# Mobility Strategy

## Net Zero Aberdeen

net zero Aberdeen

# 1. Purpose

## 1.1. How is the Mobility theme relevant to Net Zero Aberdeen

To meet Net Zero by 2045, a rapid change is required in the transportation network, alongside the development of actions towards more sustainable travel.

## 1.2. What is mobility and modal shift

A modal shift is needed from the currently private car dominated system to one of increased active travel, public transport, car sharing, echoing the National Transport Strategy's Sustainable Transport Hierarchy. Alongside a transition to the use of low and zero emission vehicles helping to secure the city as a world leader in transport and energy technologies.

We recognise that transport and connectivity are critical to sustainable economic development and a fairer Aberdeen, and it must be acknowledged that the current mode split with over 63% of trips being made by car, cannot continue.

Prioritising Sustainable Transport

# 2. Context

## 2.1.What is the context for the Mobility theme

In 2019, emissions from domestic transport in Scotland (excluding International Aviation and Shipping) was 12.0 MtCO2e, this was the largest source of net emissions. Transport emissions have varied little over the past decade when traffic has increased but vehicles become more efficient. While most other categories have seen significant reductions, transport has seen a relatively small decrease of 11.3% between 1990 and 2019, resulting in transport's contribution increasing to over a third of emissions.

In Aberdeen, the proportion of CO2 emissions attributable to transport, in comparison with other sectors, has increased from 20% in 2005 to 30% in 2019. While CO2 emissions from transport reduced by 7.5% over this period. In a regional context, Nestrans has gained Ministerial approval of the North East's new Regional Transport Strategy (RTS). The strategy will shape the area's transport policies and actions for the next 20 years. Delivery plans are to be developed towards achieving the six key priorities:

- Improved journey efficiencies to enhance connectivity
- Zero fatalities on the road network
- Air quality that is cleaner than World Health Organisation and Clean Air for Scotland standards for emissions from transport
- Significantly reduced carbon emissions from transport to support net zero 2045
- Accessibility for all
- A step change in public transport and active travel enabling a 50:50 mode split between car driver and sustainable modes.

A wide range of public transport measures will be required to either tackle existing problems or support future consolidated and sustainable growth. The Cross City Transport Connections Study will inform opportunities to provide a cross-city public transport service and enhance accessibility to more destinations by public transport and active travel modes. The completion of the railway dualling works between Aberdeen and Inverurie also means there are opportunities for improved rail services into the city.

Emerging plans, policies and strategies must continue to promote and improve the link between land use and transport to make sure that all new development and regenerated areas are conveniently located and designed in such a way as to encourage walking, cycling and the use of public transport.

Historically, the delivery of transport interventions has been slow. This is primarily due to their cost and the lengthy periods of time it takes to undertake the appropriate appraisals, amalgamate land through compulsory purchase, ensure capital funding and finally undertake construction. To make impactful change in the short term we cannot continue to follow this model and we cannot continue to depend on large scale urban road-building projects.

1 Scottish Greenhouse Gas statistics – 1990-2019: https://www.gov.scot/binaries/content/documents/govscot/publications/statistics/2021/06/scottish-greenhouse-gas-statistics-1990-2019/documents/scottish-greenhouse-gas-emissions-2019/scottish-greenhouse-gas-emissions-2019/govscot%3Adocument/scottish-greenhouse-gas-emissions-2019.pdf

2 BEIS Local authority CO2 emissions: https://data.gov.uk/dataset/723c243d-2f1a-4d27-8b61-cdb93e5b10ff/uk-local-authority-and-regional-carbon-dioxide-emissions-national-statistics-2005-to-2019

## 2.2 Key challenges for the Mobility theme

How do we:

1. **Reduce journey numbers** in the context of growing demand.
2. **Reduce journey lengths** taken.
3. **Facilitate modal shift**, from the private car towards active and public transport.
4. **Increase active travel;** the level of walking and cycling across the city
5. **Decarbonise public transport** networks, increasing the use of electric and hydrogen vehicles.
6. **Reduce travel demand,** particularly flights.

## 2.3. What is already happening

Partnership working has enabled substantial progress in recent years, with significant investment in active travel infrastructure, introduction of an enhanced local rail service between Inverurie, Aberdeen and Montrose, and delivery of one of the largest fleets of hydrogen vehicles including Hydrogen double-decker buses. The area also has a successful car club and is delivering a framework of charging for Electric Vehicles.

# 3. Strategic drivers

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| **UK** | Decarbonising Transport, a better, greener Britain |
| | To introduce a legal framework for automated vehicles |
| **Scotland** | National Transport Strategy (NTS2) and Delivery Plan |
| | Update to Scotland's Climate Change Plan includes commitments to:<br>• a 20% reduction in car traffic by 2030<br>• phase out the need for diesel and petrol cars by 2030 |
| | Current consultations on 20% car kilometre reduction routemap and an Aviation Strategy |
| **Regional** | Regional Transport Strategy – NESTRANS 2040 |
| **Aberdeen** | Aberdeen Local Transport Strategy |
| | Sustainable Urban Mobility Plan |
| | Aberdeen Active Travel Action Plan |
| | Aberdeen Electric Vehicle Framework |
| | Roads Hierarchy |

# 4. Approach

## 4.1. Overview

| **Strategic Aim: We will reduce travel demand, play a key role in enabling a transition to low / zero emission vehicles and facilitate more walking, wheeling and use of public transport to reduce emissions while increasing the safety of road users.** | | |
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| **Key Outcomes** | **Strategic objectives** | **Measures** |
| Reduction in traffic across the city | Reduce the demand for travel | Total traffic In Aberdeen. 2019 Baseline 1,568m.km |
| Reduction in proportion of journeys by car to less than 50% by 2030 | Improved travel planning and better integration of transport networks, to enable modal shift | Baseline Main Mode of Travel 2019 Car driver 53% |
| Reduce the need for car travel, facilitating local services and 20-minute neighbourhoods | Low carbon transport decisions to support 20% car traffic reduction, mode shift and emission reductions | Baseline car traffic in Aberdeen 2019 1,244 million vehicle km. |
| Increased number of people taking public transport | Increase public transport options to encourage low carbon travel | Baseline 2019 Main mode of travel bus 12% |
| Increased number of people walking and wheeling | Extend and improve active travel networks for healthy, safer, and sustainable choices | Baseline 2019 Main mode of travel walk 21% and cycle 2% |
| Reduced emissions from transport | Decarbonise transport and increase uptake of low and zero carbon technology | Baseline 2019 carbon emissions from surface transport 329 kilotonnes CO2e |

## 4.2. About the approach

**Reduce the need to travel**

While changing the mode of how we travel is key to reaching net zero, a cornerstone component of the mobility theme is reducing the need for unnecessary travel.

- Facilitate local services, with the development of a 20-minute neighbourhoods model and shop local schemes in dialogue with communities.
- Enable flexible working practices, supported through greater digital connectivity, to reduce travel to work and travelling to meetings, when appropriate.
- Encourage greater use of technology, with the continued rollout of fibre, high speed broadband networks, supporting home shopping, remote working, and education.
- Develop community hubs, to allow people to work closer to home.

**Better integration of transport networks**

For modal shift, it is key to ensure that elements of the transport networks "fit", with live information for users and different travel modes working as a combined network.

- Enable multi-operator and multi-mode journeys seamlessly, through single ticket and collated information, such as the GoABZ app. which will enable cashless, all modes ease of use for facilities such as Car Club, public transport, e-bike hire and other services.
- Work with businesses to develop travel plans and inviting a Commuter Challenge, encouraging individual businesses to aim for net zero commutes.

**Low carbon transport decisions**

Use of forecasts, modelling practices and a review of policies, plans and strategies to support traffic reduction, mode shift and carbon reductions. Ensuring that carbon-emitting practices are not built into projects and decisions.

- Identify major road schemes which are no longer necessary or appropriate and make positive decisions against their development.
- Use traffic models which test scenarios enabling traffic reduction, in line with national and local targets.
- Review the strategic approach to car parking to support a modal shift, ensuring that the cost and availability of parking is no longer an incentive for car use, relative to cost of public transport.
- Introduce Local Planning Guidance requiring developers to implement measures which will reduce dependence on car travel.
- Investigate the benefits and implications of introducing Workplace Parking Licensing, Road User Charging, or other demand management measures.

**Increase public transport options**

Conventional rail and bus networks will be supplemented by an Aberdeen Rapid Transit (ART) network (as set out in the RTS), linking Park & Ride sites and Demand Responsive Transport options where appropriate for travel competitive with car costs and journey times.

- Develop a "game changer" public transport offering in the form of Aberdeen Rapid Transit, a tram-like modern system with exemplary comfort and effectiveness, including off-vehicle ticketing and competitive journey times.
- Maximise investment in existing and new Park & Ride facilities, linking edge of City with city centre, via an effective and efficient network.
- Deliver significant bus priorities which ensure competitive, consistent, and reliable journey times for public transport, on all key routes and corridors.
- Deliver additional railway stations to provide a local rail service.
- Deliver public transport which caters for the needs of all sectors of the population, including Demand Responsive Transport, Mobility as a Service, integrated ticketing initiatives and quality information using technological advances.
- Encourage a better balance of road space, identifying where road space can be allocated to support the sustainable travel hierarchy.

**Extend active travel networks**
Attractive walking, cycling and wheeling options for short journeys by ensuring safe networks and appropriate facilities that encourage modal shift, lessening dependence on private cars.

- Pedestrianisation of the City Centre, as part of a City Centre Masterplan, incorporating linkages to the Beach and supported by measures to facilitate cycling and public transport access to the City Centre.
- Introduction of 20mph zones and traffic management, where traffic speeds are restricted to reduce the incidence of collisions and encourage active travel.
- Implement Traffic-Free Zones and Low Traffic Neighbourhoods, to protect residential amenity, reduce noise and air pollution and the impact of traffic on communities.
- Implement School Zones as part of School Travel Plans, where traffic is restricted during school start and end times, dissuading traffic around schools, encouraging active travel for pupils, and reducing casualties.
- A major programme of footway widening, junction treatments, surface improvements, and additional crossing points for an improved walking environment in the city.
- Develop a strategic, segregated cycling network.

**Decarbonise transport**
The Scottish Government has committed to phasing out the need for new petrol or diesel vehicles by 2030. They have further committed to fully decarbonising Scotland's railways and are encouraging bus operators and goods vehicles to convert to zero emission technologies.

- Support national initiatives to decarbonise rail, aviation, and maritime sectors.
- Facilitate the retrofitting of the bus fleet operating in the city, through working in partnership through the North East Bus Alliance in securing funding via Transport Scotland's Bus Emission Abatement Retrofit scheme.
- Work with fleet operators to encourage the decarbonisation of goods vehicles, and other corporate fleets, including EcoStars accreditation for organisations leading by example.
- Support a transition to zero-emission vehicles in the general population, through engendering a change in attitudes to car ownership (through providing Car Club and e-bike hire for example) and enabling a shift to alternative fuels, including Electric Vehicles and hydrogen options.

# 5. Risks for this theme

Public and political support is essential, and the pace of change required will be a significant challenge. Road building schemes remain within the infrastructure plans of the Council and business community and development proposals are expected to provide increased capacity allowing individuals to focus on their personal preference rather than community goals. Strong leadership from the public sector and in particular, senior management, is needed if the Net Zero Vision is to be delivered. Potentially unpopular proposals, including increased enforcement or new charging regimes will likely require cross-party support and cross-organisational understanding.

Financial challenges should be able to be overcome – national funding is available for ambitious schemes which meet national criteria and objectives and potential revenue-raising opportunities fit with the demand management and mode shift agenda.

# 6. Theme synergies

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| **Buildings & Heat** | Buildings should strive to incorporate future electric vehicle demands and opportunities, e.g. charging and energy storage. |
| **Energy Supply** | Net zero mobility needs energy system able to cope with demands of vehicle charging. Hydrogen alternatives help with the transition to a hydrogen economy. |
| **Circular Economy** | Leased and shared vehicles, i.e. Co-wheels & bike hire. Repair for active travel and low-carbon vehicles. End of life vehicles. |
| **Natural Environment** | Travel routes which integrate space for people and nature, improving habitat integrity and climate resilience. |
| **Empowerment** | Support the move towards zero carbon mobility, including the use of fiscal and non-fiscal incentives. |

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