Environmental: Noise Pollution



In Stockport, noise pollution is particularly an issue around the M60 motorway (as shown in Figure 4), on major junctions, and at significant through routes. Whilst cycling and walking are unable to have a real impact on long distance traffic, they could contribute to reducing noise levels by providing an alternative for local journeys and reducing congestion at junctions.

Cycling and walking can contribute to improvements in local noise levels. Traffic noise can have a negative impact on local environmental quality, particularly in residential areas near to main roads, or in district centres with major roads passing through.

Environmental benefits of walking and cycling

- Reducing car travel reduces local air pollution and will assist in achieving 'carbon neutrality' for Greater Manchester by 2038.
- Walkers and cyclists make a lower impact on local noise than cars.
- Walking and cycling can connect well with public transport, which can be more environmentally friendly.
- Increased walking and cycling helps to decrease resident's personal carbon footprints.

Environmental: Air Quality

A reduction in car use would reduce air pollution. Road traffic is responsible for about 70% of the air pollutants nitrogen dioxide, particulates, and ozone. Short car trips contribute relatively more pollution, and so encouraging a switch from car to walking or cycling for shorter journeys is particularly beneficial .(8)

Poor air quality contributes to poorer health outcomes, particularly for those who are regularly exposed to high concentrations of pollutants. In the UK, it is estimated that 40,000 deaths per year can be attributed to poor air quality.(9) The most recently available figures from Public Health England estimate that there were 151 such deaths in Stockport in 2010.

Greater Manchester has been designated as a single Air Quality Management Area (AQMA) since May 2016, and areas of Stockport are covered by the designation (as shown in Figure 5). Stockport is also required, following the launch of the Government's Air Quality Plan in July 2017, to produce a local air quality plan by December 2018. Increased levels of cycling and walking will play a vital role in reducing current air pollution levels in the Borough.

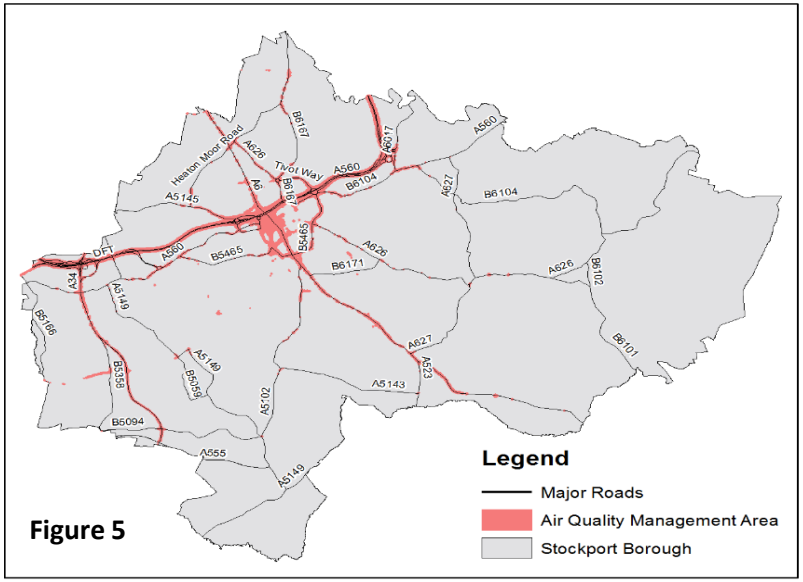


Figure 5

Cycling and walking can also play a key role in reducing carbon dioxide emissions. In 2013, 20% of the UK's greenhouse gas emissions were related to the transport sector. Greater Manchester's 2018 'Springboard to A Green City Region' is centered upon the necessity of achieving a science-based pathway to carbon neutrality by 2038. It identifies as actions investing £50m per year in walking and cycling for three years from 2019/20, and ensuring that development of the 2040 Transport Strategy aligns with a GM carbon neutral ambition.

(8)Travelwise for Schools, 2011 ccea.org.uk/giro/docs/resources/DRD/best-foot-foreward-v6.pdf
(9) Public Health England: Estimating Local Mortality Burdens associated with Particulate Air Pollution (2014)

Congestion

Road congestion and associated delays continue to be a challenge nationally, and the 2006 Eddington Report (10) estimates there will be a 30% increase in congestion by 2025, focused primarily on urban areas . Congestion makes it harder for people to access jobs and local services; can make businesses less efficient; and can act as a deterrent to potential investors. Congestion can also reduce the attractiveness of public transport, particularly buses by making services slower and less reliable.

The impact of congestion on the local economy is estimated to cost £1.3bn in Greater Manchester every year.(11) At current levels of cycling, 36,000 two way trips a day are made in Greater Manchester: if these trips had all been made by car there would be a tail back of 107 miles.(12) It has been estimated that a 20% increase in cycling could save the UK economy £207m a year in reduced congestion. (13)

Congestion in Stockport was identified as a key concern for residents and businesses in the recent SEMMM Strategy consultation. Reducing congestion and associated delays has been identified as a priority for the strategy. Whilst a number of investments have been made to reduce congestion through junction improvements and improved signaling across Stockport, congestion on key routes continues to be an issue. By way of illustration, rush hour speeds on the A34 Northbound between Handforth and Parrs Wood average 21mph, whilst average rush hour speeds on the A6 between High Lane and the M60 are 13mph.

Increasing walking and cycling can contribute to reducing congestion by reducing the number of cars and vehicles on roads. It should be noted that a 1:1 switch to electric vehicles while valuable in terms of noise levels and pollution will not reduce congestion or improve overall speed of travel. Congestion should not simply relate to the impact on motor vehicle flows; it should relate to flows of people. A greater emphasis on walking and cycling will ensure a more effective use of highway space and hence be a substantial part of a solution for congestion.

If more short journeys are undertaken by walking or cycling, this may help with congestion because:

- A given amount of highway space can be used by more people at any given time compared to cars
- Congestion is widely recognised as being bad for the economy. Reducing the numbers of cars on the road will reduce delays for those vehicle journeys which cannot be replaced by walking or cycling.

(10) DfT: The Eddington Transport Study (2006)
(11) GMCA, The Greater Manchester Congestion Conversation, 2017
(12) Greater Manchester Bike Life Report 2017
(13) LSE (2011), British Cycling Economy report

Economic

- High quality walking and cycling infrastructure can attract investment and new business.
- Pedestrians and cyclists spend more per visit at local shops and services than people arriving by motorised transport, with the most recent evidence suggesting that a generalised tendency to 'shop small, more frequently' is increasing
- A good-quality pedestrian environment encourages a greater pedestrian footfall.
- Ability to support a circular economy and Green City Region
- Cycling and walking are more affordable travel options, and can increase the level of disposable income for individuals.

The walking charity Living Streets states that "investing in walking environments can support local economies by increasing footfall, improving accessibility, and attracting new businesses and events." (15) Australian studies have shown that fully optimizing pedestrian access to city centres could boost Melbourne's economy by $1.3 billion.(16) Increasing cycling also boosts the economy; DfT figures suggest that a giver area of cycle parking delivers 5 times more retail spend than an equivalent area of car parking, and public realm improvements including for cycling result in increased trade for local businesses.(17)

A study by the London School of Economics shows that the gross cycling contribution to the UK economy in 2010 was £2.9 billion. The study took into account factors such as bicycle manufacturing, retail and cycle related employment. This equates to £230 per cyclist, per year. In addition, according to the report, a 20% increase in cycling levels by 2015 could save the UK £207m in reduced congestion and £71m in reduced pollution level each year(18). In 2014 the DfT concluded that the average Benefit Cost Ratio across the funded Cycle City Ambition Grant schemes is over 5 to 1, comprising benefits accruing from personal health, reduced congestion, reduced absenteeism and reduction in greenhouse gas emissions amongst other minor benefits. (19)

(15) Living Street (2013)The pedestrian pound: The business case for better streets and places Living Streets, London
(16)SGS Economics (2014) Walking to global competitiveness
(16) Raje and Saffrey: The Value of Cycling. DfT (2016)
(17) LSE (2011), British Cycling Economy report
(18) Value for Money Assessments of Cycling Grants. DfT (2014)

Appendix 2: The Stockport Context

National Policies

Cycling and Walking Investment Strategy: includes a commitment that by 2020 there will be an increase in cycling and walking activity, a reduction in the rate of cyclists killed or seriously injured on England's roads, and an increase in the percentage of children aged 5 to 10 that regularly walk to school.

Air Quality Plan 2017: sets out the plan for reducing roadside nitrogen dioxide and highlights the use of cycling and walking as a way of addressing local air quality issues. The plan requires Stockport to produce a local air quality plan by December 2018.

Public Health England's 'Everybody Active, Every Day' Strategy: emphasises that by developing 'active environments', through thoughtful urban design and creating transportation systems that promote walking and cycling, we can help to create active, healthier, and more livable communities.

NHT Public Satisfaction Survey 2017: The survey identifies a 55% overall public satisfaction rate with cycling and walking in Stockport, which matches the national average.

Greater Manchester Policies

The Greater Manchester Climate Change Strategy: adopted in 2011, this strategy set a target to reduce overall carbon emissions in Greater Manchester by 48% by 2020 from a 1990 baseline, and identified increasing active travel levels as a key measure to achieve this target.

Greater Manchester Transport Strategy 2017- 2040: identifies the role of cycling and walking as a key tenet of the transport mix for Greater Manchester. It reiterated the commitment to achieve the Greater Manchester Cycling Strategy target that 10% of all journeys in GM be made by bike by 2025.

Greater Manchester Moving Plan: committed to achieving the goal of 75% of GM residents being active or fairly active by 2025, to address increasing health challenges resulting from inactivity. Encouraging active travel such as walking and cycling and increasing movement by all groups continues to be a priority. This is reinforced within the Made to Move Report. To deliver these aspirations the Walking and Cycling Commissioner launched Greater Manchester's 'Beelines' cycling and walking infrastructure proposal in June 2018.

Stockport Policies

South East Manchester Multi-Modal Strategy: The original 2001 SEMMM strategy was developed to set out a long term transport strategy that addressed the problems of South East Manchester. The strategy set out a plan of specific multi-modal interventions built around the core objectives of promoting environmentally sustainable economic growth; improving amenities, health and safety; and encouraging the community and cultural life of neighbourhoods. The Strategy has been reviewed by the Council and its partners, to refresh the approach up to 2040. The review of the SEMMM Strategy took account of both what has been achieved since 2001, including delivery of A555 integrated transport corridors, and pedestrian and cycling improvements, but also the changing local context based on proposed housing growth in neighbouring areas and the emerging Greater Manchester Spatial Framework (GMSF.) The refresh process has identified a desire to see a greater emphasis on developing measures for pedestrians and cyclists within a multi-modal context.

Stockport Visitor Economy Strategy: This Strategy recognises the contribution cycling and walking can make to attracting visitors to Stockport. The Stockport Visitor Economy strategy identifies the areas around Marple and Bramhall as places that should be encouraged as areas of tourism for walking and cycling, utilising Lyme Park, Bramall Hall and park, the Middlewood Way and Peak Forest Canal. This also links with the Wider Peak District Cycle Strategy.

Stockport Rights of Way Improvement Plan 2017-2027: The Countryside and Rights of Way Act 2000 (section 60) requires all highway authorities to prepare a Rights of Way Improvement Plan (ROWIP) every 10 years. The ROWIP includes an assessment of the Rights of Way network and the value of the network for health, transport, recreation and utility purposes as well as opportunities to improve the network. Consultation for ROWIP has revealed many insights into the attitudes of Stockport residents towards walking and cycling.

Investing in Stockport Borough Plan 2015- 2020: The 5 year plan sets out a clear vision for Stockport and identifies that improving local transport networks to make it easier to get in and around Stockport is a priority action. The Plan also identifies a need to provide infrastructure improvements to support changing connectivity needs, and improve health outcomes for all residents.

Stockport Policies

Stockport Council Plan 2019-20: The Council Plan aligns with the outcomes identified in the Borough Plan and sets out the approach to delivering against those priorities over the 12 month period. The Plan identifies inclusive growth and improving transport connectivity as key priorities for the period, as well as improving the environment (with specific reference to addressing poor air quality) and maintaining and enhancing the Borough's highways, including the Public Rights of Way network.

Stockport Local Plan: Adopted by the Council in 2011, the Core Strategy is part of the Local Development Framework (LDF) and provides the overall spatial strategy for the Borough. The document sets out an overall vision for Stockport and concludes that "all [other goals] will be achieved whilst striving to ensure that travel options for residents and visitors meet their needs sustainably, offering opportunities to exercise and interact in local communities and ensuring that walking and cycling or use of an improved public transport network are viable and desirable options".

Stockport Joint Health and Wellbeing Strategy: The Strategy summarises findings from Stockport's Joint Strategic Needs Assessment (JSNA) about needs and priorities for health and wellbeing, sets out the vision and identifies the actions required to achieve that vision by 2020/21. The strategy identifies that the overall objectives for health and wellbeing in Stockport are to improve life expectancy and reduce health inequalities, and identifies that public services will collectively take responsibility for ensuring there are a wide range of facilities, including parks, open spaces, leisure, and safe cycling routes.

Stockport Sustainable Community Strategy (2020): The Strategy identifies a series of priorities such as:

- Empowered people who are supported to make positive lifestyle choices, ultimately leading to better health outcomes for all Stockport residents.
- A greener Stockport with a sustainable approach to the natural environment, improving air quality and minimising our use of natural resources
- A healthy Stockport with levels of obesity which maintain current rates rather than continuing to rise
- Good connections with excellent public transport resulting in less congestion

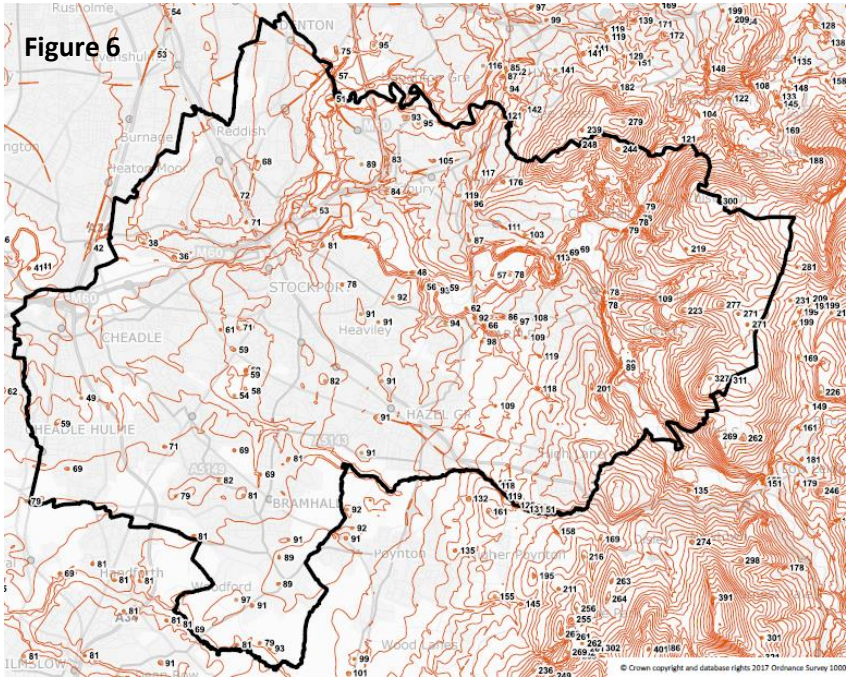
Other Policies

The following strategies have been reviewed in developing this strategy:

- Cheshire East Cycling Strategy (2017) and Rights of Way Improvement Plan (2011-2026)
- Manchester City Council 'Our Manchester' Strategy
- Wider Peak District Cycle Strategy
- Tameside Cycle Facilities review (2008)/Rights of Way Improvement Plan (2007)
- The Canals and Rivers Trust 'Living Waterways Transform Places and Enrich Lives: Our 10 Year Strategy' (2015).

Geography

The specific context of Stockport has an impact on the attractiveness of both walking and cycling as travel options, and impacts on the appropriateness of different interventions to increase levels of walking and cycling. Stockport's particular context compared to other predominantly urban areas needs to be considered when identifying any potential interventions. Stockport is situated at the confluence of the rivers Tame, Goyt and Mersey, and is dominated by river valleys. The Mersey Valley is deep in the centre of Stockport, whilst the other two rivers create steeper valleys to the east and north. Other rivers, including Poise Brook, Hempshaw Brook and the Ladybrook, contribute to the variable topography.



Stockport Town Centre itself is split level, with the old town on a promontory above the level of Merseyway, and the south eastern parts of the town then on a shallower slope along the A6.

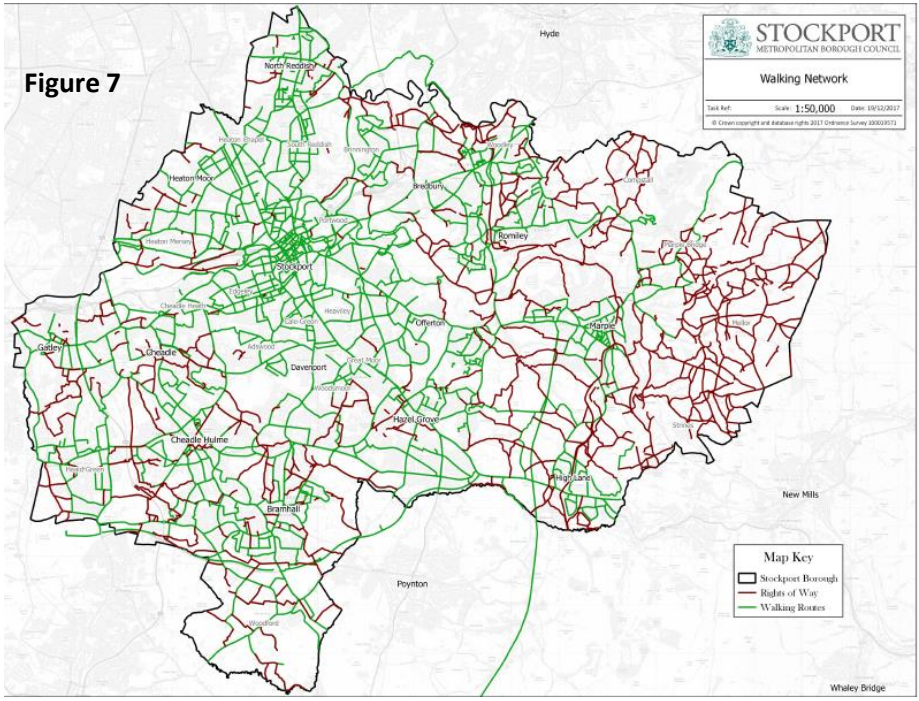
The terrain becomes hillier to the east of the borough, whilst it becomes flatter and lower to the south and west. The lowest point in Stockport is along the banks of the Mersey in Gatley (c.80ft), and the highest is Mellor Moor close to the border with Derbyshire at 1076ft. This varying topography may have an impact on the attractiveness of cycling and walking in some parts of the borough.

Transport Network

As a key part of the Greater Manchester conurbation, Stockport benefits from a comprehensive highway network comprised of 984km of roads and 268km of Public Rights of Way. Key north south routes such as the A6 and A34 pass through the borough, in addition to east west routes such as the M60 and A555.

Stockport has over 800km of walking network. In addition to the footways along the majority of highway routes, Stockport also has 233km of public footpath, 27km of bridleway and 8km of byway (restricted and open to all traffic).

The Borough features many parks, canals and river valleys providing green links across Stockport, joining with highway infrastructure to create significant leisure and utility routes. It is important to recognise the rural nature of these links, and the rights and needs of all users, particularly when considering surfacing options.



The Reddish/Brinnington border from the TPT

There are 56km of National Cycle Network routes across the Borough, most notably the NCN55 (Preston to Ironbridge) and NCN 62 (the Trans Pennine Trail, TPT). TCAP scheme 606 will create a link between the two, whilst also providing an off-carriageway link into Stockport Town Centre from the east, in conjunction with the existing Cycle City Ambition Grant (CCAG) and TCAP schemes on Newbridge Lane.

To the east of the Borough, 14km of canal towpaths provide pleasant and safe walking and cycling links to Tameside, Cheshire East and the Peak District, avoiding major roads and gradients. They are also available to cyclists thanks to Canals and Rivers Trust policy.

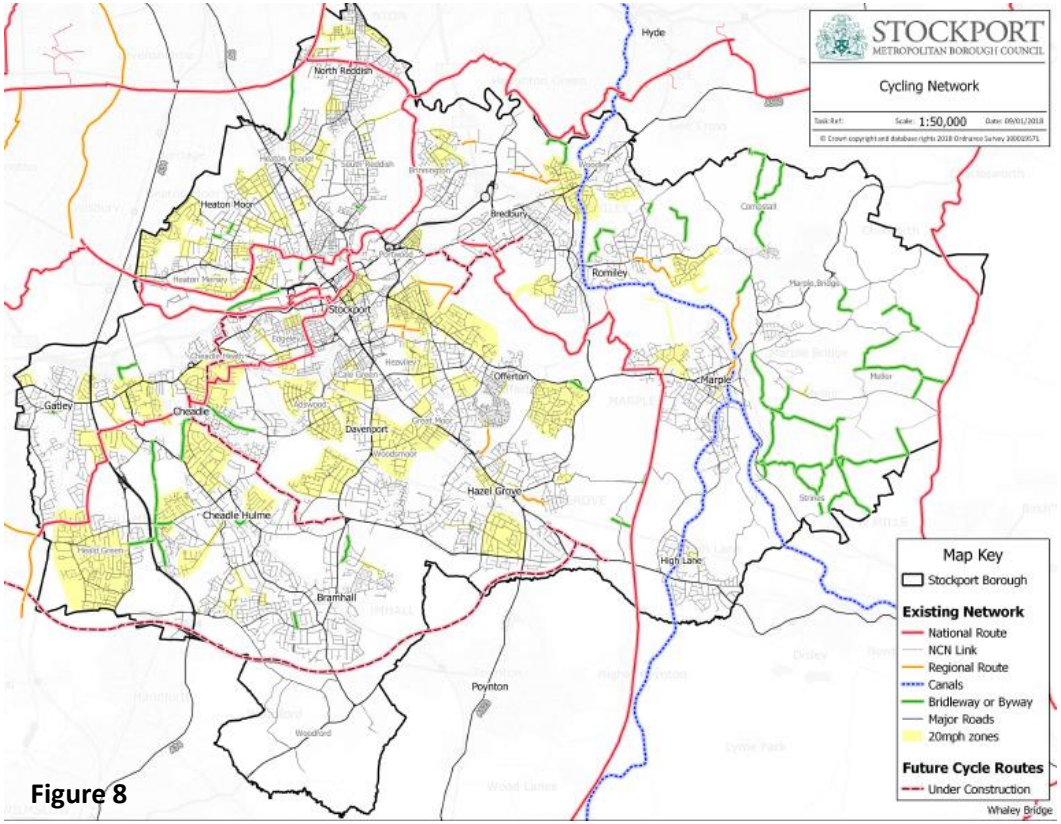


Figure 8

Existing Active Travel Provision

Work has been ongoing over several years to improve and invest in the walking and cycling networks across the borough. Improvements include:

- Further multi-user links have been delivered from the Trail to Edgeley and Cheadle Heath (via the Geoff Funnell bridge and the Aurora cycle path) and to Cheadle (via the Manchester Road cycle route).
- In the town centre, Chestergate is seeing a phased delivery of an off-carriageway cycle route running from Brinksway to the bus station as part of the Trans Pennine Trail.

The Alan Newton Way (NCN 55) heading toward the town centre

- Dark Lane (part of NCN route 55 and also the Goyt Valley Way) has recently been resurfaced, joining with the Connect 2 route at Chadkirk to provide a mostly off road link from Stockport Town Centre to Marple and Romiley. NCN55 continues to Rose Hill Station in Marple which is also the start of the Middlewood Way multi-user route to Macclesfield. Part of this has also been resurfaced recently, with more work imminent.
- It is recognised that pedestrians are the largest user group on the Right of Way network. A few examples of improvements for pedestrians include: footpaths linking the Peak Forest Canal in Woodley and at the Chadkirk estate, footpaths leading to and on the periphery of Bruntwood Park, and Stanley Road to Bradshaw Hall in Cheadle.

- There is a new off carriageway cycle facility running down Lancashire Hill, overcoming a 'virtual severance' across the M60: cyclists no longer have to use the busy road, but have a space segregated from both pedestrians and motor vehicles. This route accesses the town centre at Tiviot Dale where there is a GM cycle hub available. There is another cycle hub in the NCP car park near Stockport railway station as well as new cycle parking facilities around the station entrance.
- Car free bridges – a number of these, primarily Chadkirk Bridge, Arden Bridge and the Geoff Funnel (Gorsey Bank) Bridge, provide key walking and cycling links across rivers and roads, and through areas of better air quality. As a consequence, alternative car-free routes are available, which can be several miles shorter than any on-road option.
- Various parts of the Trans Pennine Trail through Stockport have been upgraded (with surfacing and lighting) in the Mersey Vale section and Reddish Vale. The Kings Reach section was additionally enhanced in partnership with a major local employer: this section of the river valley is now used by staff from surrounding offices as an 'outdoor dining room' (there are tables and benches) and recreational space when weather permits, as well as a sustainable transport corridor.

New cycle/footbridge, St Mary's Way

In addition to improvements to the physical network, there are a range of activities taking place to promote Walking and Cycling across the borough:

- For walking, there is a range of promotional activities organised with the support of Stockport Council by independent groups that encourage people to use the off-road network within the Borough of Stockport. These include Walkaday, which is organised by the PRoW Officer in conjunction with volunteer walk leaders. This is a programme of moderate to strenuous walks in and around Stockport, emphasising use of public transport to access the walking network. There are also less taxing Health Walks, aimed at an introductory/recuperative level.
- Schools are always encouraged to look at increasing walking and cycling using travel plans to highlight things such as Park and Stride and Walk Once a week. In addition the majority of schools participate in Bikeability.
- The Council also runs a regular Cycle User Group, enabling local cyclists and representatives of organised groups (including Stockport Community Cycling Club) to discuss with officers and each other any developments and issues in the Stockport area. These discussions have had a direct impact on a number of schemes, and have given a useful perspective to designers.
- Transport for Greater Manchester (TfGM) provides a range of free cycle training options for all residents. This includes practical advice enabling anyone, regardless of initial level of confidence, to increase on- and off-road cycling skills; there are also bike maintenance sessions, including some that are for women-only.

Case Study: Pocket Places Project

During 2015, the transport charity Sustrans co-ordinated a 'Pocket Places' project involving communities in Heaton Norris and Lancashire Hill. In addition to engaging with residents through a wide range of events, including community art, a number of changes to streets were agreed that would benefit people wishing to make local walking or cycling trips. Principal amongst these is a new toucan crossing that was subsequently constructed as part of Stockport's Town Centre Access Programme (TCAP): walking or cycling to one of the local primary schools is now seen as a more realistic proposition.

Case Study: Operation Eagle Eye

Operation Eagle eye is an educational initiative introduced in 2012 to encourage walking and cycling round primary schools. It runs a number of age varied activities.

- Step Outside: Pedestrian training for pupils in Year 2. Groups of pupils are taken on a supervised walk near to their school. Pupils cross roads in different situations including where visibility is good, next to or between parked vehicles and at junctions. If practical a pedestrian crossing may also be used.

- Headsmart: A Year 4 activity looking at the importance of wearing a bicycle helmet. Pupils look at why helmets should be worn when riding a bike. The lesson involves practical demonstrations of helmet protection.

- Crashed Vehicle: Pupils in Year 5 work in groups to make a cardboard car which is crash tested. Pupils consider how vehicles are designed to help protect drivers and passengers. The reasons why vehicles collide are discussed.

- Child Speedwatch: Year 6 pupils record traffic speeds on a local road using speed guns, learning what factors affect stopping distances or cause road collisions.

Existing Travel Patterns

Over half of Stockport's residents work within the borough, although there are noticeable cross border flows, particularly with Manchester and Cheshire East. Data from the 2011 Census reconfirmed that Stockport enjoys an interdependent relationship with Manchester, with a two way commuting flow existing between the conurbation's core and Stockport. Over 20% of Stockport's residents work in Manchester underlining the need for excellent transport links and the high skill levels amongst residents.

Significantly, 46.5% of Stockport's workforce commute into the borough from surrounding areas, a figure that has increased slightly over recent years. Today, a large number of commuters travel to Stockport from areas such as Tameside, Cheshire East and Trafford. The existence of this pattern reinforces the important role Stockport plays as a source of employment to the rest of Greater Manchester and beyond.

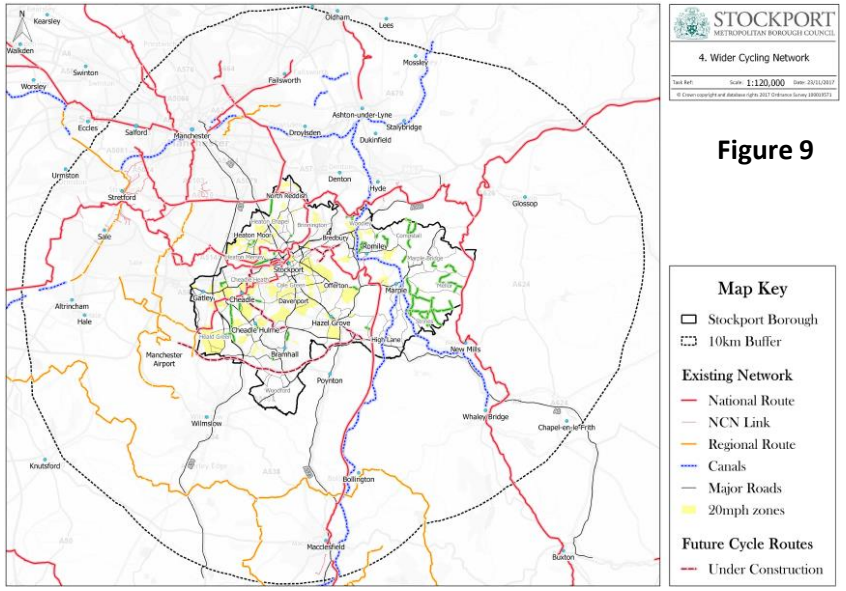


Figure 9

These figures emphasise that walking, and in particular cycling, connections with neighbouring Boroughs will be important if these modes are to be attractive commuting options for Stockport residents working outside of the borough, and those people resident elsewhere who commute into and through Stockport.

The high number of residents working within the borough or in neighbouring authorities is demonstrated by the distances travelled to work illustrated in Figure 10. The Government's Local Cycling and Walking Infrastructure Plan guidance suggests that it is reasonable to consider walking an appropriate method of transport for journeys up to 2km in length, and journeys of up to 10km for cycling.

With approximately 15% of Stockport residents travelling less than 2km to work, and over half (57%) travelling less than 10km, it suggests that there is an opportunity for cycling and walking to be used for a greater number of commuting journeys in Stockport.

Data from the 2011 Census shown in Figure 11 identifies that car or van (either as a driver or passenger) continue to be the most popular commuting method, accounting for over 2 in 3 journeys. Whilst cycling and walking combined account for 10% of travel to work journeys, there is the potential for cycling and walking to help increase the 13% of journeys undertaken by public transport, by providing 'last mile' connectivity and enabling more people to access public transport services.

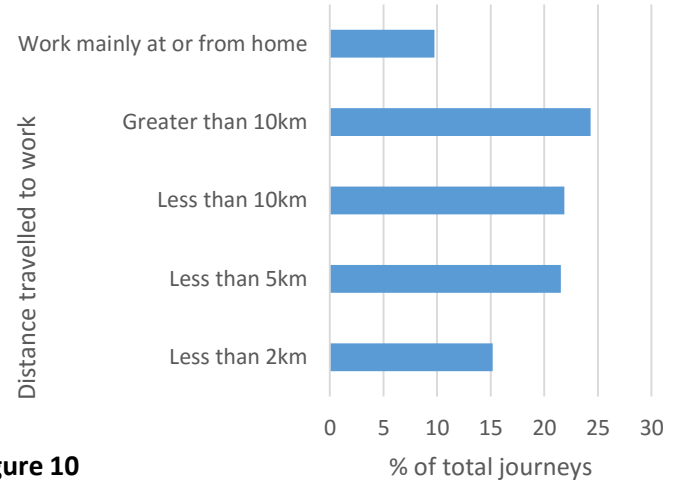


Figure 10

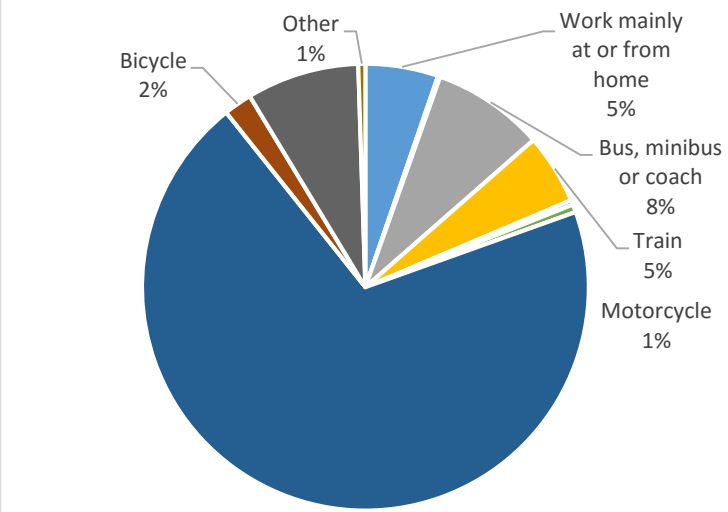


Figure 11

Travel to school trends are as equally as important to cycling and walking as travel to work trends. Many children, some accompanied by family members travelling to or from work, have the potential to walk or cycle to their local school. The National Travel Survey provides data on the modes of transport used by school children on the way to school. Whilst the data is only available at the national level, Figure 12 identifies that 44% of children walk to school. Whilst this data does not account for the local Stockport context, if it can be assumed that Stockport reflects general national trends, it suggests that walking to school is a significant transport flow, and a recognized high quality local walking network around schools is important to ensure this can be done safely.

A "hands up" survey by the Stockport Road Safety Team, covering a significant number of local primary schools, showed 48% of children travel by car (same as the national average), 42% travel on foot (slightly lower) and 3% travel by bike (3 times the national average!)

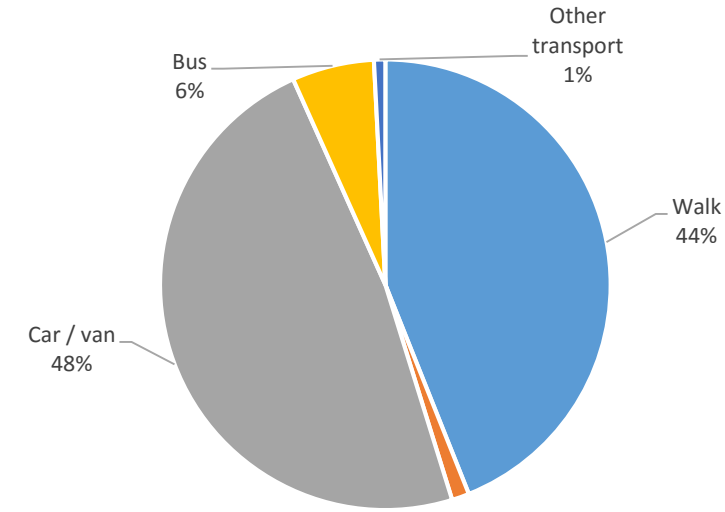


Figure 12

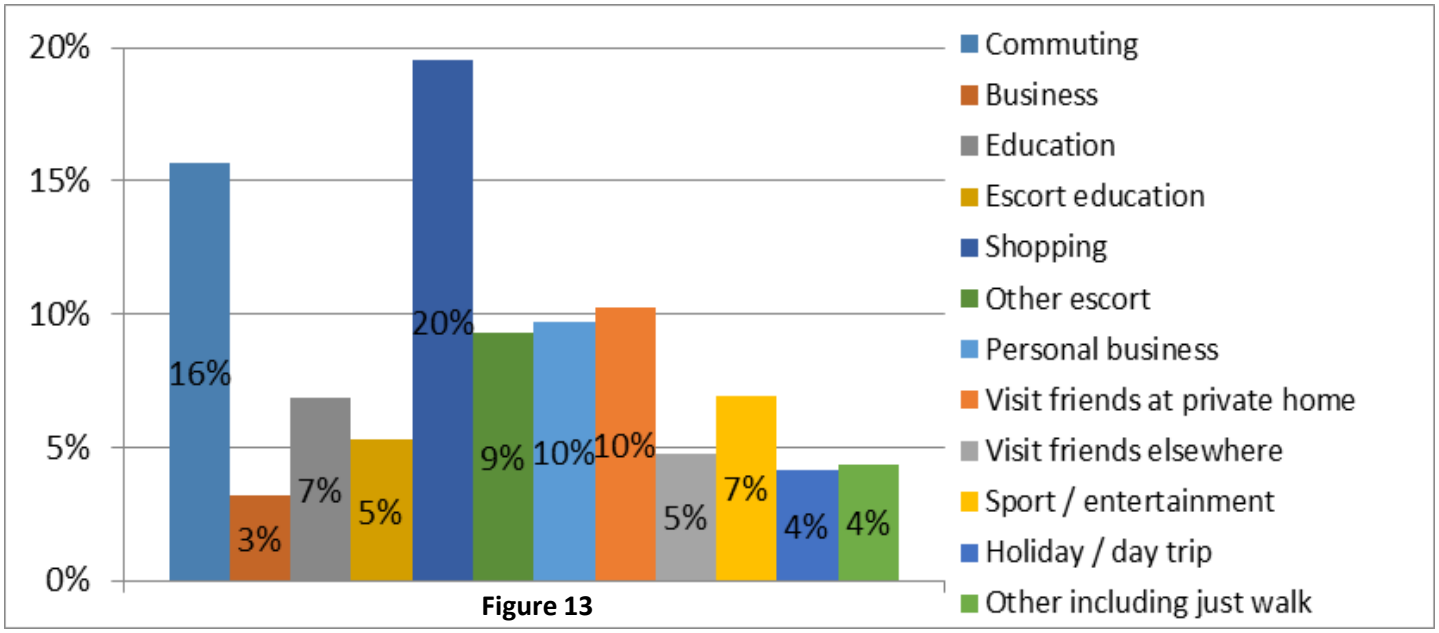
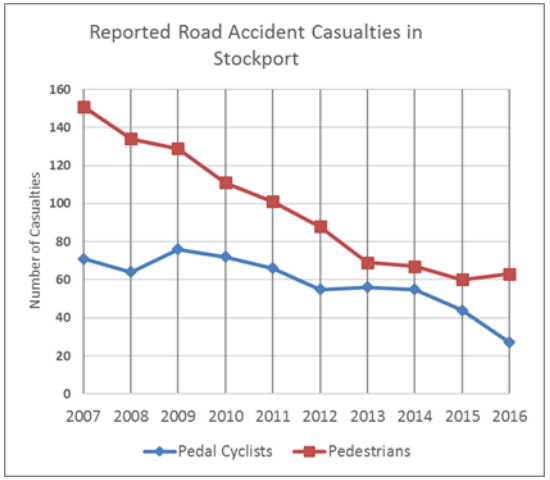


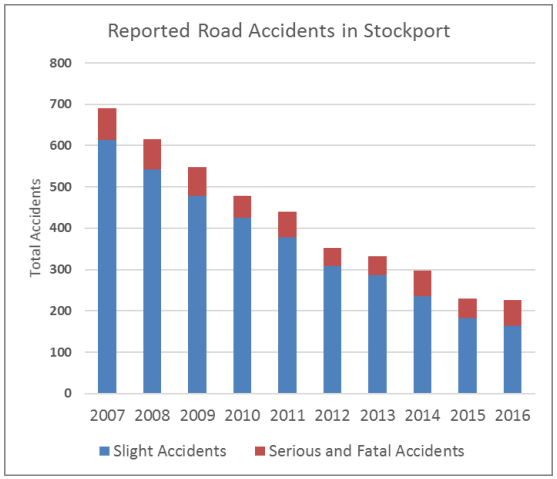
Figure 13

Data from the National Travel Survey (2013) presented in Figure 13 shows that 16% of all trips nationally are commuting, with an additional 3% business related, leaving over 80% for other purposes. Utility cycling in the local area (such as shopping, accessing education etc.) makes up a larger proportion of trips than commuting, and, therefore, the local area network is at least as important as longer distance commuter routes.



Safety is a key pillar in any transport system. For a route to be appealing and attractive, users must feel safe and secure whilst making their journey. The number of reported road accidents on Stockport roads has decreased each year since 1998 – a total decrease of over 80% during this time. Figures 14 and 15 show that the overall accidents and the numbers of pedestrians and cyclists involved in accidents has continued to reduce over the last decade, most significantly for pedestrians.

Figure 14



Whilst overall trends are positive, with reducing number of accidents and fewer vulnerable users injured in accidents, road safety and perception of road safety acts as a barrier for many when considering walking and cycling as a mode of transport. It has been found that only 27% of people in Greater Manchester feel that levels of cycling safety are good.(19) Whilst trends are improving, road safety needs to remain a priority. Nevertheless, there is a growing recognition that some road safety design features may actually be serving as a deterrent to walking and cycling, as they can make access more difficult.

Figure 15

(19) Greater Manchester Bike Life Report 2017

Current Levels of Cycling and Walking

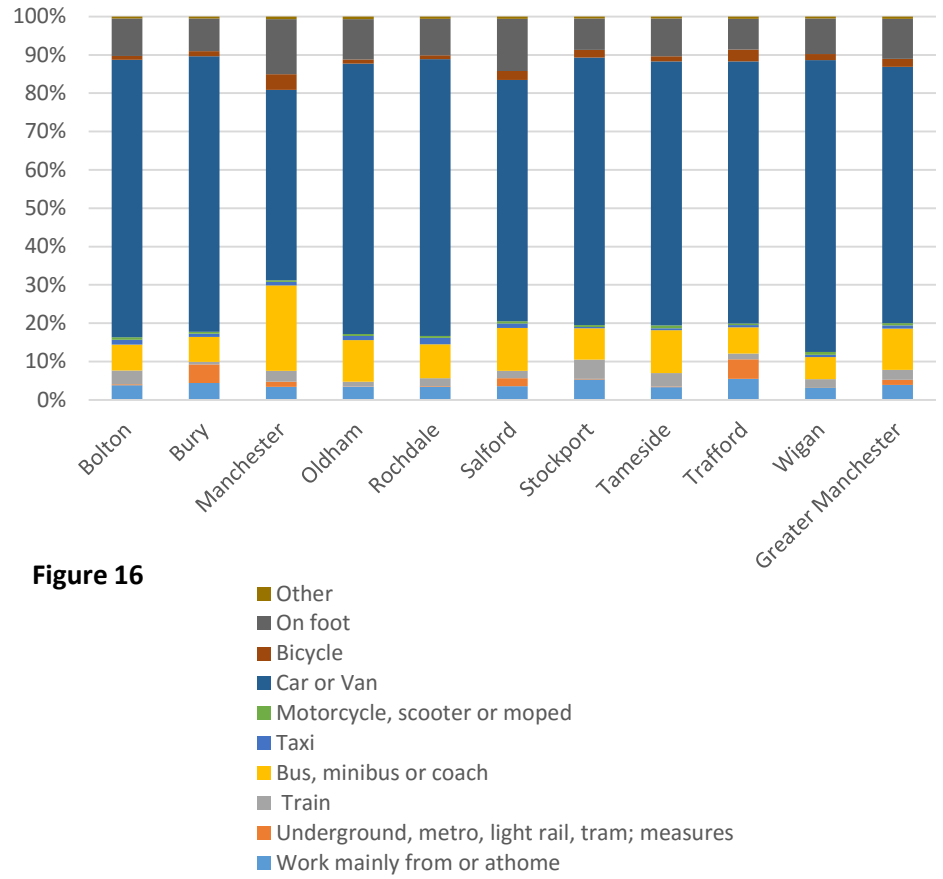


Figure 16

This comparative picture suggests that more journeys to work could be undertaken by bike or on foot when compared to other authorities in Greater Manchester.

To identify the potential for walking and cycling, it is essential to understand current levels. A few data sources can be drawn on to build a picture of current cycling and walking levels in the borough:

- How levels compare with other local areas
- How levels have changed over time
- How levels differ between different population groups (particularly commuters vs school age)
- How levels differ for different types of activity (i.e. recreational vs utility).

Using travel to work data from the 2011 Census, Figure 12 identifies that the percentage of travel to work journeys undertaken in Stockport by bike are in line with the Greater Manchester average (2.1%). Although cycling levels are below those of neighbouring Manchester (4.1%) and Trafford (3.1%), levels in Stockport are favourable compared to other boroughs outside of the regional centre. In terms of walking, Stockport is slightly below the Greater Manchester average (8.2% compared to 10.5%) and has the second lowest level of all the GM boroughs.

Using data from the Stockport Town Centre Cordon Count, it is also possible to identify a sustained increase in journeys into the town centre being made by bike and on foot. Figure 17 illustrates that there has been a 65% increase in the percentage of total journeys into the town centre being made by both cyclists and walkers during the morning rush hour period between 2003 and 2016 (from 14.5 to 24% mode share), although there has been a slight decrease in the number of bikes counted since the peak in 2014.

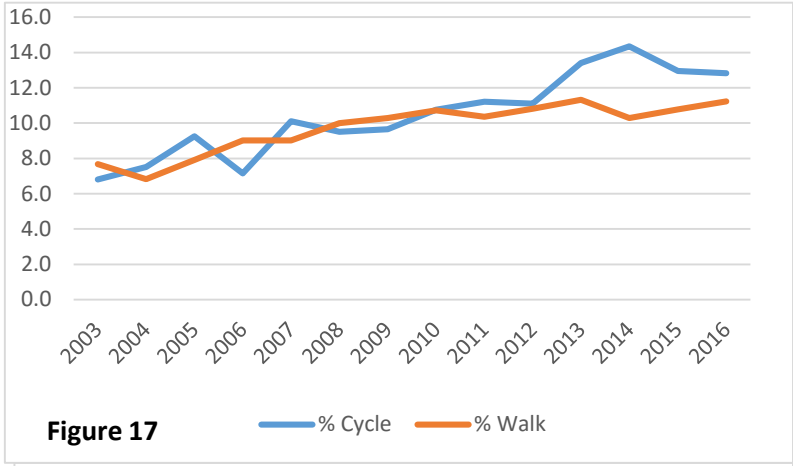


Figure 17

Whilst the town centre cordon count is likely to reflect wider commuting patterns in cycling and walking, it is also possible to identify trends in the number of Stockport residents cycling or walking for leisure or utility purposes. The Active People Survey by Sport England illustrated in Figure 18 identifies that 86% of residents had walked in the last month for the recreational or utility reasons, compared to 13% who had cycled. Figure 18 identifies that a higher percentage of respondents cycled for recreational than utility purposes, and the number of people walking or cycling for utility purposes had increased over time.

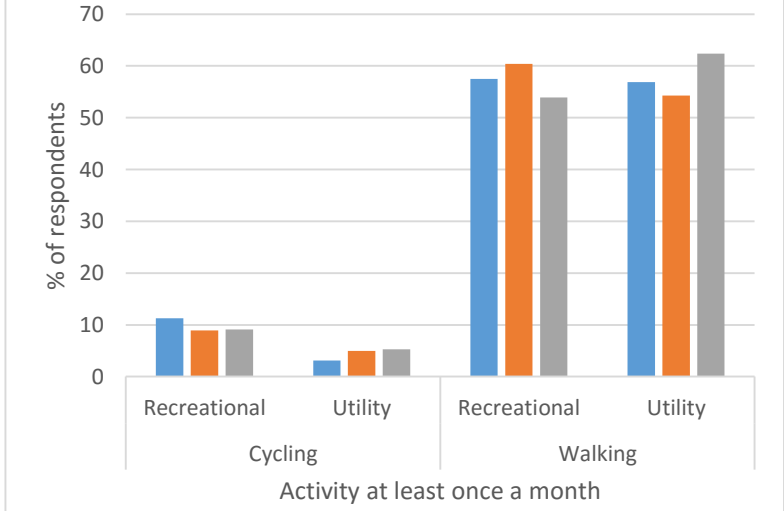


Figure 18

Amongst the 86% of adults in Stockport who walked at least once a month (GM average 83.3%), 59% walked three times a week, and 44% five times a week. 55% of pedestrians walked for at least half an hour each day they walked.(DfT: Walking and Cycling Statistics (2016))

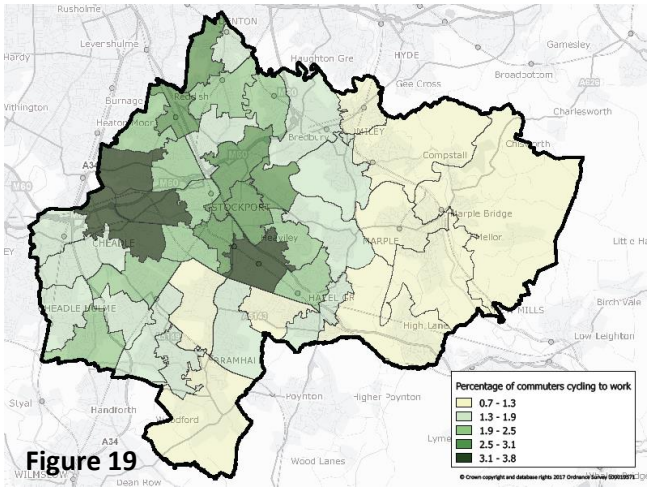


Figure 19

In addition to overall cycling and walking trends in the Borough, it is also possible to identify variations across the borough in terms of the percentage of journeys made by bike or on foot. Using travel to work data, Figure 19 identifies that residents in the Borough's north west make the highest percentage of journeys to work by bike. Fewer than 2% of journeys to work are made by bike in the eastern half of the borough. This is in part likely to be explained by the closer proximity to Manchester in the north western wards, making cycling into the regional centre a more attractive option as well as a higher density of local work destinations. In addition, the topography and more rural nature of the east of the borough deter cyclists. Household incomes and levels of car ownership may also be factors.

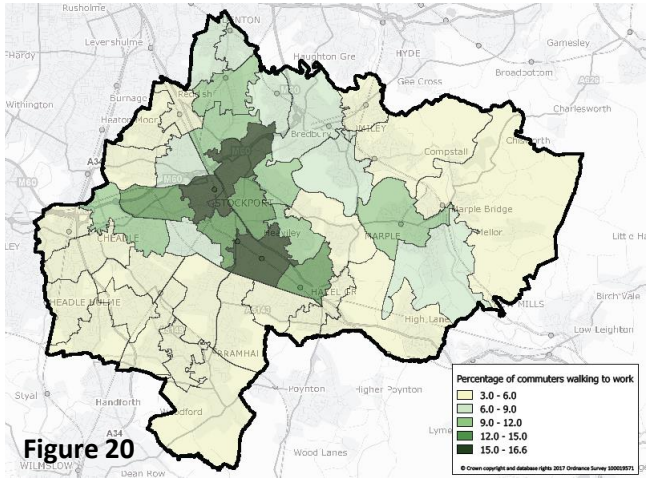


Figure 20

Figure 20 shows some similarities to the cycling map. The main difference is that there is a significant number of people apparently walking along three major corridors heading West, South and North East from the town centre. The maximum journey distance is approximately 3km. There are also significant number of people walking in the Marple area, and around Cheadle Hulme. The outlying areas of Mellor, Marple Bridge and Woodford show less people as likely to walk, possibly due to a more scattered population and fewer employment sites. Other low propensity areas are likely to feature numbers of longer distance commuters who would be less likely to walk, but may consider cycling, such as western and southern areas such as Heaton Mersey, Cheadle and Heald Green.

Appendix 3: The Beelines Network

Red Areas	Neighbourhoods that are currently closed off as they do not have any quality and accessible crossing points
Orange/ Yellow Areas	Neighbourhoods that are partially open, with one good access point
Green Areas	Neighbourhoods that have multiple accessible crossing points already
Blue Points	Existing crossing points
Red Lines	Busy roads acting as severance

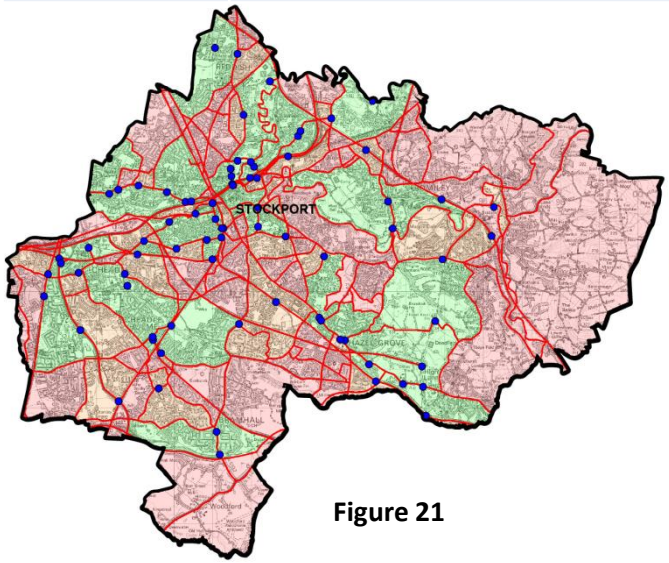


Figure 21

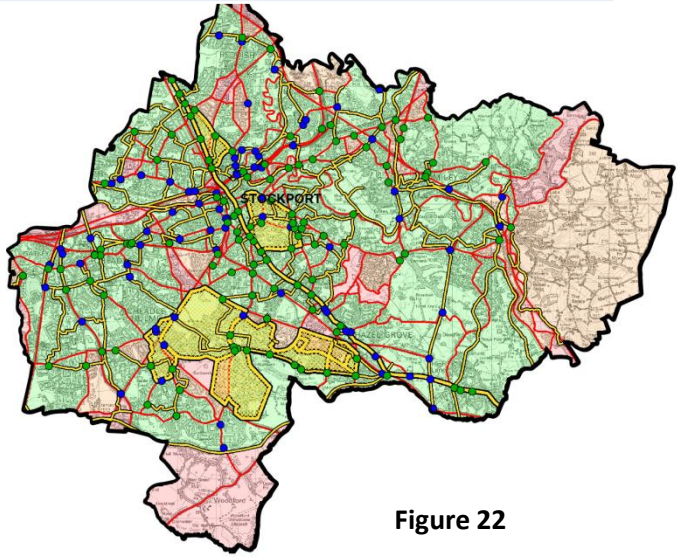


Figure 22

- Born out of the Made to Move report from the Greater Manchester's Cycling and Walking Commissioner which called for a detailed, Greater Manchester-wide walking and cycling infrastructure proposal.
- Aims for a fully joined up network of 1,000 miles of walking and cycling routes across Greater Manchester, including 75 miles of segregated cycle routes.
- Figure 21 maps Stockport's walking and cycling routes currently, and Figure 22 is a preliminary projection of Stockport's walking and cycling routes after the implementation of the Beelines proposals

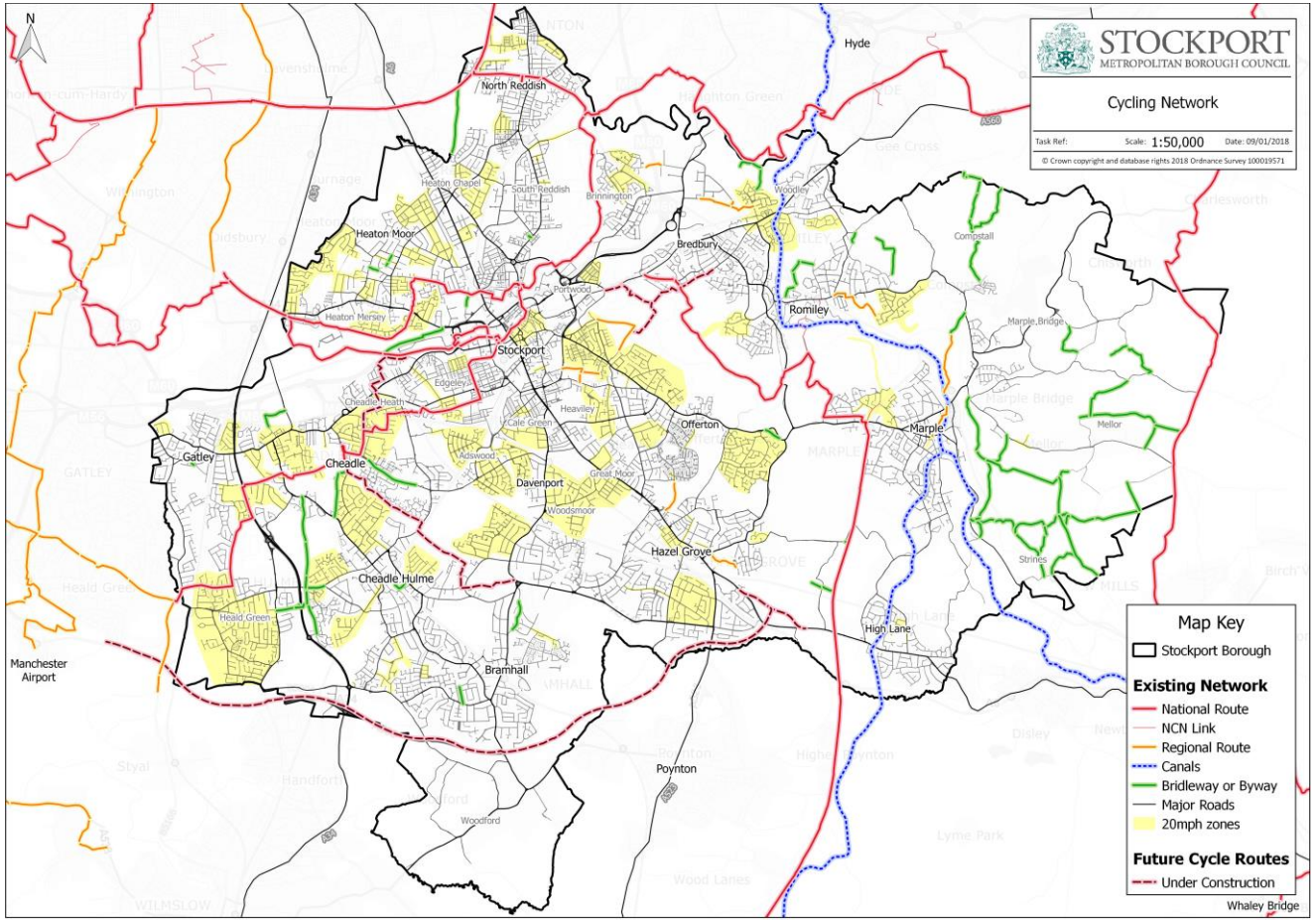
Appendix 4: Perceptions of Walking and Cycling

Perceptions of cycling and walking are important how and to what level, cycling and walking can be increased and also to understand the types of interventions which are likely to have the biggest impact in encouraging people to walk or cycle. The Council is able to draw on a number of sources to understand perceptions and views around cycling and walking and current infrastructure in Stockport. These sources of local opinion and perceptions are in addition to national sources including the British Social Attitudes Survey and DfT Public Attitudes to Transport data.

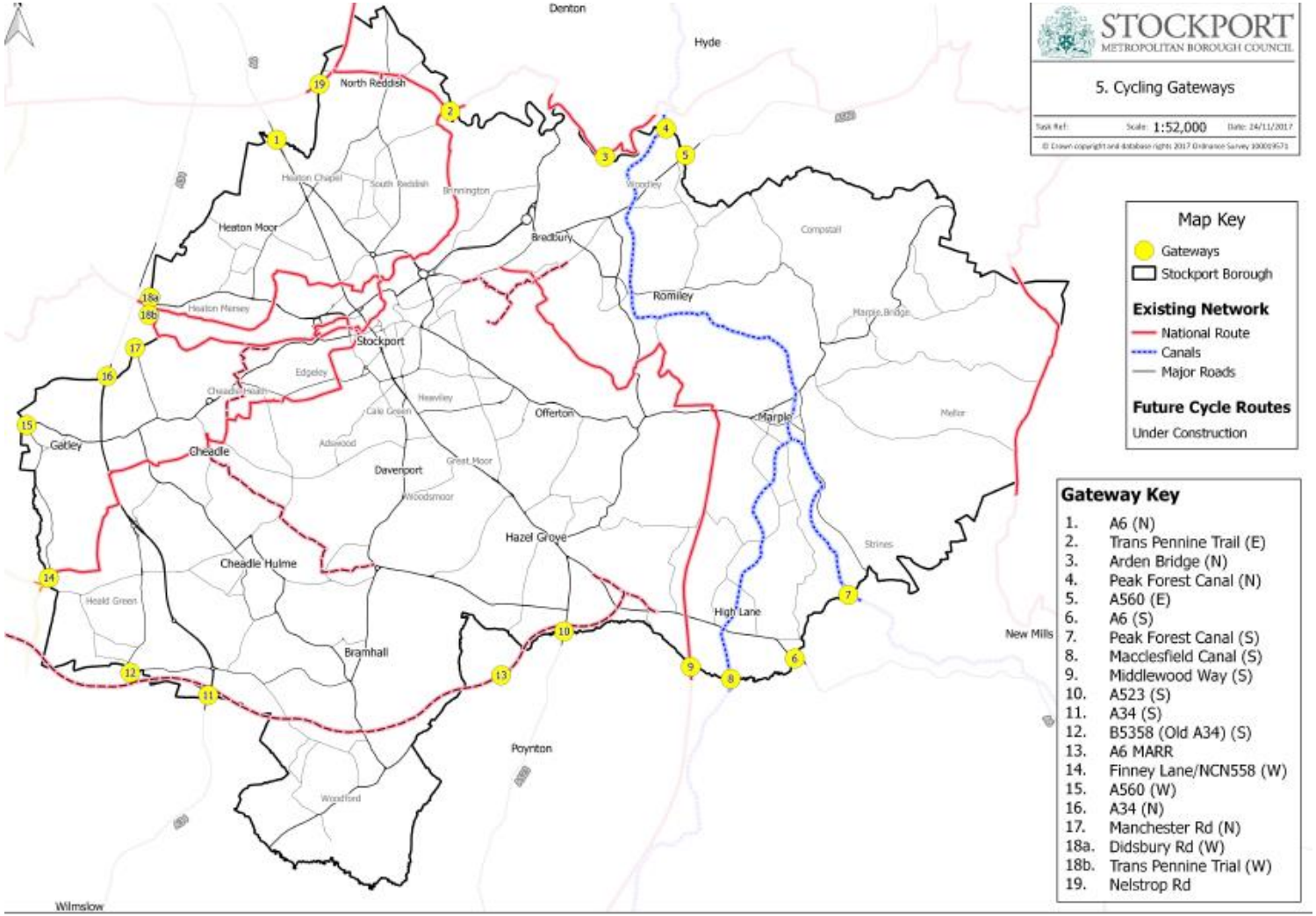
Source	Summary of Feedback
SEMMM Strategy Refresh Stockport Transport Options and Issues Consultation – August to October 2017	A number of comments were supportive of interventions to encourage cycling and walking by all ages, including for leisure as well as commuting purposes. Comments included support for: • Reallocation of road space where appropriate and where it would not result in increased congestion • Use of priority signals at junctions and crossings • Removal of barriers and gates which make some existing routes difficult to navigate by cyclists • More off-road routes to avoid conflicts with traffic on busy roads and encourage children to cycle. • Resurfacing of existing routes to provide all-weather links • Visible cycle and walking facilities on arterial routes • More bike parking facilities outside key destinations such as shops, libraries and medical centres
Rights of Way Improvement Plan Consultation – February to March 2017	As part of the process to review the Rights of Way Improvement Plan, a consultation was held in Spring 2017 to seek feedback on the existing plan. Overall, pedestrians were the most predominant users of the rights of way network in Stockport. Comments identified that priority should be given to: • Improved surfacing which is appropriate for all users • Linking paths to create longer routes and more circular shared-use off-road routes • Removing barriers, such as steps

Source	Summary of Feedback
Greater Manchester Bike Life Report (a biennial survey reporting in 2015 and 2017 so far)	The survey undertaken for the report found that:- • 75% of people in Greater Manchester want to see more money spent on cycling • 72% agree that things would be better if people in general rode bikes more (71% in Stockport) • 77% of residents support building more protected cycle lanes, even when this can mean less room for other road traffic. • Nearly 80% want better safety for cyclists • 36% of people currently ride a bike, whilst 27% don't but would like to (41% and 25% respectively in Stockport) • 57% of people in Stockport live in a household with at least one bike
NHT Public Satisfaction Survey, 2017	The survey identifies a 55% overall public satisfaction rate with cycling and walking in Stockport, which matches the national average. The survey also identifies more detailed analysis relating to cycle and walking infrastructure, including: • 56% satisfaction with pavements and footpaths (compared to 55% national average) • 51% satisfaction with cycle routes and facilities (compared to 52% national average) • 57% satisfaction with Rights of Way (compared to 58% national average)
Stockport Cycle User Group (CUG)	Stockport's CUG has operated continuously for approximately 20 years with stakeholders promoting high-quality, continuous and direct infrastructure.

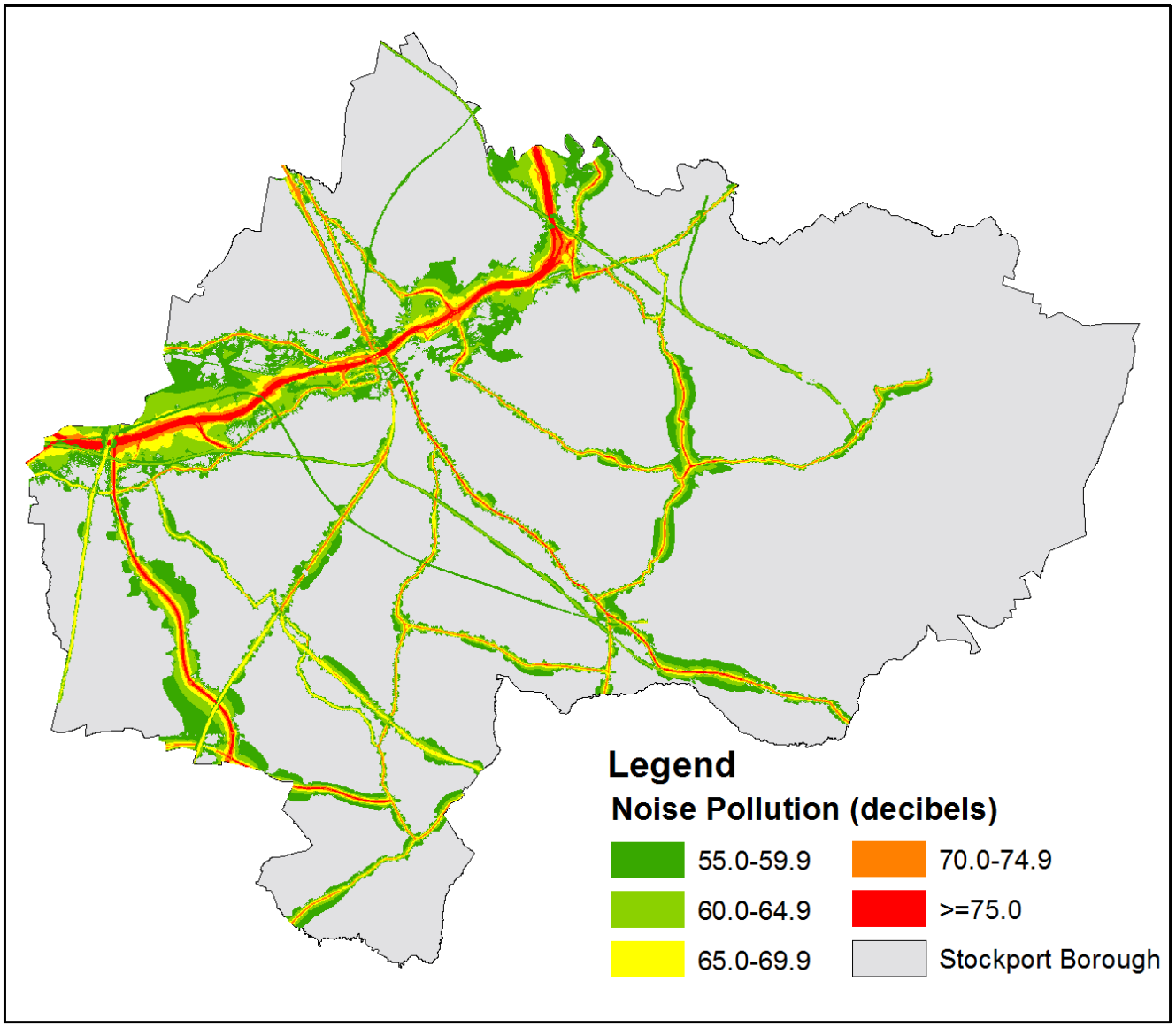
Appendix 5: All Maps Used in Document



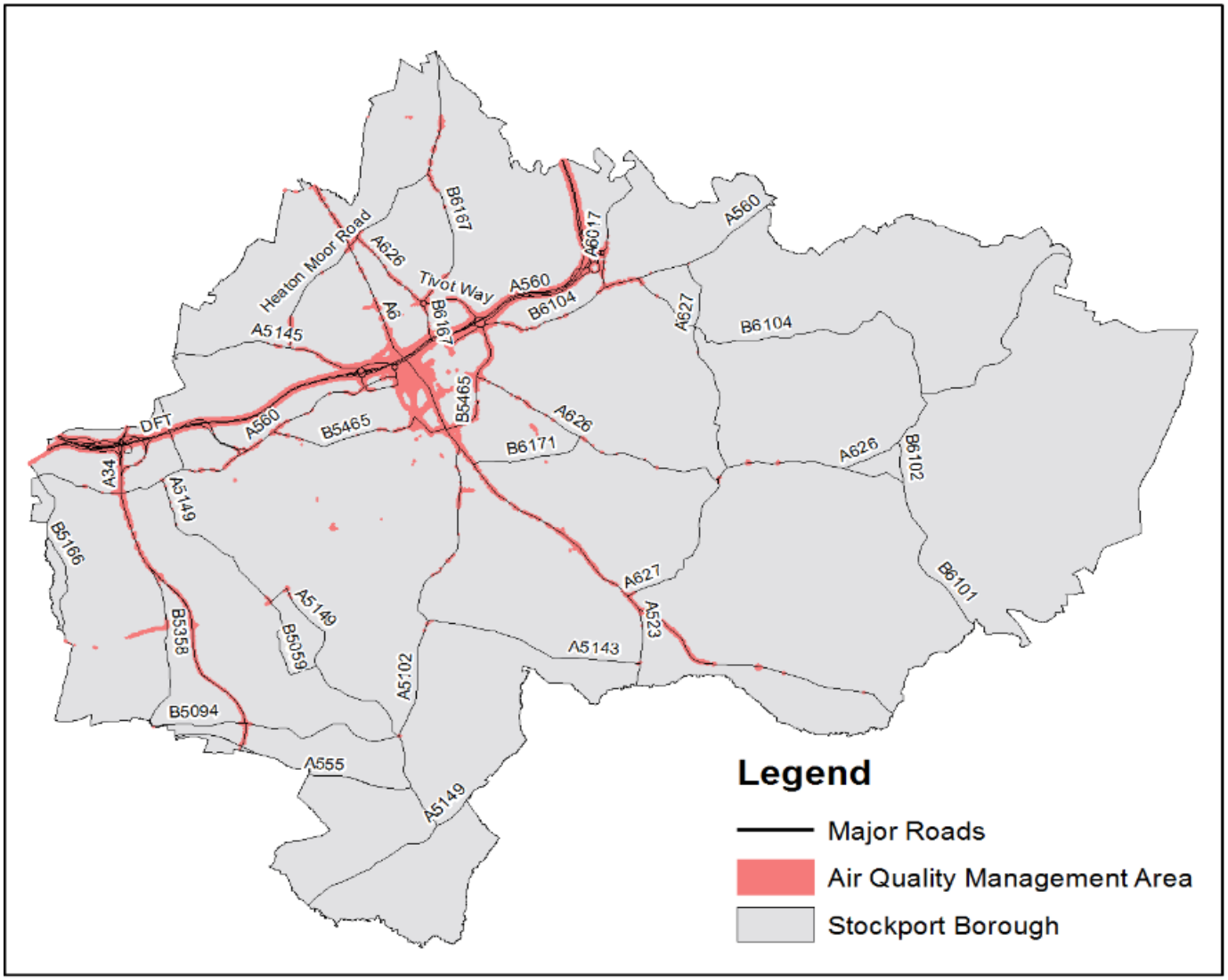
Map of existing cycling network



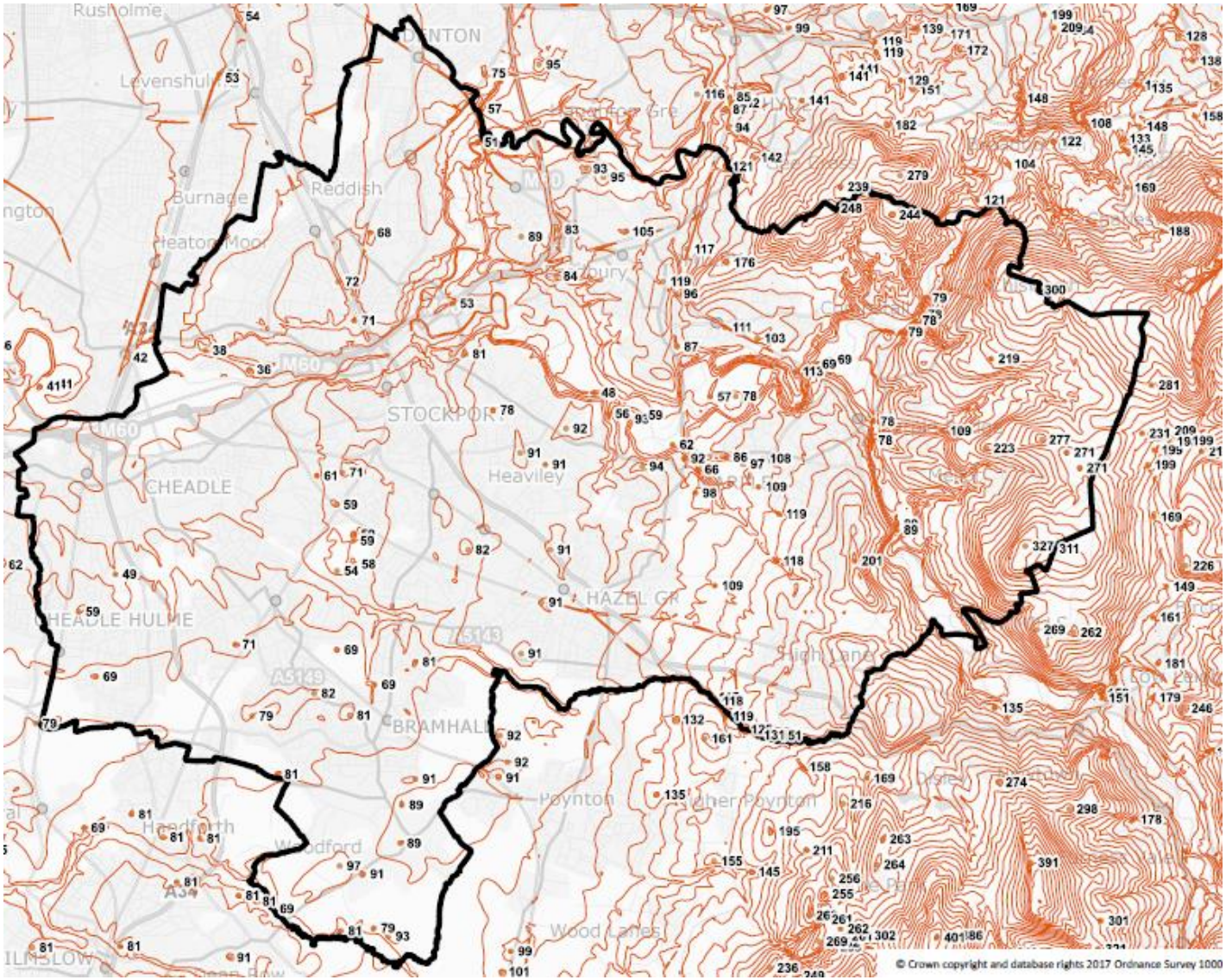
Map of cycling gateways to Stockport



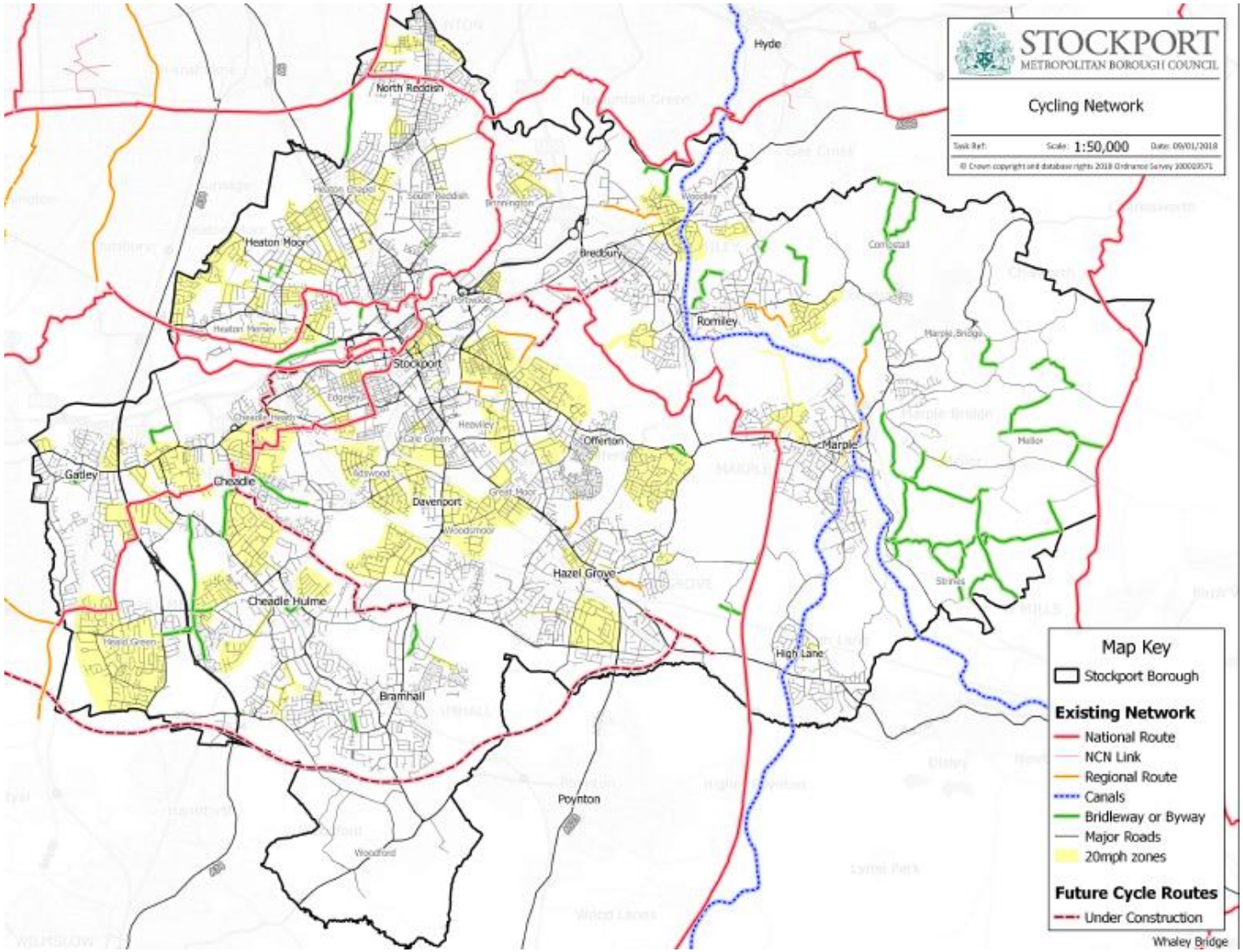
Areas of Noise Pollution in Stockport



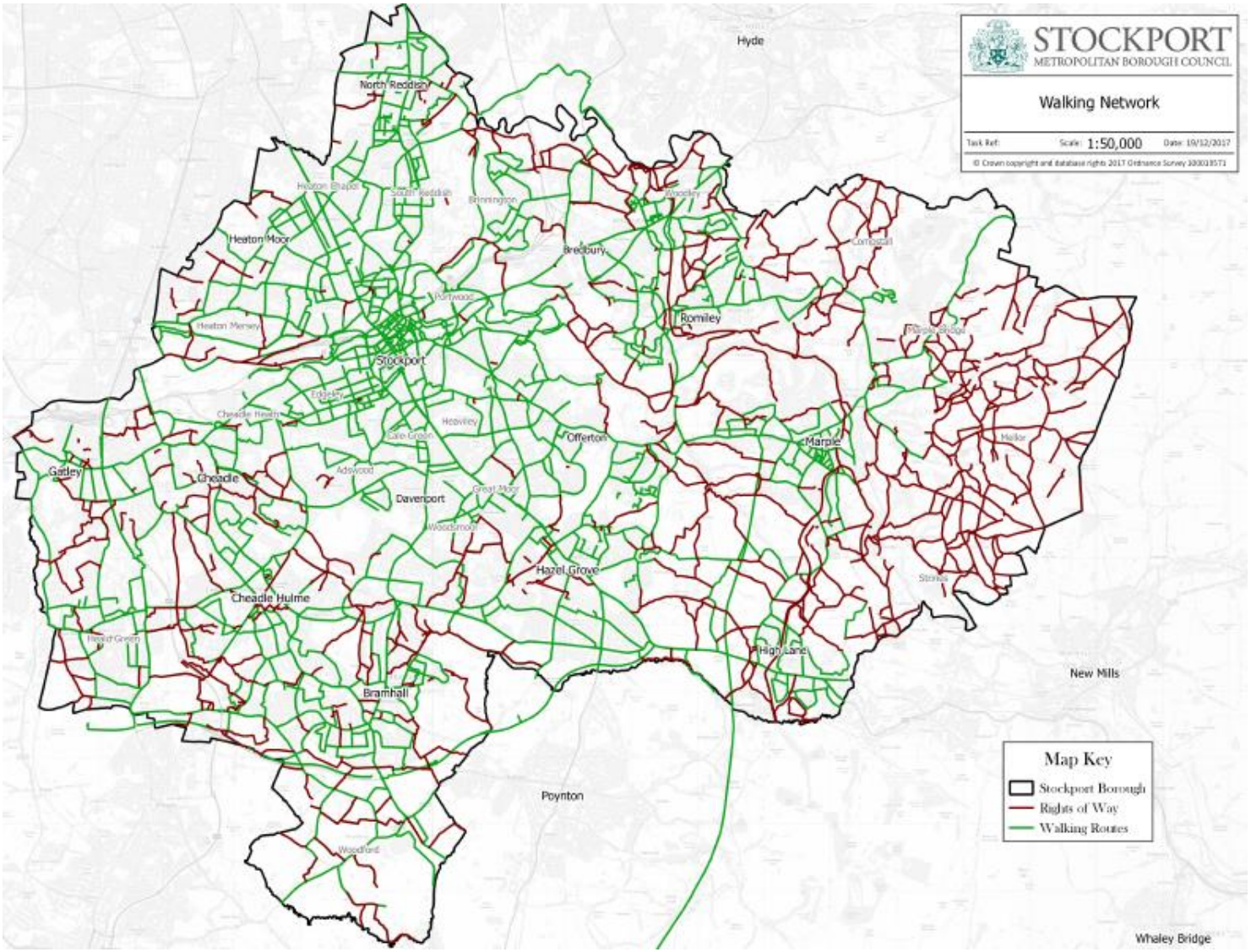
Map of air quality management areas in Stockport



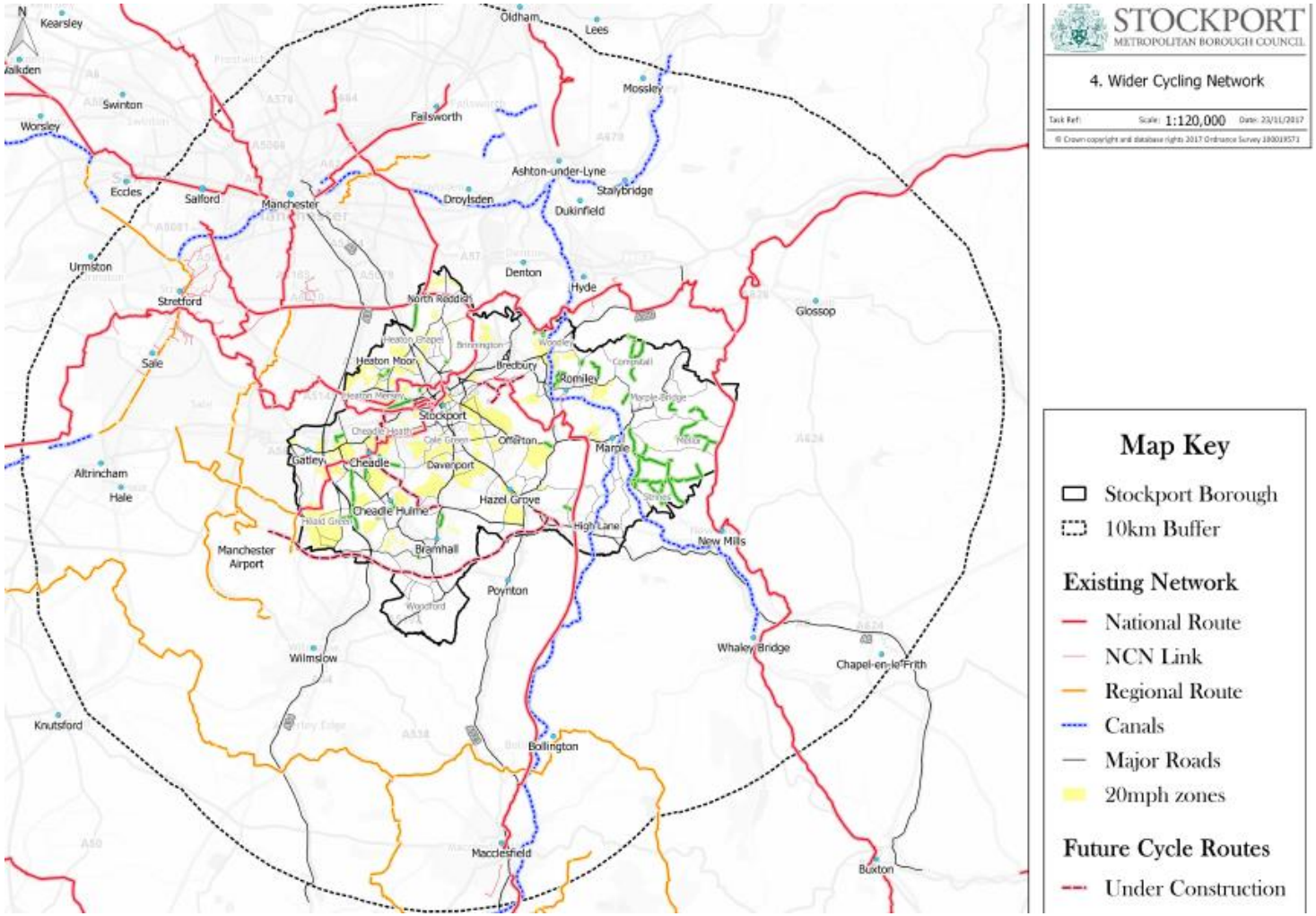
Geographical Map of Stockport



Map of Stockport cycling network



Map of Stockport walking network



STOCKPORT METROPOLITAN BOROUGH COUNCIL

4. Wider Cycling Network

Task Ref: Scale: 1:120,000 Date: 23/11/2017

Map Key

- Stockport Borough
- 10km Buffer

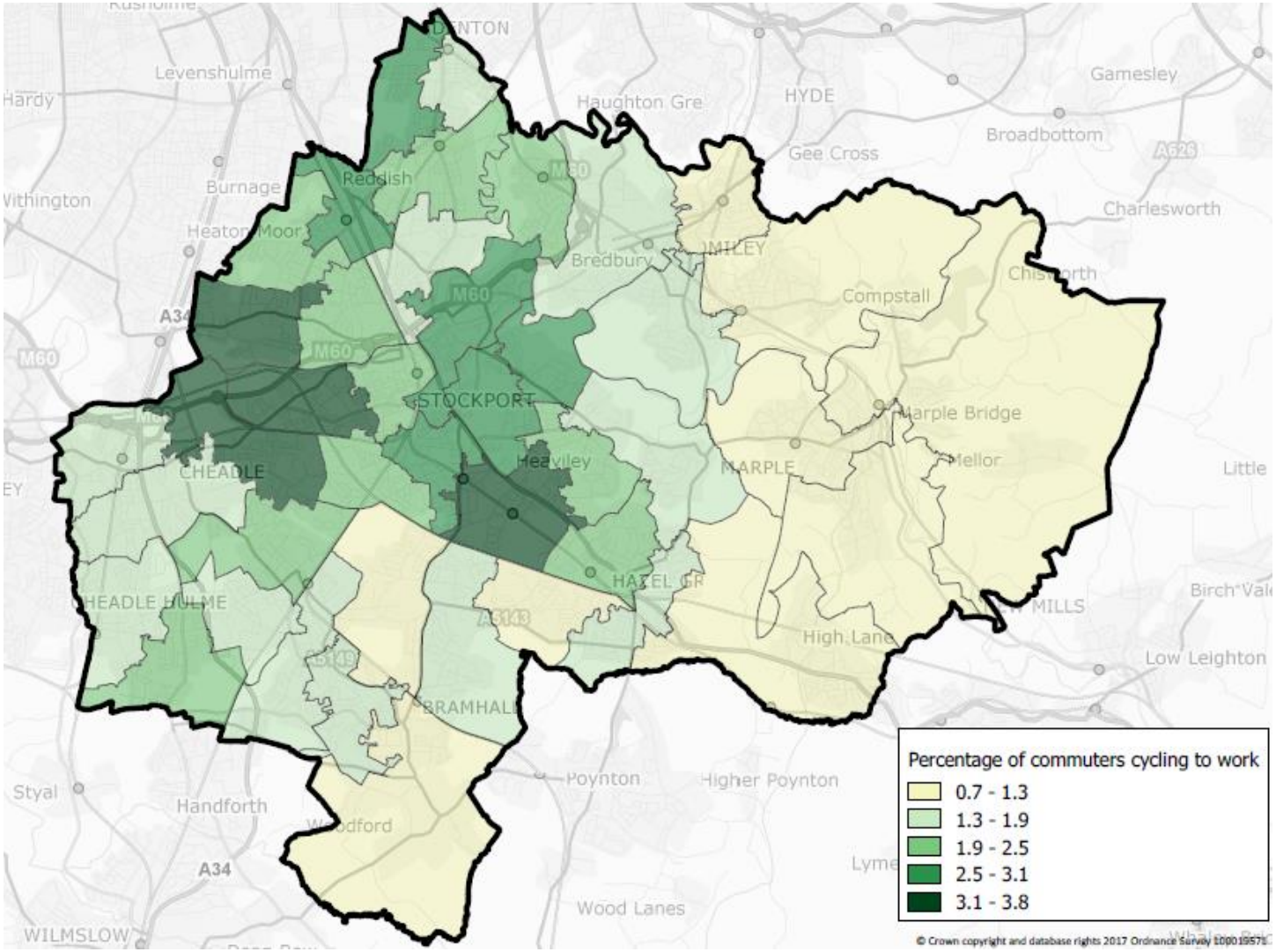
Existing Network

- National Route
- NCN Link
- Regional Route
- Canals
- Major Roads
- 20mph zones

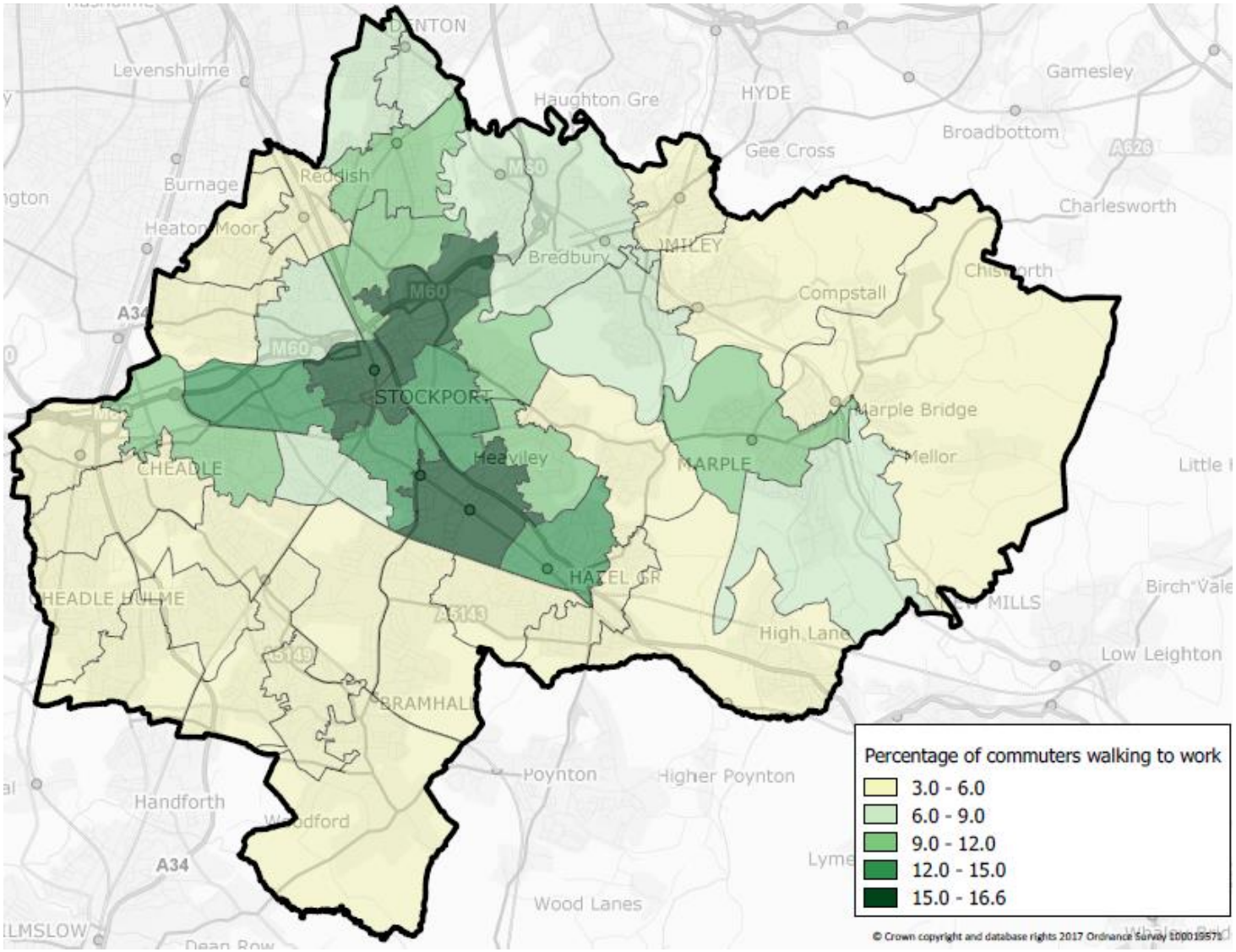
Future Cycle Routes

- Under Construction

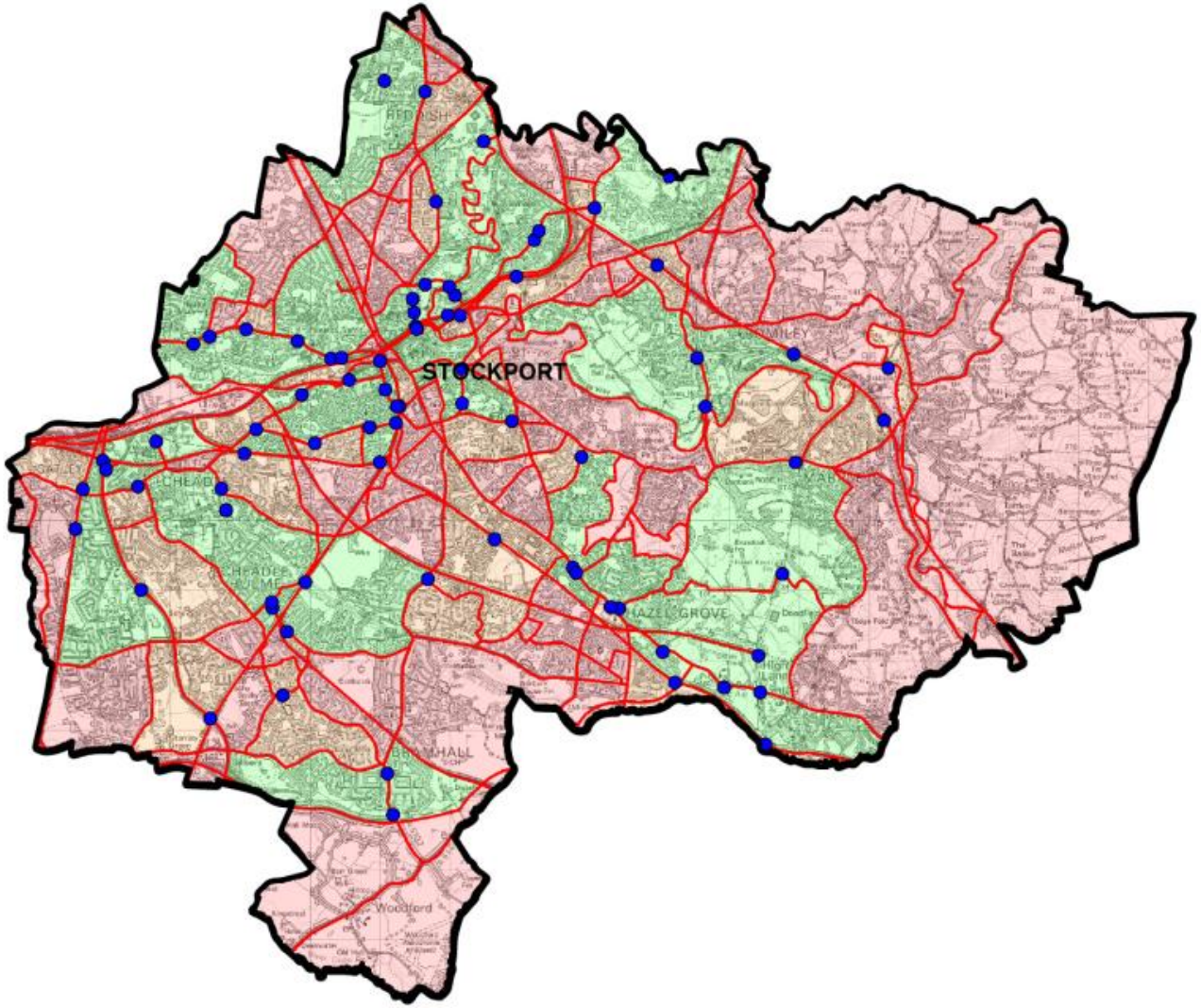
Map of wider cycling routes



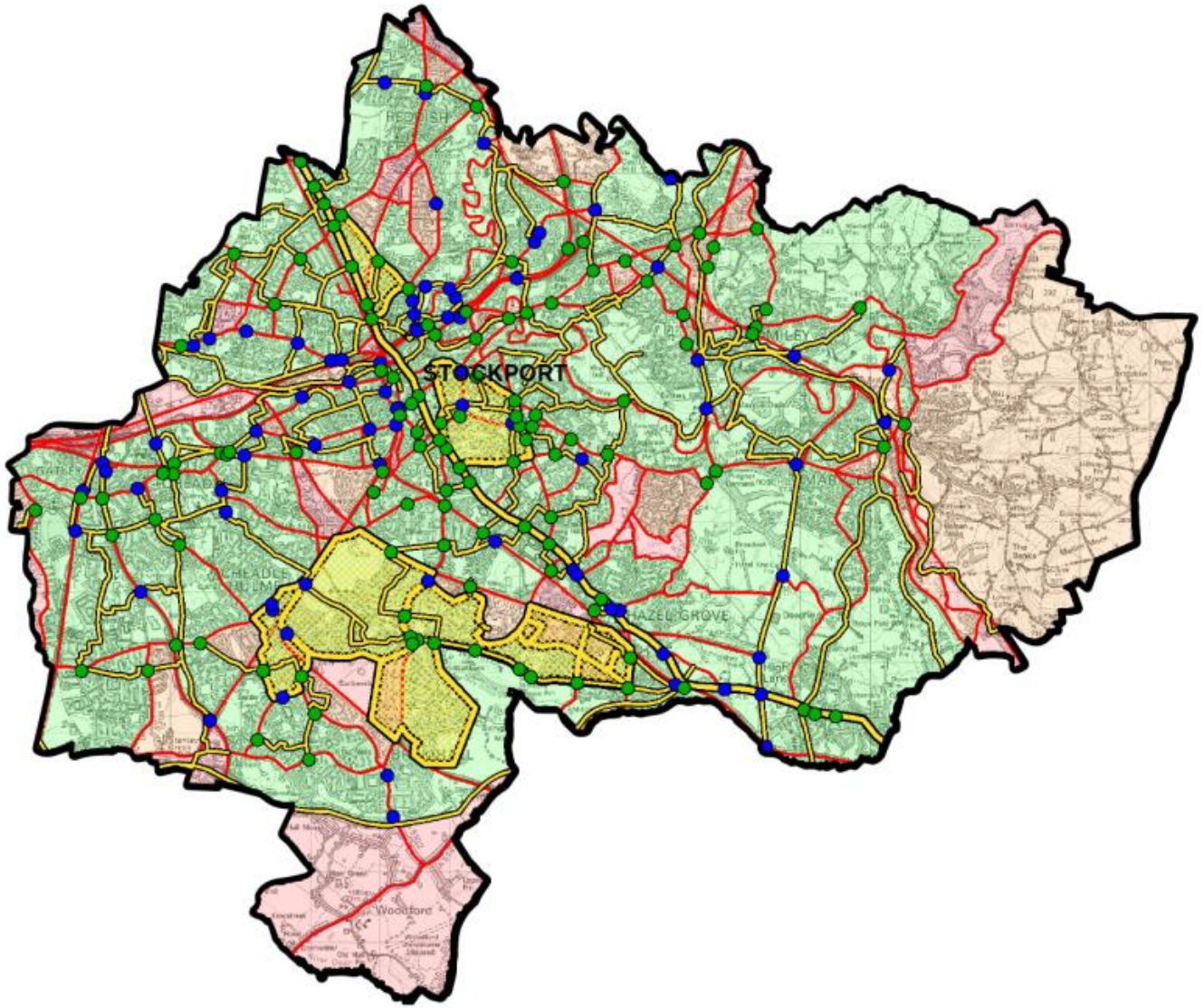
Current levels of cycling to work



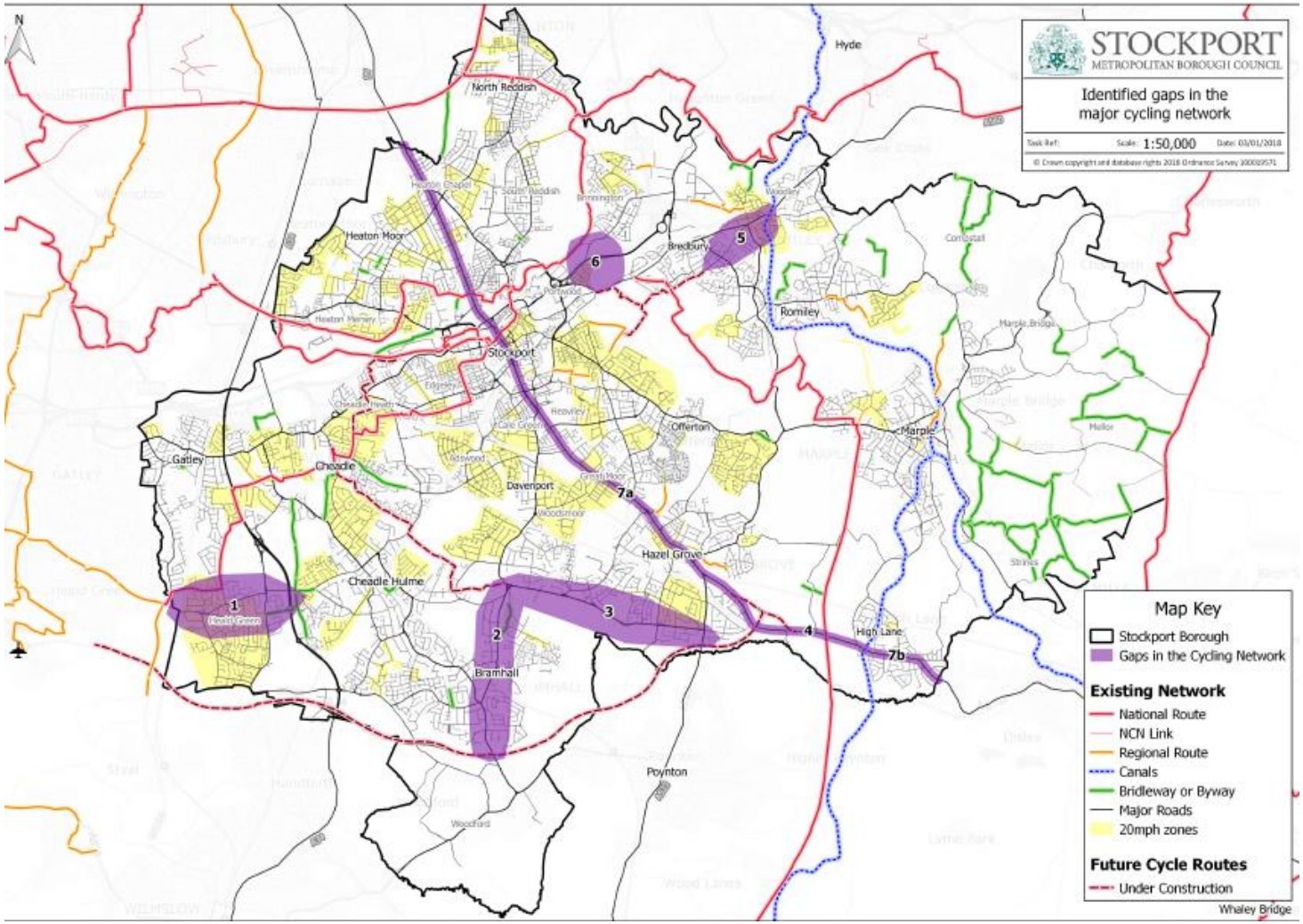
Current levels of walking to work



The cycling and walking network before Beelines has been implemented



A projection of the cycling and walking network after Beelines has been implemented.



Gaps in the emerging major cycling network