

BIKE *life*

2018

Stirling





Forward motion

Our vision for cycling in Stirling



Stirling is a compact city with bold ambitions for modal shift towards cycling and walking. The Bike Life Stirling report comes at the perfect time to support the case

for further investment in active travel in the city, and across the council area.

As the report shows, there is strong demand for improved facilities for cycling amongst Stirling residents, and we know that this is not because cycling is merely an end in itself. Bikes offer a highly affordable transport option, particularly for the 31% of Stirling households without access to a car, and can be a valuable tool in tackling transport poverty. Higher levels of cycling improve not only the health of those who cycle, but also of those around them, by taking cars off the streets and improving air quality.

71% of respondents to the Bike Life survey said that Stirling would be a better place to live and work if more people cycled. This underlines a key opportunity – by creating places that enable cycling and walking, we create spaces that people want to spend time in. This will make our city a better place for residents and visitors alike, and improve footfall in our local businesses and attractions.

Stirling has already placed itself at the forefront of innovation in cycling practice. The success of our city-wide bike hire scheme and of our pioneering Active Travel Hub at Stirling railway station have demonstrated Stirling’s potential for swift and significant changes in travel behaviour.

Alongside these successes, however, we must recognise the areas in which we still have work to do. Only 36% of residents think that cycling safety is good, and when it comes to the safety of children’s cycling, that figure falls to 16%. Creating a safer environment for our children – and getting more people out on bikes to experience it for themselves – must be a priority.

The Scottish Government’s recent doubling of funding for active travel across the country provides us with the opportunity to make the investment Stirling needs to go from being a good place to cycle, to being a great place to cycle. Our success in funding the Walk, Cycle, Live Stirling project – which will see the construction of two high quality active travel corridors in the north and west of the city – is the first step in a transformation of Stirling’s transport landscape, which will benefit generations to come.

Councillor Jim Thomson
Environment and Housing Committee
Convenor

Introducing Bike Life

Sustrans, the charity making it easier to walk and cycle, is collaborating with three Scottish cities in 2018 – Glasgow, Perth and Stirling – to report on progress towards making cycling an attractive and everyday means of travel.



Bike Life is inspired by the Copenhagen Bicycle Account, and is an assessment of city cycling development including infrastructure, travel behaviour, satisfaction, the impact of cycling, and new initiatives.

This is the first report from Stirling, one of 15 UK cities participating in Bike Life. The information in this report comes from local cycling data, modelling and a representative survey of over 1,100 residents in Stirling* conducted by ICM**.

More details on all Bike Life city reports can be found at www.sustrans.org.uk/bikelifelife.

Our thanks to the people of Stirling who took part in the survey and who told us their stories in this report.

There are substantial benefits to Stirling from people cycling

- 1.2 million trips** made by bike in Stirling in the past year
- Saving the NHS £42,000 annually**, equivalent to the average salary of **2 nurses**
- Bicycles take up to **813 cars** off Stirling’s roads each day, equal to a **2.4 mile tailback**
- £2.5 million total annual benefit to Stirling** from people riding bikes for transport and leisure

There is huge potential for more people to ride bikes...

- 3%** of Stirling residents **usually cycle to and from work**
- 31%** of households are within **125m of a cycle route**
- 19%** don’t currently ride a bike, but would like to
- 36%** think **cycling safety in Stirling is good**

...and public support to make that happen

- Residents in Stirling think investing in more space for cycling and walking, as opposed to additional space for cars and public transport is the best way to keep the city moving, improve people’s health, and reduce air pollution.
- 71%** say Stirling **would be a better place to live and work** if more people cycled
- 76%** of people would like to see **more money spent** on cycling
- 44%** of people would find **protected roadside cycle lanes very useful** to help them cycle more
- 83%** of residents **support building more protected roadside cycle lanes**, even when this could mean **less space** for other road traffic

* The area covered in this report is: Stirling city, Bannockburn & Bridge of Allan, with an adult population of 40,627 (2016 mid-year population estimates). ** Survey conducted May-July 2018.



Key figures

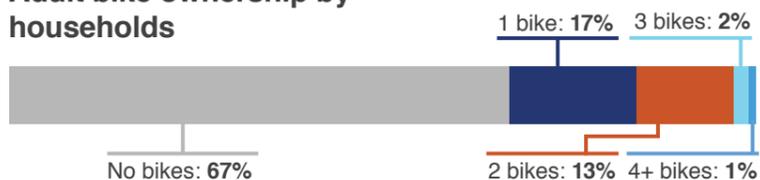
Provision and levels of cycling in Stirling

Bike ownership in Stirling

A bike gives people more choice for getting around, helping them to reach jobs and services, and to see family and friends more often.

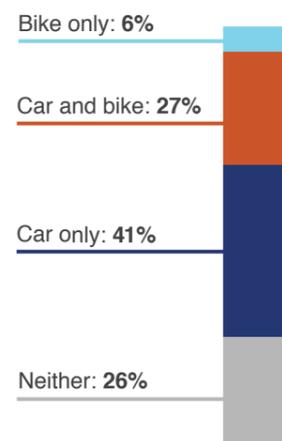
In Stirling, a third (33%) of households have access to at least one bike. Over three quarters (77%) of households with children have at least one child's bike.

Adult bike ownership by households



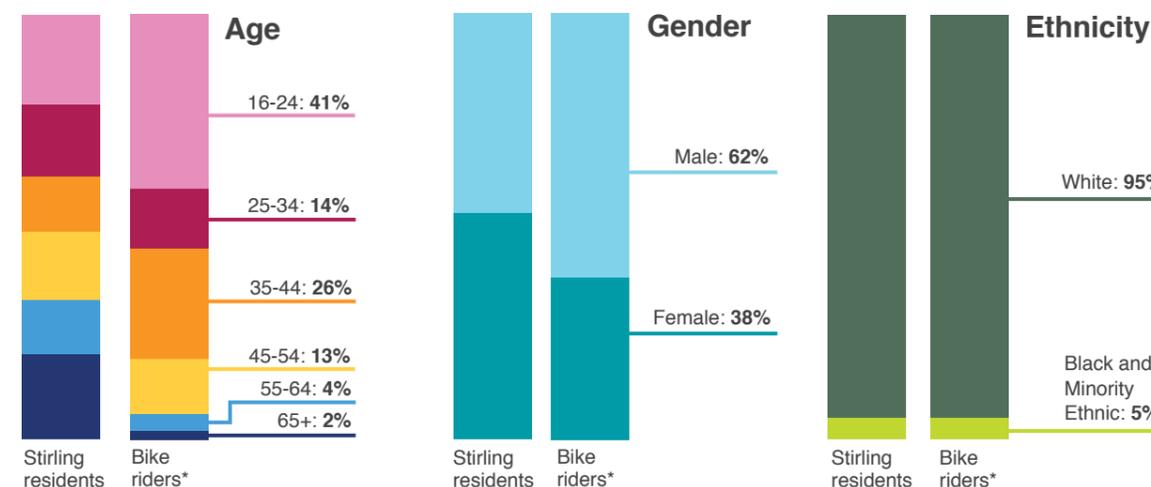
Car and bicycle ownership refers to the percentages of all people living in households that own cars/bikes. Note that census data is normally reported as the percentage of households with given numbers of cars.

Car and adult bike ownership by households



Who is cycling?

In Stirling, women and people 55 and over are under represented when it comes to riding a bike.



For age and gender, the division of Stirling residents uses 2016 mid-year estimates. For ethnicity, it uses the 2011 census. Survey respondents could also identify their gender 'in another way' or 'prefer not to say'. Due to rounding these are not displayed - they would appear as 0%.



How often are people riding a bike?



33% of Stirling households have access to a bike yet only

14% of residents cycle once a week or more

5% of residents cycle at least 5 times a week



What's available and who's aware?

17 miles

of cycle routes including

14 miles

of routes physically separated from vehicles*

21%

of people are familiar with the traffic-free routes in Stirling

31%

of households are within 125 metres of a cycle route

20

14%

of all streets in Stirling have a 20mph speed limit

240

public bike parking spaces, equivalent to 29 bike riders per space

138

railway station parking spaces for bikes, equivalent to one parking space for every 26 passengers per day



Where are people cycling?

Number of trips in the past year



47%

of Stirling residents' cycle trips are for work or education

3%

of Stirling residents usually cycle to and from work

* Includes protected bike lanes, shared footways and traffic-free routes away from roads.

* Ridden a bike in the past four weeks when the survey was conducted in May – July 2018.



Developing Bike Life

What's happening in Stirling

Making Stirling a city where more people want to cycle requires a wide range of measures, with strategic planning, improved infrastructure and behaviour change all playing vital roles.

Stirling's drive and vision has been demonstrated by recent projects including:

Stirling's Active Travel Action Plan

Stirling's Active Travel Action Plan (ATAP): Walking and Cycling to a Healthier Stirling, sets out the city's vision for creating a change in the way people travel, and details the actions required to achieve this. The ATAP was adopted by Stirling Council in December 2016, and sits under the Local Transport Strategy. Stirling's Active Travel Steering Group, formed of key partners and stakeholders from across the city, oversees the delivery of the ATAP.

Stirling Station Gateway

This ongoing infrastructure project will create a transport interchange with active travel at its heart. City centre streets in the vicinity of the railway station have already been made more accessible and people-centred through the first phase of the project. The next phase will see the station forecourt transformed into a more welcoming environment for all, particularly those travelling on foot and by bike.

Walk, Cycle, Live Stirling

In 2017, a Stirling Council project was one of five winners of Sustrans' Community Links PLUS design competition. The successful project – Walk, Cycle, Live Stirling – will deliver a £5.4 million improvement to two key cycling corridors. One will transform the route from the city centre to the University of Stirling, whilst the other will enhance facilities to Forth Valley College and Raploch via Dumbarton Road. A street design project on Raploch Road will also see the community co-design their streetscape to provide improved connection to their public space.

Stirling Active Travel Hub

Providing a highly visible face to residents and visitors alike, Stirling Active Travel Hub is the focal point for cycling culture in the city. Its location at Stirling railway station supports the close integration of cycling with public transport, and provides a first port of call for visitors to the area.

As the first of its kind in Scotland, the Hub has had over 25,000 visitors since it was launched as Stirling Cycle Hub in 2013.

The Hub is run by Forth Environment Link, who work closely with Stirling Council and other partners to deliver a wide range of cycling and walking support programmes.

Events such as the annual Stirling Festival of Walking and Cycling have been highly popular, whilst pop-up community hubs, led rides, and an extensive employer engagement programme provide opportunities for residents seeking to get back on their bikes.

A recent partnership between Stirling Active Travel Hub, NHS Forth Valley and Stirling Council has seen a behaviour change officer embedded in Stirling's new Care Village, providing social prescription and travel advice services to patients and staff.



Bike sharing

In 2014, Stirling became the second city in Scotland to adopt a city-wide bike sharing scheme.

Now boasting 23 docking stations and 160 bikes, usage has risen from 5,400 hires in the scheme's first 12 months to over 27,000 hires in the year to June 2018.

Corporate memberships have bolstered the success of the scheme, with partners including the University of Stirling and Forth Valley College.

From the summer of 2019, Stirling's city bike share scheme will be complemented by a regional e-bike sharing scheme, spanning three local authorities. Enabling journeys between Stirling, Falkirk, and Clackmannanshire, it will be one of the largest e-bike sharing schemes in Europe.





The impact

The health, economic, and environmental benefits to Stirling



Many people are cycling in Stirling

1.2 million trips

made by bike in Stirling in the past year which altogether adds up to

3.6 million miles



Stirling residents cycle **8 times** the length of Great Britain every day



Benefiting individuals and the local economy

91p per mile

net benefit for each mile cycled instead of driven which adds up to

£1.1 million

annual benefit to Stirling from people with a car choosing to cycle for transport

£2.5 million

benefit to Stirling from all trips made by bicycle*

These figures are based upon monetising the benefits and drawbacks of driving and cycling. This includes travel time, vehicle operating costs, health, congestion, infrastructure, local air quality, noise, greenhouse gases and taxation.



Unlocking significant health benefits in Stirling

In Stirling, the physical activity benefits of cycling

prevent 1 early death annually*

valued at

£4 million*

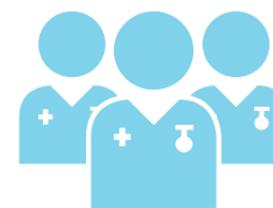
based on what people say they would pay to improve their chances of survival, and calculated using the method set by the World Health Organisation.

Cycling also averts **6** serious long term health conditions annually, saving the NHS in Stirling

£42,000 per year

equivalent to the average salary of

2 nurses



Based on Sport England MOVES tool which shows the return on investment for health of sport and physical activity.



Keeping your city moving

Transport capacity of a 4m wide lane per hour



8,000-12,000 bus passengers



5,000-10,000 people on bikes



5,000-10,000 pedestrians



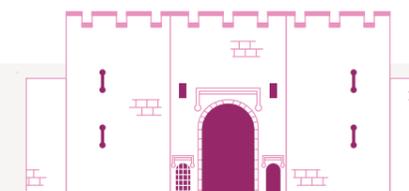
800-1,100 people in cars

Studies suggest riding a bicycle rather than driving frees up road space. This helps to keep Stirling moving.

Source: Litman, 2017. Evaluating Transportation Land Use Impacts. Based upon Eric Bruun and Vuchic, 1995. The Time-Area Concept.

813 return cycle trips are made daily in Stirling by people that could have used a car.

If these cars were all in a traffic jam it would tail back **2.4 miles**



If these cars were to be parked they would take up the space of **2 Stirling Castle Esplanades**.



More people riding bikes has environmental benefits

356 tonnes of greenhouse gas emissions saved annually

equivalent to the carbon footprint of **52 people**.

More people riding bikes improves air quality:

780 kg of NOx and 106 kg of particulates saved annually.

In Stirling **29 early adult deaths** occur each year where long-term exposure to air pollution (PM2.5) is deemed to be a contributory factor.



Based upon Public Health England, 2014. Estimating Local Mortality Burdens associated with Particulate Air Pollution. Adults = 25 years+. Please note this figure is for the whole of the Stirling Council area (not the city, as throughout).



Stories from our city

What cycling means to people



Pernille Soeholm, University of Stirling student

I grew up in Odense, Denmark, where it was natural for people to cycle everywhere. Not cycling anything under a couple of kilometres was seen as lazy. I learned to travel by bike from a young age and it is something I continue to do. Stirling is fortunate in that it is a relatively flat, small city with a young, student population. Most students don't have a lot of money so it could be a great way of encouraging them to cycle by showing them the cost savings they could make compared to how many beers or coffees they could buy! There seems to be a lack of awareness of the savings that can be made by cycling instead of using other means.

There is lots of potential, the weather shouldn't be a barrier - it's equally as rainy in Denmark as it is in Scotland - but cycling needs to be safer here.

Drivers don't like sharing road space with cyclists but one more bike on the road means one less car.

Having safe infrastructure that would allow people to cycle together adds to the experience of travelling by bike, it's more of a social activity. As well as making Stirling safer we should focus on changing the mentality that a car is the easy choice.



Jackie Simpson, returning cyclist

During my working life I cycled around 30 miles a day, then a succession of serious illnesses meant that the bike went in the shed and I lost all of my confidence. The Active Travel Hub was instrumental in getting me back on my bike. Being able to cycle again has restored my confidence after my illnesses. The sense of exhilaration and freedom is a natural anti-depressant and it allows you to see things, appreciate your surroundings and go places you wouldn't be able to if you were in a car. I still have issues with my stamina but worst case scenario I can get off and push!

Stirling is a lovely city and being so small it is completely doable to cycle but it is not the most cycle friendly place. Riding in traffic is an issue for me and I think more cycle lanes in Stirling would enable people to feel more confident and safer travelling by bike around the city. Cycling has been beneficial to my health both mentally and physically, but people know the benefits of cycling. We need to show people that cycling is fun and exciting and the positive impact it can have on our lives; I'd be devastated if I couldn't cycle anymore.



Photo, above: © Jackie Simpson



Ashley, Owner, Fat Hen Farm

I have a side business based in Stirling, a teeny tiny urban farm called Fat Hen Farm.

The business, in its first year, grows lettuces and greens for salads in a sustainable and low input way.

A big part of the sustainability of the business is having a low carbon footprint (and better health) by delivering by bicycle.

Everything I do for markets and deliveries is by bicycle, racks & panniers, and bicycle trailer.

The bicycle trailer is used mostly for Farmers' Markets (they happen once a month in Stirling), and I borrow this from the Active Travel Hub. Since I'm such a small business, the Travel Hub lending me the trailer is really key – as I couldn't justify the spend on one for the business yet.

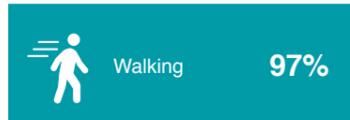
Barriers and potential

What needs to change to make cycling commonplace



Safety and security continue to be a significant concern

Percentage of people that feel safe during the day



A cycling injury occurs once every 452,000 miles pedalled around Stirling



Whilst almost two thirds (63%) of people think Stirling is a good place to ride a bike overall, when you dig deeper there are clear concerns about safety.

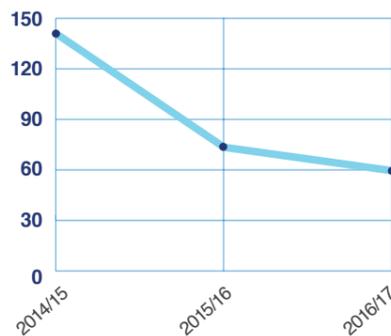


of people think **cycling safety** in Stirling is good.



think **safety of children's cycling** is good.

Reported bike thefts



There were 59 reported bike thefts in Stirling in 2016/17.

This equates to a 0.8% chance of a bike rider in Stirling having their bicycle stolen in the past year.

30% of people think the security of bicycle parking is good.



How do residents rate Stirling's cycle routes?

45% think the **amount** of cycle routes is good

29% think the **condition** of cycle routes is good

34% think the **directness** of cycle routes is good

38% think the **signposting** of cycle routes is good



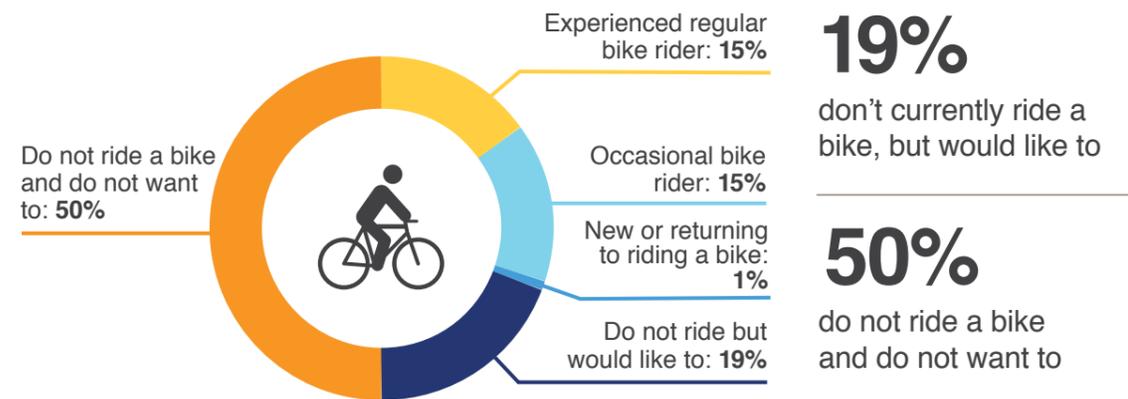
Georgina Massouraki, Project Officer, Keep Scotland Beautiful

I choose to commute from Edinburgh by a combination of train, walking and cycling. By avoiding driving, I save around 1.5 tonnes of CO₂ per year. It's also a chance to exercise, with a 10 minute cycle or 30 minute walk between the train station and the office burning around 100 calories each way and giving me a mental boost to start and end each day.

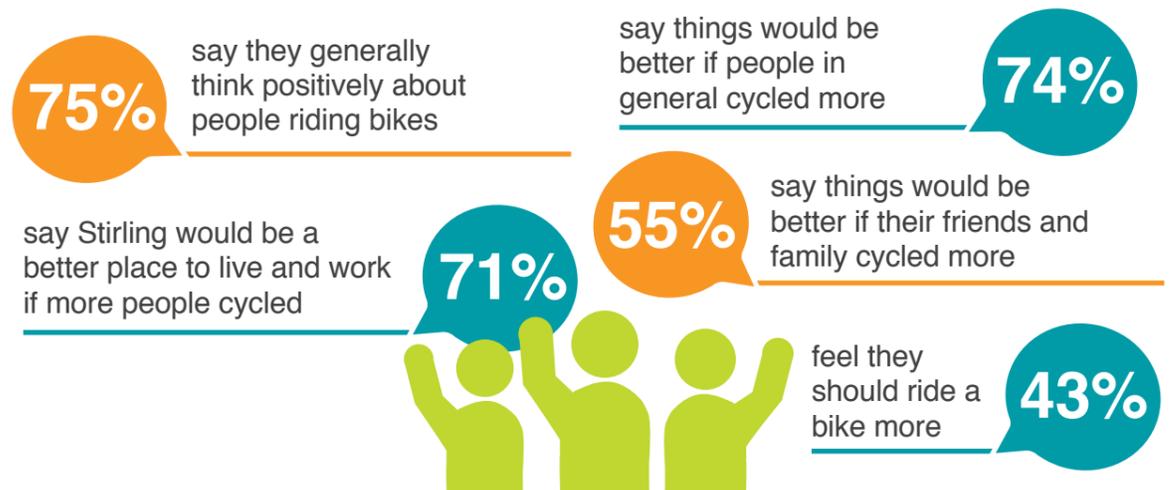
I have free use of Nextbike through my employer, Keep Scotland Beautiful's, corporate membership, saving the £60 annual fee and avoiding bike maintenance costs. I could also purchase a bike through my employer's bike purchase scheme if I wanted to. My daily two-hour train commute is time that I can use as I please, rather than sitting in traffic. With a season ticket loan from work, the cost of travelling by train works out about the same as driving, but without the added costs of owning and maintaining a car.



How do people see themselves when it comes to riding a bike?



Perceptions of cycling are positive



What the public want

Investment, safety and dedicated space



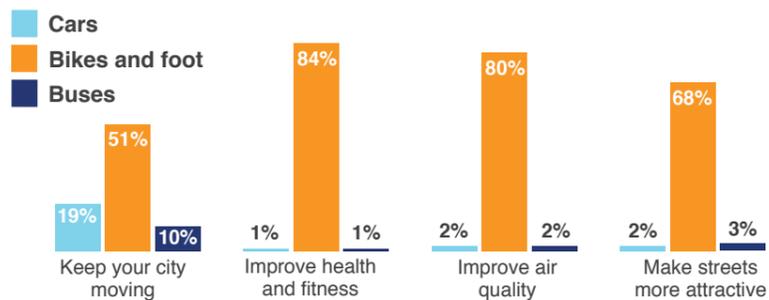
Bike to the future

Our ambition and plans to make it happen



Prioritising investment in cycling and walking

People prioritise investment in space for bikes and foot



Overall, residents in Stirling think more space for cycling and walking, as opposed to additional space for cars and public transport, is the best way to keep the city moving, improve people's health, reduce air pollution and make streets more attractive.

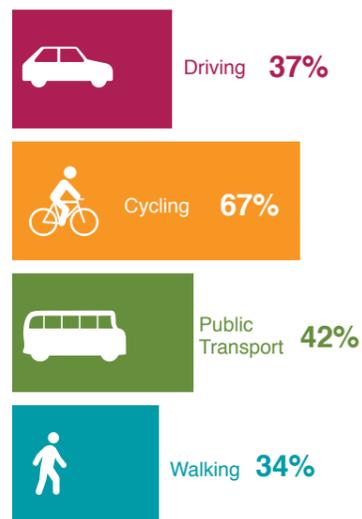
76% of residents would like to see more investment in cycling in Stirling

This includes **58%** of those who do not ride a bike and do not want to

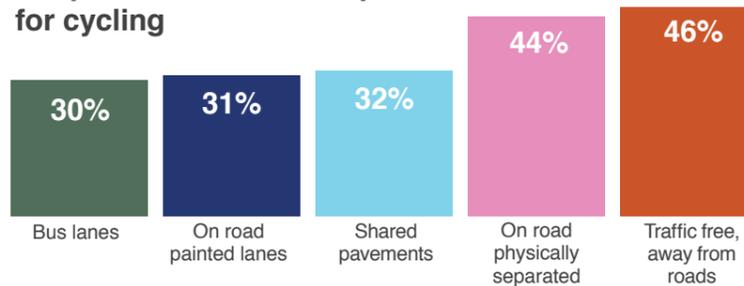


Improved safety and space for cycling

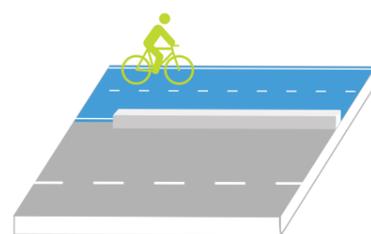
Percentage of people that think safety needs to be improved



People want dedicated space for cycling



What people would find very useful to start cycling/cycle more



83% of residents support building more protected cycle lanes, even when this can mean less room for other road traffic

Bike Life Stirling demonstrates the high level of support from local residents for concrete action to make the city a better place to cycle. Safety is still a clear concern. The fact that 50% of Stirling residents don't want to cycle shows that work is required to make cycling more appealing and accessible to local people.

However, with 83% of residents supporting the building of protected cycle lanes, it is clear the need for such infrastructure is recognised by all road users, not just those who would use it. Stirling residents understand the clear benefits of walking and cycling, from the air they breathe to the attractiveness of the city. It's now up to Stirling Council and other organisations across Stirling to translate this enthusiasm into action.

Building towards the future

As underlined by the Bike Life survey, a welcoming road environment is crucial to encouraging people to move from single-user car journeys to more active modes. Ongoing projects such as Stirling Station Gateway and Walk, Cycle, Live Stirling will have a transformative effect on the city, setting the standard for future projects.

Stirling Council will continue to create more cycle friendly infrastructure, and enhance the key walking and cycle corridors which connect outlying neighbourhoods. Major developments such as Durieshill and Forthside, will be supported to ensure that they are designed to enable more people to walk and cycle.

Leading the way on bike sharing

Innovative and collaborative approaches to bike sharing will consolidate Stirling's city bike share scheme in years to come. A new project will see reduced price access to shared bikes being offered to school children and jobseekers. These two groups are at potential risk of transport poverty and would stand to benefit greatly from a city which welcomes and encourages cycling.

The Forth Valley e-bike sharing scheme will launch in 2019 making active travel within and between Stirling, Falkirk and Clackmannanshire easier, more attractive, affordable and accessible. Other bike sharing schemes offer the potential to improve connections between Stirling City and the wider council area, along with Loch Lomond and the Trossachs National Park. This could encourage more residents and tourists to travel more actively and sustainably, whilst attracting a new demographic of visitors to the area.

Innovative partnerships

Collaboration between organisations across Stirling will maximise the benefits of cycling for residents. From local businesses to community groups, from charities to the NHS, all partners bring valuable insights to the table.

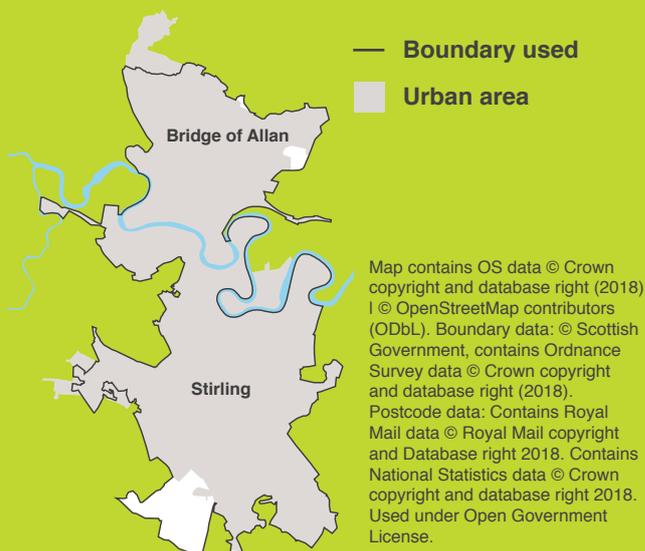
Opportunities such as the City Region Deal, and Stirling Council's Sustainable Growth Agreement with the Scottish Environmental Protection Agency, will enable innovative and bold ways of working, and allow active travel to be ever more closely integrated with wider efforts to help Stirling flourish.

Notes on terminology and methodology:

The attitudinal survey was conducted May to July 2018.

Due to the rounding up or down of individual figures, the percentages on charts may not total 100% exactly.

The area covered in this report is: Stirling city, Bannockburn and Bridge of Allan.



Further details are available at www.sustrans.org.uk/bikelifelife

Sustrans is the charity making it easier for people to walk and cycle.

We connect people and places, create liveable neighbourhoods, transform the school run and deliver a happier, healthier commute. Join us on our journey.

www.sustrans.org.uk



Sustrans is a registered charity in the UK No. 326550 (England and Wales) SC039263 (Scotland)



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For further information contact:
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