

Dundee City Council

Walking & Cycling: the benefits for Dundee

May 2021



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Active travel in Dundee

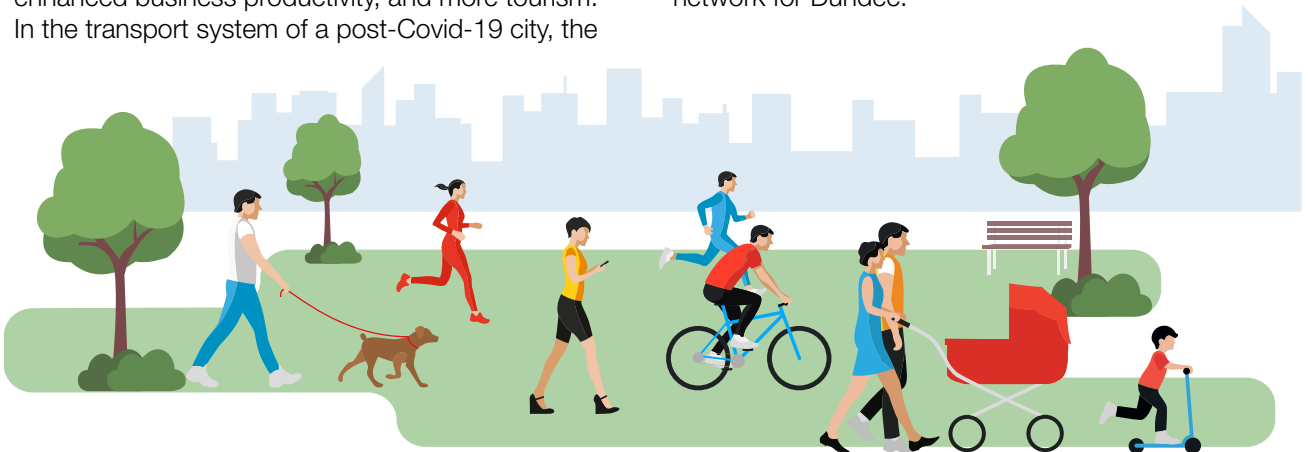
What is active travel?

Active travel in all its forms – walking, cycling and wheeling – brings huge benefits to Dundee and its people. It provides the healthiest, most inclusive, least polluting and most sustainable transport choice.

More people travelling actively will bring economic benefits to Dundee: improved retail performance, enhanced business productivity, and more tourism. In the transport system of a post-Covid-19 city, the

importance of active travel is more vital than ever, to connect businesses to customers and people to services.

This paper summarises evidence of the benefits of active travel, focussing on economic factors, and presents a vision for a strategic active travel network for Dundee.



A note regarding Covid-19 uncertainties

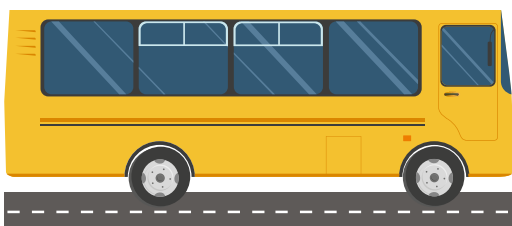
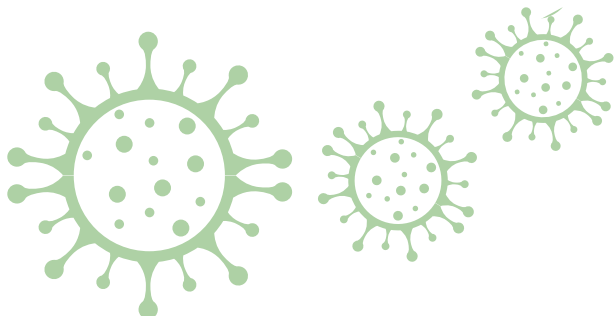
This paper was largely prepared in late 2020, a time at which Covid-19 is causing greater and more sudden changes to travel habits in Scotland than have ever been witnessed previously.

The evidence presented in this document relates to the pre-Covid-19 period; reliable data on post-Covid-19 travel and economic performance is not yet available.

However, early information is suggesting that Covid-19 has led to:

- *Substantial increases in the number of cycle journeys*
- *An initial increase in the number of people walking, though this has subsequently declined*
- *A reluctance of many people to use public transport, with active travel and cars being a replacement for some of these journeys*
- *Reduced travel to city centres, with more people becoming increasingly reliant on their local neighbourhood shops and facilities*

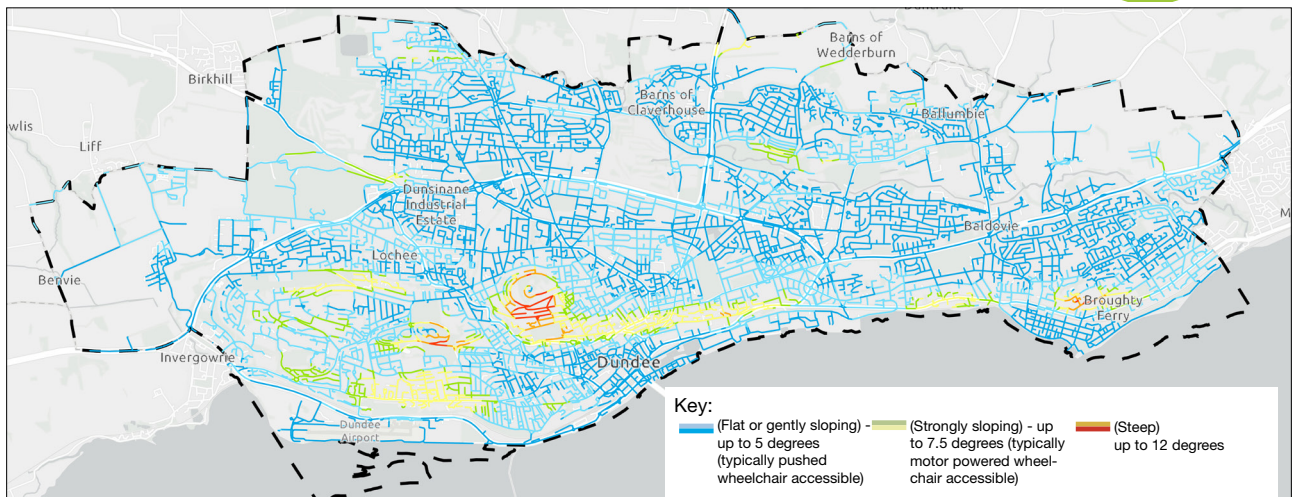
As travel patterns settle to a new normal as we learn to live with Covid-19, these trends suggest active travel will be at least as important – and possibly much more important – to the future of sustainable, inclusive travel in Dundee as it was in the past. We therefore have confidence that work to enable and encourage more people to walk, cycle and wheel more often can deliver benefits at least as great as those set out in this document.



Dundee is a walkable and cyclable city for most people

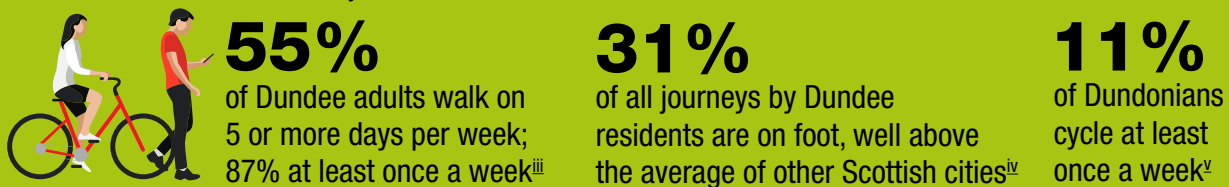
Dundee is a compact city. The density of its housing and services means that many people live within a modest distance of shops and services: the city has a built-in advantage. As examples, over 3,700 people live within 800m (a 10-minute walk for many people) of the shopping areas of both Broughty Ferry and Lochee. Nearly 10,000 people live within 800m of Stobswell (Albert St/Dura St junction).

Over half of trips made in Dundee are less than 2km longⁱ; walkable or cyclable for many people. Among all Scottish local authorities, Dundee is consistently shown to have the highest number of short journeys. Around 48% of households in Dundee don't have a car, and half of adult residents do not driveⁱⁱ. Therefore, enabling active travel is essential if Dundonians are to be able to access the goods and services they need. Hills are a deterrent to walking and cycling, and parts of the city are hilly, but most of Dundee's streets are relatively flat.



Active travel is already a common choice in Dundee

While it is accepted that some people are unable to walk, wheel or cycle a high proportion of Dundonians do travel actively:



Dundee already records the highest levels of walking of any Scottish local authority and is experiencing increasing levels of cycling. Achieving even higher rates of active travel in Dundee therefore largely requires more people to make more use of choices they already sometimes use.

But there are challenges to be overcome

Despite the low car ownership and short average journeys, over one third of all trips in Dundee are undertaken by car^{vi}, contributing to problems of road safety, congestion, and air and noise pollution. Across all of Scotland, **34% of adults and 31% of children do not meet recommended guidelines for physical activity^{vii}**. Given that **37% of Dundonians live in the 20% most health deprived areas** in Scotland^{viii}, there are clear benefits in enabling more people to be more active.

The economic benefits of active travel

More people travelling more actively is proven to improve the economic performance of cities and local centres.

62%
of traders on Dundee' Union Street said the closure of the street to traffic has been good for their business.



Active travel measures boost footfall

People are more likely to visit streets that are less dominated by moving traffic and parked vehicles, and which give people more space to walk or linger.

Case studies show that schemes which prioritise street space for pedestrians and cyclists typically **increase footfall by between 20% and 30%**:

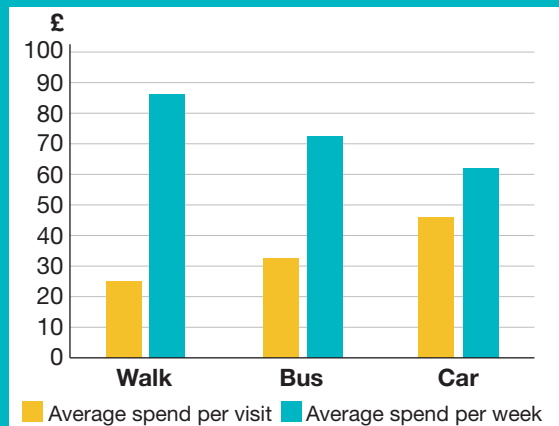
- Investment in improved public realm, better street spaces and pedestrian facilities in Altrincham, Greater Manchester increased footfall by 25%^x
- New pedestrian areas in the centre of Coventry boosted weekend footfall by 25%^x
- Reduced traffic levels and public realm improvements in Kelso town centre increased footfall by 28%^{xi}
- Creation of a more pedestrian-friendly environment in Stoke-on-Trent increased footfall by 30%^{xii}
- 62% of traders on Dundee's Union Street said the closure of the street to traffic in 2020 had been good for their business

Sometimes, much greater increases are possible:

- A study of five neighbourhood centres in London suburbs, where improvements and enlargements to the pedestrian environment had been made, showed that average footfall was 93% greater than on unimproved comparator sites^{xiii}

People travelling actively spend more

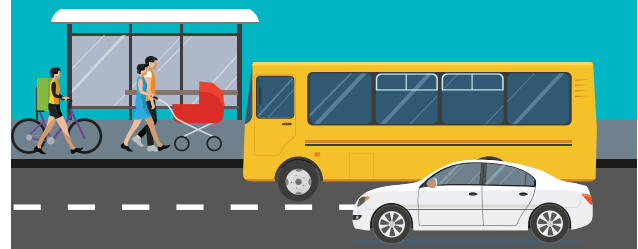
People that travel actively tend to spend more in local businesses than people arriving by motorised transport. People that arrive by car do tend to spend more per visit but pedestrians, cyclists and bus passengers are likely to visit their local centres much more often (up to twice as often as car drivers), so spend more in total^{xiv}:



Retailers tend to underestimate how many of their customers walk or cycle

Repeated studies show that local retailers tend to overestimate the importance of cars in bringing customers to their shops, and underestimate the importance of active modes. A typical example (this in a Bristol shopping street) found^{xv}:

	Shopkeepers' estimate of customers' arrival mode	Actual customer travel
Car	41%	22%
Bus	11%	13%
Cycle	6%	10%
Walk	42%	55%



Active travel investment can help retail performance

Active travel increases business productivity

Employees who cycle regularly take

1.3



fewer sick days per year than those that don't ^{xvi}. Realising this benefit for more staff would generate benefits to businesses of at least £45 per annum for every employee, or more than £3.2m per annum if all Dundonians in employment were to benefit ^{xvii}.

73%



of employees who cycle feel it makes them more productive when they are at work, as a result of feeling healthier and more alert ^{xviii}.

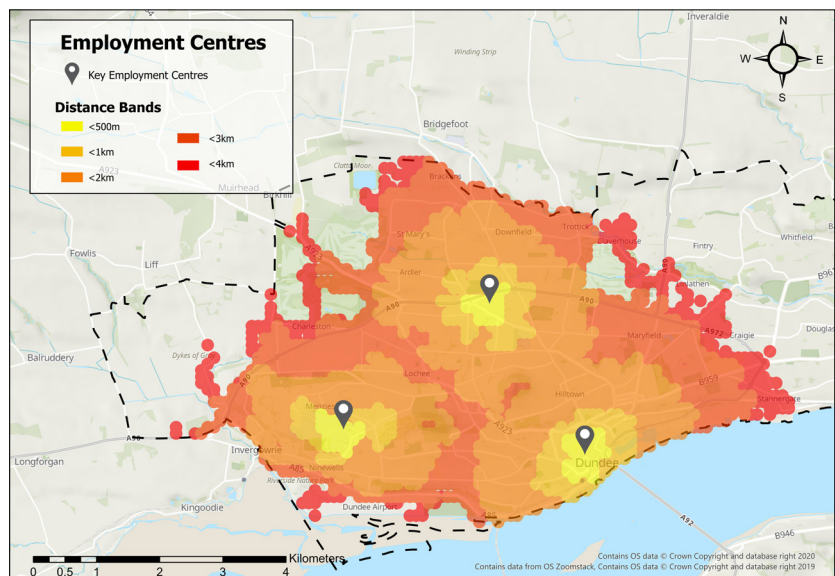


Active travel helps businesses access staff

Good active travel routes help businesses access a wider pool of potential employees.

As examples, 21,000 people live within 4km (a 15-minute cycle for many people) of Ninewells Hospital, 40,000 within 4km of the Kingsway retail park, and 43,000 within 4km of Dundee city centre.

Given the high costs of recruiting staff to businesses (which vary widely depending on the nature of the hire, but may average around £3,000 ^{xix}), any contribution to easing recruitment should be welcomed by many.



Active travel can save businesses money

Cycle freight offers a quick, low-cost option for small, local urban deliveries, especially as electric cargo bikes become more common. **Businesses using cycle freight save up to 64% of their delivery costs ^{xx}**. Many businesses are also benefiting from **reputational and marketing** benefits of using environmentally sustainable delivery options.



Active travel reduces congestion

Active travel can help **reduce traffic congestion**.

Drivers in Dundee on average lose **29** hours per year in congestion ^{xxi}, increasing motoring costs and adding to burdens on businesses.

The English Sustainable Travel Demonstration Towns projects reduced traffic flow by around 7%. Businesses dependent on road transport benefit from reduced delays as a result ^{xxii}. Bus operators and passengers can often benefit.

“We’ve benefitted from the street being more of a destination now, rather than a thoroughfare.”

Darryl Gaffney Du Plooy, Serendipities café, following closure of Union Street to traffic in 2020



Active travel investment can help business efficiency and make cities more accessible

Active travel boosts city capacity

The space required for one car can accommodate five people cycling or 20 people walking. A car carries 1.5 people on a typical journey^{xxiii}. London’s Cycle Superhighways have been found to move 46% of people travelling on congested corridors, despite occupying only 30% of roadspace. Rebalancing the use of roadspace away from cars and towards well-used facilities for active travel and public transport can boost peak time capacity of transport networks, enabling more people to access cities and local centres^{xxiv}.

Active travel boosts tourism and leisure spend

Attractive outdoor spaces for people to walk, cycle and linger are a prerequisite for many people’s decisions on where to travel for leisure. Home-based leisure cyclists typically spend nearly £10 each in local businesses on a day out^{xxv}.

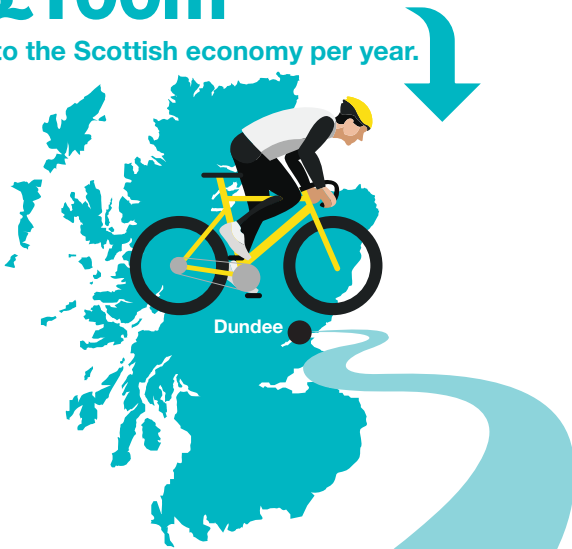
Cycle and walking-related events add further value, attracting visitors and encouraging spend in local businesses. These can be hugely popular: the Pedal for Scotland Glasgow-Edinburgh ride in 2019 attracted over 8,000 people; the Angus Glens Walking Festival has run for 17 years so far, attracting hundreds of people each year to its events.







Overall, cycle leisure and tourism alone (excluding mountain biking) adds over

£100m

to the Scottish economy per year.



Economic Values	£ million per year (all of Scotland)
 Health Benefits	4.0
 Leisure cycle events	5.6
 Leisure cycle-related infrastructure	1.5
 Expenditure by leisure cyclists	106
Total Economic Contribution	117



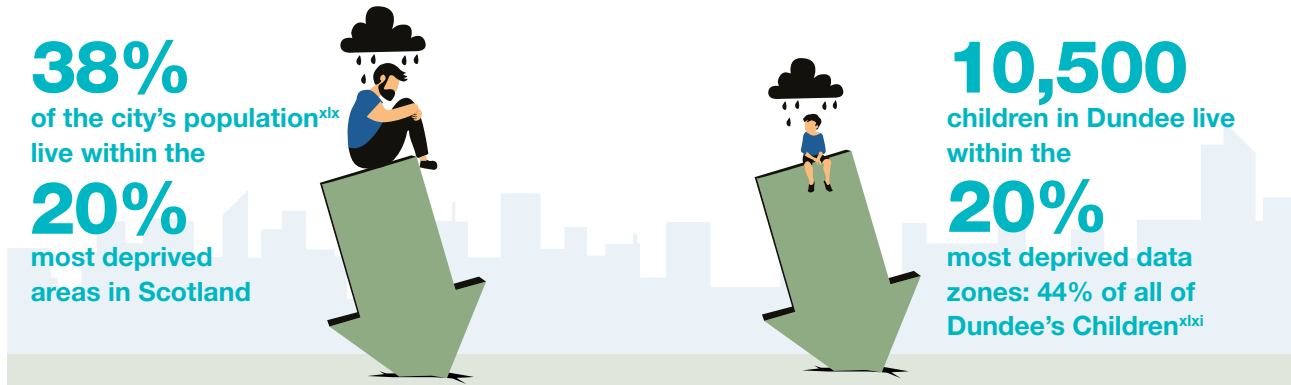
Dundee has the potential to capture a larger proportion of this value than it has to date. Long-distance routes have proven particularly successful in attracting leisure cyclists and walkers. The Caledonia Way (Campbeltown – Inverness) attracts an estimated 2.5 million cycling journeys a year from both residents, day visitors and tourists. The Hebridean Way (which comprises both walking and cycling routes in the Western Isles) has led to a marked increase in active travel visitors to the islands. With its position on NCN Route 1 (the North Sea Cycle Route coastal route), links to NCN77 (to Perth) and 777 (Newburgh) and on-going improvements to the waterfront path, Dundee has the potential to establish itself as a popular stop-off on a long-distance tour and the start point for many leisure days out, especially for cycling. And it is not only the city centre that can benefit from active travel investment; one of the aspirations of on-going work to improve connections along the beachfront at Broughty Ferry is to reinstate its position as a prime leisure destination for the region. Local trails in Dundee and the nearby Sidlaws have additional potential to attract more mountain bikers to the area.

Active travel investment promotes the leisure economy

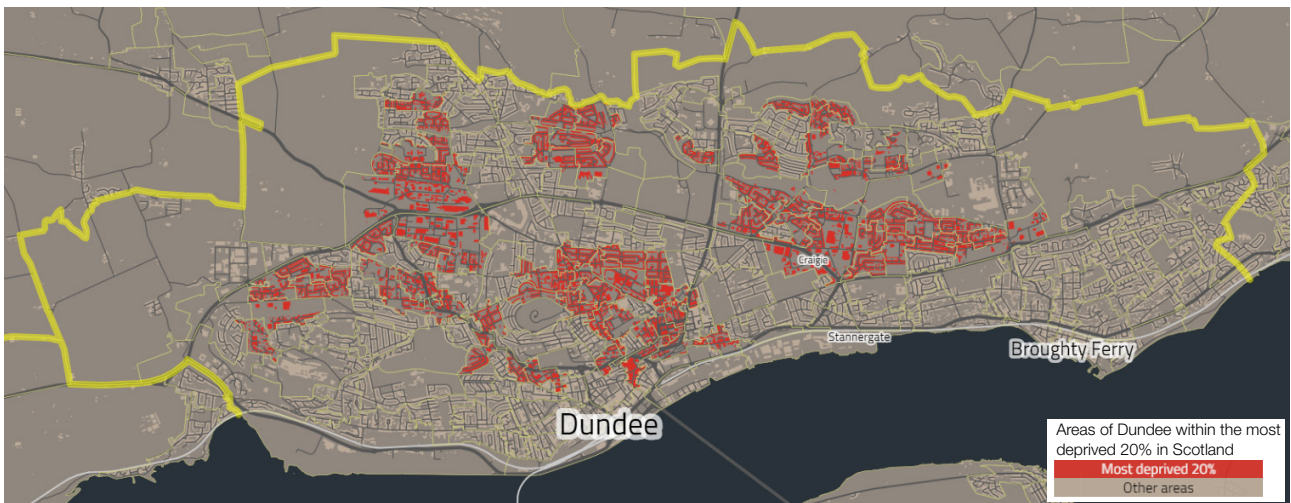
The health benefits of active travel

Dundee's health and deprivation challenge

Many Dundee residents live in deprived communities and have poor levels of health. Deprivation levels are high in many of Dundee's communities:

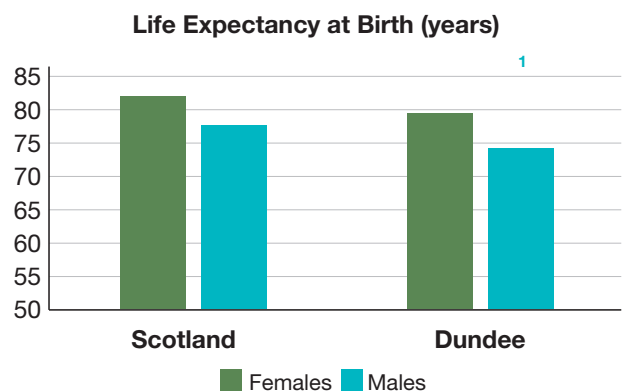


More deprived communities are prevalent in both inner and outer suburban areas. Those areas shown on the map are the amongst the 20% most deprived in Scotland:



Dundee men and women have a life expectancy at birth of almost three years less than the Scottish average:

Early mortality is over 25% greater in Dundee than the Scottish average. And health inequalities may be worsening; between 2011 and 2017 there was a widening of the mortality gap between the most and the least deprived communities due to an increase in death rates in the most deprived areas alongside a reduction in the least deprived areas.



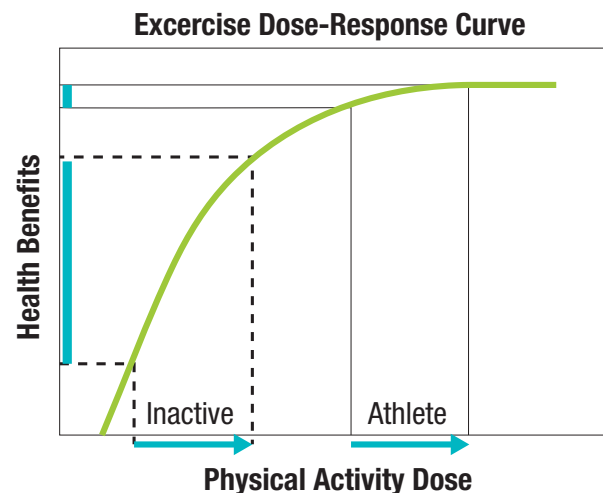
The disease burden of physical inactivity

Heart and circulatory diseases cause nearly 3 in 10 of all deaths in Scotland. Coronary heart disease (CHD) is the single largest contributor to premature death in Dundee (as across the UK). Dundee had the third highest premature death rate for heart and circulatory diseases of all Scottish local authorities between 2016-18^{xxx}.

Being obese or overweight increases the risk of developing a range of serious diseases including Type II diabetes, hypertension and heart disease. This increases the risk of premature death. In Tayside more than 66% of adults are overweight or obese and 17.5% of Primary 1 school children were assessed as at risk of overweight, obesity or severe obesity. Physical activity, including walking and cycling, offers protection against over twenty diseases and conditions including CHD, some cancers and Type II Diabetes as well as being important for weight management. It offers disproportionate benefit to the least active in terms of protection against disease.

Physical inactivity is a major contributor to the disease burden, but many people also do not get enough activity to promote good mental health. Data from a series of long-running studies shows that active travel improves mental wellbeing in a number of areas such as concentration, the ability to make decisions and enjoy normal daily activities, and that it reduced the feeling of being constantly under strain^{xxxi}.

The physical and wellbeing benefits of becoming more active are greatest for those with the least active lifestyles. Even small increases in physical activity levels for relatively inactive people can reduce the disease burden improving the quality and length of their lives.



Cost effectiveness

***Physical inactivity contributes to poor health and mental wellbeing
Increased activity is particularly beneficial for previously inactive people***

Active travel can be an effective – and cost-effective – way to promote physical activity.

UK Chief Medical Officers note that routine physical activity such as walking and cycling, and taking the stairs instead of the lift are easy ways to incorporate physical activity into routines^{xxxii}. Dundee’s Physical Activity Strategy^{xxxiv} highlights the importance of walking and cycling for active lifestyles.

Cost-effectiveness is an important consideration. The evaluations in England of both the Sustainable Travel Towns and the Local Sustainable Transport Fund (LSTF) found Benefit-to Cost ratios of 4.5:1 and 5.2-6.1:1 respectively. A study of active travel investments in communities in outer London estimated they realised health benefits nine times their financial cost^{xxxv}.

Environmental costs on health

All of Dundee has been declared an Air Quality Management Area. Several pollution hotspots pose challenging problems where pollution levels (largely of Nitrogen Dioxide) remain above legal standards, so are considered harmful to health. These hotspots exist in Dundee only in areas where road traffic is the primary pollutant. Encouraging and enabling people to switch from private vehicles, which cause congestion and pollution in these areas, to active and sustainable modes will help to reduce these problems to the benefit of all residents of the city.

***Active travel investment can be a cost-effective way to improve health,
and is especially relevant to tackle problems in Dundee***

The inclusion benefits of active travel

Active travel provides the most inclusive transport choice.

Enabling walking, wheeling and cycling can directly assist many more people to access valuable services and facilities, with particularly benefits for people with protected characteristics including those of:

Disability	<p>Steps, poorly maintained surfaces, narrow or blocked footways and uncontrolled road crossings can be major barriers to journeys for disabled people. Given that 33% of the adult population of Dundee report having a limiting long-term physical or mental health condition/illness (the second highest proportion of all Scottish local authorities)^{xxxvi}, a huge proportion of Dundee’s population can benefit from removal of some of these barriers.</p>
Age	<p>People under the age of 17 are necessarily excluded from driving. Many young people that are old enough to drive cannot afford to do so or choose not to.</p> <p>Unsafe conditions for walking, scooting or cycling, especially at road crossing points, is one of the main reasons why many younger children are prevented from travelling independently. Lack of social interaction and reduced physical activity for children, along with increased car use by adults taking/collecting children, are the results.</p> <p>Many older people are discouraged from being more active by the same barriers that affect disabled people.</p> <p>Improved conditions for active travel help mitigate age-related exclusion for younger and older people.</p>
Gender	<p><i>“Women continue to be constrained by a number of barriers that affect how they travel, and the experience of those journeys”^{xxxvii}.</i> Active travel rates can be very different for women and men, especially for cycling (men are three times more likely to cycle than women).</p> <p>These outcomes arise from a complex variety of factors, including concerns about personal security and the more complex trip-chaining journey patterns that women typically have.</p> <p>Enabling safe, efficient active travel can particularly help women access local services and facilities.</p>

Active travel investment can help social inclusion

Making a difference

What works to promote active travel

Dundee already has some great active travel infrastructure and services: some good on- and off-road paths and some great support networks.

Yet a further step-up in provision is needed if Dundee is to maximise the economic, health and other benefits that active travel can bring. To achieve this Dundee needs:

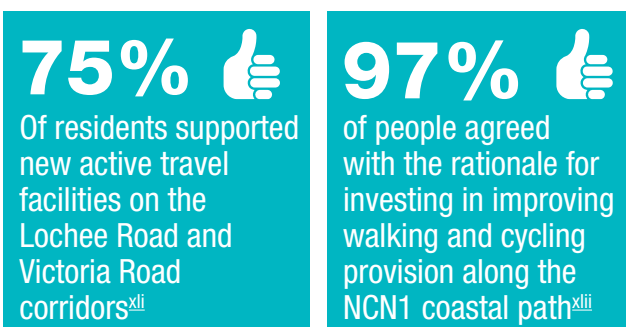
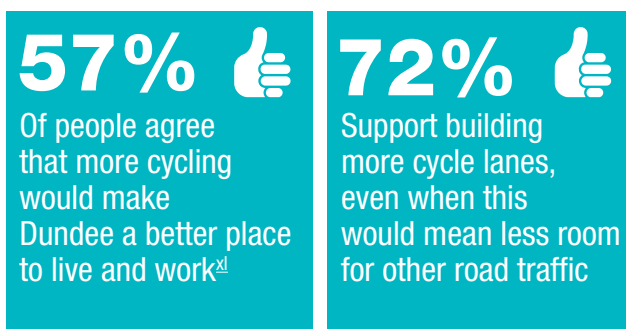
- The right **infrastructure** (good quality networks of routes, free from traffic danger, connecting the right places, associated parking and other elements)
- The right **information**, so that people know what routes and services are available
- The right **enablers** of change (access to bikes, led walks, etc)
- The right **attitudes** (active travel seen to be relevant, acceptable) ^{xxxviii}

Recent research for the Department for Transport^{xxxix} emphasises that changing travel choices is possible, highlighting that “the most successful interventions encouraging a switch to active travel focus on short and simple journeys”.

It states that “cycling can be encouraged as part of a wider infrastructure development by providing safe cycle routes, separated from other vehicles, and support with bike maintenance” whilst “schemes to encourage walking can be effective if they take into account local concerns about personal safety and road safety (especially for children)”.

Dundonians support an increase in more active travel use

Most people support more investment in active travel.



“These plans will encourage more families to get out and appreciate how lucky they are to be residents of this beautiful coastal area”

“Improvements to the coastal path can only benefit our community and visitors alike”

“I think the proposals are a great idea to encourage more people to cycle to work and encourage a healthier lifestyle”

Public comments received during engagement on proposals to improve the NCN1 route in Broughty Ferry, 2020

Dundee's work to promote active travel

Dundee City Council and its partners have a good track record of recent and planned action which is enabling more people to travel actively, including:

Embark Dundee eBike Scheme

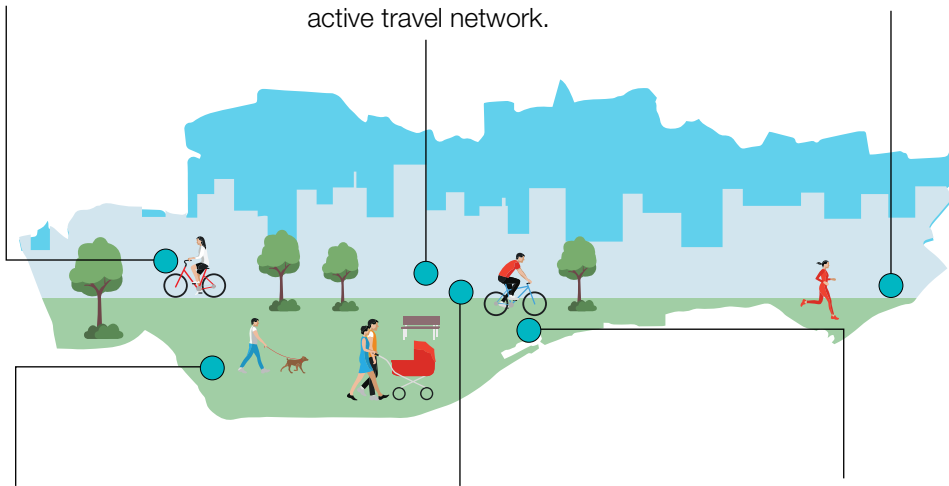
Enabling everyone in the city to access affordable eBikes.

The Cycling Strategy

As part of which Dundee City Council is developing its proposals for a comprehensive, city-wide active travel network.

Broughty Ferry/Monifieth Active Travel

Which will upgrade the active travel route along the coast.



The Green Health Partnership

Seeks to improve access to outdoor spaces to improve health and wellbeing.

Dundee Travel Active

The UK's first comprehensive transport programme specifically aimed to promote active travel and public health.

The Docks Way

Providing a new, direct, off-road link from Dundee to Broughty Ferry and beyond.

Dundee City Council and its partners therefore have the experience and the will to deliver projects which enable many more people to walk, wheel and cycle more. Yet much more work is required to ensure that these benefits are realised across the city.

Delivering this will provide benefits for public health and the environment. And it will also help promote a vibrant, inclusive and sustainable economy in Dundee.

“People are taking notice of what’s around them now because they’re not watching for traffic.”

Lorraine Law, Lorraine Law Jewellers, following closure of Union Street to traffic



Dundee has the experience and commitment to deliver active travel projects. Most local people support these changes

Delivering change

Complementing other programmes.

Work to encourage more people to walk, wheel and cycle would not and should not sit in isolation; instead, it complements a range of other plans and activities being led by Dundee City Council or considered for implementation in Scotland's cities by the Scottish Government to create more sustainable, inclusive transport for everyone.

“It’s been noticeable, definitely, that there have been more people walking up and down the street. It’s been an enormous benefit for us.”

Paul Russel, The Bank Bar, following closure of Union Street to traffic

These include:

- **The Low Emission Zone**, which Dundee City Council has committed to introduce, will prevent some of the most polluting vehicles from entering an area of central Dundee, and other measures proposed in Dundee’s **Air Quality Action Plan**^{xiii} which seeks to reduce harmful emissions from vehicles throughout the city. Research in other cities contemplating Low Emission Zones has shown that they would encourage more active travel: in Edinburgh, 24% of participants in research said that an LEZ would encourage them to walk more and 20% cycle more^{xiv}; London’s Ultra LEZ resulted in 27% of people walking more and 11% cycling more^{xv}
- **20-minute neighbourhoods**, being considered by Transport Scotland as part of its second Strategic Transport Projects Review, which intend to deliver high-quality active travel networks in the vicinity of neighbourhood centres, so enabling more people to access key local services on foot or by bike, and Low Traffic Neighbourhoods, which aim to create safer and more pleasant communities by reducing traffic volumes
- **20mph zones and limits** which, as are being trialled in some areas of Dundee, are intended to create street spaces which feel safer, and so are more attractive as places to move around on foot or by bike
- *The potential for improved bus priority*, in order to create a more cost-effective and attractive public transport system, being promoted by Transport Scotland through its Bus Partnership Fund. Given that almost all public transport journeys also have an active element, and that there can be conflicts in demand for scarce roadspace between aspirations for bus priority and for improved facilities for active modes, the need for joint planning is clear
- Support efforts to **encourage active journeys to school**, helping support healthier and more sustainable journeys for young people including the roll out of School Streets
- Dundee’s **Climate Action Plan**^{xvi}, introduced in response to the declaration of a climate emergency by Dundee City Council, which identifies a large range of measures to reduce carbon emissions, including the promotion of active travel

Effective complementary planning of these proposals or concepts with a city-wide focus on active travel network development will help deliver a sustainable, integrated transport system, better able to meet the needs of all Dundee’s residents and visitors.

***Active travel investment can complement other programmes.
Changes to roadspace rarely lead to traffic problems***

Roadspace reallocation and traffic evaporation

Any city's streets must meet the needs of all users. In addition to people walking, wheeling and cycling, they must accommodate moving vehicles – buses, delivery vehicles and private cars – and provide appropriate spaces for loading, bus stops and parking. And streets are not only for movement; good streetscapes have places for people to meet and interact, to play or relax.

Concerns are commonly raised that reallocation of roadspace from motorised vehicles to active modes will lead to substantial problems. Whilst any such scheme must be designed with consideration for all potential road users, the experience of roadspace reallocation projects in European cities, where traffic capacity has been given back to pedestrians, cyclists and more attractive urban space, is that traffic problems following the implementation of a scheme are usually far less serious than predicted.

“Predictions of traffic problems [resulting from roadspace reallocation] are often unnecessarily alarmist, and that, given appropriate local circumstances, significant reductions in overall traffic levels can occur, with people making a far wider range of behavioural responses than has traditionally been assumed”^{xvii}.

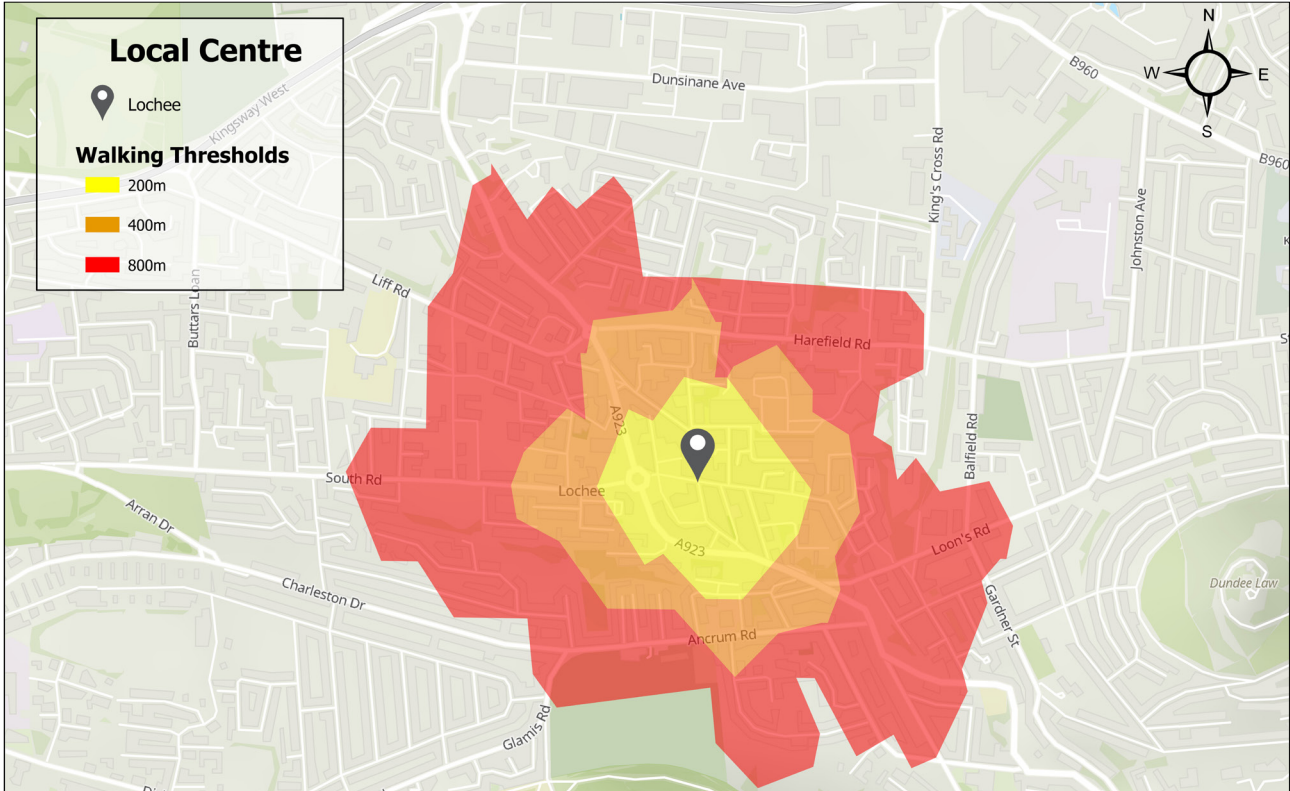
This is supported by evidence of many people's ability to adapt to changes in travel habits rapidly. Demonstrated most fully by the external and unwelcome shocks caused by the Covid-19 pandemic, this adaptability had been recognised in evidence previously: “there is a growing evidence base analysing significant events at local, regional and national level which highlight how travellers can adapt to major change to network conditions, service availability and social norms. Taken together, we contend that the population is far more adaptable to major change than the policy process currently assumes”^{xviii}.



Local Contexts

The following pages outline the active travel potential for Dundee city centre and some of its neighbourhood centres. The walk and cycle catchments areas are shown, along with some current barriers to active travel and opportunities for change.

Lochee



4,700+
people within 800m
walking distance of Lochee

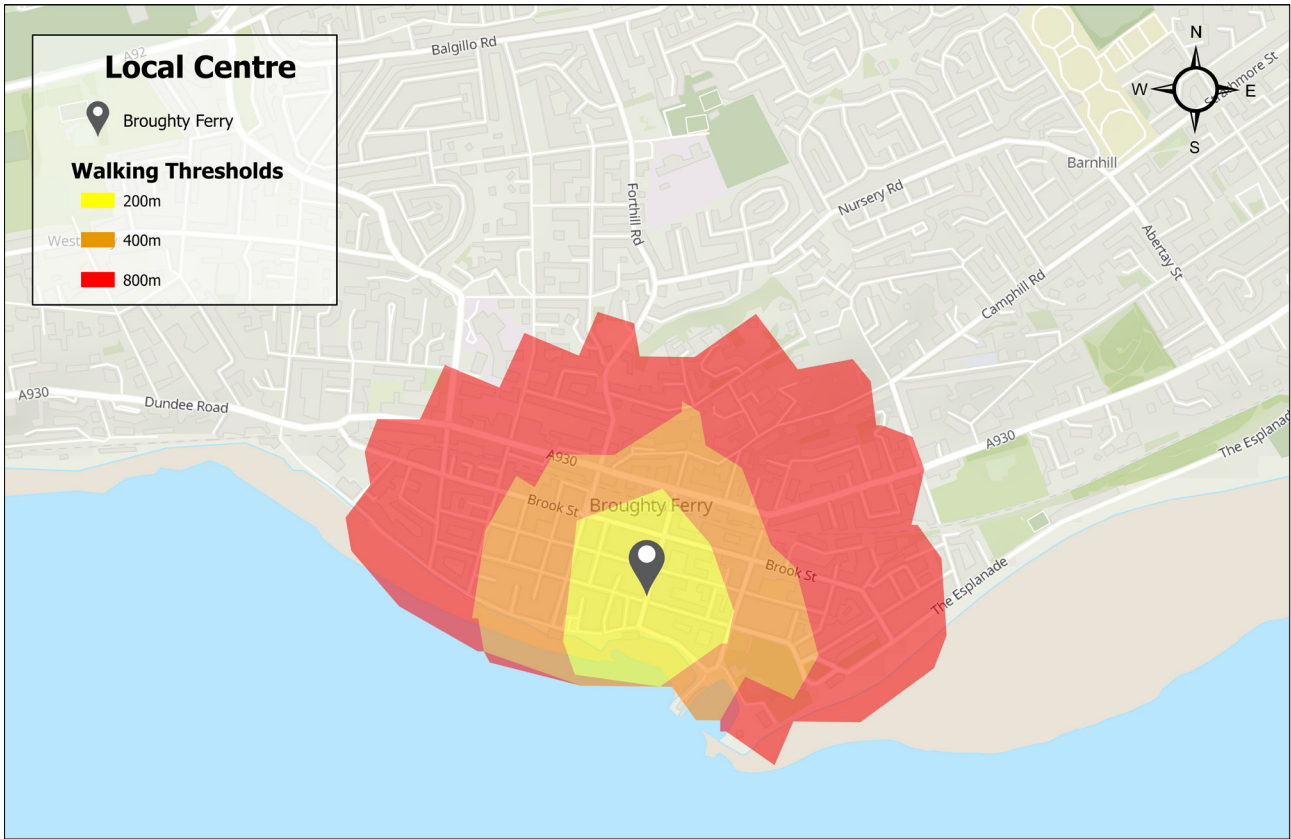
28,300+
people within 2km
cycle of Lochee



Barriers to active travel include:

- On-street parking
- Lack of cycle routes and parking
- Crossing the busy A923 Coupar Angus Road

Broughty Ferry



3,700+

people within 800m walking distance of Broughty Ferry



11,500+

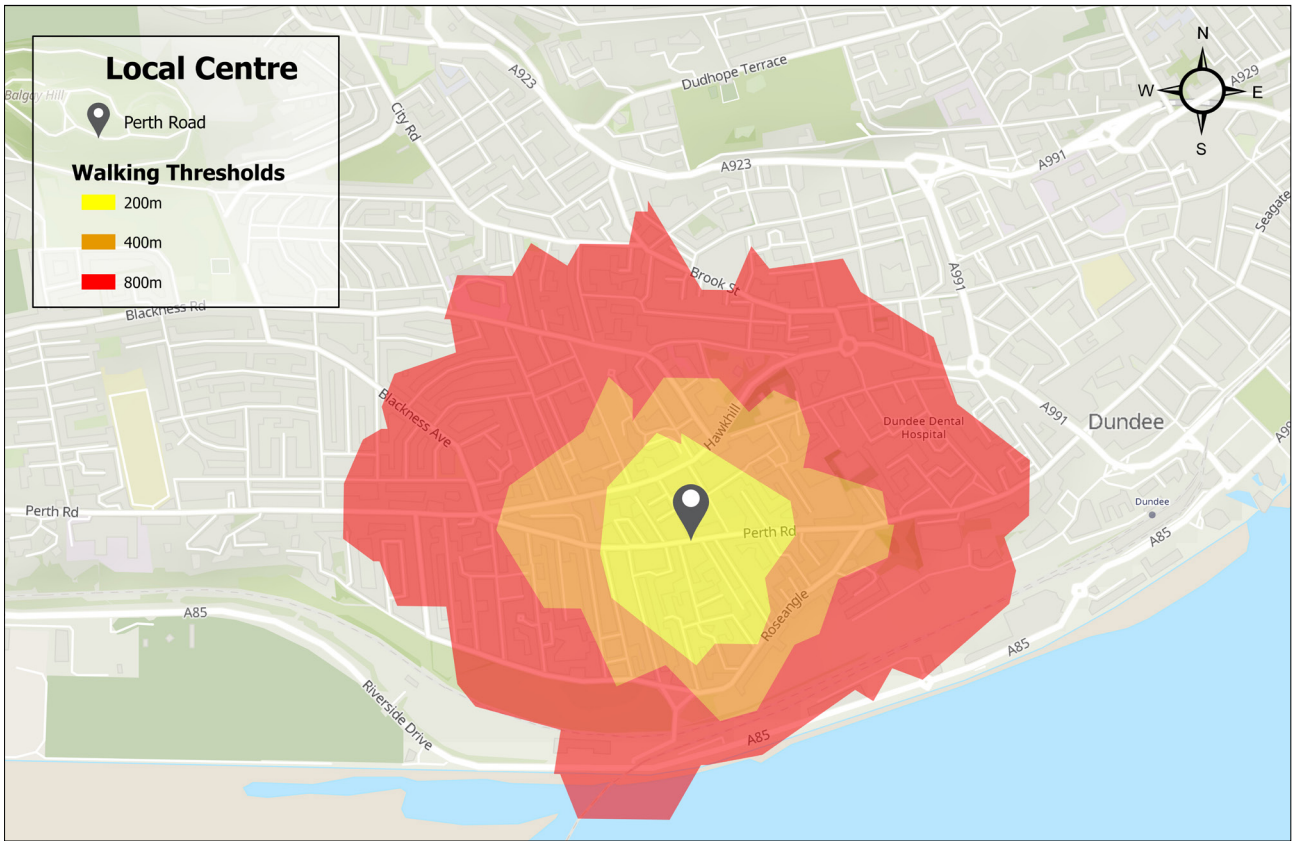
people within 2km cycle of Broughty Ferry



Barriers to active travel include:

- High traffic levels
- Wide streets and lack of controlled crossing points
- On-street parking
- Severance caused by the railway line and Queen Street
- Steep gradients on many streets north of Queen Street
- Lack of cycle infrastructure away from the coastal route

Perth Road



8,000+
people within 800m
walking distance of Perth Road



27,500+
people within 2km
cycle of Perth Road

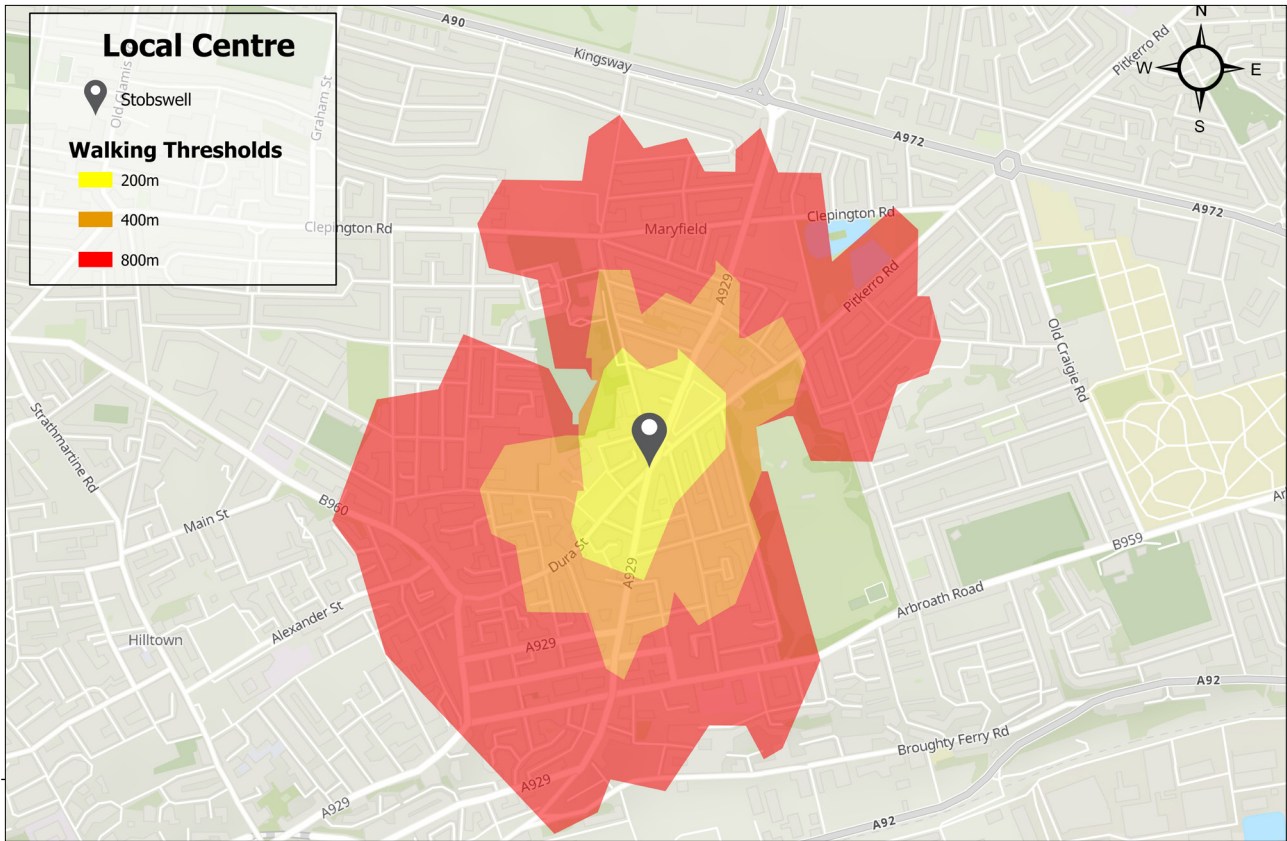


Barriers to active travel include:

- Busy main roads
- Narrow sloping footways
- Lack of cycle infrastructure
- Inconsiderate parking



Stobswell



9,900+
 people within 800m
 walking distance of Stobswell

34,100+
 people within 2km
 cycle of Stobswell

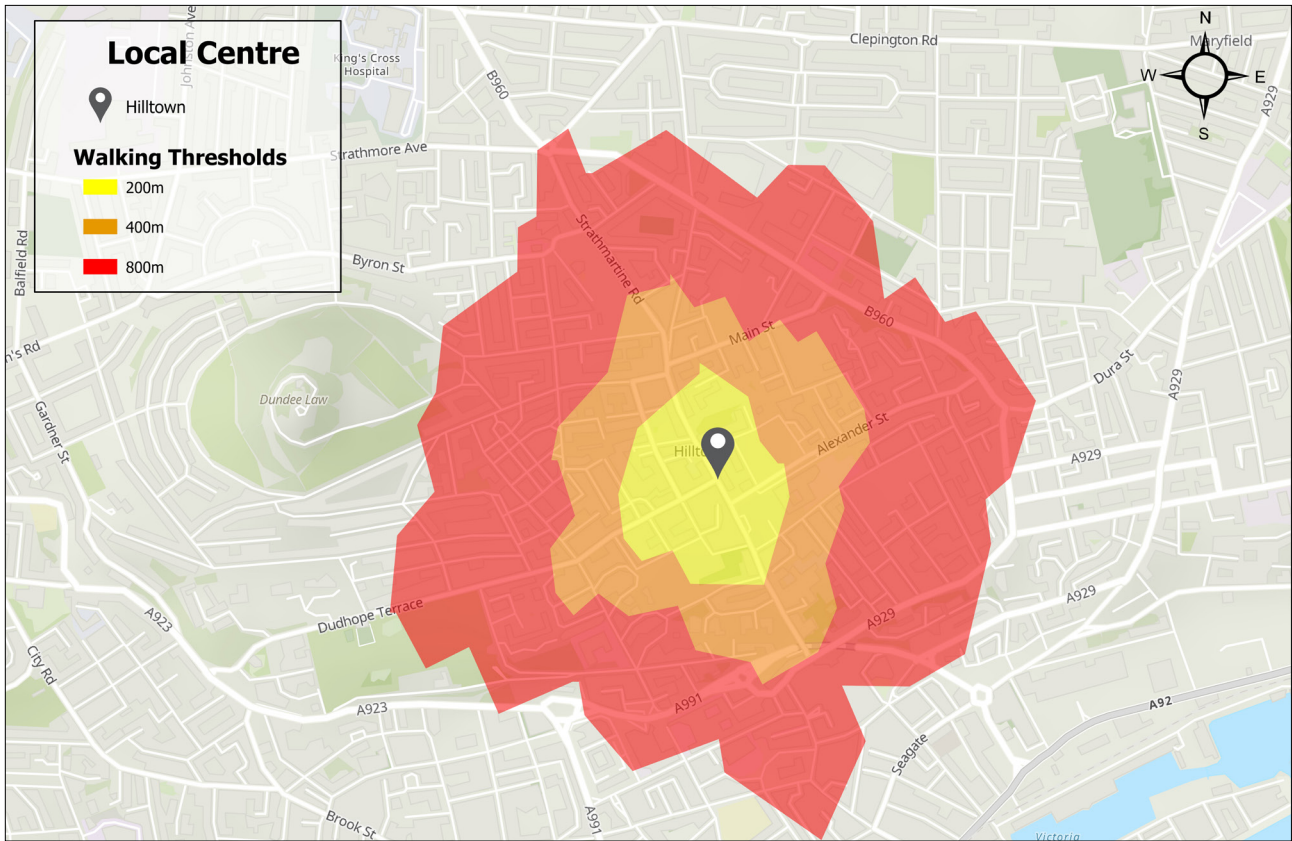


Barriers to active travel include:

- Busy arterial road causing severance
- HGV's passing through without stopping
- On-street parking
- Limited cycle infrastructure
- Narrow footways
- Gradient travelling south to north



Hilltown



9,000+
people within 800m
walking distance of Hilltown



43,000+
people within 2km
cycle of Hilltown

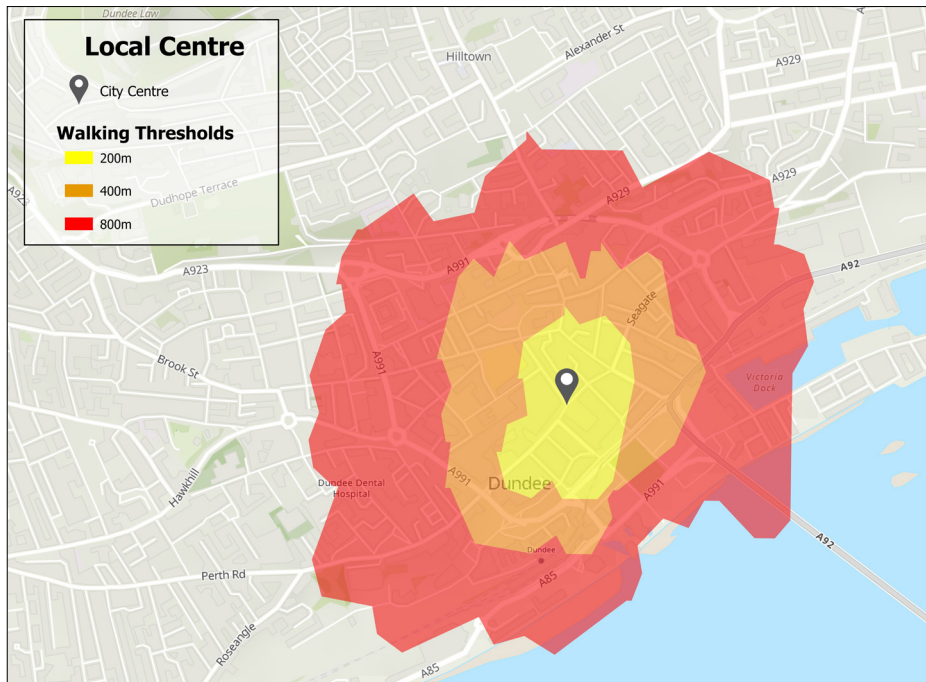


Barriers to active travel include:

- Busy main roads
- On-street parking
- Limited cycle infrastructure
- Narrow footways
- Steep inclines



City Centre



7,000+
people within 800m
walking distance of
the City Centre



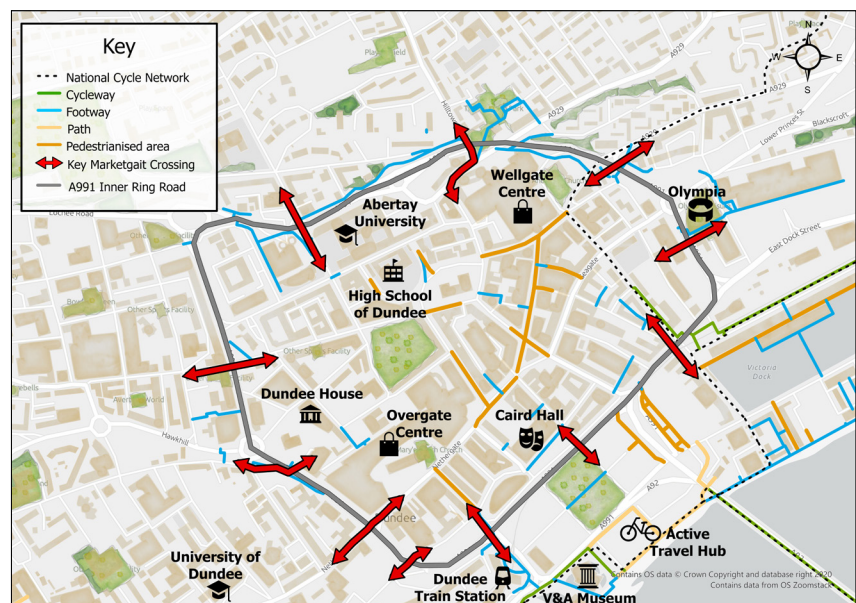
37,000+
people within 2km
cycle of the City Centre



The Marketgait inner ring road performs a valuable function in keeping a large proportion of traffic away from the central core of the city. As a result of that and pedestrianisation, much of the centre is relatively attractive for walking and wheeling. Investment in recent years have also enhanced facilities for cyclists.

But the Marketgait presents a significant barrier for active journeys between the centre and locations outside. These locations include almost all of the city's residential areas, but also important key destinations, including the rail station, V&A and Discovery museums, the University of Dundee, and the Olympia.

Most of the crossing points for pedestrians and cyclists rely on at-grade signalised crossings, many of which cause significant delays as vehicular traffic competes for priority with active modes or necessitate significant diversions

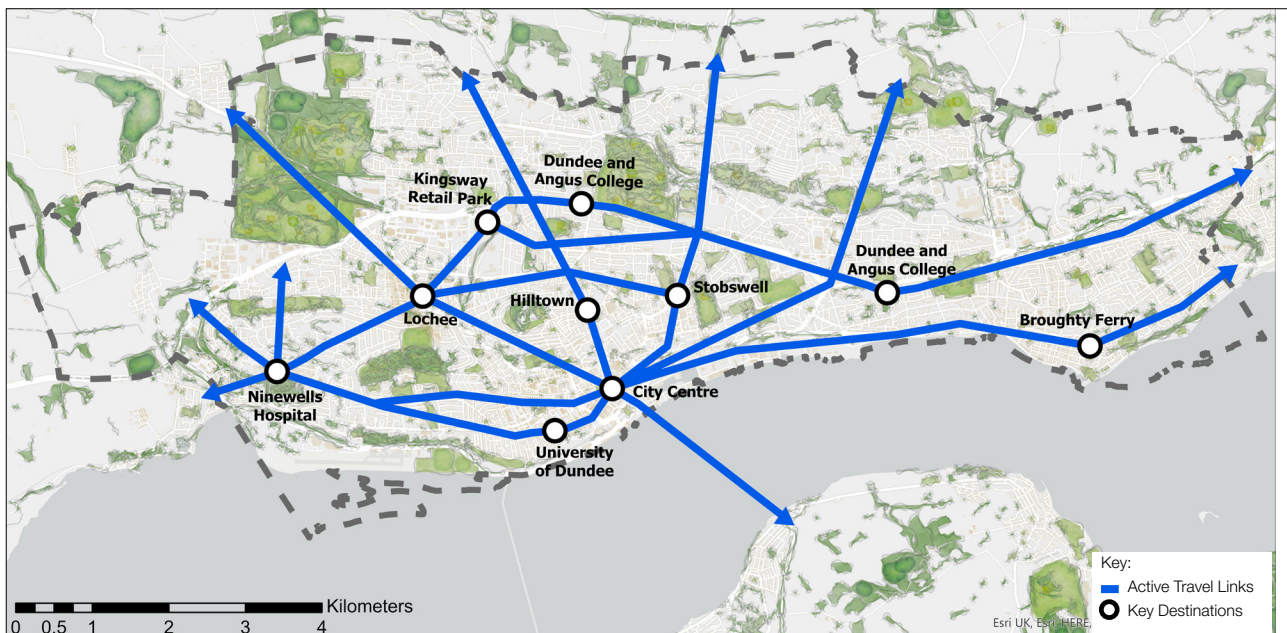


away from natural desire lines. Some crossing points make use of underpasses, which remove problems of delay but introduce personal security concerns for many people.

Removing the problems of crossing the Marketgait and giving greater priority to pedestrians and cyclists has the potential to better connect the city centre for the large number of people that live or work just outside it. This would help make the city centre a more attractive place to visit for retail, leisure and other purposes, and could be a valuable aid to maintaining vitality of the centre.

A strategic active travel network for Dundee

To maximise the benefits of active travel in Dundee, neighbourhood centres and other key trip attractors should be linked by high quality, direct, convenient and safe routes on which people walking, wheeling and cycling are segregated from general traffic. The concept accords with that for Active Freeways, proposed by the Scottish Government in the 2020 Programme for Government and in the 2020 update to the Climate Change Plan⁴¹. A suggested strategic active travel network for Dundee is shown in the map below:



Other minor improvements should complement this strategic network. In local centres and on key active travel routes throughout Dundee, the city should aspire to provide:

- Wide, well-surfaced, drained, lit footways and footpaths
- Well-surfaced, drained and lit cyclepaths, segregated from traffic where possible and from pedestrians where appropriate
- Good facilities for cyclists at destinations, including cycle parking appropriate for all types of cycles
- Low traffic volumes and speeds, with effective, safe crossing points where active travel routes cross roads
- The support mechanisms to enable and encourage more Dundonians to walk, wheel and cycle more often



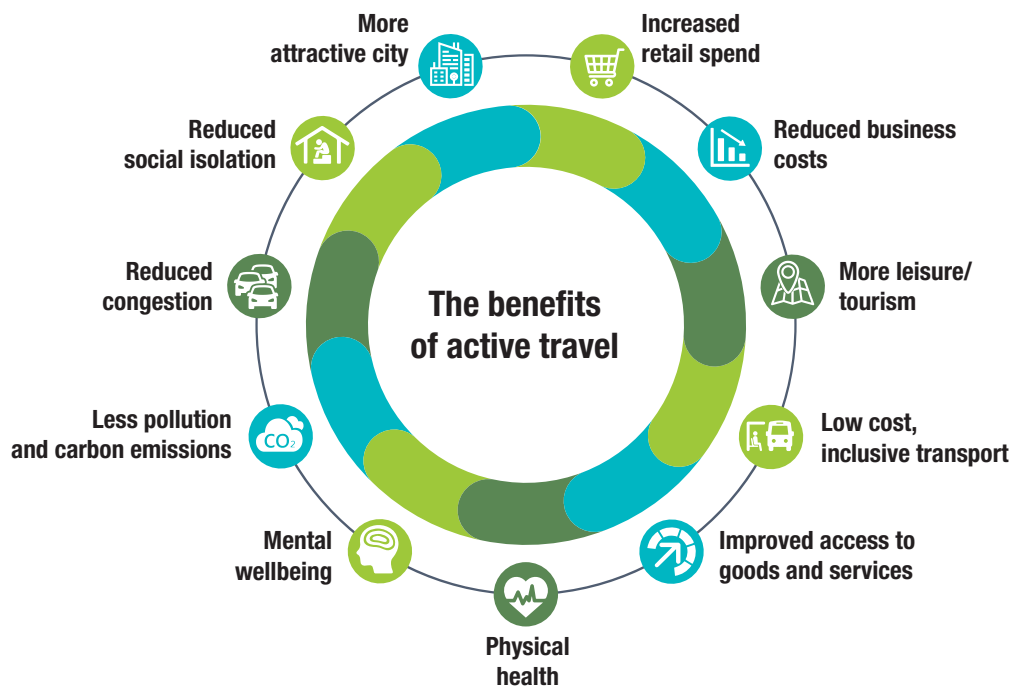
Dundee deserves a strategic active travel network, complemented by local improvements and enablers of change

Summary: The benefits of active travel in Dundee

Dundee is the ideal city for walking, wheeling and cycling, with:

- Compact urban form
- A demography that will especially benefit from healthy and low-cost transport
- Strong public support for active travel

Active travel provides huge benefits to the economy, health, the environment and inclusion. Enabling and encouraging more people to walk, wheel and cycle more often in Dundee will aid them, and the city as a whole.



Active travel can provide benefits for all parts of Dundee:

Outer industrial / retail	Typical Neighbourhood centre	Dundee City Centre	Residential Dundee
Up to 40,000 people within a 15 minute cycle	Up to 8,000 people within a 10-minute walk	Over 40,000 people within a 15-minute cycle	Better access to jobs and services, education and training
Absenteeism reduced by more than 1 day per staff member per year	20-30% increase in footfall	Increased transport capacity to city centre and less traffic congestion faced by buses	Free/low-cost transport
Improved productivity from healthier workforce	Direct benefits to active travel retailers (e.g. bike shops)	20-30% increase in footfall	More physical activity, leading to better health and wellbeing
Access to larger pool of potential staff		Increased tourism/leisure spend	More pleasant and safer communities
Less congestion, so lower transport costs		Absenteeism reduced by more than 1 day per staff member per year	
		Improved productivity from healthier workforce	
		Direct benefits to active travel retailers (e.g. bike shops)	

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