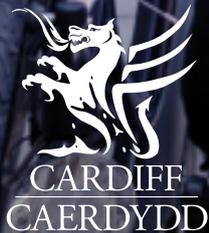


BIKE *life*

2017

Cardiff



Y MUNWCH Â'R MUDIAD

sustrans

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Forward motion

Our vision for cycling in Cardiff



Cardiff is a city with much to offer: a rich heritage, leading universities, major sporting and cultural venues, a flourishing creative industries sector and extensive parkland and waterfront areas. That's why it's one of the best places to live

and one of the fastest-growing cities in the UK.

With growth will come big opportunities for Cardiff, but it will also bring challenges, so getting our transport system right is one of our top priorities.

Bikes already take the equivalent of a 33-mile tailback off Cardiff's roads each day, but our transport system is still dominated by private car journeys.

If we are to accommodate Cardiff's future growth – and ease congestion – then we need to change the way we think about travelling around the city. Our target is for over 50% of journeys to be made by bike, on foot, or by public transport by 2026. I think we need to be even more ambitious than this, and a cycling revolution is required to make it happen.

As well as reducing congestion, more people on bikes also means lower carbon emissions, better air quality, improved residents' health and a boost for the city's economy.

We have been busy setting out our plans for the phased implementation of new cycle superhighways, a new transport interchange and bike hub in Central Square, an upgrade of popular routes and a potential on-street cycle hire scheme.

These plans have been informed by our work with Sustrans on Bike Life Cardiff and mark the beginning of a new era for cycling in the city.

Two of the statistics that stand out from the independent research carried out for Bike Life Cardiff are that 79% of residents would like to see more money spent on cycling and 79% support the building of protected cycle lanes, even when it means less room for other road users.

There is a lot to do and we know that we can't do this alone. This is why we will encourage and welcome the active support of our partners, and most importantly the citizens of Cardiff, as we work to make Cardiff a truly world class cycling city.

Councillor Caro Wild
Cabinet Member for Strategic Planning & Transport
Cardiff Council

Introducing Bike Life

Sustrans, the charity making it easier for people to walk and cycle, is collaborating with seven cities in the UK – Belfast, Birmingham, Bristol, Cardiff, Edinburgh, Greater Manchester and Newcastle – 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 second report from Cardiff following on from the original report published in 2015. The information in this report comes from local cycling data, modelling and a representative survey of over 1,100 residents in Cardiff conducted by ICM*.

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

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

There are substantial benefits to Cardiff from people cycling

- Over 12 million trips** made by bike in Cardiff in the past year
- Saving the NHS £699,000 annually**, equivalent to the average salary of **30 nurses**
- Bicycles take up to **11,008 cars** off Cardiff's roads each day, equal to a **33-mile tailback**
- £28 million total benefit to Cardiff** from people riding bikes for transport and leisure annually

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

- 7%** of Cardiff residents **usually cycle to and from work**
- 23%** of people live within **125 metres of a cycle route**
- 57%** would like to **start riding a bike, or could ride their bike more**
- 34%** think **cycling safety in Cardiff is good**

...and public support to make that happen

- Residents in Cardiff think investing in more street space for cycling, walking and public transport, is the best way to keep the city moving, improve people's health, and reduce air pollution.
- 71%** of residents say Cardiff **would be a better place to live and work** if more people cycled
- 79%** of people would like to see **more money spent** on cycling
- 70%** of people would find **protected roadside cycle lanes very useful** to help them cycle more
- 79%** of residents **support building more protected roadside cycle lanes**, even when this could mean **less space** for other road traffic

* Survey conducted May-July 2017.



Making progress

Provision and levels of cycling in Cardiff

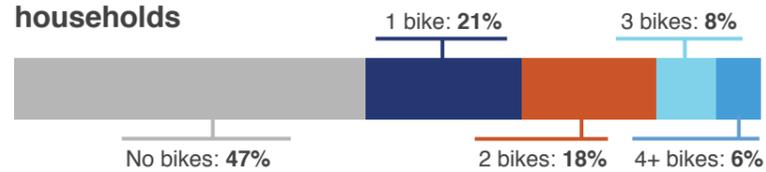
Bike ownership in Cardiff

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

52% in 2015 In Cardiff, just over half of households (53%) have access to at least one bike. Almost three quarters (71%) of households with children have at least one child's bike.

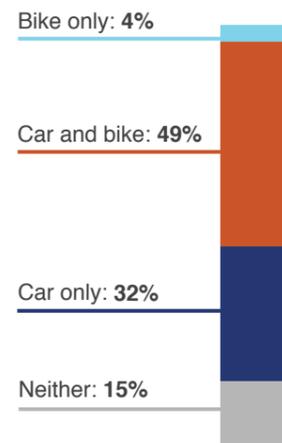
Most households that own a car also own a bike. People use different modes for different journeys.

Adult bike ownership by households



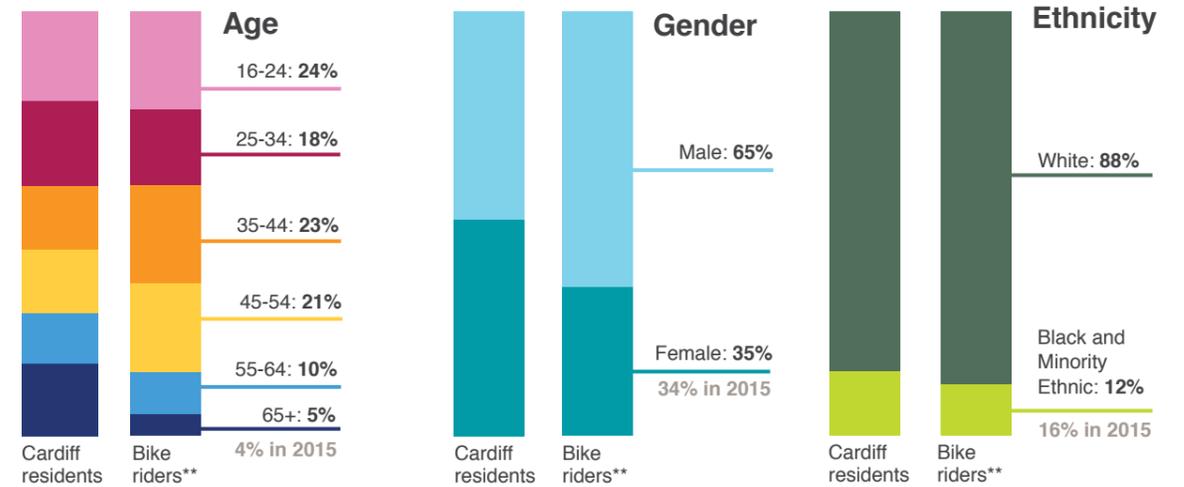
Car and bicycle ownership refers to the percentages of all people living in households that own cars/bikes. Note that census data is normally reported as the percentage of households with given numbers of cars.

Car and adult bike ownership by households



Who is cycling?

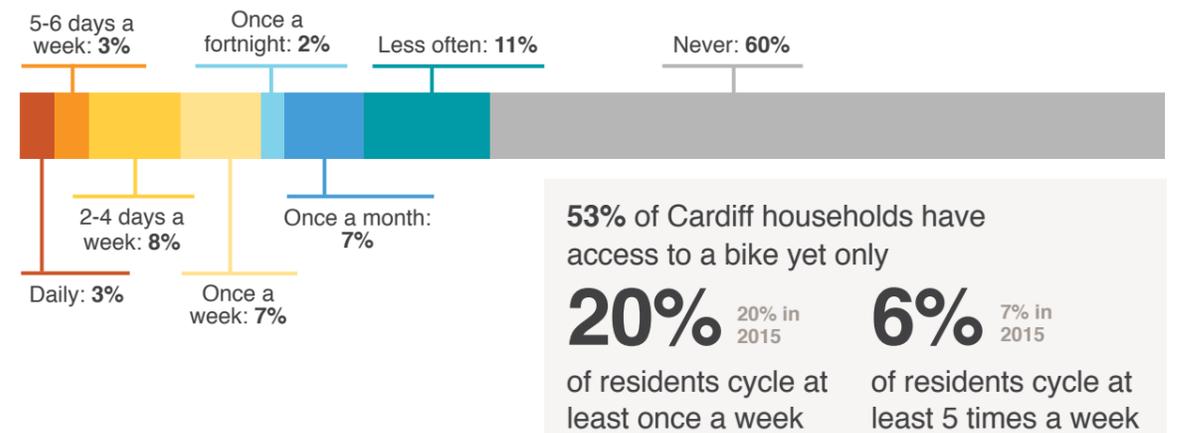
In Cardiff, women and over 65s are under-represented when it comes to riding a bike.



For age and gender, the division of Cardiff residents uses 2015 estimates. For ethnicity, it uses the 2011 census.



How often are people riding a bike?



What's available and who's aware?

from 78 miles in 2015 ↑ **80 miles** of cycle routes including

from 52 miles in 2015 ↑ **54 miles** of routes physically separated from vehicles*

37% in 2015 ↑ **38%** of people are familiar with the traffic-free routes in Cardiff

23% ↑ from 22% in 2015 of people live within 125 metres of a cycle route

4% ↑ from 3% in 2015 of all streets in Cardiff have a 20mph speed limit

1,817 ↑ from 1,797 in 2015 public bike parking spaces, equivalent to 40 bike riders per space

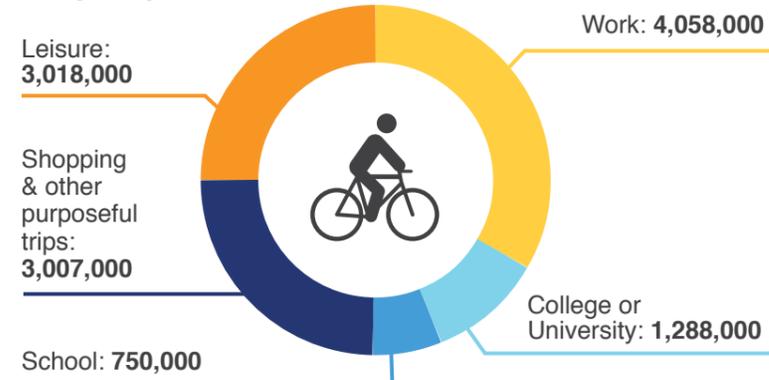
254 railway station parking spaces for bikes, equivalent to one parking space for every 111 passengers per day

KEY
 Actual change: ↑ from xx in 2015 Statistically significant increase: ↑ from xx in 2015 No statistically significant change: xx in 2015 Statistically significant decrease: ↓ from xx in 2015



Where are people cycling?

Number of trips in the past year



50% of Cardiff residents' cycle trips are for work or education

7% of Cardiff residents usually cycle to and from work (8% in 2015)

* Includes protected bike lanes, shared footways and paths away from roads.
 ** Ridden a bike in the past four weeks when the survey was conducted in May – July 2017.

Developing Bike Life

What's happened in Cardiff since 2015

Over the past decade Cardiff has grown significantly and gained a reputation as a great place to live, study, work and visit. Its first class shopping facilities, world class venues and a busy calendar of sporting and cultural events have made the city a major destination for visitors from across the UK and beyond.

We know that a good city to cycle in, is a good city to live in. We also know that as Cardiff continues to expand, the demands on its transport infrastructure will increase. Developing safe and attractive routes for cycling will help to manage pressures on the city's road network by providing people with an alternative to the car, particularly for short, local journeys.

Cardiff Council's new 10-year Cycling Strategy sets out an ambitious plan for the development of a citywide network of cycle routes, linking existing communities and future development sites to the city centre and major employment areas.

At the heart of this strategy is the development of a network of cycle superhighways, fully segregated from other road users. It also sets out plans for the upgrading of existing main routes such as the Taff Trail, which will see major improvements to one well-used section as part of the Greener Grangetown project, delivering the first 'bicycle street' in Wales.



20mph limit, Pontcanna

Following the successful pilot of 20mph limits in Cathays and Roath, expansion to other parts of the city has begun, starting with the recent introduction of 20mph limits in Pontcanna. Reduced vehicle speeds improve conditions for cycling in residential areas and plans are now in place to extend 20mph limits to other parts of the city.

Watkiss Way Cycling Zebra Crossing, Cardiff Bay

Watkiss Way in Cardiff Bay is a new residential development built by Greenbank Partnerships. Thanks to the innovative scheme at Watkiss Way, people on bikes now have a parallel crossing point with pedestrians.

This means that for the first time, bikes have right of way over vehicles when crossing the road. This is part of the route from Pont Y Werin Bridge over the River Ely into this thriving part of Cardiff Bay.



Ely River Bridge, Cowbridge Road West

A new bridge for cyclists and pedestrians was installed in May 2017 on Cowbridge Road West, over the River Ely, linking with a major residential development on the site of a former large paper mill.

Funding has also been secured to design segregated cycling facilities on the Cowbridge Road West corridor between the new bridge and Grand Avenue.

The bridge opens up the opportunity to better connect the suburbs of Ely and Caerau with the city centre.





Unlocking significant health benefits in Cardiff

In Cardiff, the physical activity benefits of cycling

prevent 12 early deaths annually*

valued at

£38 million*

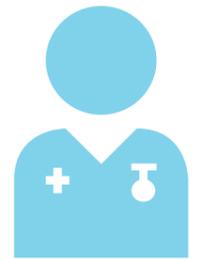
based on what people say they would pay to improve their chances of survival, and calculated using the method set by the World Health Organisation.

Cycling also averts **103** serious long term health conditions annually, saving the NHS in Cardiff

£699,000 per year

equivalent to the average salary of

30 nurses



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

The impact

The health, economic, and environmental benefits to Cardiff



Many people are cycling in Cardiff

13.5 million in 2015

12 million trips

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

39 million miles



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 Cardiff moving.

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



11,008 return cycle trips are made daily in Cardiff by people that could have used a car.

If these cars were all in a traffic jam it would tail back **33 miles**



If these cars were to be parked they would take up the space of **1.7 Victoria Parks (Canton)**.



Benefiting individuals and the local economy

82p per mile

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

£14 million

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

£28 million

annual benefit to Cardiff 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.



More people riding bikes has environmental benefits

5,014 tonnes of greenhouse gas emissions saved annually

equivalent to the carbon footprint of **983 people**.

More people riding bikes improves air quality:

10,239 kg of NOx and **1,128 kg of particulates** saved annually.

In Cardiff **143 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+.

* 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.



Stories from our city

What cycling means to people



John Clark, Cheese Pantry, Cardiff Market

I cycle every day to get to work and sometimes cycle to the other side of Cardiff because it's easier than getting two buses. I use a Brompton - I travel a lot on the train - so it's my main mode of transport in the city.

Cardiff is a total dream for cycling. I moved here from Glasgow in 2007 and couldn't believe how different it was compared to other major cities, partly because in the middle it's lovely and flat but also because of the green networks. You've got these green fingers that run along the three rivers: the Ely, Taff and Rhymney and it's really fantastic, all the cycle networks link up to that.

There could be more secure bike stands as security is a big concern. We could also do with better signposting as well. I think when you get to the city centre it's not immediately obvious if you're a bike user, especially for visitors. Better cycling provision would also be great for anybody looking to travel in a greener and more active way.

I think Cardiff is taking cycling quite seriously. It was already good but hopefully people will see it as a way out of increased congestion and so it should be a positive feature.



Simone Lanfredini, Postdoctoral Researcher at Cardiff University

I'm a post doc researcher studying cancer cells at Cardiff University, but I was born and lived in Turin. In both Turin and Cardiff I always prefer to get to work and hobbies by bike.

In general in Cardiff, drivers are more attentive to people on bikes, compared to Italy, making my cycle pleasant and relatively safe.

I would like to see improvements to the cycle paths heading into the city, and advances in tackling the levels of bike theft in Cardiff.

Better cycling provision would definitely increase the amount I'd ride my bike instead of taking the car, and I believe lots of my colleagues would then start to use the bike more often as well. I think about 30% of them are commuting to work every day by bicycle.



Cerys Furlong, Chief Executive of Chwarae Teg

I used to live in Bristol where cycling was always very popular, we all had bikes as students. When I moved back to Cardiff where I'm originally from, it was natural for us to continue cycling and actually it's such a flat city it's really easy to get around by bike.

I've always cycled with my children on my bike from the time that they were babies.

It's a practical thing for us, it's just a choice that makes our lives easier. It's much quicker to get to and from school, nursery and to work.

I'm often in meetings across different parts of the city, so hopping on and off my bike is much easier than trying to find somewhere to park.

It's never bothered me having a child on the back and I think as long as you're sensible on the road it's perfectly safe and actually they absolutely love it. It's a really good way to get them into cycling, used to being on the road and learning the rules of the road.

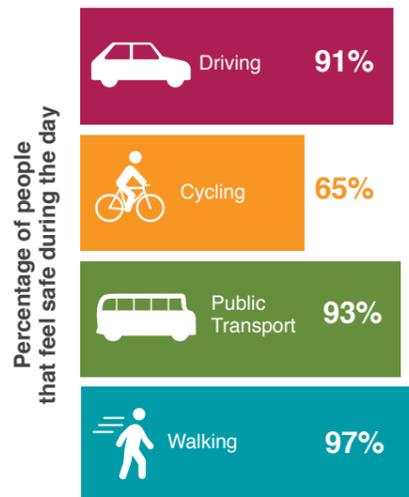
Barriers and potential

What needs to change to make cycling commonplace



Safety and security continue to be a significant concern

Riding a bike feels less safe than other ways of travelling



A cycling injury occurs once every 377,000 miles pedalled around Cardiff.

Whilst over half (55%) of people think Cardiff is a good place to ride a bike overall, when you dig deeper there are clear concerns about safety.

57% in 2015

only 34%



33% in 2015

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

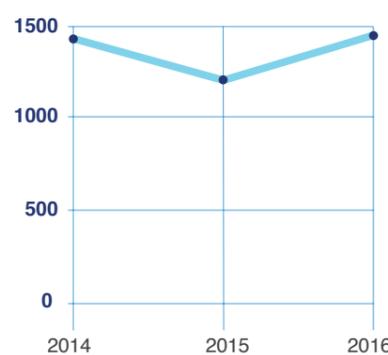
only 23%



25% in 2015

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

Reported bike thefts



There were 1,436 reported bike thefts in Cardiff in 2016.

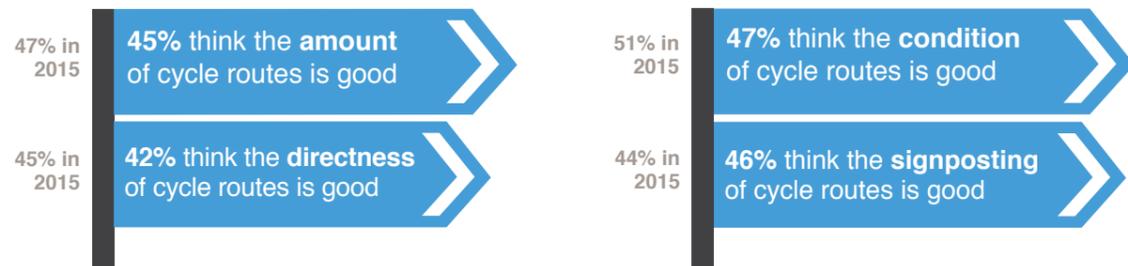
This equates to a 2% chance of a bike rider in Cardiff having their bicycle stolen in the past year.

23% of people think the security of bicycle parking is good.

26% in 2015



How do residents rate Cardiff's cycle routes?



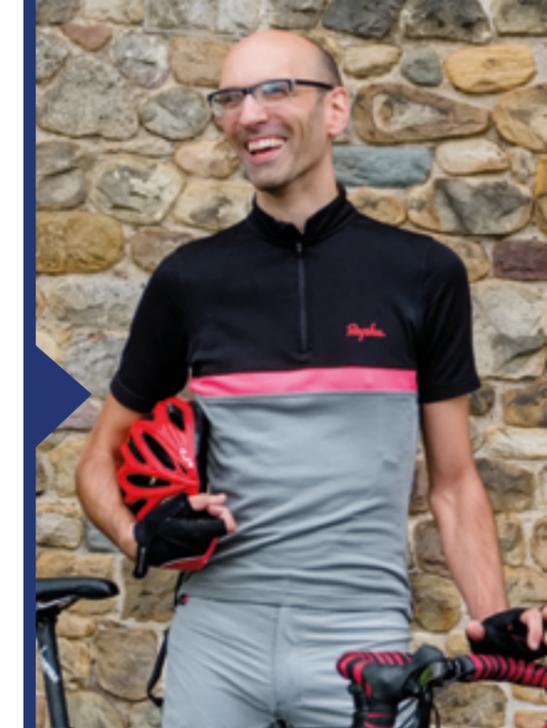
Steve Castle, Sound Engineer

I cycle to work and back every day, come wind, rain, shine and all the others in between.

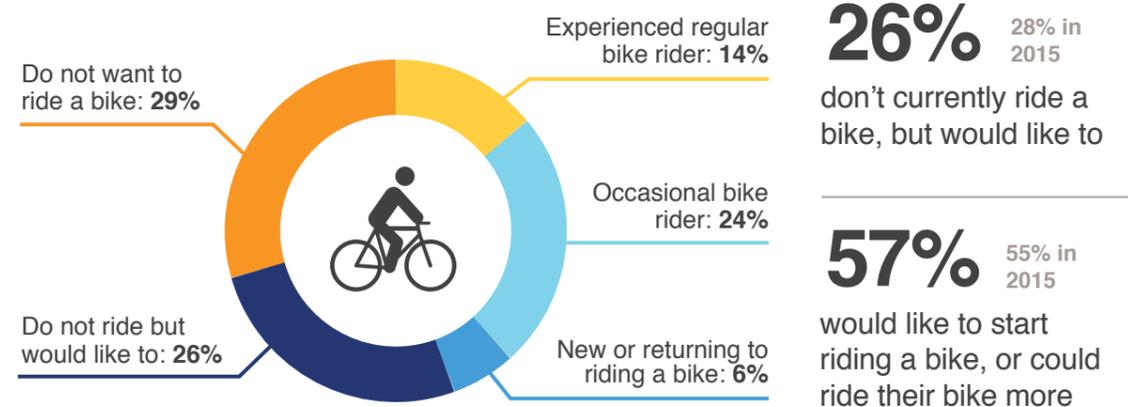
Cycling could be better by being more inclusive - everybody should be able to ride, not just those like me who have become less sensitive to the dangers.

I want to be treated as an equal to other forms of transport on the road. At the same time I am well aware that if it wasn't for the safety net of both the traffic free Cardiff Bay Barrage & Taff Trail I never would have started in the first place.

Maybe in a generation or so, when we have dedicated space for cyclists, we'll look back and wonder why so few chose to cycle. I hope so.



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



26% 28% in 2015

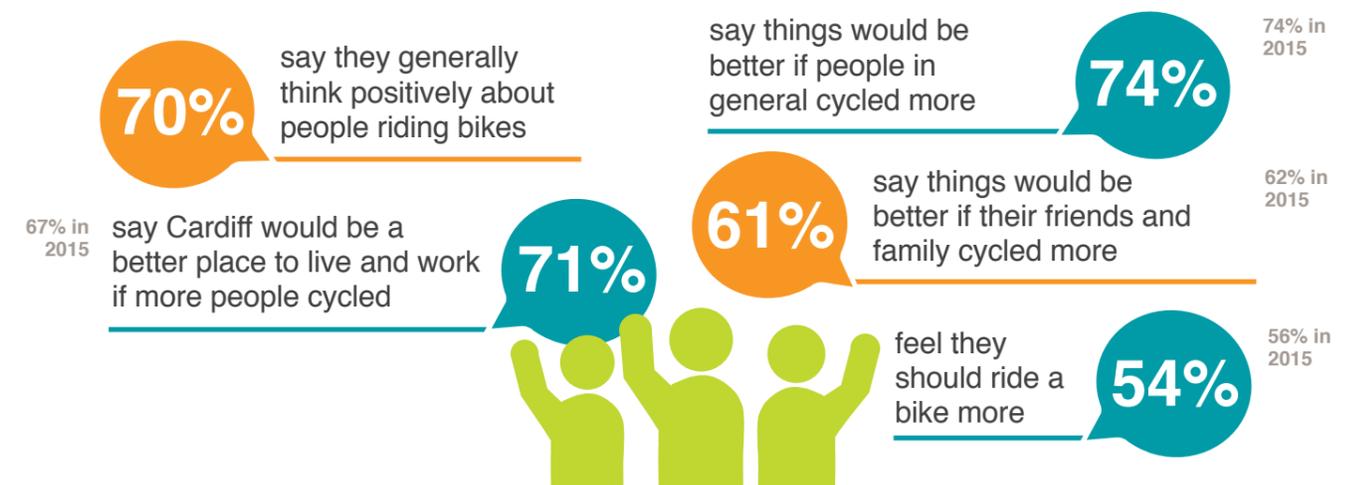
don't currently ride a bike, but would like to

57% 55% in 2015

would like to start riding a bike, or could ride their bike more



Perceptions of cycling are positive



What the public want

Investment, safety and dedicated space



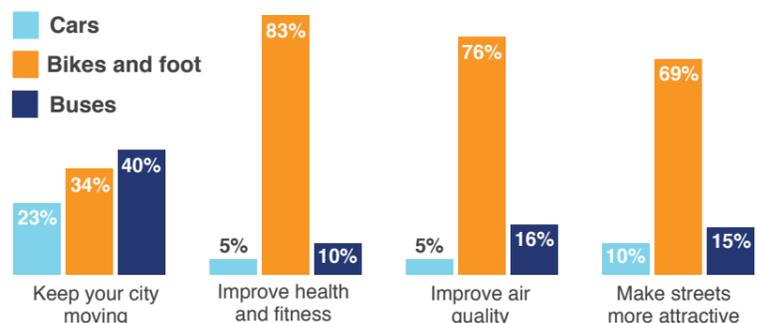
Bike to the future

Our ambition and plans to make it happen



Prioritising investment in cycling and walking

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



79%



of residents would like to see more investment in cycling in Cardiff

78% in 2015

This includes **66%** of those aged over 65, those least likely to ride a bike

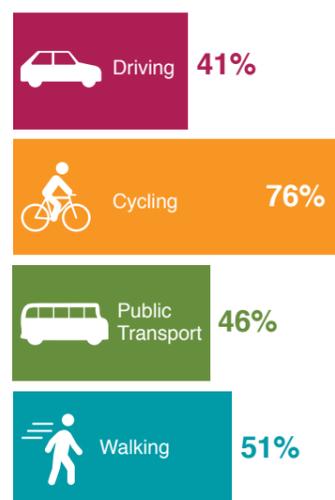
70% in 2015



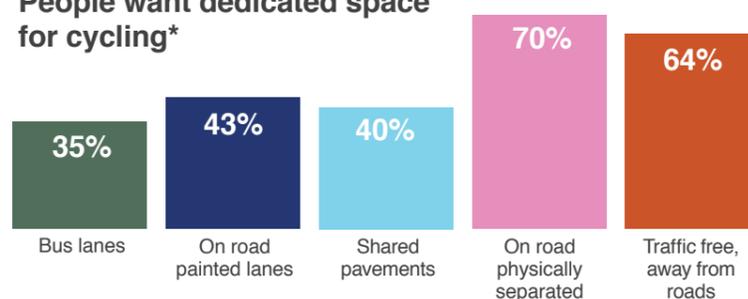
Improved safety and space for cycling

Residents think cycling safety needs to be improved

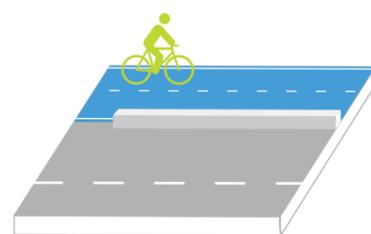
Percentage of people that think safety needs to be improved



People want dedicated space for cycling*



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



79%

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

Cardiff's growing popularity means that the capital's transport system is busier than ever. To ensure Cardiff can continue to thrive it is crucial that growth is well-planned and sustainable.

Bike Life 2017 demonstrates that whilst more people are choosing to travel around Cardiff on two wheels, there are still a number of challenges that need addressing to make sure the city's growth can be accommodated on our transport network, carbon emissions are reduced and air quality improved.

In 2017, 57% of Cardiff residents would like to start riding a bike, or could ride their bike more. This is a significant sector of the population that could switch to two wheels if conditions for cycling are improved. Safety is a major concern, with only 34% of residents thinking cycling safety is good. There is also strong demand for more segregated cycle lanes - 70% of residents would find these very helpful to start cycling or cycle more. 79% support building more segregated cycle lanes even if this means there is less space for other road traffic. Bike Life 2017 has also shown that cycle theft is a problem in Cardiff and only 23% of respondents think the security of cycle parking is good.

In spring 2017 Cardiff Council undertook public consultation on an ambitious new Cycling Strategy and an Integrated Network Map. These documents set out plans to improve the cycling network over the next 15 years and provide the quality of infrastructure needed to double the number of cycle trips in Cardiff by 2026.

To deliver the Cycling Strategy Cardiff Council will:

- Deliver two new cycle superhighways. These continuous routes, segregated from traffic on busy roads, will connect major destinations to existing communities and strategic development sites and serve as an exemplar for all ages and abilities cycling in Cardiff.
- Make improvements to increase the capacity of existing popular cycle routes including the Taff Trail and Bay Trail.
- Increase cycle parking provision, including a Cycle Hub with secure cycle parking for 500 bikes as part of the Central Square redevelopment and additional on street parking in key locations across the city.
- Work with the Police on initiatives to prevent cycle theft.
- Expand 20mph limits to selected residential areas across the city.

As Bike Life demonstrates, the majority of Cardiff's residents think more people riding bikes is a good thing. Better cycling facilities help bring about many positive outcomes for Cardiff, including: better cross-city and commuting travel times, more efficient use of urban space, managing growth and improved public health. These outcomes are underpinned by new legislation, such as the Active Travel (Wales) Act 2013 and the Well-being of Future Generations Act 2015, making cycling a key part of Cardiff's future.

* The equivalent graph in the 2015 report showed 'very useful' and 'fairly useful' responses combined.

Notes on terminology and methodology:

The attitudinal survey was conducted May to July 2017.

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

Survey results have been tested for change between 2015 and 2017. The level of significance has been set at 0.01 but these should be seen to be indicative only, as they have not been corrected for multiple comparisons. Where a survey result is shown as a change from 2015 this was a statistically significant result at this level.

Note that some values published in 2015 have been recalculated using improved methodology in 2017.

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

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) SCO39263 (Scotland)

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