

Best foot forward

How walking, wheeling, and cycling can help Scotland meet its climate targets

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.

The time for action on climate change is now, but emissions from transport – especially cars – remain stubbornly high. Active travel can change that.

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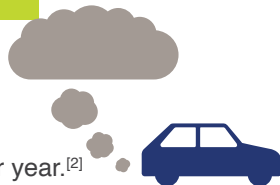
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JOIN THE MOVEMENT

We all know that choosing to walk and cycle can reduce carbon emissions. And it is already having an impact.

People who cycle take up to **42,000** cars off the roads every day across six Scottish cities.^[1]

Living car-free is the single biggest choice you can make to reduce your carbon footprint, saving over **2 tons** of CO₂ per year.^[2]



That's a very good start, but we need to do more to reduce transport emissions, particularly from cars.

21%

of the UK's total greenhouse gas emissions came from road transport in 2017.^[3]

Road transport greenhouse gas emissions rose by **6%** between 1990 and 2017, even as the UK's overall emissions fell **32%** over the same period.^[4]

In Scotland, cars are the source of **39%** of transport emissions, and **58%** of road emissions.^[5]

The switch to electric cars isn't going far enough, fast enough, to tackle the climate emergency.

Even if **100%** of new sales were Ultra Low Emission Vehicles (ULEVs) by 2030, car mileage would still need to be reduced by between **10%** and **20%** to meet the UK's Fifth Carbon Budget.^[6]

The average lifespan of a new car on sale today is **14 years**^[7] – so without additional measures there will still be many fossil fuel cars on our roads throughout the 2030s.



If more people can walk or cycle their regular short journeys we can save a lot more carbon.

By cycling instead of driving for 1 trip daily, an adult can save

0.5 tons

of CO₂ emissions annually.^[8]

In combination with better public transport, prioritising walking and cycling would reduce overall transport carbon emissions by **12%** by 2030.^[9]

That's faster and cheaper than buying new electric cars, and also offers better public health and more pleasant places to live.

In Scotland 54% of journeys are under 5 km,^[10] roughly 3 miles. To reduce carbon, we need more of these trips to be made on foot or by bike.



41% to 69% – the estimated proportion of trips of under 3 miles that people could walk or cycle.^[11]

That means we need to make it easier for people to walk and cycle, and reduce the need for car journeys.

Making it easier to walk, wheel and cycle for short trips means:

More space for people

- **Wider pavements** giving more space for pedestrians, wheelchair users, queuing and physical distancing.



- **Segregated cycle routes** along key corridors, connecting town centres, stations, and major areas of employment.



Quieter residential streets

- **Modal filters** removing through-traffic whilst maintaining residential access, reducing vehicle volumes and rat-running.
- **Lower speed limits:** slower vehicle speeds increase actual and perceived safety for people walking, wheeling and cycling.



By placing more of the services we need within a 20 minute walk of people's homes, we can reduce the need for car journeys, and also:



Create vibrant and prosperous communities that engage citizens.



Ensure vulnerable members of society can easily access vital services.



Put accessibility ahead of mobility, as home-working becomes the new normal.

10 minutes there and 10 minutes back, to key local amenities:

- **Shops** – Improving access to local businesses creates more vibrant local economies.
- **Health services** – Increasing active journeys to health services frees up parking spaces for those who need them most.
- **Schools** – When the school run is dominated by active modes, the surrounding streets become safer.
- **Green space** – It's never been clearer how important access to the outdoors is for our wellbeing.

There are many other benefits of walking, wheeling, and cycling:

Community resilience

- Dedicating more public space to green infrastructure makes our urban areas more resilient to extreme weather events such as flash flooding.
- Increasing access to services improves the resilience of local economies, helping them better withstand economic and public health crises.

Health outcomes

- **34%** of Scottish adults didn't achieve the recommended weekly 150 minutes of physical activity in 2019.^[12]
- People who cycle to work lower their risk of cardiovascular disease by **46%**, and of cancer by **45%**.^[13]

Reducing pressure on household finances

- Scottish households spent **11%** of their weekly expenditure on purchasing and operating motor vehicles in 2019,^[14] and less than **1%** on rail and bus fares.^[15] Car ownership is a particular financial burden on lower income households.

Lowering inequalities

- **60%** of the lowest income households lack access to a car, compared with **3%** of the highest income households.^[16]
- Children are more than **three times** as likely to be injured by road traffic in the **20%** most deprived areas of Scotland than in the **20%** least deprived areas.^[17]

Supporting town centres

- Well-designed improvements to the public realm have increased business turnover by an average of **17%**.^[18]
- Retailers overestimate the importance of car access to their customers, and underestimate how many travel by active and public transport.^[19]

Improving air quality

- Each year, outdoor air pollution causes **40,000** deaths in the UK. Children, older people, and people with underlying health conditions are particularly affected by this.^[20]
- Traffic is the main contributor to poor air quality.^[21] Increasing walking, wheeling, and cycling will give us cleaner air.

References

^[1]Sustrans (2018, 2019 [1]). ^[2]Ivanova et al (2020). ^[3,4]ONS (2019 [1]). ^[5]Transport Scotland (2020 [1]). ^[6]Transport for Quality of Life (2018). ^[7]Society of Motor Manufacturers and Traders (2019). ^[8]Brand et al (2021). ^[9]Brand et al. (2018). ^[10,16]Transport Scotland (2020 [2]). ^[11]Neves & Brand (2019). ^[12]Scottish Government (2020). ^[13]Celis-Morales et al (2017). ^[14,15]ONS (2019 [2]). ^[17]Sustrans (2019 [2]). ^[18,19]Living Streets (2018). ^[20]Royal College of Physicians (2016). ^[21]Defra (2021).

A text version of this leaflet and full references are available online – search '**Sustrans Scotland best foot forward**'.