

TAYSIDE AND CENTRAL SCOTLAND TRANSPORT PARTNERSHIP

16 MARCH 2021

A NEW REGIONAL TRANSPORT STRATEGY: MAIN ISSUES REPORT
AND CONSULTATION STRATEGY

REPORT BY SENIOR STRATEGY OFFICER

This report updates the Partnership on the work to produce a new Regional Transport Strategy for the Tactran region and asks the Partnership to approve (i) the proposed content of a main issues report for consultation (ii) a consultation strategy

1 RECOMMENDATIONS

1.1 That the Partnership:

- (i) Approves the content of a main issues report for consultation included as Appendix A to this report; and
- (ii) Approves a consultation strategy included as Appendix B to this report

2 BACKGROUND

- 2.1 Regional Transport Strategies have statutory status, as provided for in the Transport (Scotland) Act 2005 (The Act). 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. The Act requires that Regional Transport Partnerships (RTPs) keep their strategies under review.
- 2.2 The Partnership Meeting of 15 September 2020 approved the preparation of a new Regional Transport Strategy (RTS) (report [RTP/20/32](#) refers).

3 DISCUSSIONDevelopment of the Main Issues Report

- 3.1 Since the Partnership Meeting in September 2020, meetings with Board members and officers have discussed the problems, issues, opportunities and constraints to inform the content of a Main Issues Report (MIR).
- 3.2 The discussions focused on the principal elements of the MIR, namely:
- Nature of the region
 - Environmental, social and economic priorities
 - New travel demands
 - Transport network and weaknesses

- Future uncertainties in travel
- The Role of the RTS
- Proposed consultation questions

3.3 Appendix A provides the text proposed for the main issues report, rather than a draft Main Issues Report Document in itself. It is proposed that as the distribution of the document will be on-line, we will use story mapping software to present the work. This work is still ongoing, however good examples of the presentational style can be seen in the respective STPR2 case for Change Reports covering the Region:

- [Forth Valley STPR2 Case for Change Story Map](#)
- [Tay Cities STPR2 Case for Change Story Map](#)

Appendix A includes text and tables to be included in the on-line story map. Where-ever possible, maps and diagrams will be used in the on-line story map version.

Timescales

3.4 The table below presents the indicative timescales for the process

Report preparation	Engagement/decisions
<p>April-May 2021: Main Issues Report identifies the potential issues shaping a RTS</p> <p>June: Prepare consultation report, including proposed objectives</p>	<p>March: Tactran Board consider Main Issues Report and consultation strategy</p> <p>April-May: Local members and other stakeholders to consider MIR and the issues which will shape the strategy</p> <p>June: Tactran Board consider feedback from Councils and stakeholders and agree draft objectives</p>
<p>July/Aug 2021: Identify alternative strategies / options: High level appraisal of options against objectives</p>	<p>Sept: Tactran Board consider alternative strategies / options</p> <p>Oct/Nov: Local members and stakeholders consider alternative strategies /options</p> <p>Dec: Tactran Board consider feedback from Councils and stakeholders and agree preferred strategies/options</p>
<p>Jan-May 2022 Option appraisal</p> <p>Jan- May 2022: Draft RTS</p>	<p>June 2022: Tactran Board consider draft RTS for consultation</p> <p>Summer 2022: Consult on draft RTS</p>

Report preparation	Engagement/decisions
September 2022: Consultation report	September 2022: Tactran Board consider consultation report Autumn: New administrations consider draft plan and responses
Adoption	Decision Point: Dec 2022: Tactran board to consider final RTS

- 3.5 The report to the September partnership meeting noted that in seeking to align the RTS to other regional and national transport, land use and economic processes, the process may need to retain flexibility in terms of timescales. Conversations remain ongoing with Development Planning colleagues on aligning the RTS process with Regional Spatial Strategy processes.

Consultation Strategy

- 3.6 Appendix B outlines the proposed strategy for consulting on the main issues report, namely the organisations and the means of communication. The aim is to undertake these exercises across April and May 2021 and bring a consultation report back to the Partnership meeting in June.
- 3.7 As the RTS is a partnership plan, there is a desire to follow a process and timescales which allow the Councils to shape the plan to meet their needs.
- 3.8 The role of the RTS will be discussed with the Councils during the engagement exercise, rather than the wider stakeholder list.

Next Steps

- 3.9 Subject to a successful engagement with stakeholders on the Main Issues Report, the intention is to bring a consultation report to the June Partnership meeting, and for that meeting to consider the objectives which will inform the development of the Strategy.

4 CONSULTATIONS

- 4.1 This report has been prepared in consultation with the local authority transport officers and respective Regional Spatial Strategy.

5 RESOURCE IMPLICATIONS

- 5.1 Tactran does not have significant resource to direct towards developing a new RTS. The production of a new Regional Transport Strategy will be met within existing staff resources, and we will draw on parallel exercises, not least the Tay Cities Regional Transport Model and the STPR2 process.

5.2 Tactran will look to bring in additional resources where possible and it will be important to have assistance from Local Authority officers at critical times throughout the process.

6 EQUALITIES IMPLICATIONS

6.1 This report has been screened for any policy implications in respect of Equality Impact Assessment and no major issues have been identified. The process of developing a RTS will include a number of impact assessments, including:

- Equality Impact Assessment
- Fairer Scotland Duty Assessment
- Children's Rights Impact Assessment

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NOTE

The following background papers, as defined by Section 50D of the Local Government (Scotland) Act 1973 (and not containing confidential or exempt information) were relied on to a material extent in preparing the above Report:

Report to Partnership RTP/15/19, Refresh of Regional Transport Strategy, 16 June 2015

Report to Partnership RTP/20/32, A New Regional Transport Strategy for the Tactran Region, 15 September 2020

Report to Partnership RTP/20/45, A New Regional Transport Strategy: Main Issues Report Update, 15 December 2020

Appendix A

A new Regional Transport Strategy for the Tactran partners

This is the text and tables for the Main Issues Report. The report itself, with maps, will be on-line in a story map format e.g.

https://experience.arcgis.com/experience/925294035a8f4ad39248fd0ff47249f6/page/page_69/ (Forth Valley)

https://experience.arcgis.com/experience/925294035a8f4ad39248fd0ff47249f6/page/page_77/ (TayCities)

v1.4

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:** 30% 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	April / May 2020: Local members and other stakeholders to consider issues highlighted in Main Issues Report
Objective Setting	June 2020: Tactran Board consider feedback from Councils and stakeholders and agree draft objectives
Initial Option identification	Oct/Nov2021: Local members and stakeholders consider alternative strategies /options
Detailed Option Appraisal	Dec 2021: Tactran Board consider feedback from Councils and stakeholders and agree preferred strategies/options April-May 2022: Consult on draft plan
Adoption	Summer / Autumn 2022: New administrations consider draft plan and responses Sept/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 Impact Assessment; Fairer Scotland 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"> • The availability of transport options: e.g. 10%-15% 16-25yr olds have no public transport access to further education¹ • Transport poverty: e.g. 33%-54% of the Angus, Perth and Kinross & Stirling datazones are at risk of Transport Poverty². • Inclusive networks. e.g. 10.5% of the people in Dundee have a long term health problem or disability 	<p>Problems include:</p> <ul style="list-style-type: none"> • The amount of trips made by car: Approximately 50%-70%³ 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 • 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
Helping deliver inclusive economic growth	Improving our health and wellbeing
<ul style="list-style-type: none"> • Supporting existing employment sectors and locations, including tourism • Supporting growth sectors and locations in our City Region Deals and Local Development Plans • 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 • Access to jobs and training: Angus and PKC 33%-43% of pop are unable to access a choice of 3 employment locations within 60mins by public transport 	<ul style="list-style-type: none"> • Addressing road safety problems • Air quality problems: LEZ declared in Dundee and AQMAs declared in Perth and Crieff • Supporting access to health services: In Angus 60% of households without a car are more than 60mins drive from a hospital • Supporting areas of poor health: 33% of Dundee lives in the lowest 20% of SIMD datazones ranked by health

¹ Tactran TRACC Accessibility Modelling

² TayCities and Forth Valley STPR2 Case for Change Reports

³ 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 / Linlathan / MSIP
Perth West / Ruthvenfield Rd
Durieshill / Kildean / Forthside

Housing growth areas	New housing	Approx % increase in homes
Arbroath	884	36%
Blairgowrie	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, Plean, 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%

Strengths, weaknesses, opportunities and threats with our transport networks

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

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!

Most likely impacts of future uncertainties
Climate change: Governments and society will drive the speed of change
Clean fuel technologies: Clean technologies provide alternative to fossil fuels
Increased use of technology for homeworking/shopping / healthcare trips etc: decreases demand for travel to work at peak times and may make locations outside big cities more attractive
Economic busts Reduced: <ul style="list-style-type: none"> - Economic activity - Lower levels of employment / income
MaaS technology: MaaS can make more efficient use of existing services.
Driverless car technology: Increase effective road capacity long term; medium term more road capacity may be required. Makes single occupancy car use available to everyone
Transport Policy: Governments (local and national) will dictate prioritisation of modes & where funding be directed (e.g. parking policy / road & congestion charging)
Fiscal Policy: Road and congestion pricing to compensate for loss of fuel duties
Confidence in mass transit: Pandemics and terrorism can affect willingness to use mass transit with a mode shift to private car

Introduction

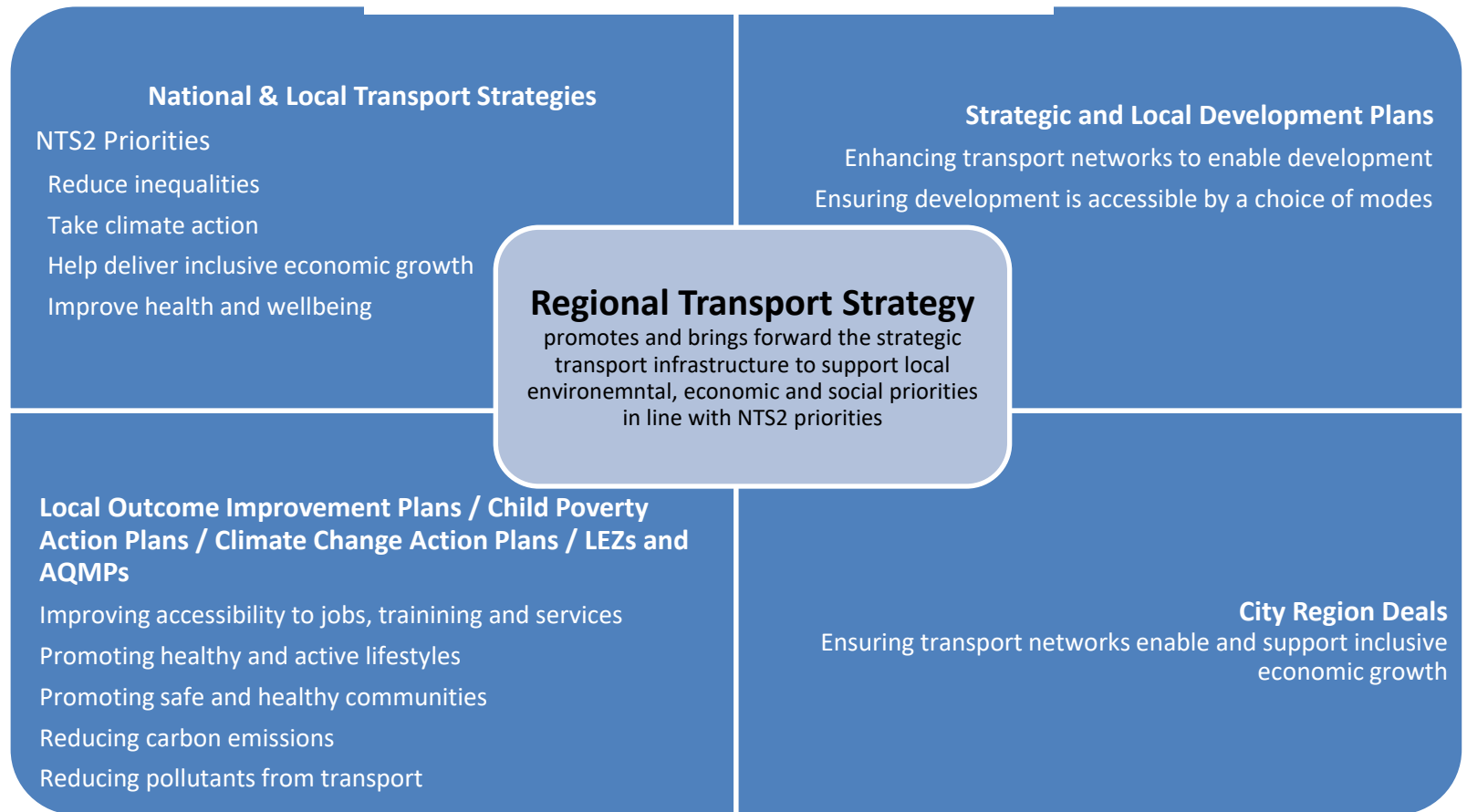
What is the Regional Transport Strategy?

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.

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).

Figure 1: How the RTS supports national and local priorities



Why write a new Regional Transport Strategy (RTS3) 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

Process for preparing a new RTS & Indicative timescales

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

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

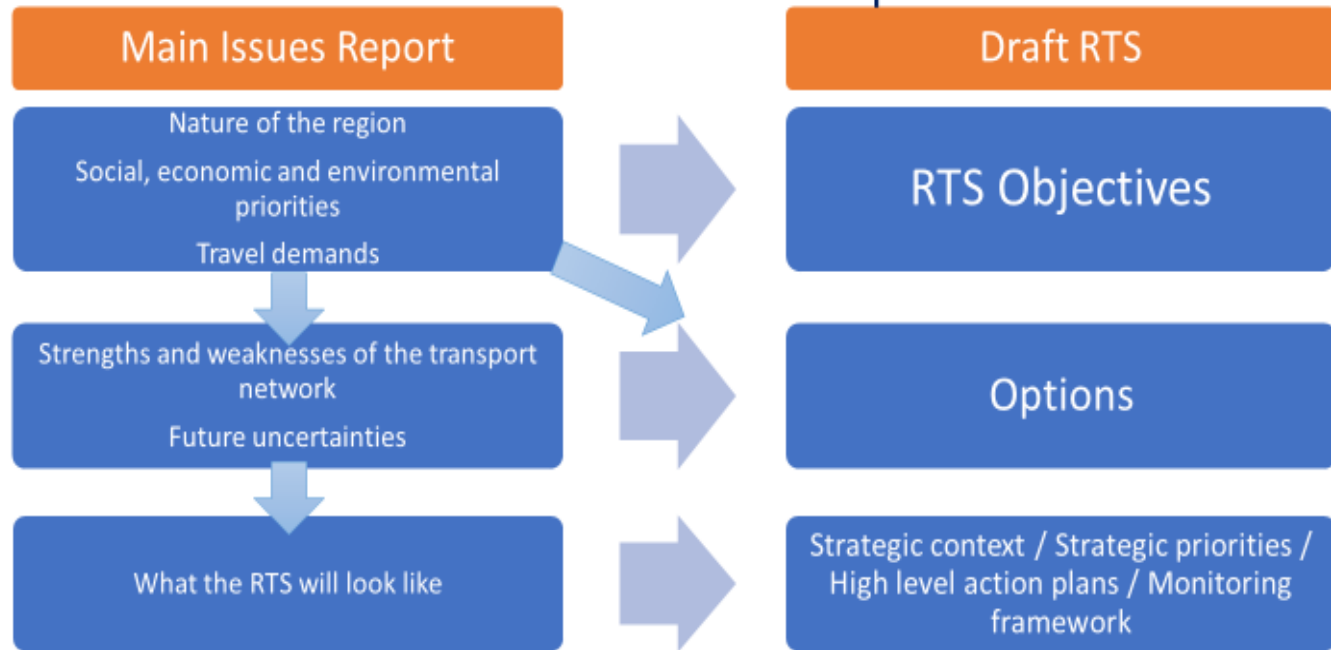
The first stage of the exercise is to identify the problems, issues, opportunities and constraints that will shape the Regional Transport Strategy. We will do this by undertaking engagement exercises with stakeholders based on the content of this Main Issues Report, identifying the problems, issues, 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 strengths and weaknesses of the transport network
- Future risks and opportunities that may influence travel demands (scenario planning)

Content of the Main Issues Report



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.

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.

To ensure the process of writing a new RTS considers the most relevant issues, we have used the four NTS priorities to structure this Main Issues Report.

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



Alignment with other Government Strategies and Programmes

Of course, the RTS will also ensure that it supports and helps bring forward those transport activities that support the objectives of all relevant national strategies. Including:

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

Problems, opportunities, issues and constraints

1. Nature of the region

Section 1 summarises the key characteristics of the region which shape our travel demands.

Q1. Are there specific aspects about the nature of the region which have been missed and have a significant influence on either the demands for travel within the region, or our ability to address those demands?

Population and Geography: 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 Scotland⁶. 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)⁴
- 29% live in remote and rural areas, and 8.3% live in small accessible towns⁴
- 12% of Angus, 9% of Perth and Kinross and 8% of Stirling's datazones are in the lowest 5% of SIMD access domain⁵

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

The area also sits in the heart of Scotland with all trunk road and rail routes between the Highlands (inc Inverness), 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.

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

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

⁵ Scottish Indices of Multiple Deprivation 2020

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

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

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)⁷)
- **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:

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

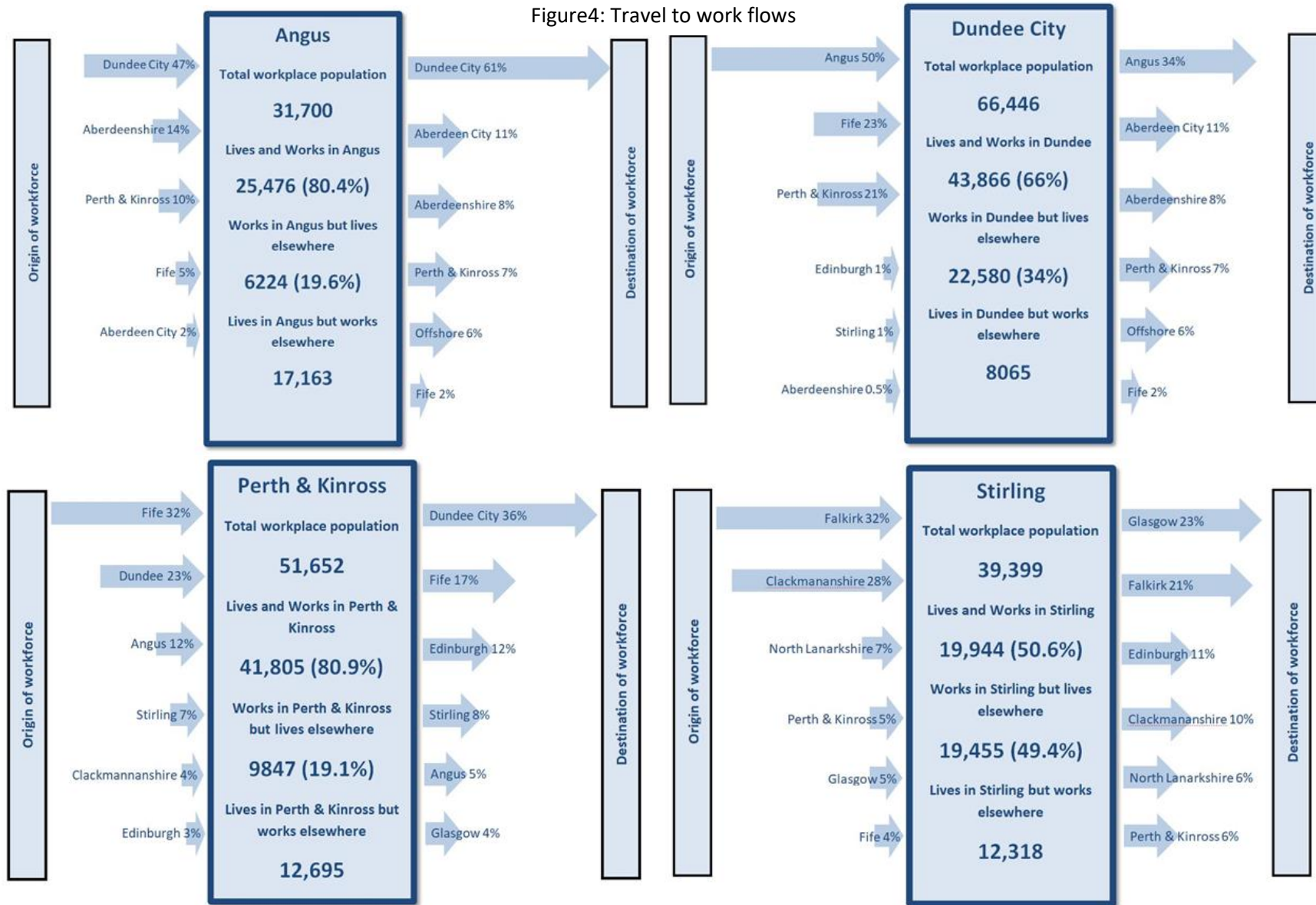
Forth Valley: NHS Forth Valley with hospital sites in Larbert, Alloa and Stirling; Forth Valley College with sites in Stirling, Alloa and Falkirk.

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.

⁷ 2011 Census data

Table 2: Cross boundary travel to work areas		
Area	Issues	New developments on the edge of the Tactran boundary
TayCities TTWA (Angus, Perth and Kinross, Dundee and North east Fife)	Taybridgehead and NE Fife towns access key health, leisure, retail and employment in Dundee.	Newport (150) Wormit (212) Guardbridge Papermill (St Andrews University) Guardbridge (350) St Andrews Western Expansion (1000+)
Forth Valley TTWA (Stirling/ Clackmannanshire / Falkirk)	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.	
Kinross-shire / Fife (Kinross / Dunfermline)	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
NE Angus / Aberdeenshire (Montrose / Laurencekirk / Stonehaven)	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) Laurencekirk (1100+)
NW Stirling / Oban (Criarlarich / Tyndrum / Dalmally / Oban)	Access to railway network means that travel to Oban is better than bus links to Stirling for further education, shopping etc	
SW Stirling / Glasgow (Strathblane / Balfron / Milngarvie)	Access to health, leisure, employment largely within East Dunbartonshire/Glasgow area. Limited PT options.	

Figure4: Travel to work flows



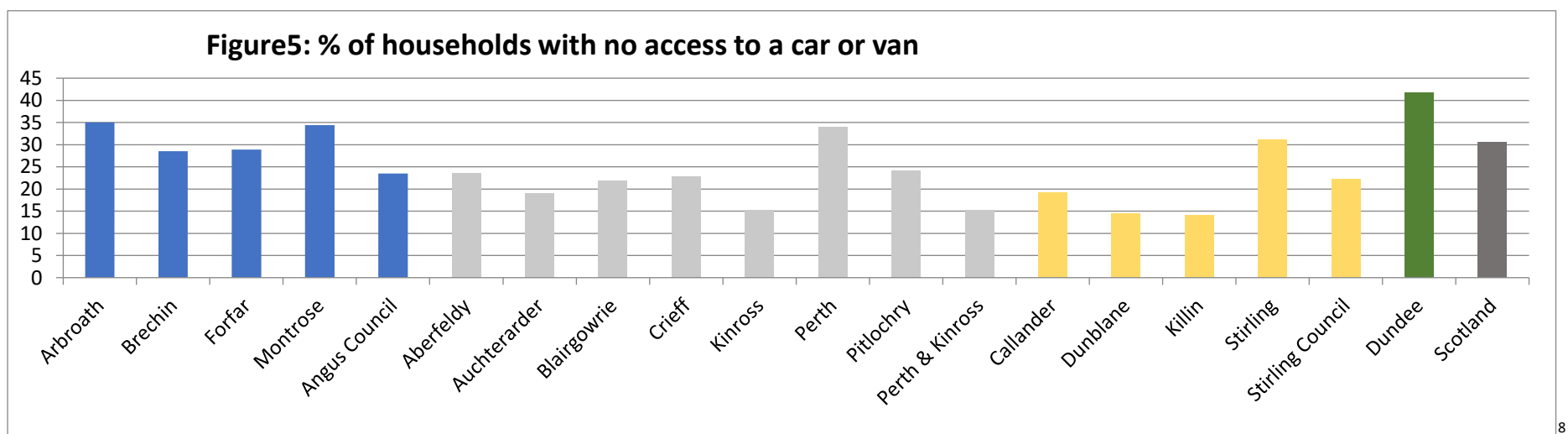
Socio-economic profile

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

Table 2: Economic profile of the population	Angus	DCC	PKC	Stirling	Scotland
Economic activity					
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
Occupation of those employed					
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
Key Industries in which people are employed					
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

Table4: Health profile	Angus	DCC	PKC	Stirling	Scotland
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



⁸ Census 2011

2. Social, environmental and economic priorities

Section 2 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.

Q2a. Have we captured the key problems that our local, regional and national partners are striving to address, and how these problems relate to specific locations or groups of people in the region?

Q2b. Have we identified the most relevant local and regional strategies and plans which define our social, environmental and economic priorities?

3.1 The priorities for reducing inequalities

All the local and regional partners recognise the problems of inequalities, 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
The availability of transport options to access services	<ul style="list-style-type: none">• Our most deprived areas will have the lowest levels of car ownership, and will be more dependent on public transport• 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 car⁹

⁹ 2011 Census data

The problem	For who
The cost of transport and the issues of transport poverty	<ul style="list-style-type: none"> 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.
The ability to make the most of the transport services that exist	<ul style="list-style-type: none"> 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. 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.
The ability of people with mobility difficulties to use our transport networks	<ul style="list-style-type: none"> 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.

The above assumptions are based on are 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.

Table5 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
Our most disadvantaged communities (SIMD worst 5%)	Pts Arbroath (Centre/Harbour)	Pts Whitfield / Fintry / Douglas / Linlathen & Midcraigie / Kirkton / Ardler & St Mary's / The Glens / Hilltown / Fairmuir / Lochee / Menzieshill / City Centre	10% Pts Muirton / Tulloch / Ratray	Pt Cornton / Raploch

Table 5: where are our priorities for reducing inequalities?				
	Angus	Dundee	Perth and Kinross	Stirling
		37% of the City's datazones in lowest 20%. Twice the national average.		
Economically inactive people 16 to 74 who are long-term sick or disabled	12.3%	17%	11.5%	13%
At risk groups (Tactran EqIA)	young single parents / people with mobility difficulties / reliant on seasonal employment / cultural or religious barriers / gender inequalities / elderly (<i>older than Scottish average population outside Dundee and Perth Cities</i>)but maybe a different balance across communities across the region			
Access to services & education (TRACC accessibility modelling / SIMD)	20% of datazones are within the bottom 10% of datazones for geographic access (SIMD)		21% of datazones are within the bottom 10% of datazones for geographic access (SIMD)	17% of datazones are within the bottom 10% of datazones for geographic access (SIMD)
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%
Transport poverty				
<i>Average cost of full rail fare</i>	<i>2nd highest in Scotland</i>			<i>3rd highest in Scotland</i>

Table 5: where are our priorities for reducing inequalities?				
	Angus	Dundee	Perth and Kinross	Stirling
% weekly income spent on transport	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
% datazones at high risk of transport poverty ¹⁰	54%	11%	35%	35%
<i>Scotland average: high risk 36%</i>				

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

3.2 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 will 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 weakness 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%¹¹ 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 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>
The problem: Where people live and need/chose to travel	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	

¹¹ <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 <u>Climate Change Strategy and Action Plan</u>	Dundee <u>Climate Action Plan LEZ</u>	Perth and Kinross <u>Climate Change Action Plan</u>	Stirling <u>Climate Change Sustainable Development Strategy</u>
% of trips over 5km ¹²		36%	19%	44%	33%
Mode share travel to work ¹³	Walk and cycle	23%	19%	18%	19%
	Bus and train	5%	13%	9%	7%
	Car	71%	64%	71%	69%
Homeworking ¹³		10%	11%	14%	14%
The barriers to change <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"> • Existence of, awareness of and ability to use alternatives to the private car for private trips (active travel, public transport) • Take up and support networks for low emission technology, for both personal travel and emissions. Remember almost all freight trips to & from the Highlands and Aberdeenshire pass through the region. <ul style="list-style-type: none"> ○ Gap between current and target EV infrastructure¹⁴ (0.7% current registrations, target 60-70% coverage by 2032). Issues include: public sector fleets; availability of infrastructure at rural and tourist locations (including remote tourist parking areas); tenements & flats / Cost of EVs and the risks of increasing inequalities • Availability and cost of technology to reduce the need to travel • Continual reduction of services, and centralisation of services, increasing the distances people have to travel 			

¹² SHS Travel Diary 2019

¹³ Census 2011

¹⁴ [Tactran Regional EV Strategy 2019](#)

3.3 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
Existing employment sectors and locations	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? Tay Tourism Strategy	<ul style="list-style-type: none"> • Angus Glens • Carnoustie 	Waterfront (V&A) / City Centre	<ul style="list-style-type: none"> • A9/A93/Blairgowrie-Dunkeld – Aberfeldy - Kenmore-Aberfeldy-Pitlochry; Blair Atholl (+House of Bruar) • Crieff; • City Hall (Stone of Destiny); Scone Palace and racecourse; • Gleneagles 	<ul style="list-style-type: none"> • LLTNP (Callander A84; East Loch Lomond; Killin) • Stirling Castle • Blairdrummond Safari Park
	<ul style="list-style-type: none"> • Tourism & Culture 			<ul style="list-style-type: none"> • Innovation

Table 7: Priorities for promoting inclusive economic growth					
		Angus	Dundee	Perth and Kinross	Stirling
Growth sectors and locations Tay Cities City Region Deal Tay Cities Region Economic Strategy 2019-2039 Stirling and Clackmannanshire City Region Deal			<ul style="list-style-type: none"> • Food & Drink • Engineering & Manufacturing • Energy (including Renewables, Offshore Wind, Oil & Gas Decommissioning); • Digital & Creative Industries • Biomedical, Life Sciences and MedTech • Construction 		<ul style="list-style-type: none"> • Digital • Developing culture, heritage and tourism assets • Transport, connectivity and low carbon • Infrastructure • Skills and inclusion
		North Angus (Montrose)	Michelin Scotland Innovation Park / Waterfront (inc V&A)	North & West Perth James Hutton Institute	<ul style="list-style-type: none"> • University: Scotland's National Environment Centre & The National Aquaculture Technology and Innovation Hub • Developing Culture, Heritage & Tourism Assets: National Tartan Centre • Infrastructure (MoD Forthside)
Connecting Scotland's cities Journey times (fastest rail journey shown)	Glasgow	Road (Forfar) 125mins Rail (Montrose) 115mins	Road 103mins Rail 80mins	Road 74mins Rail 56mins	Road 39 mins Rail 27 mins
	Edinburgh	Road (Forfar) 107mins Rail (Montrose) 105mins	Road 87mins Rail 71mins	Road 64 mins Rail 71 mins	Road 62 mins Rail 41 mins
		Rail fares between Glasgow/Edinburgh and Perth/Dundee ramp up north of Dunblane....disproportionate cost and limits hinterlands in favour of Glasgow and Edinburgh		Rail to Edinburgh disproportionately long compared to road	

Table 7: Priorities for promoting inclusive economic growth				
	Angus	Dundee	Perth and Kinross	Stirling
Ensuring access to jobs and training	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 60mins¹⁵</i>	43.4%	3.9%	33.2%	16.6%
<i>16-24 year olds no access to Further Education by PT¹⁶</i>	11.8%	1.6%	15.1%	10.4%

¹⁵ TRACC Accessibility Modelling 2018

3.4 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
Road safety problems	A90 / A92	A90/A92/A972 Growing % of elderly involved, increasing severity.	A9 Perth to Inverness / A9 Auchterarder / A93	A9 Kier / A811 / A84
Air quality problems		LEZ	Perth City AQMA Crieff AQMA	
Where are the areas of poor health?		33% of the population lives in a SIMD area ranked in the bottom 20% for health		

Table 8: Priorities for health and wellbeing / transport implications

	Angus	Dundee	Perth and Kinross	Stirling
Access to healthcare	<i>Ability to access healthcare for those without access to a car, particularly those in a rural location</i>			
Households without a car (More than 60mins to hospital)	80.5%	0%	13.3%	19.2%
65+ yr olds (no public transport to primary health care)	7.9%	0.5%	11.2%	10.1%

3. Significant new travel demands in the area

Section 3 considers those major new developments that will increase the demand for travel in the region.

Q3. Over and above the new locations where travel demand will be generated (as identified in the LDPs / RSSs / City Region Deals), are there other significant new travel demands? (e.g arising out of existing industries such as tourism)

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
Indicative Regional Spatial Strategies	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
Local Development Plans¹⁶ New Housing (% increase in settlement)	Arbroath 884 (36%) Forfar 978 (15%) Montrose 702 (12%)	Dundee 2855 (4%)	Blairgowrie 1677 (41%) Bridge of Earn 1797 (156%) Crieff 920 (28%) Luncarty 760 (110%) Perth 8581+ (40%) Scone 823 (37%)	Stirling City Area <ul style="list-style-type: none"> • Durieshill 2500 and South Stirling Gateway 800 (new) • Stirling City 2088 (14%) • Eastern Villages (Cowie, Fallin, Plean, Throsk) 1718 (56%) = 24% increase across City area by 2037
Business	Arbroath: Elliot Ind Estate (21ha) Montrose: Montrose Port; Montrose Airport (50ha);	Dundee Waterfront / Western Gateway 50ha / Linlathan 40ha / MSIP Principal Economic Development Areas: Goudie / Dryborough / Dunsinane / West Pitkerro / Claypotts / Port of Dundee Specialist Economic Development Areas: Seabraes / MediPark / Technopole / Technology Park	Invergowrie: James Hutton Institute Western Perth: Bertha Park (25ha); Almond Valley; Perth West (25ha) Ruthvenfield Rd (23.6ha) Bridge of Earn: Oudenarde 35ha	Durieshill Kildean Forthside Callander: Claish Farm (190homes + 48ha tourism)

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

4. Strengths and weaknesses of the transport network

Section 4 considers the key strengths/opportunities and weaknesses/threats 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. Have we captured the key strengths/opportunities and weaknesses/threats in our existing transport networks which could shape the options we have to address the social, environmental and economic priorities?

Our transport networks and systems will help or hinder us

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

Table10 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

Table 10: Strengths and weaknesses of the transport network

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

Table 10: Strengths and weaknesses of the transport network

<ul style="list-style-type: none"> • By providing reliable journey times • By Enabling access to jobs • By Connecting the cities / region • By Supporting tourism 	<p>Weakness / threat</p>	<ul style="list-style-type: none"> • Ports: port of Montrose; Port of Dundee, Perth Harbour • Dundee Airport <p>Angus: Poor links to Port of Montrose / North Angus</p> <p>Dundee: Pinch points / unreliable journey times:</p> <ul style="list-style-type: none"> • A90 (Kingsway) Swallow Roundabout / Claypotts • A92 (Arbroath Road) <p>Perth & Kinross: Pinch points / unreliable journey times:</p> <ul style="list-style-type: none"> • A9 Broxden / Inveralmond • Perth City Centre • Perth to Edinburgh rail times/cost <p>Stirling: Pinch points / unreliable journey times:</p> <ul style="list-style-type: none"> • Strategic: Craigforth / Kier / A91 • City Centre (Craigs & Customs Rndbts) • Sustainable transport links into National Park <p>Poor connections to neighbouring regional centres outside Forth Valley</p>
<p>Health and wellbeing</p> <ul style="list-style-type: none"> • By being safe • By not polluting • By enabling access to health • By enabling active travel 	<p>Strength / opportunity</p> <p>Weakness / threat</p>	<ul style="list-style-type: none"> • Compact towns and cities present active travel opportunities • Many settlements within cycling distance of each other • Central Scotland Green network • Principal hospitals being close to rail stations • Central Scotland Green network <ul style="list-style-type: none"> • Dundee: Traffic creating air quality issues • Percieved and actual road safety problems? • Angus, Perth and Kinross and Stirling: Poor active travel connectivity between settlements • Dundee, Perth and Stirling: City Centre pinch points creating congestion and air quality issues

5. Future uncertainties and risks that may influence travel

Section 5 considers the future uncertainties that we need to take into account in shaping the RTS

Q5. Have we captured the most significant uncertainties in terms of both travel demand and supply? Have we summarised the impact and likelihood reasonably?

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 & adverse weather could affect</u></p> <ul style="list-style-type: none"> - Network resilience - Policy <p><u>Economic booms and bust (inc those triggered by disruptions like pandemics) affect</u></p> <ul style="list-style-type: none"> - Trip generation in the region from house building and general activity - Trips through the region (e.g. to/from Aberdeen) <p><u>Brexit could affect</u></p> <ul style="list-style-type: none"> • Economic activity (volume and type) • Demographics (immigration and birth rates) 	<p><u>Technology provides us with tools to help us achieve objectives:</u></p> <ul style="list-style-type: none"> • Electric / hydrogen vehicles (reduces emissions) • Demand management tools (e.g. road pricing tech) • Solutions such as MaaS <p><u>Technology affecting how we travel (what needs to be accommodated?)</u></p> <ul style="list-style-type: none"> • Driverless cars (road capacity requirements increase then decrease) • How deliveries are made <p><u>Existing transport networks</u></p> <ul style="list-style-type: none"> • Future of buses • Cost of energy & travel (as we transfer from 'carbon' to 'green')
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) & terrorism can affect</u></p> <ul style="list-style-type: none"> • willingness to use mass transit • willingness to travel / stay at home <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>The opportunities <u>technology provides</u> us e.g.</p> <ul style="list-style-type: none"> • Tech may provide increased opportunities to work at home / shop on line / flexibility where we live. But will we? 	<p><u>Transport policy</u></p> <ul style="list-style-type: none"> • Prioritisation of modes & where will funding be directed (e.g. parking policy / road & congestion charging) <p><u>Land use policy</u></p> <ul style="list-style-type: none"> • Where will there be a demand for housing? • What will be the role of our town centres? (shops/offices etc) <p><u>Fiscal Policy</u></p> <ul style="list-style-type: none"> • 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	Supply	What could this mean in the region	Likelihood	Mitigate or Promote
MaaS technology MaaS can make more efficient use of existing services.		Improve	Better rural accessibility	Medium	Promote – however use of MaaS should not be limited to high population density areas.
Clean fuel technologies Clean technologies provide alternative to fossil fuels		Improve	Improvements in AQ 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 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
Increased use of technology for homeworking/shopping / healthcare trips etc 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 PT routes	High	Mitigate – PT network is crucial for the sustainability of the transport network
			Increases in rural population could put additional pressure on transport networks	Medium	Mitigate – ensure that rural transport network can provide adequate access
Economic downturn Reduced: <ul style="list-style-type: none"> - Economic activity 	Decrease	Decrease	Fall in economic output and/or inflationary pressures result in lower disposable income causing an	Medium	Mitigate – ensure affordable PT and other shared mobility options (eg car clubs, MaaS etc) are available

Table 12: impact of the most likely uncertainties					
Uncertainty	Demand	Supply	What could this mean in the region	Likelihood	Mitigate or Promote
- Lower levels of employment / income			increase in fuel/transport poverty, in particular for rural areas		
			Less traffic, could ease pressure where there are capacity issues	Medium	Promote – make best use of existing capacity and look to lock in lower car mode share and incentivise sustainable modes
Driverless cars Increase effective road capacity long term; medium term more road capacity may be required. Makes single occupancy car use available to everyone	Increase	Decrease capacity in med term	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 accordance with the place principal
Transport Policy Prioritisation of modes & where funding be directed (e.g. parking policy / road & congestion charging)	Decrease (non-sustainable modes)	Improve	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.
Fiscal Policy Road and congestion pricing to compensate for loss of fuel duties	Decrease (car use)		Potential for significant changes in demand and travel patterns.	Medium	Promote – ensure that changes impact positively on mode choice and sustainability
Confidence in mass transit Pandemics and terrorism can affect willingness to use mass transit with a mode shift to private car	Decrease		Reduction in demand for PT could result in service reductions along with an increase in car usage	High	Mitigate – ensure that PT remains an attractive and viable option through effective promotion and investment.

Table 12: impact of the most likely uncertainties

Uncertainty	Demand	Supply	What could this mean in the region	Likelihood	Mitigate or Promote
Climate change Rate of response	Decrease (non-sustainable modes)	Improve (sustainable modes)	Policy, technology and public opinion is increasingly accepting the changes required to address climate change. The uncertainty exists as a potential mode shift to more sustainable modes. Increased demand for more sustainable transport infrastructure.	Medium	Promote – ensure that active travel and sustainable transport networks are fit for purpose and can support and encourage mode shift from car

6. 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:

- Identifying the social, environmental and economic priorities to be supported
- Objectives: what transport outcomes the strategy must aim for to support economic, social and environmental objectives
- Identifying those locations on the strategic transport networks (*and those elements of our transport systems*) where intervention is required to support the economic, environmental and social objectives

Strategic transport framework

The strategic framework will identify key 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.

RTS: Consultation strategy

Audience	Timescale	Method	Key Stakeholders
Tactran Board	March 2021: Tactran Board consider Main Issues Report and consultation strategy	Board Meeting	<ul style="list-style-type: none"> ▪ Transport Scotland ▪ RTPs ▪ Local Authorities and associated groups ▪ National Parks ▪ Tactran Freight Quality Partnership ▪ Lobby groups (e.g. Transform Scotland, Transport Focus) ▪ Mobility Access Committee for Scotland ▪ Transport Providers (ScotRail, Network Rail, bus and coach operators) ▪ Community Planning Partnerships ▪ Community Councils ▪ Sustrans ▪ Paths for All ▪ Cycling Scotland ▪ Energy Savings Trust ▪ Living Streets ▪ Community Rail Partnerships
Local Authority Members and other Key Stakeholders	April – May 2021: Local members and other key stakeholders to consider MIR and the issues which will shape the Strategy	<ul style="list-style-type: none"> • Email links to ‘storymapping’ website (with feedback options through website) • Regional meetings and; • Promoted through links on Tactran website • Attendance at established public sector meetings 	
Tactran Board	June 2021: Tactran Board consider feedback from Councils and stakeholders and agree draft objectives	Board Meeting	
Tactran Board	September 2021: Tactran Board consider alternative strategies / options	Board Meeting	
Local Authority Members and other key Stakeholders	October / November 2021: Local members and stakeholders consider alternative strategies / options	<ul style="list-style-type: none"> • Email, links to ‘storymapping’ URL (with feedback options through website) • regional meetings 	

Audience	Timescale	Method	Key Stakeholders
Tactran Board	December 2021: Tactran Board consider feedback from Councils and Stakeholders and agree preferred strategies / options	Board Meeting	<ul style="list-style-type: none"> ▪ Health Boards in Tactran region ▪ FHE in Tactran region ▪ Wider industry of professionals ▪ SEPA ▪ Scottish Natural Heritage ▪ Historic Environment Scotland
Tactran Board	June 2022: Tactran Board Consider Draft RTS for consultation	Board Meeting	
Local Officers, Key Stakeholders and wider public audience	Summer2022: Consult on draft RTS	<ul style="list-style-type: none"> • Email links to “storymapping” URL • Regional meetings, • Attendance at established public sector meetings • feedback options on social media links and other networks / reciprocal links / Tactran website 	
Tactran Board and New Administrations	September 2022: Tactran Board and new administrations consider Consultation Report	Board Meeting	