BIKE line 2019

Belfast





C

Making tracks

Our vision for cycling in Belfast

As Minister with responsibility for Infrastructure, I am delighted to present the third biennial 'Belfast Bike Life' report which provides an insight into the views of people in Belfast about cycling. I have a clear vision to increase sustainable travel options that connect communities, reduce greenhouse gas emissions, help lessen the impacts of climate change and deliver benefits to people.

The positive impacts of cycling are well-known: cheaper and easier travel; better physical and mental health and wellbeing; access to employment opportunities; a less congested, less noisy city with cleaner air. Cycling is a low-cost, easy and flexible way to get around the city, which will become increasingly important as Belfast's population continues to grow.

Belfast is a city made for cycling – the city is compact; most of the inner area is flat and the main roads and streets are wide. While the report highlights that the number of journeys made by cycling has increased it also reminds us that there are still many challenges to overcome. People need to feel safe, whatever way they travel. We need to provide more safe space for cycling, protected from motor traffic and where pedestrians are also kept safe. Since Belfast Bike Life 2017, some notable improvements have been made: these include widening of the Comber Greenway and the new segregated cycle lane on Middlepath Street, opening up a direct link to the city centre from Titanic Quarter station.

Translink have recently installed and upgraded the cycling facilities across their bus and rail network. They have now installed secure cycle parking facilities in the city at Lanyon Place station and along the Glider route at Dundonald Park & Ride, Ulster Hospital, Holywood Arches and Colin Connect.

This is an excellent example of how organisations can work together to realise a common vision and it is something I would like to build on. There is still a lot to do if we want to continue to increase the number of journeys cycled. I am convinced that together we can make it happen and that we can give people the freedom and confidence to cycle for everyday journeys.

Nichola Mallon MLA Minister for Infrastructure

Contents

- 4 Report summary
- 6 Realising benefits
- 8 Cycling participation
- **10** Social inequality and mobility
- **12** Barriers
- 14 Solutions
- **17** Improving cycling
- 19 Bike to the future

Introducing Bike Life

Bike Life is the biggest assessment of cycling in urban areas in the UK and Ireland. It is delivered by Sustrans in collaboration with 17 cities and urban areas. Each city* reports on progress towards making cycling an attractive and everyday means of travel.

Bike Life reports every two years. In 2015 and 2017 seven cities published reports. Glasgow, Perth and Stirling followed and published their first reports in 2018.

Fourteen areas are participating in Bike Life in 2019. This includes our first London borough, Tower Hamlets, and our first city outside of the UK, Dublin Metropolitan Area.

This is the third report from Belfast, produced in partnership with the Department for Infrastructure in Northern Ireland. The information in this report comes from local cycling data, modelling and an independent survey of 1,449 residents aged 16 or above in Belfast.** The survey was conducted by social research organisation NatCen and is representative of Belfast residents, not just those who cycle.

More details on all Bike Life reports can be found at **www.sustrans.org.uk/bike-life**.

Our thanks to the people of Belfast who took part in the survey and shared their stories with us.



Report summary

Belfast City Council area

Population*

341,900

area

Survey

Everyone benefits when more people cycle

Every day, people cycling in Belfast takes up to

7,500 cars off the road

Based on cycling by residents that live in a household with a car. Does not include leisure cycling trips. Every year, cycling:

- prevents 93 serious long-term health conditions
 - saves **3,800 tonnes** of greenhouse gas emissions
 - Creates £24.7 million in economic benefit for individuals and the city

There is significant appetite in Belfast for cycling.

12<mark>%</mark>

of residents cycle at least once a week

Cave Hill Country Park

Belfast

City Hall

Stormont

31%

don't cycle but would like to

Safety concerns stop cycling being a genuine travel choice for many residents

Many residents are less likely to cycle regularly, for example women and disabled people.

However, all groups want cycling safety to be improved.

Proportion of residents who cycle at least once a week



Proportion of residents who think cycle safety needs improving

72% of men

78% of women

75% of disabled people

75% of non-disabled people

To help residents cycle more we need better cycling infrastructure

77%

think that more cycle tracks along roads physically separated from traffic and pedestrians would be useful to help them cycle more

67%

support building more of these tracks, even when this would mean less room for other road traffic**

2 miles

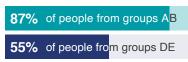
of cycle tracks along roads physically separated from traffic and pedestrians currently exist in Belfast

*NISRA mid-year 2018 population estimate. This is the most recent available for Belfast.

**Please note this question has changed since 2017 from 'could mean' to 'would mean'. See Bike Life methodology for further details.

People from socio-economic groups D and E are most likely to suffer the impacts of higher traffic levels,[†] yet are least likely to own a car

Proportion of residents from socio-economic groups AB or DE who have a car or van in their household



Not having a car can increase the risk of social exclusion, debt and transport poverty.^{††} 84%

of residents from socio-economic groups D and E never cycle, but

28% would like to start

This is equal to **27,000 adults**

Cycling as a mode of transport is ideally suited to urban life.

Cities that are designed for cycling can help many residents access everyday services and reduce social and economic isolation.

Socio-economic group is a classification based on occupation maintained by the Market Research Society. Groups A and B are professional and managerial. Groups D and E are semi-skilled and unskilled manual occupations and people not in employment.

Belfast residents believe improving their streets for cycling and walking would make their area a better place to live, work or visit

60%		78%		51%	
think more cycling make their area a place to live and w	better	think space s increased for socialising, c and walking o	people ycling	think streets outsi local schools shou closed to cars due off and pick up tin	uld be ring drop
65%		local high str	eet	65%	
think fewer motor vehicles on our str would be useful to them cycle more	help			think speed limits be reduced on loc	

Residents would like to see more government spending on public transport, walking and cycling

61% Walking 58% Cycling	62%	Public transpo	ort
	61%	Walking	
25% Driving	58%	Cycling	
35% Drivi <mark>ng</mark>	35%	Driving	

Anthony Rafferty

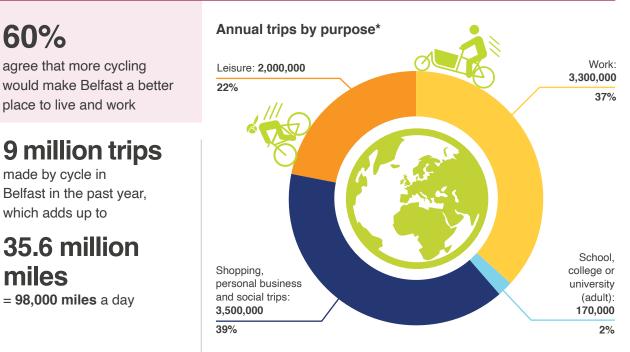
I have recently started cycling to and from work after seven years of no real physical activity. I feel much healthier and feel like I'm doing my bit for the environment. Travelling by bicycle saves me around 25 minutes each day which means I have more time at home with my family.

""

Realising benefits

Why everyone gains when more people cycle

Belfast residents cycle four times around the world every day



The estimates of trips presented in Bike Life use a model developed by Sustrans. Sustrans believes that some respondents may interpret 'social trips' as leisure trips. This means that when comparing to other travel surveys some variation may exist in the proportion of journeys cycled by journey purpose.

Cycling keeps Belfast moving

Studies show cycling frees up road space in comparison to driving.** This helps to keep Belfast moving for all road users.

7,500 return cycle trips

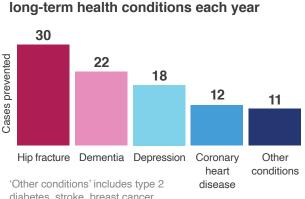
are made daily in Belfast by people that could have used a car

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

22 miles



*Leisure trips include adults and children. All other trips are just adults. **Litman, 2017. Evaluating Transportation Land Use Impacts. Based upon Eric Bruun and Vuchic, 1995. The Time-Area Concept.



Cycling in Belfast prevents 93 serious

diabetes, stroke, breast cancer, colorectal cancer.

Saving the NHS in Belfast

£600,000 per year

equivalent to the cost of 20,000 GP appointments

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

In Belfast the physical activity benefits of cycling

prevent 11 early deaths annually

which is valued at **£37.4 million**[†]

More people cycling improves air quality:

8,800 kg of NO_x and 1,100 kg of particulates (PM₁₀ and PM₂₅) saved annually.

In Belfast **141 early adult deaths** occur each year where long-term exposure to air pollution (PM_{2.5}) is deemed to be a contributory factor.

Based upon Public Health England, 2014. Estimating Local Mortality Burdens associated with Particulate Air Pollution (covers all of the UK). Adults = 25 years+.

Cycling helps reduce the impact of our climate crisis

3,800 tonnes

of greenhouse gas emissions (carbon dioxide, methane and nitrous oxide) saved annually, equivalent to the carbon footprint of

8,200 people taking flights



from Belfast International to Tenerife

Transport now accounts for 23% of Northern Ireland's greenhouse gas emissions, of which the main sources are petrol and diesel cars. Overall Northern Ireland's emissions between 1990 and 2017 fell by 18%, however transport emissions rose by 30%.

Northern Ireland Greenhouse Gas Emissions 2017, Department of Agriculture, Environment and Rural Affairs.

Cycling benefits residents and the local economy in Belfast

82p net benefit for individuals and society from each mile cycled instead of driven

These figures are based upon monetising the costs and benefits of driving and cycling. This includes travel time, vehicle operating costs, medical costs and work absenteeism, congestion, infrastructure, local air quality, noise, greenhouse gases and taxation. In total, this adds up to:

£10.7 million

per year from people with a car choosing to cycle for transport, or

£24.7 million

annually from all trips cycled



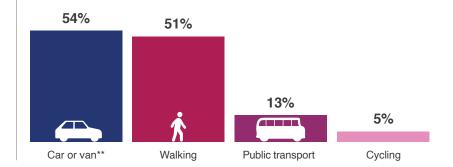
[†]Based on WHO/Europe Health Economic Assessment Tool (HEAT), which enables an economic assessment of the health benefits of cycling by estimating the value of reduced mortality resulting from specified amounts of cycling.



Most people living in Belfast do not currently cycle

Whilst many people cycle in Belfast, participation is much lower than for other modes of travel.

When cities are designed to make cycling more attractive than other forms of transport, participation can be high. For example **29%** of residents cycle five or more days a week in Greater Cambridge.* Residents who travel by the following modes five or more days a week in Belfast



83%

of Belfast residents walk at least once a week

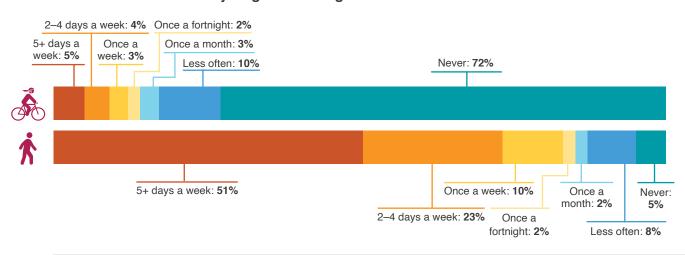
12% of residents cycle at least once a week

While it's clear that improvements need to be made to the walking environment, there is at least a network of protected space – pavements.

In comparison, it is only possible to cycle to most everyday destinations if you are happy to share road space with motor vehicles.



How often are residents cycling and walking?



How inclusive is cycling?

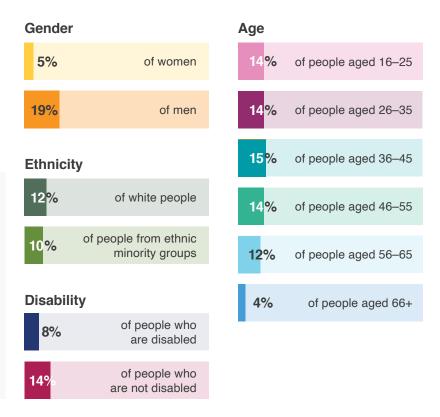
In Belfast cycling participation of different demographic groups is not equal.

Barriers to cycling can be more pronounced for different demographic groups, however cities with high cycling rates show this is not always the case.

55% of all cycling trips in the Netherlands are made by women. Furthermore, people over 65 make 24% of their trips by cycle, higher than the percentage reported for any other age group over the age of 26.

Pucher and Buehler, 2008. Making Cycling Irresistible Transport Reviews, Vol. 28.

Proportion of Belfast residents in different demographic groups who cycle at least once a week



ligo and La

Gary McClean, East Belfast



I've been cycling for a couple of years following a training course through the Belfast Community Active Travel programme. The first time I used the hand-cycle it took a bit of getting used to and then I enjoyed it.

I go out on the traffic-free paths such as the Comber Greenway and Lagan Towpath. The only thing is I need to go through the community groups to get access to the adapted bikes. I would love to own my own hand-cycle but they are expensive.

I tried the side-by-side bike at the Belcycle festival at CS Lewis Square – it was brilliant. It was raining that day but I didn't mind because it was really good to get out. You get fresh air and can chat with the person cycling beside you.

I think there should be more adapted bikes available. Let people try them out and give them safety courses. You would get more people cycling.





Cycling's potential to help people

Mobility is about accessing basic, everyday needs that help people live well

Mobility enables people to access employment, education, fresh food, green space and healthcare. Mobility also enables people to see family, participate in their community and to have a voice in society.

And yet, mobility for many people in the UK and Ireland is neither equal nor inclusive.

People who do not have a car can find it challenging to reach everyday services in areas where travel alternatives are lacking

Proportion of residents from each socio-economic group* who do not have a car or van in their household



Many disadvantaged neighbourhoods have fewer local amenities and poorer public transport provision.** This combination means that everyday services may be harder to reach. Cycling can help accessibility.

Many residents from socio-economic groups D and E would like to start cycling

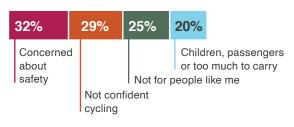
28% of residents from groups D and E in Belfast would like to start cycling

7%

of residents from groups D and E in Belfast currently cycle at least once a week

In comparison, **14%** of residents from groups A and B cycle at least once a week

Reasons why Belfast residents from socio-economic groups D and E do not cycle or why they cycle less often



Proportion of residents from socio-economic groups who think cycling is not for people like them



Being a 'cyclist' can be associated with a certain type of person and characteristics.

Cycling has potential to reduce social and economic exclusion

Cycling could help many residents access employment, healthcare and everyday services, but only if we make cycling attractive, safe and easy for everyone.

At a relaxed pace you can cycle over 4 miles in 25 minutes. So, cycling can be ideally suited to urban life, especially as an option for people who do not own a car and live further away from public transport.

25-minute cycling distance from Europa Buscentre

Cycling would enable **230,000** people to travel from their home to Europa Buscentre in less than 25 minutes, including **91,000** people from areas that are among the 20% most deprived in Northern Ireland.





Lisa Rolston, Community Nurse

"

Following a bad experience cycling my confidence started going down. So I started the bad habit of cycling on the pavement when there were no pedestrians about. I just thought it's a hassle to cycle on the road because you feel like you're in drivers' way. It can be a bit intimidating.

A women's cycling course with Sustrans helped give me my confidence back. I'm back cycling on the road and enjoy the freedom again of getting about by bike.

I find cycling a better way to get around this city. I don't know why more ladies don't get on their bikes. It needs to be encouraged. You're leaving the car, you're saving yourself money and you're not adding to pollution. You can cycle somewhere faster than in the car sometimes. Plus you don't have to pay parking.





36%

think Belfast is a good place to cycle. But many barriers to cycling exist.

Reasons why some residents do not cycle or why they cycle less often

79%

78%

48%	33%
Concerned about safety	Poor weather

Safety is the single largest barrier to more people cycling



without 20mph speed limits* of households are further than 125

of Belfast's

streets are

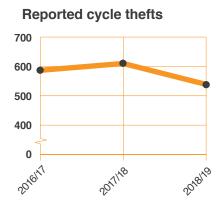
metres from routes that are considered good practice**

*Excluding motorways.

Reducing the speed of traffic on the roads

Reducing levels of traffic on the roads

**These are defined as routes that are traffic-free and away from roads, and cycle tracks along roads physically protected from traffic and pedestrians.



There were **538** reported cycle thefts in Belfast in 2018/19.

For every **230** people who own an adult cycle in Belfast, there was 1 reported cycle theft in the past year. There is a public cycle parking space for every **53** people who cycle in Belfast.

16%

of residents think the security of public cycle parking is good.

Security can also be a risk at home, especially in flats where storage inside the property can be harder.

Please note survey respondents could pick multiple options

28%	23%	18%	15%	15%	15%	13%
Not confident cycling	Lack of storage or facilities at home or work	Children, passengers or too much to carry	Not for people like me	Living too far away from my destination	Cost of a suitable cycle	Too hilly here



Colette Leeson



My husband was based in London when we met. He did a lot of commuting by train or tube but when he moved to Belfast he found it like a village compared to London – everything is very accessible.

We had a choice of moving out of Belfast to a bigger house or staying closer to town where we could walk and cycle. We decided we wanted a more city-based life.

We cycle in all weathers. We cycle to and from work. We cycle to keep fit. We cycle to see family and for leisure.

If we need a car, say for weekend trips or to transport bigger items, then we just hire one. It works out a lot cheaper than buying and running a car that might sit outside your door all week.

I have never seen so many people being active in Belfast – walking, cycling or running. We need more protected cycle lanes on Belfast's roads so we are not causing a nuisance to pedestrians, and we need a proper network of cycle lanes that join up and that are safer at junctions. Alfred Street cycle lane is great but it needs to connect up better.





Many Belfast residents want to cycle



Residents want improved cycling infrastructure

What proportion of residents would find infrastructure improvements useful to cycle more?

80%	77%	74%	67%
More traffic-free cycle routes away from roads, eg through parks or along waterways	More cycle tracks along roads that are physically protected from traffic and pedestrians	More signposted local cycle routes along quieter streets	Better links with public transport
Belfast has 39 miles of traffic-free cycle routes away from the road	2 miles of cycle tracks physical from traffic and pedestr		There is one cycle parking space at Belfast's railway stations for every 117
of households are	However, only 11% within 125 metres of these	e routes	passengers

67%

of residents support building more protected on-road cycle tracks, even when this would mean less room for other road traffic* A and B roads have higher levels of traffic so these are where physical separation is most useful for cycling. In total, **121 miles** of these roads exist in Belfast.



*Please note this question has changed since 2017 from 'could mean' to 'would mean'. See Bike Life methodology for further details.

What proportion of residents would find more support useful to cycle more?

60%	56%	47%	39%	26%
Improvements to your local town or city's public cycle sharing scheme	Cycling training courses and social rides	Access to an electric cycle	Access to a cargo cycle	Access to an adapte cycle (eg tricycle or recumben cycle)

45%

of residents have access to an adult pedal cycle

"

Belfast Bikes started in 2015 and has expanded steadily. It has stations across the city, providing a low cost, convenient and sustainable way to travel. Nextbike is responsible for the bikes, NSL operate the scheme and it is sponsored by Just Eat. **181,740** annual trips

47 cycle share stations

388 shared cycles 33%

of residents think that Belfast's public cycle scheme is good

of residents think that it's bad



Claire Griffin

I started cycling as part of my commute nearly two years ago. I try to cycle once a week because I often need the car to visit clients for my work.

I cycle to the train station on a folding bike which I got through my employer's Cycle to Work scheme.

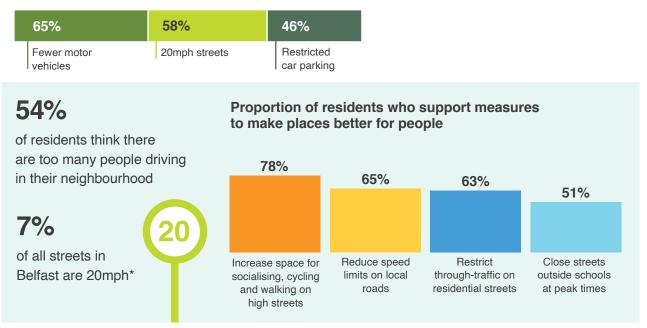
I had previously cycled from Titanic Quarter railway station along the Sydenham Road into the city centre. However, this cycle lane just stops at a busy junction leaving me feeling vulnerable to traffic. A fellow commuter showed me how to access Middlepath Street which has been an improvement to my journey. I had no idea the protected cycle lane was there because there was no signage.

I enjoy cycling to work but find so many cycle lanes are not continuous which does not provide any security to cyclists. I would recommend cycling to other commuters and have seen an increase in the numbers cycling to work in Belfast.



A reported cycle injury occurs once every **300,000 miles** cycled around Belfast. Whilst injuries are relatively rare, sharing the road with motor vehicles is unattractive for most people.

What proportion of residents would find traffic management measures useful to cycle more?



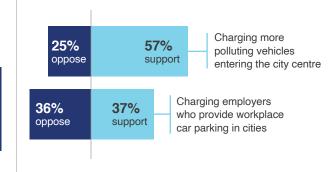
Residents want more investment in public transport, walking and cycling



62% 61% 58% 35%

Public support exists for some policy measures that could be used to help fund walking, cycling and public transport.

Proportion of residents who support and oppose traffic management measures



Investing in provision for cycling is good value for money, and gives greater returns than many alternatives. For example, the £150 million English Cycling Cities Ambition Grant programme secures approximately £5.50 in benefits for every £1 spent. This is typical for cycling schemes in the UK, and compares favourably with most other transport schemes.

Improving cycling

How has Belfast been developing cycling?



Belfast has become a more cycle-friendly city in more ways than one since the Bike Life 2017 report. There have been infrastructure improvements, both on-road in the heart of the city and on our popular traffic-free greenways. The Belfast Bike Share Scheme continues to grow and through a new cycle-friendly initiative employers are recognising the importance of supporting people to cycle to work. Read about some of our highlights:

New improved and widened Comber Greenway

This report found that 80% of Belfast residents would find traffic-free cycle routes useful. The Comber Greenway is a seven-mile long traffic free route, which connects Belfast with the rural town of Comber, and has over 100,000 cycling journeys each year.

The Department for Infrastructure (DfI) recently widened the greenway to four metres along the urban part of the route. This gives all users more room to enjoy the open space and reduces any potential conflict.

A number of other improvements have been made including a new pedestrian and cycle-bridge connecting the Comber Greenway and Dundonald Leisure Park (pictured left). This means residents and visitors have better access to local facilities including the Dundonald Ice Bowl, Omniplex, local eateries and the Caravan Park.

In addition, access to the greenway at the Comber Road has been improved by reducing the gradient for cyclists and three new automatic counters have been installed at strategic points along the greenway to better monitor usage.

New protected cycle lane in city centre: Middlepath Street

With 77% of residents agreeing that we need more segregated cycle routes in the city, the opening in 2018 of the new Middlepath Street cycle route provides exactly that. The 600-metre two-way segregated cycle lane includes traffic signals and a new toucan crossing.

It provides an important link from the Comber Greenway and Connswater Community Greenway to the city centre, via Titanic Quarter railway station. We can now expect many more people to cycle from East Belfast more safely. New signage on the cycle lane and incorporating this with the Comber Greenway National Cycle Network route signage will improve accessibility.

Belfast Bike Share Scheme

One third of Belfast residents feel that the Belfast Bike Share Scheme, launched in 2015, is good. Belfast City Council now provides 47 bike docking stations and around 350 bikes. The Bike Share Scheme offers a cost-effective, sustainable mode of travel, helping to reduce car usage. The scheme also provides easy access around the city for residents, visitors and business users. It helps to improve health and wellbeing by encouraging people to integrate physical activity into their daily routine.

By the end of 2019 there had been over 880,000 journeys since the scheme began.

With 60% of people wanting to see improvements to the bicycle sharing scheme, Belfast City Council is currently reviewing options for the future management, and potential expansion of the scheme.

Cycle-Friendly Employer Accreditation Scheme

A new Cycle-Friendly Employer Accreditation Scheme for the UK was piloted in Belfast, which rewards companies who make their workplaces supportive for cycle commuters.

Organisations must meet a range of measures including communications, training and incentives for staff as well as physical facilities such as secure cycle parking, showers and changing rooms.

Wendy Galbraith of Queen's University said: "I am very pleased that Queen's University Belfast is the first organisation to be awarded a Gold standard in Cycling UK's Cycle-Friendly Employer Accreditation. The University has put significant efforts into creating a more cycle-friendly environment for our staff and students over the past number of years."









Our ambition and plans to make it happen

Belfast has big plans for the city to improve cycling in the future.

Lagan Gateway Project

A new pedestrian and cycle bridge is being built at Stranmillis as part of the Lagan Gateway project. This will open up opportunities for new links between communities in the south Belfast area, connecting Stranmillis to Annadale and Belvoir Forest Park, and act as a focus for economic renewal. This is part of the wider Lagan Corridor programme which will help re-animate and develop the river frontage for both residents and visitors to Belfast due for completion in early 2021.

Belfast Bicycle Network

The Department for Infrastructure (DfI) is continuing to build cycling infrastructure throughout the city centre with a new protected cycle path linking Broadway Roundabout to the Bog Meadows. This will form part of a 2.5km protected route from College Street in the city centre to Bog Meadows and connect to an existing path that leads through the nature reserve to the Falls Road and Falls Park.

Further connections are being developed to add linkages to the Alfred Street / Upper Arthur Street cycle lane. These schemes will provide more space for cycling and continue the process of reducing permeability for motor traffic in the city centre. Following consultation on the draft Belfast Bicycle Network published in 2017, the Department has carried out further studies which will enable a final plan to be published in due course.

Belfast Region City Deal

Belfast Region City Deal is a co-investment of nearly £1 billion from the UK Government, local government, the universities and the private sector, in a range of projects to address barriers to economic growth that will benefit all communities.

Three infrastructure projects are earmarked for funding, two of which have the potential to benefit cycling in Belfast. One is a proposal for a new walking and cycling bridge across the River Lagan connecting Ormeau Park to the city centre which would improve connectivity from the southeast of the city. The other is the development of Belfast Rapid Transit connecting north and south Belfast with 12-hour bus and cycle lanes.

Cycle repair stations

The Department for Infrastructure has recently purchased a number of bike repair stations and is currently considering key points to install them in the city. This edition of Bike Life Belfast is dedicated to the late Colin Henderson, a long-time Sustrans volunteer and cycling instructor.

Notes on terminology and methodology:

The attitudinal survey was conducted from April to July 2019 by independent social research organisation NatCen.

The survey is representative of all Belfast residents, not just those who cycle.

Changes to the survey methodology and questions, and to the model to estimate trips cycled, mean that 2019 figures are not directly comparable with figures reported in 2017. These changes were made to future-proof the methodology.

Rounding has been used throughout the report.

More information and a detailed methodology are available at <u>www.sustrans.org.uk/bike-life</u>

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. <u>www.sustrans.org.uk</u>

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

© Sustrans March 2020 © All photos: Brian Morrison/Sustrans, except p2: Michael Cooper



Printed with 100% renewable energy using an alcohol-free process and vegetable-based inks

Bike Life Belfast has been funded by The Freshfield Foundation and the Department for Infrastructure (DfI). The project is co-ordinated by Sustrans. The Bike Life Belfast Steering Group includes Belfast Strategic Partnership, DfI and the Public Health Agency.



