

Intervention 1 – Development and delivery of Active Freeways

1 Description of Package

In urban areas worldwide, the implementation of networks of high-quality segregated networks of routes for people walking, cycling and wheeling has been a key component in promoting healthy, sustainable and inclusive travel choices. The Active Freeways programme will bring these benefits to some or all of Scotland's cities and towns.

Active Freeways will connect city and town centres to outlying neighbourhoods, and to other major trip attractors. They will focus on high-demand travel corridors and on improving connections to communities for which transport exclusion is currently prevalent. They will deliver high-quality, direct and segregated routes for people walking, wheeling and cycling. Improved local connections from the main Active Freeway routes will ensure that people are able to access them from their homes, schools, workplaces and other destinations.



Example of an Active Freeway

Active Freeways will support delivery of the networks of routes that are already under consideration in many of our cities and towns. They will integrate with existing and complement active travel networks, building on the work that local and regional partners have been leading, such as the SEStran Strategic Network (2020). They will build on the work started by the Places for Everyone programme to provide direct, high-quality, segregated networks of routes for people travelling actively – whether walking, wheeling or cycling – enabling efficient, swift and safe options for short and medium-length urban journeys.

By so doing, Active Freeways will provide attractive and convenient choices for many urban residents' everyday journeys. As a result, people will benefit from improved access to local goods and services, using healthy and non-polluting modes.

Active Freeways seek to provide transport solutions relevant to all urban residents: including for children's safer journeys to and from school on foot and by scooter, for medium-length commuter journeys which could be undertaken by bike, and to provide better connections to facilities for disabled people in an environment which is accessible and they feel safe. Connections to transport hubs (including rail stations and park & ride sites) will help ensure that people that live out with the urban area can also benefit. Complementary investments (such as helping people access bikes or training) will help ensure that all members of target groups are able to make use of the new infrastructure if they wish.

In many instances, Active Freeways may require reallocation of roadspace away from other modes. Where this is the case, designs will be handled carefully in order to balance the sometimes conflicting aspirations for improved active travel routes with those for bus priority, local access and servicing, and minimisation of traffic pollution and congestion.

2 What we have heard?

Improving active travel infrastructure was clearly stated to be respondents’ highest priority aspirations in the online survey undertaken for STPR2 (which was widely promoted amongst active travel advocacy groups).

“Cycling - Availability of safe cycling infrastructure (e.g. cycleways)” was ranked by respondents as the highest priority intervention nationally, with over 50% more people stating this to be their top priority than the second choice. It was also stated to be the highest priority individual intervention in the Tay Cities, Glasgow City and Edinburgh & South East regions.

Respondents were also asked about their satisfaction with current transport modes. Across all Scotland-wide responses, between 53% and 62% were dissatisfied with the different aspects of walking and wheeling, and between 15% and 26% were satisfied. Dissatisfaction was highest for availability of attractive infrastructure.

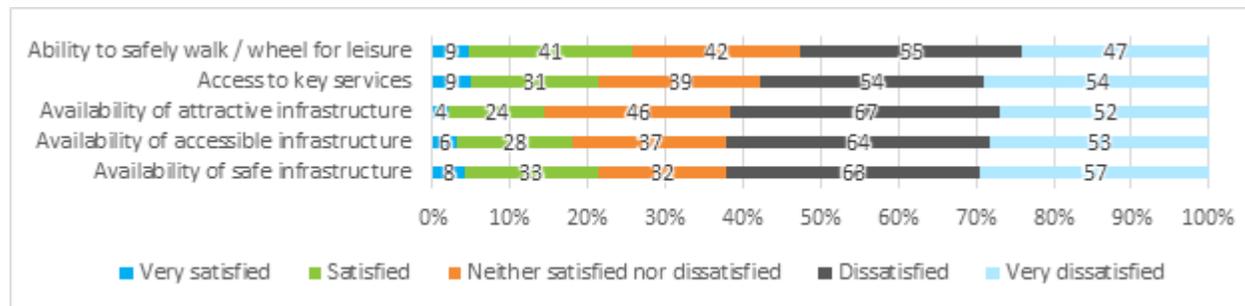


Figure 1: Scotland Wide - Satisfaction Walking and Wheeling

Meanwhile, between 64% and 79% were dissatisfied with the different aspects of cycling, and between 9% and 20% were satisfied. Dissatisfaction was highest for availability of safe infrastructure.

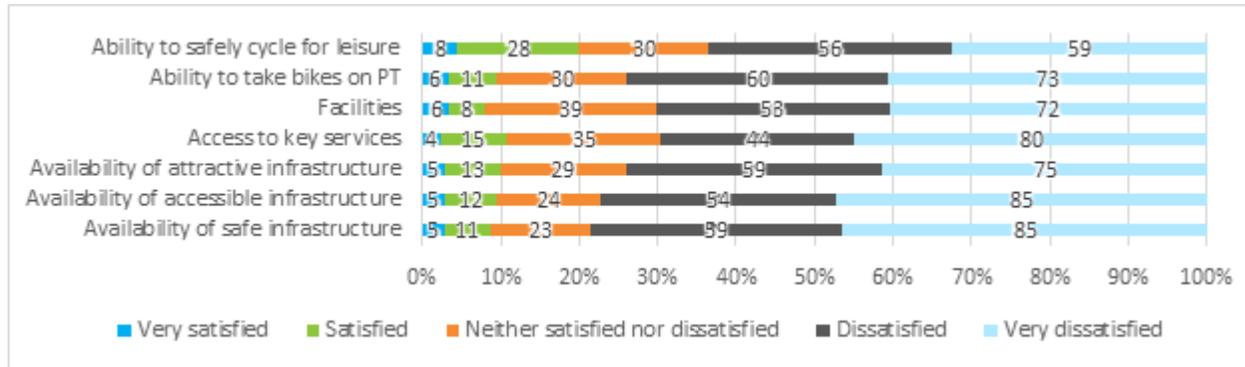


Figure 2: Scotland Wide - Satisfaction Cycling

Aspirations to improve active travel infrastructure, in many forms but including creation of more segregated routes, were aired at each of the regional options development workshops held for STPR2, reinforcing evidence that stakeholders’ views complement those of the online survey.

Stakeholder feedback therefore supports the rationale that investing to improve active travel infrastructure is a relevant priority for STPR2.

3 The evidence base to support a case for change

Only 66% of Scottish adults meet recommended guidelines for physical activity, and there is a clear correlation with deprivation; 74% of adults residing in the least deprived quintile meet activity guidelines, but only 54% living in the most deprived quintile do so¹. Over the last few decades our increasing reliance on cars has contributed to Scotland becoming less active as a nation².

Meanwhile, the benefits of active travel on health outcomes have long been recognised: “*The potential benefits of physical activity to health are huge. If a medication existed which had a similar effect, it would be regarded as a “wonder drug” or “miracle cure”*”³. And “*For most people, the easiest and most acceptable forms of physical activity are those that can be incorporated into everyday life. Examples include walking or cycling instead of travelling by car, bus or train*”⁴.

The health benefits associated with increased levels of active travel are well known. Keeping physically active can reduce the risk of heart and circulatory disease by as much as 35% and risk of early death by as much as 30%⁵. Walking and cycling also have positive effects on mental health and general wellbeing. The mental health and neurological benefits include reduced risk of dementia, improved sleep quality, and a greater sense of wellbeing⁶.

¹ Scottish Government, Scottish Health Survey, 2018, [tables 6.2 & 6.3](#)

² Transport Scotland, NTS2, 2020

³ Sir Liam Donaldson, Chief Medical Officer, 2009

⁴ Department of Health, Start Active, Stay Active: A report on physical activity for health from the four home countries’ Chief Medical Officers, 2011

⁵ Sustrans, [Health benefits of cycling and walking](#), 2019

⁶ Public Health England, [Cycling and walking for individual and population health benefits](#), 2018

Most journeys in our towns and cities are short: for example, over 70% of journeys made in each of the four largest cities in Scotland are less than 5km long⁷. This is particularly notable for travel to work journeys, where residents of the city authorities have substantially shorter average commutes than the overall Scottish population:

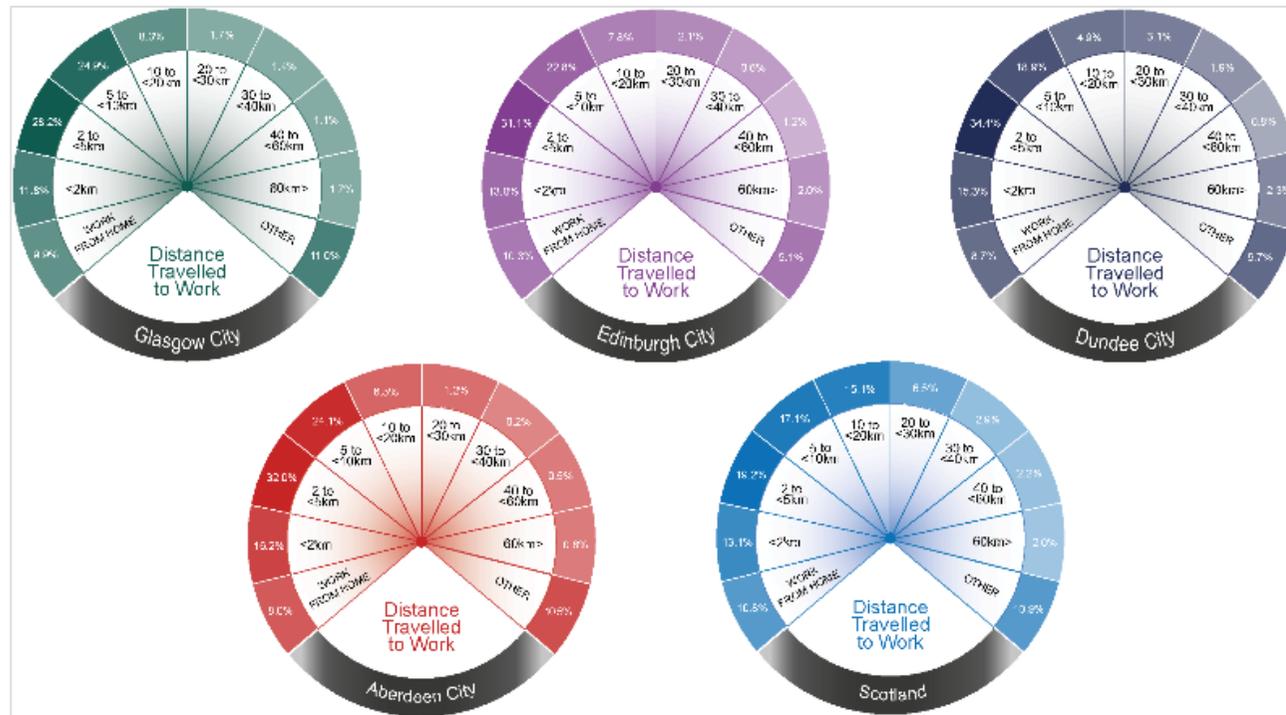


Figure 3: Proportion of journeys to work by distance⁸

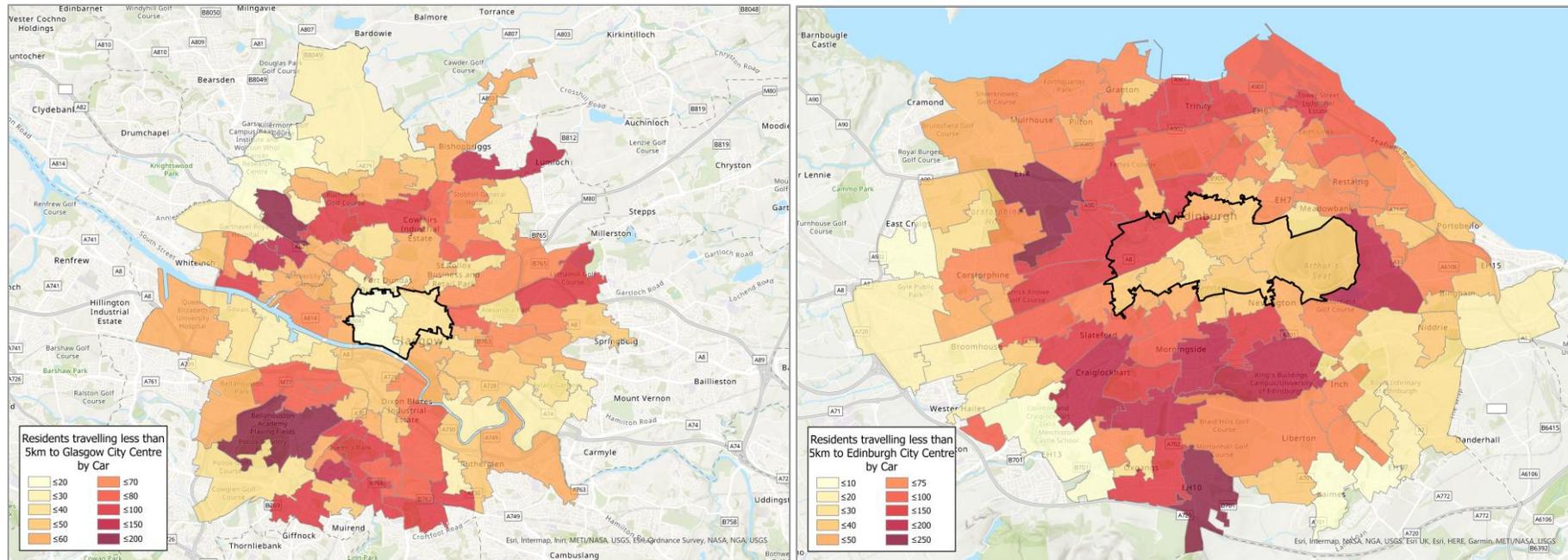
⁷ Cycling Scotland, Annual Cycling Monitoring Report, 2019, <https://www.cycling.scot/mediaLibrary/other/english/6353.pdf>

⁸ Office for National Statistics, 2011 Census

Supporting smart and sustainable travel across Scotland

Intervention 1 – Development and delivery of Active Freeways

That there is a large number of people travelling short journeys in urban areas by car is demonstrated by the examples below, which also highlight that the distribution of short journeys is not uniform. These suggest potential priority locations for intervention in our main cities, albeit more local analysis (including for in smaller cities and towns) and engagement is required before network designs could be completed.



Supporting smart and sustainable travel across Scotland

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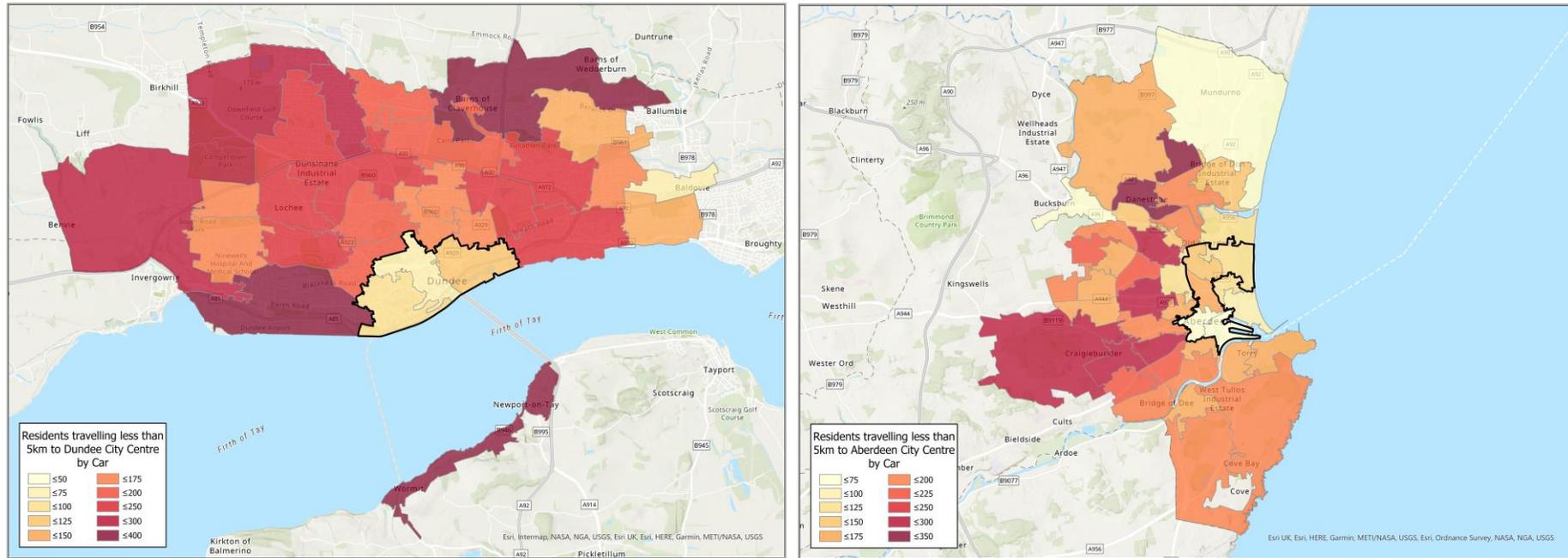


Figure 4: numbers of intermediate zone residents travelling by car <5km to city centres to work, Glasgow, Edinburgh, Dundee & Aberdeen

Although walking is much more prevalent than cycling in Scotland (20% of journeys are on foot, only 1% by bike⁹), cycling is by no means a minority choice: over 7% of commute journeys in both Glasgow and Edinburgh are by bike¹⁰.

Across Scotland, 49% of adults walk somewhere as a means of transport on at least three days per week¹¹, but urban areas show a higher propensity: Scotland's four city authorities have proportions ranging from 51% (Dundee) to 72% (Edinburgh).

Despite many successful initiatives to increase active travel rates in Scotland, trends are not all in the right direction. The number of km cycled on Scotland's roads in 2017 was nearly 7% less than in 2012¹², while the proportion of children walking to school in

⁹ Transport Scotland, Scottish Transport Statistics, 2019

¹⁰ Sustrans, Bike Life reports, <https://www.sustrans.org.uk/bike-life>

¹¹ Transport Scotland, Transport & Travel in Scotland, LA Tables, table 9, 2018

¹² Transport Scotland, NTS2, 2020

Scotland has declined in the last decade (from 46% in 2010 to 41% in 2019). But there are positive signs too, with the proportion of children cycling or scooting to school increasing from 3.5% to over 6.5% in the same period¹³. But our urban areas show good potential for active travel choices, because of relatively short journeys to school for many children; in each of Scotland’s four largest cities, 53% or more of all children travel actively to school.

The national average for Scotland for households with access to a bike is 34%. The areas with the highest levels of access to bikes are more rural areas, with Highland (54%), Orkney Islands (47%), Aberdeenshire (47%), Moray (46%) and Perth & Kinross (46%) being the top five. This shows high potential for those in rural areas to access their local town centres by bike; improved routes within the towns can help them to do so.

Although transport poverty tends to be lower in towns and cities than in rural areas, parts of many of Scotland’s urban areas suffer from high levels of transport poverty¹⁴. These tend to be prevalent in those outer suburban areas where car ownership is low and public transport accessibility poor, as indicated in these examples from Dumfries and Dundee:

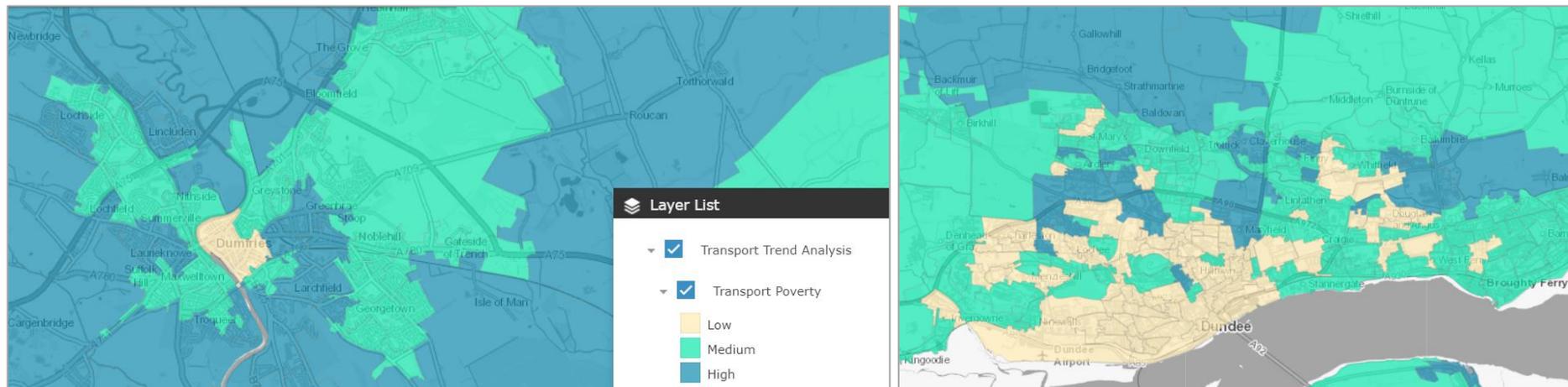


Figure 5: Suburban transport poverty examples: Dumfries and Dundee

A similar picture is shown by analysis of SIMD data. In many urban areas, some of the most deprived communities are those that

¹³ Sustrans, Hands Up Survey Scotland, 2019, <https://www.sustrans.org.uk/our-blog/projects/2019/scotland/hands-up-scotland-survey>

¹⁴ Sustrans, Transport Poverty in Scotland, 2016, https://www.sustrans.org.uk/media/2880/transport_poverty_in_scotland_2016.pdf

are somewhat distant from the centre, but at distances that could be well served by cycling by many people, as demonstrated by this example from Edinburgh:

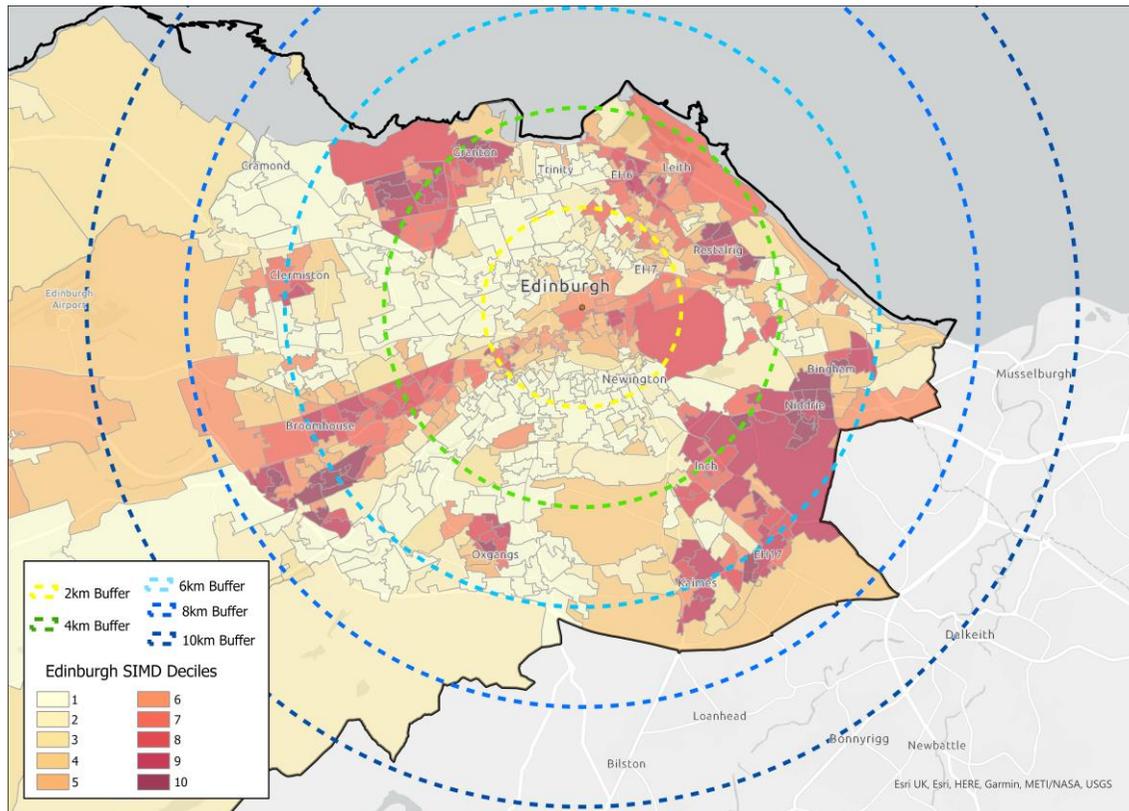


Figure 6: Peripherality of city deprivation example: Edinburgh

There is evidence to support the economic benefits associated with increasing active travel provision in town centres. Compact town centres optimised for walking and cycling can have a “retail density” (spend per square metre) 2.5 times higher than a typical urban centre¹⁵. It has also been found that people travelling actively visit local shops more regularly, spending more than users of

¹⁵ Raje & Daffrey, The Value of Cycling - Local Economic Benefits, 2016

most other modes of transport¹⁶.

Active Freeways can make a difference, promoting health, sustainability, inclusion and economic wellbeing. The benefits realised will depend on location and scheme design, but comparisons with similar schemes elsewhere are relevant.

The UK's largest comparator network is London's Cycle Superhighways (albeit that Active Freeways will cater more explicitly for all active modes, not only cycling). At some busy locations where routes have been implemented, cyclists now make up 70% of all traffic¹⁷, helped by the fact that cycle tracks can move up to five times as many people in a carriageway lane as one dominated by private vehicles¹⁸. All the London routes have been successful in increasing numbers of cyclists on a corridor, some by over 70%¹⁹. Similar schemes in Leeds and Manchester have delivered increases in the 30-80% range.

Around a quarter of Active Freeway users may typically switch from car, the remainder being new to the route, or switching from other active modes or public transport. Care will need to be taken to ensure that no unintended reductions in public transport patronage result. But those that do switch make a substantial contribution to carbon emissions (reducing emissions by an average of 92%²⁰) and air quality.

One of the main successes of the routes has been to improve perceptions of safety for users; over 80% of users of London's Superhighways agreed that their safety is improved²¹. By so doing, one of the main barriers to active travel – fear of road danger – is reduced.

And, whilst data on cyclists' behaviour is more readily available than for users of other modes, other active travellers benefit from Active Freeways: people walking and wheeling benefit from additional and higher quality footway space, fewer delays at side road

¹⁶ Raje & Daffrey, [The Value of Cycling - Local Economic Benefits](#), 2016

¹⁷ Transport for London, Update on the implementation of the Quietways and Cycle Superhighways programmes, 2016, <http://content.tfl.gov.uk/pic-161130-07-cycle-quietways.pdf>

¹⁸ Transport for London, Segregated Cycling Infrastructure, <http://content.tfl.gov.uk/segregated-cycling-infrastructure-evidence-pack.pdf>

¹⁹ Transport for London, Update on the implementation of the Quietways and Cycle Superhighways programmes, 2016, <http://content.tfl.gov.uk/pic-161130-07-cycle-quietways.pdf>

²⁰ Office for Cycle Superhighways, Cycle Superhighways, 2018, https://ec.europa.eu/transport/sites/transport/files/cycling-guidance/cycle_superhighways_2018.pdf

²¹ Transport for London, Barclays Cycle Superhighways Evaluation of Pilot Routes 3 and 7, 2011, <https://www.whatdotheyknow.com/request/162841/response/402026/attach/3/BCS%20pilot%20evaluation%20report.pdf>

crossings and improved safety²².

4 The Strategic Rationale

Transport Scotland has set a strong policy framework for the promotion of active travel, including in its Active Travel Vision, Active Travel Outcomes Framework and NTS2. Through Places for Everyone funding, it is supporting the development of high-quality segregated cycling and walking routes at locations in Scotland’s towns and cities where local needs and opportunities are identified. The 2020 Programme for Government supported this outcome further, with a commitment of over £500M of funding for active travel infrastructure and supporting measures over the next five years.

Cabinet Secretary for Transport, Michael Matheson: *“the task was now to ‘lock-in’ positive changes in travel behaviour. This is why we have committed to invest over £500m in active travel over the next five years. By improving our match-funding offer for permanent infrastructure at the same time, it will help our local authorities make some of the temporary changes permanent where appropriate”*²³.

The Active Freeways package will complement and go beyond those prior commitments. It will work with local and regional authorities to develop and implement coherent, town- and city-wide networks of high quality, efficient and safe active travel routes, connecting communities with key trip attractors. It will improve facilities for people walking, wheeling and cycling .

As well as national transport policies, the package supports aspirations of many local, regional and national agencies, including:

- The Scottish Government’s Town Centre Action Plan, which states that “Town centres are a key element of the economic and social fabric of Scotland and can be a central component of successful local economies and offer a base for small businesses and jobs. Town centres are often at the core of community life, offering spaces to meet and interact with access to facilities and services that people require”²⁴
- Glasgow has identified the need for “the completion of a network of safe, high quality, segregated cycling arterial routes

²² Transport for London, Update on the implementation of the Quietways and Cycle Superhighways programmes, 2016, <http://content.tfl.gov.uk/pic-161130-07-cycle-quietways.pdf>

²³ BBC News, COVID-19: Scottish surge in cycling continues, 2020, <https://www.bbc.co.uk/news/uk-scotland-54253224>

²⁴ Scottish Government, Town Centre Action Plan: Scottish Government Response, 2013, <https://www.gov.scot/publications/town-centre-action-plan-scottish-government-response/>

- connecting the city centre to suburbs and peripheral neighbourhoods”²⁵
- Edinburgh seeks to develop a “strategic network of cycle and walking routes [that] will open up safer, healthier and more active travel for people and families”²⁶
 - Aberdeen will “Prioritise the implementation of walking and cycling routes that link people’s homes with everyday destinations, such as the city centre, neighbourhood centres, retail and employment areas, education facilities, health facilities, transport interchanges and visitor attractions”²⁷
 - Dundee aspires to “Create a strategic cycle network, improve the attractiveness of other streets to cycle and install associated cycle friendly infrastructure”²⁸
 - Highland Council Local Transport Strategy and Active Travel Masterplans – In partnership with HITRANS, The Highland Council are developing a series of active travel audits and masterplans for a number of settlements in the Highlands²⁹
 - Tactran – The Regional Transport Strategy and Delivery Plan aims to “*Improve Walking and Cycling Links within the Region. Develop walking and cycling links to and within town and city centres and to employment, health facilities, services, leisure and tourism activities*”³⁰
 - Angus Council – An Active Travel Strategy for Angus states that “Walking and cycling are the most inclusive transport modes, that “Burgh centres are more vibrant if more people walk and cycle” and that “walkers and cyclists contribute to the leisure and rural economy of Angus”³¹

The aspirations are also supported by the views of many of Scotland’s people. Over a quarter of Scottish adults are ‘looking to

²⁵ Glasgow Connectivity Commission, Connecting Glasgow: Creating an Inclusive, Thriving, Liveable City, 2019,

<https://www.glasgow.gov.uk/CHttpHandler.ashx?id=45064&p=0>

²⁶ City of Edinburgh Council, Edinburgh City Mobility Plan, 2020

²⁷ Aberdeen City Council, Aberdeen Active Travel Action Plan, 2017

<https://committees.aberdeencity.gov.uk/documents/s65438/Aberdeen%20Active%20Travel%20Action%20Plan%20Appendix%201.pdf>

²⁸ Dundee City Council, Dundee Cycling Strategy, 2019,

https://www.dundee.gov.uk/sites/default/files/publications/dundee_cycle_strategy_2019.pdf

²⁹ Highland Council, Local Transport Planning,

https://www.highland.gov.uk/info/1523/transport_and_streets/121/local_transport_planning

³⁰ Tactran, Regional Transport Strategy Refresh, 2015, <https://www.tactran.gov.uk/documents/RTSRefresh-FinalReport.pdf>

³¹ Angus Council, An Active Travel Strategy for Angus, 2016, https://www.angus.gov.uk/sites/default/files/2017-07/401_AppA.pdf

change' towards increased rates of active travel³², and 70% or more of residents in the urban areas surveyed would like to see more investment in active travel³³.

Why now?

- There is a strong national and local policy context for active travel, to support healthy, inclusive and low carbon transport;
- Places for Everyone has demonstrated that well-designed active travel infrastructure can be delivered in Scotland, and that there can be strong demand for its use, but further investment is required if the benefits are to be rolled out in a comprehensive manner across Scotland's towns and cities;
- Active travel is increasingly important for social inclusion and as an alternative to car use as we live with COVID-19, and high quality segregated active travel networks provide a sustainable and inclusive option for short and medium-length urban journeys;
- High quality active travel routes can increase overall road network capacity in congested areas, benefitting urban vitality;
- The opportunity for change is large: over 80% of Scottish adults already walk either daily or several times a week; over a third of Scottish households have access to one or more bikes (though only 12% of adults cycle on at least a monthly basis). Despite the strong policy framework and some successful projects, active travel rates are not consistently increasing in Scotland;
- Experience demonstrates that comprehensive networks of high-quality active travel routes can be transformative for towns and cities, being catalysts for a range of social, environmental and economic benefits.

³² Paths for All, National Survey of attitudes and barriers to walking in Scotland, 2019, <https://www.pathsforall.org.uk/mediaLibrary/other/english/paths-for-all-national-survey---attitudes-and-barriers-to-walking-in-scotland.pdf>

³³ Sustrans, Bike Life reports, <https://www.sustrans.org.uk/bike-life>

5 Meeting the STPR2 Transport Planning Objectives

TRANSPORT PLANNING OBJECTIVE	CONTRIBUTION	SCALE OF IMPACT (-3 to +3)
A sustainable strategic transport system that contributes significantly to the Scottish Government’s net zero emissions target.	High quality networks of strategic active travel routes can be particularly effective at encouraging walking and cycling for short and medium-length urban journeys. They will therefore enable an attractive alternative to many urban car journeys	✓✓
An inclusive strategic transport system that improves the affordability and accessibility of public transport.	Although not everyone can walk or cycle, active travel offers the most inclusive transport choices. High quality active travel infrastructure can be particularly effective at enabling walking and cycling for people that are currently often excluded from transport because of reasons including cost, physical accessibility or fear of road danger. As such, Active Freeway networks will improve transport inclusivity, especially amongst many members of commonly-disadvantaged groups	✓✓
A cohesive strategic transport system that enhances communities as places, supporting health and wellbeing.	Implementation of Active Freeway networks of strategic urban active travel corridors will lead to increased levels of physical activity, hence improved population health and wellbeing. If well designed, active travel infrastructure can also significantly improve placemaking	✓✓
An integrated strategic transport system that contributes towards sustainable inclusive growth in Scotland.	Active travel routes can significantly expand the capacity of congested urban road networks, so increasing the potential catchment of town/city centres. Well-designed active travel infrastructure can improve economic performance of local retail centres, with typical increases in footfall of 20-30%. Active travel also offers the most inclusive means of connecting people to employment and services	✓✓
A reliable and resilient strategic transport system that is safe and secure for users.	Fear of road danger is commonly reported as the single biggest barrier to active travel; provision of high-quality segregated infrastructure can significantly reduce this risk: 80% of uses of London’s cycle superhighway network agreed that it improved safety for cyclists ³⁴	✓✓

³⁴ Transport for London, Barclays Cycle Superhighways Evaluation of Pilot Routes 3 and 7, 2011

6 Addressing the Post COVID-19 Priorities

POST-C19 PRIORITIES	CONTRIBUTION
Employment	Active travel enables inclusive, sustainable access for many people to urban centres and other key employment sites. By increasing capacity on congested urban road networks, active travel can also increase total transport capacity to employment hubs and other key destinations
Environment	Active Freeways provide capacity for modal shift from short and medium- distance car journeys within urban areas. Accompanying improvements to streetscapes can enhance placemaking and develop higher quality urban realms
Education	Active Freeways will aid healthy and inclusive access to schools and further/higher education. This will help promote sustainable transport, healthier children, and larger catchments to colleges and universities
Equalities	Active travel provides the most inclusive transport choices, with accessibility benefits to many people that are commonly excluded from the transport system. Active Freeways will work to enhance access for some of Scotland’s most deprived communities, providing low-cost transport choices and accessibly infrastructure for many people that are excluded by the current transport system

7 SEA, EqIA and Other Impact Assessments³⁵

ASSESSMENT	COMMENTARY
SEA (Strategic Environmental Assessment)	Active Freeways will deliver a modal shift from car to active travel, thereby reducing greenhouse gas emissions and (subject to careful design to avoid exacerbating traffic congestion) improving air quality. They will therefore complement the SEA and help to progress the SEA objectives
EqIA (Equality Impact Assessment)	Active Freeways will provide improved transport choices to people who are often excluded, including young and older people, people on low incomes and people with physical or sensory impairments. It should be noted, however, that whilst active travel presents the lowest cost transport modes, people on the lowest incomes are still commonly excluded from cycling because of the cost of accessing a bike and associated equipment; complementary investment may be required to reduce these problems
ICIA (Island Communities Impact Assessment)	This intervention could have the potential to help improve the inclusiveness and prosperity of Scotland’s island communities, through improving access to town centres and key trip attractors, via active modes
CRWIA (Children’s Rights and Wellbeing Impact Assessment)	Children and young people comprise one of the groups that is currently most excluded from a full range of transport choices, due to road safety concerns. Provision of high-quality active travel infrastructure is particularly beneficial to children and young people, as it enables independent and low-cost travel
FSDIA (Fairer Scotland Duty Impact Assessment)	Can provide significant benefit for inclusive accessibility, social cohesion and public health, including for members of target groups, and especially if networks are well designed to serve areas of highest needs

³⁵ All of these impact assessments are currently underway but no formal assessments have yet been undertaken. Please note SEA and EqIA scoping reports have been produced and consulted upon.

8 Implementability and Interdependencies

IMPLEMENTABILITY CRITERIA	COMMENTARY
Feasibility	High quality, segregated active travel networks of Active Freeway routes are feasible in Scotland’s towns and cities, though much detailed development work is required to identify the most appropriate routes and preferred fit with the urban form
Affordability	Overall implementation costs for comprehensive networks in all Scotland’s towns and cities are substantial, though there is significant scope for phasing of work
Public Acceptability	UK and international experience consistently shows good levels of public support for active travel infrastructure post-implementation, but also that debate and challenge should be expected during design and implementation phases

Key Interdependencies

Creating active and sustainable town and village centres through increased space for active travel and improved placemaking, in many instances, will involve competition for scarce road space and for use of public space. Particular attention will need to be paid to parking and public transport requirements. The development and implementation of well-designed schemes requires strong vision, political buy in and leadership. It is also critical to work with local communities from the outset, to ensure that they meet the needs of and are in the best interests of the people who live there.

A desire to improve active travel infrastructure was the clear highest priority of the respondents to the public survey undertaken for STPR2. It accords with the strong policy framework for supporting investment in active travel that has been set both by Transport Scotland (including through the NTS2) and by local and regional transport authorities. The Active Freeways package would complement and go beyond those prior commitments. It would involve collaboration across various partners in some or all of Scotland’s towns and cities to develop and implement coherent, town/city-wide networks of high quality, efficient and safe active travel routes, connecting communities with key trip attractors. It would improve facilities for people walking, wheeling and cycling. This intervention has been supported by funding in the Government’s Capital Spending Review and within the Update of the Climate Change Plan published in December 2020.

