

# Sustainable Mobility Strategy 2025

TRANSPORT IN THE CLIMATE AND NATURE  
EMERGENCY



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## Foreword

I am delighted to introduce this Sustainable Mobility Strategy.

Transport is a key priority within our Climate and Nature Emergency Plan and we have set out in the SMS bold but realistic proposals to meet our transport emissions reduction targets.

Emissions from the transport sector have remained largely unchanged over the last decade. We need concerted effort to bring about a sustainable transport system that is an attractive and viable for people.

We know people are willing to change how, when and where they travel. We need to meet people's willingness to change.

Stirling Council has made great progress across sustainable transport in recent years, notably the delivery of our flagship active travel routes to the College and University and the launch of our Council-run bus service the C60. We are developing active travel schemes at pace as part of the Forthside regeneration, supported by Levelling Up funding from the UK government.

## Our Plan on a page

### Why do we need this strategy?

Stirling Council formally recognised the climate and nature emergency in October 2019 and adopted a Climate and Nature Emergency (CaNE) Plan in 2021, setting out how the Council will support the transition to net zero. Transport is the single biggest source of carbon emissions in Stirling. Unlike other sectors, total emissions from transport have remained relatively unchanged over the last decade. Action is needed to minimise the number of journeys powered by fossil fuels. This Sustainable Mobility Strategy (SMS) provides a pathway for shifting journeys away from fossil fuels. This SMS also links with our Local Development Plan (LDP), which sets out the sites and scale of future development.

### What is sustainable mobility?

Sustainable mobility is a transport system that is environmentally friendly, economically efficient, safe, accessible, and affordable. It includes public transport, walking, wheeling and cycling, while recognising there is also a place for driving, particularly in rural areas.

### We have a clear vision for transport in the Stirling area

- *“A fair and clean transport system for everyone in our region that benefits people and place while protecting the planet”*

### Priorities

Our priorities for transport, as set out in the CaNE Plan and adopted in this SMS, are to:

1. Make every trip in the Stirling area net zero carbon.
2. Make walking and cycling easy, safe, and attractive travel options.
3. Help enable an effective, affordable public transport network.
4. Maximise sustainable choices for all.

### Where we will focus our action

The Council will lead by example and will develop action plans to shift staff commuting and operational travel to sustainable modes. Four action plans will accompany this SMS spanning the main modes of transport in our sustainable mobility system:

- **Active travel** – we will develop urban and rural active travel routes and connections to them, provide more cycle parking and help with access to cycles and training.
- **Public transport** – we will support decarbonisation of the bus fleet, explore options for delivering more bus services in-house, and make the case for a new station at Bannockburn/Cowie.
- **Vehicles** – we will identify sites for additional public electric vehicle chargers, review our parking permit charges, and develop a plan for transitioning all Council fleet vehicles to zero emissions.
- **Freight** – we will work with partners on deliveries and servicing consolidation, support the uptake of zero emission freight vehicles and will review the rules for using on-street loading bays. We will explore opportunities to expand rail freight.

## Strategic context

### CaNE Plan (Net Zero)

As detailed in Stirling Councils CaNE Plan, area-wide carbon emissions from transport across Stirling stood at approximately 228,000 tonnes of CO<sub>2</sub> equivalent (tCO<sub>2</sub>e) in 2021<sup>1</sup>, with little change over the recent decades, making it the largest single source of emissions in the region and a major barrier to achieving net zero.

In the best-case scenario for 2045, where all relevant Sustainable Mobility initiatives are delivered, emissions from the sector are projected to fall significantly, yet around 47,000 tCO<sub>2</sub>e of residual transport emissions would remain. To achieve Net Zero, carbon offsetting equivalent to the sequestration capacity of 2.2 million adult trees would be required, highlighting the scale of effort needed. While tree planting will play a role, it will not be sufficient on its own. Other nature-based solutions, such as peatland restoration and rewilding, will be essential.

This illustrates the scale of the challenge and the urgency of coordinated action to reach net zero across Stirling's transport network.

The wider national, regional and local context for the strategy also points towards achieving a transport system that is accessible and works for the economy. The relevant key strategies are summarised below.

### Linking to Scottish Government strategy

Scotland's second **National Transport Strategy** (NTS2) was published in 2020 providing the strategic framework within which future transport investments will be made. There are four overarching priorities– to take climate action, improve health and wellbeing, reduce inequalities, and help deliver inclusive and sustainable growth. The outcomes associated with each priority are shown in Table 1. The actions in this SMS reflect these national priorities and how these will be delivered in the council area.

Table 1: National Transport Strategy priorities and outcomes

Priority	Outcome
Take climate action:	<ul style="list-style-type: none"><li>• Help deliver Scotland's net zero target</li><li>• Adapt to the effects of climate change</li><li>• Promote greener, cleaner choices</li></ul>
Improve health and wellbeing:	<ul style="list-style-type: none"><li>• Safe and secure for all</li><li>• Enable us to make healthy travel choices</li><li>• Help make our communities great places to live</li></ul>
Reduce inequalities:	<ul style="list-style-type: none"><li>• Provide fair access to services</li><li>• Easy to use for all</li><li>• Affordable for all</li></ul>
Help deliver inclusive and sustainable growth:	<ul style="list-style-type: none"><li>• Get people and goods where they need to go</li><li>• Reliable, efficient, and high quality</li><li>• Use beneficial innovation</li></ul>

<sup>1</sup> [Climate Action Platform | SCIS](#)

The Scottish Government's **Climate Change Plan** (2020) set a target to reduce the number of car kilometres driven in Scotland against a 2019 baseline. To achieve this, high-quality mobility and connectivity options are needed to enable people to leave their vehicles at home or travel less. The Climate Change Plan also introduced the commitment to phase out the need for new petrol and diesel cars by 2030, which although it doesn't ban the sale of such vehicles it does imply a commitment to supporting the infrastructure needed to enable greater use of zero emission vehicles, public transport and active travel as alternatives to conventionally fuelled cars.

## Regional Transport Strategy

The 2024 **Regional Transport Strategy** (RTS), produced by Tactran, the Regional Transport Partnership covering the Stirling council area, mirrors the priorities of NTS2 and sets out what needs to be done at a regional level and in partnership with local authorities to meet the NTS2 priorities. The approach recommended in the RTS is to deliver measures that: enable a step change in electric vehicle use, improve alternatives to the car, and to focus activity on the places and people where support to enable travel behaviour change is needed most. The RTS recommends integrated solutions, meaning that transport systems should be planned around the information and functionality people need at different stages in a non-car journey, for example, real-time information about delays to public transport services and timetabling that minimises wasted time when changing between services or modes of transport.

## Fit with other local strategy

This strategy has been developed in the context of the Council's 2023 corporate plan, **Thriving Stirling**, the 10-year strategy which sets the Council's overarching priorities and objectives. The four outcomes of Thriving Stirling are social and economic equality, financial sustainability of the Council, carbon net zero, and a strong economy. Thriving Stirling highlights the challenges for the Council of providing services in the coming years – a population that will grow by approximately 5%, while the proportion of the population aged over 75 will increase by 30%, and increasing pressure on Council budgets resulting in a forecast gap of £33m by 2025. Thriving Stirling sets the principles by which schemes and services will be delivered, including a focus on designing schemes with the participation of residents and that decisions and solutions will be based on research and evidence.

The Council's 2022 economic strategy, **Invest Stirling**, is used to guide actions that support economic growth and development in the council area. Invest Stirling has clear priorities to help Stirling city centre and the town centres to be vibrant and sustainable, as well as providing the support the rural communities need to diversify, grow and survive. A high quality sustainable mobility system has an integral role to play in supporting the economic viability of Stirling's urban and rural areas. Establishing a transport network that reduces reliance on private cars will also be instrumental in achieving Invest Stirling's other priorities of reducing inequality and attracting investment to the council area.

The Council's **Local Development Plan** (LDP), due to be published in 2027, will set out where new development should be located in the council area and the infrastructure required as part of development, including transport. The LDP is being prepared alongside this Sustainable Mobility Strategy and the two share an evidence base. The preferred sites for development will be informed by our existing and planned sustainable transport network, and the LDP will identify where enhancements to the network are needed to support development on land that is underserved by the network. This reflects the requirements set by the updated National Planning Framework (NPPF4), which will also be a major part of the LDP.

A sustainable mobility system has an important role to play in improving public health as there is evidence to show that using active travel and public transport increases people's physical activity<sup>2</sup>, which in turn can benefit physical and mental health. In Stirling, the Council has formed a Health and Social Care partnership with neighbouring Clackmannanshire Council. The joint **Strategic Commissioning Plan 2023-33** is the plan for delivering delegated public health services. It includes as its top priority the need to prevent ill health and promote positive health and wellbeing. A transport system that enables and encourages physical activity helps people to stay healthy and independent and therefore complements the ambition of the plan.

This SMS supersedes the Council's 2017-27 **Local Transport Strategy**. This SMS with accompanying action plans should be considered as the Council's Local Transport Strategy for the period to 2041.

## The case for change

This section sets out the transport problems and opportunities in the Stirling Council area that the SMS seeks to address.

### Public consultation: what people have told us about transport

Between August and September 2023 the Council undertook a consultation with residents called 'Have your say in the future of your place', the first stage in developing an evidence report for the emerging Local Development Plan. Respondents told us a wide range of things about Stirling and their thoughts about what should be the priorities for the future.

We have summarised the findings relevant to developing a sustainable transport system. The consultation was structured around nine key questions developed from the Place Standard tool, a national framework covering the physical and social aspects of place. The following issues relating to mobility were raised:

- Lack of active travel connections between settlements
- Lack of safe cycle routes
- Lack of cycle parking in settlements and at railway stations
- Unreliable, infrequent and expensive bus services
- Outlying settlements lack connection to the bus network
- Lack of bus services in the evenings and at weekends
- Lack of bus shelters and absence of real-time information about bus services
- Lack of rail station serving Bannockburn and Cowie
- Problems with speeding, contributing to an unappealing environment for active travel
- Limited availability of electric vehicle charging infrastructure outside Stirling city

The consultation showed strong support for sustainable transport – this was mentioned as a priority by one third of respondents. There was also evidence of support for sustainable transport measures implemented so far including our active travel schemes, 20mph zones and the park and ride services, and a sense that traffic is generally well managed in Stirling without significant congestion hotspots.

### Travel behaviour in Stirling – in numbers

The Scottish Government collects data annually on transport use through the Scottish Household Survey (although the annual surveys were disrupted in 2020 and 2021 due to the pandemic). Figures 1, 2 and 3 show the usual mode of travel averaged across all journeys, journeys to work and journeys

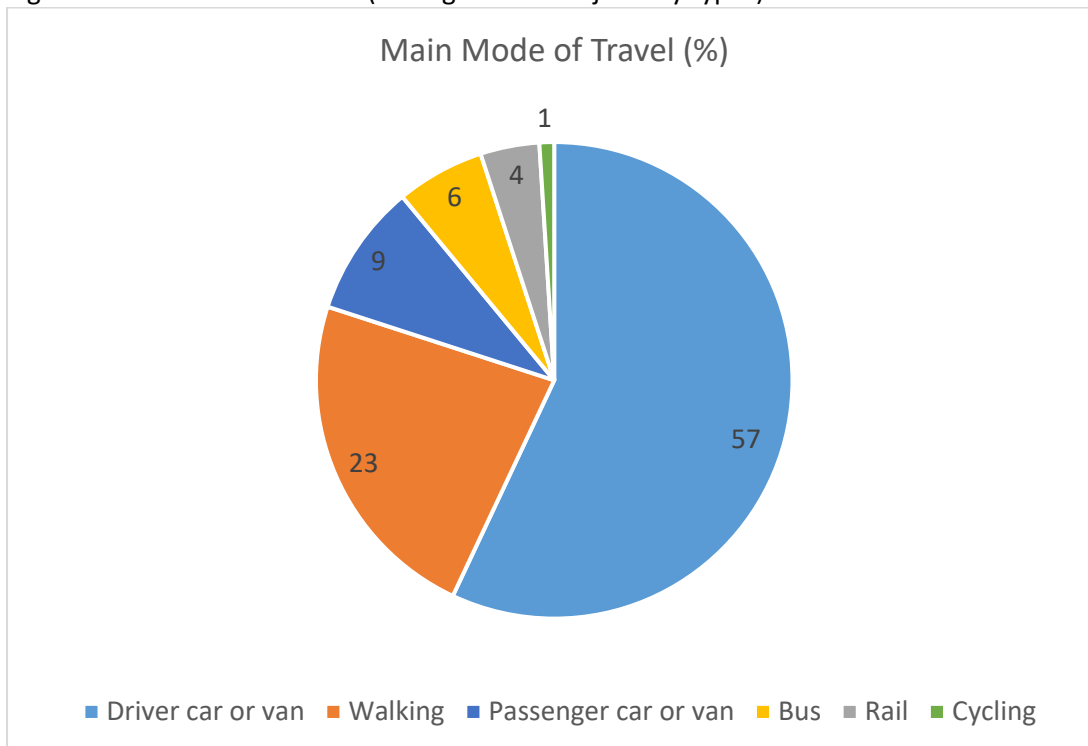
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<sup>2</sup> For example <https://publichealthscotland.scot/our-areas-of-work/climate-sustainability-and-environment/transport-and-health/why-is-transport-important-for-health/> accessed August 2024.

to school respectively in the Stirling council area. It should be noted there is a low base on the datasets for work and school journeys, 90 respondents for work commuting and 50 for school travel<sup>3</sup>.

- Across all journey types in Stirling recorded in the 2022 SHS, 57% were undertaken by car, 23% on foot, 6% by bus, 4% by rail and 1% by bike; this includes journeys to work and school but also travel for shopping, leisure and visiting family and friends.
- Excluding working from home, almost two thirds of people drive to work, 15% use public transport and 15% walk or cycle. The SHS data also shows that 68% of Stirling residents do not work from home<sup>4</sup>.
- For journeys to school, walking is the most used at 53%, followed by going in a car/van (30%), 8% using a bus and 3% cycling.

Figure 1: Main mode of travel (average across all journey types)



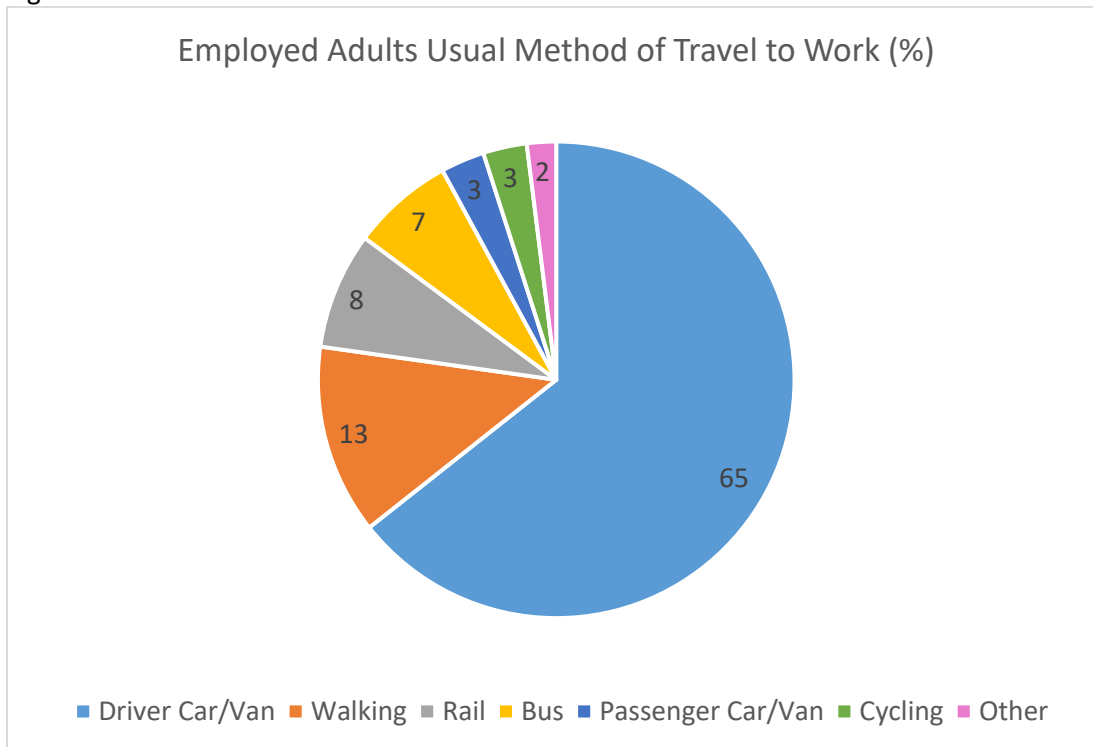
Source: *Transport and Travel in Scotland*<sup>5</sup> 2022. Stirling council area n = 390

<sup>3</sup> Journey to work data collected in the 2011 Scottish Census shows 60% of Stirling residents drove to work, 9% used public transport and 17% used other modes (it does not distinguish between walking, cycling and any other types of transport). At time of writing, travel data from the 2022 Scottish Census was not available.

<sup>4</sup> In the 2011 Scottish Census 14% of Stirling residents said they mainly worked at home.

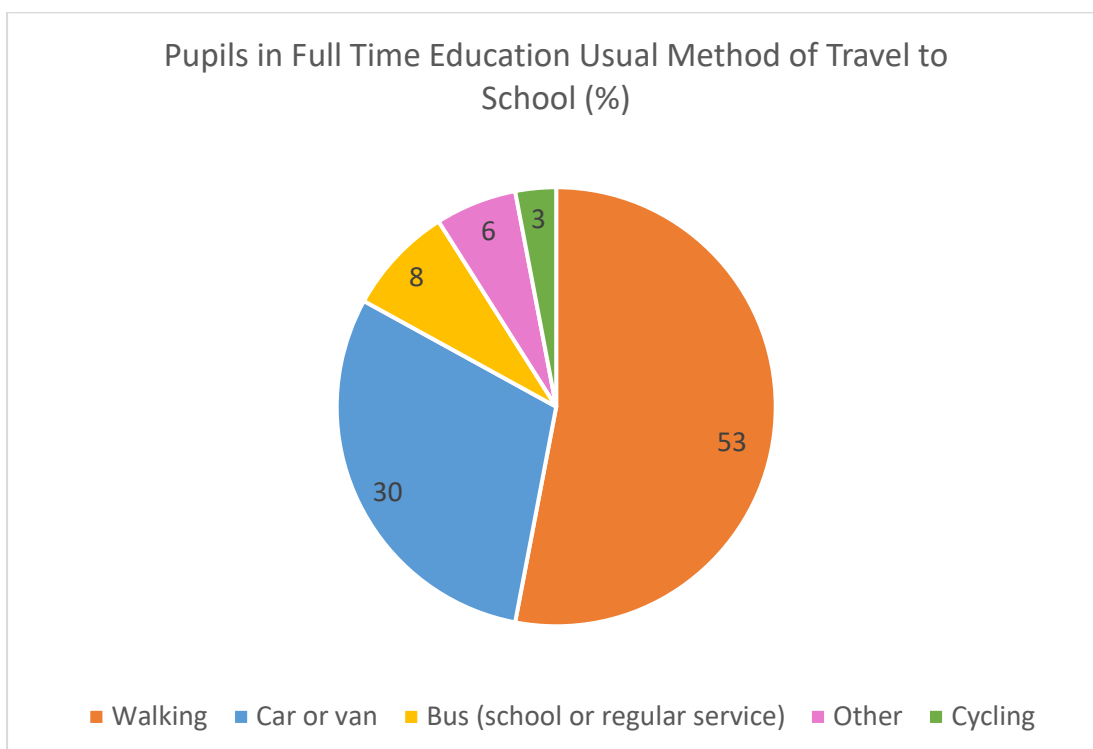
<sup>5</sup> <https://www.transport.gov.scot/publication/transport-and-travel-in-scotland-2022/> accessed August 2024

Figure 2: Usual method of travel to work



Source: Transport and Travel in Scotland 2022. Stirling council area n = 90

Figure 3: Usual method of travel to school



Source: Transport and Travel in Scotland 2022. Stirling council area n = 50

## Attitudes to changing travel behaviour

Research by Tactran in 2023<sup>6</sup> to inform the Regional Transport Strategy asked a representative sample of Stirling residents about their attitudes towards climate change and their willingness to change travel behaviour to help achieve climate change targets.

- Approximately half of Stirling residents would be willing to change how they travel, but only 41% thought the existing transport provision was sufficient to support a change in travel choice.
- Up to three quarters of Stirling residents would walk, cycle, use public transport or use facilities closer to home instead of driving if there were safe, convenient and affordable travel options available.
- 59% of Stirling residents agreed that resources should be directed to locations or trips where the most car km are driven and 81% agreed that resources should be directed to the more vulnerable or most in need in society to help them access jobs, training and services.

## Why transport, why now?

### Climate change

We need to prioritise changes in the way we travel because domestic transport is still the biggest emitter of greenhouse gases in the nation, accounting for 29% of all our emissions. Within the transport sector, cars account for 38% of emissions followed by HGVs and vans at 28%, so we need to minimise the number of journeys made by fossil fuel vehicles<sup>7</sup>.

Stirling's transport CO<sub>2</sub> emissions per head are currently 40% higher than the Scottish average. This partly reflects the fact that large portions of our region are rural and semi-rural, but we nonetheless stand to make significant progress in reducing these.

The impact of climate change in Scotland is that the climate is getting rainier and stormier, and rainy spells are getting heavier. In Stirling, flash flooding in 2019 affected lots of local businesses and roadways. Strong winds in 2021 left 350 homes without power for a week and cut communities off from supplies.

### Public health

Emissions from transport are not just climate changing carbon dioxide, but also nitrogen oxides (NOx) and particulate matter (PM2.5 and PM10). These pollutants pose health risks, affecting the eyes, nose, throat, blood vessels and respiratory system. Air pollution can worsen lung function and asthma, and exposure over years contributes to cardiovascular diseases, respiratory diseases, lung cancer and dementia. According to the UK Government, air pollution is the largest environmental risk to public health.<sup>9</sup> Stirling as a whole performs well on air quality with no defined Air Quality Management Areas and estimates that pollutants from road traffic sources are within legal limits.

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<sup>6</sup> <https://tactran.gov.uk/wp-content/uploads/2023/11/2023-12-12-Item-9-A-New-RTS-Appendix-C-Representative-Public-Opinion-Survey.pdf> accessed August 2024

<sup>7</sup> <https://www.transport.gov.scot/media/50872/a-route-map-to-achieve-a-20-per-cent-reduction-in-car-kms-by-2030.pdf> accessed September 2024

<sup>8</sup> <https://www.transport.gov.scot/our-approach/environment/20-reduction-in-car-km-by-2030/#:~:text=Total%20emissions%20were%2010.3%20million,shipping%20at%2019.8%25%20in%202020> accessed September 2024

<sup>9</sup> [Air pollution: applying All Our Health - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/news/air-pollution-applying-all-our-health) accessed September 2024.

Reducing vehicle miles on our road network will support this relatively positive picture on air quality<sup>10</sup>.

In addition to emission reduction benefits, more people using active travel and public transport can help take the strain off the NHS. Evidence shows that walking, wheeling, cycling and using public transport increases physical activity, which in turn improves health outcomes such as reduced risk of cancer, cardiovascular diseases and mental ill health. While Stirling generally performs better than the Scotland average for health outcomes, cancers, cardiovascular diseases and mental ill health are all in the top five leading causes of ill health and early death<sup>11</sup>.

#### Economic and social outcomes

Stirling generally performs well against economic and social indicators, with more businesses per head of population and a stronger business survival rate than the national average. However there are places within the council area where deprivation persists. Child poverty ranges from 6% in Bridge of Allan to 24% in Bannockburn. Poorer economic outcomes correlate with poorer health and social outcomes<sup>12</sup>.

Improving the sustainable transport network gives people better access to education, jobs and services, bringing economic and health benefits and making society fairer.<sup>13</sup>

Shopping locally and using local services helps local businesses and communities to thrive, at the same time as taking meaningful action to reduce harm to the environment<sup>14</sup>.

#### Changing travel and commuting habits

Our future transport system needs to respond to the changes in travel and commuting patterns that have happened since the COVID-19 pandemic, which has led to more people working from home or from different locations. This has reduced the demand for peak-time commuting and means we need to rethink how, when, and where we provide services.

Figure 4 shows how the estimated number of miles driven on roads in the Stirling council area has varied in the 30 years to 2023<sup>15</sup>. While the number of miles driven has rebounded from historic lows in 2020 during the pandemic, traffic has not so far returned to the level seen in 2019 and was approximately 7% lower in 2023 than in 2019.

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<sup>10</sup> <https://www.scottishairquality.scot/laqm-reports/stirling-council> accessed September 2024

<sup>11</sup> <https://www.scotpho.org.uk/media/2335/2021-09-21-scottishburdenofdisease-stirling-revised.pdf> accessed September 2024

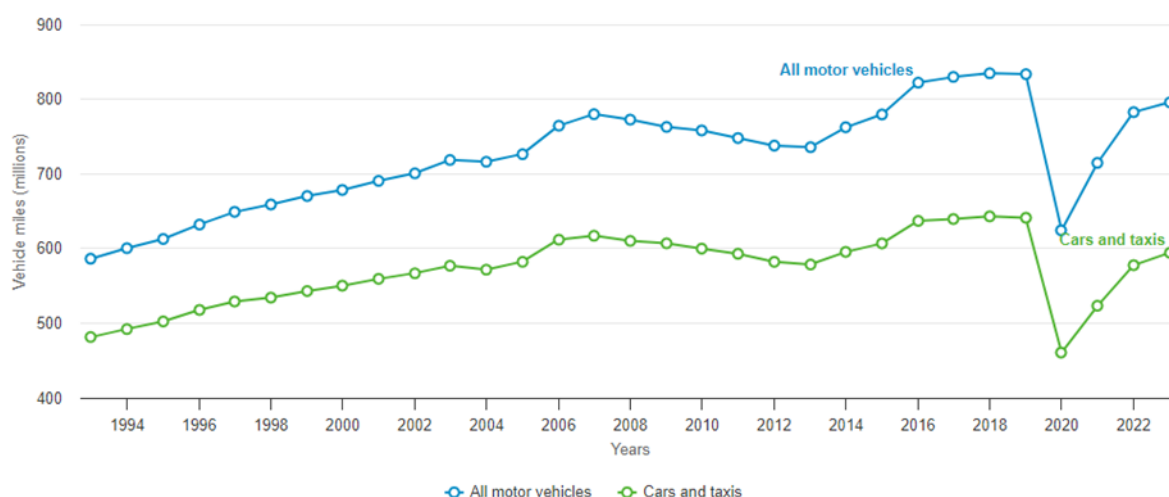
<sup>12</sup> <https://investinstirling.com/wp-content/uploads/2023/05/Economic-Strategy-2022v3-invest-style-finalpdf.pdf> accessed September 2024

<sup>13</sup> Jeroen Bastiaanssen, Daneil Johnson and Karen Lucas, "Does better job accessibility help people gain employment? The role of public transport in Great Britain," *Urban Studies* 59, no.2 (2022).

<sup>14</sup> <https://www.gov.scot/publications/scottish-government-planning-guidance-local-living-20-minute-neighbourhoods/pages/2/> accessed September 2024

<sup>15</sup> <https://roadtraffic.dft.gov.uk/local-authorities/42> accessed September 2024

Figure 4: Annual vehicle traffic by type in Stirling 1993-2023



Source: Department for Transport local authority traffic statistics

### Summary

- Over half of all journeys in the council area are made by car and for journeys to work this increases to almost two thirds of journeys.
- Travel choices need to change in Stirling, like the rest of Scotland and the UK, if carbon emissions targets are to be achieved. Stirling's per head transport emissions are higher than the Scotland average. Reducing the distance travelled by fossil fuel vehicles by switching journeys to sustainable modes of transport or electric vehicles, accessing services locally, or working from home are key to reducing carbon emissions from the transport sector.
- People know they need to change the way they travel, but people have told us a lack of sustainable travel connectivity and routes limits their ability to change.
- More active travel and public transport use also bring potential public health benefits from a more active population, reducing costs to the NHS and increasing the number of years people can expect to live in good health<sup>16</sup>.
- Reducing the need to travel by using local services supports local businesses and communities and can reduce car use and emissions.

Transport is not just transport: it is health; it is economic wellbeing; and it is social connection. Getting it right is foundational to building a Stirling where everyone can thrive.

<sup>16</sup> <https://www.gov.uk/government/publications/understanding-the-drivers-of-healthy-life-expectancy/understanding-the-drivers-of-healthy-life-expectancy-report#influences-on-life-expectancy> accessed September 2024

## Our strategy for transport

### Vision

To contribute to achieving the Council's target of net zero carbon emissions by 2045, we need to tackle transport as a priority, while making sure transport is accessible, equitable and affordable. These factors have led to the vision for this strategy:

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*"A fair and clean transport system for everyone in our region that benefits people and place while protecting the planet."*

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### Priorities

Our priorities for transport, as set out in the CaNE Plan and adopted in this SMS, are to:

- P1. Make every trip in the Stirling area net zero carbon.
- P2. Make walking and cycling easy, safe, and attractive travel options.
- P3. Help enable an effective, affordable public transport network.
- P4. Maximise sustainable choices for all.

These priorities also align with Stirling Council's 10-year Thriving Stirling Strategy by contributing to priorities across the board, and they meet national priorities for climate and transport.

Achieving these priorities means we have to change how we provide services and help people to make the most of them. Change is often difficult to achieve, but the benefits of these changes will pay dividends in the future, for the council, for its communities, and for the climate. Each one of the outcomes above has several reasons that make it an important one to pursue.

## Targets

The targets set out in this strategy align with the CaNE Plan and will be used to measure success against its four priorities.

Table 2: Sustainable Mobility Targets

Indicator <i>(Baseline)</i>	Interim Target	2045 Target	Priorities Measured
<b>Area wide carbon emissions from Transport<sup>17</sup></b> <i>(228,000 tCO<sub>2</sub> in 2021)</i>	-	Net Zero	P1,P4
<b>Carbon emissions from road traffic in the city area</b> <i>(15,908 tCO<sub>2</sub> a year across monitored AADT routes, 2022)</i>	More than 40% by 2032*	Reduction of 75%*	P1,P4
<b>Carbon emissions from public transport</b> <i>(3,842 tCO<sub>2</sub> in 2019-20)</i>	25% in 2030	Reduction of 75%	P1,P3
<b>Carbon emissions from Council business travel</b> <i>(4,450 tCO<sub>2</sub> in 2006/07 baseline)</i>	45% by 2030	90%	P1,P4
<b>Driven car kilometers, on average per person<sup>18</sup></b> <i>(2019 11,055 km/pp/py)</i>	10% decline per person	20% decline per person	P4
<b>% of Ultra Low Emission Vehicles</b> <i>(2.2% of all vehicles registered in Stirling in 2019)</i>	45% by 2032	100%	P1,P4
<b>Patronage increase in public transport (Council supported busses)</b> <i>(2.3m boarding 2019-20)</i>	Increase of 25% by 2030	Increase of 50%	P3, P4
<b>% of Stirling licensed taxis which are EVs</b> <i>(0% in 2019)</i>	100% of new licenses by 2032	100% of all taxis operating in the area to be EV	P1,P4

<sup>17</sup> [PBCCDs Annual Report, 2023-24](#)

<sup>18</sup> [Road traffic statistics - Local authority: Stirling](#)

<b>% Council vehicle fleet running on 'clean' energy</b> <i>(3.1% in 2019)</i>	Phase out new petrol and diesel light commercial vehicles by 2025**	100% of all fleet clean by 2030**	P1,P4
<b>% of city centre journeys by active travel</b> <i>(modal cordon count of 15.4%, 2019)</i>	At least 20% by 2030*	Increase to 30%*	P1,P2
<b>% of Stirling residents who walk or wheel at least 5 days a week<sup>19</sup></b> <i>(2023, 53% from WCL) *Health benefits monetized in report</i>	-	An additional 5% per year from 2023	P2,P4
<b>% of Stirling residents who cycle at least 5 days a week</b> <i>(2023, 19% from WCL) *Health benefits monetized in report</i>	-	An additional 5% per year from 2023	P2,P4

\* National Transport Strategy (NTS2)

\*\* Climate Change (Emissions Reduction Targets) (Scotland) Act 2019

<sup>19</sup> [City data dashboard - Sustrans.org.uk](https://www.sustrans.org.uk/city-data-dashboard)

## What we will do

We have set a goal for each of our four strategy themes, under our overarching vision for sustainable mobility, and within each theme we will develop dynamic action plans. Below, we have identified a series of actions that will form the foundation of each action plan (Table 3).

Table 3: Our sustainable mobility vision, goals and actions

<p><i>“A fair and clean transport system for everyone in our region that benefits people and place while protecting the planet.”</i></p>
<b>GOALS</b>
<b>Public Transport</b> <ul style="list-style-type: none"><li>● Increase usage of public transport through an integrated, innovative, and affordable public transport system that offers choice and comfort in connecting all members of society to the places they want to be, while minimising negative environmental impacts.</li></ul>
<b>Active Travel</b> <ul style="list-style-type: none"><li>● Walking, wheeling, and cycling are the natural choice for local journeys, enabled through good quality, accessible, active travel routes connecting neighbourhoods with key destinations and public transport.</li></ul>
<b>Vehicles</b> <ul style="list-style-type: none"><li>● Support residents, businesses and visitors in the use of zero- and low- emission vehicles, enabling the shift away from fossil fuel vehicles, encourage shared journeys where car is the only option and working towards the national government target to reduce vehicle kilometres by 2030.</li></ul>
<b>Freight and Delivery</b> <ul style="list-style-type: none"><li>● A freight and delivery network that minimises negative impacts on communities and the environment, while supporting the local economy and providing high-quality service for senders and recipients of goods.</li></ul>
<b>ACTIONS</b>
<b>Public Transport</b> <ol style="list-style-type: none"><li>1. Develop hub and spoke model for public transport provision working with communities to prioritise including feasibility study into working with partners to achieve this and delivering integrated services and ticketing in the council area.</li><li>2. Feasibility study into providing more services in-house building on experience with the C60 bus.</li><li>3. Support operators in decarbonising bus operations by supporting the use of zero emission vehicles at our bus station and supporting operator engagement with power networks to upgrade depot facilities.</li><li>4. Work with partners to improve the quality of bus journeys, enhancing bus stops where appropriate by providing shelters, timetable information and real-time travel information.</li><li>5. Work with partners to market and promote public transport services. This will be informed by a survey of bus users and potential users.</li><li>6. We will continue to develop the case for a new rail station south of Stirling (Bannockburn/Cowie).</li><li>7. We will lobby for the provision of direct services between Alloa and Edinburgh and the reopening of the Alloa-Dunfermline railway for passenger services.</li></ol>

## Active Travel

1. Provide strategic active travel routes to enable people to walk, wheel or cycle between key origins and destinations across Stirling, catering for rural as well as urban active travel journeys. Delivery of active travel infrastructure will be prioritised according to propensity to use active travel and there will be a balance between implementation in urban and rural locations.
2. Provide neighbourhood accessibility and community links to strategic active travel routes and deliver School Streets to support walking and cycling to school and reduce road danger outside school gates.
3. Install high quality secure cycle parking in our town and village centres, at key destinations and where needed in neighbourhoods.
4. Support residents and visitors with access to cycles and the skills needed to ride them.
5. Drive travel behaviour change by encouraging residents and visitors to Stirling to walk and cycle.
6. Lead the change by switching council journeys to walking, wheeling and cycling where possible.

## Vehicles

1. Identify locations suitable for new public charging points and where appropriate support the provision of suitable EV chargers. Locations will include a mix of on-street provision (e.g. chargers within lamp columns) and high capacity charging hubs (e.g. the charging bays at Castle View Park & Ride).
2. Develop a costed feasibility plan for the transition of all Council fleet vehicles to zero emissions considering potential impacts and opportunities for operational efficiency, and a plan to make sure the cleanest vehicles are used in the in our most densely populated areas.
3. Seek to use the taxi licensing process to encourage the transition of licensed taxis to zero emissions.
4. Review charges for residents' parking permits within Council operated Controlled Parking Zones, with the aim that a permit for a zero emission vehicle costs less than a permit for a fossil fuel equivalent.
5. Review city centre parking supply including Blue Badge provision.
6. Facilitation and promotion of car sharing across the council area.
7. Facilitation and promotion of a car club for the council area.
8. Work with employers in the council area to support installation of EV chargers on their land.
9. Review and update this strategy regularly as technology develops in this fast moving area.

## Freight and Delivery

1. Help enable use of zero-emission vehicles for freight and deliveries by supporting the installation of charging points for freight vehicles at suitable locations.
2. Promote deliveries/servicing and waste collection consolidation, working in partnership with GoForth the Stirling Business Improvement District and local businesses to help reduce the number of goods vehicle movements across the Stirling council area.
3. Feasibility study into the potential for a Stirling freight consolidation centre with zero emission last-mile delivery capability within the council area.
4. Review the regulations for using loading bays in the council area so that these are optimised for the needs of our businesses in the post-pandemic world.
5. Feasibility study into potential for rail freight in Stirling e.g. timber and link to potential south Stirling rail station (e.g. at Cowie).

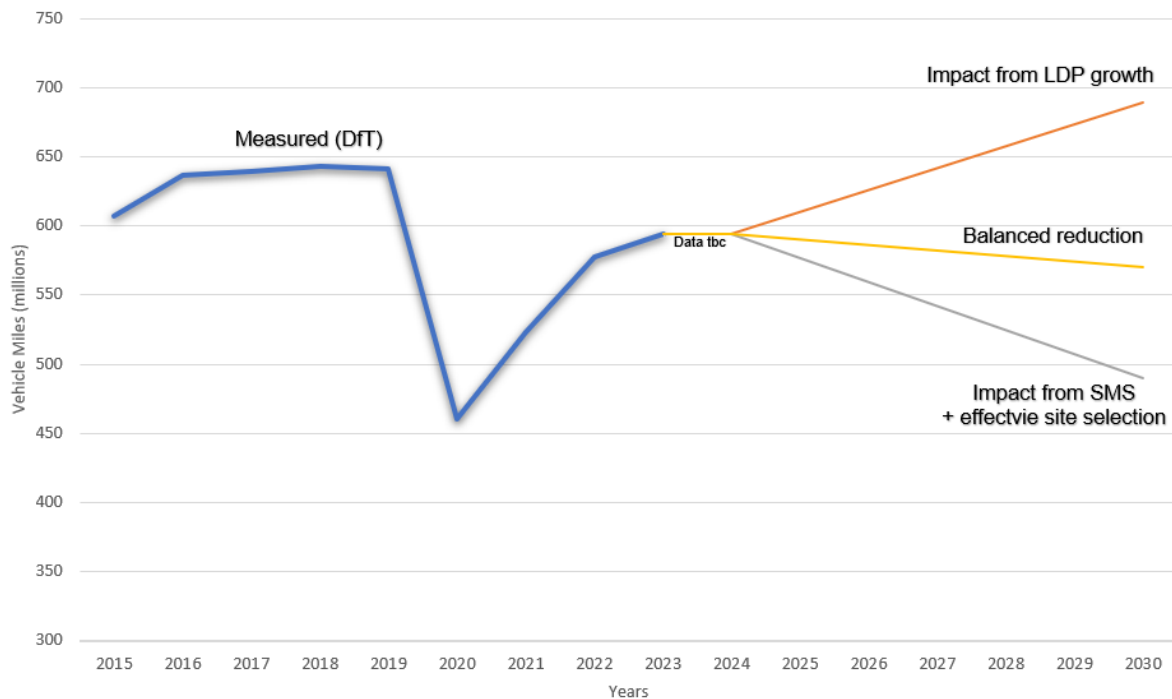
## Network Planning

It is important to acknowledge that Local Development Plan (LDP) growth is required by Stirling Council, in line with NTS2 priorities, NPF4 and Stirling Council's 10-Year Plan. As such, we will closely monitor network congestion and localised growth through the development of LDP3, assessing site suitability in conjunction with SMS initiatives and their impact on the road network.

The graph below visualises future trends, summarising a report by Jacobs on 'Achieving a 20% Reduction in Car-km: Options for the Tactran Region'<sup>20</sup> which was used to forecast potential scenarios across the region. These projections include:

- Projected Car Growth: 16% increase projected (represented by the red line).
- Reduction Potential: 15–20% decrease, assuming the full optimisation of SMS measures (excluding charging mechanisms) and appropriately located development sites.
- A Balanced Reduction Expected (circa 4%): A gradual decrease in car kilometres, excluding the impact of travel demand measures, aligning with and contributing to national targets.

Figure 5: Predicted Car Growth, extracted from Jacobs report.



<sup>20</sup> [Tactran-20-car-km-reduction-report-160123.pdf](#)

## How we will deliver – cross-cutting actions

There are some actions and ways of working, detailed below, that will support delivery against the four strategy themes. These include how we:

- Prioritise the delivery of new infrastructure and services
- Understand travel behaviour change
- Develop projects with communities
- Achieve consistency in design and materials used in infrastructure projects
- Maintain infrastructure once it has been delivered
- Reduce the carbon impact of new infrastructure
- Learn lessons from how we work

### Prioritising investment

The location and phasing of new active travel infrastructure will be prioritised based on relative demand and deliverability, in line with Transport Scotland's scoring and award process. This approach enables Stirling Council to allocate resources effectively to connections that will have the greatest impact on the Council's vision and CaNE plan priorities, while also strengthening our position for future funding bids.

The prioritisation considers:

- Demand: This criterion evaluates the demand for travel between origins and destinations, taking into account data from the Scottish Household Survey over the last 10 years, 2022 Census data, key trip destinations, and future growth through the currently adopted Local Development Plan (LDP).
- Deliverability: This has been split across three key factors, allowing for a strategic assessment to be made.
  - Landownership: Evaluates the extent of private land acquisition required or potential ownership challenges.
  - Physical Constraints: Assesses structural requirements, such as the need for bridges, culverts, or retaining walls and other significant barriers across the network.
  - Environment: Considers constraints from protected trees, habitats, and flood zones, alongside opportunities to enhance the local environment.

This approach ensures a fair, transparent, and evidence-based prioritisation process. The process will also show distinction between the rural and urban areas, avoiding direct conflict while addressing the unique needs of each.

### Behavioural science approach to travel behaviour change

To meet the vision and goals of this strategy requires long-lasting change in how, when and where people travel. We acknowledge that providing infrastructure and/or services is only one part of what is needed to change behaviour. The COM-B model of behaviour change holds that behaviour is the product of Capability, Opportunity and Motivation – if infrastructure and services are part of the Opportunity, helping people with Capability and Motivation can be just as important. We aim to work collaboratively with key partners in the area to support, develop, and effectively deliver behavioural change initiatives that complement new infrastructure and investment.

## Project design and development with our communities: equity and inclusion

We will support local communities in the scoping and development of active travel projects that they have identified, subject to there being evidence of demand. New projects will need to be prioritised alongside existing committed projects and potential future projects.

We will engage with local communities throughout the design development process of active travel projects so that local people can have their say before schemes reach formal consultation. In this way, projects will be developed with communities from the start. This is an opportunity to address local concerns early, and respond to opportunities to enhance projects where these are highlighted by local residents and businesses.

Transport projects will be designed with the needs of typically disadvantaged users in-mind, including older people, women and minority ethnic groups who are traditionally underrepresented in active travel. Active travel infrastructure will be designed to be used by adapted cycles and cargo cycles that may require more space to manoeuvre. The Council will support installation of accessible public EV chargers.

We will incorporate co-design principles into scheme development so that communities help to determine designs and solutions from the earliest stages of design.

## Effective communications and engagement

Delivering new infrastructure can mean change and temporary disruption to streets and public spaces. We recognise the importance of bringing residents with us, not only during the scheme development stage but also during construction. We will aim to build understanding of why schemes are being developed and how changes could impact people.

For upcoming transport infrastructure projects we will assess the potential construction impacts and identify mitigation measures such as changes to delivery timescales and phasing to help reduce disruption for residents and businesses.

Effective communications and engagement also links to behavioural change more generally. By helping people to understand the impact of their travel choices and the transport options available to them, well-designed information campaigns can support the shift towards more sustainable modes of transport.

## Design standards and review

The preparation of designs for transport projects will be guided by national design guidance (e.g. Cycling by Design and the Public Charge Point Regulations 2023 guidance) and a Stirling-specific design guidance setting out our local requirements for the type and quality of materials.

Our design scrutiny process aims to ensure that through the stages of project development designs are checked and approved accordingly across departments, and potential future negative impacts are avoided, removed or mitigated.

## Continued care and maintenance of transport infrastructure

Stirling Council will re-evaluate its Roads Asset Management Plan (RAMP) to align with the key priorities of the Sustainable Mobility Strategy (SMS).

Our focus will be on both routine and ad hoc maintenance, including core paths designated under the Land Reform (Scotland) Act 2003 and newly developed active travel infrastructure. We will also

advocate for Transport Scotland to integrate maintenance funding into infrastructure projects and ensure design considerations support long-term adaptability and upkeep.

### Reducing the carbon impact of infrastructure and construction

We will consider the carbon costs of implementing new infrastructure. Different construction materials and techniques can vary considerably in the emissions generated in production and implementation. Where possible we will re-use materials in our construction works (e.g. kerbstones and paving) and look for recycled and sustainable products where new materials are required.

### Sustainable travel built-in to new development

We will work with developers to make sure that sustainable travel infrastructure is incorporated into new development and is available from the outset as soon as new occupiers arrive on site. This will include active travel infrastructure and EV charge points. The Council's Local Development Plan developed alongside this Sustainable Mobility Strategy will prioritise development in accessible locations, consistent with the National Planning Framework, adopting a 'decide and provide' approach.

### Learning and continuous improvement

We will undertake a process review of all elements of delivering transport projects so that all teams and staff involved are aware of roles, responsibilities and requirements to deliver works to a high standard. Doing so will help to optimise the efficiency of our teams and inter-team working as well as how we interface with external consultants and delivery partners.

We will bolster the status and importance of project evaluation and lessons learnt and deliver review sessions to teams as appropriate.

## Reviewing our progress

### Monitoring and data collection

The targets presented in this SMS mirror the indicators contained within the CaNE Plan; the annual performance monitoring for the CaNE Plan will therefore reflect the impact this SMS is having on travel behaviours.

The action plans for the four strategy themes will include KPIs to measure how well we are progressing towards delivering the actions identified in this SMS. The action plans for the strategy themes will identify where and what additional data needs to be collected to support delivery against the action plans.

The Council already collects a range of transport data and will continue to do so to help understand changes in transport use over time. This includes traffic counts, counts of people walking and cycling and bus use data. These datasets provide us with insights on how transport use is changing across Stirling over time and may enable us to see the longer term impacts of this strategy on travel behaviour.

We will develop monitoring and evaluation plans for individual projects, proportionate to the size and nature of the scheme, so that we can understand scheme impact and have evidence to inform decisions about similar potential schemes in the future.

Evaluation of the strategy, action plans and individual projects will consider process (how we have delivered as a council and what we can learn from this) as well as impact (the outcomes delivered by our work).

Each team leader for the relevant strategic theme will hold responsibility for their actions and KPIs, while the Service Manager for Sustainability Development and Transport holds responsibility for the overall strategy.

### Reviewing and updating this strategy

We will review and refresh this strategy every five years. New strategy themes will be added to the SMS if necessary, so that it captures the full extent of sustainable mobility in the area and to stay in step with developments in transport such as new fuels and technologies and the evolving wider strategic context such as national planning policies.

Action plans will be reviewed and updated to reflect emerging contexts, concerns, or financial opportunities.

We will undertake periodic process reviews at both service and project level to learn from experience and identify how performance and delivery can be enhanced. This will draw upon feedback from the public, elected members and Council employees. Process reviews will seek to ensure we deliver this SMS efficiently and effectively, consistent with the strategic goals of the Council's 10 year strategy, Thriving Stirling.