

A new Tactran Regional Transport Strategy  
2023-2033  
Main Issues Consultation Report  
v3.0



# Executive Summary

## Introduction

### What is the Regional Transport Strategy?

The Regional Transport Strategy (RTS) is a partnership plan setting the strategic transport framework and priorities for the area covered by the Angus, Dundee, Perth and Kinross, and Stirling Councils.

### Nature of the region

The key factors that shape the travel demands of the region are:

- **the urban / rural split:** 29% of our population live in locations classified as remote or rural
- **national travel demands:** predominately via the A9, A90 and A82, as well as the Highland Mainline, East Coast Mainline and the West Highland Line, the region accommodates significant north-south travel to other parts of Scotland through the region
- **regional travel demands:** most of the work and shopping trips undertaken by most of the region fall within two travel to work areas covering Tayside (Angus, Dundee, Perth and Kinross and North Fife) and Forth Valley (Stirling, Clackmannanshire and Falkirk). Nonetheless, there are many of our communities that look towards either Aberdeen or Glasgow or even Oban as their closest or most easily accessed centres for shopping, employment or further education.

| Key stages for writing a new Regional Transport Strategy for the Tactran partners  |   |
|--|---|
| Identify problems, opportunities issues and constraints  | June/July 2021: Local members and other stakeholders to consider issues highlighted in Main Issues Report   |
| Objective Setting  | August/September 2021: Tactran Board consider feedback from Councils and stakeholders and agree draft objectives  |
| Initial Option identification  | Late 2021: Local members and stakeholders consider alternative strategies /options  |
| Detailed Option Appraisal  | Early 2022: Tactran Board consider feedback from Councils and stakeholders and agree preferred strategies/options<br>Summer 2022: Consult on draft plan |
| Adoption   | Autumn 2022: New administrations consider draft plan and responses<br>Dec 2022: Tactran board to consider feedback from Councils                        |
| In addition, the following appraisal process will be undertaken to ensure proportionate consideration is taken of the our most critical priorities: Strategic Environmental Appraisal, Equality & Human Rights Impact Assessment; Fairer Scotland Duty Assessment; Health Inequalities Impact Assessment and Child Rights and Wellbeing Assessment |   |

## The social environmental and economic priorities for the region

The RTS must support the environmental, social and economic priorities for the region set by development plans, city region deals, economic and environmental strategies and the local outcome improvement plans.

Under the four National Transport Strategy priorities, key problems and priorities for each local authority area have been identified.

| Key social, environmental and economic problems and priorities  |   |
|---|---|
| Reducing inequalities   | Taking climate action   |
| <p>For our most disadvantaged communities, our rural communities, people with mobility difficulties, and at risk groups, problems include</p> <ul style="list-style-type: none"> <li>• The availability of transport options: e.g. 10%-15% 16-25yr olds have no public transport access to further education<sup>1</sup></li> <li>• Transport poverty: e.g. 33%-54% of the Angus, Perth and Kinross &amp; Stirling datazones are at risk of Transport Poverty<sup>2</sup>.</li> <li>• Inclusive networks. e.g. 10.5% of the people in Dundee have a long term health problem or disability</li> </ul>                             | <p>Problems include:</p> <ul style="list-style-type: none"> <li>• The amount of trips made by car: Approximately 50%-70%<sup>3</sup> of work trips in the region are made by car. This is informed by where people live and need/chose to travel e.g. 29% of the population live in remote and rural locations</li> <li>• The locations where rail-lines and key roads are at risk during extreme weather events. Closure of routes in our rural areas can lead to very long diversionary routes</li> </ul> |
| Helping deliver inclusive economic growth   | Improving our health and wellbeing  |
| <ul style="list-style-type: none"> <li>• Supporting existing employment sectors and locations, including tourism</li> <li>• Supporting growth sectors and locations in our City Region Deals and Local Development Plans</li> <li>• Connecting goods and people to markets and opportunities. In particular, Connecting Scotland’s cities is vital to the growth of both our major settlements and Scotland as a whole</li> <li>• Access to jobs and training: In Angus 43% of the population, and in Perth&amp;Kinross 33%, are unable to access a choice of 3 employment locations within 60mins by public transport</li> </ul> | <ul style="list-style-type: none"> <li>• Addressing road safety problems</li> <li>• Air quality problems: Low Emission Zone declared in Dundee and Air Quality Management Areas declared in Perth and Crieff</li> <li>• Supporting access to health services: In Angus 60% of households without a car are more than 60mins drive from a hospital</li> <li>• Supporting areas of poor health: 33% of Dundee lives in the lowest 20% of SIMD datazones ranked by health</li> </ul>                           |

<sup>1</sup> Tactran TRACC Accessibility Modelling

<sup>2</sup> TayCities and Forth Valley STPR2 Case for Change Reports

<sup>3</sup> Census and Scottish Household Survey data

## New travel demands

Travel habits are changing at an unprecedented rate, and the uncertainties of how, where and how often we travel will be considered later. Nonetheless, the greatest new pressures on our transport networks will still come from new housing and economic developments as promoted in our development plans, our economic strategies and the city region deals.

New travel demands will also arise from growth of existing industries, such as tourism. It is also worth remembering that significant growth in Aberdeen/shire and the Highlands will also add to new trips on the networks in the Tactran area.

| Economic growth areas                                  |
|--|
| Arbroath / Montrose                                    |
| Dundee Waterfront / Western Gateway / Linlathen / MSIP |
| Perth West / Ruthvenfield Rd                           |
| Durieshill / Kildean / Forthside                       |

| Housing growth areas  | New housing | Approx % increase in homes |
|---|-------------|----------------------------|
| Arbroath  | 884         | 36%                        |
| Blairstown  | 1677        | 41%                        |
| Bridge of Earn  | 1797        | 156%                       |
| Crieff  | 920         | 28%                        |
| Dundee  | 2855        | 4%                         |
| Durieshill and South Stirling Gateway                           | 2500 + 800  | -                          |
| Stirling Eastern Villages (Cowie, Fallin, Pleun, Throsk)        | 1718        | 56%                        |
| Forfar  | 978         | 15%                        |
| Luncarty  | 760         | 110%                       |
| Montrose  | 702         | 12%                        |
| Perth   | 8581+       | 40%                        |
| Scone   | 823         | 37%                        |
| Stirling City (excluding Durieshill and South Stirling Gateway) | 2088        | 14%                        |

## Problems and opportunities with our transport networks

The existing transport networks across the Tactran region have a range of problems and opportunities which will affect our ability to address the environmental, economic and social priorities.

| Strengths and weaknesses of our transport networks to....  |   |
|--|---|
| Reduce inequalities  | Deliver inclusive economic growth   |
| <p><b>Enabling access to local facilities</b></p> <ul style="list-style-type: none"> <li>+ve good daytime bus service in Dundee</li> <li>-ve limited services across the rural areas. This is compounded by issues of transport poverty in rural and disadvantage communities</li> </ul> <p><b>By being inclusive</b></p> <ul style="list-style-type: none"> <li>-ve much of our transport networks are not inclusive for people with mobility difficulties</li> </ul>   | <p><b>Reliable journey times</b></p> <ul style="list-style-type: none"> <li>-ve hindered by pinch points on our strategic networks at Dundee, Perth and Stirling</li> </ul> <p><b>Enabling access to jobs</b></p> <ul style="list-style-type: none"> <li>-ve limited public transport choices across much of the region</li> </ul> <p><b>Connecting the cities / region</b></p> <ul style="list-style-type: none"> <li>+ve our cities are well connected on the strategic trunk and rail networks</li> </ul> <p><b>Supporting tourism</b></p> <ul style="list-style-type: none"> <li>+ve Long distance walking and cycling routes, inc West Highland Way</li> <li>-ve limited sustainable travel options in our rural areas</li> </ul>                                    |
| Take climate action  | Health and wellbeing  |
| <p><b>Resilience to poor weather</b></p> <ul style="list-style-type: none"> <li>-ve Flooding (Larbert/Bridge of Allen/Dunblane) of rail lines; landslips (West Highland Line); snow on higher level roads</li> </ul> <p><b>By enabling sustainable travel</b></p> <ul style="list-style-type: none"> <li>+ve compact towns and cities, many small towns within cycling distance of each other</li> <li>-ve declining bus services, limited EV infrastructure and greater provision of walking and cycling facilities required</li> </ul> | <p><b>Safety</b></p> <ul style="list-style-type: none"> <li>-ve accident hotspots on A9 at junctions and on single carriageway sections</li> </ul> <p><b>Pollution</b></p> <ul style="list-style-type: none"> <li>-ve traffic volumes and pinch points contributing to air quality issues</li> </ul> <p><b>Access to healthcare</b></p> <ul style="list-style-type: none"> <li>-ve Rural communities and those disadvantaged communities not near our main hospital</li> <li>+ve main hospitals near rail</li> </ul> <p><b>Enabling active travel</b></p> <ul style="list-style-type: none"> <li>+ve compact towns and cities, many small towns within cycling distance of each other</li> <li>ve greater provision of walking and cycling facilities required</li> </ul> |

### Future uncertainties and risks that may influence travel

There are more uncertainties now than at any other point in terms of where, how, and how often we travel. It will be important to identify what are the future risks and opportunities that we need to take into account as we plan for the future.

For convenience, we have identified the following headings to help identify various uncertainties, but many uncertainties could easily fall under more than one heading:

- **Political or global 'drivers'** .... events that trigger society to change behaviour e.g.
- **Technology**.... technological advances which give us greater opportunities to how we may travel or live our lives
- **Policy**.... Government policy responding to political or global triggers, or the technologies that exist, to promote or manage change
- **Attitudes**.... the public response to any of the above

Potential Uncertainties include:

- The pace at which Governments, business and society respond to Climate Change
- Increased use of technology may reduce work, shopping trips, etc
- Economic busts and booms which affect the amount of travel
- Driverless car technology may increase effective road capacity long term but in the medium term more capacity may be required. Makes single occupancy car use available to everyone
- Pandemics and terrorism can affect willingness to use public transport

# Content

|   |  |    |
|---|--|----|
| 1. Introduction                               | <a href="#"><u>1.1 What is the Regional Transport Strategy?</u></a>  | P9 |
|   | <a href="#"><u>1.2 Why write a new Regional Transport Strategy (RTS3) now?</u></a>                             |    |
|   | <a href="#"><u>1.3 Process for preparing a new RTS &amp; indicative timescales</u></a>                         |    |
|   | <a href="#"><u>1.4 Main Issues Report: Identifying the problems, issues, opportunities and constraints</u></a> |    |
|   | <a href="#"><u>1.5 Alignment with Scotland's Second National Transport Strategy</u></a>                        |    |
|   | <a href="#"><u>1.6 Alignment with other Government Strategies</u></a>  |    |
| 2. Nature of the region                       | <a href="#"><u>2.1 The Urban/Rural Split</u></a>   |    |
|   | <a href="#"><u>2.2 Location in Scotland: National travel demands to and through the region</u></a>             |    |
|   | <a href="#"><u>2.3 Regional Travel Demands</u></a>   |    |
|   | <a href="#"><u>2.4 Socio-economic profile</u></a>  |    |
| Social, environmental and economic priorities | <a href="#"><u>3.1 The priorities for reducing inequalities</u></a>  |    |



[3.2 The priorities for taking climate action](#)

[3.3 The priorities for inclusive economic growth](#)

[3.4 The priorities for health and wellbeing](#)

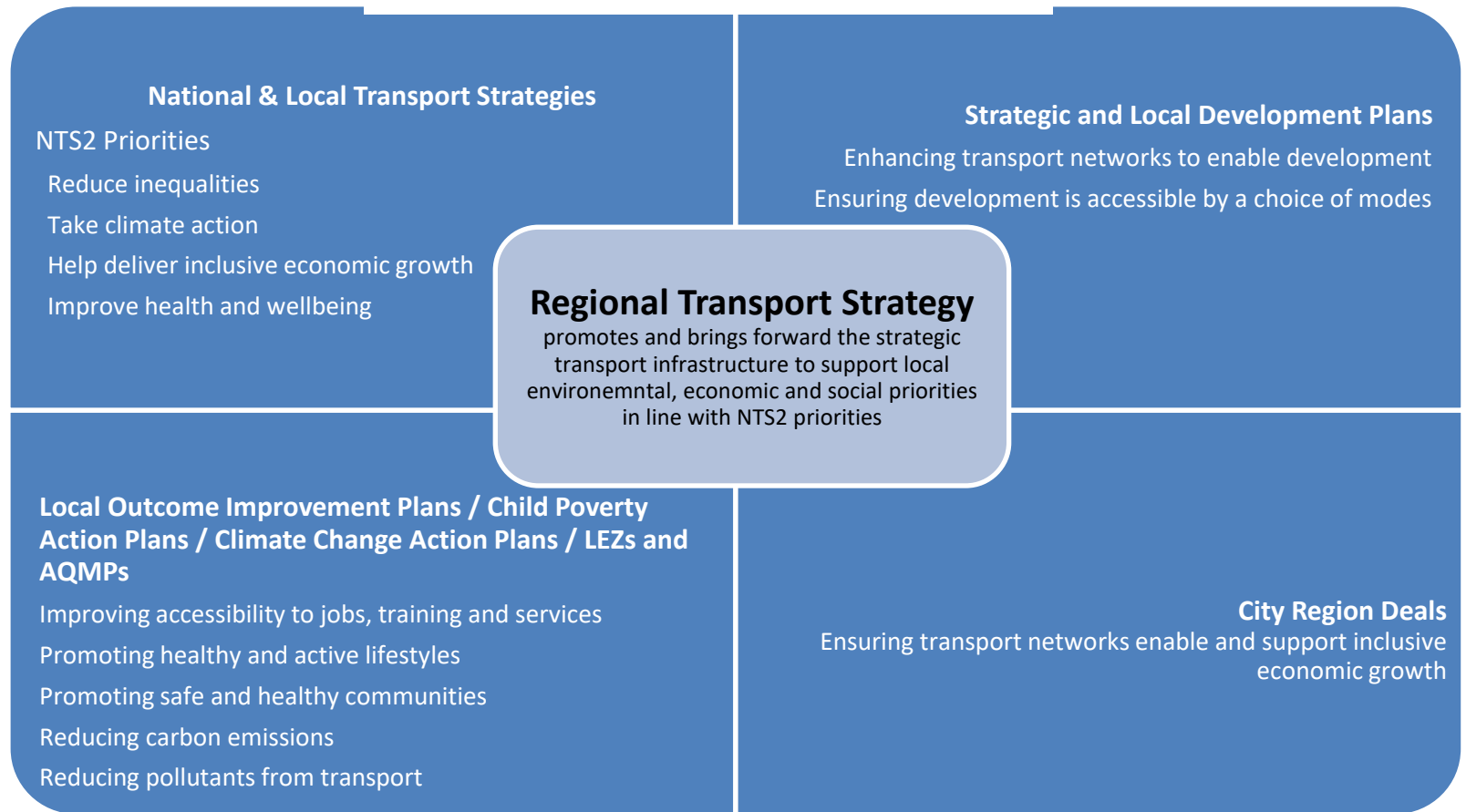
4. [Significant new travel demands in the area](#)
5. [Problems and opportunities with our existing transport network](#)
6. [Future uncertainties and risks that may influence travel](#)
7. [What will the RTS look like?](#)
8. [Questions](#)

# 1. Introduction

### 1.1 What is the Regional Transport Strategy?

The Regional Transport Strategy (RTS) sets the strategic transport framework and strategic transport priorities for the area covered by the Angus, Dundee, Perth and Kinross, and Stirling Councils. RTSs have statutory status, as provided for in the Transport (Scotland) Act 2005. The Act places a duty on constituent Councils, Health Boards and other public bodies to perform their functions which relate to, or which are affected by transport, consistently with their respective Regional Transport Strategy.

Figure 1: How the RTS supports national and local priorities



The Strategy takes account of the social, economic and environmental priorities for the region as identified both locally and nationally, especially those priorities identified within the spatial strategies (the respective Regional Spatial Strategies and Local Development Plans) and the economic strategies (including the respective City Region Deals).

## 1.2 Why write a new Regional Transport Strategy now?

The [last Regional Transport Strategy](#) for the Tactran area was adopted in 2015. A lot has changed since then. We now need to consider the impacts on the Region of:

- [Climate Change Emergency](#)
- [National Transport Strategy \(NTS2\)](#) & [Strategic Transport Projects Review \(STPR2\)](#)
- TayCities and Stirling & Clackmannanshire City Region Deals
- New and emerging Local and Regional Spatial Strategies
- The impacts of Covid 19

## 1.3 Process for preparing a new RTS & indicative timescales

| Report preparation   | Engagement/decisions   |
|--|--|
| <p><b>Identify problems, opportunities issues and constraints</b><br/> <a href="#">Main Issues Report</a> identifies the potential issues shaping a RTS for consultation with internal and external stakeholders</p> <p><b>Objective Setting</b></p> | <p><b>Engagement: June-July:</b> Local members and other stakeholders to consider issues which will shape the strategy</p> <p><b>Decision Point: August/September:</b> Tactran Board consider feedback from Councils and stakeholders and agree draft objectives</p> |
| <p><b>Initial Option identification</b><br/>           Identify alternative strategies / options. High level appraisal of these options against objectives (e.g. prelim appraisal)</p>   | <p><b>Engagement: Late 2021</b> Local members and stakeholders consider alternative strategies /options</p> <p><b>Decision Point: Early 2022</b> Tactran Board consider feedback from Councils and stakeholders and agree preferred strategies/options</p>           |
| <p><b>Detailed option appraisal</b><br/> <b>Jan-May 2022</b> (detailed) Option appraisal, inc modelling where appropriate<br/> <b>Jan- May 2022:</b> Draft RTS</p>   | <p><b>Engagement: Summer 2022:</b> Stakeholder engagement on draft plan</p> <p><b>Engagement: Autumn 2022:</b> New Tactran Board and new administrations to consider responses to draft plan</p>   |
| <p><b>Adoption</b></p>   | <p><b>Decision Point: Dec 2022:</b> Tactran board to consider final RTS</p>  |

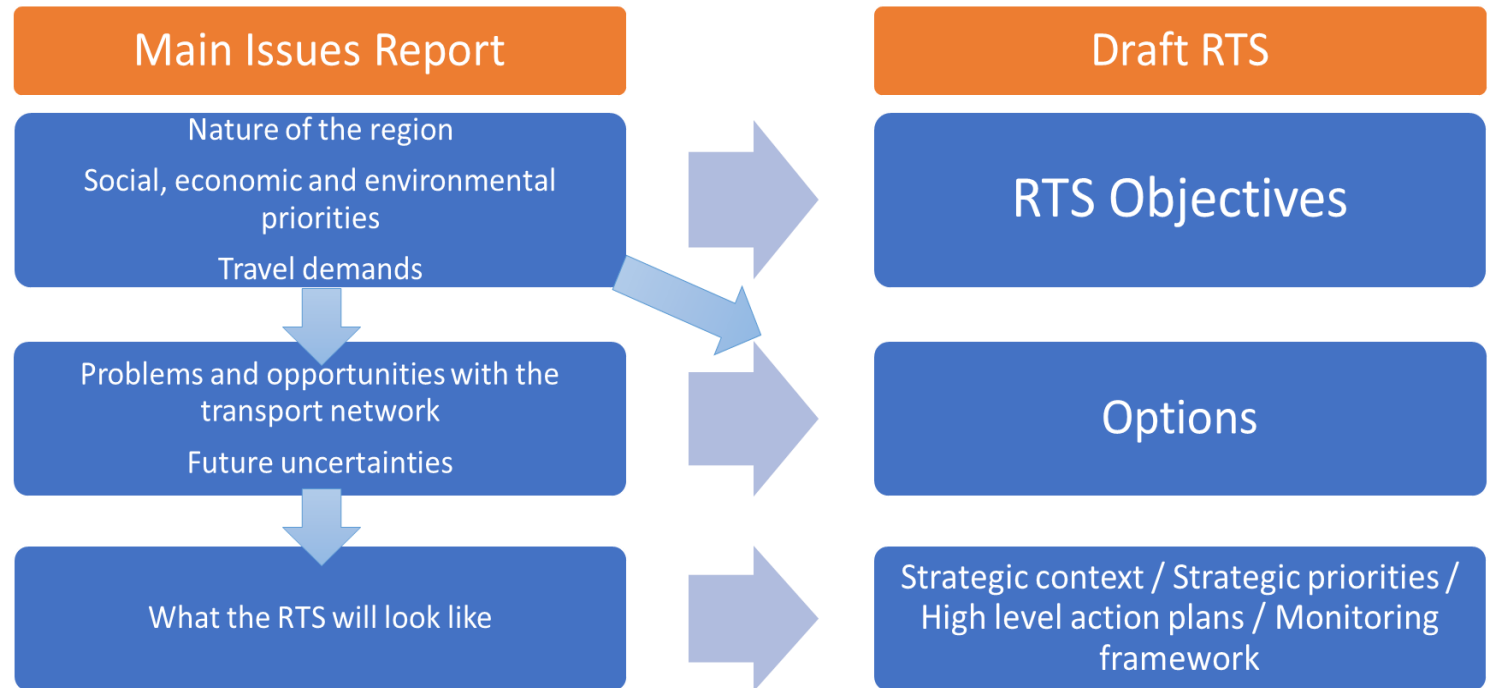
**1.4 Main Issues Report: Identifying the problems, issues, opportunities and constraints**

The first stage of the exercise is to identify the problems, issues, opportunities and constraints that will shape the Regional Transport Strategy. We will do this by undertaking engagement exercises with stakeholders based on the content of this Main Issues Report, identifying the problems, issues, opportunities and constraints which will help inform:

- What the RTS needs to support
- The RTS objectives
- The alternative options we have for achieving the RTS objectives

This Main Issues Report suggests the problems, issues, opportunities and constraints by considering:

- The nature of the region
- The social, economic and environmental priorities for the region
- The key travel demands
- The problems and opportunities the transport network
- Future uncertainties and risks that may influence travel



To help stakeholders respond to the questions posed in this main issues report, we gave an idea of what the Regional Transport Strategy itself may look like in section 6.

### 1.5 Alignment with Scotland's Second National Transport Strategy

There are a number of national, regional and local strategies that the RTS seeks to support, in particular, Scotland's Second National Transport Strategy (NTS2) adopted in February 2020 which the RTS needs to align with. In structuring the document around the NTS2 priorities, we will demonstrate how the RTS aligns with, and delivers, national priorities.

Accordingly, this Main Issues Report considers:

- What are the problems and priorities in the region for reducing inequalities; taking climate action; helping deliver inclusive economic growth; and improving our health and wellbeing
- What are the strengths, weaknesses, opportunities and threats of and to our transport networks for reducing inequalities; taking climate action; helping deliver inclusive economic growth; and improving our health and wellbeing

The writing of this Main Issues Report overlaps with Transport Scotland's Second Strategic Transport Projects Review (STPR2). Useful information on the transport problems, opportunities, issues and constraints in the region can be found in the respective STPR2 Case for Change Reports:

[Forth Valley STPR2 Case for Change Report](#)

[Tay Cities STPR2 Case for Change Report](#)

Figure3: National Transport Strategy Priorities



1.6 Alignment with other Government Strategies

The RTS will also ensure that it supports and helps bring forward those transport activities that support the priorities of all relevant national strategies, including:

| <b>Table 1: Principal objectives of national strategies</b>  |  |   |  |   |   |
|--|--|---|--|---|---|
| <a href="#"><u>National Planning Framework 4</u></a>   | <a href="#"><u>Clean Air for Scotland</u></a>  | <a href="#"><u>Climate Change Plan</u></a>  | <a href="#"><u>Fairer Scotland Action Plan</u></a>   | <a href="#"><u>Public Health Priorities for Scotland</u></a>  | <a href="#"><u>Economic Strategy</u></a>  |
| <ul style="list-style-type: none"> <li>• A plan for net zero emissions</li> <li>• A plan for resilient communities</li> <li>• A plan for wellbeing economy</li> <li>• A plan for better, greener places</li> </ul> | <ul style="list-style-type: none"> <li>• Meet national emissions ceiling directives</li> </ul> | <ul style="list-style-type: none"> <li>• all greenhouse gases to net-zero by 2045</li> <li>• Just Transition</li> <li>• Phase out the need for petrol and diesel cars and vans in Scotland by 2030</li> <li>• remove the need for new petrol and diesel heavy vehicles by 2035.</li> <li>• ensure that the majority of new buses purchased from 2024 are zero-emission</li> <li>• decarbonise scheduled flights within Scotland by 2040</li> <li>• Scotland’s passenger rail services will be decarbonised by 2035</li> <li>• Reduce car kilometres by 20% by 2030</li> <li>• By 2032 low emissions solutions will be widely adopted at Scottish ports</li> </ul> | <ul style="list-style-type: none"> <li>• A Fairer Scotland For All</li> <li>• Ending Child Poverty</li> <li>• A Strong Start For All Young People</li> <li>• Fairer Working Lives</li> <li>• A Thriving Third Age</li> </ul> | <p>A Scotland where we:</p> <ul style="list-style-type: none"> <li>• live in vibrant, healthy and safe places and communities</li> <li>• flourish in our early years</li> <li>• have good mental wellbeing</li> <li>• reduce the use of alcohol, tobacco and other drugs</li> <li>• have a sustainable, inclusive economy with equality of outcomes for all</li> <li>• eat well, have a healthy weight and are physically active</li> </ul> | <ul style="list-style-type: none"> <li>• investing in people</li> <li>• fostering a culture of innovation</li> <li>• stimulating inclusive growth</li> <li>• creating opportunity promoting Scotland internationally</li> </ul> |

## 2. Nature of the region

Section 2 summarises the key characteristics of the region which shape our travel demands, namely:

- The urban/rural split
- National travel demands to and through the region
- Regional travel demands
- Socio- economic profile

***Q1. Current travel demands: Have we captured the main factors which shape where (from/to) people and goods travel to and through the region?***

### 2.1 The Urban/Rural Split

The Tactran region covers the local authority areas of Angus, Dundee, Perth and Kinross and Stirling. Accordingly, it is a large geographic area including the cities of Dundee, Perth and Stirling as well as 13% of the most remote communities in Scotland<sup>6</sup>. Whilst our transport networks to and within Dundee, Perth and Stirling are constrained by their respective rivers, travel to and from our rural communities are often defined by the mountains and glens within which they sit.

#### Urban/rural split

- 62.7% live in urban areas (Dundee, Perth, Stirling, Arbroath, Forfar, Montrose, Brechin)<sup>4</sup>
- 29% live in remote and rural areas, and 8.3% live in small accessible towns<sup>4</sup>
- 12% of Angus, 9% of Perth and Kinross and 8% of Stirling's datazones are in the lowest 5% of SIMD access domain<sup>5</sup>

<sup>4</sup> Scottish Government Urban/Rural Classification <https://www.gov.scot/publications/scottish-government-urban-rural-classification-2016/pages/2/>

<sup>5</sup> Scottish Indices of Multiple Deprivation 2020

<sup>6</sup> SIMD 2020: 13% of the lowest 5% of national datazones ranked by the SIMD access domain are within the Tactran area



## 2.2 Location in Scotland: National travel demands to and through the region

The area sits in the heart of Scotland with all trunk road and rail routes between the Highlands (inc Inverness and Fort William), the North East (inc Aberdeen) and the Central Belt passing through the region. The travel demands to and from these locations therefore need to be taken into account when we consider transport and travel in the region.

In addition to our towns, cities, mountains, glens and coast, we also have major destinations which attract visitors to the region, including:

- Loch Lomond and the Trossachs and Cairngorms National Parks
- Blairdrummond Safari Park / Stirling Castle / Wallace Monument / V&A / Scone Palace / Glamis / Gleneagles / Carnoustie

### National Routes passing through the region

- M80/M9/A9
- M90/A90
- A84/A82
- Aberdeen/Inverness to Glasgow/Edinburgh rail services
- Glasgow to Fort William/Oban rail services

## 2.3 Regional Travel Demands

Travel to work areas define where most of us live and work, and by extension where we are most likely to shop and play. Accordingly they often reflect where the strongest demands for travel are. Travel to work areas are rarely contained within a single local authority area, and there are two strong travel to work areas which cover a large proportion of the region's population:

- **TayCities TTWA** covering Dundee, and large parts of Angus, Perth and Kinross and North-east Fife (79.8% Tay Cities residents work in Tay Cities area (Of all journeys starting in Perth & Kinross, Angus and Dundee City, 81%, 86% and 90% end within the Tay Cities Region respectively)<sup>7</sup>
- **Forth Valley TTWA** covering large parts of Clackmannanshire, Falkirk and Stirling (65.1% Forth Valley residents work in Forth Valley area)

These 'travel to work areas' areas are also reflected in the regional institutions that serve these areas such as:

---

<sup>7</sup> 2011 Census data

**Taycities:** NHS Tayside, with hospitals in Dundee, Perth and Stracathro; Dundee and Angus College with principal sites in Dundee and Arbroath

**Forth Valley:** NHS Forth Valley with hospital sites in Larbert, Alloa and Stirling; Forth Valley College with sites in Stirling, Alloa and Falkirk.

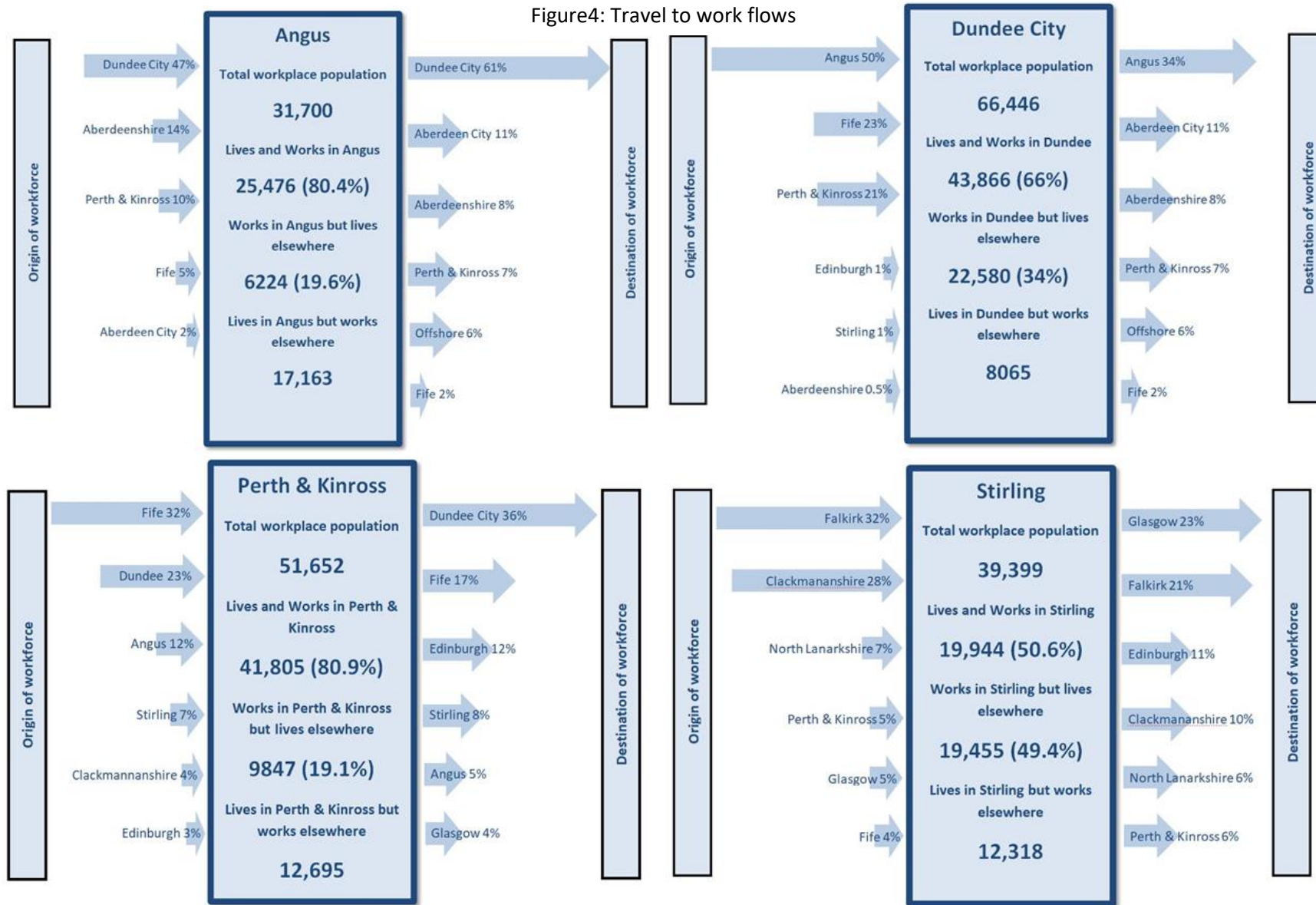
It would however be wrong to not recognise that other communities on either side of the Tactran ‘boundary’ operate in different travel to work areas, table 2 summarises the key cross boundary ‘communities’. Figure 4 shows the main travel to work flows for the four council areas.

| <b>Table 2: Cross boundary travel to work areas</b>                          |   |   |
|--|---|---|
| <b>Area</b>  | <b>Issues</b>   | <b>New developments on the edge of the Tactran boundary</b>   |
| <b>TayCities TTWA (Angus, Perth and Kinross, Dundee and North east Fife)</b> | Taybridgehead and NE Fife towns access key health, leisure, retail and employment in Dundee.  | Newport (150 houses)<br>Wormit (212 houses)<br>Guardbridge Papermill (St Andrews University)<br>Guardbridge (350 houses)<br>St Andrews Western Expansion (1000+ houses) |
| <b>Forth Valley TTWA (Stirling/ Clackmannanshire / Falkirk)</b>              | Stirling City is a net importer of work trips, largely due to the proximity of the communities in Forth Valley. Access for much of the Clackmannanshire population to Glasgow and the west is via Stirling. Key regional hospital (Forth Valley Hospital) located in Larbert. | Grangemouth Investment Zone / Falkirk Growth Deal   |
| <b>Kinross-shire / Fife (Kinross / Dunfermline)</b>                          | Strong links to Fife for health, leisure and employment. Also at edge of Edinburgh TTW area. Queen Margaret Hospital (Dunfermline)  | West Fife developments have potential to increase traffic towards M90 corridor eg Westfield Business Park   |
| <b>NE Angus / Aberdeenshire (Montrose / Laurencekirk / Stonehaven)</b>       | Linkages to Aberdeen/Aberdeenshire with commuters. Also inflow from rural Aberdeenshire communities such as Edzel to access services in Brechin etc. Potential for inward flow to economic development around Montrose area.  | Edzell (200 houses)<br>Laurencekirk (1100+ houses)  |

**Table 2: Cross boundary travel to work areas**

|   |  |  |
|---|--|--|
| <b>NW Stirling / Oban<br/>(Criarlarich / Tyndrum /<br/>Dalmally / Oban)</b> | Access to railway network means that travel to Oban is better than bus links to Stirling for further education, shopping etc |  |
| <b>SW Stirling / Glasgow<br/>(Strathblane / Balfroun /<br/>Milngarvie)</b>  | Access to health, leisure, employment largely within East Dunbartonshire/Glasgow area. Limited Public Transport options.     |  |

Figure4: Travel to work flows



## 2.4 Socio-economic profile

Tables 3&4, and figure 5, highlight some of the key socio-economic characteristics of the region relating to:

- The level of economic activity, the kind of jobs people do and what industries these are in
- Health and disability
- Car ownership

Key messages:

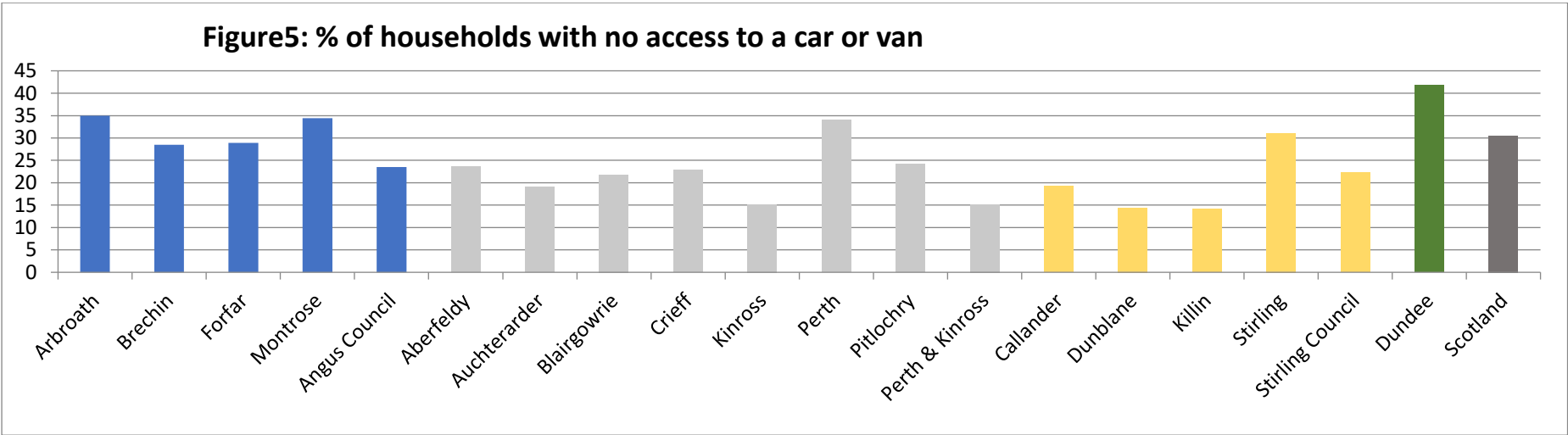
- Dundee City (5.7%) is above the national average for unemployment (4.8%). Dundee City is also above average for economically inactive, at 35.6% compared to the national average of 31%.
- Both Angus (18.1%) and Perth and Kinross (17.2%), are above the national average (14.9%) for the proportion of the population that is retired
- Dundee and Stirling Cities, with their respective universities,

| <b>Table3: Economic profile of the population</b>             | <b>Angus</b> | <b>DCC</b> | <b>PKC</b> | <b>Stirling</b> | <b>Scotland</b> |
|---|--------------|------------|------------|-----------------|-----------------|
| <b>Economic activity</b>                                      |              |            |            |                 |                 |
| Employees - full-time   | 39.5         | 34.7       | 40.1       | 36.7            | 39.6            |
| Employees - part-time   | 14.3         | 12.6       | 14.3       | 12.6            | 13.3            |
| Self-employed   | 8.5          | 4.9        | 10.6       | 9.3             | 7.5             |
| Economically inactive   | 30.7         | 35.6       | 29         | 32              | 31              |
| Retired   | 18.1         | 14.2       | 17.2       | 15.1            | 14.9            |
| Student   | 3.7          | 10.1       | 3.5        | 7.6             | 5.5             |
| Long-term sick or disabled                                    | 3.8          | 6          | 3.3        | 4.1             | 5.1             |
| Unemployed  | 4.2          | 5.7        | 3.3        | 3.9             | 4.8             |
| <b>Occupation of those employed</b>                           |              |            |            |                 |                 |
| Professional occupations                                      | 14.7         | 16.5       | 16.4       | 20              | 16.8            |
| Skilled trades occupations                                    | 15.9         | 10.5       | 14.1       | 11.7            | 12.5            |
| Associate professional and technical occupations              | 12.9         | 11.5       | 12.4       | 12.7            | 12.6            |
| Elementary occupations  | 11.6         | 13.6       | 12.1       | 11.5            | 11.6            |
| Administrative and secretarial occupations                    | 10.5         | 11.3       | 10         | 9.6             | 11.4            |
| Caring, leisure and other service occupations                 | 9.4          | 10.3       | 8.9        | 8.7             | 9.7             |
| Sales and customer service occupations                        | 7.6          | 12.2       | 9.3        | 8.8             | 9.3             |
| Managers, directors and senior officials                      | 8.2          | 6.2        | 10.5       | 11.1            | 8.4             |
| Process, plant and machine operatives                         | 9.1          | 7.8        | 6.4        | 6               | 7.7             |
| <b>Key Industries in which people are employed</b>            |              |            |            |                 |                 |
| Human health and social work activities                       | 16.2         | 18.8       | 14.4       | 13.6            | 15              |
| Wholesale and retail trade; repair of vehicles and m'cycles   | 14.6         | 17.6       | 15.6       | 14.9            | 15              |
| Education   | 8.6          | 10         | 8          | 10.2            | 8.4             |
| Manufacturing   | 10.7         | 7.4        | 6.1        | 6.6             | 8               |
| Construction  | 9.1          | 7          | 8.8        | 8.6             | 8               |
| Public administration and defence; compulsory social security | 7.1          | 7.2        | 5.9        | 7               | 7               |
| Accommodation and food service activities                     | 5.4          | 6.9        | 8.6        | 8.3             | 6.3             |

have a much higher % of students than the national average. NB Stirling City will have a much higher % of its population being students than the council wide average would suggest

- Low levels of car ownership are not limited to our urban centres. Many households in our rural communities do not have access to a car or van

| <b>Table4: Health profile</b>   |  | <b>Angus</b> | <b>DCC</b> | <b>PKC</b> | <b>Stirling</b> | <b>Scotland</b> |
|---|--|--------------|------------|------------|-----------------|-----------------|
| Long-term health problem or disability (%)  |  |              |            |            |                 |                 |
| Limited a lot   |  | 8.4          | 10.5       | 7.8        | 8.1             | 9.6             |
| Limited a little  |  | 10.5         | 10.4       | 10.3       | 9.4             | 10.1            |
| Not limited   |  | 81           | 79.1       | 81.9       | 82.5            | 80.4            |
| Percentage of economically inactive people aged 16 to 74 who are long-term sick or disabled |  | 12.3         | 17         | 11.5       | 13              | 16.6            |



<sup>8</sup> Census 2011

### 3. Social, environmental and economic priorities

This section sets out the key social, economic and environmental problems and priorities for the region – as they relate to the four NTS2 priorities - that our transport systems need to address.

**Q2. Key social, environmental and economic priorities: Have we captured the key social (e.g. issues of inequalities and health), environmental (e.g. climate change) and economic (e.g. promoting growth and access to jobs and training) priorities which transport needs to support?**

#### 3.1 The priorities for reducing inequalities

All the local and regional partners recognise the problems of inequalities, in particular as they relate to:

- Our most disadvantaged communities
- People with mobility difficulties
- At risk groups
- Child poverty

The problems these groups experience include

| The problem  | For who  |
|--|--|
| <p><b>The availability of transport to access services and education</b></p> | <ul style="list-style-type: none"> <li>• Our most deprived areas will have the lowest levels of car ownership, and will be more dependent on public transport</li> <li>• Our rural areas, with lower population densities, will have limited public transport. 1:7 household in many of our rural areas do not have access to a car<sup>9</sup><br/>(NB access to employment and healthcare are considered in sections 3.3 and 3.4)</li> </ul> |

<sup>9</sup> 2011 Census data

| The problem   | For who   |
|---|---|
| <b>The cost of transport and the issues of transport poverty</b>                      | <ul style="list-style-type: none"> <li>For our most deprived residents, and also for residents in rural areas where travel costs are higher, transport costs will take up a disproportionate proportion of their income. This may mean people either go without to pay for travel, or miss out on services or opportunities by not being able to access them.</li> </ul>  |
| <b>The ability to make the most of the transport services that exist</b>              | <ul style="list-style-type: none"> <li>The above issue of transport poverty is further compounded by those living the most chaotic lifestyles being unlikely to be aware of, and to be able to take advantage of, all the transport options that are available.</li> <li>As new technologies and rules are introduced to promote clean and sustainable travel, there is a risk that only the better off can afford to take advantage of the new opportunities, further exacerbating the inequality gap in society.</li> </ul> |
| <b>The ability of people with mobility difficulties to use our transport networks</b> | <ul style="list-style-type: none"> <li>Any journey is door to door. This requires people with mobility difficulties to have the confidence that they will be able to make every stage of their journey.</li> </ul>  |

The above assumptions are based on pre-covid data. We assume that the consequences of the covid-19 pandemic is that inequalities have been increased, increasing the problems felt by our most at risk groups and communities, and perhaps pushing more people into poverty.

Table 5 below, helps identify where and for who our priorities for reducing inequalities may lie in the region.



| Table 5: where are our priorities for reducing inequalities?  |   |   |  |  |
|---|---|---|--|--|
|   | Angus   | Dundee  | Perth and Kinross  | Stirling   |
| <b>Our most disadvantaged communities</b><br>( <a href="#">SIMD</a> worst 5%)   | Pts Arbroath<br>(Centre/Harbour)  | Pts Whitfield / Fintry /<br>Douglas / Linlathen &<br>Midcraigie / Kirkton /<br>Ardler & St Mary's / The<br>Glens / Hilltown / Fairmuir<br>/ Lochee / Menzieshill /<br>City Centre<br><br>37% of the City's datazones<br>in lowest 20%. Twice the<br>national average. | 10% Pts Muirton / Tulloch /<br>Rattray   | Pt Cornton / Raploch   |
| <b>Economically inactive people 16 to 74 who are long-term sick or disabled</b>                                       | 12.3%   | 17%   | 11.5%  | 13%  |
| <b>At risk groups</b> ( <a href="#">Tactran</a><br><a href="#">EqIA</a> )   | Include....young single parents / people with mobility difficulties / reliant on seasonal employment / cultural or religious barriers / gender inequalities / elderly |   |  |  |
| <b>Access to services &amp; education</b><br>( <a href="#">TRACC accessibility modelling</a> / <a href="#">SIMD</a> ) | 20% of datazones are within the bottom 10% of datazones for geographic access ( <a href="#">SIMD</a> )  |   | 21% of datazones are within the bottom 10% of datazones for geographic access ( <a href="#">SIMD</a> ) | 17% of datazones are within the bottom 10% of datazones for geographic access ( <a href="#">SIMD</a> ) |
| 16-25yrs No PT access to further education  | 11.8%   | 1.6%  | 15.1%  | 10.4%  |
| 65+ yrs No car households 30-60mins to retail centre  | 16.9%   | 11.3%   | 41.8%  | 12.0%  |

| Table 5: where are our priorities for reducing inequalities?      |   |        |                   |  |
|---|---|--------|-------------------|--|
|   | Angus   | Dundee | Perth and Kinross | Stirling   |
| <b>Transport poverty</b>  |   |        |                   |  |
| <i>Average cost of full rail fare</i>                             | <i>2<sup>nd</sup> highest in Scotland</i>   |        |                   | <i>3<sup>rd</sup> highest in Scotland</i>  |
| <i>% weekly income spent on transport</i>                         | In both cities and larger towns, transport expenditure is generally comparable to the Scottish average, with the majority of urban areas ranging between 9% and 16% of household spending. In deeper rural areas of Perth & Kinross and Angus transport expenditure is generally high, reaching 20% of household income |        |                   | Outside Stirling City, much of area spends above national average (14.1% of income) on transport |
| <i>% datazones at high risk of transport poverty<sup>10</sup></i> | 54%   | 11%    | 35%               | 35%  |
|   | <i>Scotland average: high risk 36%</i>  |        |                   |  |

<sup>10</sup> STPR2 Case for Change Reports: Factor of *car availability/income/public transport access*

### 3.2 The priorities for taking climate action

The problems, here and now, for the region created by climate change are largely related to the resilience of our transport networks to adverse weather events, which appear to be increasing in frequency. Longer term issues may relate to the impact of rising sea levels on our coastal communities. The issue of the resilience of our networks to climate change is considered in section 5 ‘Strengths and weaknesses of the transport network’.

The priorities for climate change arise from the global need to reduce climate emissions, and this section considers the key problems for achieving this in the region. It is estimated that transport is responsible for 35.6%<sup>11</sup> of carbon emissions in Scotland. The ‘transport’ problems we face in taking climate action are summarised as:

- Our lifestyles, i.e. Where people live and need/chose to travel (*in particular the mode share of car trips*).
- The barriers and opportunities that people and businesses have for changing to more sustainable modes of travel

Table 5 below, helps identify where and for who the priorities for taking climate action may need to focus in the region. Again, please remember that the statistics are all pre-covid-19 data.

| Table 6: Problems and priorities for taking climate action     |  |   |   |   |
|--|--|---|---|---|
|  | <u>Angus Climate Change Strategy and Action Plan</u> | <u>Dundee Climate Action Plan LEZ</u>   | <u>Perth and Kinross Climate Change Action Plan</u>   | <u>Stirling Climate Change Sustainable Development Strategy</u> |
| <b>The problem: Where people live and need/chose to travel</b> | Rural population with limited public transport       | Most trips start and end in Dundee City, but are sustainable transport networks sufficiently attractive to encourage change? Hilly. | Rural population with limited public transport options / Perth and Stirling cities have numerous rural villages/towns in hinterland |   |

<sup>11</sup> <https://www.gov.scot/publications/securing-green-recovery-path-net-zero-update-climate-change-plan-20182032/>

| Table 6: Problems and priorities for taking climate action                                    |                |  |  |  |  |
|---|----------------|--|--|--|--|
|   |                | Angus<br><u>Climate Change Strategy<br/>and Action Plan</u>  | Dundee<br><u>Climate Action Plan<br/>LEZ</u> | Perth and Kinross<br><u>Climate Change Action<br/>Plan</u> | Stirling<br><u>Climate Change<br/>Sustainable Development<br/>Strategy</u> |
|   |                | Continual reduction of services, and centralisation of services, increases the distances people have to travel   |  |  |  |
| % of trips over 5km <sup>12</sup>   |                | 36%  | 19%  | 44%  | 33%  |
| Mode share travel to work <sup>13</sup>   | Walk and cycle | 23%  | 19%  | 18%  | 19%  |
|   | Bus and train  | 5%   | 13%  | 9%   | 7%   |
|   | Car            | 71%  | 64%  | 71%  | 69%  |
| Homeworking <sup>13</sup>   |                | 10%  | 11%  | 14%  | 14%  |
| <b>The barriers to change</b><br><i>For personal trips, business and fleet, freight, rail</i> |                | <p>Section 5 highlights some of the strengths, opportunities, weaknesses and threats our transport networks present for enabling more sustainable travel habits. The key challenge is the need for travel and the ability to provide alternatives, both considerations which are exacerbated with large rural hinterlands. Problems include:</p> <ul style="list-style-type: none"> <li>• Existence of, awareness of and ability to use alternatives to the private car for private trips (active travel, public transport)</li> <li>• Take up and support networks for low emission technology, for both personal travel and emissions. Remember almost all freight trips to &amp; from the Highlands and Aberdeenshire pass through the region. <ul style="list-style-type: none"> <li>○ <b>Gap between current and target EV infrastructure<sup>14</sup></b> (0.7% current registrations, target 60-70% coverage by 2032). Issues include: public sector <b>fleets</b>; availability of <b>infrastructure</b> at rural and tourist locations (including remote tourist parking areas); tenements &amp; flats / <b>Cost</b> of EVs and the risks of increasing inequalities</li> </ul> </li> <li>• Availability and cost of technology to reduce the need to travel</li> </ul> |  |  |  |

<sup>12</sup> SHS Travel Diary 2019

<sup>13</sup> Census 2011

<sup>14</sup> [Tactran Regional EV Strategy 2019](#)

### 3.3 The priorities for inclusive economic growth

The priorities for where and how transport supports inclusive economic growth relate to supporting:

- **Existing employment sectors and locations**, including tourism
- **Growth sectors and locations**: The respective Economic Strategies and the City Region Deals set out the priorities for economic growth in the region
  - Many of these existing and growth industries rely on good access to markets, and in the first instance, that means good access to the rest of Scotland, **including providing strong connections between Scotland’s Cities**
- **Access to employment and training**: inclusive economic growth means designing growth so that everyone in society benefits. As far as this relates to transport, this means maximising access to opportunities for all

Table 7 below, helps identify what industries, where and for who our priorities for supporting inclusive economic growth may lie in the region.

| Table 7: Priorities for promoting inclusive economic growth              |   |   |   |   |
|--|---|---|---|---|
|  | Angus   | Dundee  | Perth and Kinross   | Stirling  |
| <b>Principal employment locations</b>                                    | Arbroath, Brechin, Forfar, Montrose   | Universities / Ninewells / business and industrial parks off Kingsway / City Centre | Inveralmond / Broxden & Cherrybank/ Friarton / City Centre  | Springkerse / Castle Business Park, Kildean & Prudential / City Centre / Stirling University Innovation Park  |
| Where are the tourism pressures?<br><a href="#">Tay Tourism Strategy</a> | <ul style="list-style-type: none"> <li>• Angus Glens</li> <li>• Carnoustie</li> </ul> | Waterfront (V&A) / City Centre  | <ul style="list-style-type: none"> <li>• A9/A93/Blairgowrie-Dunkeld – Aberfeldy - Kenmore-Aberfeldy-Pitlochry; Blair Atholl (+House of Bruar)</li> <li>• Crieff;</li> <li>• City Hall (Stone of Destiny); Scone Palace and racecourse;</li> <li>• Gleneagles</li> </ul> | <ul style="list-style-type: none"> <li>• LLTNP (Callander A84; East Loch Lomond; Killin)</li> <li>• Stirling Castle</li> <li>• Blairdrummond Safari Park</li> </ul> |

| Table 7: Priorities for promoting inclusive economic growth   |           |   |  |  |  |
|---|-----------|---|--|--|--|
|   |           | Angus   | Dundee   | Perth and Kinross  | Stirling   |
| <b>Growth sectors and locations</b><br><a href="#">Tay Cities City Region Deal</a><br><a href="#">Tay Cities Region Economic Strategy 2019-2039</a><br><a href="#">Stirling and Clackmannanshire City Region Deal</a> |           |   | <ul style="list-style-type: none"> <li>• Tourism &amp; Culture</li> <li>• Food &amp; Drink</li> <li>• Engineering &amp; Manufacturing</li> <li>• Energy (including Renewables, Offshore Wind, Oil &amp; Gas Decommissioning);</li> <li>• Digital &amp; Creative Industries</li> <li>• Biomedical, Life Sciences and MedTech</li> <li>• Construction</li> </ul> |  | <ul style="list-style-type: none"> <li>• Innovation</li> <li>• Digital</li> <li>• Developing culture, heritage and tourism assets</li> <li>• Transport, connectivity and low carbon</li> <li>• Infrastructure</li> <li>• Skills and inclusion</li> </ul>   |
|   |           | North Angus (Montrose)  | Michelin Scotland Innovation Park / Waterfront (inc V&A)   | North & West Perth James Hutton Institute                            | <ul style="list-style-type: none"> <li>• University: Scotland's National Environment Centre &amp; The National Aquaculture Technology and Innovation Hub</li> <li>• Developing Culture, Heritage &amp; Tourism Assets: National Tartan Centre</li> <li>• Infrastructure (MoD Forthside)</li> </ul> |
| <b>Connecting Scotland's cities</b><br>Journey times<br>(fastest rail journey shown)  | Glasgow   | Road (Forfar) 125mins<br>Rail (Montrose) 115mins  | Road 103mins<br>Rail 80mins  | Road 74mins<br>Rail 56mins   | Road 39 mins<br>Rail 27 mins   |
|   | Edinburgh | Road (Forfar) 107mins<br>Rail (Montrose) 105mins  | Road 87mins<br>Rail 71mins   | Road 64 mins<br>Rail 71 mins   | Road 62 mins<br>Rail 41 mins   |
|   |           | Rail fares ramp up north of Stirling. This means not only are fares to Edinburgh/Glasgow from Perth/Dundee are proportionally high, but also fares between Stirling and Dundee are twice as high as the fare from Stirling to |  | The rail trip to Edinburgh takes longer than making the trip by road |  |

| Table 7: Priorities for promoting inclusive economic growth                          |   |        |                   |          |
|--|---|--------|-------------------|----------|
|  | Angus   | Dundee | Perth and Kinross | Stirling |
|  | Edinburgh although the journey takes a similar time. This encourages trips to Glasgow and Edinburgh at the expense of other cities                    |        |                   |          |
| <b>Ensuring access to jobs and training</b>  | Public transport availability to make shifts / cost of travel / ability to interchange / changing work patterns (increasing levels of part-time work) |        |                   |          |
| <i>Pop without car unable to access 3 emp sites by PT within 60mins<sup>15</sup></i> | 43.4%   | 3.9%   | 33.2%             | 16.6%    |
| <i>16-24 year olds no access to Further Education by PT<sup>16</sup></i>             | 11.8%   | 1.6%   | 15.1%             | 10.4%    |

<sup>15</sup> TRACC Accessibility Modelling 2018

### 3.4 The priorities for health and wellbeing

Health and wellbeing is crucial to our quality of life. Conversely, poor health is a burden on the public purse. The health and wellbeing aspects of transport relate to:

- Road safety
- Air and noise pollution
- The amount we walk and cycling as part of active daily routines (see table 3.2)
- Ability to access health services

The adverse impacts of these aspects will be felt, respectively by:

- Vulnerable road users, such as pedestrians and cyclists
- Those living near busy roads or major transport generators such as rail lines and airports
- Those communities with poor health
- Those that need to access health facilities the most, and non-car owning households that are not well served by alternatives such as public transport

Table 8 below, helps identify where and for who transport creates problems for health and wellbeing in the region.

| Table 8: Priorities for health and wellbeing / transport implications |  |   |  |                      |
|---|--|---|--|----------------------|
|   | Angus  | Dundee  | Perth and Kinross  | Stirling             |
| <b>Road safety problems</b>   | A90 / A92  | A90/A92/A972<br>Growing % of elderly involved, increasing severity. | A9 Perth to Inverness / A9 Auchterarder / A93                  | A9 Kier / A811 / A84 |
| <b>Air quality problems</b>   |  | <a href="#">LEZ</a>   | <a href="#">Perth City AQMA</a><br><a href="#">Crieff AQMA</a> |                      |
| <b>Noise problems</b>   | The Scottish Government's <a href="#">‘Scotland’s Noise’</a> website estimates the amount of traffic noise that localities experience. |   |  |                      |



**Table 8: Priorities for health and wellbeing / transport implications**

|   | Angus   | Dundee   | Perth and Kinross | Stirling |
|---|---|--|-------------------|----------|
| <b>Where are the areas of poor health?</b>                        |   | 33% of the population lives in a SIMD area ranked in the bottom 20% for health |                   |          |
| <b>Access to healthcare</b>                                       | <i>Ability to access healthcare for those without access to a car, particularly those in a rural location</i> |  |                   |          |
| <b>Households without a car</b><br>(More than 60mins to hospital) | 80.5%   | 0%   | 13.3%             | 19.2%    |
| <b>65+ yr olds</b> (no public transport to primary health care)   | 7.9%  | 0.5%   | 11.2%             | 10.1%    |

## 4. Significant new travel demands in the area

This section considers those major new developments that will increase the demand for travel in the region.

**Q3. New travel demands: Most new trips are generated by new developments. Are there other significant generators of new trips in or through the region?**

Travel habits are changing at an unprecedented rate. Section 6 will consider the broader set of uncertainties in travel demand and supply that the RTS may need to consider.

Nonetheless, the greatest new pressures on our transport networks are likely to still come from new housing and economic developments as promoted in the development plans, economic strategies and the city region deals in our region. In addition, growth promoted beyond the region, for example in Aberdeen/shire and the Highlands will also increase the travel demands in the region.

Table 9 below, helps identify where new development may will create increased travel demands in the region. The economic growth sectors are covered in Section 3.

| Table 9: Locations of major developments      |                                |  |   |  |
|---|--------------------------------|--|---|--|
|   | Angus                          | Dundee   | Perth and Kinross   | Stirling   |
| <b>Indicative Regional Spatial Strategies</b> | North Angus Growth Opportunity | Dundee Waterfront / Michelin Scotland Innovation Park / Dundee Port / Dundee Western Gateway / Linlathen Employment Site | Perth Eco Innovation Park @ PerthWest / Oudenarde James Hutton Institute Innovation Hub | Innovative Connected Economic Centres (e.g. Town centres / Stirling Uni) Forth Valley Tourism (National Tartan Centre) |

| Table 9: Locations of major developments   |   |   |  |  |
|--|---|---|--|--|
|  | Angus   | Dundee  | Perth and Kinross  | Stirling   |
| <b>Local Development Plans<sup>16</sup></b><br>New Housing<br>(% increase in settlement) | 2016-2026:<br>Arbroath 884 (36%)<br>Forfar 978 (15%)<br>Montrose 702 (12%)              | 2019-2029<br>Dundee 2855 (4%)   | 2018-2029<br>Blairgowrie 1677 (41%)<br>Bridge of Earn 1797 (156%)<br>Crieff 920 (28%)<br>Luncarty 760 (110%)<br>Perth 8581+ (40%)<br>Scone 823 (37%)                         | 2015-2037<br>Stirling City Area <ul style="list-style-type: none"> <li>• Durieshill 2500 and South Stirling Gateway 800 (new)</li> <li>• Stirling City 2088 (14%)</li> <li>• Eastern Villages (Cowie, Fallin, Plean, Throsk) 1718 (56%)</li> </ul> = 24% increase across City area by 2037 |
| Business   | Arbroath: Elliot Ind Estate (21ha)<br>Montrose: Montrose Port; Montrose Airport (50ha); | Dundee Waterfront / Western Gateway 50ha / Linlathan 40ha / MSIP<br>Principal Economic Development Areas: Goudie / Dryborough / Dunsinane / West Pitkerro / Claypotts / Port of Dundee<br>Specialist Economic Development Areas: Seabraes / MediPark / Technopole / Technology Park | Invergowrie: James Hutton Institute<br>Western Perth: Bertha Park (25ha); Almond Valley; Perth West (25ha)<br>Ruthvenfield Rd (23.6ha)<br><br>Bridge of Earn: Oudenarde 35ha | Durieshill<br>Kildean<br>Forthside<br>Callander: Claish Farm (190homes + 48ha tourism)   |

<sup>16</sup> [Angus LDP 2016-2026](#) [Dundee LDP 2019-2029](#) [PKC LDP 2019-2029](#) [Stirling LDP 2018-2037](#) [LLTNPA LDP 2017-2021](#) [TAYPlan](#)

# 5. Problems and opportunities with our existing transport network

This section considers the key problems and opportunities in our existing transport systems which affect our ability to reduce inequalities, take climate action, help deliver inclusive economic growth and improve health and wellbeing.

***Q4. Problems and opportunities with our existing transport networks: Have we captured the key problems and opportunities in our existing transport networks which either hinder or help us support the social, environmental and economic priorities?***

Our transport networks and systems will help or hinder us

|  |   |
|--|---|
| <b>Reduce inequalities by</b>  | <b>Deliver inclusive economic growth by</b>   |
| <ul style="list-style-type: none"> <li>• Enabling access to local facilities</li> <li>• Being inclusive, enabling everyone, including those with mobility difficulties, to be able to access and use them</li> </ul> | <ul style="list-style-type: none"> <li>• Providing reliable journey times</li> <li>• Enabling access to jobs and training</li> <li>• Connecting the region to the rest of Scotland, and ensuring good connectivity between Scotland’s cities</li> <li>• Supporting tourism</li> </ul> |
| <b>Take climate action by</b>  | <b>Improve health and wellbeing by</b>  |
| <ul style="list-style-type: none"> <li>• Being resilient to adverse weather</li> <li>• Enabling sustainable travel</li> </ul>  | <ul style="list-style-type: none"> <li>• Being safe</li> <li>• Minimising air and noise pollution</li> <li>• Enabling access to healthcare facilities</li> <li>• Enabling walking and cycling as part of an active lifestyle</li> </ul>   |

Table 10 below summarises those strengths/opportunities and weaknesses/threats with our existing transport networks which could shape the options we have to address the social, environmental and economic priorities

| <b>Table 10: Problems and opportunities of the transport network</b>   |               |  |
|--|---------------|--|
| <b>Reduce inequalities</b> <ul style="list-style-type: none"> <li>By enabling access to local facilities</li> <li>By being inclusive</li> </ul>            | Opportunities | <ul style="list-style-type: none"> <li>Dundee: Good public transport network (day time), but decreasing....</li> <li>Angus, Perth and Kinross and Stirling: Good demand responsive transport (DRT) network / Good community transport sector in some areas</li> <li>MaaS platforms exist</li> </ul>  |
|  | Problems      | <ul style="list-style-type: none"> <li>Limited public transport, and other transport choices, in most of our rural areas</li> <li>Cost of travel of travel is an issue in both our deprived and rural communities. Issue is compounded by awareness of travel options</li> <li>Most networks not inclusive for people with mobility difficulties</li> </ul>  |
| <b>Take climate action</b> <ul style="list-style-type: none"> <li>By being resilient to adverse weather</li> <li>By enabling sustainable travel</li> </ul> | Opportunities | <ul style="list-style-type: none"> <li>Compact towns and cities present active travel opportunities</li> <li>Many settlements with cycling distance of each other / NCN</li> <li>Dundee: Leading authority on EV</li> <li>City Region Deal support for Broxden Low Carbon Hub</li> <li>City Region Deal support for active travel</li> </ul>   |
|  | Problems      | <ul style="list-style-type: none"> <li>Extent and quality of pedestrian and cycle environments (and poor perception)</li> <li>EV infrastructure</li> <li>Snow: on higher level road routes inc Angus Glens / A9 / A93</li> <li>Coastal erosion: Carnoustie</li> <li>Wind: Tay road and rail bridge, Friarton Bridge</li> <li>Flooding: Angus: Angus Glens; Dundee: Broughty Ferry /localised flooding in City (Dychtie Burn); Perth City / Aberfeldy / Kinross / Comrie / Almondbank; Alloa Road, Stirling</li> <li>Flooding of rail lines: Dundee-Glasgow rail line at Cornton / West Highland Line (+landslips) / Larbert</li> </ul> |
| <b>Deliver inclusive economic growth</b>   | Opportunities | <ul style="list-style-type: none"> <li>Dundee/Angus: Connected on strategic networks road and rail networks (n/s)</li> <li>Perth and Kinross / Stirling: Well connected on strategic road and rail networks (n/s/e/w)</li> <li>Limited corridors in Cities present p&amp;c opportunities</li> </ul>  |

**Table 10: Problems and opportunities of the transport network**

|   |                      |   |
|---|----------------------|---|
| <ul style="list-style-type: none"> <li>• By providing reliable journey times</li> <li>• By Enabling access to jobs</li> <li>• By Connecting the cities / region</li> <li>• By Supporting tourism</li> </ul>   |                      | <ul style="list-style-type: none"> <li>• Opportunity: City Region Deal support for North Angus</li> <li>• Ports: port of Montrose; Port of Dundee, Perth Harbour</li> <li>• Dundee Airport</li> </ul>   |
| <p><b>Health and wellbeing</b></p> <ul style="list-style-type: none"> <li>• By being safe</li> <li>• By not polluting</li> <li>• By enabling access to health</li> <li>• By enabling active travel</li> </ul> | <p>Opportunities</p> | <ul style="list-style-type: none"> <li>• Compact towns and cities present active travel opportunities</li> <li>• Many settlements within cycling distance of each other</li> <li>• Central Scotland Green network</li> <li>• Principal hospitals being close to rail stations</li> <li>• Central Scotland Green network</li> </ul>                                    |
|   | <p>Problems</p>      | <ul style="list-style-type: none"> <li>• Dundee: Traffic creating air quality issues</li> <li>• Perceived and actual road safety problems</li> <li>• Angus, Perth and Kinross and Stirling: Poor active travel connectivity between settlements</li> <li>• Dundee, Perth and Stirling: City Centre pinch points creating congestion and air quality issues</li> </ul> |

# 6. Future uncertainties and risks that may influence travel

This section considers the future uncertainties that we need to take into account in shaping the RTS

***Q5. Future uncertainties in how, where and why we travel: Have we captured the most significant uncertainties in how, where and why we will travel in the future?***

## **The problem of uncertain futures**

There are many uncertainties about the future which will shape why, where, how much and how we travel? Not least:

- Technology is rapidly evolving, changing what we can do and how we do it
- Worldwide events, like climate change, are challenging how we lead our lives

The Regional Transport Strategy considers how best to meet travel demands over a 20year period to align with the land use planning processes. What are the uncertainties of travel demand and supply that we need to take into account when writing the strategy? Over time, these uncertainties will evolve and change, and new ones emerge

## **How do we ensure that the RTS considers uncertain futures and is responsive?**

- Regular reviews of programmes to ensure that the strategy remains relevant and responsive
- ‘Scenario mapping’ helps us highlight the likely impact of uncertainties to inform policies and programmes

## **Scenario Mapping: key steps**

We will consider the future uncertainties in a three stage process, rather like a simple risk assessment

- 1. Future risks and opportunities that may influence travel demands**
- 2. Consideration of the potential impact of the uncertainties**
- 3. Consideration of the likelihood of the uncertainties**

Taking this 3 stage process will enable us to consider

- For Positive impacts, do we want to encourage the impact?
- For Negative impacts: Do we want to discourage impact? Or mitigate against?

| Table 11: Future risks and opportunities that may influence travel demands   |   |
|--|---|
| Political or global 'drivers'.... events that trigger society to change behaviour  | Technology.... technological advances which give us greater opportunities to how we may travel or live our lives  |
| <p><u>Climate change</u> &amp; adverse weather could affect</p> <ul style="list-style-type: none"> <li>- Network resilience</li> <li>- Policy</li> </ul> <p><u>Economic booms and bust (inc those triggered by disruptions like pandemics)</u> affect</p> <ul style="list-style-type: none"> <li>- Trip generation in the region from house building and general activity</li> <li>- Trips through the region (e.g. to/from Aberdeen)</li> </ul> <p><u>Brexit</u> could affect</p> <ul style="list-style-type: none"> <li>• Economic activity (volume and type)</li> <li>• Demographics (immigration and birth rates)</li> </ul> | <p><u>Technology</u> provides us with tools to help us achieve objectives:</p> <ul style="list-style-type: none"> <li>• Electric / hydrogen vehicles (reduces emissions)</li> <li>• Demand management tools (e.g. road pricing tech)</li> <li>• Solutions such as MaaS</li> </ul> <p><u>Technology affecting how we travel (what needs to be accommodated?)</u></p> <ul style="list-style-type: none"> <li>• Driverless cars (road capacity requirements increase then decrease)</li> <li>• How deliveries are made</li> </ul> <p><u>Existing transport networks</u></p> <ul style="list-style-type: none"> <li>• Future of buses</li> <li>• Cost of energy &amp; travel (as we transfer from 'carbon' to 'green')</li> </ul> |
| Attitudes.... the peoples response to any of the above!  | Policy.... Government policy responding to political or global triggers, or the technologies that exist, to promote or manage change  |
| <p><u>Pandemics (covid-19) &amp; terrorism</u> can affect</p> <ul style="list-style-type: none"> <li>• willingness to use mass transit</li> <li>• willingness to travel / stay at home</li> </ul> <p>Public response to <u>climate change</u> can affect attitude to sustainable travel</p> <p>Car <u>ownership and shared mobility</u> can affect whether people automatically jump in a car</p>  | <p><u>Transport policy</u></p> <ul style="list-style-type: none"> <li>• Prioritisation of modes &amp; where will funding be directed (e.g. parking policy / road &amp; congestion charging)</li> </ul> <p><u>Land use policy</u></p> <ul style="list-style-type: none"> <li>• Where will there be a demand for housing?</li> <li>• What will be the role of our town centres? (shops/offices etc)</li> </ul> <p><u>Fiscal Policy</u></p>  |



The opportunities technology provides us e.g.

- Tech may provide increased opportunities to work at home / shop on line / flexibility where we live. But will we?

- Road and congestion pricing to compensate for loss of fuel duties?

### Summary of most likely impacts

| Table 12: impact of the most likely uncertainties  |                      |                      |   |            |  |
|--|----------------------|----------------------|---|------------|--|
| Uncertainty  | Demand <sup>17</sup> | Supply <sup>18</sup> | What could this mean in the region  | Likelihood | Mitigate or Promote  |
| <b>MaaS technology</b><br>MaaS can make more efficient use of existing services.         |                      | Improve              | Improve access to and integration of transport services   | Medium     | Promote – however use of MaaS should not be limited to high population density areas.              |
| <b>Clean fuel technologies</b><br>Clean technologies provide alternative to fossil fuels |                      | Improve              | Improvements in air quality in urban areas. Reduce climate impact of travel                           | High       | Promote – ensure maximum benefit can be achieved from the move from fossil fuels                   |
|  |                      |                      | Could reduce incentive to cut car use   | High       | Mitigate – ensure that sustainable non car modes are attractive and cost effective compared to car |
|  |                      |                      | New technology, and savings accruing from such, will be expensive and may increase gaps in inequality | High       | Mitigate – Ensure that new transport technology is affordable and accessible                       |

<sup>17</sup> i.e. increases or decreases the demand for travel

<sup>18</sup> i.e. increases or decreases the supply of transport

| Table 12: impact of the most likely uncertainties  |                      |                               |  |            |  |
|--|----------------------|-------------------------------|--|------------|--|
| Uncertainty  | Demand <sup>17</sup> | Supply <sup>18</sup>          | What could this mean in the region   | Likelihood | Mitigate or Promote  |
| <b>Increased use of technology for homeworking/shopping / banking trips etc</b><br>decreases demand for travel to work and may make locations outside big cities more attractive | Decrease             | Decrease                      | Reduced peak time traffic and travel   | Medium     | Promote – reduction in peak time travel can reduce the need to increase road capacity                            |
|  |                      |                               | Reduced demand may impact financial viability of public transport  | High       | Mitigate – public transport is crucial for the sustainability of the transport network                           |
|  |                      |                               | Increases in rural population could shift the demands for travel   | Medium     | Mitigate – ensure that rural transport network can provide adequate access                                       |
| <b>Economic downturn</b><br>Reduced: <ul style="list-style-type: none"> <li>- Economic activity</li> <li>- Lower levels of employment / income</li> </ul>                        | Decrease             | Decrease                      | Lower disposable income causing an increase in fuel/transport poverty, in particular for rural areas   | Medium     | Mitigate – ensure affordable PT and other shared mobility options (eg car clubs, MaaS etc) are available         |
|  |                      |                               | Less economic activity leads to less traffic could ease pressure where there are capacity issues. Lower house building rates delays future demands for travel. | Medium     | Promote – make best use of existing capacity and look to lock in lower car use and incentivise sustainable modes |
| <b>Driverless cars</b><br>Increase effective road capacity long term; medium term more road capacity   | Increase             | Decrease capacity in med term | Could reduce need to increase strategic road network capacity.   | Low        | Promote – more efficient use of existing resources   |
|  |                      |                               | Potential conflict between vehicles and peds/cyclists  | Low        | Mitigate – public spaces to be viewed as people centric in   |

| Table 12: impact of the most likely uncertainties  |                                  |                             |   |            |   |
|--|----------------------------------|-----------------------------|---|------------|---|
| Uncertainty  | Demand <sup>17</sup>             | Supply <sup>18</sup>        | What could this mean in the region  | Likelihood | Mitigate or Promote   |
| may be required. Makes single occupancy car use available to everyone  |                                  |                             |   |            | accordance with the place principal   |
| <b>Transport Policy</b><br>Prioritisation of modes & where funding be directed (e.g. parking policy / road & congestion charging)        | Decrease (non-sustainable modes) | Improve                     | Increased support for modal shift from car  | High       | Promote – modal shift to support environmental, economic and social objectives  |
|  |                                  |                             | Potential for urban centres to ‘compete’ for cars due to assumed link to economic prosperity of retail          | High       | Mitigate – use better modelling and demand forecasting tools to demonstrate impact of policy changes.                                 |
| <b>Fiscal Policy</b><br>As use of fossil fuels diminish, a loss of fuel duties may result in other forms of taxation on travel           | Decrease (car use)               |                             | Potential for significant changes in demand and travel patterns.  | Medium     | Promote:<br>- changes should impact positively on mode choice and sustainability<br>- must not have a negative impact on inequalities |
| <b>Confidence in mass transit</b><br>Pandemics and terrorism can affect willingness to use mass transit with a mode shift to private car | Decrease                         |                             | Reduction in demand for public transport could result in service reductions along with an increase in car usage | High       | Mitigate – ensure that public transport remains an attractive and viable option through effective promotion and investment.           |
| <b>Climate change</b><br>Policy, technology and public opinion is increasingly   | Decrease (non-                   | Improve (sustainable modes) | Increased demand for more sustainable transport infrastructure.   | Medium     | Promote – ensure that active travel and sustainable transport networks are fit for purpose and  |

**Table 12: impact of the most likely uncertainties**

| Uncertainty   | Demand <sup>17</sup> | Supply <sup>18</sup> | What could this mean in the region | Likelihood | Mitigate or Promote                           |
|---|----------------------|----------------------|------------------------------------|------------|---|
| accepting the changes required to address climate change. But what will be the rate of change across society? | sustainable modes)   |                      |                                    |            | can support and encourage mode shift from car |

## 7. What will the RTS look like?

It may help responses to the questions posed in this main issues report if we gave an idea of what the Regional Transport Strategy itself may look like. It is proposed that the RTS will provide:

### **Strategic context**

The RTS will set out the priorities that transport needs to support across the region, this includes:

- the social, environmental and economic priorities to be supported
- the problems, opportunities, issues and constraints on our strategic transport networks (and systems) where interventions are required to support the economic, environmental and social priorities
- transport objectives and outcomes to support economic, social and environmental priorities

### **Strategic transport framework**

The strategic framework will identify the key interventions required in terms of major infrastructure projects; infrastructure programmes; and promotion and awareness programmes

### **Delivery**

High level action plans will identify the key steps for progressing the identified interventions

### **Monitoring and Review**

The [monitoring framework for the current Regional Transport Strategy](#) will be reviewed and amended as appropriate to support the new RTS.

## 8. Questions

**Q1. Current travel demands:** Have we captured the main factors which shape where (from/to) people and/or goods travel to and through the region?

- Yes/No (please delete as appropriate)
- Please use the box below to make any further comments in support of your response

**Q2. Key social, environmental and economic priorities:** Have we captured the key social (e.g. issues of inequalities and health), environmental (e.g. climate change) and economic (e.g. promoting growth and access to jobs and training) priorities which transport needs to support?

- Yes/No (please delete as appropriate)
- Please use the box below to make any further comments in support of your response. In particular, it would be helpful if you could highlight where priorities relate to specific groups of people or locations in the region

**Q3. New travel demands:** Most new trips are generated by new developments. Are there other significant generators of new trips in or through the region?

- Yes/No (please delete as appropriate)
- Please use the box below to make any further comments in support of your response

**Q4. Problems and opportunities with our existing transport networks:** Have we captured the key problems and opportunities in our existing transport networks which either hinder or help us support the social, environmental and economic priorities?

- Yes/No (please delete as appropriate)
- Please use the box below to make any further comments in support of your response

**Q5. Future uncertainties in how, where and why we travel:** Have we captured the most significant uncertainties in how, where and why we will travel in the future?

- Yes/No (please delete as appropriate)
- Please use the box below to make any further comments in support of your response

**Q6. Any other suggestions:** Please use the box below to highlight further issues which you think should inform a new Regional Transport Strategy?



**If you are responding on behalf of an organisation**

|                                 |  |
|---------------------------------|--|
| <b>Name and/or organisation</b> |  |
|---------------------------------|--|

|                                    |  |
|------------------------------------|--|
| <b>First half of your postcode</b> |  |
|------------------------------------|--|

|   |  |
|---|--|
| <b>Could you please outline if your organisation has any responsibility for representing aspects of the environment or groups of people</b> |  |
|---|--|

**If you are responding as an individual**

it will be helpful if you could fill in the box below

|             |  |
|-------------|--|
| <b>Name</b> |  |
|-------------|--|

|                                    |  |
|------------------------------------|--|
| <b>First half of your postcode</b> |  |
|------------------------------------|--|

**Your Personal Data and How it will be used:** We will be unable to identify you from the information you have provided and all personal information will be destroyed once it has been summarised for the consultation. We will only use your email address if you wish to provide it for the purposes of being kept up to date with the progress of the RTS.

**Do you want to be kept informed of the progress of the Regional Transport Strategy?**

If you would like to be kept informed of the RTS assessment processes, please write your email address in the box below. This will only be used to forward information to you during the course of writing this RTS and will be deleted immediately thereafter. It will not be stored in relation to any responses you gave in relation to the survey.

|                      |  |
|----------------------|--|
| <b>Email address</b> |  |
|----------------------|--|