Tayside and Central Scotland Regional Transport Strategy 2024-2034

Draft for submission to the Cabinet Secretary for Transport

January 2024









If you require help in reading this strategy, for example a version in an easy read format or in an alternative language, please leave a message at Info@tactran.gov.uk or 01738 475775



Foreword

I know that we all care passionately about the climate emergency that faces us; the health problems poor air quality causes; the inequalities that prevent people having equal opportunities and living comfortable, healthy and happy lives; poor health in our population and the consequences of this not only on individuals now but also public services in the long term; and the impact travel constraints place on our economy.

The role of the Tayside and Central Scotland Regional Transport Strategy is to provide a framework for all public sector agencies in the region to perform their functions as they relate to transport and travel in order to address these issues.

The scale of the challenge is significant, and we recognise that for meaningful progress to be made, step changes are required by the public sector, organisations, businesses and individuals.

We do not underestimate the scale of this challenge. You have told us about your travel needs and the potential implications of change. We have listened. We know the changes will be difficult for all of us.

But we also know that the majority of you do care about addressing the issues identified above, and are prepared to make changes provided opportunities exist and the ask of yourselves is fair and equitable.

To help address the priorities identified, this Regional Transport Strategy seeks to:

- Focus activity on where it will have the greatest impact on reducing carbon emissions; improving air quality; improving health outcomes; enabling the most vulnerable in society to access services and opportunities; and enabling inclusive economic growth
- Co-ordinate partner resources and programmes to ensure that we provide integrated solutions that present realistic options for yourselves

The changes for all are significant. We know we need to keep this conversation open to help us all understand, plan for, and navigate the changes required in a fair and equitable manner. We cannot do this alone, we need everyone to do what they can. Please continue to play your role in this transformation, and tell us when we're getting it right, and especially, when you think we're getting it wrong.

Depute Provost Andrew Parrott, Chair Tactran

Executive Summary

The Tayside and Central Scotland Regional Transport Strategy (RTS) is a partnership plan identifying the strategic transport priorities for the Angus, Dundee City, Perth & Kinross and Stirling Council areas.

Through stakeholder engagement we have:

- Identified the key social, environmental and economic priorities that the region's transport networks need to support
- Developed strategic objectives and outcomes to help focus activity on where it is most required
- Identified actions that can help deliver these outcomes

Figure 1 summarises the main issues and how they inform the strategic objectives.

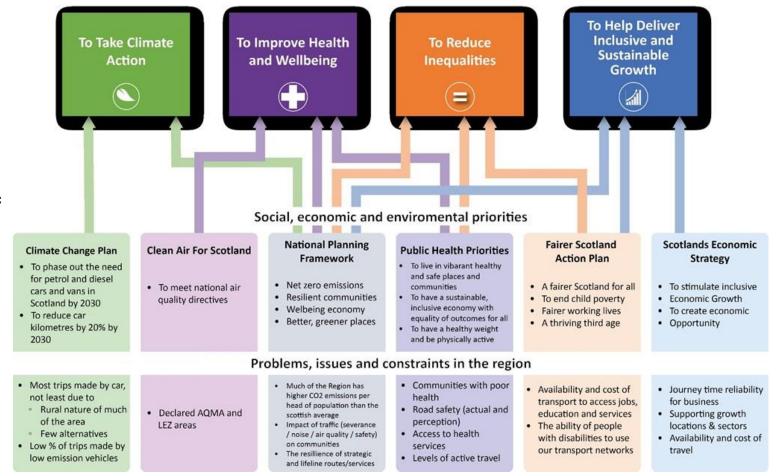


Fig. 1: Relationship between strategic objectives and key issues

The strategy recognises:

- The scale of the challenge required to meet local and national aspirations, especially those in relation to climate change
- That meeting these aspirations means a step change in behaviour both for individuals and businesses, and also for the delivery agencies, including the Councils and other Regional partners. Maintaining the status quo in what and how we deliver improvements to our transport networks are unlikely to enable these targets to be met
- When asking individuals and business to change their behaviour, the ask must be fair, timely and proportionate

At the heart of the strategy is a proposed approach which:

- Seeks to focus activity on the locations and groups in society where support to access facilities or encourage behaviour change is most required
- Encourages **co-ordination of activity across partners**, to ensure that improvement programmes provide a genuine alternative to car use through **integrated solutions**
- Recognises that alternative models for bus provision need to be investigated
- In discouraging car use to support climate change targets, aims to ensure activity is co-ordinated across the respective travel to work areas in the region:
 - Improving alternatives to the car in those corridors/locations, and for those trips, which generate the most kilometres driven by car
 - **Promoting national fiscal measures** as the most effective approach to reducing car kilometres driven
 - Subject to the effectiveness of the national fiscal measures, **consider local charging mechanisms**
- Enables a step change in electric and low emission vehicle use

Table 1 highlights what needs to be achieved against key outcomes, and the scale of the challenge faced.

TABLE 1: WHERE WE NEED TO GET TO AND THE SCALE OF THE CHALLENGE						
Key RTS Outcomes Proposed Regional Target		Scale of the challenge	What needs to be done			
Reduce estimated CO ₂ emissions from transport in the region	ssions from with the national target of a reduction of the Scottish a		Decarbonisation of vehicle transmissions Reduce mileage driven			
Increase the share of EV and low emission vehicle use	Promote Ultra Low Emission Vehicle (ULEV) adoption to achieve $72.7\%^1$ of the target of a 56% reduction in transport CO ₂ emissions by 2030	Approximately 4.5% of vehicles registered in the region were hybrid, electric or ULEV in 2023	Rapid introduction and adoption of low and zero-emission technologies			
Reduce car kilometres driven	Reduce car kilometres driven in line with the national target of reducing car km driven by 20% by 2030 (compared to 2019 levels)	National target means reversing 29+ years of growth in car km in 6 years 82% of car mileage is generated to, from or between our rural areas and towns Over ¾ of personal mileage is generated by trips over 10km	 Improve alternatives for longer trips Improve access to public transport interchange Facilitate shorter trips through more services being delivered locally Discourage car trips where there are reasonable alternatives and facilitate shorter trips Improve access to public transport 			

¹ Research commissioned by the Scottish Government suggests changing technology will achieve 72.7% of 2030 target and behaviour change 27.3% of target (Element Energy 'Decarbonising the Scottish transport sector' 2021)

TABLE 1: WHERE WE NEED TO GET TO AND THE SCALE OF THE CHALLENGE					
Key RTS Outcomes	Proposed Regional Target Scale of the challenge		What needs to be done		
Reduce fatalities and injuries	Meet the targets set out in Scotland's Road Safety Framework to 2030 ²				
Increase the levels of walking and cycling in the least affluent SIMD data zones	 For the least affluent SIMD data zones achieve Transport Scotland's³ forecasts for average proportion of journeys walked and cycled by 2030⁴ Large urban areas: 30% walk / 24% cycle Other urban areas: 24% walk /19% cycle Accessible small towns: 26% walk 13% cycle 	 The current average proportion of journeys walked / cycled are: Large urban areas: 24% walk / 1.5% cycle Other urban areas: 19% walk / 0.4% cycle Accessible small towns: 20% walk / 0.5% cycle Within existing parameters, walking can be expected to increase in the least affluent communities by an additional 1% point, and cycling by 2-4% points 	Improve walking, wheeling and cycling opportunities to local facilities		

² Scotland's Road Safety Framework to 2030 indicators

³ Transport Scotland's Second Strategic Transport Projects Review (STPR2)

⁴ To reduce inequalities, the goal would be to increase the levels of walking and cycling in the least affluent SIMD data zones to the same level as that in the most affluent areas. However, it is difficult to pick out differences at a local level, not least as most of the less affluent communities are in urban areas where active travel is higher than the average. It is possible however to seek to achieve the target levels of walking and cycling in the least affluent is higher than the average. It is possible however to seek to achieve the target levels of walking and cycling in the least affluent areas first (i.e. by 2030), the STPR2 forecasts are to 2033.

TABLE 1: WHERE WE NEED TO GET TO AND THE SCALE OF THE CHALLENGE					
Key RTS Outcomes	RTS Outcomes Proposed Regional Target Scale of		What needs to be done		
Reduce transport emissions in declared air quality management areas	 National Emission Ceiling Directive⁵ thresholds are reflected in the Crieff, Dundee City and Perth City Air Quality Management Plans and Dundee Low Emission Zone. Including. NO₂ annual mean (not to exceed 40µg m-3) number of NO₂ exceedances (200µg m-3 not to be exceeded more than 18 times a year) 	Our towns & cities serve large rural hinterlands. 60% of trips made by those living in the region are by car (2019)	Support the introduction and adoption of low and zero- emission technologies Reduce the number of car journeys in our towns through promoting walking, wheeling, cycling and public transport		
Improve ability of all in the least affluent SIMD data zones targeted by the respective Council to access jobs, education and services	The ability to access services is influenced by a number of factors including availability and awareness of services; cost; difficulties in planning and undertaking multi-stage / multi-modal journeys etc. There are limited data sources to track ability of the target groups to access jobs, education and services. Whilst the following target is used to support this subject, it is acknowledged that a wider set of indicators that drive progress are required (see Section 4 for a fuller range of indicators) % of employed adults who could use public transport for work in least affluent	Lack of access to affordable transport is identified as a key driver of Child Poverty. Limited public transport services in many localities and limited ability to influence commercial fares Centralisation of public services. Location of services in 'out-of- centre' locations.	Improve public and shared transport opportunities Improve ability to access and use public and shared transport opportunities		

⁵ National Emission Ceilings Directive

TABLE 1: WHERE WE NEED TO GET TO AND THE SCALE OF THE CHALLENGE					
Key RTS Outcomes	Proposed Regional Target	Scale of the challenge	What needs to be done		
	areas to be equal to or better than the average for the Council area				
Improve journey times and journey time reliability on strategic road and rail routes to key destinations for (a) public transport (b) freight	 Improve public transport journey time and journey time reliability on key bus corridors in accord with any Tayside and Forth Valley Bus Alliance Strategic Business Case Ensure journey time reliability to key freight origins/destinations remains with 95% of average journey time 	The region is both peripheral to the central belt, as well as accommodating almost all surface trips to North-East Scotland and the Highlands and Islands	Reduce the number of trips passing through the pinch points on our strategic routes		

Achieving these aspirations, especially those that support the targets included in the Climate Change Act which all four Councils have committed to, is a significant challenge, and one that will not be easy for any of us.

Whilst this strategy sets out where we need to focus activity to support the national targets and aspirations, we need to:

- Continue to understand the implications of the scale of change for our communities, our businesses, our visitors and those that travel through the region, to help design and bring forward solutions which are fair and equitable
- Identify what Tactran and its constituent Councils can do, but also where further support and joint work with the Scottish Government is required to meet the national climate change and social inclusion targets

Contents

	Page	Supporting Documents
1. <u>Context</u>		
1.1 What is the Tayside and Central Scotland Regional Transport Strategy?	13	
1.2 Key issues: Nature of the region	15	Main Issues Report and Storymap
1.3: <u>Key Issues: Transport</u>	16	Consultation Summary: Regional Transport Strategy Update Note January 2022
1.4 Key Issues: Climate emergency	17	Representative Public Opinion Surveys
1.5 Key Issues: Social inclusion	18	Taylor McKenzie 'Tactran Quantitative Research' November 2022
1.6 What you told us	19	Taylor McKenzie 'Tactran Quantitative Research Report' October 2023 Headlines from the three stages of engagement on a New Tayside and Central Scotland RTS
2. What we want to achieve		
2.1 Strategic objectives	22	Report to Partnership 14 September 2021: A New
2.2 Outcomes		Regional Transport Strategy: Objective Setting
2.3 The scale of the challenge: Targets	26	Options Consultation: A conversation about changing how we travel SEA Scoping Report December 2021

	Page	Supporting Documents
		Achieving a 20% reduction in car-km: Options for the Tactran Region
		Tactran RTS Targets: baseline and options
3. How we will deliver the strategy		
3.1 Step changes in approach required	31	
3.2 Role of the Scottish Government	35	A conversation about changing how we travel:
3.3 Our transport networks cannot work without a strong and reliable public transport network	36	Consultation Summary Integrated Impact Assessment Report
3.4 Reducing car kilometres	37	SEA Environmental Report
3.5 Decarbonising transport	40	Appraisal Summary Tables
3.6 Integrated solutions	41	
3.7 <u>Actions</u>	47	
4. How we will measure success	68	Monitoring Framework

1.Context



1.1 What is the Tayside and Central Scotland Regional Transport Strategy?

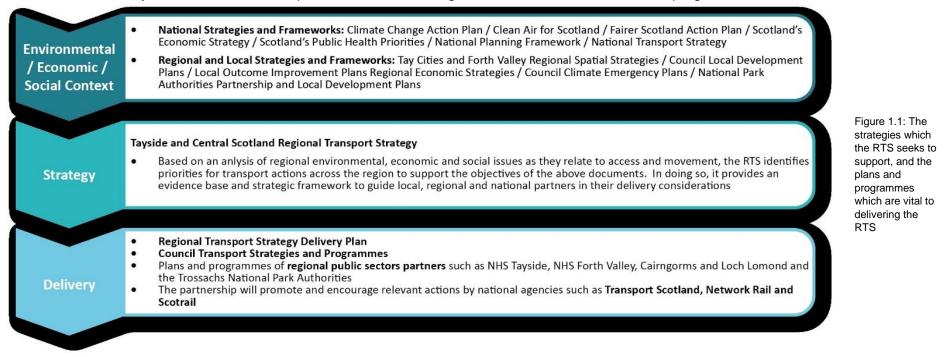
The Regional Transport Strategy (RTS) is a partnership plan identifying the strategic transport priorities for the Angus, Dundee City, Perth & Kinross and Stirling Council areas.

It provides a unique and complementary role to support local and national strategies, focusing on regionally significant issues. Figure 1 highlights the strategies it seeks to support, and the plans and programmes which are vital to delivering the RTS.

The Transport (Scotland) Act 2005 places a duty on Councils, Health Boards and other public bodies to perform their functions consistent with their respective Regional Transport Strategy.

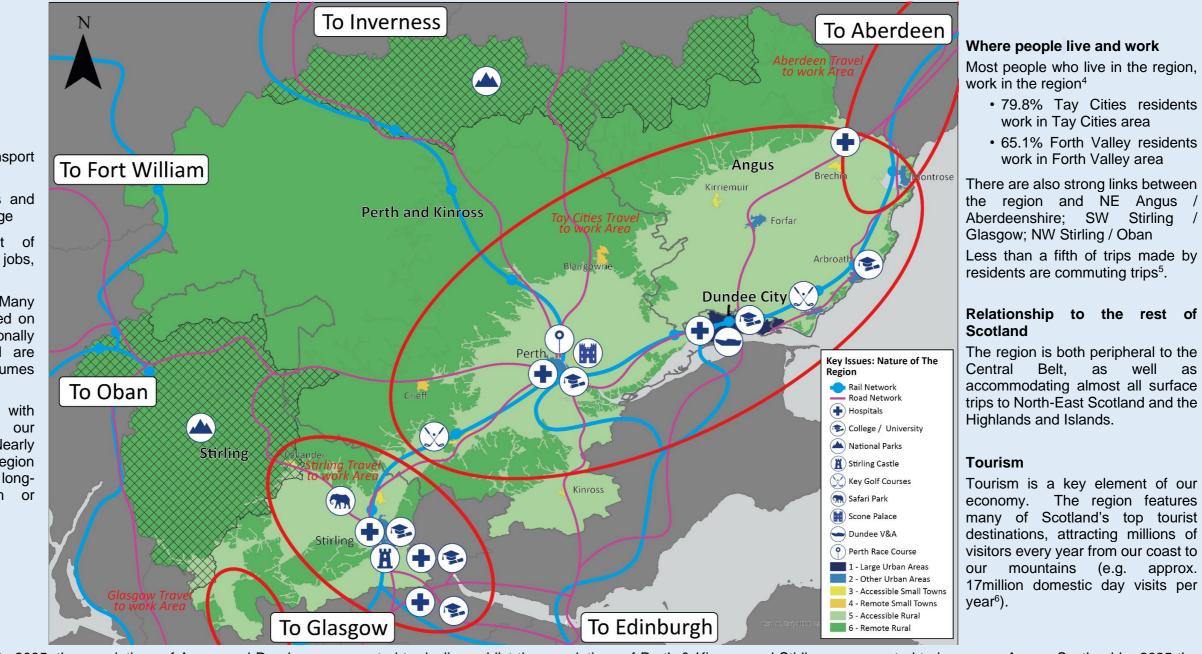
The strategy seeks to:

- Identify the key issues our transport systems need to support
- Provide the strategic policy framework for Tactran and our partners plans and programmes: the strategic objectives, outcomes and actions to focus activity on where it is most required. And a monitoring and review framework to enable progress to be measured



1.2: Key issues: Nature of the region

The urban / rural split: Whilst 63% of the population live in the urban areas of Arbroath, Dundee, Forfar, Montrose, Perth and Stirling, 37% of the region live in rural areas: 67.3% of people in Perth & Kinross, 46.9% in Stirling and 38.4% in Angus live in rural areas ¹. Many of whom are dependent on strategic routes to access jobs, services and healthcare. Approximately 29%-36% of the populations of Angus, Stirling and Perth & Kinross are in the lowest 20% Scottish Indices of Multiple Deprivation (SIMD) data zones for access²



You told us the main transport issues in the region were:

What you told us

- Adressing the impacts and causes of climate change
- · Availability and cost of transport to access jobs, education and services
- Impact of traffic: Many communities are located on trunk roads and regionally significant routes and are subject to the traffic volumes these routes bring
- The ability of people with disabilities to use our transport networks. Nearly 9% of people in the Region are limited a lot by a longterm health problem or disability³

Population size and age: By 2035, the populations of Angus and Dundee are expected to decline, whilst the populations of Perth & Kinross and Stirling are expected to increase. Across Scotland by 2035 the population of pensionable age will have risen from 18.3% (2020) to 22% placing greater pressure on public resources⁷. These figures are likely to be higher across the Tactran region where, in 2022, the over 65s already make up 25.1% of the population in Angus; 24.7% in Perth & Kinross; 20.5% in Stirling; and 18.1% in Dundee⁸.

Wealth: 36% of the population of Dundee, and 7%, 6% and 12% of Angus, Perth & Kinross and Stirling residents live in the least affluent 20% of SIMD data zones² / 20.6% of children in Angus, 24.5% in Dundee, 17.9% in Perth & Kinross and 16.6% in Stirling are living in relative poverty⁹. / 6.2% of 16-19yr olds in Dundee, 4.8% in Angus, 3.5% in Perth & Kinross and 2.9% in Stirling are not participating in education, training or employment ¹⁰

Health: 37% of Dundee is in the lowest 20% SIMD data zones for health; 10.74% for Stirling, 3.23% for Perth & Kinross, 1.94% for Angus²

1.3: Key Issues: Transport

Consequences of rural hinterlands

- Average car km driven/person/year is 12,547km in Perth & Kinross, 11,054km in Stirling, 7,512km in Angus, and 4,471km in Dundee (the Scottish average is 6,723km)¹¹
- Our towns & cities serve large rural hinterlands. Whilst 62% of trips to work in Dundee are made by car, as the population becomes more rural this % increases: 69% in Stirling; 77% of trips in Angus; and 79% in Perth & Kinross¹²
- Angus, Perth & Kinross and Stirling all have higher per capita transport CO₂ emissions compared to the Scottish average¹³

Road safety

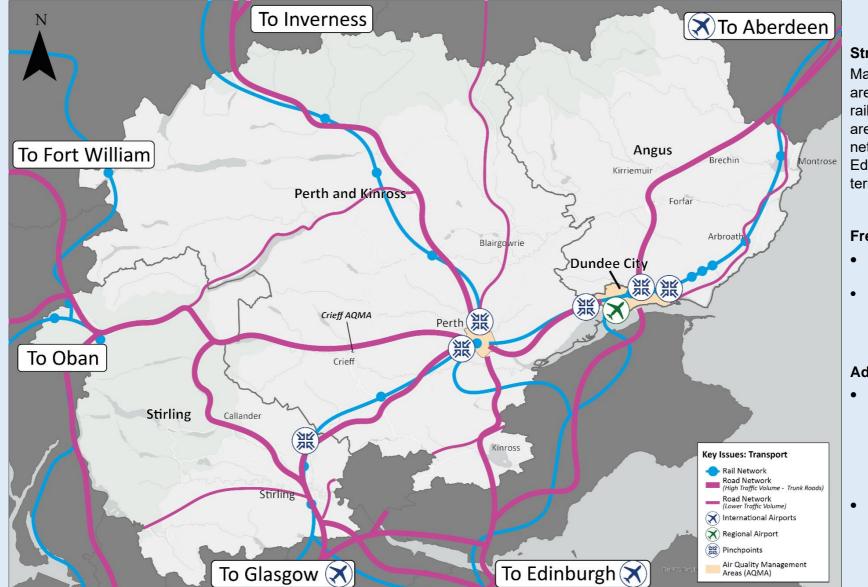
Any number of fatalities or casualties are too many. While good progress has been, and continues to be, made across most of the region in the last 10years, close attention needs to continue to be paid to longer term trends

Impact on communities

- Air quality has exceeded national air quality thresholds in Dundee and Perth cities as well as Crieff
- The number of transport services serving a community, and the resilience of these in the face of adverse weather events, will have an impact on the resilience of the community itself

Congestion and journey times

- 11% of drivers experience congestion on their journeys¹²
- vehicle miles could increase by up to 28% by 2037 compared to 2017, with a corresponding 51% increase in pm peak delays (secs/mile) in the Tayside area and 9% in the Forth Valley area ¹⁵



Availability and cost of transport to access jobs, education and services

- Limited public transport services in many localities and limited ability to influence commercial fares
- Approximately a 1/5th of the jobs in the region cannot be accessed within 60minutes by public transport by the working age population¹⁸. However, 68% of residents do not believe that the trip they make to work or education can be carried out using public transport¹⁹
- 12% of 16-24 year olds cannot access further education within 60minutes by public transport ¹⁸
- 14% of the population cannot access a hospital within 60mins by public transport; and approximately 8% cannot access a GP within 30mins by public transport¹⁸

Health

37% never walk as a means of transport, 26% never for pleasure¹². 57% of people in the 20% most deprived areas regularly walk for recreation, compared to 78% of people in the least 20% deprived areas²⁰

Strategic connectivity

Many (but not all) of our larger settlements are well located on the strategic road and/or rail network. But at each of our cities, there are pinch points on the strategic road network; and the rail journey from Perth to Edinburgh is not competitive with the car in terms of time or cost.

Freight

- Freight traffic accounts for 26% of the vehicle mileage in the Region¹⁶
- 24% of UK freight with an origin or destination in Scotland starts, ends or passes through the Region¹⁷

Addressing climate change

- For residents of Angus, Perth & Kinross and Stirling, whilst only 26%-29% of personal trips are over 10km, these trips account for 81%-84% of total km driven. In Dundee 93% of the trips are under 10km, where this accounts for 60% of km driven¹²
 - Approximately 4.5% of vehicles registered in the region were hybrid, electric or ULEV in 2023¹⁴

1.4 Key Issues: Climate emergency	Table 1.1 Climate action targets	
The Scottish Government and all four Councils in the region	Targets	The scale of the challenge
 have declared a Climate Emergency²². This has resulted in targets in the Government's <u>Climate Change Action Plan⁶</u> to reduce transport carbon emissions (compared to 1990) by 56% by 2030 and net zero by 2045 by: Decabonisation of transport Reducing the car km driven Work undertaken for Transport Scotland²³ suggests that climate change will only be met by: Rapid introduction of low and zero-emission technologies Reducing passenger and freight vehicle kilometres travelled in the region through: modal shift 	 Decarbonisation of transport, interim targets includes: phasing out need for new petrol or diesel light commercial vehicles in public bodies by 2025 phasing out need for any new petrol or diesel vehicles in public sector fleets by 2030 phasing out need for new petrol or diesel cars or vans by 2030 phasing out need for new petrol or diesel cars or vans by 2030 removal of diesel passenger trains from the Scottish network by 2035 beginning work to decarbonise HGVs, ferries and aviation 	Approximately 4.5% of vehicles registered in the region were hybrid, electric or ULEV in 2023 ¹⁴ If sales rates are maintained, ULEVs are expected to be only be approximtaley 13% of the car fleet by 2030 ²¹ Electrification between Edinburgh / Dunblane and Aberdeen / Inverness required. Alternative fuels required on West Highland Line
 reduced travel through shorter trips and trip avoidance 		This means reversing 29+ years of
Across the region there is strong public support for		growth in car km in 6 years
 combating climate change⁷: 80% see climate change as an immediate and urgent problem 85% believe they have a personal duty to combat 	Reducing car km by 20% by 2030 compared to a 2019 base	82% car mileage is generated to, from or between our rural areas and towns. ³ ⁄ ₄ of personal mileage is generated by trips over 10km

• 53% would be willing to change how they travel to help address climate change

⁶ See also Transport Scotland Mission Zero for transport

⁷ Tactran Representative Public Opinion Survey 2023. See also <u>SHS 2021</u>, where 83% believe Climate change is an immediate and urgent problem

1.5 Key Issues: Social inclusion

Many in the region suffer some form of disadvantage which makes it harder to participate in society and achieve a decent quality of life:

- Least affluent areas: Table 1.2 highlights the % of LA population living within the 20% least affluent Scottish Indices of Multiple Deprivation (SIMD) data zones
- **Rural isolation**: 20.7% of Angus, 20.4% of Perth & Kinross and 18.2% of Stirling data zones are in the 10% most access deprived geographies as defined by the SIMD
- **Disability**²⁴: Approximately 9% of the region's population are limited by a long-term health problem or disability³
- **Discrimination** as a result of gender; pregnancy / maternity; sexual orientation; ethnicity; religious belief, disability or age
- Discrimination as a result of low income, low wealth, material deprivation or socioeconomic background⁸

For many, more than one of the above characteristics apply, compounding problems²⁵. Many of the more vulnerable groups in society have safety concerns when it comes to using public transport. This includes the young²⁶, females²⁷, disabled, members of the LGBTQ+ community, religious belief, and ethnicity.

Child poverty

To help address inequalities the Government has also set ambitious <u>targets for child poverty</u>. The lack of affordable and accessible transport has been identified as one of the <u>drivers of</u> <u>child poverty</u>.

Table 1.3: Child poverty targets	Child poverty rates in 20229		29	
Child poverty targets include	Angus	Dundee	Perth & Kinross	Stirling
By 2030, less than 10% of children should be living in relative poverty	20.6%	24.5%	17.9%	16.6%
By 2030, less than 5% of children should be living in absolute poverty	16.4%	19.0%	14.2%	13.4%

Dundee

Stirling

Perth & Kinross

least affluent SIMD data zones in Scotla				
		Pop in 20% least affluent areas	% of pop in 20% least affluent areas	
	Angus	9,291	8%	

55,840

8,508

11,110

38%

6%

12%

p18/77

Table 1.2: Population living within the 20%

⁸ Low income: cannot afford to maintain regular payments such as bills, food, clothing; Low wealth: enough money to meet basic living costs and pay bills but have no savings to deal with any unexpected spends and no provision for the future; Material deprivation: being unable to access basic goods and services i.e. financial products like life insurance, repair/replace broken electrical goods, warm home, leisure and hobbies; Socio-economic background: disadvantage that can arise from parents' education, employment and income – in other words, social class

1.6 What you told us

This strategy is asking big changes of all of us. To help get it right, it is critical that we have listened to what you told us. In addition to receiving responses from individuals and organisations we undertook two representative public opinion surveys²⁸. Key messages from these surveys were:

Problems and priorities

- 80% believe that climate change is an immediate and urgent problem
- Approximately 80% support the principles of taking climate action, reducing inequalities, improving health and wellbeing and supporting inclusive economic growth. But improving health and wellbeing receives a little more support than the other three priorities

Constraints and opportunities

- 68% do not believe their trip to work or education can be undertaken by public transport
- The main reason people travel by the mode they are most reliant on is convenience. The least important reason is environmental benefit

Solutions

- 53% would be willing to change how they travel to help achieve climate change targets
- If there were safe, affordable and convenient transport alternatives provided
 - 29% were more likely to travel to facilities closer to home (71% if those who are a *little more* likely are included)
 - 18% were more likely to walk more instead of drive (62% if those who are a *little more* likely are included)
 - o 20% were more likely to get the bus instead of drive (59% if those who are a *little more* likely are included)
 - 20% were more likely to get the train instead of drive (53% if those who are a *little more* likely are included)
 - 10% were more likely to cycle more than drive (26% if those who are a *little more* likely are included)
- There is net positive support for all measures, with the exception of new charges for motorists

Amongst the submitted responses, the concern that the Partners would be unable to deliver the strategy is perhaps the most significant response. A summary of the <u>headlines from the three stages of engagement</u> and the full consultation results are available on the <u>RTS website</u>.

Further information

A fuller description of the issues can be found in <u>Main Issues website</u> / <u>Main Issues document</u>. A summary of what you told us about the issues can be found in <u>A New RTS January 2022 Update</u>. A <u>full report of the responses received</u> is available on the Tactran website.

References in Section1	
1. Scottish Urban Rural Classification 2020	15. Transport Scotland Transport Forecasts 2018
2 Local and national share calculator, Scottish Indices of Multiple Deprivation	16. Freight DfT Road Traffic Statistics 2022
And Population in Deprived Zones by Council: Overall SIMD 2020 Rank	17. Table 3.8: Average freight lifted by UK HGVs Scottish Transport Statistics 2021
3. <u>Census</u>	18. Tactran 2023 Public transport accessibility mapping <u>RTS Monitoring Framework</u>
4. Census Origin destination statistics The TayCities travel to work area includes Angus,	19. Tactran Representative Public Opinion Survey 2023
Dundee, Perth & Kinross and North East Fife council areas; the Forth Valley travel to work area covers the Clackmannanshire, Falkirk and Stirling council areas	20. <u>Scottish Household Survey Data Explorer</u>
5 Transport and Travel in Scotland 2019	21. Jacobs 'Tactran RTS Targets: Baseline and Options' September 2023
6 Visit Scotland 2019 Factsheets	22. Angus Council Transition to Net Zero Action Plan: 2022 to 2030 Dundee Climate Action Plan Perth & Kinross Climate Change Strategy and Action Plan Stirling Climate and Nature
7. National Records of Scotland: Projected Population	Emergency Plan, 2021–45
8. Scotland's Census 2022	23. Decarbonising the Scottish Transport Sector Final Report for Transport Scotland
9. Department for Work and Pensions: Children in low income families: local area statistics	24. Transport Scotland Disability and Transport 2021
10. Skills Development Scotland Annual Participation Measure 2023	25 See also Public Health Scotland Transport Poverty Jan 2024 and Joseph Rowntree
11. Jacobs Achieving a 20% Reduction in Car-km: Options for the Tactran Region 2023	Foundation 'Poverty in Scotland 2023'
12. Transport and Travel in Scotland 2021: Results from the Scottish Household Survey;	26. <u>Transport Scotland Baseline data report - June 2022 - Young Persons' Free Bus Travel</u> Scheme
13. UK local authority and regional greenhouse gas emissions national statistics 2021	27. Women's and girls' views and experiences of personal safety when using public
14. <u>Vehicle licensing statistics data tables</u> DVLA / DfT	transport Transport Scotland
	28 Tactran Representative Public Opinion Survey (Taylor McKenzie Research 'Tactran Quantitative Research' Reports <u>November 2022</u> and <u>October 2023</u>)

2.What we want to achieve



2.1 Strategic objectives

It is important the strategy is an objective led process to ensure we identify and focus on priorities for action.

Figure 2.1 summarises the main issues and relates these to strategic objectives, which mirror Scotland's National Transport Strategy (NTS2).

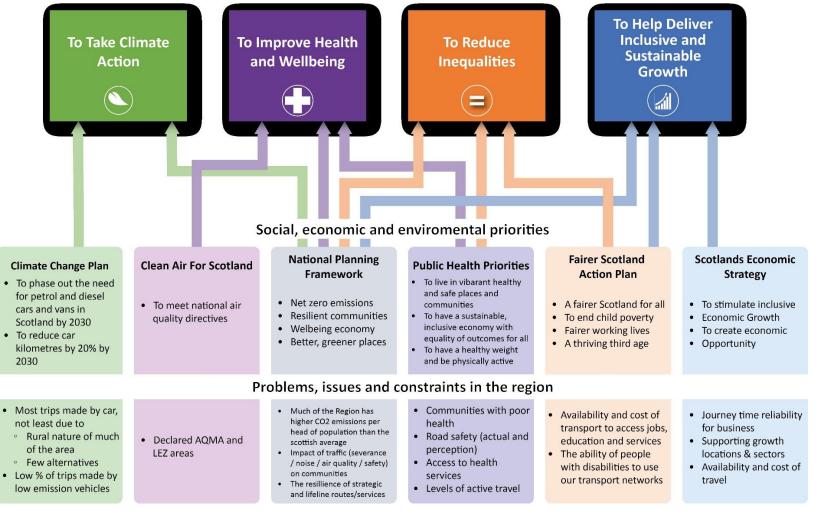


Fig. 2.1: Relationship between strategic objectives and key issues

2.2 Outcomes

The strategic objectives mirror the four priorities of <u>Scotland's National Transport Strategy (NTS2</u>). Taking account of national and regional issues, we have identified outcomes that detail how we want to achieve these strategic objectives. These outcomes help identify and focus activity where it is most needed, both in terms of locations and for which population groups.

TABLE 2.1: OUTCOMES

To take climate action

Reduce estimated CO₂ emissions from transport in the region

- Increase the share of EV and low emission vehicle use
- Reduce freight mileage by road
- Reduce car kilometres driven

Ensure strategic and lifeline routes (& services) are resilient to climate change, extreme weather and emergencies

To improve health and wellbeing

Improve road safety for vulnerable users (pedestrians, cyclists, children and older people, lower SIMD quintile)

Reduce transport emissions in declared air quality management areas

Improve access to healthcare

- Improve the ability of all in the lowest SIMD datazones (health domain) targeted by the respective Council to access healthcare
- Improve the ability of rural communities to access healthcare
- Improve the ability of over 65s to access healthcare (Primary health care / Hospitals)

Increase the share of personal trips made by sustainable modes such as walking, cycling and public transport

Increase levels of physical activity

- Increase the levels of walking, wheeling and cycling in the lowest SIMD datazones (health domain) targeted by the respective Council
- Improve the ability to access active leisure facilities and green space for lowest SIMD datazones

Reduce the impact of traffic on communities on strategic routes

TABLE 2.1: OUTCOMES

To reduce inequalities

Improve ability for young people, and disadvantaged & rural communities to access jobs, education and services

- Improve ability of 16-24 year olds to access jobs and further education
- Improve ability of all in the lowest SIMD datazones (all domains) targeted by the respective Council to access jobs, education and services
- Improve ability of families targeted in local child poverty action plans to access jobs, education and services
- Improve ability of rural communities to access jobs, education and services
- Improve the ability of older (65+) people and those in lowest SIMD datazones targeted by the respective Council to access social activities

Improve the ability of people with disabilities to access jobs, education and services

Improve the safety and security of vulnerable and protected characteristic groups in the street environment and on public transport

To help deliver sustainable, inclusive economic growth

Reliable inter and intra-regional journey times

- Improve public transport journey times and journey time reliability on strategic road and rail routes
- Improve journey time reliability for freight through the Region and to key destinations in the Region

Improved ability for young people, and disadvantaged & rural communities to access jobs and education

see outcomes to reduce inequalities above

Where does attention need to be focused?

Given the number of trips made each day in each Council area, any real progress against the strategic objectives is unlikely unless **measures** are directed at those populations and locations where they are most are most likely to have the greatest impact. For example:

- To reduce inequalities: Target access improvements at the least affluent communities and vulnerable groups (e.g. disabled; young; over 65's; groups identified in the child poverty action plans and the Integrated Impact Assessment), especially where these groups are located in areas where there is poor access (as indicated by <u>SIMD access domain</u>) and/or at risk of transport poverty (see Transport Scotland <u>STPR2</u> transport poverty mapping)
- To address climate change: Target measures at those trips and locations that generate the most km driven (i.e. 75% of km driven by those who live in the region is generated by trips over 10km⁹, and 82% of car km driven is generated to/from/between our rural areas¹⁰)
- To improve health and wellbeing:
 - Promote active travel in the communities with the poorest health (as defined by the <u>SIMD health domain</u>)
 - Promote modal shift to reduce the number of car trips in those locations where there are air quality issues
 - Target road safety interventions at pedestrians, cyclists, children and older people, locations in the lower SIMD quintile
- To assist the delivery of sustainable inclusive economic growth:
 - Target access improvements to education, training and employment for 16-24 year olds; the least affluent SIMD data zones as targeted by each Council¹¹; and those identified in child poverty action plans (*lone parent families, the large majority of which are headed by women; families which include a disabled adult or child; larger families; minority ethnic families; families with a child under one year old; families where the mother is under 25 years of age.*¹²)
 - Promote modal shift in and around major traffic corridors and pinch points in our urban areas
 - Improve connectivity to/from the region where there are disparities in travel times between car and public transport on the strategic transport network

⁹ <u>Transport and Travel in Scotland 2021</u>: Distance travelled

¹⁰ Jacobs 'Achieving a 20% reduction in car km: Options for the Tactran Region' January 2023

¹¹ See respective local outcome improvement plans: <u>Angus Local Outcomes Improvement Plan 2022-2030</u>; <u>City Plan for Dundee 2022-32</u>; <u>Perth & Kinross</u> Community Plan 2022-2032; The Stirling Plan 2017-2027

¹² Scottish Government Poverty and Social Justice 'Every child, every chance: tackling child poverty delivery plan 2018-2022' 2018; Annex 2

2.3 The scale of the challenge: Targets

Whilst the partnership will strive to work towards all outcomes, it is suggested that a number of key outcomes will drive the strategy. These are highlighted in Table 2.2 below. Given the importance of these outcomes, targets have been set to help partners measure progress towards the required goal.

TABLE 2.2: WHERE WE NEED TO GET TO AND THE SCALE OF THE CHALLENGE					
Key RTS Outcomes	ey RTS Outcomes Proposed Regional Target Scale of the challenge		What needs to be done		
Reduce estimated CO ₂ emissions from transport in the region	Reduce emissions from transport in line with the national target of a reduction of 56% by 2030 (compared to 1990)	Angus, Perth & Kinross and Stirling all have higher transport CO ₂ emissions per head than the Scottish average If current trends are maintained, it is likely that a reduction of only 11% may be likely.	Decarbonisation of vehicle transmissions Reduce mileage driven		
Increase the share of EV and low emission vehicle use	Promote Ultra Low Emission Vehicle (ULEV) adoption to achieve $72.7\%^{13}$ of the target of a 56% reduction in transport CO ₂ emissions by 2030	Approximately 4.5% of vehicles registered in the region were hybrid, electric or ULEV in 2023 ¹⁴	Rapid introduction and adoption of low and zero-emission technologies		
Reduce car kilometres driven	Reduce car kilometres driven in line with the national target of reducing car km driven by 20% by 2030 (compared to 2019 levels)	National target means reversing 29+ years of growth in car km in 6 years 82% car mileage is generated to, from or between rural areas and towns ¹⁵	Improve alternatives for longer trips Facilitate shorter trips through more services being delivered locally		

¹³ Research commissioned by the Scottish Government suggests Scottish Government's Climate Change Action Plan identifies changing technology as achieving 72.7% of 2030 target and behaviour change as 27.3% of target (Element Energy 'Decarbonising the Scottish transport sector' 2021)

¹⁴ Vehicle licensing statistics data tables DVLA / DfT

¹⁵ Jacobs 'Achieving a 20% Reduction in Car-km: Options for the Tactran Region' 2023

TABLE 2.2: WHERE WE NEED TO GET TO AND THE SCALE OF THE CHALLENGE					
Key RTS Outcomes	Proposed Regional Target	Scale of the challenge	What needs to be done		
	Over gener		Discourage car trips where there are reasonable alternatives and facilitate shorter trips Improve access to public transport		
Reduce fatalities and injuries	Meet the targets set out in Scotland's Road Safety Framework to 2030 ¹⁶	Any number of fatalities or casualties are too many. While good progress has been, and continues to be, made across most of the region in the last 10years, close attention needs to continue to be paid to longer term trends	 Reduce traffic speeds and consider engineering solutions to address identified safety concerns Provide road safety education and campaigns 		
Increase the levels of walking and cycling in the least affluent SIMD data zones	 For the least affluent SIMD data zones achieve the Transport Scotland's¹⁷ forecasts for average proportion of journeys walked and cycled by 2030¹⁸ Large urban areas: 30% walk / 24% cycle Other urban areas: 24% walk /19% cycle Accessible small towns: 26% walk 13% cycle 	 The current average proportion of journeys walked / cycled are: Large urban areas: 24% walk / 1.5% cycle Other urban areas: 19% walk / 0.4% cycle Accessible small towns: 20% walk / 0.5% cycle Within existing parameters, walking can be expected to 	Improve the proportion of facilities that are within walking/cycling distance of communities. Improve walking, wheeling and cycling opportunities to local facilities		

¹⁶ Scotland's Road Safety Framework to 2030 indicators

¹⁷ Transport Scotland's Second Strategic Transport Projects Review (STPR2)

¹⁸ To reduce inequalities, the goal would be to increase the levels of walking and cycling in the least affluent SIMD data zones to the same level as that in the most affluent areas. However, it is difficult to pick out differences at a local level, not least as most of the less affluent communities are in urban areas where active travel is higher than the average. It is possible however to seek to achieve the target levels of walking and cycling in the least affluent single travel is higher than the average. It is possible however to seek to achieve the target levels of walking and cycling in the least affluent areas first (i.e. by 2030), the STPR2 forecasts are to 2033.

TABLE 2.2: WHERE WE NEED TO GET TO AND THE SCALE OF THE CHALLENGE					
Key RTS Outcomes	Proposed Regional Target	Scale of the challenge	What needs to be done		
		increase in the least affluent communities by an additional 1% point, and cycling by 2-4% points			
Reduce transport emissions in declared air quality management areas	 National Emission Ceiling Directive¹⁹ thresholds are reflected in Crieff, Dundee City and Perth City Air Quality Management Plans and Dundee Low Emission Zone. Including. NO₂ annual mean (not to exceed 40µg m-3) number of NO₂ exceedances (200µg m-3 not to be exceeded more than 18 times a year) 	Our towns & cities serve large rural hinterlands. 60% of trips made by those living in the region are by car (2019)	Support the introduction and adoption of low and zero emission technologies Reduce the number of car journeys in our towns through promoting walking, wheeling, cycling and public transport		
Improve ability of all in the least affluent SIMD data zones targeted by the respective Council to access jobs, education and services	The ability to access services is influenced by a number of factors including availability and awareness of services; cost; difficulties in planning and undertaking multi-stage / multi-modal journeys etc. There are limited data sources to track ability of the target groups to access jobs, education and services. Whilst the following target is used to support this subject, it is acknowledged that a wider set of	Lack of access to affordable transport is identified as a key driver of Child Poverty ²⁰ . Limited public transport services in many localities and limited ability to influence commercial fares. Centralisation of public services.	Improve the proportion of facilities that are within walking/cycling distance of communities. Improve public and shared transport opportunities Improve ability to access and use public and shared transport opportunities		

¹⁹ National Emission Ceilings Directive

²⁰ Child Poverty Act

TABLE 2.2: WHERE WE NEED TO GET TO AND THE SCALE OF THE CHALLENGE					
Key RTS Outcomes	Proposed Regional Target	Scale of the challenge	What needs to be done		
	 indicators that drive progress are required (see Section 4 for a fuller range of indicators) % of employed adults who could use public transport for work/college in least affluent areas to be equal to or better than the average for the Council area 	Location of services in 'out-of- centre' locations.			
Improve journey times and journey time reliability on strategic road and rail routes to key destinations for (a) public transport (b) freight	 Improve public transport journey time and journey time reliability on key bus corridors in accord with any Tayside or Forth Valley Bus Alliance Strategic Business Case Ensure journey time reliability to key freight origins/destinations remains with 95% of average journey time 	The region is both peripheral to the central belt, as well as accommodating almost all surface trips to North-East Scotland and the Highlands and Islands	Reduce the number of trips passing through the pinch points on our strategic routes		

Further information

A fuller description of the outcomes and targets can be found in <u>RTS Monitoring Framework.</u> This includes identifying those locations and population groups where action is most required.

Supporting information		
Climate Change Action Plan	Transport Scotland 'Improving the evidence base on journey time reliability on the Trunk Road Network in Scotland' 2015 Transport Scotland 'Just transition for the transport sector: a discussion paper' June 2023 HITRANS Fish n Trips December 2018	
Public Health Priorities for Scotland		
Cleaner Air for Scotland 2 - Towards a Better Place for Everyone		
National Emission Ceilings Directive		
Child Poverty Act	Mobility and Access Committee for Scotland 'Transport to Health and Social Care' December	
Scotland's National Strategy for Economic Transformation	2019	
	Jacobs 'Tactran RTS Targets: baseline and options' September 2023	

3.How we will deliver the strategy



3.1 Step changes in approach required

Table 2.2 above highlighted the scale of change required to achieve our local, regional and national aspirations, particularly in relation to climate change and reducing social inclusion. This scale of change requires significant changes in how we travel and service provision for individuals, businesses, the Councils and other delivery agencies.

This scale of change requires:

- 1. Significant change in travel habits for individuals and businesses
- 2. Greater provision of public and shared transport: Improvements to public transport services are required to support modal shift and social inclusion. Powers available in the Transport (Scotland) Act 2019 and alternatives to providing subsidised public transport need to be considered
- 3. **Demand management measures:** Improvements to active, public and shared transport alone will not encourage a sufficient modal shift, and demand management measures that reflect people's realistic choices, will be required. This is likely to require discouraging car use by those who have alternative travel options
- 4. Additional finances (public and private) must be found to improve alternatives to the car
- 5. The location of services and new development must not be car dependent
- 6. Greater collaboration and co-ordination of partner activities is required to maximise available resources

This is a step change in activity for partners, and there is an **urgency** if the 2030 targets are to be met or bettered. This level of change requires **strong and declared political support.**

3.1.1 How this will affect individuals and busineses?

- It is important that there is a <u>Just Transition</u>²¹ to a net zero carbon emissions society. This includes ensuring that the move towards net zero reduces social inequalities and does not exacerbate them. In addition, people will expect **fairness**. They will expect everyone to play their part, and they will expect the circumstances of the more vulnerable in society to be taken into account.
- It is those that drive the most (individuals and businesses) that will be asked to change their habits the most. This will mean considering what mechanisms can discourage car use, but this can only be done where there are reasonable alternatives to the car. There is a need to ensure such mechanisms are fair and equitable, reflecting the different circumstances across the region. Any introduction must also be carefully timed, taking account not just of reasonable alternatives but wider events in society, such as the current cost of living crisis.
- Changing behaviour can be difficult, and providing transport solutions alone may not in themselves enable change. People may not have a choice about where and when they travel. This will inevitably restrict their travel options. People will also have to weigh up the costs of different options. These complexities are recognised, and underline the need to view the problems and solutions within a wider societal context.
- This will not be an easy process for anyone, so it is important to explain why actions to address climate change are necessary, and understand the potential implications from the people who will be affected to inform the location, scale and nature of measures. An informed conversation on this difficult matter needs to be promoted and maintained.
- Any restraint measures will also be associated with improvements to our transport networks and choices. This will improve the situation for those without access to a car (28.3% of households²²) and also those that want to walk, cycle and use public transport. In particular, people will expect to see a direct link between any charges made and improvements to alternatives.

We hope this will mean:

- People will have the choice to make fewer trips by using technology to reduce the need to travel
- People have confidence that they can make car based trips by low emission vehicles and reduce car mileage by making most trips by sustainable modes. Our settlements will be healthier places to live, where people are able to access more services locally by walking, wheeling and cycling
- That reliable and affordable public transport and shared transport²³ networks enable everyone to access jobs, education and services
- Journey times to and between centres will be reliable due to less congestion and more resilient networks

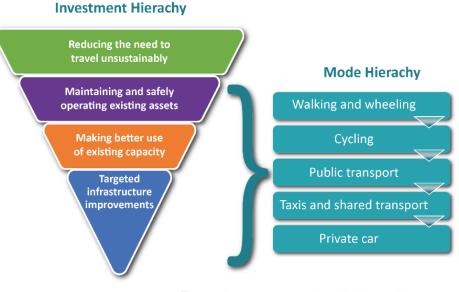
²¹ Just Transition - A Fairer, Greener Scotland & Climate Change (Scotland) Act 2009

²² Census

²³ Shared transport: shared transport, such as car clubs, car hire, bike hire, community transport etc. can complement demand responsive public transport to access either the destination or the closest fixed route public transport service

3.1.2 How this will affect the regional partners?

- Implementing the scale of alternatives to the car and demand management measures that discourage car use to hit the 2030 climate change targets will be challenging and require a step change in delivery:
 - The scale of behaviour change for individuals and businesses will be challenging. We will need to take everyone with us, carefully explaining the changes required, why they are required, listening and understanding the consequences, and shaping proposals accordingly. This is likely to require widespread hearts and minds campaigns with clear and co-ordinated messaging across partners. This RTS seeks to support this process, and partners may wish to consider how further regional messaging could assist.
 - The resources to improve alternatives to the car everywhere by 2030 will not be available. With scarce resources there is a need to:
 - prioritise where action is most required and will have the greatest impact on targets
 - improve co-ordination of delivery programmes between partners to deliver realistic alternative to car travel. Integrated programmes are required to deliver integrated solutions
 - make the case for more investment and explore other funding models
 - As well as the co-ordination (aligning priorities and programmes) required to provide integrated solutions, finding solutions to the big issues (*i.e. improving public transport; decarbonisation of transport; demand management required to support 20% car km reduction target*) requires effective collaborative working across the respective transport agencies (*including the third and private sectors*). The regional partners will accordingly identify partnership arrangements that ensure programmes are prioritised and co-ordinated to deliver integrated solutions.
 - When considering the appropriate solution to any problem, the principles of both the <u>sustainable</u> <u>investment and mode hierarchies</u> will be applied. This means always considering whether actions higher up the hierarchy can provide a solution to the problem, before considering an action lower down the hierarchy.





- The identification of solutions and co-ordination of delivery must look beyond local authority boundaries. People live their lives across local authority boundaries, and the integrated solutions provided must work across the individual's journey, which is often across a local authority boundary, and sometimes across regional boundaries. The areas to work across include:
 - Tay Cities area (Angus, Dundee, Perth&Kinross and North East Fife)
 - Forth Valley area (Stirling, Clackmannanshire and Falkirk)
 - North Angus and South Aberdeenshire
 - South-west Stirling and North East Glasgow
 - Cairngorms and the Loch Lomond and the Trossachs National Parks
- Addressing the issues can not be resolved by the transport agencies alone.
 - People need to get to healthcare, to education, to employment. Only by working together can relevant agencies identify the coordinated activity required to support the user across all of their journey. The users' journey does not start with "where do I catch the bus"...it starts with "I want to go to college". The first step in this process – and one which is essential to deliver the 20min/liveable neighbourhoods principle²⁴ – is that all public sector partners need to consider how services are to be provided locally.
 - The digital and electricity networks are critical to how we access services and how our transport networks work. Transport agencies must ensure that our transport aspirations align with the capacity of both digital and electricity network providers.
- The RTS encourages regional partners to continue to investigate ways of working together to improve the ability of all to meet the challenging aspirations that everyone shares. It may be worthwhile noting, the Scottish Government's Net Zero, Energy and Transport Committee recommendations in its consideration of '<u>The role of local government and its cross-sectoral partners in financing and deliverying a net zero Scotland</u>':

The Committee supports a stronger Regional Transport Partnership model to help enable positive behavioural change. RTPs should be empowered and resourced to be lead decision-takers on achieving a more joined up and strategic approach to public transport and active travel at regional level: one reflective of actual travel or commuting patterns, which do not stop at Council boundaries, and to achieve better integration on transport policy between member Local Authorities. This in return requires RTPs to be higher profile, more transparent and more responsive organisations, with clearer processes for public engagement

²⁴ National Planning Framework 4

3.2 The role of the Scottish Government

The partners are committed to achieving the targets set by the Scottish Government in relation to climate change; reducing inequalities; improving road safety; active lifestyles and air quality amongst others. In striving towards these targets the partners will:

- Prioritise and co-ordinate activity to target those locations/populations where the most progress is required to make a difference against national targets
- Investigate with operators new models of public transport provision
- Investigate charging mechanisms to encourage a modal shift

However, the work undertaken to develop this strategy suggests that is unlikely that a number of national targets will be achieved in the region within the existing resources and powers available to the partners. Where gaps are identified between the 'best that the Tactran partners can do' and the aspiration of a national target, we ask that ongoing engagement with the Scottish Government and its officials be established to work together to help each other achieve these critical national aspirations.

Table3.1: Risks to achieving national aspirations				
Target	Risks			
Promote Ultra Low Emission Vehicle adoption to achieve 72.7% of the 56% reduction in CO ₂ by 2030	Attractiveness of ULEV to purchasers (public and fleet) due to: Cost Confidence and ease of charging EVs			
Reduce car kilometres driven in line with the national target of 20% by 2030 (compared to 2019 levels)	Ability to provide alternatives for those trips that generate most milage by 2030 Restraint measures likely to be required. Ability to implement appropriate measures in timescales			
Meet the targets set out in Scotland's Road Safety Framework to 2030	 Impact of other programmes, e.g. Reduced road maintenance Resources, particularly in terms of Enforcement Ability to make sufficient infrastructure improvements 			
Emissions are reduced to below National Emission Ceiling Directive thresholds in Crieff, Dundee City and Perth City	Speed of adoption of ULEV Ability to provide sustainable alternatives to the car Ability to introduce restraint measures within timescales			
(For the least affluent SIMD data zones) achieve the Transport Scotland's forecasts for journeys walked and cycled by 2030	Ability to ensure that sufficient destinations are within walking or cycling distance Ability to make sufficient improvements to the walking, wheeling and cycling environment Ability to encourage behaviour change			
Support child poverty targets by addressing the lack of access to affordable transport	Ability to provide transport services outside core public transport hours Ability to improve affordability for the target groups			

3.3 Our transport networks can not work without a strong and reliable public transport network

A reasonable public transport network may exist between towns and within the cities, but:

- There are gaps in people's ability to connect to this network and
- Improvements to this network (including reliability and frequency) are required

Consultation responses suggest that the public has lost confidence in bus travel in the Region. The impact can be greater in rural areas e.g. when there is a cancelled bus and the next one may be a couple of hours later (or not at all). A loss in confidence could drive car use up further, and may affect the attractiveness of rural destinations. The networks need to be more reliable.

Integration, both in terms of modes, facilities and timetables is essential to provide an attractive alternative to the car.

Affordability remains a problem. Especially for those having to travel the furthest (e.g. those in rural area)

New models need to be explored to address user confidence, integration and affordability. These may be:

- regional models or
- local models

Operators (including community transport operators) have agreed to work in partnership with Tactran and the Councils to explore future models of provision through the bus alliances.

The solutions must reflect the travel demands of an area. The travel demands include not just the daily demands of residents but also the demands of visitors.

Where fixed route services are not viable or best value for money due the low density of population, then Tactran and the Councils want to explore ways to work with and support communities identify and provide the solutions that best work for them.

New models need to consider how best use of public sector fleet can be made.

A new funding model will be required for any service/affordability improvement. Within an integrated transport network, charging mechanisms to discourage car use can help provide funding to continue to improve the alternatives to the car.

3.4 Reducing car kilometres driven²⁵

The Scottish Government has set a target to reduce car km driven by 20% by 2030 compared to 2019 levels. Research commissioned by the Scottish Government suggest that this will deliver approximately 27% of the transport carbon emission reductions required by 2030²⁶.

Tactran and the Councils are supportive of this target, but are also conscious of the implications of

delivering this target. Most of the car km driven is to, from and between our rural areas. It would be wrong to add to the costs of living by charging car use where there currently is not a reasonable alternative to the car.

Consequently, Tactran and the Councils will investigate and support an approach to reducing car km driven where:

- Alternatives will be provided and improved in those corridors which generate the most km
- Any changes to charging car use must:
 - Follow sufficient improvement in alternatives to the car
 - Have an impact on kilometres driven. Congestion charge, workplace parking levy, increased parking charges will have a greater impact on the number of trips within a centre (helping address air quality and congestion problems), than the distance people travel
 - Not undermine the viability of a location (whether that be a local centre if it becomes cheaper to travel to a centre further away; or the viability of living in a rural area by significantly adding to the relative costs of living in a rural area). Co-ordination of measures across local authority boundaries will be required
 - Not increase transport poverty
 - o Be able to be responsive to changes in fuel duty or its successor

Fig 3.2: Proposed order of actions to reduce car km

Reduce the need to travel and improve integrated sustainable travel alternatives

+ Promote national road user charging scheme which recognises the rural nature of much of Scotland

+ Additonal local demand management

²⁵ Further reading: Transport Scotland <u>Route map to achieve 20% reduction in car km by 2030</u>; RAC <u>A Fairer way of paying to drive</u>; Centre for Policy Studies <u>The future of driving</u>, Climate Emergency Response Group <u>Committing to delivery</u>. Transport Scotland are due to issue a second report on achieving the 20% car km reduction in late 2023. Regarding a charging/payment regime alternative to the existing fuel and road taxation based structure see Scottish Government's <u>Update to the Climate Change Plan 2018 – 2032</u> para 3.3.36

²⁶ Element Energy '<u>Decarbonising the Scottish transport sector</u>' September 2021

 Recognise that people need to travel, and in rural areas the only way for many people to access their closest facilities (including public transport interchanges) is currently by car

Our representative public opinion survey suggests that there is strong public support for following these principles when investigating how to reduce car km²⁷.

It is also recommended that a national conversation be initiated to ensure public, businesses and all stakeholders are aware of and can participate in this critical issue which will affect, one way or another, everyone.

Recent consultation on Scotland's Guiding principles on the Environment²⁸ has confirmed the appropriateness of:

- The precautionary principle as it relates to the environment
- The principle that the polluter should play

Both these principles are useful to be conscious of when considering options to help reduce car mileage.



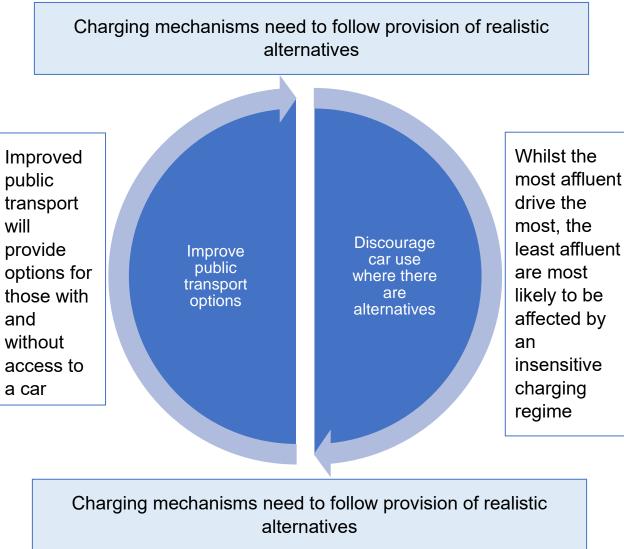
²⁷ Tactran Representative Public Opinion Survey (Taylor McKenzie Research '<u>Tactran Quantitative Research Report</u>' October 2023)

²⁸ <u>Scotland's Guiding Principles on the Environment: Statutory Guidance – Parliamentary Statement and Analysis Report</u>

New models of bus provision need to be explored to address user confidence, integration and affordability.

- Tactran and the Councils will work with the public transport operators to understand which future models can deliver what the people of the Region need
- The solutions must reflect the travel demands of an area. The travel demands include not just the daily demands of residents but also the demands of visitors.
- Where fixed route services are not viable or best value for money, we want to explore ways to work with and support communities identify and provide the solutions that best work for them.
- New models need to consider how best use of public sector fleet can be made.
- A new funding model will be required for any service / affordability improvement.

Fig 3.3: Our transport networks cannot work without a strong and reliable public transport network, however improving alternatives alone will not meet climate change targets



Any changes to charging car use must:

- Follow sufficient improvement in alternatives to the car
- Have an impact on kilometres driven
- Not undermine the viability
 of a location (whether that
 be a local centre if it
 becomes cheaper to travel
 to a centre further away; or
 the viability of living in a rural
 area by significantly adding
 to the relative costs of living
 in a rural area). Coordination of measures
 across local authority
 boundaries will be required
- Not increase transport
 poverty

٠

- Be able to be responsive to changes in fuel duty or its successor
- Recognise that people need to travel, and in rural areas the only way for many people to access their closet facilities (including public transport interchanges) is

3.5 Decarbonising transport

Supporting the uptake of electric vehicles is key to the Scottish Government's Climate Change Plan and is aligned with the outcome of phasing out the need for new petrol and diesel cars and vans by 2030. Research commissioned by the Scottish Government suggests 72.7% of the 2030 interim transport CO₂ emissions target will be as a result of changing technologies which help decarbonise transport.²⁹

Both the scale and pace of investment in ULEV charging infrastructure will need to be accelerated to meet the anticipated demand over the coming years.

In June 2023, Transport Scotland published its public charging Vision³⁰. The Partners are committed to delivering the principles contained within the vision to make public ULEV charging more convenient, accessible and ensure private sector funding helps to maintain a comprehensive network that supports our decarbonised transport ambitions. The Scottish Government aims to grow the public electric vehicle charging network to at least 6,000 public charge points by 2026³¹, with the expectation of leveraging private investment to complement and improve the current charging network.

Angus, Dundee City, Perth & Kinross and Stirling Councils are each developing their public electric vehicle charging strategy and expansion plans, to identify and take forward the opportunities to work with the private sector to grow the public EV charging network within the region. These plans are identifying local and regional charge point needs, the investment requirements, as well as the best approaches to delivering collaborative investments with commercial charge point operators.

Tactran and its constituent local authorities are open to operating different types of zero-emission technology in public sector, business and bus fleets which includes hydrogen fuel cell vehicles (FCEVs). FCEVs are less common at present, and the scale of their role in the future zero-carbon transport system is currently uncertain. However, infrastructure for fuelling FCEVs must also be considered to support their deployment as the technology becomes more readily available. Tactran and its constituent local authorities are currently engaged in a regional hydrogen project which will provide further insights into the requirements for integrating FCEVs to support the decarbonisation of transport.

²⁹ Element Energy 'Decarbonising the Scottish Transport Sector' 2021

³⁰ Transport Scotland '<u>A Network Fit For The Future: Vision for Scotland's Public Electric Vehicle Charging Network</u>' June 2023

³¹ There are currently 4,591 publicly available charge points across Scotland (Cp. ZapMap – EV Charging Statistics 2023 (last accessed 18th January 2024))

3.6 Integrated solutions

To provide an alternative to the car, there is a need to work together to provide integrated solutions across all stages of the non-car journey. This work needs to reflect the users journey (columns in Fig 3.4), rather than our organisational silos (rows in Fig 3.4).

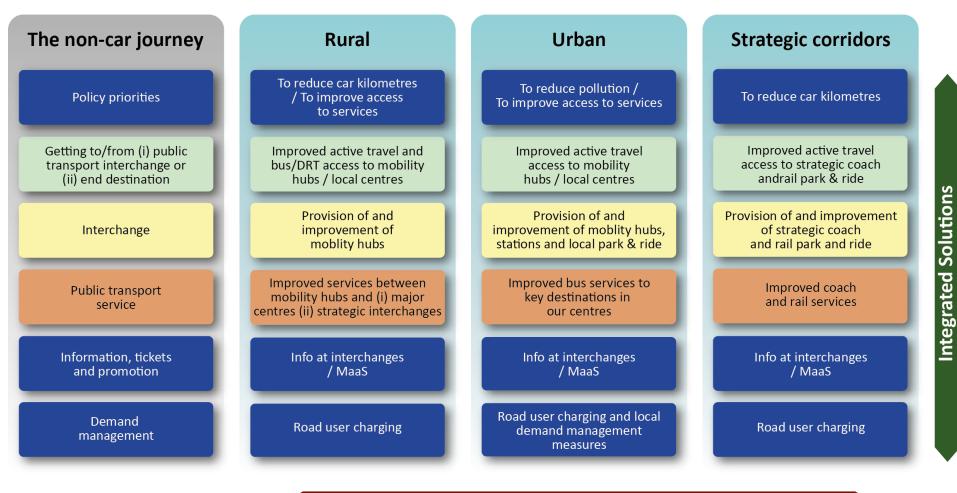


Fig. 3.4: Integrated solutions concept

Working horizontally leads to piecemeal provisions

3.6.1 Integrated solutions: Rural areas

West & North Stirling; West and North Perthshire; Kinross-shire; Angus Glens; Angus Mearns; Stirling Eastern Villages; Carse of Gowrie

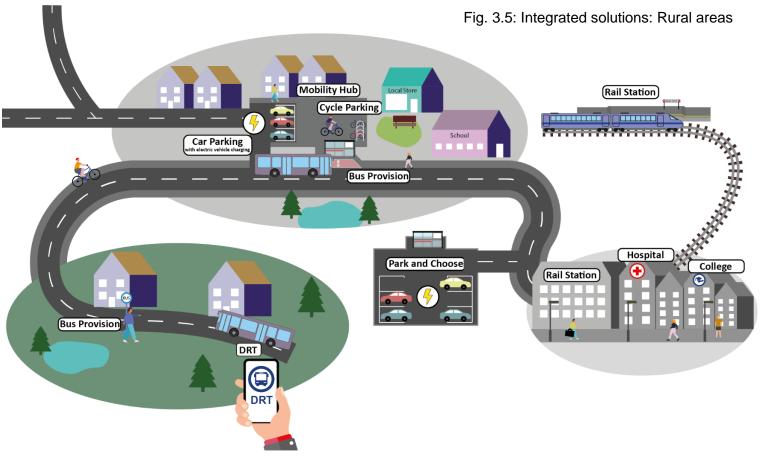
37% of the population in the region live in rural areas³².

Residents often have to travel further for services

- increasing costs: increasing the risk of transport poverty
- **limiting opportunities**: for example, being restricted to arriving later and leaving earlier will reduce the courses you can attend at college

Most of our rural areas, be it coast or mountains, are also **popular tourist destinations** attracting significant numbers of visitors (this includes areas within two national parks).

81% of car km driven in the Region is to, from or



³² Scottish Government Urban Rural Classification 2020

between our rural areas helping contribute to the higher transport CO2 emissions per capita in Angus, Perth & Kinross and Stirling compared to the national average.

Low population densities mean it is difficult to provide extensive and regular public transport. Consequently many residents and visitors To help people access services in their local centres and nearby towns and cities (and conversely help visitors and workers access our rural areas); and to reduce car km - there is a need to:

- enable people to access interchange points by walking, wheeling, cycling and public and shared transport, but also by car (as sufficient public or shared transport options are never going to be able to be provided to meet all travel demands in rural areas) in their local centre and in (or near) nearby towns and cities.
- improve bus, coach and train services between our centres

More services also need to be provided locally

rely on the car to travel to, from and between our rural areas. However, it would be wrong to assume all households have access to a car.

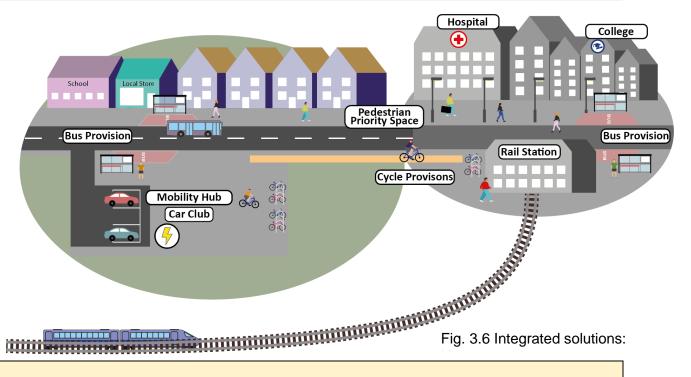
3.6.2 Integrated solutions: Urban areas

Arbroath, Dundee, Forfar, Montrose, Perth, Stirling (including Bridge of Allan)

63% of the population in the region live in urban areas³³.

Most (but not all) of our least affluent areas, and most of our concentrations of poor health are within our urban areas³⁴.

These centres are the focus of many of the trips from around the region, concentrating traffic and **creating problems of air quality and journey time reliability**, including on those strategic routes which pass through, or by, our urban areas. While many trips within our urban areas may be short, cost, convenience, time constraints and physical abilities mean that many travel by car rather than walk, wheel, cycle or use public transport.



There is a need to:

- promote and improve active and sustainable travel opportunities, especially for our least affluent communities, to connect everyone to jobs; education and training; local services (such as shops and open space); and health facilities
- reduce the traffic entering and leaving our towns by enabling people to transfer to public transport

In doing so, we will help reduce the adverse impacts of traffic on our communities and on local and national economies.

³³ Scottish Government Urban Rural Classification 2020

³⁴ Scottish Index of Multiple Deprivation 2020

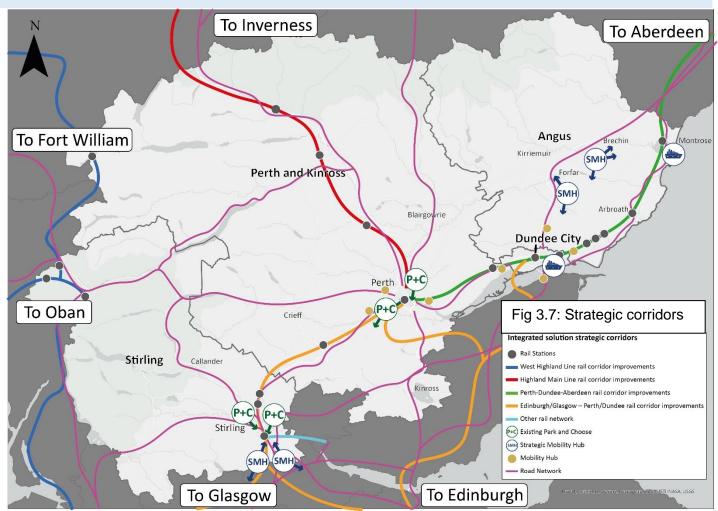
3.6.3 Integrated solutions: strategic corridors

Rail: Aberdeen/Inverness to Edinburgh/Glasgow; West Highland Line; Alloa/Dunblane to Edinburgh/Glasgow Road: M9 / M80 / M90 / A9 / A90 / A82 / A84 / A85

The region lies at the heart of Scotland.

Residents and visitors travel to and from the region from elsewhere in Scotland, and in particular to/from the neighbouring cities of Aberdeen, Dunfermline, Edinburgh, Glasgow and Inverness.

In addition, most vehicular and rail trips to or from Northeast Scotland and the Highlands and Islands will pass through the region. Ensuring that many centres in the region are well served by strategic road and rail (a notable exception being rail between Perth and Edinburgh), has conversely led to the through traffic contributing to air quality, noise, and journey time reliability issues at and around Dundee,



Perth and Stirling affecting local and national economies and local communities.

There is a need to:

- Reduce the impact of pinch points on these strategic networks for local and national freight, bus and coach services
- Improve public transport along these strategic corridors within and through the region
- Provide opportunities for people to access these strategic coach and rail services at the earliest opportunity to reduce car km both across Scotland and neighbouring areas



3.7 Actions

Actions have been identified that help deliver each outcome identified in Table 2.1. These actions have been grouped into nine delivery themes.

Fig 3.8 below highlights the delivery themes and how they relate to the outcomes and the strategic objectives (the diagram also highlights how many delivery themes will help address more than one outcome).

Each of the tables 3.2-3.10 below reflect the nine delivery themes and their respective actions.

For each action, the tables also suggest how and where the respective agencies could deliver the action in respect to the different geographies of rural areas, urban areas and strategic corridors.

Further detail on how the actions are to be taken forward will be included in the RTS Delivery Plan which will be developed to accompany the RTS. This includes identifying:

- Responsible partner(s)
- Target locations and populations
- Any appropriate metrics
- Potential risks and mitigation (including opportunities for bio-diversity enhancement)
- Relevant guidance and best practice
- Where actions are likely to be included in specific theme or locality action programmes (e.g. Bus Service Improvement Partnerships; Low Emissions Zones and Air Quality Management Plans; Local Transport Strategies or plans; NHS and National Park Authority programmes etc.)



FIGURE 3.8: DELIVERY THEMES TO ADDRESS THE STRATEGIC OBJECTIVES AND OUTCOMES				
Strategic Objectives	Outcomes (Summarised)		Delivery Theme	
	Reduce greenhouse gas emissions			
To take climate	Modal shift to more sustainable modes of travel		Reducing the need to travel by car through the location of development	
action	Reduce car kilometres driven		and services	
	Ensure our transport networks are resilient		Influencing travel choices and	
	Reduce fatalities and injuries		<u>behaviour</u>	
	Improve air quality		Decarbonising transport	
To improve health and wellbeing	Improve ability for older people, rural and disadvantaged communities to access healthcare		Improving safety	
	Improve ability for the most vulnerable to access social activities		Improving the accessibility & security of our transport networks	
Increase levels of physical activity			Improving network resilience	
To reduce inequalities	Improve ability for young people, and disadvantaged & rural communities to access jobs, education and services		Improving sustainable travel opportunities	
To help deliver sustainable, inclusive economic growth	Reliable inter and intra-regional journey times for public transport and freight		Improving access to public transport	
	Improve ability for young and disadvantaged communities to access jobs, education and training (as above)		Improving strategic connectivity	

The delivery themes have been ordered to reflect the principles of the sustainable investment hierarchy contained in Scotland's Second <u>National Transport Strategy</u>. This approach recognises the need to make as much progress in the first instance with the resources we have.

Reducing the need to travel unsustainably

- Reducing the need to travel by car through the location of development and services
- Influencing travel choices and behaviour
- Decarbonising transport

Maintaining and safely opertating existing assets

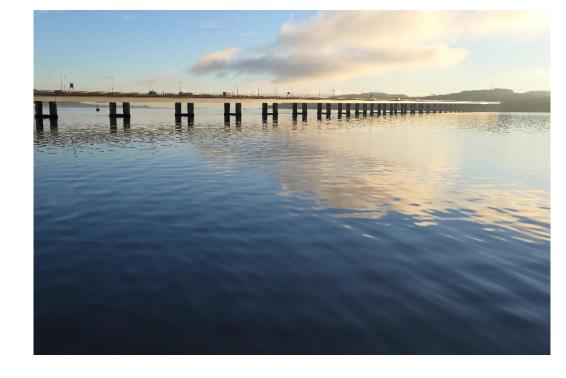
- Improving safety
- Improving the accessibility & security of our transport networks
- Improving network resilience

Making better use of existing capacity

- Improving sustainable travel opportunities
- Improving access to public transport

Targeted infastructure improvements

Improving strategic connectivity



Reducing the need to travel unsustainably

TABLE 3.2: REDUCING THE NEED TO TRAVEL BY CAR THROUGH THE LOCATION OF DEVELOPMENT AND SERVICES				
ACTION	WHERE AND HOW AGENCIES MAY APPLY THE ACTION			
	Rural (Small towns, villages, countryside)	Urban (Larger towns and cities)	Strategic Corridors	
Action 1 Planning authorities will reduce the car dependency of new	Development plans promoting la need to travel , and enable trave	nd use patterns that reduce the I by sustainable modes		
developments	The development management process ensuring new development is realistically accessible by a range of modes			
Action 2 Public sector agencies, will be encouraged to make available, and locate new, services within communities	Public services will be encouraged to work together to improve the range of local services that can be available at a neighbourhood level to support the 20minute / liveable neighbourhood principle			
Action 3 Councils will work with Scottish Government and suppliers to promote digital inclusivity across their areas	 Full fibre and mobile coverage are essential to: Enable remote access to services and reducing the need to travel Enable access to MaaS (Mobility as a Service) journey planning tools which enable the planning, booking and paying of transport service To ensure digital access for all, Councils will be encouraged to ensure there is public access to the internet in settlements (e.g. libraries and community hubs) 			
Notes: Action 1: Tactran will support the planning authorities prepare				

TABLE 3.2: REDUCING THE NEED TO TRAVEL BY CAR THROUGH THE LOCATION OF DEVELOPMENT AND SERVICES				
WHERE AND HOW AGENCIES MAY APPLY THE ACTION				
Rural (Small towns, villages, Urban (Larger towns and cities) Strategic Corridors countryside)				
 "an appropriate and effective transport appraisal undertaken in line with relevant transport appraisal guidance" (NPF4 p57) and/or LDP evidence report which includes "assessment of existing and planned travel and transport infrastructure and services available in the plan area for movement of people and freight across all modes of transport, including previous transport appraisal/assessment work that has been undertaken; consideration of local, regional and national transport strategies and plans" Local development planning - regulations and guidance - draft guidance Council Local Development Plans and Supplementary Guidance can be found at Angus Council, Dundee City Council, Perth & Kinross Council and Stirling Council. National Guidance can be found at NPF4 Local living and 20 minute neighbourhoods - planning guidance: consultation 				
 Action 2: Public sector agencies such as Council one stop shops, Health Boards, Department of Working & Pensions, Police Scotland etc. <u>NHS Scotland climate emergency and sustainability strategy: 2022-2026</u> <u>West Stirlingshire, Dumbarton and Helensburgh Market</u> 				
	WHERE AND HOW AGENCIES MAY APPL Rural (Small towns, villages, countryside) tive transport appraisal undertaken in line with th includes "assessment of existing and planne bort, including previous transport appraisal/ass t planning - regulations and guidance - draft guidance t planning - regulations and guidance can be t NPF4 e neighbourhoods - planning guidance: consult h as Council one stop shops, Health Boards, D ergency and sustainability strategy: 2022-2026	WHERE AND HOW AGENCIES MAY APPLY THE ACTION Rural (Small towns, villages, countryside) Urban (Larger towns and cities) tive transport appraisal undertaken in line with relevant transport appraisal guidance" (NPF4 p57) at the includes "assessment of existing and planned travel and transport infrastructure and services avoort, including previous transport appraisal/assessment work that has been undertaken; considerate t planning - regulations and guidance - draft guidance Int Plans and Supplementary Guidance can be found at Angus Council, Dundee City Council, Pertter NPF4 e neighbourhoods - planning guidance: consultation h as Council one stop shops, Health Boards, Department of Working & Pensions, Police Scotland or ergency and sustainability strategy: 2022-2026		

TABLE 3.3: INFLUENCING TRAVEL CHOICES AND BEHAVIOUR			
ACTION	WHERE AND HOW AGENCIES MAY APPLY THE ACTION		
	Rural (Small towns, villages, countryside)	Urban (Larger towns and cities)	Strategic Corridors
Action 4 All agencies will promote awareness and advantages of sustainable travel	Behavioural change campaigns to promote active and sustainable travel across Travel to Work Areas and/or nationally Develop, deliver and maintain Travel Plans and School Travel Plans Promoting Car Sharing / BikeHire etc schemes		
Action 5		Workplace Parking Levy / Congestion Zone Charging Public parking charges	

TABLE 3.3: INFLUENCING TRAVEL CHOICES AND BEHAVIOUR				
ACTION	WHERE AND HOW AGENCIES MAY APPLY THE ACTION			
	Rural (Small towns, villages, countryside)	Urban (Larger towns and cities)	Strategic Corridors	
Roads authorities will reduce the impact of traffic on		Reallocation / Reduction of the numbers of both on-street and off-street parking spaces within town and city centres		
communities and promote sustainable travel through demand management		Reallocation of carriageway , giving more space to active and sustainable modes		
measures	Expansion of 20mph limits and zones			
	Re-routing motorised traffic on longer and/or less direct routes for the benefit of the wider network			
	Speed limits to reduce carbo	on and particulate emissions		
Action 6 Tactran and the Councils will work with Transport Scotland to consider a national demand management mechanism (such as road user charging) to reduce car km driven	Demand management measures include road user charging where road users are charged for the length of trip made. If such an approach was pursued by the Scottish Government, Partners will encourage a just mechanism which takes account of geographic and social circumstances			
Notes Action 4: Agencies include: Local, regional and national agencies; local, regional and national public sector agencies; third sector agencies				

TABLE 3.3: INFLUENCING TRAVEL CHOICES AND BEHAVIOUR					
ACTION	WHERE AND HOW AGENCIES MAY APPLY THE ACTION				
	Rural (Small towns, villages, countryside) Urban (Larger towns and cities) Strategic Corridors				
 MaaS tools offer the opp 	portunity to not only promote sustainable tr	avel, they can also help improve the viability of interventions	(particularly shared transport measures)		
Action 5 / Action 6:					
 It is likely that some form of charging mechanism will be required to encourage a sufficient reduction in car km driven to support the national target of a 20% reduction as included in the Climate Change Action Plan. The public discussion regarding which type(s) of charging mechanism, and the appropriate package of improvements to alternative modes, will need to be informed by appropriate economic and equality impact appraisals. The ease and ability to make many trips will be influenced by the sticks and carrots being applied in neighbouring areas. Where applicable it will be beneficially to work with 					
 neighbouring authorities on measures that can reduce the number of vehicular trips Public charging policies may also take account of promoting electric and low emission vehicles 					
 Transport Scotland <u>A route map to achieve a 20 per cent reduction in car kilometres by 2030</u> 					
	 Reducing car use through parking policies: an evidence review (climatexchange.org.uk) 				

- Reducing speed limits can help reduce carbon and particulate emissions <u>University of Oxford CE Delft Transport for London</u> Transport Scotland '<u>Developing an Active Nation</u>' ٠
- ٠

TABLE 3.4: DECARBONISING TRANSPORT			
ACTION WHERE AND HOW AGENCIES MAY APPLY THE ACTION			
	Rural (Small towns, villages, countryside)	Urban (Larger towns and cities)	Strategic Corridors
Action 7 All public sector agencies will promote and enable electric and low emission vehicles for individuals, public sector, business and bus fleets	 (i) Supporting electric vehicle uptake through adoption of Ultra Low Emission Vehicles (ULEV) in public sector, business and bus fleets; and supporting a just transition through the availability of electric vehicles through car clubs and parking and charging tariffs (ii) Developing charging infrastructure through deployment and maintenance of public infrastructure; home charging and fleet charging (iii) Promoting electric mobility, communicating the benefits of low emission vehicles 		Promote ULEV coaches

TABLE 3.4: DECARBONISING	TRANSPORT			
ACTION	WHERE AND HOW AGENCIES MAY APPLY TH	WHERE AND HOW AGENCIES MAY APPLY THE ACTION		
	Rural (Small towns, villages, countryside)	Urban (Larger towns and cities)	Strategic Corridors	
	(iv) Partners will continue to review support the integration of Hydrogen future	hydrogen studies and how they might Fuel-Cell Vehicles (FCEV) in the		
			Support the decarbonisation of the rail network by 2035 through	
			(i) Electrification of Dunblane to Perth/ Dundee / Aberdeen	
Action 8 Tactran and the Councils will work			(ii) Battery Electric Trains from Edinburgh to Perth / Dundee (short term)	
with the rail industry to support Rail Decarbonisation			(iii) Electrification from Edinburgh to Perth / Dundee (long term)	
			(iv) Electrification from Perth to Inverness	
			(v) Battery Electric Trains on the West Highland Line	
This work is expected t	was produced in 2019. The Councils are currently to be completed TBC by Councils. Iskforce ROAD HAULAGE DECARBONISATION OVE		the requirements to meet the EV adoption targets.	
 see Transport Scotland Scotland's Railway 'Sus 	's <u>Rail Services Decarbonisation Action Plan</u> stainability'			
	Transport Scotland, Network Rail and Train Operat	ing Companies		

Maintaining and safely operating existing capacity

TABLE 3.5: IMPROVING SAFETY			
Action	WHERE AND HOW AGENCIES MAY APPLY THE ACTION		
	Rural (Small towns, villages, countryside)	Urban (Larger towns and cities)	Strategic Corridors
Action 9 The roads authorities will reduce traffic speeds and consider engineering solutions to address identified safety concerns	 Reducing speeds in settlements Review speed limits in residential and neighbourhood environments focusing on areas with road safety concerns Localised safety schemes such as traffic calming measures, crossing facilities and road / junctions realignments and redesigns Addressing network blackspots Review speed limits Road / junction realignments and redesigns Road safety enforcement, including enforcement of speed restrictions via camera technology 		
Action 10 Partners and public sector agencies will support the provision of road safety education	 Education measures, which include training and publicity, aiming to provide road users with the knowledge and skills needed to use the roads safely. Focused on: Road safety education pre-school, primary and secondary schools Road safety education for adults, such as drivers Road safety education for 17-25yr olds 		
Action 11 Tactran and the Councils will work with Transport Scotland and industry to identify opportunities to			Freight is still predominantly road- based with most drivers regularly traveling long distances. Without sufficient rest, drivers can experience fatigue which can be dangerous for

TABLE 3.5: IMPROVING SAFETY				
ACTION WHERE AND HOW AGENCIE		AY APPLY THE ACTION		
	Rural (Small towns, villages, countryside)	Urban (Larger towns and cities)	Strategic Corridors	
improve rest and welfare facilities for hauliers			themselves and other road users. Opportunities to increase the range of rest facilities available to drivers should be investigated.	
Notes:				
Action 9: speed controls can also help ma	ke the street environments feel safer for walkin	ng and cycling and reduce carbon emissions. See	Action 4	
Action 10: Public sector agencies: Police, Fire Services				
Scotland's Road Safety Framework to 2030				
Scotland's Road Safety Framework to 2	2030 - Delivery Plan 2021/22			

TABLE 3.6: IMPROVING THE ACCESSIBILITY & SECURITY OF OUR TRANSPORT NETWORKS				
ACTION	WHERE AND HOW AGENCIES MAY APPLY	THE ACTION		
	Rural (Small towns, villages, countryside)	Urban (Larger towns and cities)	Strategic Corridors	
Action 12 Roads and planning authorities will improve the accessibility & security of the street environment	Step free routes and appropriate transport interchange points; local neighbourhoods); and key local se Seating Lighting and reviewing the desi improve security Signage and wayfinding Number and location of disabled	Reducing severance & improving active travel on trunk roads through communities		
	Promoting changes to our transport networks to people with learning difficulties			
Action 13 Tactran and Councils will work with transport operators to promote improved accessibility & security for all across public transport:	Improvements at interchanges, step free access, improved seating, improved lighting, security improvements Improved accessibility of buses and trains for all, including for people with mobility issues Improved information provision for all, including for people with mobility issues Assistance to public transport users			

Action 12: This option seeks to make our settlements places where everyone, this includes people with mobility difficulties as well as those with hidden disabilities (such as learning difficulties), can confidently and easily move around. A programme of accessibility audits will assist in identifying and prioritising improvements whilst also contributing to the requirement of the Equalities Act (2010) to consider reasonable alterations. See CABE The principles of inclusive design; Transport Scotland Inclusive Design in Town Centres and Busy Street Areas; DfT Inclusive Mobility

Action 13: Improving access for all public transport users and particularly for those who are mobility impaired

TABLE 3.7: IMPROVING NETWORK RESILIENCE					
ACTION	WHERE AND HOW AGENCIES MAY APPLY THE ACTION				
	Rural (Small towns, villages, countryside)	Urban (Larger towns and cities)	Strategic Corridors		
Action 14 Transport authorities will improve network resilience to maintain a transport network within the region which		etworks from flooding / landslips			
is resilient to disruptive events resulting from increased risk of extreme weather and flooding	Meet environmental standards in construction and maintenance Blue-Green Infrastructure Strategic road renewal for reliability, resilience and safety				
Notes					

Making better use of existing capacity

TABLE 3.8: IMPROVING SUSTA	NINABLE TRAVEL OPPORTUNITIES					
ACTION	WHERE AND HOW AGENCIES MAY APPLY	WHERE AND HOW AGENCIES MAY APPLY THE ACTION				
	Rural (Small towns, villages, countryside)	Urban (Larger towns and cities)	Strategic Corridors			
Action 15 Tactran, the Councils	including mobility and public trans	habling people to access local facilities, sport hubs, by walking, wheeling and access to cycles through cycle hire ntional or electric cycles)				
and the National Park Authorities will improve walking,		Active freeways, cycle priority routes into our town and city centres				
wheeling and cycling opportunities	Strategic, high quality, walking, wheeling and cycling networks: providing walking, wheeling and cycling links between villages, towns and cities, connecting settlements, public transport interchanges; and supporting the National Cycle Network					
	Ensuring secure cycle parking at homes, workplaces, schools, interchanges and other destinations					
Action 16	(i) safer routes to schools - imp	roving walking, wheeling and cycling				
Tactran and the	routes to schools, including reducing traffic speeds around schools					
Councils will promote active and sustainable access to	(ii) school exclusion zones - lim times to improve safety and air qu					
schools	(iii) cycle parking; cycle training					
Action 17		Strategic Bus Priority Corridors, improbus priority measures, traffic management	oving journey time and reliability through ent etc.			

TABLE 3.8: IMPROVING SUSTA	AINABLE TRAVEL OPPORTUNITIES				
ACTION	WHERE AND HOW AGENCIES MAY APPLY THE ACTION				
	Rural (Small towns, villages, countryside)	Urban (Larger towns and cities)	Strategic Corridors		
Tactran and the Councils will work with operators to	Increasing Bus Services, improvement and feeder services (including Determined by the services of the services	ing the frequency, quality and coverage mand Responsive Transport)	of public transport through fixed routes		
improve the frequency, comfort, cost and integration of public transport services	Demand Responsive Transport (DRT): on demand (rather than timetabled services) to link to existing traditional fixed route bus services, and to cover areas where fixed route services are not viable				
	Improved rail services: making the most of the rail network to provide sustainable transport links between settlements within and outwith the region				
Action 18 Tactran and the Councils will investigate and support community and shared transport services where commercial fixed route services are not financially sustainable	Support for community and volu Car Clubs : to provide access to a	•			
Action 19	Encourage & support public tra	nsport providers to review fares to:			

TABLE 3.8: IMPROVING SUSTA	NINABLE TRAVEL OPPORTUNITIES					
Action	WHERE AND HOW AGENCIES MAY APPLY THE ACTION					
	Rural (Small towns, villages, countryside)					
Tactran and the Councils will work with Transport Scotland and operators to Promote Fair Fares	 (i) enhance social inclusion by providing a realistic alternative to a wider range of people, including disadvantaged communities (ii) help balance demand for public transport throughout the day and reduce pressure on services at peak times 					
Action 20 Tactran and the Councils will work with industry, the port authorities and the rail industry to identify and promote opportunities to reduce road freight	First and last mile distribution s bikes etc. Work with <u>Stirling and Tayside</u> <u>Timber Transfer Group</u> to identify and support timber transfer facilities	services, such as vans, drones, cargo	such as vans, drones, cargo (i) Road and rail fr (ii) Consolidation (iii) Improving opport freight modal trait the rail network			
investment in the creation Regional Active Travel M Action 16: Such physical improver Action 17: The Forth Valley and Ta Action 19: Fair Fares will not only compared to car travel	on of connected cycling infrastructure, protected Network (arcgis.com) nents should be linked to the school travel plann ayCities Bus Alliances will both lead on this actio serve the objective of making public transport mo	ing process (see Action 4)	ng towards	public transport being competitively priced		

TABLE 3.9: IMPROVING ACCE	TABLE 3.9: IMPROVING ACCESS TO PUBLIC TRANSPORT					
ACTION	WHERE AND HOW AGENCIES MAY APPLY THE ACTION					
	Rural (Small towns, villages, countryside)	Urban (Larger towns and cities)	Strategic Corridors			
Action 21	onward journey. This usually access bus services by, e.g. o walking and cycling links; den	of transport services within a s via different modes to enable your means improving the ability to car and bicycle parking; bike hire; nand responsive bus services. But g car club & car sharing facilities.				
		Strategic multi-modal interchange those long-distance trips heading to stance	sites to transfer from bus or car to coach or rail Scotland's cities			
Tactran and the Councils will work		Passenger facilities along strategia accessible waiting facilities with infor	c bus corridors: improve access to and ensure mation along strategic bus corridors			
with respective partners to provide and improve public transport interchanges		Local Park and Choose sites to provide interchange facilities at railway stations, bus stations and on public transport corridors serving towns to enable transfer to train, bus or bike into our larger towns and cities				
		New and improved bus stations				
		New and improved rail stations on network and reduce car trips on strat	existing lines to improve access to the rail egic routes			
Action 22	Journey planning tools to h	elp people be aware of all the choices	they have to make a journey			

TABLE 3.9: IMPROVING ACCES	TABLE 3.9: IMPROVING ACCESS TO PUBLIC TRANSPORT				
ACTION	WHERE AND HOW AGENCIES MAY AF	PPLY THE ACTION			
	Rural (Small towns, villages, countryside)	Urban (Larger towns and cities)	Strategic Corridors		
Tactran, Councils and public sector agencies will investigate and promote initiatives that allow the easier planning and booking of journeys	 Smart and integrated ticketing whereby tickets are stored electronically, usually on a smart card or other forms of smart media, enabling a person to use a single 'ticket' on different modes of transportation, such as bus and rail, or across different operators. <u>MaaS</u> products can provide both improved journey planning and provide smart, integrated ticketing. They can also help promote, and potentially improve the viability of, new transport services 				
Notes Action 21: Scotland's Railway 'Sustainable Travel to Stations' June 2023 Action22: • Mobility as a Service (MaaS) • Tactran ENABLE • Integrated Mobility Partnership					

Targeted infrastructure improvements

TABLE 3.10: IMPROVING STRAT	TABLE 3.10: IMPROVING STRATEGIC CONNECTIVITY				
ACTION	WHERE AND HOW AGENCIES MAY APPLY THE ACTION				
	Strategic Corridors				
Action 23 Tactran and the Councils will work with Transport Scotland to address pinch points on strategic roads to address issues of road safety, freight and bus/coach journey times / journey time reliability	 Improvements to address key pinch points, focused on improving public transport and freight journey time reliability and road safety: (i) Kingsway, Dundee A90/A972 (ii) Broxden and Inveralmond, A9 Perth (iii) Craigforth, M9 Stirling (iv) Grade separation of the A9 between Kier and Inverness (Kier, Auchterader) (v) Dualling of the A9 north of Perth (vi) A82 Inverarnan – Tarbert 				
Action 24 Tactran and the Councils will work with Transport Scotland and the rail industry to promote improved rail connectivity	 (i) Physical and operational improvements to reduce journey times and improve resilience of routes from and through the region to/from Edinburgh; Glasgow; Aberdeen; Inverness; including Highland Mainline (i.e. Inverness to Perth) rail corridor enhancements Aberdeen to Central Belt (i.e Dundee/Perth/Stirling to Aberdeen/Edinburgh/Glasgow) rail corridor enhancements (ii) Improved frequency and capacity of services to Edinburgh and Glasgow, including consideration of intermediate stations (iii) Improve resilience of West Highland line 				

TABLE 3.10: IMPROVING STRAT			
ACTION	WHERE AND HOW AGENCIES MAY APPLY THE ACTION		
	Strategic Corridors		
Action 25 Tactran and the Councils will work with Transport Scotland and the rail and freight industries to improve connectivity to freight destinations	Improving journey time reliability through the Region and to major freight destinations in the Region		
Action 26 Tactran and the	 Work with transport operators and the Airport Authorities to: (i) Promote sustainable access to Scotland's airports by public transport (ii) Promote flight connections to and from Dundee Airport 		
Councils will promote direct rail and air links	Work with train operating companies and other Regional Transport Partnerships to		
to and from the Region	(iii) Promote direct long distance rail connections into the region and onwards to Aberdeen and Inverness		
Notes	proving opportunities for freight modal transfer onto the rail network		

Impact Assessments

It is both a duty and best practice for impacts assessments to be undertaken to inform the strategy. These have included:

- <u>Integrated Impact Assessment Report</u>: incorporating the suggested content of the Human Rights & Equality; Fairer Scotland Duty; Children's Rights and Wellbeing; Health Inequalities impact assessments
- <u>Strategic Environmental Appraisal (SEA) Environmental Report</u>: including Cumulative and Comparative Impact Assessments

We have also undertook a qualitative impact assessment of the delivery themes above:

• Appraisal Summary Tables: Qualitative assessment against RTS objectives and STAG criteria

The conclusions of the impact assessments have been broadly supportive of the RTS. However, the principal issues raised by the draft impact assessments up to now have been:

- Many of the possible benefits of the strategy in terms of it mitigating against social or environmental issues will only be realised if the strategy is delivered.
- The potential for restrictive measures to help reduce car use having a greater impact on the least affluent and more vulnerable groups in society

4. How we will measure success



4.1 How we will measures success

To understand if the strategic objectives of the strategy are being achieved within the desired timescales, it is vital that the strategy includes a robust monitoring framework. Table 4.1 below identifies indicators which can help track progress through available information sources³⁵. We will continue to improve the Monitoring Framework and prepare a monitoring report every other year during the lifetime of this strategy. Please note, not all the indicators have highlighted the latest set of data in early 2024 as the baseline as some data during representing issues during the Covid-19 pandemic may not have been representative of 'normal' conditions. Further information is available in the <u>RTS Monitoring</u> Framework.

TABLE 4.1: THE IN	TABLE 4.1: THE INDICATORS WHICH WILL BE USED TO MEASURE PROGRESS AGAINST THE OUTCOMES						
Outcome (summary)	Outcome (detailed)	Indicator	Baseline				
	Increase the share of EV and low emission vehicle use		2023	% cars	% all vehicles		
		% of vehicles which are EV and low emission vehicles ³⁶	Angus	5.5%	1.7%		
			Dundee	5.3%%	2.3%		
			Perth & Kinross	6.0%	2.2%		
Reduce greenhouse			Stirling	18.0% ³⁷	12.5%		
gas emissions		estimated Transport kt C0 ₂ emissions per capita ³⁸	2021	Kt C0	2 / capita		
			Angus	1.99			
	Reduce estimated CO ₂ emissions from transport in the region		Dundee	1.23			
		Jupitu	Perth & Kinross	3.31			
			Stirling	2	.64		

³⁵ Whilst 2021 data is available (eg in Transport and Travel in Scotland and Dft Road Traffic Statistics) due to the ongoing impact of the covid pandemic in 2021, 2019 data is considered a more realistic baseline for selected outcomes

³⁶ DfT / DVLA Vehicle licensing statistics data tables

³⁷ It is likely that the higher % of registered vehicles in Stirling are not a consequence of private registrations

³⁸ <u>UK local authority and regional greenhouse gas emissions national statistics</u>

Outcome (summary)	Outcome (detailed)	Indicator	Baseline		
	Personal travel: Increase the share of		Main Mode 2019	% Car	% Other
			Angus	58	42
	trips made by sustainable modes such as walking, wheeling, cycling	mode share: main mode of travel ³⁹	Dundee	49	51
Modal shift to more sustainable modes of travel	and public transport		Perth & Kinross	66	34
			Stirling	69	31
	Reducing freight mileage by road	% road mileage that is freight ⁴⁰	2022		
			Angus	27.8%	
			Dundee	18.9%	
			Perth & Kinross	28.99	%
			Stirling	25.09	%
		Car km travelled on roads ⁴¹	Cars & taxis	Million vehicle kr	n 2019
Reduce car			Angus	837.6	
kilometres	Reduce car kilometres driven		Dundee	680.64	
driven			Perth & Kinross	1870.24	
			Stirling	1025.76	
Ensure our transport networks are resilient	Ensure strategic and lifeline routes (&	number of road/bridge closures per year on strategic road network	Monitoring framework required		1
	services) are resilient to climate change, extreme weather and emergencies	Rail services cancelled/delayed as a consequence of weather	region were par	In 2023 160 services serving the Tactran region were partly cancelled, and 251 fully cancelled due to adverse weather. 1736	

³⁹ Transport and Travel in Scotland 2017-2019 likely to be a better base due to traffic levels during pandemic.

⁴⁰ DfT Road Traffic Statistics

⁴¹ DfT Road Traffic Statistics

Outcome (summary)	Outcome (detailed)	Indicator	Baseline		
			services were de weather	layed due to	adverse
fatalities and users (people killed people seriously injured 	2018-22 average ⁴²	Killed	All severities
			Angus	2	154
	Improve road safety for vulnerable users (pedestrians, cyclists, children and older people)		Dundee	1	156
			Perth & Kinross	7	212
			Stirling	5	139
	Reduce transport emissions in declared air quality management areas	NO ₂ annual mean (not to exceed 40µg m ⁻³) and number of NO ₂ exceedances (200µg m ⁻³ not to be exceeded more than 18 times a year)	Air Quality in Scotland: Annual Statistic F Some, but not all, the data sets are available for identified settlements of strategic network. See RTS Monitori Framework		Statistic Reports
Reduce the impact of traffic on communities	Reduce the impact of traffic on communities on strategic routes	 (i) traffic volumes/type for identified communities⁴³ (ii) noise monitoring for candidate noise management areas (iii) accident data for identified communities (iv) air quality monitoring for identified communities 			nents on the

⁴² <u>Reported Road Casualties 2022</u> NB No local datasets other than KSIs

⁴³ (i) Local authority counts and https://roadtraffic.dft.gov.uk/regions/3 (ii) Scotland's Noise Map (iii) DfT Think (iv) Air Quality in Scotland

TABLE 4.1: THE INC	DICATORS WHICH WILL BE USED TO MEASUR	E PROGRESS AGAINST THE OUTCOMES			
Outcome (summary)	Outcome (detailed)	Indicator	Baseline		
			202344	30mins of a hospital	30mins of a GP
	Improve the ability of over 65s to	(i) % of over 65s able to access a hospital within 30mins/60mins by public transport	Angus	41.5%	89.0%
Improve the ability for older people and rural and	access healthcare (Primary health care /Hospitals)	(ii) % of over 65s able to access primary health	Dundee	33.2%	99.8%
		care (GP) within 30mins/60mins by public transport	Perth & Kinross	60.3%	87.7%
			Stirling	43.3%	92.9%
	Ability of all in the least affluent SIMD data zones (health domain) targeted by the respective Council to access healthcare	% of population within least affluent SIMD data zones able to access (a) primary (GP) and (b) secondary (hospitals) healthcare by public transport within 30mins / 60mins	2023:% of 20% SIMD within ⁴⁵	30mins of GPs	30mins of Hospitals
disadvantaged communities to			Angus	100%	41,.7%
access			Dundee	100%	38.6%
healthcare			Perth & Kinross	100%	100%
			Stirling	100%	73.3%
		% of population within rural areas able to	2023 ⁴⁶	30mins of GPs	60mins of Hospitals
	Ability of rural communities to access	access (a) primary (GP) and (b) secondary	Angus	60.5%	58.1%
	healthcare	(hospital) healthcare by public transport within 30mins / 60mins	Perth & Kinross	72.3%	73.5%
			Stirling	76.7%	46.5%

 ⁴⁴ Tactran NAPTAT Accessibility Modelling 2023
 ⁴⁵ Tactran NAPTAT Accessibility Modelling 2023
 ⁴⁶ Tactran NAPTAT Accessibility Modelling 2023

TABLE 4.1: THE INI	DICATORS WHICH WILL BE USED TO MEASU	RE PROGRESS AGAINST THE OUTCOMES				
Outcome (summary)	Outcome (detailed)	Indicator	Baseline	Baseline		
Improve ability for the most vulnerable to access social activities	Ability of older people and those in least affluent SIMD data zones (health domain) targeted by the respective Council to access social activities	% population unable to access community facilities by public transport within 30mins / 60mins	Whilst likely that there are more community facilities than local shops, suggest access to local centres be used as a reasonable proxy.			
	Levels of walking and cycling in the least affluent SIMD data zones (health domain) targeted by the respective Council	Pedestrian and cycle data in least affluent SIMD data zones	Normal method of travel to work/education 2023 ⁴⁷ in 20% least affluent data zones	Walk	Cycle	
			Angus	23%	5%	
			Dundee	8%	3%	
Increase levels			Perth & Kinross	21%	5%	
of physical			Stirling	12%	3%	
activity		Mode share travel to school in least affluent SIMD data zones ⁴⁸	Data to be included in Monitoring Framework			
			2019	20% least affluent data zones	Whole Council area	
	Improved ability to access active	% of population within the least affluent SIMD	Angus	0%	65%	
	leisure facilities and green space least affluent SIMD data zones	data zones within 5min walk of their local green or blue space ⁴⁹	Dundee	46%	48%	
			Perth & Kinross	0%	66%	
			Stirling	0%	84%	

 ⁴⁷ Tactran Representative Public Opinion Survey (Taylor McKenzie Research 'Tactran Quantitative Research Report' October 2023)
 ⁴⁸ Sustrans Hands Up Scotland Survey

⁴⁹ <u>Scottish Household Survey</u> Table 10.15: Walking distance to nearest useable green or blue space

Outcome (summary)	Outcome (detailed)	Indicator % population within the least affluent SIMD data zones able to access a public leisure centre by public transport within 30mins/60mins by public transport ⁵⁰	Baseline		
			2023	30mins	60mins
			Angus	100%	100%
			Dundee	100%	100%
			Perth & Kinross	100%	100%
		Stirling	80%	100%	
	aged ies to os, improve ability of 16-24 year olds to access jobs and further education % 16-24yr olds able to access further education facilities within 30mins / 60mins by public transport ⁵²		2023	40mins	60mins
		% 16-24vr olds able to access a range of	Angus	92.0%	76.9%
Improve ability for young people, disadvantaged and rural communities to access jobs, education and services		employment opportunities within 40mins /	Dundee	99.7%	99.7%
			Perth & Kinross	80.5%	63.8%
			Stirling	83.0%	88.7%
		51	2023	30mins	60mins
			Angus	37.4%	87.6%
			Dundee	97.7%	99.7%
			Perth & Kinross	38.0%	74.3%
			Stirling	55.1%	88.8%
	Improve ability of all in the least affluent SIMD data zones (all domains) targeted by the respective Council to access jobs, education and services	% population in least affluent SIMD data zones to access a range of employment opportunities within 40mins / 60mins by public transport ^{53 54}	2023	40mins	60mins
			Angus	100.0%	83.3%
			Dundee	100.0%	100.0%
			Perth & Kinross	100.0%	81.8%

 ⁵⁰ Tactran NAPTAT Accessibility Modelling
 ⁵¹ Tactran NAPTAT Accessibility Modelling
 ⁵² Tactran NAPTAT Accessibility Modelling
 ⁵³ Tactran NAPTAT Accessibility Modelling

⁵⁴ SIMD20, comprising the 20% most deprived data zones

Outcome (summary)	Outcome (detailed)	Indicator	Baseline			
			Stirling	100.0%	1	100.0%
		% who feel the journey to or from work/ college/university could be carried out using public transport ⁵⁵	2023	Least afflue SIMD quinti		verage (mode)
			Angus	27%		76%
		Further indicators to be developed, including:	Dundee	23%	23% 2	
		Frequency of services outside peak	Perth & Kinross	31%		41%
		hours between least affluent areas and jobs, education and services	Stirling	28%		55%
		Cost of travel				
		Indicators of child poverty exist at Council level.				
	Improve ability of families targeted in local child poverty action plans to access jobs, education and services	Indicators of child poverty exist at Council level. most likely in the least affluent SIMD data zones, these geographic areas. Target groups have bee which along with SIMD geographical data allows indicator of the ability of the target groups to acce difficult to identify.	the problem reace on identified in the targeting of interv	hes deeper e <u>Child Pove</u> rentions. An	nto soc ty Actic accura	ciety thar on Plan te
	local child poverty action plans to	most likely in the least affluent SIMD data zones, these geographic areas. Target groups have bee which along with SIMD geographical data allows indicator of the ability of the target groups to acce	the problem reace on identified in the targeting of interv	hes deeper e <u>Child Pove</u> rentions. An	nto soc ty Actic accura	ciety thar on Plan te owever
	local child poverty action plans to access jobs, education and services Improve ability of rural communities	 most likely in the least affluent SIMD data zones, these geographic areas. Target groups have been which along with SIMD geographical data allows indicator of the ability of the target groups to accerdifficult to identify. % of population within rural areas able to access by public transport within 30mins / 	the problem react en identified in the targeting of interv ess jobs, educatio	hes deeper <u>Child Pove</u> rentions. An n and servic Emp ⁵⁷	nto soc ty Actic accura es is ho	siety thar on <u>Plan</u> te owever SMrkt
	local child poverty action plans to access jobs, education and services	 most likely in the least affluent SIMD data zones, these geographic areas. Target groups have been which along with SIMD geographical data allows indicator of the ability of the target groups to accerdifficult to identify. % of population within rural areas able to access by public transport within 30mins / 60mins: (a) range of employment opportunities, 	the problem reac en identified in the targeting of interv ess jobs, educatio 2023: 30mins	hes deeper <u>Child Pove</u> rentions. An n and servic <u>Emp⁵⁷</u> 69.8%	nto soc ty Actic accura es is ho FE	siety than on Plan te owever SMrkt 55.8%
	local child poverty action plans to access jobs, education and services Improve ability of rural communities to access jobs, education and	 most likely in the least affluent SIMD data zones, these geographic areas. Target groups have been which along with SIMD geographical data allows indicator of the ability of the target groups to accerdifficult to identify. % of population within rural areas able to access by public transport within 30mins / 	the problem reac en identified in the targeting of interv ess jobs, educatio 2023: 30mins Angus	hes deeper <u>Child Pove</u> rentions. An n and servic <u>Emp⁵⁷</u> 69.8%	nto soc ty Actic accura es is hc FE 25.6%	ciety thar on Plan te

 ⁵⁵ Tactran Representative Public Opinion Survey (Taylor McKenzie Research 'Tactran Quantitative Research Report' October 2023)
 ⁵⁶ Tactran NAPTAT Accessibility Modelling

⁵⁷ Accessebility by public transport within 40mins

Outcome (summary)	Outcome (detailed)	Indicator	Baseline			
		% felt safe and secure on bus/train in last month ⁵⁸		Bus 2021	Train 2021	
			Angus	98%	n/a	
			Dundee	99%	n/a	
	The effet and ensuity of university		Perth & Kinross	100%	n/a	
	The safety and security of vulnerable and protected characteristic groups in the street environment and on		Stirling	97%	100%	
		% perception of people feeling very/fairly safe	2019			
	public transport		Angus	87%		
		when walking alone in their neighbourhood after	Dundee	81%		
		dark ⁵⁹	Perth & Kinross	8	86%	
			Stirling	89%		
Reliable inter and intra- regional journey times	Improve journey times and journey time reliability on strategic road and rail routes for public transport to key destinations (e.g. major centres and economic locations)	Congestion delays experienced by drivers ⁶⁰	% delayed	2017-2019		
			Angus	9%		
			Dundee	13%		
			Perth & Kinross	8%		
			Stirling	15%		
		Journey times to key destinations / reliability ⁶¹	Road/rail (mins) 2021	Edinburgh	Glasgow	
			Forfar	107 (road)	125 (road)	
			Montrose	102 (rail)	114 (rail)	
			Dundee	87 / 65	103 / 96	

⁵⁸ SHS Transport & Travel In Scotland: Adults who used rail services / local bus service in last month who agreed with each statement

⁵⁹ SHS Perceptions of safety when walking alone after dark

⁶⁰ SHS Transport % Travel in Scotland: Congestion delays experienced by drivers 2017-2019 likely to be a better base due to traffic levels during pandemic.

⁶¹ Rail: Scotrail timetables Road: Google maps

Outcome (summary)	Outcome (detailed)	Indicator	Baseline		
			Perth	64 / 75	74 / 73
			Stirling	62 / 40	39 / 40
	Improve journey time reliability for freight to key destinations (e.g. major centres and economic locations / air and sea ports)	Journey times to key destinations / reliability ⁶²	Data to be identified and included in Monitoring Framework		
	Improve ability of 16-24 year olds to access jobs and further education				
Improved ability for young people, and disadvantaged and rural communities to access jobs, education and training	Improve ability of all in the lowest SIMD data zones (all domains) targeted by the respective Council to access jobs and further education	See 'Improved ability for young people, and disa	d rural communi	ities to access	
	Improve ability of families targeted in local child poverty action plans to access jobs and further education	jobs, education and services' indicators above			
	Improve ability of working age population in rural communities to access jobs and further education				

Contact

For further information, please

Visit the RTS page on the Tactran website https://tactran.gov.uk/

or

Contact: Info@tactran.gov.uk or 01738 475775