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Making tracks

Our vision for cycling in Edinburgh



In Edinburgh we spend nearly £1 billion a year on transport. That's over £80 per household per week to move around, in and out of the city. By 2030 we will be spending £1.3 billion. We spend more on

transport than anything else apart from housing. These costs directly affect us all but are disproportionately high for those on low to middle incomes.

The way we move between places is also the second biggest contributor to carbon emissions (after our homes). That is why Edinburgh was the first city in the world, and along with Glasgow still one of only two cities, who plan to be carbon-neutral by 2030.

To effect meaningful and long-lasting change, our communities must have a leading voice in shaping our streets, neighbourhoods and cities. Through Bike Life, Edinburgh residents have told us that prioritising people would make their areas better places to live, work or visit. I wholeheartedly agree.

Through a collaborative and evidence-led approach, and confident political and civic leadership, we can make this happen. Cycling, for example, has real potential to increase access in disadvantaged areas, helping people get to employment, healthcare and everyday services. But only if we make it an attractive and safe option. In Edinburgh, we have a growing reputation for pushing progressive, sustainable transport policy. From committing 10% of our transport budget towards developing cycling infrastructure, to becoming Scotland's first 20mph city. In 2020 we will implement our ambitious plans for a citywide Low Emission Zone.

But while we pride ourselves on this forwardthinking approach, it's not enough to deliver such projects in isolation. Projects like Edinburgh's City Centre Transformation have been established to address the varied transport, place-making and social challenges Edinburgh faces. We took a holistic and collaborative approach, seeking to put people at the very heart of the capital's public realm where transport is seen as an enabler, not a dominant, oppressive force.

Of course, this is about getting the infrastructure right. Through various projects across the city, we will vastly improve ease and access for walking and cycling, creating places for people to relax, interact and enjoy our beautiful environment.

I would like to express my gratitude to everyone who has taken time to input into this assessment, and I look forward to ongoing dialogue with you about how our great city evolves.

Lesley Macinnes Transport and Environment Convener The City of Edinburgh Council

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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 Edinburgh, produced in partnership with the City of Edinburgh Council. The information in this report comes from local cycling data, modelling and an independent survey of 1,435 residents aged 16 or above in Edinburgh.** The survey was conducted by social research organisation NatCen and is representative of Edinburgh residents, not just those who cycle.

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

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



Report summary

Edinburgh

Population*

513,210

Everyone benefits when more people cycle

Every day, cycling in Edinburgh takes up to

22,000 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:

Survey

area

- prevents 251 serious long-term health conditions
 - saves 14,000 tonnes of greenhouse gas emissions
 - Creates **£49.2 million** in economic benefit for individuals and the city

There is significant appetite in Edinburgh for cycling.

Murrayfield •

Stadium

Holyrood

Park

24%

of residents cycle at least once a week

26%

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



14% of disabled people26% of non-disabled people

Proportion of residents who think cycle safety needs improving

71% of women

68% of men

72% of disabled people

70% of non-disabled people

To help residents to cycle more we need better cycling infrastructure

82%

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

74%

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

1 mile

of cycle tracks along roads physically separated from traffic and pedestrians currently exists in Edinburgh

*NOMIS mid-year 2017 population estimate. This is the most recent available for all Bike Life areas.

**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

79% of people from groups AB

34% of people from groups DE

Not having a car can increase the risk of social exclusion, debt and transport poverty.^{††} 76%

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

30% 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.

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

63% 75% 57% think more cycling would think space should be think streets outside local schools should be make their area a better increased for people socialising, cycling place to live and work closed to cars during drop and walking on their off and pick up times 65% local high street 55% think fewer motor vehicles on our streets think speed limits should be reduced on local roads would be useful to help them cycle more

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

62%	Cycling
62%	Public transpo <mark>rt</mark>
60%	Walking
27%	Driving

Liz Thomas, Landscape architect

We need fully segregated on-road routes, so you're not in danger on the road and can cycle with children at the speed you want to go.





Annual trips by purpose*

Leisure: 3,500,000

Edinburgh residents cycle 9 times around the world every day

13%

Shopping,



agree that more cycling would make Edinburgh a better place to live and work

27.1 million trips

made by cycle in Edinburgh in the past year (changes to the survey and model mean that this figure is not directly comparable with the figure reported in 2017).

This adds up to

85.8 million miles

he personal business and social trips: 9,100,000 33% School (child): 760,000 3%

School, college or university (adult): 2,600,000 10%

Work:

41%

11,200,000

= 240,000 miles a day

Cycling keeps Edinburgh moving

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

22,000 return cycle trips

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

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

64 miles

equivalent to the distance from Edinburgh to Dumbarton.

*Leisure trips include adults and children. Education trips are shown separately for 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 Edinburgh prevents 251 serious long-term health conditions each year



diabetes, stroke, breast cancer, colorectal cancer.

Saving the NHS in Edinburgh

£1.6 million per year

equivalent to the cost of 55,000 GP appointments

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

In Edinburgh the physical activity benefits of cycling

prevent 34 early deaths annually

which is valued at **£119.1 million**[†]

More people cycling improves air quality:

30,000 kg of NO_x and 4,000 kg of particulates

 $(\mathrm{PM}_{_{10}} \, \mathrm{and} \, \mathrm{PM}_{_{2.5}})$ saved annually.

In Edinburgh **205 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

14,000 tonnes

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

19,000 people taking flights

from Edinburgh to New York



Transport now accounts for 37% of Scotland's greenhouse gas emissions, of which the main sources are petrol and diesel cars.

Overall Scotland's emissions between 1990 and 2017 fell by 47%; however transport emissions increased by 0.4%.

Scottish Greenhouse Gas Emissions 2017 report. Scottish Government.

Cycling benefits residents and the local economy in Edinburgh

95p net benefit for individuals and society from each mile cycled instead of driven

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. In total, this adds up to:

£47.3 million

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

£49.2 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 Edinburgh do not currently cycle

Whilst many people cycle in Edinburgh, 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.*

24%

92%

of Edinburgh residents

of residents walk at

least once a week

cycle at least once a week

Residents who travel by the following modes five or more days a week in Edinburgh



8% of commuters living in Edinburgh cycle to and from work.[†]

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?



*Bike Life Greater Cambridge 2019. **Travelling as driver or passenger.

⁺This is estimated by growing the 2011 Census figure for the % of journeys to work being made by bicycle to 2019 levels using cycle counter data.

How inclusive is cycling?

In Edinburgh 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 Edinburgh residents in different demographic groups who cycle at least once a week





Amy Hickman, Fife



On my commute, it is very noticeable there are very few women doing the same journey. I know it's a long commute, but most of the cyclists are men. A lot of my friends would love to cycle more.

I think it is the expectation that women need to turn up to meetings looking a certain way, and I think that is why I probably wouldn't cycle to a meeting at the moment, just because of the nature of my work and that I wear clipped-in shoes. That's a huge thing for me to

think about.

Sustrans and Edinburgh City Council have spent a lot of money on infrastructure along the A90, so the cycle path along that road has improved massively in the last four years between Dalmeny and Cramond. They've widened it and raised it so you're not getting lights glared in your eyes. It's made it much more pleasant.



Social inequality and mobility

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 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



21% of the population of Edinburgh are from the socio-economic groups D and E. That's around **110,000** people in total.

Groups D and E are semi-skilled and unskilled manual occupations, homemakers and people not in employment.

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

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

30%

of residents from groups D and E in Edinburgh would like to start cycling

7%

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

In comparison, **30%** of residents from groups A and B cycle at least once a week.

*Socio-economic group is a classification based on occupation maintained by the Market Research Society. **Glasgow Centre for Population Health, 2013. The built environment and health: an evidence review.



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 George Street

Cycling would enable 350,000 people to travel from their home to George Street in less than 25 minutes, including 38,000 people from areas that are among the 20% most deprived in Scotland.





Caroline Barr, St Leonards, Edinburgh

I acquired my disability when I was 13. I used to ride a bike before I fell ill. I used to cycle into the village and to school.

And then I got ill, and then I couldn't ride. I tried to cycle after a bit of recovery but I still couldn't manage it. I got my first trike 10 years ago. I use my trike for shopping, and going to the pub, of course being Scottish, and for work.

The trike has allowed me to be more independent and it allows me to exercise. I've got muscles in my legs that I would never have had if it wasn't for the bike.



I go to the shops about half a mile away on the bike. I wouldn't be able to walk up there. It would wipe me out for the rest of the day. Active travel has made a massive difference to my life.

Barriers

What is stopping Edinburgh residents cycling more?

47%

think Edinburgh 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

51%	31%
Concerned about safety	Poor weather

Safety is the single largest barrier to more people cycling



Which issues do residents think are important for improving cycle safety in Edinburgh?



34%

of residents think cycling safety in Edinburgh is good

18%

think children's cycling safety in Edinburgh is good



*These are defined as routes that are traffic-free and away from roads, cycle tracks along roads physically protected from traffic and pedestrians, and routes along quieter streets where there is less traffic.



There were **1,702** reported cycle thefts in Edinburgh in 2018/19.

For every **140** people who own an adult cycle in Edinburgh, there was 1 reported cycle theft in the past year. There is a public cycle parking space for every **51** people who cycle in Edinburgh.

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

26%	25%	19%	15%	14%	13%	9%
Not confident cycling	Lack of storage or facilities at home or work	Too hilly here	Living too far away from my destination	Children, passengers or too much to carry	Cost of a suitable cycle	Not for people like me



Kirsten Russel

Me or my husband cycle with our three children to school. We live about a mile away and we cycle because we can get there in under 20 minutes and don't have to worry about parking.

The kids are very aware of the climate crisis so, despite some grumbles when it gets really cold and windy, they are in favour of cycling. They enjoy being on their bikes and even our five-year old

is a seasoned rider now. We want the kids to grow up used to an active lifestyle where they will automatically consider cycling an option.

We take a route to school avoiding main roads. A lot of parents I know would like to cycle with their children but the traffic puts them off.

I think the only way to make cycling a realistic alternative for families is segregated cycle lanes. I am delighted to see that this is being proposed in some areas of the city.

We went on holiday to Amsterdam and hired bikes to get around. The infrastructure needed to make cycling safe and easy has been put in place there. It was amazing seeing everyone doing the commute and the school run on bikes. I would love Edinburgh to be like that.



"'''

Solutions

What would help Edinburgh residents to cycle more?

Many Edinburgh residents want to cycle



Residents want improved cycling infrastructure

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

34%	82%	75%	64%	
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	
Edinburgh has 110 miles of traffic-free cycle routes away from the road	1 mile of cycle tracks physically protected from traffic and pedestrians	20 miles of signed cycle routes on quieter streets	There is one cycle parking space at Edinburgh's railway stations for every	
of households	80 passengers			

74%

of residents support building more protected on-road cycle tracks, even when this would mean less room for other road traffic*



*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?

51%	47%	45%	31%	18%
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 a adapted cyc (eg tricycle or recumber cycle)

55%

of residents have access to an adult pedal cycle

Edinburgh Cycle Hire started in 2018 and now has docking stations across the city. Electric bikes will be added in 2020.

115,676 annual trips[†]

82 cycle share stations

500 cycles available to use





Liz Thomas, Landscape architect



I cycle with a purpose – the school drop off and then to work. To me, it's the only way to get around Edinburgh.

For the school run, I cycle with my baby in a bike seat and my 5 year old on his bike. We go on the pavement because there are just too many parked cars on the congested route to school,

and I'm terrified of someone opening a car door into his face. I feel like other pedestrians think we go too fast to be on the pavement, but I don't feel we can use the road.

On my commute I use the roads, but whenever possible I go onto the great off-road network. I love these for the cleaner feeling air and I don't have to be on high alert for traffic.

I think we need fully segregated on-road routes, so you're not in danger on the road and can cycle with children at the speed you want to go.



A reported cycle injury occurs once every **460,000 miles** cycled around Edinburgh. 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 cycling, public transport and walking

Proportion of residents who would like to see more government spending on different types of transport



Public support exists for introducing policy measures that could be used to help fund cycling, walking 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, Transport for London's 'Walking and Cycling Economic Benefits summary pack' tells us that for every £1 spent on walking and cycling, £13 of benefits are returned to the economy.



Improving cycling

How has Edinburgh been developing cycling?



Providing traffic-free, people-friendly streets around the old town on the first Sunday of every month has been Edinburgh's first step towards a more liveable city centre. The past two years has seen the Council deliver a range of work to make the city a better place for people to live and travel around. From joining the Open Streets movement, to launching a hire bike scheme and completing the conversion of the city's roads to a network to 20mph streets, Edinburgh has continued working to overcome citizens' barriers to cycling in the city.

Open Streets and City Centre Transformation

On 5th May 2019, Edinburgh became the first city in the UK to join the Open Streets movement. We are amongst the likes of Paris, Bogota and New York who regularly offer their citizens the space to enjoy their city's most iconic streets traffic-free. Providing traffic-free, people-friendly streets around the old town on the first Sunday of every month has been Edinburgh's first step towards a more liveable city centre.

Since 2017 we have asked Edinburgh's residents, businesses and workers for their opinions on the scale of change they would like to see in the city centre to make it better for people to visit and move around. People clearly told us they want a radical shift in how the city centre's streets provide for its residents and visitors. In response, we have produced 'The City Centre Transformation Strategy': a plan that includes delivering pedestrianisation, pedestrian priority streets and segregated cycleways.

20mph rollout

Since Bike Life 2017, the citywide rollout of 20mph streets has been completed. The findings show that speeds have fallen and residents who were already walking and cycling are now choosing to do doing so more frequently, because they feel safer.

Meadows to George St and West Edinburgh Link

With support from Sustrans Scotland we have been working with the communities in West Edinburgh, the city's centre and south side. Over the past two years, the communities' feedback has informed our first designs for both schemes.

QuietRoutes

We have continued to deliver improvements to the city's QuietRoutes network, with completions and upgrades to paths and lighting including at Lower Granton Road, Davidson Mains Park, Colinton Tunnel and along the Innocent Railway Path. These provide important links for communities into the existing cycle network and key local destinations.

Edinburgh Cycle Hire

One of the barriers to cycling that the people of Edinburgh have highlighted to us over the years is access to and storage of bikes. With the launch of the Edinburgh Cycle Hire by Transport for Edinburgh in 2018, the city has taken a step towards overcoming this issue. The scheme has had 21,487 individual users in the first year, with nearly a fifth of those being regular users.

Street Design Guidance

Recently, the Street Design Guidance factsheets have begun shaping projects, with walking and cycling being prioritised in street renewals schemes through to planning conditions in new developments. Through applying the Street Design guidance when delivering a carriageway renewals scheme on 'The Bridges', we also improved the environment for pedestrians. This included notable footway widening at a particularly busy location outside the Tron Kirk.

Workplace engagement

2019 marks the third year of our workplace journey programme, challenging employees to travel more sustainably for 4–6 weeks to see what an alternative commute could look like for them. 6,039 individuals from 65 employers have been provided with one to one support on travel choices. As a result of our programme, 92% of these employers intend to continue promoting and running travel planning initiatives.







Looking forward, there are many exciting changes to come in Edinburgh. In June 2019 the Council approved a £62 million investment programme in Active Travel through to 2024.

Delivering a network

Construction of Edinburgh's first major city centre segregated cycling route will begin in 2020, connecting the west of the city through to Piccardy Place. With further protected bike lanes to be implemented along the full length of Leith Walk in the next few years as part of the tram scheme, many parts of the city centre will become increasingly accessible to all those on cycles in a way it has never been before.

To connect into the Leith Walk lanes and the west-east link, we will be continuing the design development and community engagement to deliver transformational changes to George St and a cycle route connection to Ocean Terminal. With funding now secured from Transport Scotland through Sustrans' 'Places For Everyone' Programme to do this, we are looking forward to an Edinburgh in which high quality segregated routes will take you from the south of the city via Meadows to George St, through to Leith. Connections through to and around the west of the city are also being developed, with the continued design development of West Edinburgh Link as well as a high-quality cycling and walking connection from the Meadows through to the Union Canal.

Transforming the city centre

Following the initial feedback from the city's residents and business communities, delivery of the Council's City Centre Transformation vision will now get under way. As part of this, we are now undertaking an explanatory study on removing general traffic from the east end of Princes St. This work could set the way for a future extension of the West-East segregated cycling route. Between the city centre transformation and the implementation of Edinburgh's Low Emission Zone in 2021, the drive to provide the citizens of our city with a better and healthier place to live has never been stronger.

Making our city better for people travelling on foot or by cycle goes beyond just delivering improved streets, it's also about tackling the other barriers stopping people travelling actively. We have heard from many residents living in tenements about the challenge of finding a safe place to store a cycle. To this end, we will soon be delivering secure cycle parking in residential streets around the city.

With the vision for the city centre set, 2020 will also see the refresh of Edinburgh's Active Travel Action Plan. This will build on the city centre transformation and lay out the city's wider plans for delivering a more walkable and cycling-friendly city by 2030.

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 Edinburgh 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)

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