Local Cycling and Walking Infrastructure Plan



City of Sunderland

Contents

Chapter One: Determining scope	3
Chapter Two: Gathering information	9
Chapter Three: Network planning for cycling	19
Chapter Four: Network planning for walking	27
Chapter Five: Prioritisation	33
Chapter Six: Integration and application	39
Appendix A	43
Appendix B	45



Chapter One: Determining scope

Introduction

Transport shapes our everyday lives and can determine how much physical activity we undertake, how pleasant or long our journeys are, how we choose to live and what we choose to do.

Transport related air quality, carbon emissions, sedentary lifestyles, and road congestion from the dominance of car use are serious issues facing society. Investment to make walking and cycling in Sunderland safe, affordable, accessible and enjoyable is an important part of tackling these issues.

Walking and cycling are the most environmentally benign modes of transport. They rely on human muscle power and have zero carbon impact. The bicycle is the most energy efficient land vehicle ever invented. Both cycling and walking are ideally suited to the type of short journeys we make around the city and have the added benefit of improving health.

Walking and cycling are a key part of the future of our transport network and should be seen and promoted as attractive viable transport options for local travel. This Local Cycling and Walking Infrastructure Plan (LCWIP) has been prepared to help us achieve this aim.

Scope of the LCWIP

This document explores walking and cycling in Sunderland and sets out a Local Cycling and Walking Infrastructure Plan (LCWIP). It provides a comprehensive framework to guide Sunderland City Council and its partners regarding planned walking and cycling infrastructure over the next ten years. The plan will be used to support funding applications and in taking planning and design decisions regarding transport more broadly, including Active Travel which is specifically walking and cycling.

The geographical scope of this LCWIP is the area within Sunderland City Council's boundary. This includes Sunderland, Washington, Houghton-le-Spring and Hetton-le-Hole. We have also consulted and will consider, how our network links to our neighbouring authorities.

The statutory Local Transport Authority for Sunderland is the North East Joint Transport Committee, which also holds powers for passenger transport. Other relevant statutory powers are held more locally by the City Council including Statutory Highway Authority, Local Planning, Environmental Health and Public Health.

The LCWIP supports a local approach to delivering both the Government and City Council's ambitions to create a cycling and walking nation, as outlined in the DfT's Cycling and Walking Strategy (2017) and will guide future cycling and walking developments in line with our shared walking and cycling ambitions.

Sunderland LCWIP Policy Context

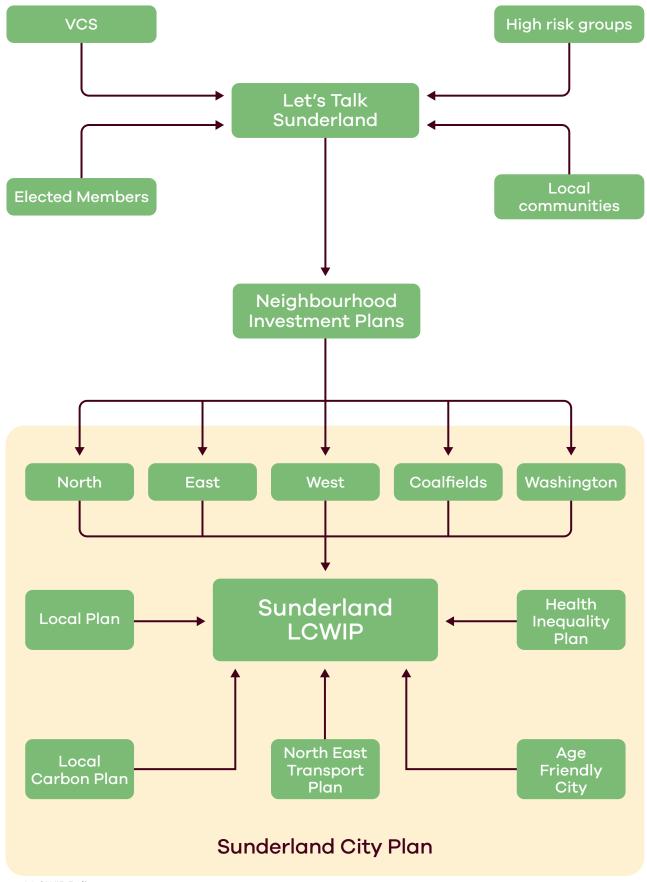


Figure 1: LCWIP Policy

In accordance with DfT guidance, the main outputs from this LCWIP are:

- a plan that sets out proposals for cycling and walking infrastructure in Sunderland for the next ten years
- a network plan for walking and cycling which identifies preferred routes and core zones for further development
- a prioritised programme of infrastructure improvements for future investment.

By taking a strategic approach to improving conditions for cycling and walking, the LCWIP will assist the City Council in:

- identifying cycling and walking infrastructure improvements for future investment in the short, medium, and long term
- ensuring that consideration is given to cycling and walking within both local planning and transport policies and strategies
- ensuring that consideration is given to cycling and walking
- making the case for future funding for walking and cycling infrastructure.



Figure 2: Benefits of walking and cycling

Travelling by bike or on foot can help to reduce congestion and free up road space for business and other road users. Providing growth in Active Travel modes can be a more economically efficient way to accommodate growth than non-active modes of travel such as the private car.

This helps us create better connected places and cleaner environments to live, learn and work.

Governance of the LCWIP

The LCWIP has drawn on diverse skills from across the City Council. It has been prepared and led by a small team from the Infrastructure and Transportation service. They have been supported and assisted by a wider 'Core Group' of staff from across the council from various professional disciplines with an interest in Active Travel and infrastructure. The process has been undertaken with engagement from a 'Wider Reference Group' drawn from partner organisations who also have an interest in Active Travel.

Formal adoption of this document for consultation is the responsibility of the council's Cabinet. Prior to Cabinet consideration presentations were given to the five Area Committees in Sunderland.

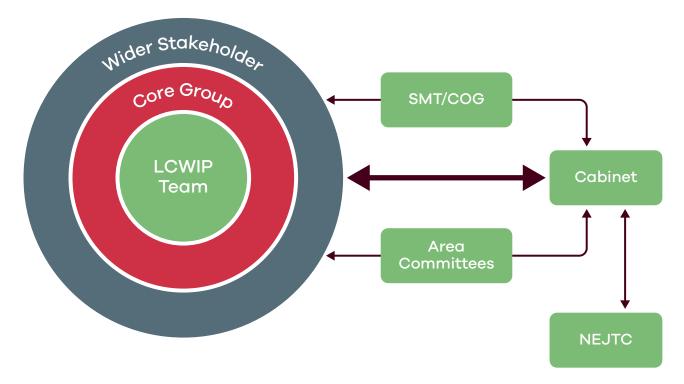


Figure 3: LCWIP Governance

Delivery

The LCWIP is an ambitious programme and several agencies will be responsible for delivery. The Local Highway Authority will take responsibility for securing funding, scheme design, seeking necessary approvals and commissioning construction works. Future new development will be required to be permeable for Active Travel and connected to surrounding networks, with developers required to provide this as an integral part of development.

Stakeholder engagement

As outlined, various stakeholder organisations were consulted in the preparation of the LCWIP document.

Active Travel England (ATE) is a new executive agency which was set up in January 2022 and is intended to build on the government commitment to boost cycling and walking and to deliver a healthy, safe and carbon-neutral transport system. ATE will manage the national active travel budget, award funding for projects meeting LTN1/21, ensure the money is well spent and to raise the standard of cycling and walking infrastructure.

In the longer term ATE will fulfil an inspectorate role on Highway Authorities in assessing

their performance on active travel as part of raising standards and challenging failure.

'Gear Change' was published in July 2020 and represents the Government's plan for how the then recently announced increased funding for active travel was to be spent. Launched in conjunction with LTN 1/20, it also advocated much higher standards for cycling schemes. 'Gear Change One Year On'' has recently been published and reviews progress over the first year with cycling increasing nationally by 46%.



Chapter Two: Gathering information

The Sunderland context

Most regular journeys we make around the Sunderland area on a day-to-day basis are short. The urban areas are quite compact and within these one in three car journeys are less than a kilometre in length. These journeys are ideal for walking and cycling.

Road space requirements

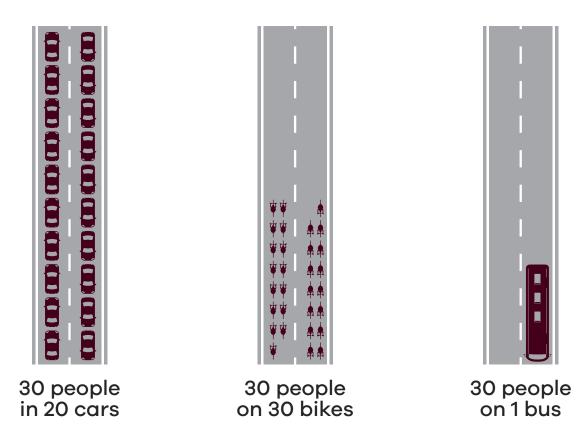
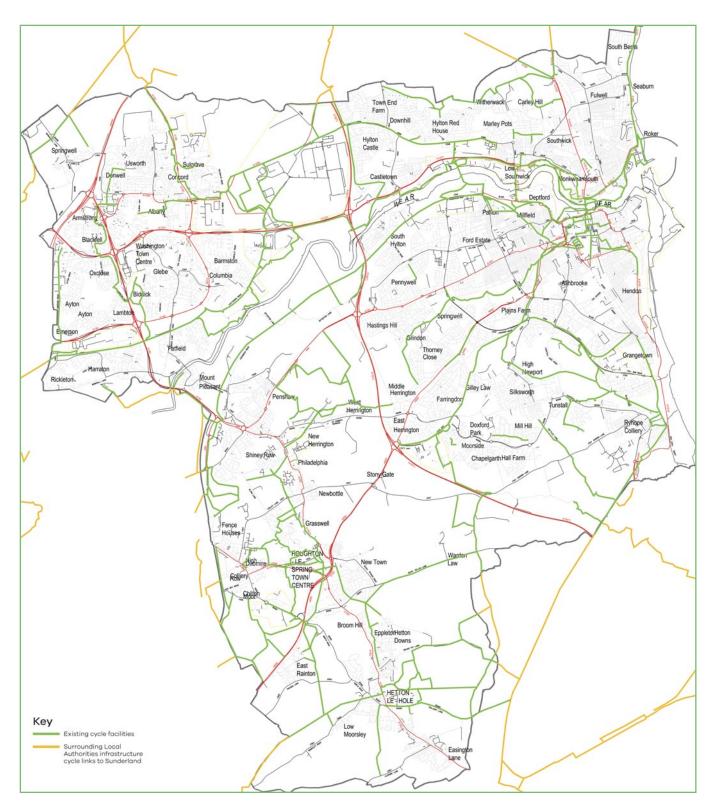


Figure 4: Amount of space required to transport the same number of passengers by car, bus, or cycle

In urban areas roads have become dominated by motor vehicles, routinely used for short journeys. Provision for alternative means of transport the exception, not the first choice.

Pedestrian provision is more comprehensively available on road corridors where footways on the side of the road are provided. This commonly lacks attractiveness to encourage Active Travel. The result is reduced levels of physical activity, traffic related pollution and congestion which delays all traffic including public transport, freight and other commercial journeys.



Map 1: Existing cycle infrastructure in Sunderland

The local highway network



Figure 5: The local network in Sunderland

Sunderland is defined and divided by the River Wear which passes through the middle of the city. Much of the city is located on a low range of hills running parallel to the coast. On average it is 80 metres above sea level. In terms of terrain, Sunderland is favourable for cycling, the main obstacles being the River Wear and its steep valley sides as well as trunk roads/dual carriageways including the A19, A1231 and A690.

The bridges connecting the North and South portions of the city are:

- Queen Alexandra Bridge (PCV) Pallion to Southwick
- Wearmouth Bridge (PCV) City Centre
- Northern Spire Bridge (PCV) Castletown to Pallion
- Hylton Viaduct (PV) over A19
- A182 Washington Highway (V) Washington to Coalfields
- Cox Green (PC)
- Fatfield Bridge (PCV).

(P= pedestrian, C=cycle, V= motor vehicle)

The most strategic and busiest road in Sunderland is the A19 Trunk Road running north to south along the western edge of the urban area, crossing the River Wear at Hylton, providing access north to the Tyne Tunnel, where it joins up with the A1 to Edinburgh and south through Teeside, joining up with A1M via A168 at Thirsk.

The major highways that converge in Sunderland city centre are:

- A690 Sunderland city centre to southwest Durham
- A1231 Sunderland city centre west via Washington to A1
- A1018 South Shields south to Sunderland city centre
- A183 South Shields south to Sunderland city centre then west to Chester-le-Street.

Recent improvements to the highway network include:

- Sunderland Strategic Transport Corridor (SSTC) linking Port of Sunderland to the A19 via Northern Spire Bridge and A1231
- Southern Radial Route A1018 bypass at Grangetown and Ryhope.

Most of the suburbs of Sunderland are situated south and west of the city centre with 70% of the population living on the south side of the river and 30% on the north side.

The city extends from Hendon Ryhope and Hendon in the south to Roker and Seaburn to the north. The city includes Green Belt consisting of its surrounding rural areas and settlement breaks.

The urban parts of Sunderland are shown on Map 2:



Map 2: Sunderland context

Sunderland comprises of an eclectic mix of urban and rural areas. It includes an ecologically vibrant estuary in the River Wear with a rich industrial history. There are over 60 parks which include main parks, small pocket parks and playparks, four popular country park and nature reserve areas, the England Coast Path National Trail, and National Cycle Network routes 1, 7, 11 and 70.

Within this, historic villages and towns merge or proximate to each other, from the south coalfield areas of Easington Lane and Hetton-le-Hole up to the elevated Springwell Village at the northwest side of Washington with its historic Bowes Railway, and across the north of the city to award winning coastal resorts at Roker and Seaburn.

South of Wearmouth the Port of Sunderland and mixed industrial areas run down the coast to a long stretch of spectacular tall cliff Heritage Coast. Inland from here and up the west of the city are busy rural agricultural areas with a diversifying and enriched rural economy including a vibrant and growing equestrian sector as well as fishing, golf, petting farm, country parks and nature reserves.

Many areas resonate with a history of mineral extraction, with many place names historically being double barreled with 'Colliery'. Active industrial areas are spread across the city, with major industrial production up the east side of Washington. The city centre is experiencing a reinvigoration, with major redevelopment, a thriving university, top flight sporting venues and resurgent city centre provision of high spec offices with exemplary tech-connectivity.

The whole area is served by a large and growing network of cycle routes which criss-cross the area and converge to the city centre like wheel spokes. Sunderland is evolving as it always has, to host internationally renowned industrial performance, and a vibrant population benefiting from a great place to live learn and work.

Trends in England and Sunderland

Sunderland, as of 2020, has a population of 277,846 and has 127,000 households spread across 60 neighbourhoods. Covering 137 square kilometres, it is the second most populous local authority in Tyne and Wear and makes up 10.57% of the North East's population.

Sunderland contains several of the most deprived areas in England. Just under half of Sunderland was ranked as being in the 20% most deprived areas in England and more than a fifth ranked as the bottom in the bottom 10%.

Index of Multiple Deprivation (IMD)

The official measure of deprivation in England which was most recently updated in September 2019.

National rank as a percentile from most deprived to least



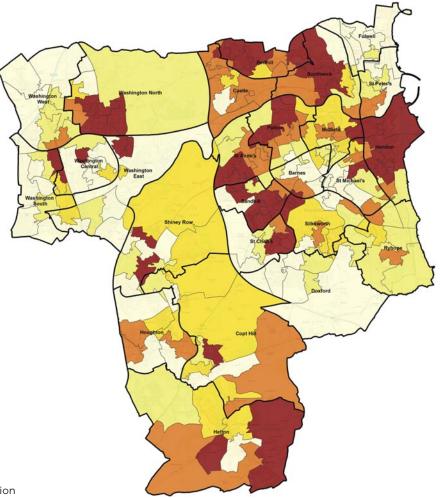


Figure 6: Sunderland index of multiple deprivation

Life expectancy

Local Authority Health Profiles OHID phe.org.uk



81.4 83.2 Sunderland England



77.2 79.6 Sunderland England

% of Adults Physically Active % Adults (18+) overweight or obese

> 72.5% Sunderland

62.8%

England

Proportion of adults who do any walking or cycling, for any purpose (x5 times/week)

33.3%

Sunderland

35.8%

England

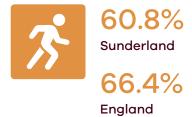


Figure 7: Life expectancy

Cycling and walking statistics for Sunderland

Sunderland is currently below the national average for both cycling and walking, according to the DfT's transport statistics.

In 2018–19 Sunderland cycling and walking levels for people who participate once a week are 65.2% which is slightly below the national average for England (73.2%) and the North East (71.4%), but much of Sunderland's cycle network is off road, and so not picked up on the DfT surveys.

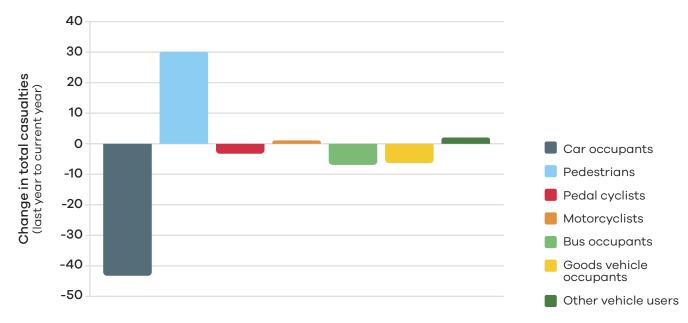
		Any c	ycling			Cycling f	or leisure		Cycling for travel					
Area name	Once per month	Once per week	Three times per week	Five times a week	Once per month	Once per week	Three times per week	Five times a week	Once per month	Once per week	Three times per week	Five times a week		
England	16.1	11.6	5.3	3.0	13.4	8.5	2.8	1.3	6.7	5.1	2.3	1.4		
North East	12.6	8.8	4.3	2.2	10.9	7.2	2.3	1.2	4.5	3.5	1.8	1.0		
County Durham	9.6	6.6	2.7	1.1	9.2	6.4	1.8	0.9	1.9	1.3	0.0	0.0		
Darlington	13.1	9.2	3.9	3.0	10.3	6.4	2.0	1.1	5.0	3.7	2.5	1.9		
Hartlepool	10.3	8.6	2.1	1.5	6.9	5.1	1.0	0.6	4.6	4.2	1.4	1.0		
Middlesbrough	10.5	7.3	5.3	2.1	7.7	4.4	1.6	0.7	5.0	4.2	2.7	1.3		
Northumberland	10.9	8.4	4.8	3.0	10.0	7.4	3.6	2.3	4.0	3.4	2.3	2.1		
Redcar and Cleveland	17.3	11.1	7.3	1.5	15.0	8.7	1.4	0.5	8.7	8.1	1.6	0.7		
Stockton-on-Tees	15.5	9.3	4.1	1.5	13.7	7.9	3.0	0.8	3.4	2.2	1.0	0.7		
Tyne and Wear	13.8	9.8	4.8	2.7	11.8	7.7	2.4	1.2	5.4	4.1	2.5	1.2		
Gateshead	15.8	10.9	4.4	0.8	14.1	9.6	1.4	0.8	6.8	3.8	2.8	0.1		
Newcastle	14.3	10.5	5.5	3.6	10.7	6.6	2.1	0.8	7.8	6.1	3.5	1.9		
North Tyneside	18.3	13.1	6.2	4.0	16.5	11.4	3.8	2.5	6.3	5.4	3.1	1.5		
South Tyneside	9.2	7.2	4.2	2.8	7.9	5.4	2.8	1.4	2.6	2.4	1.7	1.6		
Sunderland	10.9	7.1	3.4	2.1	10.0	6.1	2.2	1.1	2.4	2.1	1.1	0.9		

Proportion of adults that cycle, by frequency, purpose and local authority, England, 2019–2020

Figure 8: Proportion of adults that cycle, by frequency, purpose and local authority, England, 2019–2020

Car or van availability Sunderland

Office of National Statistics data for 2011 Indicates that 59.3% of Sunderland households do not have access to a car or van and are thus dependent on walking, cycling and public transport.



Current variance in casualties by road user group

Figure 9: Current variance in casualties by road user group

Cycle/Pedestrian accident data for 2018-19: 2018 Accidents (Cyclists = 47/Pedestrians = 65) 2019 Accidents (Cyclists = 44/Pedestrians = 95) Cyclists = 7% decrease from 2018. Pedestrians = 46% increase from 2018.

Department for Transport statistics

Area name	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
England	48	47	47	47	47	46	45	45	44	43	43	43	44	44	45	45
North East	56	58	56	58	55	53	56	52	52	46	48	45	43	40	41	41
North West	45	47	48	46	48	46	45	45	45	43	41	41	41	40	38	39
Yorkshire and	52	48	51	53	56	49	46	44	44	43	42	44	48	48	48	44
East Midlands	52	53	51	48	45	45	46	46	45	47	47	49	47	48	48	49
West Midlands	50	47	47	46	47	50	49	48	45	46	47	45	46	46	49	45
East of England	47	44	46	47	47	45	43	43	41	42	44	45	45	42	39	36

41% of children in the North East walk to school, less than the 43% average for England.

Figure 10: Percentage of children aged 5-16 who usually walk or cycle to school with 3 year average, England, 2003-2020

Trip Generators in Sunderland

For most people journeys start at home, whilst commercial journeys link manufacturing, distribution, retail and office sites. A plan for changing how people move around requires an understanding through mapping of trip generators in relation to origins.

To define key trip generator sites in Sunderland, local amenities that could be expected to attract a significant number of trips were plotted.



Chapter Three: Network planning for cycling

Sunderland hosts some important parts of the National Cycle Network developed in the early 2000's based on former railway corridors. It has numerous routes suited to a range of journey purpose from recreation to commuting. Many routes serve both functions.

There are 170km of dedicated cycle routes in Sunderland, with more than 140km off-road, providing easy routes for beginners, as well as long distance routes.

Few other cities can provide off-road cycling access from the heart of the city centre out to the suburbs and countryside in the way that Sunderland can.

Routes head north or northwest to the River Tyne, west to the Pennines and north Cumbria, southwest to Durham, Barnard Castle and south Cumbria, and south to Teesside and beyond.

Public Consultation

Members of the public were able to provide feedback on this document in November 2021 during a consultation process. This document has since been redrafted from the key points made during the consultation. There were 38 responses to the document with over 200 key points raised. Public feedback has helped reveal any errors in the document that were overlooked initially and provide an insight into the local community. It highlighted what issues residents have and what they want to see in their local area.

The key points from the responses were picked out and organised into categories. These include, more investment, maintenance, knowledge, safety, transport links, other route options, document specifics, signage, future concerns, active travel, and route comments.

See Appendix B for further information.

Map 3: The National Cycle Network

OS MAP National Cycle Network (Sunderland)



Sunderland falls below the national proportion of people who cycle for any purpose. To make Sunderland an Active Travel city, we need to take action to tackle the main barriers to cycling. We need to attract people to take up Active Travel by building better quality infrastructure, making highway facilities better for everyone and we need to make sure people feel safe and confident cycling.

To deliver this, we need to ensure Active Travel is embedded in wider policy making and facilitate better inclusion of walking and cycling facilities for existing and proposed highway infrastructure improvements.

In accordance with the Government's 'Gear Change' document, we will promote the four main themes suggested to achieve this goal:

- better streets for cycling and walking
- putting cycling and walking at the heart of transport, place making and health policy
- empowerment of Local Authorities
- enable people to cycle and protect them when cycling.

Where possible we will provide safe, continuous, direct routes for cycling, ideally physically separated from pedestrians and motor traffic to the places where people want to go and where they will be most useful for everyday journeys.

We will use the improved cycle design guidance set out in Department for Transport's Local Transport Note 1/20 to provide better designed facilities and uncluttered streets. All new highway schemes will deliver or improve cycling infrastructure to LTN 1/20 standard unless it is demonstrated there is little or no need for cycle facilities along the highway/s concerned.

Future cycle and walking routes require specifically designed infrastructure which is accessible to all, regardless of age, gender, ethnicity or disability, and infrastructure that does not create hazards for vulnerable pedestrians. Improvements to the public highway should always seek to enhance accessibility for all.

We wish to increase the number of cargo bikes to replace some van journeys and want new cycle routes to be accessible to recumbents, trikes, handcycles, and other cycles used by disabled cyclists.

We will increase the number of cycle parking locations, ensuring these are as secure as possible. Cycle parking will be increased where it is most needed i.e. at city centre improvement schemes, major trip generators, transport interchanges, public buildings including hospitals and schools and it will also be a condition of planning consent for new developments.

Future cycle parking will consider the needs of all potential users and the range of cycles which will use the facilities.

We will promote the importance of high quality, accessible and secure designs that will encourage increased use and discourage theft.

We will continue to work with key stakeholders to develop new standards for enough secure bike storage in all new residential and non-residential developments.

We will also consider the role the emerging National Model Design Code and revisions to the Manual for Streets can play in delivering high quality, accessible, secure, and safe cycle storage.

Making the planning system contribute to the achievement of sustainable development

Developers have a role in encouraging cycling through provision of fully permeable new developments that are connected to surrounding active travel networks for walking and cycling.

This will be achieved through a combination of useful design and developer funding. We will work with Active Travel England and other key stakeholders to ensure that high quality cycling and walking provision through development is embedded within the land-use planning system.

Cycle infrastructure requirements will be embedded in local authority planning, design and highways adoption policies and processes.

Schemes must be clearly signposted and labelled

We will use high quality Traffic Signs General Regulations and Directions (TSGDR) compliant signing, including multi-range destinations as appropriate. Signing will be installed at key route junctions, with 'reassurance' signing in between where suitable.

Maintaining routes properly

Routes should be properly maintained at appropriate frequencies, including management of vegetation, and cleansing of deposits such as litter, debris, and glass.

Routes will be designed and upgraded, as budgets allow, to support ease of maintenance. In many instances this will mean bitmac surfaces, with/without friction dressing to improve usability in winter conditions.

Case Study 1: Pedestrian and Cycle Bridge

The £31m 'smart-bridge', will connect the transforming Riverside Sunderland site to Sheepfolds, providing improved links to the Stadium of Light, the two University of Sunderland campuses in the city centre and St Peter's and residential communities to the north of the river.

It will provide access to both pedestrians and cyclists creating improved connections between the city centre and the coast. The new, high level bridge is a key priority for the council and a major local contribution to the success of the Riverside masterplan proposal. The new bridge will connect The Beam, on the south bank, with the listed NER stables in Sheepfolds, a span of approximately 250 metres at a height of around 30 metres. Outline plans for the footbridge show a simple, elegant design that will frame the Wearmouth Bridge and complement the changing cityscape on Riverside Sunderland.



Government Targets

The 'Government Target' scenario models a doubling of cycling nationally, corresponding to the proposed target in the UK government's Cycling Delivery Plan to double cycling between 2013 to 2025. We want to see a future where half of all journeys in our city are cycled or walked.

Government statistics show 58% of car journeys in 2018 were under 5 miles and in urban areas more than 40% of journeys were under 2 miles in 2017–18. For many people, these journeys are perfectly suited to cycling and walking.

Whilst women are motivated to travel actively for physical and mental health reasons, worries about their personal safety, convenience (particularly when taking multi-stop trips) and appearance are all barriers to preventing them from cycling and walking.

Propensity to cycle declines more rapidly with distance for women and older people if a quiet route creates a detour such that a 2-mile trip becomes effectively a 3-mile trip, younger men's propensity to cycle the route will decrease 11%. For younger women, the decline is 19% and for older adults (60+) the propensity would decrease by 35%.

This impacts upon women's and older men's cycling twice: they are less likely than men to want to cycle the fast route, but then are also less likely to be willing to cycle an effectively longer alternative route. It is likely to be part of the reason for disparities in cycling by age and gender.

Improving direct routes will reduce the impact of these safety and time disincentives to utility cycling, while a good proportion of current cyclists may use the 'quieter' route, a sizeable increase in capacity will necessitate substantial improvements to the 'fast' route, which will then carry many more riders.

It is for these reasons, that it has been chosen to present the 'fast' as the first choice for creating good cycling routes (as recommended in LTN 1/20).

Propensity to Cycle Tool

Identifying opportunities to improve health outcomes

We have used the Department for Transport's Propensity to Cycle Tool to inform the development of a draft list of proposed interventions. This has allowed us to identify routes that will promote health and economic gains. For example, from residential areas to the city centre.

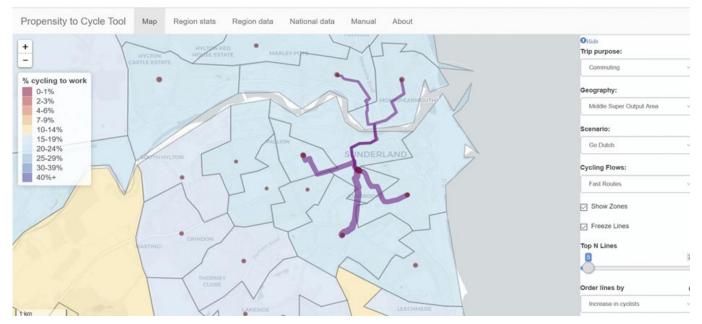


Figure 11: Example Routes from the Propensity to Cycle Tool - Residential to Urban Core

Employment Areas

We have also identified opportunities for improved commuting fast routes that focus on key employment areas such as the Nissan plant and Doxford International. Links to these areas are within the top 12 fastest cycle routes used in Sunderland:

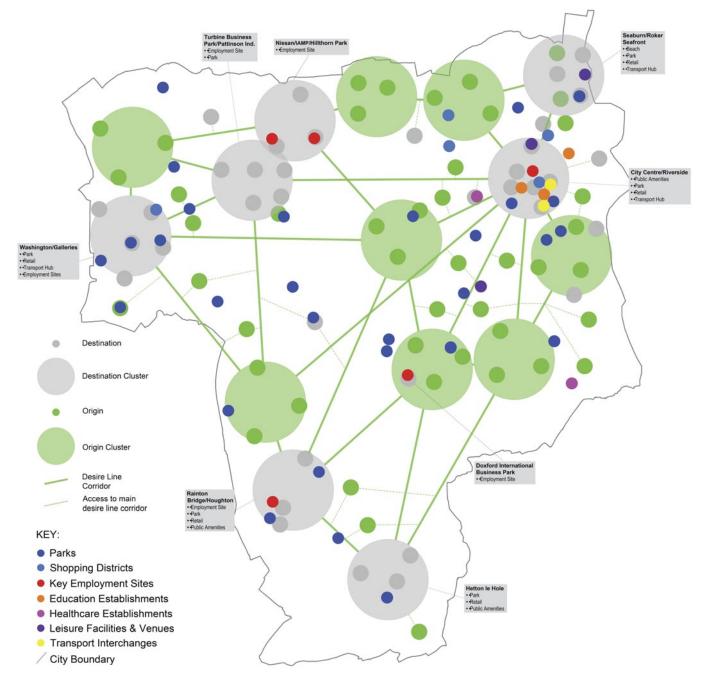


Figure 12: Example Routes from the Propensity to Cycle Tool - Residential to Employment

The National Highway and Transport Public Satisfaction Survey (NHT Survey)

This collects the public's views on various aspects of Highway and Transport in local authority areas. Responses to the survey are compiled into Key Benchmark Indicators (KBIs) and Benchmark Indicators (BIs) for each Authority for comparison purposes, most of which measure satisfaction. We will use this information to help to target improvements and infrastructure as part of this plan.

Map 4: Cycling origins and destinations in Sunderland:





Chapter Four: Network planning for walking

Walking is the most universal mode of transport and the easiest mode of travel to promote. It requires little specialist equipment, has minimal environmental impact and is particularly appealing for those who currently have low levels of activity.

Sunderland City Council recognises its importance in terms physical and mental health and wellbeing, it is also an important Active Travel mode for shorter journeys in reducing CO₂ emissions and improving air quality.



Figure 13: Walking policy linkages

2019–2020 DfT Statistics show that walking in Sunderland for any purpose once per week is around 66.2% which is just below the national figure (for England) which is 67.3% and the North East figure which is 67.6%.

Walking to school in the North East for 5–16 year-olds has experienced a marked 15% reduction from 56% in 2003 to 41% in 2017 and 2018. This compares to a 5% reduction in national figures for England from 48% in 2003 and 43% in 2018.

According to the National Travel Survey data over 40% of urban journeys were under 2 miles - perfectly suited to walking and cycling.

Results from the Sport England Active Lives Survey show 87.7% or 200,200 residents of Sunderland (over the age of 16) said they had walked as a means of sport, recreation, or active travel. (Data taken between November 2018 and November 2019).



Figure 14: How people travel - walking taken from the DfT's National Travel Survey Data 2019

There are many attractive prime walking routes in the Sunderland area, whether it be a scenic coastal walk, a walk in the park, a rural countryside or riverside stroll, all varying in distance and required ability.

There are over 40 routes in green spaces and parks across the city promoted through Active Sunderland. All these routes can be uploaded via https://my.viewranger.com/ accessed by computer or by the free View Ranger app on a mobile phone.

The city has many parks and is proud to hold five Green Flag Park Awards for outstanding parks and open spaces. These include Herrington Country Park, Hetton Lyons Country Park, Roker Park, Mowbray Park and Barnes Park.

Sunderland is the North East's city by the sea with two Blue Flag award-winning beaches at Seaburn and Roker on the England Coast Path National Trail. South from Hendon, the dramatic tall boulder clay cliffs of the Durham Heritage Coast provide dramatic walking routes to Teesside and beyond with views of North Yorkshire.

Sunderland is well equipped with places for active waking and getting information to people to encourage them to make full use of what is on the doorstep is a priority to encourage behaviour change, alongside improving connections to these areas.

Identifying and clustering trip origin and destination points

Key to providing improved infrastructure for walking is an understanding of demand for a planned infrastructure network. This starts by mapping the main origin and destination points across the geographical area. Pedestrian utility trips typically have common journey destinations, such as town and city centres, educational establishments, workplaces, health, leisure, and other facilities.

By focusing on pedestrian infrastructure improvements around these walking trip attractors and mapping them along with the routes that lead to them, Core Walking Zones (CWZs) can be defined. These are areas that consist of several walking trips in proximity.

Establishing walking routes and core walking zones

Following the identification of CWZs, key walking routes to each can then be identified by mapping a 2km area from the central point, considered to be the maximum walking distance:



Figure 15: Example core walking zone

In Sunderland we have a robust Highway Maintenance Inspection Regime for footways and the adopted highway. The council's frequency of inspections is split into:

- prestige
- primary
- secondary
- link footways and local access/minor footways.

These are inspected at different frequencies; monthly, three monthly, six monthly or annually based on the assigned hierarchy of appropriate risk, functionality, and usage. This information has been used to identify the key walking routes in Sunderland.

Case Study 2: England Coast Path National Trail (ECP-NT)

The ECP National Trail was launched as part of the first phase 'round England's coast' route in 2014. Arriving in the south along the spectacular Durham Heritage Coast on tall cliffs supported by boulder clay with protected marine habitat below, the long distance walking trail continues north through the heart of a transforming city and industrial coastline, as important as the natural and semi natural landscapes it runs through.

As a National Trail overwatched by Natural England, it is a high quality route with continuity of signing, running through the heart of the city, crossing the Wearmouth Bridge before dropping down to run along the Saint Peters promenade, past the National Glass Centre and to the coast, before turning north along the award winning seafront regeneration areas at Roker and Seaburn.

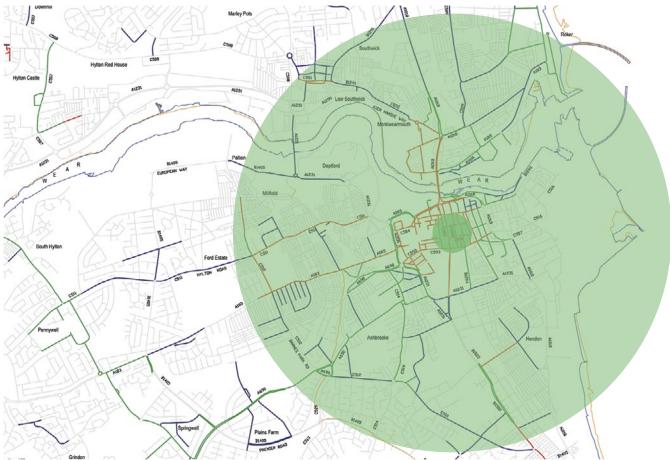


Figure 16: Example Sunderland city centre core walking zone

Auditing the main routes and identifying barriers

To audit the main walking routes and identify barriers, looking at areas for improvements is an important part of the process.

How do our walking routes compare in terms of:

- attractiveness
- comfort
- directness
- safety
- coherence.

Key considerations include the needs of vulnerable pedestrians who may be older, visually impaired, mobility impaired, hearing impaired, with learning difficulties, with mobility buggy users, or with children and/or pushchair.

These are considerations that will be assessed using Department for Transport's Route Selection Tool (RST) and Walking Route Audit Tool (WRAT).

The primary function of the RST is to access the suitability of a route against a set of core design outcomes. The RST enables a route to be assessed in both its existing state and potential future state if improvements were made. Considerations include directness, gradient, safety, connectivity, comfort, critical junction and crossing points.

The primary function of the WRAT is to access the current condition and suitability of a walking route. The WRAT is intended to be used during or following a site visit and provides a means of ensuring that all factors are considered.

Some of the barriers to walking and areas for improvement include maintenance, fear of crime, traffic noise and pollution, street lighting, street furniture, signage, refuse, condition, footway width, width on staggered crossings/pedestrian islands/refuges, footway parking, gradient, obstructions, bus shelters, drainage, footway provision, location of crossings in relation to desire lines, gaps in traffic (where no controlled crossings present or if likely to cross outside of controlled crossing), impact of controlled crossings on journey time, green man time, traffic volume, traffic speed, visibility, dropped kerbs and tactile paving.

Chapter Five: Prioritisation

A key output of this LCWIP document is the prioritisation of walking and cycling infrastructure improvements in the short, medium, and long term. As part of the consultation exercise we collected the views of all parties on the approach we have taken.

Chapter 2 of this document 'Gathering Information' and Chapters 3 'Network Planning for Cycling' and 4 'Network Planning for Walking' contain more detail on our approach to identifying potential schemes. Central to this approach has been:

- understanding the existing network
- identifying key trends in our population including socio-demographic issues and existing travel patterns
- identifying key origin and destination points (now and in the future as our city grows)
- understanding propensity to cycle and walk and areas where improvements might be made to increase levels of both.

It should be noted that identifying links on the walking and cycling network plans does not commit the council to delivering them or commit council funding. Any proposals will be subject to the council's usual scheme development and consultation process which is outside of the LCWIP scope. They must also meet the criteria of the various funding 'pots' through which such infrastructure is invariably financed.

Levelling up Fund

During the course of the consultation and in the immediately following period, the Council submitted its Levelling up Fund (LUF) bid which was informed by the LCWIP process and has further developed the justification and business cases for some of the schemes identified in the consultation draft.

The vision included in the Levelling-Up Fund (LUF) bid is:

A city where travel choices by all sustainable modes can be made easily. Routes for pedestrians and cyclists will be direct, connected and of high quality so that for many journeys, they are the mode of choice. Highways will prioritise people over cars. The City Centre will be connected to new and existing housing sites, people will be connected to jobs, goods and services, and the environment will benefit from green and sustainable growth.

The objectives of the proposals in the LUF are outlined below:

- provide a safe and sustainable travel environment for pedestrians and cyclists to key destinations across Sunderland
- connect the pedestrian and cycle network across the city centre as a key destination for many journeys
- support the development and connectivity of Sunderland's principal regeneration areas
- improve travel times for cyclists and pedestrians across the city
- improve integration with other sustainable transport modes



Case Study 3: Transforming Cities Fund 01 (TCF1)

TCF1 built four important walking/cycling routes across the city. Of particular importance was a route connecting the South Coalfields area, from Four Lane Ends at the junction of Hetton-le-Hole and Easington Lane East on a new wide shared use footway, 2/3 and 1/3 respectively in Sunderland and Durham, to Murton.

This provides the South Coalfield's area with gentle gradient active sustainable travel access to work at Murton and Dalton Park, and via the pre-existing national cycle network route 1 to employment areas at Seaham and Ryhope. A second TCF1 scheme continued the same high quality off-road provision from Ryhope north to Sunderland city and all of its employment education and retail opportunities. This attractive and accessible walking in cycling provision presents excellent travel connections from an areas reinventing itself after the loss of historic extraction industries, to major employment areas nearby.

- reduce the reliance of car trips across Sunderland
- reduce vehicle emissions and improve air quality
- to improve health for the population of Sunderland
- improve cross boundary links to South Tyneside and Durham and the existing local cycling network

As part of our Options Assessment process a number of route alignments and gaps in the network have been identified to better connect the city through active travel. These are illustrated below.

Map 5:



Each Route is made up of several individual schemes, some of which are at an advanced stage of preparation. Others are at a conceptual stage and individual schemes making up the route will be brought forward during the life of the LCWIP.

Each of the routes and schemes summarised in this document has been considered in terms of deliverability, and a short term (less than three years), medium term (three to five years) or long term (over five years) timescale provisionally identified.

Individual proposed schemes have been scored using an appraisal framework to better understand how they meet four criteria: Effectiveness; Policy; Economic and Deliverability. Priority will be given to improvements that are most likely to have the greatest impact on increasing the number of people who choose to walk and cycle and contribute to the identified desired route alignments

Prioritisation Criteria - Effectiveness:

- forecast increase in walking and cycling trips
- population who directly benefit from the intervention
- Road Safety

Policy Criteria

- delivery against policy objectives
- performance against the Local Transport Plan
- importance of the Intervention for Particular User Groups

Economic Criteria

- cost of construction and maintenance
- value for money using CBA
- potential to attract funding

Deliverability Criteria

- scheme feasibility
- dependence on other schemes
- political acceptability

Ranking process

Proposed schemes have been scored from 1–5, with 5 being the highest score across a number of criteria using the appraisal framework. Depending upon future funding opportunities the council will be able to use this appraisal framework to prioritise objectives in the context of our Capital Programme and in particular external funding opportunities.

We have developed a shortlist of deliverable schemes that address the appraisal framework criteria outlined. See Appendix A.

Shortlisted schemes

Short term

A183 Whitburn Road Pallion New Road European Way A183 St Peter's Dame Dorothy Street

Short/medium

Route 1 Ryhope Road Route 2 Newcastle Road City Centre and High Level Bridge

Medium/long

Route 3 west route via Barnes Route 4 SSGA Spire Bridge Route 5 north bound link to Nissan Route 6 west link Hetton-le-Hole to Nissan

Wider implementation principles

Infrastructure will be built for resilience to the impacts of climate change and designs will consider flood risk and will be designed to be resilient to flooding and extreme weather events. All schemes will be designed to the principles contained within Local Transport Note LTN 1/20.

Road safety is a key consideration and the council will focus on high quality infrastructure and will introduce separate and off-road cycleways and pedestrian facilities where possible. Safety audits in the design process will be undertaken and will be key to ensuring the safety of people on cycles and on foot.

At all new development sites the council will consider appropriate requirements for development include full appropriate permeability and connection to surrounding networks for pedestrians and cyclists and these will be promoted through the planning and highways agreement processes.

As part of the council's Digital City ambitions, where possible, the development of cycling and walking interventions will include provision for ducting that will enable fibre networks to use the routes.



Chapter Six: Integration and application

Introduction

Transport is integral to our everyday lives and consequently there are impacts and relationships with most other policy areas. As such, transport policies are not developed in isolation and this LCWIP is no exception to this. It has been developed in the context of national, regional, local and neighbourhood documents and the issues at each strategic level.

Integration

There is a clear link between this LCWIP and other strategic transport planning documents. At national level, cycling and walking have had a much greater priority from central Government since 2017 when LCWIPs were first announced. The global pandemic since early 2020 has especially focused attention on active and sustainable travel due to the changes in working patterns and lifestyles as part of our response to it. This has been matched with increased funding for cycling and walking and the announcement of a longer-term investment programme to encourage their use.

This LCWIP has therefore been prepared and developed in the context of the following national DfT documents:



Sunderland City Council works closely with neighbouring authorities across most policy agendas. On economic development we work with the other three South of Tyne authorities that form the North East Combined Authority (NECA). In transport, the five Tyne and Wear authorities are covered by a Passenger Transport Executive (trading as Nexus) meaning that NECA and the North of Tyne Combined Authority share the Transport Authority function which is administered through the North East Joint Transport Committee (JTC).

The JTC published the Northeast Transport Plan in March 2021, and this sets the context of this LCWIP. This brings to life the region's transport aspirations and the programme set out in it, is intended to make a difference to the lives of people in the region through improved health, environment, and economy. Cycling and walking improvements are considered in the context of investment in metro and rail and improvements to bus services. www.transportnortheast.gov.uk/transportplan/

The local strategic planning context for the LCWIP is set out in the Sunderland Local Plan -Core Strategy and Development Plan which was adopted by the council on 30 January 2020. This sets out our long-term plan for development across the city to 2033. It will ensure that the right type of development is focused on the right places to meet the needs of local people and businesses. The principles of the LCWIP are also incorporated into the supplementary planning guidance and associated statutory documents. These include the following documents:

- Allocations and Designations Plan
- Riverside Sunderland Masterplan
- Riverside Sunderland Supplementary Planning Document
- Planning Obligations Supplementary Planning Document
- South Sunderland Growth Area Supplementary Planning Document
- Development Management Supplementary Planning Document
- Rights of Way Improvement Plan.

www.sunderland.gov.uk/CSDP

It is intended that this LCWIP will be incorporated into development briefs for individual sites within major developments in the city including employment sites in the International Advanced Manufacturing Park (IAMP) and housing sites within Sunderland South Growth Area and Washington Meadows.

Inevitably the LCWIP has been influenced by, and will influence in future, other related policy documents prepared by the City Council and its partners. These include the following:

The Health and Well-being Strategy - produced by the Sunderland Partnership. This establishes a vision to have the 'best possible health and wellbeing for Sunderland' by which we mean a city where everyone can be as healthy as they can be, people live longer, enjoy a good standard of wellbeing and we can see a reduction in health inequalities.

Heritage, Tourism, Education strategies and plans.

Application

Preparation and adoption of the LCWIP is not the end of the story. It is just the beginning. It will support a range of work around active travel in the future.

We are currently using the LCWIP in the preparation of the following:

- preparation of business cases and funding bids for future investment these include the Levelling-Up Fund, Active Travel Fund, Active Travel Capability Fund, Transforming Cities Fund future rounds and other transport investment packages that include a significant active travel element
- preparation of Travel Plans, Transport Assessments and Statements. The City Council is developing robust Travel Plans for major developments that it is promoting with private and other public sector partners. Examples of these include the International Advanced

Manufacturing Park, the new City Hall, the new central business district at Riverside Sunderland and several new schools

 City Hall Mobility Hub which will encourage staff working in the building to use active travel, sustainable modes, or public transport. In this we are working with Gentoo, DWP and NHS (Eye Infirmary)

On the short to medium term, we intend to use the LCWIP in the following:

- preparation of more localised walking and cycling strategies and action plans
- allocation of funding in local delivery plans through the Area Boards and Committees
- preparation of Neighbourhood Plans, particularly in the former Coalfields area
- consideration of significant major planning applications and other proposed land use changes through the development management process. This could include securing private sector contributions for walking and cycling through planning gain agreements
- preparation of heritage trails to encourage people to explore our rich heritage in a more sustainable manner organisation of active travel 'events' to encourage take up of walking and cycling.

In the future we intend to use the LCWIP in further developing the following:

- greater integration with public transport ticketing with bike/scooter hire/last mile modes
- further 'Let's Talk' conversations with local communities to guide local investment
- measures that complement the emerging bus partnership strategy
- partnerships with voluntary and community sector and community organizations.

Further developments will evolve as this living document is used and refined.



Appendix A

LCWIP Scheme Ranking		Effectiveness	ň		Policy			Economic		Deliverability	ability	Prioriti	Prioritisation
Each of these criteria has been scored fram I-5, with 5 being the highest scoring and this has resulted in a ranked score for each proposed intervention in the short, medium and long term.	Forecast increase in walking and cycling trips	Population who directly benefit from the intervention	Improvement in road safety	Delivery against policy objectives	Performance aga inst local transport plan	Importance of the intervention for particular user groups	Cost of construction and maintenance	Value for Money using cost benefit analysis	Potential to attract funding	Scheme Feasibility	Dependance on other schemes	Total Score	Ranking
Short term													
A183 Whitburn Road ATF2	4	4	£	വ	ъ	ъ	4	4	4	4	4	48	-
Pallion New Road European Way ATF3	ო	ო	4	4	4	4	4	4	4	4	n	41	ო
A183 St Peter's Dame Dorothy Street ATF3	4	4	വ	വ	Q	പ	4	4	4	m	4	47	7
Short/Medium term													
Route 1 LUF - Ryhope Road	ო	4	4	4	4	4	4	4	4	n	n	41	2
Route 2 LUF - Newcastle Road	4	4	4	4	4	4	Э	4	4	ю	4	42	1
Medium/Long term													
Route 3 LUF - West Route via Barnes Park	4	4	4	4	4	4	4	4	4	4	4	44	1
Route 4 LUF - Sunderland South Growth Area - Spire Bridge	4	4	4	4	4	4	4	4	4	4	ო	43	2
Route 5 LUF - Northbound link to Nissan/IAMP	4	4	4	4	4	4	4	4	4	ю	ю	42	ß
Route 6 LUF - West link Hetton to Nissan./IAMP	4	4	4	4	4	m	ო	4	4	ო	n	40	4

Local Cycling and Walking Infrastructure Plan

Appendix B

LCWIP Consultation Summary

Number of key points

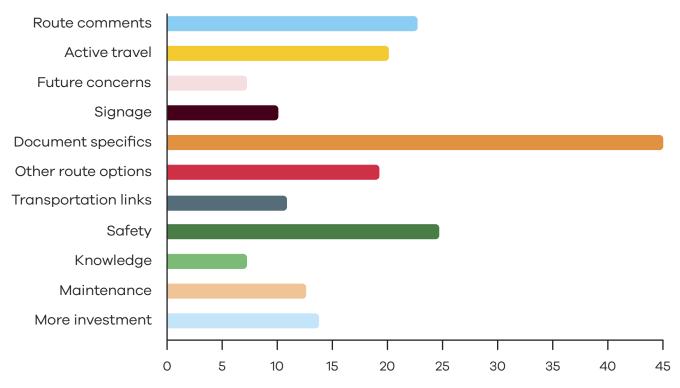


Figure 1. percentage of key points in each category

Most of the key points were document specific (39%). This includes sentence corrections, errors in diagrams and suggested changes to the specific document. 11.5% of key points were on cyclist and pedestrian safety and 10.5% were comments on routes outlined within the document. See table 1 for percentage breakdown for each category (figure 1). Maintenance refers to the upkeep of the infrastructure, making sure paths and cycle ways are clear of rubbish and debris.

Knowledge is based on cyclists and pedestrian's knowledge of the local routes and highway code. Transport links is about linking infrastructure to other forms of transport such as the metro, bus, and trains. Responses also included suggestions on other options of routes within the city and other areas to invest more in.

Some key points raised how important signage of the local routes is to help cyclists and pedestrian get around. There were future concerns for the infrastructure and the need for more active travel within the city. Most comments made regarding this document were actioned, around 75%.

Table 1. percentage of key points in each category

Category	Percentage of key points
More Investment	5.4
Maintenance	5.0
Knowledge	2.0
Safety	11.4
Transport Links	4.0
Other Route Options	8.4
Document Specifics	39.1
Signage	3.5
Future Concerns	2.0
Active Travel	8.9
Route Comments	10.4

Local Cycling and Walking Infrastructure Plan

Local Cycling and Walking Infrastructure Plan

City of Sunderland