# Cardiff Walking and Cycling Index 2023

Published March 2024

Cardiff City Council

Sustrans

## Foreword

Our vision for walking, wheeling and cycling in Cardiff

In recent years, Cardiff Council has prioritised walking and cycling by investing in active travel infrastructure. These new routes have emerged as vital connections, bolstering the resilience and vitality of our communities.

Disadvantaged communities experience a disproportionately negative impact from road traffic, through road safety concerns and poor air quality, while also facing barriers in accessing affordable public and active transport. Identifying and addressing these disparities remains pivotal in building an equitable and inclusive transport system.

This report presents a detailed analysis of Cardiff’s communities, providing a deeper understanding of active travel participation and the impediments faced by different groups. It marks another important step in creating an active travel network that meets the needs of all Cardiff residents.

Active travel also provides global benefits. Tackling the climate emergency is urgent and re-prioritising our travel habits, especially for shorter distances, is crucial to reducing damaging emissions. We have declared a climate emergency and set out our ambition to be carbon neutral by 2030. 41% of our carbon emissions stem from transport, so transitioning to sustainable transport is crucial. We want to double the number of sustainable trips from 2018-2030 to 76%.

Sustrans Cymru, co-authors of this report, work to improve accessibility to walking, wheeling, and cycling, and the liveability of our towns and cities. Together, we envisage Cardiff standing as an exemplar of interconnectivity, where sustainable transport seamlessly connects and complements our vibrant communities, and where residents’ well-being takes precedence. This latest Walking and Cycling Index provides an up-to-date and insightful snapshot of that shared ambition, detailing the city’s current projects, its residents’ attitudes, and the promising trajectory for the future.

I am grateful to all involved in this active travel journey. To the residents of Cardiff making their everyday travel choices, to all who responded to the survey and shared their stories, to Cardiff Council officers formulating ambitious policies and delivering on the ground, and to Sustrans Cymru for their partnership in delivering this report.

Together, we look forward to a future where more active travel fosters prosperity, equality, and cleaner air for all.

**Councillor Dan De’Ath, Cabinet Member for Transport and Strategic Planning**

## Contents

[The Walking and Cycling Index 5](#_Toc158803771)

[Headlines 7](#_Toc158803772)

[Walking in Cardiff 12](#_Toc158803773)

[Cycling in Cardiff 15](#_Toc158803774)

[Benefits of walking 18](#_Toc158803775)

[Benefits of cycling 21](#_Toc158803776)

[Walking solutions 24](#_Toc158803777)

[Cycling solutions 27](#_Toc158803778)

[Neighbourhood solutions 30](#_Toc158803779)

[Developing Cardiff 33](#_Toc158803780)

[Looking forward 35](#_Toc158803781)

[Notes on methodology: 37](#_Toc158803782)

## The Walking and Cycling Index

The Walking and Cycling Index (formerly Bike Life) is the biggest assessment of walking, wheeling and cycling in urban areas in the UK and Ireland.

It is delivered by Sustrans in collaboration with 23 cities and urban areas. Each city[[1]](#footnote-1) reports on the progress made towards making walking, wheeling and cycling more attractive, everyday ways to travel.

The Walking and Cycling Index reports every two years. This is the fifth report from Cardiff produced in partnership with Cardiff Council. The data in this report comes from 2023 and includes local walking, wheeling and cycling data, modelling and an independent survey of 1,169 residents aged 16 or above in Cardiff. The survey was conducted from March to June 2023. Social research organisation NatCen conducted the survey, which is representative of all residents, not just those who walk, wheel or cycle.

Across this report we have included comparisons to 2021 data where available.

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

More details on all reports can be found at [www.sustrans.org.uk/walking-cycling-index](https://www.sustrans.org.uk/walking-cycling-index). For more data, including 2019 figures where available, see the [Index Data Tool](https://www.sustrans.org.uk/index-data-tool).

Map of the UK and Ireland showing the cities participating in the Walking and Cycling Index: Aberdeen, Belfast, Birmingham, Bristol, Cardiff, Cork Metropolitan Area, Dublin Metropolitan Area, Dundee, Dunfermline, Edinburgh, Galway Metropolitan Area, Glasgow, Greater Cambridge, Greater Manchester, Inverness, Limerick Metropolitan Area, Liverpool City Region, Perth, Southampton City Region, Stirling, Tower Hamlets, Tyneside and Waterford Metropolitan Area.

### Defining wheeling

We recognise that some people who use wheeled mobility aids, for example a wheelchair or a mobility scooter, may not identify with the term walking and may prefer to use the term wheeling. We use the terms walking and wheeling together to ensure we are as inclusive as possible.

## Headlines

Cardiff

Population:**[[2]](#footnote-2)**

**362,221**

### Survey area

Map showing the area covered by the survey with Cardiff Bay, Castell Coch, Cardiff Castle, Roath Park and St. Fagans highlighted. The area is approximately **58** square miles and covers all of Cardiff.

### The impact of the pandemic

The Covid-19 pandemic had a big impact on travel. In 2021 whilst most restrictions had been lifted, many people were taking fewer journeys and working from home.

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

##### Walking or wheeling

**55%** in 2019

**53%** in 2021

**49%** in 2023

##### Driving[[3]](#footnote-3)

**45%** in 2019

**39%** in 2021

**43%** in 2023

##### Public transport

**14%** in 2019

**7%** in 2021

**11%** in 2023

##### Cycling

**8%** in 2019

**7%** in 2021

**6%** in 2023

Participation in walking, wheeling and cycling on a regular basis has decreased since 2021.

**49%** of residents walk or wheel at least five days a week (**53%** in 2021)

**19%** of residents cycle at least once a week (**23%** in 2021)

### Walking, wheeling and cycling participation is not equal

Residents’ travel choices and their perceptions of walking, wheeling and cycling sometimes vary widely between different groups.

#### Proportion of residents who walk or wheel at least five days a week

**36%** of disabled people

**54%** of non-disabled people

#### Proportion of residents who cycle at least once a week[[4]](#footnote-4)

**10%** of women

**29%** of men

### Not all residents feel safe and welcome in their neighbourhood

#### Proportion of residents who think walking or wheeling safety is good[[5]](#footnote-5)

**53%** of socio-economic group DE

**61%** of socio-economic group AB

#### Proportion of residents who think cycling safety is good

**60%** of people aged 16–25

**31%** of people aged 56–65

#### Proportion of residents who feel welcome and comfortable walking, wheeling or spending time on the streets of their neighbourhood

**65%** of people from ethnic minority groups

**70%** of white people

### Everyone benefits when more people walk, wheel and cycle

Every day, walking, wheeling and cycling in Cardiff take up to **92,000** cars off the road[[6]](#footnote-6). Each year in Cardiff these three modes combined:

* Prevent **745** serious long‑term health conditions
* Create **£245.5 million** in economic benefit for individuals and Cardiff
* Save **17,000 tonnes** of greenhouse gas emissions

### Residents want to walk, wheel and cycle more and drive less

**26%** of residents want to drive less, yet **43%** of residents often use a car because no other transport options are available.

#### Percentage of residents who would like to use different types of transport more or less in the future:

##### Walk or wheel

**46%** more

**5%** less

##### Cycle

**45%** more

**4%** less

##### Take public transport

**42%** more

**8%** less

##### Drive

**14%** more

**26%** less

### Residents want more funding for walking, wheeling, cycling and public transport

#### Percentage of residents who would like to see more government spending in their local area:

**53%** on walking and wheeling (**53%** in 2021)

**41%** on cycling (**55%** in 2021)

**76%** on public transport (**69%** in 2021)

**35%** on driving (**28%** in 2021)

### Increased funding would help support more liveable neighbourhoods

#### Among Cardiff residents:

**55%** support, while **29%** oppose, more cycle paths along roads, physically separated from traffic and pedestrians

**56%** agree, while **26%** disagree, that increasing space for people socialising, walking, wheeling and cycling on their local high street would improve their local area

**72%** support, while **12%** oppose, the creation of more 20-minute neighbourhoods[[7]](#footnote-7)

**64%** support, while **15%** oppose, banning vehicles parking on the pavement

**55%** support, while **21%** oppose, the creation of more low‑traffic neighbourhoods[[8]](#footnote-8)

**54%** support, while **24%** oppose, shifting investment from road building schemes to fund walking, wheeling, cycling and public transport

## Walking in Cardiff

Walking and wheeling participation, safety and satisfaction

### Walking and wheeling participation

Overall in Cardiff the number of people walking and wheeling regularly (at least five days a week) has decreased since 2021.

Walking and wheeling are often overlooked in transport. This is despite being an efficient use of space, good for our health and having no environmental impact.

**94%** of all residents walk or wheel (**95%** in 2021)

**49%** of residents walk or wheel at least five days a week (**53%** in 2021)

#### Proportion of residents who walk or wheel at least five days a week

##### Gender[[9]](#footnote-9) and sexuality

**47%** of women (**50%** in 2021)

**51%** of men (**56%** in 2021)

**63%** of LGBTQ+ people

**48%** of non-LGBTQ+ people

##### Ethnicity

**47%** of people from ethnic minority groups (**45%** in 2021)

**49%** of white people (**54%** in 2021)

##### Age

**59%** of people aged 16–25 (**56%** in 2021)

**54%** of people aged 26–35 (**56%** in 2021)

**48%** of people aged 36–45 (**53%** in 2021)

**45%** of people aged 46–55 (**52%** in 2021)

**45%** of people aged 56–65 (**56%** in 2021)

**40%** of people aged 66+ (**46%** in 2021)

##### Disability

**36%** of disabled people (**50%** in 2021)

**54%** of non-disabled people (**55%** in 2021)

##### Socio-economic group[[10]](#footnote-10)

**52%** of AB (**54%** in 2021)

**54%** of C1 (**59%** in 2021)

**40%** of C2 (**36%** in 2021)

**37%** of DE (**47%** in 2021)

### Walking and wheeling safety and satisfaction

**61%** of residents think the level of safety for walking or wheeling is good (**71%** in 2021)

**47%** of residents think the level of safety for children walking or wheeling is good (**56%** in 2021)

**72%** of residents think their local area overall is a good place to walk or wheel (**77%** in 2021)

#### Proportion of residents who think walking or wheeling safety in their local area is good

##### Gender and sexuality

**60%** of women (**69%** in 2021)

**63%** of men (**73%** in 2021)

**60%** of LGBTQ+ people

**63%** of non-LGBTQ+ people

##### Ethnicity

**72%** of people from ethnic minority groups (**65%** in 2021)

**59%** of white people (**72%** in 2021)

##### Age

**69%** of people aged 16–25 (**72%** in 2021)

**60%** of people aged 26–35 (**72%** in 2021)

**62%** of people aged 36–45 (**67%** in 2021)

**56%** of people aged 46–55 (**70%** in 2021)

**55%** of people aged 56–65 (**72%** in 2021)

**64%** of people aged 66+ (**72%** in 2021)

##### Disability

**53%** of disabled people (**61%** in 2021)

**65%** of non-disabled people (**74%** in 2021)

##### Socio-economic group

**61%** of AB (**78%** in 2021)

**66%** of C1 (**67%** in 2021)

**69%** of C2 (**63%** in 2021)

**53%** of DE (**65%** in 2021)

### Quote from Lorraine

I’ve always enjoyed walking, I do it on a regular basis, and I always walk to and from work as I arrive feeling relaxed and focused for the day.

I enjoy looking at people’s gardens and chatting with people, something you can’t do traveling by bike or car.

There’s also the added benefit that a walk takes the same time for every journey, a definite plus compared to other modes of transport.

## Cycling in Cardiff

Cycling participation, safety and satisfaction

### Cycling participation

Overall in Cardiff the number of people cycling has decreased since 2021. Despite a much larger potential for cycling, only **19%** of people cycle regularly.[[11]](#footnote-11)

Cycling participation, however, is not equal. Barriers to cycling can be far more pronounced for some people. Safety, including road safety and personal safety, is the single largest barrier to cycling.[[12]](#footnote-12)

**43%** of all residents cycle (**46%** in 2021)

**19%** of all residents cycle at least once a week (**23%** in 2021)

#### Proportion of residents who cycle at least once a week

##### Gender and sexuality

**10%** of women (**16%** in 2021)

**29%** of men (**30%** in 2021)

**26%** of LGBTQ+ people

**19%** of non-LGBTQ+ people

##### Ethnicity

**23%** of people from ethnic minority groups (**19%** in 2021)

**19%** of white people (**24%** in 2021)

##### Age

**24%** of people aged 16–25 (**31%** in 2021)

**20%** of people aged 26–35 (**22%** in 2021)

**20%** of people aged 36–45 (**30%** in 2021)

**25%** of people aged 46–55 (**23%** in 2021)

**18%** of people aged 56–65 (**22%** in 2021)

**8%** of people aged 66+ (**8%** in 2021)

##### Disability

**16%** of disabled people (**18%** in 2021)

**21%** of non-disabled people (**25%** in 2021)

##### Socio-economic group

**23%** of AB (**23%** in 2021)

**20%** of C1 (**26%** in 2021)

**13%** of C2 (**20%** in 2021)

**11%** of DE (**18%** in 2021)

### Cycling safety and satisfaction

**41%** of all residents think the level of safety for cycling in their local area is good (**39%** in 2021)

**31%** of all residents think the level of safety for children cycling is good (**30%** in 2021)

**47%** of all residents think their local area overall is a good place to cycle (**45%** in 2021)

#### Proportion of residents who think cycling safety in their local area is good

##### Gender and sexuality

**38%** of women (**34%** in 2021)

**43%** of men (**42%** in 2021)

**47%** of LGBTQ+ people

**41%** of non-LGBTQ+ people

##### Ethnicity

**59%** of people from ethnic minority groups (**44%** in 2021)

**36%** of white people (**38%** in 2021)

##### Age

**60%** of people aged 16–25 (**55%** in 2021)

**37%** of people aged 26–35 (**40%** in 2021)

**39%** of people aged 36–45 (**29%** in 2021)

**32%** of people aged 46–55 (**35%** in 2021)

**31%** of people aged 56–65 (**40%** in 2021)

**36%** of people aged 66+ (**30%** in 2021)

##### Disability

**34%** of disabled people (**32%** in 2021)

**43%** of non-disabled people (**42%** in 2021)

##### Socio-economic group

**39%** of AB (**40%** in 2021)

**40%** of C1 (**36%** in 2021)

**46%** of C2 (**38%** in 2021)

**45%** of DE (**44%** in 2021)

### Quote from Salah

Many people claiming asylum who live in Cardiff start off cycling because it’s more affordable and easier than driving a car. It’s really important to maintain that, to encourage people to continue cycling.

Within the Kurdish community here, cycling isn’t popular, but I’ve set up a Sunday afternoon cycling group. It’s a good, but small group.

One thing I really want to do is to get more people into this group and involve women cycling.

It’s just not something Kurdish women are used to, but I want to change that.

## Benefits of walking

Why everyone gains when more people walk or wheel

### Cardiff residents walk or wheel 16 times around the world every day

Compared to 2021, there has been a reduction in walking and wheeling trips both to a destination and for leisure and fitness.

#### Annual walking and wheeling trips by purpose[[13]](#footnote-13)

##### 2023: 134.8 million trips

Destination – adults only (like work, school, shopping): **71,800**,**000** or **53%**

School – children only: **11,500**,**000** or **9%**

Enjoyment or fitness – adults and children (including running): **51,500**,**000** or **38%**

This adds up to **141.2 million** **miles** = **390,000 miles** a day

##### 2021: 151.5 million trips

Destination – adults only (like work, school, shopping): **77,600**,**000** or **51%**

School – children only: **12,100**,**000** or **8%**

Enjoyment or fitness – adults and children (including running): **61,800**,**000** or **41%**

This adds up to **160.7 million** **miles** = **440,000 miles** a day

### Walking and wheeling benefits residents and the local economy

The Walking and Cycling Index uses a model to understand the costs and benefits of driving and walking. For example travel time, vehicle operating costs, health benefits, air quality and taxation.

**46p** is saved[[14]](#footnote-14) for each mile walked or wheeled instead of driven in Cardiff. (**5p** in 2021)

Over a year this adds up to **£16.3 million** from adults with a car in their household walking or wheeling to work, school and other destinations. (**£2 million** in 2021)

The total annual economic benefit from all trips walked and wheeled in Cardiff is **£183.2 million**[[15]](#footnote-15) (**£182.3 million** in 2021)

### Walking and wheeling unlocks health benefits for everyone

Walking in Cardiff prevents **564** serious long-term health conditions each year (**653** in 2021)

##### Cases prevented

Hip fracture: **217**

Dementia: **163**

Depression: **70**

Coronary heart disease: **60**

Other conditions: **54**

‘Other conditions’ includes type 2 diabetes, stroke, breast cancer, colorectal cancer.

Saving the NHS in Cardiff **£7.1 million** per year (**£4.3 million** in 2021), equivalent to the cost of **170,000** GP appointments (**140,000** in 2021)

These figures are based on applying Cardiff data to Sport England MOVES tool which shows the return on investment for health of sport and physical activity.

In Cardiff the physical activity benefits of walking prevent **172** early deaths annually (**175** in 2021) which is valued at **£623 million**[[16]](#footnote-16) (**£577 million** in 2021)

Please note wheelchair or mobility scooter trips are modelled as walking trips for the purposes of the MOVES and HEAT models.

People walking and wheeling more instead of driving improves air quality, saving annually:

**26,000 kg** of NOx (**33,000 kg** in 2021)

and

**3,600 kg** of particulates (PM**10** and PM**2.5**) (**4,600 kg** in 2021)

**42%** of residents agree the air is clean in their local area (**45%** in 2021)

### Walking and wheeling in Cardiff helps mitigate our climate crisis

**9,600 tonnes** of greenhouse gas emissions (carbon dioxide, methane and nitrous oxide) saved annually by walking or wheeling instead of driving (**11,000 tonnes** in 2021), equivalent to the carbon footprint of **24,000** people taking flights from Cardiff to Tenerife (**26,000** people in 2021)

In 2021 transport accounted for **15%** of Wales’ greenhouse gas emissions, of which the main sources are the use of petrol and diesel in road transport.

Stats Wales, Greenhouse Gases by year.

### Walking and wheeling keeps Cardiff moving

Studies show walking or cycling frees up road space in comparison to driving.[[17]](#footnote-17) This helps to keep Cardiff moving for all road users.

**77,000** return walking and wheeling trips are made daily in Cardiff by people that could have used a car. (**86,000** in 2021)

If these cars were all in a traffic jam it would tail back **231 miles** equivalent to the distance from Cardiff to Dover. (**258 miles** in 2021)

## Benefits of cycling

Why everyone gains when more people cycle

### Cardiff residents cycle 7 times around the world every day

Compared to 2021 there has been an increase in cycling trips of all kinds.

#### Annual cycling trips by purpose in Cardiff[[18]](#footnote-18)

##### 2023: 17.5 million trips

Work: **6,100**,**000** or **35%**

School, college or university (adults): **2,100**,**000** or **12%**

School (children): **830,000** or **5%**

Shopping, personal business and social trips: **5,300**,**000** or **30%**

Leisure: **3,200**,**000** or **18%**

This adds up to **61.3 million** **miles** = **170,000 miles** a day

##### 2021: 15.5 million trips

Work: **5,300**,**000** or **34%**

School, college or university (adults): **1,600**,**000** or **10%**

School (children): **750,000** or **5%**

Shopping, personal business and social trips: **5,000**,**000** or **32%**

Leisure: **2,900**,**000** or **19%**

This adds up to **50.7 million** **miles** = **140,000 miles** a day

### Cycling benefits residents and the local economy

The Walking and Cycling Index uses a model to understand the costs and benefits of driving and cycling. For example travel time, vehicle operating costs, health benefits, air quality and taxation.

**£1.40** is saved for each mile cycled instead of driven in Cardiff. (**94p** in 2021)

Over a year this adds up to **£36.1 million** from adults with a car in their household cycling to work, school and other destinations. (**£21.1 million** in 2021)

The total annual economic benefit from all trips cycled in Cardiff is **£62.3 million**[[19]](#footnote-19) (**£38.8 million** in 2021)

### Cycling unlocks health benefits for everyone

Cycling in Cardiff prevents **181** serious long-term health conditions each year (**151** in 2021)

##### Cases prevented

Hip fracture: **59**

Dementia: **46**

Depression: **32**

Coronary heart disease: **22**

Other conditions: **22**

‘Other conditions’ includes type 2 diabetes, stroke, breast cancer, colorectal cancer.

Saving the NHS in Cardiff **£2.4 million** per year (**£1 million** in 2021), equivalent to the cost of **59,000** GP appointments (**33,000** in 2021)

These figures are based on applying Cardiff data to Sport England MOVES tool which shows the return on investment for health of sport and physical activity.

In Cardiff the physical activity benefits of cycling prevent **23** early deaths annually (**17** in 2021) which is valued at **£84.9 million**[[20]](#footnote-20) (**£57 million** in 2021)

People cycling more instead of driving improves air quality, saving annually:

**14,000 kg** of NOx (**13,000 kg** in 2021)

and

**2,000 kg** of particulates (PM10 and PM2.5) (**1,800 kg** in 2021)

**42%** of residents agree the air is clean in their local area (**45%** in 2021)

### Cycling in Cardiff helps mitigate our climate crisis

**7,100 tonnes** of greenhouse gas emissions (carbon dioxide, methane and nitrous oxide) saved annually by cycling instead of driving (**6,200 tonnes** in 2021), equivalent to the carbon footprint of **17,000** people taking flights from Cardiff to Tenerife (**15,000** people in 2021)

In 2021 transport accounted for **15%** of Wales’ greenhouse gas emissions, of which the main sources are the use of petrol and diesel in road transport.

Stats Wales, Greenhouse Gases by year.

### Cycling keeps Cardiff moving

Studies show walking or cycling frees up road space in comparison to driving.[[21]](#footnote-21) This helps to keep Cardiff moving for all road users.

**15,000** return cycling trips are made daily in Cardiff by people that could have used a car. (**13,000** in 2021)

If these cars were all in a traffic jam it would tail back **44 miles** equivalent to the distance from Cardiff to Swansea. (**38 miles** in 2021)

## Walking solutions

What would help make walking and wheeling easier?

### Residents want more services and amenities within walking and wheeling distance

Ideally, walking or wheeling should be the most attractive option for short journeys. An area can support this by ensuring many of the things people need are found near to where people live. The environment should be safe, comfortable and welcoming.

20-minute neighbourhoods are places where you can walk from your home to many of the things you need on a regular basis. Based on a 20-minute return journey this is around 480 metres each way for the majority of people.[[22]](#footnote-22)

**64%** of Cardiff households are in neighbourhoods of more than 40 homes per hectare (**64%** in 2021). These are or can become 20-minute neighbourhoods.

These higher-density neighbourhoods with more people can sustain local businesses and public transport routes.[[23]](#footnote-23)

**50%** agree they can easily get to many places they need to visit without having to drive (**60%** in 2021)

#### What percentage of residents would find more local amenities and services useful to help them walk or wheel more?

**80%** More shops and everyday services, such as banks and post offices, close to your home (**79%** in 2021)

**74%** More government services, such as doctors surgeries and schools, close to your home (**70%** in 2021)

**80%** More parks or green spaces close to your home (**83%** in 2021)

**79%** More things to see and do close to your home, like cafés or entertainment venues (**81%** in 2021)

#### Proportion of households within a 400m radius of the following amenities

This is modelled as a straight-line distance, as opposed to the actual walking distance based on street layout which is likely to be longer (approximately equivalent to 480m).

Food shop **64%**

Park or space for recreation **92%**

Doctors surgery **34%**

Primary school **54%**

Post Office **35%**

A mix of cultural and leisure venues[[24]](#footnote-24) **74%**

Railway station (within 800m) **37%**

Bus stop **99%**

### Residents want better streets

There are many ways to make our streets and neighbourhoods safe, welcoming and comfortable for everyone to walk or wheel in.

#### What percentage of residents think that these changes would help them walk or wheel more?

**65%** Wider pavements (**68%** in 2021)

**70%** More frequent road crossings, with reduced wait times (**68%** in 2021)

**73%** Nicer places along streets to stop and rest, like more benches, trees and shelters (**79%** in 2021)

**72%** Better pavement accessibility, like level surfaces, dropped kerbs at crossing points (**71%** in 2021)

**68%** Fewer cars parked on the pavement (**69%** in 2021)

**70%** Less fear of crime or antisocial behaviour in their area (**68%** in 2021)

#### In Cardiff:

**43%** of A and B roads have a pavement width greater than 3m if unobstructed[[25]](#footnote-25)

**64%** of C and unclassified roads have a pavement width greater than 2m if unobstructed

**80%** of residents agree more measures to reduce crime and antisocial behaviour on the street or in public spaces would improve their local area (**79%** in 2021)

### Quote from Heewr

After I had an accident and had a problem with my leg, I recognised that walking when I was ill was difficult between places, especially bus stops.

Cardiff has a lot of narrow streets, with a lot of stressed drivers, because people are frustrated at how busy it is in the city centre and other parts of town.

There should be less cars and more opportunities for people to rest while they walk.

To see more trees around different parts of the city would help people want to walk more, too. Without trees and green spaces, places look empty. People feel more relaxed in nature. Anywhere you want to attract people for walking, you should have trees, parks, and green spaces.

## Cycling solutions

What would make cycling better?

### Many Cardiff residents want to cycle

#### How do residents see themselves when it comes to cycling?

Regularly cycle: **13%** (**14%** in 2021)

Occasionally cycle: **19%** (**21%** in 2021)

New or returning to cycling: **6%** (**5%** in 2021)

Do not cycle but would like to: **26%** (**28%** in 2021)

Do not cycle and do not want to: **36%** (**31%** in 2021)

#### What proportion of residents said they ‘do not cycle but would like to’?

**30%** of women (**31%** in 2021)

**39%** of people from ethnic minority groups (**48%** in 2021)

**24%** of disabled people (**30%** in 2021)

### Residents want improved cycling infrastructure

#### What percentage of residents would be helped to cycle more by better facilities?

**70%** More traffic‑free cycle paths away from roads, like through parks or along waterways (**75%** in 2021)

**62%** More cycle paths along roads that are physically separated from traffic and pedestrians (**72%** in 2021)

**61%** More signposted local cycle routes along quieter streets (**73%** in 2021)

**69%** Better links with public transport, like secure cycle parking at train stations (**69%** in 2021)

There are **290** cycle parking spaces across all **20** railway stations (**290** in 2021)

#### Cardiff has:[[26]](#footnote-26)

**37 miles** of traffic‑free cycle paths away from the road (**37 miles** in 2021)

**7 miles** of cycle paths physically separated from traffic and pedestrians (**4 miles** in 2021)

**1** **mile** of signposted routes along quieter streets (**1** **mile** in 2021)

**16%** of households within 125m of these routes (**13%** in 2021)

**55%** of residents support building more cycle paths physically separated from traffic and pedestrians, even when this would mean less room for other road traffic (**67%** in 2021)

### Residents want more support to cycle

#### What percentage of residents think that these kinds of support would help them cycle more?

**39%** Cycling training courses and organised social rides (**41%** in 2021)

**47%** Access or improvements to a city cycle hire scheme (**56%** in 2021)

**53%** Access to secure cycle storage at or near home (**59%** in 2021)

**49%** Access to a bicycle (**58%** in 2021)

**40%** Access to an electric cycle (**44%** in 2021)

**33%** Access to a cargo cycle with space to carry children or shopping (**37%** in 2021)

**22%** Access to an adapted cycle, like a tricycle or handcycle (**25%** in 2021)

#### Cardiff cycle hire scheme[[27]](#footnote-27)

**1,030** hire cycles

**1,030** in 2021

**99** cycle hire stations (**101** in 2021)

**417,580** annual trips

**358,327** in 2021

#### Reported cycle thefts

There were **1,286** reported cycle thefts in Cardiff in 2022/**23**. (**1,167** in 2021/22)

For every **131** people who own an adult cycle in Cardiff, there was **1** reported cycle theft in the past year.

There is a public cycle parking space for every **55** people who cycle in Cardiff. (**61** in 2021)

#### Proportions of residents with access to an adult cycle

**57%** of residents (**59%** in 2021)

**38%** of socio-economic group DE (**45%** in 2021)

**67%** of socio-economic group AB (**61%** in 2021)

**55%** of residents support financial discounts for people on low incomes or not in employment to help them buy a cycle

**38%** of households are within 800m of a cycle shop[[28]](#footnote-28)

### Quote from Tom, Founder of the Bike Lock café

If you can’t make Cardiff a cycling city, then where can you?

It’s got a small footprint, it’s flat, it’s got the river and the Taff Trail running through it, and it’s now having an increase in the number of cycle lanes.

We need hundreds of good bike spaces at the train station, we need far better coverage of cycle lanes, we need safer streets.

We need all those things, but we can also be part of the solution. What we’re trying to do here at The Bike Lock is help people overcome some of those reasons why they might not cycle so much.

We’re taking away those reasons why people feel like they can’t travel by bike or walk.

## Neighbourhood solutions

What would help make neighbourhoods better?

### All residents should feel welcome in their neighbourhood

#### Proportion of residents that feel welcome and comfortable walking, wheeling or spending time on the streets of their neighbourhood

**69%** of residents (**69%** in 2021)

**65%** of people from ethnic minority groups (**60%** in 2021)

**70%** of white people (**71%** in 2021)

**68%** of women (**68%** in 2021)

**71%** of men (**70%** in 2021)

**56%** of LGBTQ+ people

**73%** of non-LGBTQ+ people

**64%** of disabled people (**61%** in 2021)

**71%** of non-disabled people (**73%** in 2021)

**58%** of socio-economic group DE (**59%** in 2021)

**74%** of socio-economic group AB (**80%** in 2021)

### The dominance of motor vehicles can discourage walking, wheeling and cycling

Only **30%** of residents think that their streets are not dominated by moving or parked motor vehicles. (**26%** in 2021)

#### Residents would find fewer motor vehicles on their streets useful to:

**62%** Walk or wheel more (**67%** in 2021)

**57%** Cycle more (**65%** in 2021)

Unclassified roads are not designed to carry through-traffic, but in Cardiff **23%** of their total length has nothing to prevent it (**23%** in 2021). This can result in rat-running.[[29]](#footnote-29)

**49%** agree that restricting through-traffic on local residential streets would make their area a better place. (**51%** in 2021)

**46%** of Cardiff’s streets already had 20mph speed limits before the default changed to 20mph in September 2023.[[30]](#footnote-30) (**28%** in 2021)

#### Residents would find more streets with 20mph speed limits useful to:

**44%** Walk or wheel more (**53%** in 2021)

**45%** Cycle more (**51%** in 2021)

### Residents want local streets to be better spaces for people to spend time in

**56%** agree increasing space for people socialising, walking, wheeling and cycling on their local high street would improve their local area (**62%** in 2021)

**50%** agree they regularly chat to their neighbours, more than just to say hello (**50%** in 2021)

**55%** support low‑traffic neighbourhoods (**65%** in 2021)

### Quote from Asha

There are pretty good pathways and crossing networks for walkers. I wish that walkers had more priority at pedestrian crossings - some take ages to turn red after pressing the button, often leaving pedestrians waiting excessively to cross safely. Lights are not smart either, so pedestrians are often left waiting for lights to turn, even when roads are clear.

I’ve found that cycling in Cardiff and surrounding areas can leave me feeling isolated on some sections of the roads.

I have had quite a bit of abuse from cars or vans, with drivers shouting at me and beeping their horns.

It makes me think “Yeah, this isn’t the safest route I could’ve taken, which isn’t right.” The amount of potholes and rubbish on the streets is excessive, which causes hazards and punctures.

### Neighbourhoods must be designed with children in mind

Neighbourhoods should be places for children to thrive. Increasing independence, providing space to play and socialise, and improving the journey to school are all important.

If we design neighbourhoods with children in mind they will then work better for everyone else too.

**11** **years old** average age when people living with children would let them walk, wheel or cycle independently in their neighbourhood. (**12 years old** in 2021)

**80%** of seven-year-olds in Germany are allowed to go alone to places within walking distance, other than school.[[31]](#footnote-31)

**49%** of residents agree there is space for children to socialise and play. (**54%** in 2021)

**54%** of households are within 400m of a children’s playground.

#### Among Cardiff residents:

**46%** agree, while **30%** disagree, closing streets outside local schools to cars during drop-off and pick-up times would improve their local area (**46%** agreed in 2021, while **22%** disagreed in 2021)

These are known as ‘School Streets’.

**15** **schools** in Cardiff have School Streets schemes[[32]](#footnote-32) (**5** schemes in 2021)

## Developing Cardiff

Recent walking, wheeling, cycling and neighbourhood changes

Since the previous Walking and Cycling Index report, Cardiff has emerged from the Covid-19 pandemic with more active travel infrastructure, a greater emphasis on placemaking in its city centre and districts, and strengthened policies encouraging behaviour change.

Many interventions focus on schools. Every school in Cardiff has an updated active travel plan. The number of school streets is increasing, with 15 at the end of 2022/23 and more planned for 2023/24. There are safer routes to schools, with new zebra and puffin crossings, widened pavements, carriageway re-alignment, one-way streets, planters and street art. Many schools have new bicycle and scooter fleets, secure bicycle storage, and several bike buses have now been established.

The segregated cycleway network has grown, partly fuelled by “pop-up” cycleways. There is a cross-city route from Canton to Adamsdown, a southern route on East Tyndall Street, and a district centre pop-up on Wellfield Road. These pop-ups have design features including road space re-allocation, low level traffic lights at junctions with cycle-only signal phases, bus islands, light segregation using wands and visual differentiation using blue surfacing.

A 20mph default speed limit on restricted roads was piloted in the north of the city, before Wales’ nationwide change on September 17th 2023. The vast majority of urban roads in Cardiff now have a 20mph limit. “Simple” zebra crossings have been piloted in three locations. They are lower cost than a standard crossing, with white lines only, and emphasize pedestrians’ priority when crossing side roads. They are being evaluated, and if successful will be introduced elsewhere in Cardiff.

### Re-designed urban corridors

The continuation of Cycleway 1 along Cathays Terrace and Allensbank Road, completing a 1.8 mile route from the city centre to Wales’ largest hospital, has been the city’s flagship new cycling scheme. These roads have been re-designed to feature a two-way segregated cycle track, closures of side roads with modal filters, continuous/blended footway treatments on side roads, sustainable drainage, and new bus stops. The scheme involved the removal of parking spaces on one side of the road, facilitated by an area-wide re-designed parking system.

### Urban Regeneration

The city centre has been re-imagined, notably on the Wood Street/Tudor Street corridor heading west from the central train station, with cycle tracks segregated from motor vehicles, widened pavements, attractive paving, sustainable drainage with shrubs, tree planting, bee-friendly bus stops, a bus gate, new on-street cycle stands and toucan crossings. A trial of a pelican crossing over a cycle way to a floating bus stop has been included. Work around the city centre and other district centres is continuing.

### Continuous/blended footways

Cardiff has implemented continuous/blended footways at several locations across the city, including on Cowbridge Road East and Crwys Road. Continuing a footway across a side street junction without a change makes it easier and safer for pedestrians to cross. It reduces the speed of turning vehicles, shortens the length of the crossing and provides a level route. It provides a visual reminder to drivers that they should give way to pedestrians crossing over side roads.

## Looking forward

Better streets and places for everyone

After the Covid-19 pandemic and the periods of lockdown, working and travelling patterns have changed. Cardiff has seen an increase in home and hybrid working, and a consequent decrease in regular travel on all modes of transport since 2019. For those not at home, it remains the case that walking is the most common regular mode of travel, with half of all residents walking five or more days a week. One in five residents also cycle at least once a week. Alongside other interventions, increased levels of active travel are also hoped for from the now completed roll-out of default 20mph limits, as slower speeds on residential streets become normal. The data shows that residents do want to walk, wheel and cycle more, and do want to drive less.

The Welsh Government and Cardiff Council’s priorities have aligned to support this demand for active travel. Funding available for active travel has increased, with the Active Travel Fund now worth more than £22 per person per year in Wales. Cardiff has also improved its active travel infrastructure through other sources of funding, for example regeneration funding, planning contributions, and funding related to the COVID-19 pandemic. At the same time, national and regional reports such as the Roads Review and the South East Wales Transport Commission have signalled a greater focus on sustainable travel on regional transport corridors and the trunk road network. Looking forward, the Council has made an in-principle decision to introduce a Road User Payment, pledging to ringfence proceeds for sustainable travel. Overall, the policy and funding background to support more residents to choose active travel appears promising for the coming years.

Cardiff will continue to focus on schools, recognising the crucial role they play in encouraging active travel from an early age, as well as the need to tackle the considerable problems of traffic levels created by the school run. Support will continue to implement school travel plans, using interventions such as school streets, cycle training, provision of cycle and scooter fleets, on-site cycle storage, and improvements on key school routes.

Continued development of the strategic cycle network will form a key part of future active travel investment. Preparatory work has been undertaken on the network to the west into Canton, to the east into Adamsdown, to the north-west into Llandaff and north-east around Roath Park. Following the example of the Cathays Terrace scheme, these schemes will largely include segregated cycle ways and junction upgrades including new pedestrian priority and crossings.

Funding is secured and work is in development for the city centre. The Castle Street corridor will be re-designed, making the current pop-up cycle lane permanent, and joining it via Westgate Street to the new cycle infrastructure to the south on Wood Street. At the same time, Cardiff is working with partners in public transport to improve walking and cycling. This includes providing segregated cycle tracks on Callaghan Square, Herbert St, Bute Street and St Mary Street alongside the Metro and improving pedestrian connectivity and providing a cycle hub as part of renovation to Central Station.

The on-street cycle hire scheme was the most successful in the UK in terms of usage but was closed due to vandalism. Clearly there is demand for the service and Cardiff Council are working on plans for a new and more resilient scheme in the near future.

### Quote from Sita

I don’t drive, so I walk and cycle a lot. I would feel stuck if I didn’t have safe infrastructure to travel along and cross busy roads on foot or bike.

Thanks to the cycle lanes I can get quickly to many places in Cardiff where I need to get to. There are still areas around Cardiff where there aren’t designated cycle lanes, and this makes me feel less safe and less eager to cycle.

Sometimes I ask my partner to drive us to harder to reach places.

The better the infrastructure, the more encouraged I’d be to cycle everywhere, and to encourage others to as well.

I would like to upgrade my bike, and if there was more support to cycle, such as better workplace schemes, this would be massively helpful to ensure that cycling remains my go-to means of travel.

## Notes on methodology:

The attitudinal survey was conducted from March to June 2023 by independent social research organisation NatCen.

The survey is representative of all Cardiff residents, not just those who walk, wheel or cycle.

2021 survey data was collected from June to August 2021, also by NatCen, following the same methodology.

All other data is sourced from our city partners, national data sets or modelled and calculated by Sustrans.

Trip estimates use a model developed by Sustrans. When comparing to other travel surveys, some variation may exist in the proportion of journeys travelled by journey purpose.

Rounding has been used throughout the report. In many cases we have rounded to the nearest whole number. Rounding is avoided where this may cause confusion, for example with modelled estimates shown in the summary and benefits sections.

More information and a detailed methodology are available at [www.sustrans.org.uk/walking-cycling-index](https://www.sustrans.org.uk/walking-cycling-index)

Sustrans makes it easier for everyone to walk, wheel and cycle.

We work for and with communities, helping them come to life by walking, wheeling and cycling to create healthier places and happier lives for everyone.

Join us on our journey. [www.sustrans.org.uk](https://www.sustrans.org.uk/)

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

© Sustrans March 2024

Thanks to Open Route Service for their support with their isochrone plugin in QGIS.

Walking and Cycling Index Cardiff has been funded and supported by The Freshfield Foundation and Cardiff Council. The project is co-ordinated by Sustrans.

1. City is used as a shorthand for Walking and Cycling Index cities, city regions, metropolitan areas and boroughs. [↑](#footnote-ref-1)
2. ONS Census 2021. This is the most recent available for Cardiff. [↑](#footnote-ref-2)
3. Travelling as driver or passenger of car, van or motorcycle. In 2019, questions did not include traveling by motorcycle. [↑](#footnote-ref-3)
4. The sample size for respondents who identified their gender ‘in another way’ was too low to be statistically significant and therefore is not presented here. [↑](#footnote-ref-4)
5. 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, homemakers and people not in employment. [↑](#footnote-ref-5)
6. Based on walking, wheeling and cycling by residents that live in a household with a car. Does not include leisure cycling or leisure walking or wheeling trips. [↑](#footnote-ref-6)
7. See definition in Walking solutions. [↑](#footnote-ref-7)
8. For definition see [Methodology document](https://www.sustrans.org.uk/walking-cycling-index). [↑](#footnote-ref-8)
9. The sample size for respondents who identified their gender ‘in another way’ was too low to be statistically significant and therefore is not presented here. [↑](#footnote-ref-9)
10. Socio-economic group is a classification based on occupation maintained by the Market Research Society. Groups A and B are professional and managerial. Group C1 is supervisory/clerical and students. Group C2 is skilled manual. Groups D and E are semi-skilled and unskilled manual occupations, homemakers and people not in employment. [↑](#footnote-ref-10)
11. Based on people who cycle at least once a week. [↑](#footnote-ref-11)
12. See Bike Life 2019 Cardiff report. [↑](#footnote-ref-12)
13. Trips for enjoyment or fitness include adults and children (with and without adult accompaniment). School trips are shown separately for children only. [↑](#footnote-ref-13)
14. Benefits have increased significantly, mainly because of increased costs of driving and greater traffic congestion. [↑](#footnote-ref-14)
15. This includes trips walked or wheeled for enjoyment or fitness, and trips to destinations by people with and without a car. [↑](#footnote-ref-15)
16. Based on WHO/Europe Health Economic Assessment Tool (HEAT), which enables an economic assessment of the health benefits of walking by estimating the value of reduced mortality resulting from specified amounts of walking. [↑](#footnote-ref-16)
17. Litman, 2023. Evaluating Transportation Land Use Impacts. Based upon Eric Bruun and Vuchic, 1995. The Time-Area Concept. [↑](#footnote-ref-17)
18. Leisure trips include adults and children (with and without adult accompaniment). Education trips are shown separately for adults and children. All other trips are just adults. [↑](#footnote-ref-18)
19. This includes trips cycled for enjoyment or fitness, and trips to destinations by people with and without a car. [↑](#footnote-ref-19)
20. 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. [↑](#footnote-ref-20)
21. Litman, 2023. Evaluating Transportation Land Use Impacts. Based upon Eric Bruun and Vuchic, 1995. The Time-Area Concept. [↑](#footnote-ref-21)
22. Asher et al, 2012. Most older pedestrians are unable to cross the road in time: a cross-sectional study. Age and Ageing. [↑](#footnote-ref-22)
23. Sustrans, 2017. Linking Active Travel and Public Transport to Housing Growth and Planning. [↑](#footnote-ref-23)
24. A minimum of three distinct types of cultural and leisure venues, like cafés, pubs, bingo halls, cinemas, museums. [↑](#footnote-ref-24)
25. OS source measurement now excludes grass verges, so is more accurate than in the 2021 report. A and B roads are main roads. C roads and unclassified roads are more minor roads and often residential streets. [↑](#footnote-ref-25)
26. To ensure comparability, these figures are correct as of **31** May 2023 for all city reports. [↑](#footnote-ref-26)
27. 2023 data covers July 2022–June 2023. 2021 data covers July 2020–June 2021. The Cardiff Nextbike scheme stopped operating in December 2023. [↑](#footnote-ref-27)
28. Credit to the Association of Cycle Traders (ACT) for their assistance with cycle shop locations and services offered. [↑](#footnote-ref-28)
29. Based on analysis by CycleStreets [www.lowtrafficneighbourhoods.org](https://www.lowtrafficneighbourhoods.org/). Unclassified roads are all public roads that are neither motorways, A, B nor C roads. [↑](#footnote-ref-29)
30. Excludes motorways. [↑](#footnote-ref-30)
31. Children’s Independent Mobility: an international comparison and recommendations for action, 2015. [↑](#footnote-ref-31)
32. Figure given is correct as of **31** May 2023. [↑](#footnote-ref-32)