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RTP/24/01

TAYSIDE AND CENTRAL SCOTLAND TRANSPORT PARTNERSHIP

30 JANUARY 2024

A NEW REGIONAL TRANSPORT STRATEGY: DRAFT FOR SUBMISSION TO THE MINISTER FOR TRANSPORT

REPORT BY SENIOR STRATEGY OFFICER AND STRATEGY OFFICER (STRATEGIC CONNECTIVITY)

Purpose

The report seeks (i) approval of the Integrated Impact Assessment and Strategic Environmental Appraisal reports that have informed the development of the Final Draft of a Tayside and Central Scotland Regional Transport Strategy 2024-2034 (RTS); (ii) approval to submit the Final Draft of the RTS to the Minister for Transport for approval; (iii) to note the next steps as they relate to preparing a RTS Delivery Plan and a consultation summary for circulation to public and stakeholders.

Summary

Members and officers have worked on a new RTS since 2020. A final draft has been prepared. As a statutory document, the strategy requires submission to the Minister for Transport for approval.

1 RECOMMENDATIONS

1.1 That the Partnership:

(i) approves the Integrated Impact Assessment report undertaken to inform a Tayside and Central Scotland Regional Transport Strategy 2024-2034, available in the Members area of the Tactran website;

(ii) approves the Strategic Environmental Appraisal report undertaken to inform a Tayside and Central Scotland Regional Transport Strategy 2024-2034, available in the Members area of the Tactran website;

(iii) approves the Final Draft of the Tayside and Central Scotland Regional Transport Strategy 2024-2034 for submission to the Minister for Transport as included at Appendix D; and

(iv) notes the next steps in relation to preparing the RTS Delivery Plan and a summary of consultation to circulate to those that participated in the engagement on the draft Strategy in 2023.

2 BACKGROUND

2.1 Regional Transport Strategies 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 Act requires that Regional Transport Partnerships 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).

2.3 Development of the strategy followed the principles of appraisal and strategy development as set out in Transport Scotland's Scottish Transport Appraisal Guidance (STAG) and Development Planning and Management Transport Appraisal Guidance (DPMTAG), namely following the process of:

- Identifying problems, opportunities, issues and constraints
- Setting objectives
- Identifying and sifting of options
- Appraising options

Supporting work

2.4 To inform the strategy the following supporting pieces of work were undertaken:

- A Strategic Environmental Assessment
- An Integrated Impact Assessment
- Work to understand how the Region could support the Government's climate change target of reducing car km (Jacobs 'Achieving a 20% reduction in car km: Options for the Tactran Region' January 2023)
- Work to understand the likely achievement of proposed targets based on current delivery trends (Jacobs 'Tactran RTS Targets: baseline and options' September 2023)
- Two Representative Public Opinion Surveys (Taylor McKenzie Research 'Tactran Quantitative Research' Reports November 2022 and October 2023)
- A main issues report
- An options consultation report
- A draft monitoring Framework

2.5 The supporting documents are available on the in the Regional Transport Strategy section of the Members area of the website.

Engagement

2.6 Between June and August 2021 public and stakeholder engagement was undertaken to help identify the issues to be considered when developing the strategy. This informed the draft objectives and outcomes approved by the Partnership Meeting of 14 September 2021 (report RTP/21/26 refers).

2.7 Between July 2022 and November 2022 public and stakeholder engagement was undertaken, seeking views on the draft objectives and outcomes; the scale

of change required to hit national targets; and the measures which could help deliver the identified outcomes (report RTP/22/32 refers)

2.8 Between July 2024 and November 2023, public and stakeholder engagement was undertaken, seeking views on a draft strategy. The results of this engagement were considered by the Partnership Meeting of 12th December 2023. That meeting agreed which issues warranted amendments and agreed the nature of those amendments (report RTP/23/36 refers).

3 DISCUSSION

Main themes in the RTS

3.1 In undertaking the work, the Partnership Board have noted:

- The scale of the challenge required to hit local and national aspirations, especially those in relation to Climate Change. Members have also noted there is limited time and resources to achieve the 2030 interim Climate Change targets.
- That hitting these targets means a step change in behaviour for individuals and businesses, and also the delivery agencies, including the Councils and other Regional partners. Maintaining the status quo in how we deliver improvements to our transport networks is unlikely to enable these targets to be met.
- When asking individuals and business to change their behaviour, the ask must be fair, timely and proportionate. The degree of behaviour change desired, requires an ongoing conversation with all stakeholders

3.2 As the strategy has developed, the following have become key elements of the strategy:

- The strategy must recognise the different circumstances and opportunities as they relate to the **rural and urban populations** across the region
- Given that the achievement of a number of national targets are unlikely to be achieved with existing resources, delivery arrangements and timescales, the Partners need to
    - **focus activity on those locations and groups in society where support to access facilities or encourage behaviour change is most required**
    - Recognise that the alternative to the car (whether for people with cars, or those without) requires **integrated solutions**. This **requires agreeing priorities and co-ordinating programmes within and across partner organisations**
    - Investigate a **step change in public transport provision**
    - Investigate **mechanisms to reduce car km** to support the national climate change target
    - understand the potential gaps between ‘the best that we can do’ and the achievement of the national targets, and to **encourage the**

Government to continue to work with Partners to understand how these targets can be achieved.

Public and stakeholder views

3.3 The representative public opinion surveys indicate that the public are:

- Supportive of the strategic objectives
- Supportive of almost all measures proposed (the introduction of new charges for motorists being the exception)

3.4 Likewise, organisational stakeholders have been supportive of the strategy.

3.5 However, perhaps the most significant issue generated by the public responses to the consultation is a lack of confidence in the Partners ability to deliver the aspirations of the strategy.

Amendments following consultation on the draft Strategy

3.6 The results of the consultation on the Draft RTS and the Impact Assessment Reports were presented to the Partnership Board of 12th December 2024. That meeting agreed which issues warranted amendments and agreed the nature of those amendments.

Assessment Reports

3.7 Appendix A identifies the proposed changes to the Integrated Impact Assessment Report, Appendix B identifies the proposed changes to the SEA Report.

3.8 The Final Drafts of the Strategic Environmental Appraisal report and the Integrated Impact Assessment report are included in the Partnership Board & Executive Committee section of the Members area of the Tactran website, which the Partnership is asked to approve.

3.9 The most significant amendments to the assessment reports are:

- Integrated Impact Assessment
  - Inclusion of the findings from the consultation with the children and young people in Angus and Dundee.
  - Inclusion of reference to bike ownership and use and the subsequent equality implications.
  - Added reference to newly published regional research into the impacts of poor air quality on children and young people in Tayside by the University of Dundee's Medical School.
  - Clarification that only high-level assessments have been undertaken as the majority of actions in the RTS are not spatially exclusive. It is therefore anticipated that respective delivery schemes and programmes will be subject to individual Health Inequality Impact Assessments.

- Strategic Environmental Impact Assessment
  - Explicit assessment of strategy objectives and delivery themes
  - Introduction of the mitigation hierarchy, i.e. the hierarchy follows avoidance, reduction, restoration and offsets. Schemes will be delivered through the appropriate consenting process. As such, detailed mitigation and enhancement opportunities will only be able to be developed as part of the consenting process at scheme level in line with the mitigation hierarchy.
  - Summary detailing how the Strategic Environmental Assessment has informed the RTS.

3.10 All proposed changes are highlighted in the documents.

Regional Transport Strategy

3.11 Appendix C identifies the proposed changes to the RTS. The most significant amendments to the RTS text are:

- Inclusion of a foreword
- Inclusion of 'What you have told us' page in Section 1
- To increase confidence in delivery
  - additional detail on where improvements will be focused has been included
  - reference to "The regional Partners will accordingly identify partnership arrangements that ensure programmes are prioritised and co-ordinated to deliver integrated solutions."
  - Introduction of relative priorities within the rural, urban and strategic corridor integrated solutions
- Inclusion of a short section on the approach to promoting electric and low emission vehicles
- The introduction of the principle that, whilst partners will explore '*the best they can do*' to deliver national targets, further work with the Scottish Government will be required to understand how both parties can best support each other to deliver the targets. This is under the heading of 'The role of the Scottish Government'

3.12 The Final Draft of the RTS including amendments is included as Appendix D, which the Partnership is asked to approve.

3.13 All proposed changes are highlighted in the documents.

Next steps

3.14 The following actions are proposed to continue to progress the RTS and its delivery.

3.15 **Consultation summary to participants**: A summary of the consultation will be prepared for circulation to organisations and individuals who have asked to be kept updated on progress of the RTS.

3.16 **Delivery Plan: Delivering the integrated solutions:** it is proposed that work commences on preparing the RTS delivery plan.

3.17 **Undertake preparatory work for final versions of the strategy:** for example, commencing work on on-line and easy read versions for these to be able to be promoted as soon as possible after any Minister approval.

4 CONSULTATIONS

4.1 The report has been prepared in consultation with the Local Authority transport officers.

5 RESOURCE IMPLICATIONS

5.1 Work undertaken on the RTS in 2023/24 has been funded through the RTS and Delivery Plan revenue budget allocation of £54,000.

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 the following impact assessments:

- Equality and Human Rights Impact Assessment (EqIA)
- Children's Rights and Wellbeing Impact Assessment (CRWIA)
- Health Inequalities Impact Assessment (HIIA)

6.2 The requirements of the Fairer Scotland Duty have been met through the EqIA, CRWIA and HIIA processes included within the Integrated 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/20/32, A New Regional Transport Strategy for the Tactran Region, 15 September 2020

Report to Partnership RTP/21/09, A New Regional Transport Strategy: Main Issues Report and Consultation Strategy, 16 March 2021

Report to Partnership RTP/21/15, A New Regional Transport Strategy: Update, 15 June 2021

Report to Partnership RTP/21/26, A New Regional Transport Strategy: Objective Setting, 14 September 2021

Report to Partnership RTP/21/32, A New Regional Transport Strategy: Option Identification, 14 December 2021

Report to Partnership RTP/22/09, A New Regional Transport Strategy: Some Big Questions, 15 March 2022

Report to Partnership RTP/22/17, A New Regional Transport Strategy: Update, 14 June 2022

Report to Partnership RTP/22/19, A New Regional Transport Strategy: A Conversation About How We Travel, 2 August 2022

Report to Partnership RTP/22/24, A New Regional Transport Strategy: Progress Report, 20 September 2022

Report to Partnership RTP/22/32, A New Regional Transport Strategy: A Conversation about changing how we travel Consultation Summary, 13 December 2022

Report to Partnership RTP/23/08, A New Regional Transport Strategy, 14 March 2023

Report to Partnership RTP/23/11, A New Regional Transport Strategy, 13 June 2023

Report to Partnership RTP/23/36, A New Regional Transport Strategy, 12 December 2023

Appendix A

DRAFT Changes to the consultation draft of the Tayside and Central Scotland Regional Transport Strategy – Integrated Impact Assessment

New or changed text highlighted.

Table 1: Amendments agreed at Partnership Meeting of 12th December 2023		
Proposed amendment	**Proposed text**	**New page**
Introduction New paragraph introduced to explain the individual assessments that have be integrated in the Integrated Impact Assessment.	**New text:** 30th January 2024 This report sets out an Integrated Impact Assessment screening of the delivery themes and associated options within the Draft TACTRAN Regional Transport Strategy 2024-2034 against a current evidence base. The Integrated Impact Assessment integrates the Equalities and Fairer Scotland Duty Impact Assessment (EqIA), Children's Rights and Wellbeing Impact Assessment (CRWIA), and Health Inequality Impact Assessment (HIIA).	**p.1**
Children's Rights and Wellbeing Impact Assessment – Positive Impacts		
Include findings from the consultation with the children and young people in Angus and Dundee.	Identified challenges faced by children and young people within the region would be addressed by the Draft RTS as it establishes a sound framework which will allow transport interventions to be developed to meet the needs of children and young people.	p.22

Table 1: Amendments agreed at Partnership Meeting of 12th December 2023		
Proposed amendment	**Proposed text**	**New page**
The consultation generated rich insight with clear messages for policy and practice	The transport offer is key to enable access to and young people's ability to benefit from education, amenities, public services, employment, and economic opportunities. The RTS will implement inventions to support children and young people in Angus, Dundee City, Perth and Kinross, and Stirling to travel more actively more often. The RTS will, subsequently, also implement interventions to support children and young people to be healthy. An increase in physical activity has been proven to be associated with benefits to mental health. Physical activity can reduce the risk of depression. Physical activity can enhance psychological wellbeing by improving self-perception and self-esteem including a sense of purpose and value, mood, and sleep quality, and by reducing levels of anxiety and fatigue[1]. Physical activity is important for children's and young people's overall physical, psychosocial, and cognitive development[2]. Research in recent decades has shown that engaging in physical activity improves cognitive performance and academic achievement in children and adolescents[3] [4]. Cognitive ability and academic achievement are closely linked. For children and young people, their social lives depend heavily on getting to places where they can meet and interact with their friends and family members. The RTS will implement interventions to improve the ability of children and young people to reach destinations within the region where they meet with other people. Active and public transport networks need to link children and young people with where they want to go at a local level, not just along	

[1] DEPARTMENT OF HEALTH, 2011: Start Active, Stay Active. A report on physical activity for health from the four home countries - Chief Medical Officers

[2] JANSSEN I., LEBLANC A.G., 2010: Systematic review of the health benefits of physical activity and fitness in school-aged children and youth. Int. J. Behav. Nutr. Phys. Act. 2010;7:40. doi: 10.1186/1479-5868-7-40

[3] SIBLEY B.A., ETNIER J.L:. The relationship between physical activity and cognition in children: A meta-analysis. Pediatr. Exerc. Sci. 2003;15:243–256. doi: 10.1123/pes.15.3.243

[4] FEDEWA A.L., AHN S., 2011: The effects of physical activity and physical fitness on children's achievement and cognitive outcomes: A meta-analysis. Res. Q. Exerc. Sport. 2011;82:521–535. doi: 10.1080/02701367.2011.10599785

Table 1: Amendments agreed at Partnership Meeting of 12th December 2023		
Proposed amendment	**Proposed text**	**New page**
	arterial routes to urban centres or long-distance leisure routes. Additionally, while journeys to school are a key focus, children also need to be able to travel independently in their wider local community. Whilst overcrowding was one of the mentioned barriers to increased public transport use for younger people, the quality of bus and train services, with specific concerns about fare prices, reliability, and cleanliness was most frequently highlighted as an important issue by young people. For those under the age of 16, using public transport can be a daunting experience. Children and younger people can be more fearful of getting lost or missing their station. When using the bus, train or when walking (during the day), there were suggestions that young people in particular, do not feel safe from crime or anti-social behaviour. They were more likely to say that concerns over crime and anti-social behaviour affect the frequency of their public transport use. There was some suggestion that younger people feel less safe walking after dark. The RTS will implement interventions that will be informed by further engagement at a local level to develop and deliver respective actions. Targeted work to involve work with groups to include children and young people as well as their parents and guardians.	
Children's Rights and Wellbeing Impact Assessment - Proposed Measures to Close Information Gaps		
Introduce findings from the consultation with the children and young people in Angus and Dundee.	Tactran attempted to engage with groups representing young people in Scotland and has engaged with Members of the Scottish Youth Parliament. Tactran will continue the engagement with children and young people through their regional MSYP representatives.	p.23

Table 1: Amendments agreed at Partnership Meeting of 12th December 2023		
Proposed amendment	**Proposed text**	**New page**
The consultation generated rich insight with clear messages for policy and practice.		
Children's Rights and Wellbeing Impact Assessment - Accounting for the Views of Children and Young People		
Introduce findings from the consultation with the children and young people in Angus and Dundee. The consultation generated rich insight with clear messages for policy and practice.	Tactran will continue to be building in those contacts established during the consultation process so far and will be specifically seeking out the views of children and young people on ~~the Draft RTS and~~ actions and policies within the RTS.	p.23
Assessment of Equality and Fairer Duties Scotland Impacts		
Delivery Theme: Improving Safety Include reference to bike ownership and use	New text: Cycling Scotland[5] (2021) highlighted that 20% of people in the lower socio-economic groups stated that one of their reasons for not cycling was related to the cost of a suitable bike. 38% of people at risk of deprivation would like to start cycling Improving access to bikes and cycle training will contribute to the uptake of cycling among those affected by socioeconomic disadvantage and provide an alternative low-cost transport option and may support greater access to employment education and training opportunities. Actions relating to the provision	p.42

[5] Cycling Scotland (2021): Annual Cycling Scotland Monitoring Report https://cycling.scot/mediaLibrary/other/english/9444.pdf (accessed 21st Dec 2023)

Table 1: Amendments agreed at Partnership Meeting of 12th December 2023		
Proposed amendment	**Proposed text**	**New page**
	of comprehensive cycle training will also expand the pool of those likely to benefit from increased physical activity[6].	

Table 2: Other proposed changes based on consultation responses		
Proposed amendment	**Proposed text**	**New page**
Children's Rights and Wellbeing Impact Assessment		
Add reference to newly published regional research into the impacts of poor air quality on children and young people.	New text: Traffic-related noise of can disproportionately affect children. Evidence suggests that such noise is correlated more broadly with lower health-related quality of life in children (cp. HJORTEBJERG ET AL. (2015)). Children and young people are also more vulnerable to the effects of poor air quality compared to the overall population.Jill J.F. Belch et al (2023) confirmed that increased air pollution leads to more children being admitted to hospital with lung conditions while it does not have the same impact on adults. The researchers at the University of Dundee's medical school examined 35,000 cases over 14 years in Tayside[7].	p.19
Health Inequalities Impact Assessment		

[6] Cp. Arup and Sustrans (2020): Cycling for everyone: A guide for inclusive cycling in cities and towns https://www.sustrans.org.uk/media/7377/cycling_for_everyone-sustrans-arup.pdf (accessed 21st Dec 2023)

[7] JILL J.F. BELCH ET AL. (2023): Respiratory Admissions Linked to Air Pollution in a Medium Sized City of the UK: A Case-crossover Study https://aaqr.org/articles/aaqr-23-03-oa-0062 (last accessed 16/01/2024).

Table 2: Other proposed changes based on consultation responses		
Proposed amendment	**Proposed text**	**New page**
Clarification that due to the suite of overarching actions and policies which are not spatially exclusive at this stage, only a high-level assessment of options could be provided at this point.	New text As a suite of overarching actions and policies which are not spatially exclusive at this stage, only a high-level assessment of could be provided at this point. Building on the initial options provided, it is anticipated that all strategic schemes will be delivered through the appropriate consenting process and will be subject to individual Health Inequality Impact Assessments.	p.75

Appendix B

DRAFT Changes to the consultation draft of the Tayside and Central Scotland Regional Transport Strategy – SEA Environmental Report

New or changed text highlighted.

Table 1: Main amendments agreed at Partnership Meeting of 12th December 2023		
Proposed amendment	**Proposed text**	**New page**
STRATEGIC OBJECTIVES **DELIVERY THEMES**		
Explicit assessment of strategy objectives and delivery themes Respective section included in the Environment Report	Please see Table 2 below. PP. 8 refer.	
MITIGATION HIERARCHY		
Introduce the mitigation hierarchy. The hierarchy follows avoidance, reduction, restoration and offsets. Mitigation hierarchy introduced as part of Chapter 7. Schemes will be delivered through the appropriate consenting process. Detailed	Please see Table 2 below. PP. 13 refer.	

Table 1: Main amendments agreed at Partnership Meeting of 12th December 2023		
Proposed amendment	**Proposed text**	**New page**
mitigation and enhancement opportunities will be developed as part of the consenting process at scheme level in line with the mitigation hierarchy.		
HOW THE STRATEGIC ENVIRONMENTAL ASSESSMENT HAS INFORMED THE RTS		
Note how the RTS has been informed as a result of the SEA Respective chapter added, detailing the changes that have been informed by the SEA	Please see Table 2 below. PP 24 refer.	

Table 2: Changes to the Draft SEA Environmental Report and complementary Appendices A to G		
Proposed amendment	**Proposed text**	**New page**
Environmental Report		
Introduction: Date changed from 27th April 2023 to 30th January 2024	New text: SEA ENVIRONMENTAL REPORT (30th January 2024)	**p.1**
Chapter 2: TACTRAN's Regional Transport Strategy 2024 – 2034 Additional reference to the three declared Air Quality Management Areas in Crieff, Dundee and Perth added. Footnotes 3 and 4 refer.	New text: There are currently three declared Air Quality Management Areas in Crieff, Dundee and Perth.	**p.4** **p.6**
Chapter 3: The SEA Process to Date Most recent stages to prepare both the finalised Draft RTS 2024-2034 and the complementary Draft SEA Environmental Report following consultation on the Draft Strategy and suit of complementary Impact Assessments. Table 3.1 refers.	New text: SEA Action: Draft Regional Transport Strategy 2024-2034 finalised Date: Sep 2023 – Jan 2024 Comments: Draft RTS updated to take consultation responses into account and to reflect agreed content and structure of the final RTS. SEA Action: Draft SEA Environmental Report finalised Date: Sep 2023 – Jan 2024 Comments: Draft Environmental Report updated to take consultation responses into account and to reflect agreed content and structure of the final SEA Environmental Report.	**p.14**

Chapter 3: The SEA Process to Date

Summary of the comments received from the Consultation Authorities on the Draft SEA Environmental Report, along with information on how these comments have been taken into account in the development of this final SEA Environmental Report. Table 3.2 refers,

New text:

Table 3.2: Comments received from the Consultation Authorities on the Draft SEA Environmental Assessment

Recommendation to reference the Historic Environment Policy for Scotland (2019) and the Ancient Monuments and Archaeological Areas Act (1979). Recommendation to also refer to the Our Place Our Future (2023)	HEP states that "plans, programmes, policies and strategies, and the allocation of resources, should be approached in a way that protects and promotes the historic environment." As such, HEPS as well as the Ancient Monuments and Archaeological Areas Act (1979) and Our Place, Our Future (2023) have been included as relevant policies.
Recommendation to reference the Flood Risk Management Plans (2022) and the latest River Basin Management Plan 2021 -2027 (2021). Recommendation to also note SEPA's Energy Framework.	Referenced policies and plans reviewed. As such, both the Flood Risk Management Plans and the River Basin Management Plan have been included as relevant policies. As such, the relevant baseline info presented in Appendix B has been checked as to whether it presented the most recent data. Confirmed that it is.
The list of relevant plans, programmes and strategies only included reference to the National Planning Framework 3 (NPF3).	The list included a note to highlight the preparation of the new National Planning Framework 4 (NPF4). With NPF4 having now been published in February 2023, the reference has been changed from NPF3 to NPF4.
Strong support for the objective to take climate action which is welcomed as a primary outcome. Recommendation for the respective to be amended to also take action against biodiversity loss and for the RTS to be more ambitious in relation to enhancing biodiversity.	The text throughout the Draft SEA Environmental Report has been strengthened to better highlight the potential for biodiversity enhancement measures both in the RTS and, most importantly, the forthcoming RTS Delivery Plan.

p.14

p.15

p.16

p.17

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p.19

			It should be noted, though, that biodiversity is an issue that the RTS can (and wishes to) support. But is not a problem that is fundamentally addressed through regional transport strategies.		
		Recommendation to scope in Population and Human Health Themes in the Draft Environmental Report as 'improve our health and wellbeing' is one of the four strategic priorities of the National Transport Strategy 2 (NTS2).	In identifying the intended scope for the SEA assessment, the Tayside and Central Scotland Transport Partnership concluded that all SEA themes except for the Population and Human Health themes should remain 'scoped in' as part of the SEA as transport has the potential to impact upon all of these The Consultation Authorities recommended to scope in all SEA themes and, subsequently, all SEA themes have been assessed in the Draft Environmental Report.		
		Suggestion to include peatland habitats along the carbon-rich soils with regards to the SEA Theme 'Geology and Soil'.	Reference to peatland habitats added. Table 5.1 refers. It is acknowledged, though, that the RTS can play a role in protecting carbon rich soils and peatland habitats when identifying potential locations for new infrastructure or routes.		
		Suggestion to broaden the SEA Theme / Objective 'Water' from water bodies to water environment. The quality of the water environment is defined under the Water Framework Directive. Surface water bodies are described in terms of their ecological status which takes into account water quality and morphology pressures as	SEA Theme / Objective 'Water' broadened to water environment. Now also including reference to protection against flooding. Table 5.1 refers.		

		well as pressures resulting from abstraction and impoundment. Groundwater bodies are defined in terms of their status taking into account water quality and abstraction pressures.			
		Recommendation to expand the SEA Theme / Objective 'Air Quality' to include Air Quality Management Areas and Low Emission Zones. This is especially relevant given that the analysis of various plans showed that the RTS should "Seek to improve air quality, in particular with regards to the three declared Air Quality Management Areas in Crieff, Dundee and Perth.	Agreed. SEA Objective amended to: To reduce all forms of transport related air pollution and improve air quality, in particularly with regards to the three declared Air Quality Management Areas in Crieff, Dundee and Perth. Reference to the Dundee Low Emission Zone strengthened throughout the document.		
		As noted in the Environmental Report, the SEA assessment relates to the Strategy more broadly rather than individual proposals. As such, it was recommended to amend the wording of the guiding assessment questions to "To what extent does the Strategy…"	Guiding assessment questions amended in line with the recommendation.		
		Note that all aspects of the PPS which could have significant impacts would need to be assessed, including the Strategic Objectives.	A more explicit assessment of both the four RTS Strategic Objectives as well as the nine Strategic Delivery Themes has now been included.		
		Appendix B: Baseline, Environmental Data. Targets, Trends affecting Tayside and Central Scotland. Suggestion to update the data source from SNH Gateway to NatureScot Sitelink.	Data source updated.		
		Appendix C: SEA Theme Biodiversity – Sites of Natural Heritage Designations. The Appendix does little to add context.	Noted.		

		Appendix D: SEA Themes – Likely Evolution with and without the emerging RTS 2024-2034. Noted that there were blank rows in relation to “Climate Change’ and ‘Noise’.	This was an oversight and both SEA Themes have now been updated.		
		Appendix D: SEA Themes – Likely Evolution with and without the emerging RTS 2024-2034. In relation to Landscape, the appendix only states that the RTS should protect the landscapes from the development of unsightly transport infrastructure. However, the cumulative assessment states that the “delivery of the RTS will have largely positive impacts on the landscape in the long-term through a reduced need for construction of new roads etc. which may otherwise be inevitable with continually increasing car use and which could lead to an unsightly urban and rural landscape.” Appendix D suggests that the RTS would only be mitigating negative impacts rather than creating positive impacts as stated in relation to the cumulative effects. It would be useful to have alignment between all appendices and the ER.	Noted. The cited wording does not contradict each other nor are both statements mutually exclusive, with one superseding the other. However, to be clearer in relation to the assessment contained within Appendix D, an additional paragraph has been introduced.		
		Appendix E: Full SEA Assessment Tables In relation to the ‘Improving access to public transport delivery theme, it is	Disagree. A considerable mode shift towards public transport holds the only realistic potential to significantly reduce car kilometres within the		

		considered unlikely that the measures proposed will have a significant positive effect on landscape and should be amended to neutral effects.	Tactran region. As such, increased mode shares for bus and rail at the expense of car trips could reduce the need for construction of new, unsightly transport facilities, such as roads etc. and, subsequently, holds the potential for a long-term positive impact on landscape.		
		Appendix E: Full SEA Assessment Tables Please provide clarification on the assessment of biodiversity, flora and fauna under 'Improved Active Travel Opportunities' in the 'Improving Sustainable Travel Opportunities'. It has been scored as '+/-' with the commentary stating that 'proposals may comprise plans to improve active travel routes through areas of natural beauty including park and green spaces. This could encourage human activity around sensitive species and habitats or even cause severance of habitats. This might have long-term negative impacts on biodiversity."	Noted. The commentary is upheld as it refers to the realistic risk of areas of natural beauty running the risk of being seriously negatively impacted or, indeed, ruined by overcrowding if improved access, including active travel routes, is provided.		
		Appendix E: Full SEA Assessment Tables In considering improvements to access to public transport we would note that new and improved rail and bus stations have implications of the historic environment that can lead to both positive and negative effects. For	Agreed. Respective paragraphs added as per the below. In considering improvements to access to public transport we would note that new and improved rail and bus stations have implications of the historic environment that		

		example, improvements at stations may have challenges associated with existing infrastructure that is of historic merit.	can lead to both positive and negative effects. For example, improvements at stations may have challenges associated with existing infrastructure that is of historic merit. Schemes will be delivered through the appropriate consenting process. Detailed mitigation and enhancement opportunities will be developed as part of the consenting process at scheme level, weighing up access improvements with other aspects.		
		Appendix F: SEA Cumulative Impact Assessment (as well as Chapter 6.2 of the Draft Environmental Report) Nature Scotland would like to see the Environmental Report go further in identifying opportunities for biodiversity enhancements. Whilst they welcome protecting habitats and species, this needs to be more ambitious to align with NPF4 and wider thinking on biodiversity. This should then directly inform the RTS itself. For example, this could be done through incorporating nature into the active travel network.	Reference to the potential to incorporate blue-green infrastructure to the active and public transport networks within the region already included in the assessment. The text throughout the Draft SEA Environmental Report has been strengthened to better highlight the potential for biodiversity enhancement measures both in the RTS and, most importantly, the forthcoming RTS Delivery Plan. It should be noted, though, that biodiversity is an issue that the RTS can (and wishes to) support. But is not a problem that is fundamentally addressed through regional transport strategies.		
		Recommendation to be clear about mitigation measures which are proposed as a result of the assessment. These should follow the mitigation hierarchy.	Noted. Mitigation hierarchy introduced as part of Chapter 7. Schemes will be delivered through the appropriate consenting process.		

			Detailed mitigation and enhancement opportunities will be developed as part of the forthcoming RTS Delivery Plan and, more importantly, the consenting process at scheme level in line with the mitigation hierarchy.		
		It would be useful to also have the same level of detail on the enhancement measures proposed, for example in relation to biodiversity.	Noted. Text strengthened throughout the documents. It should be noted that both detailed mitigation and enhancement opportunities will be developed as part of the design and consenting process at scheme level.		
		One of the most important ways to mitigate significant environmental effects identified through the assessment is to make changes to the PPS itself. The Environmental Report should therefore identify any changes made to the PPS as a result of the SEA.	New Chapter 8: How the SEA has informed the Draft RTS 2024-2034 Chapter provides a summary on how the Draft 2023-2034 has been informed as a result of the SEA. It should be noted that detailed mitigation and enhancement opportunities will be developed as part of the forthcoming RTS Delivery Plan and, more importantly, the consenting process at scheme level in line with the mitigation hierarchy.		
		Reference to whether identified effects are short term, temporary or permanent.	Respective references have been added where possible.		
		It would be helpful if the Environmental Report included a summary of the scoping outcomes and how comments from the three Consultation Authorities	Table 3.2 refers.		

	on the Draft Environmental Report were taken into account.		
Chapter 4: Environmental Context Updated Table 4.1 to reflect additional referenced plans, programmes, strategies, or environmental protection objectives at national level identified during consultation.	**New Text:** #4: Ancient Monuments and Archaeological Areas Act (1979) #8: Flood Risk Management Plans (2022) #9: River Basic Management Plan 2021 – 2027 (2021) #35: Historic Environment Policy for Scotland (HEPS)(2019) #60: Historic Environment Scotland: Our Place, Our Future (2023)		**p.20** **p.21**
Chapter 4: Environmental Context Reference to National Planning Framework 3 (2015) changed to National Planning Framework 4 (2023). Table 4.1 refers.	**New text:** #37: National Planning Framework for Scotland 4 (NPF4) (2023)		**p.20**
Chapter 5: Assessment **5.2. Scoping In / Scoping Out of SEA Themes** Additional sentence introduced to better highlight that all SEA Themes have been scoped in to assess the RTS objectives, strategic delivery themes and suits of policies and actions.	**New text:** In identifying the intended scope for the SEA assessment, the Tayside and Central Scotland Transport Partnership concluded that all SEA themes except for the Population and Human Health themes should remain 'scoped in' as part of the SEA as transport has the potential to impact upon all of these. The Consultation Authorities recommended to scope in all SEA themes and, subsequently, all SEA themes have been assessed in this Environmental Report.		**p.25**

Chapter 5: Assessment **5.3. SEA Assessment Framework** Wording of the SEA assessment objective in relation to the SEA theme 'Geology and Soil' revised from "to safeguard and improve soil quality, particularly high value agricultural land and carbon rich soil" to "to safeguard and improve soil quality, particularly high value agricultural land and carbon rich soil and peatland habitats".	**New text:** SEA Theme: Geology and Soil SEA Assessment Objective: To safeguard and improve soil quality, particularly high value agricultural land and carbon rich soil and peatland habitats	**p.26** **p.29**

Chapter 5: Assessment **5.3. SEA Assessment Framework** Wording of the SEA assessment objective in relation to the SEA theme 'Water' revised from "to protect, maintain and improve the quality of water bodies and wetlands that could be directly or indirectly affected by transport infrastructure" to "to protect, maintain and improve the quality of water environment and wetlands that could be directly or indirectly affected by transport infrastructure and protect against the risk of flooding".	**New text:** SEA Theme: Water SEA Assessment Objective: To protect, maintain and improve the quality of water environment and wetlands that could be directly or indirectly affected by transport infrastructure and protect against the risk of flooding	**p.26** **p.30**
Chapter 5: Assessment **5.3. SEA Assessment Framework** Tightened the wording. Reference to "proposal" in the 'Guiding Assessment Questions…' column replaced with "strategy" throughout Table 5.3.	**New text:** The word "proposal" replaced with "strategy" throughout Table 5.3	**p.27** **p.28** **p.29** **p.30**

Chapter 6: Assessment of Environmental Impacts **6.1 Assessment Summary** Introductory paragraph introduced to reiterate the strategic framework of the RTS 2024-2034 structured around four objectives and nine strategic delivery themes.	**New text:** The preferred strategy set out within the Draft RTS 2024-2034 aims to implement a strategic framework structured around four strategic objectives and nine delivery themes. Each of these themes comprises a suite of specific actions, comprising both general commitments and individual projects.	**p.30**
Chapter 6: Assessment of Environmental Impacts **6.1 Assessment Summary** Paragraphs introduced to provide reasoning for an approach to the assessment that slightly differs from the one set out in the SEA Scoping Report due to the strategic character of the framework set out in the Draft RTS 2024-2034.	**New text:** Owing to the overarching character of the proposed strategic framework of the Draft RTS, it was not possible to identify with any certainty whether the individual components would themselves be likely to result in significant effects. The focus of the SEA was rather on ensuring sufficient coverage of the identified key environmental issues and the associated SEA Objectives within the Tactran RTS SEA Assessment Framework to ensure that these issues are to be addressed through the complementary suite of policies and actions under strategic framework of the Draft RTS. Although this differs from the approach outlined in the Scoping Report, it has not affected the integrity of the process. Assessments of the objectives and subsequent strategic delivery themes are robust and detailed, while also resulting in an assessment of a more manageable length.	**p.31**

Chapter 6: Assessment of Environmental Impacts **6.1 Assessment Summary** Introduction of a new section detailing the assessment of an initial high-level assessment of both the four strategic objectives and the nine strategic delivery themes	New text: Initial Assessment of Strategic Objectives and Strategic Delivery Themes An initial high-level assessment of likely environmental effects comprised an assessment of the four equal and interlinked strategic objectives to embed the priorities of the NTS2 (2020) within the strategic framework of Tactran's RTS 2024-2034 and, the nine thematic strategic delivery themes to define high level priorities which define the focus of Tactran's RTS 2024-2034. <u>Strategic Objectives</u> Tactran's RTS has been developed under four equal and interlinked strategic objectives which align with and support the four strategic priorities of Scotland's National Transport Strategy 2 (2020). The four strategic objectives form an important part of the strategic framework within the RTS and have guided the development of the delivery themes and subsequent actions and policies. 1. To reduce inequalities: 2. To take climate action: 3. To help deliver inclusive economic growth 4. To improve health and wellbeing These objectives have however already undergone a comprehensive SEA assessment as part of the development of the NTS2 and, subsequently, do not require to be reassessed at this stage. <u>Strategic Delivery Themes</u> An initial high-level assessment of the compatibility of the nine strategic delivery themes is provided in Table 5.1 below.	**p.31** **p.32** **p.33** **p.34**

RTS Delivery Theme	Biodiversity, Flora and Fauna	Landscape	Cultural Heritage	Climate Change	Air Quality	Noise and Vibration	Human Health	Population	Geology and Soil	Water	Material Assets
Improving Safety	?	?	?	✓	✓	?	✓	✓	?	?	✓
Influencing Travel Behaviour	✓	✓	✓	✓	✓	✓	✓	✓	?	✓	✓
Improving Access to Public Transport	✓	✓	✓	✓	✓	✓	✓	✓	?	✓	✓
Improving Sustainable Travel Opportunities	✓	✓	✓	✓	✓	✓	✓	✓	?	✓	✓
Decarbonising Transport and a Just Transition	✓	?	✓	✓	✓	?	✓	✓	✓	✓	✓

Improving the Accessibility and Security of our Transport Networks	?	?	?	✓	✓	?	✓	✓	✓	?	✓
Reducing the Need to Travel by Car through the Location of Development and Services	✓	✓	✓	✓	✓	✓	✓	✓	?	?	✓
Improving Strategic Connectivity	X	X	X	?	?	X	✓	✓	X	X	✓

The macro-level socio-environmental context provided by the four strategic objectives that have informed the nine delivery themes results in good compatibility with all SEA indicators at high-level.

The theme to improve safety focuses on improving road safety. This aligns directly with the human health and population indicators while indirectly also aligning with improving air quality and addressing climate change. It also has positive implications for the material assets indicators.

The same applies to the delivery theme to improve accessibility and security.

The strategic theme to influence travel behaviour follows a dual focus on improving public transport and active travel options at a local level result in good compatibility with most SEA indicators. Measures to reduce car usage are complementary. As such, there remain some uncertainties in relation to the extent to which those strands could result in additional infrastructure work with subsequent potentially negative

	environmental impacts. The same applies to the delivery themes to improve access to public transport and to improve sustainable travel opportunities. The same also applies to the delivery theme to reduce the need to travel by car through the location of development and services. The strategic theme to decarbonise transport aligns directly with the climate change indicator as well as aligning indirectly with the remaining SEA indicators. Uncertainties arise from the focus on transport (and potentially subsequent infrastructure). The theme to improve strategic connectivity aligns well with the human health, population and material assets indicators. With the focus on enhancing the performance of the transport infrastructure, the theme supports actions at local, regional and national level to increase efficiencies and foster economic growth. However, this means that the delivery theme does not necessarily balance the need for improvements to the strategic connectivity with a need to protect and enhance environment aspects. This may result in potential incompatibilities. Uncertainties for indicators that are potentially susceptible to negative impacts are also highlighted as a cause of economic growth. With the nine strategic delivery themes considered together, they provide the required high-level priorities and define the focus of Tactran's RTS 2024-2034 in line with all the SEA indicators. There were no significant gaps identified. However, due to the strategic character of the delivery themes it was not possible to identify any likely specific significant environmental impacts at this stage. Environmental impacts are dependent on the implementation of policies and actions at a more local level. The strategic framework set out within the RTS, however, is sufficiently broad in scope to allow the development and implementation of policies and actions both at regional and local level which will address the identified environmental issues. It must also be noted that the RTS embeds the four strategic priorities of the NTS2 which, although not subject to assessment in this SEA, help to embed environmental considerations within this strategy. As such, both the strategic priorities and delivery themes, in implementing NTS2, address environmental objectives more broadly. The full SEA assessment of all policies and actions under each delivery theme is set out in Appendix E and provides a detailed assessment.	

	Potential negative impacts have been identified irrespective of whether the risks are relatively minor. They have been noted and mitigation measures in line with the mitigation hierarchy have been identified in Chapter 7.	
Chapter 6: Assessment of Environmental Impacts **6.2 Cumulative Assessment** Introduction of a closing paragraph to the cumulative assessment, concluding that, when taken together, assessment indicates that, as drafted, the proposed RTS objectives, policies and suit of actions are compatible with the achievement of sustainable development.	**New text:** Taken together, the above indicates that, as drafted, the proposed RTS objectives, policies and suite of actions are compatible with the achievement of sustainable development.	**p.36**

Chapter 7: Mitigation Measures **Introduce the mitigation hierarchy. The hierarchy follows avoidance, reduction, restoration and offsets.** Mitigation hierarchy introduced in relation to the identified mitigation measures. Schemes will be delivered through the appropriate consenting process. Detailed mitigation and enhancement opportunities will be developed as part of the consenting process at scheme level in line with the mitigation hierarchy.	New text: As a suite of overarching actions and policies which are not spatially exclusive at this stage, only a high-level assessment of environmental effects could be provided at this point. Building on the initial SEA mitigation and enhancement recommendations provided in this table, the below sets out more detailed measures that might be applied to reduce adverse environmental impacts arising from transport within the region. It is anticipated that all strategic schemes will be delivered through the appropriate consenting process and will be subject to individual Environmental Impact Assessments. Detailed mitigation and enhancement opportunities will be developed as part of the design and consenting process at scheme level. The mitigation hierarchy will apply to the selection of appropriate mitigation measures to reduce development impacts and control any negative effects on the environment. The hierarchy follows avoidance, reduction, restoration and offsets. Detailed mitigation and enhancement opportunities will be developed as part of the design and consenting process at scheme level. The mitigation hierarchy will apply to the selection of appropriate mitigation measures to reduce development impacts and control any negative effects on the environment. The hierarchy follows avoidance, reduction, restoration and offsets. • Avoidance: Preferred. Measures aimed at modifying the alternative options. One or more elements of an alternative can be refined further to avoid negative environmental impacts. The STAG process provides a robust mechanism for the ongoing development and appraisal of options promoted as actions through the Draft RTS and this includes further consideration of environmental impacts. • Reduction: Applicable when all alternative options or approaches to avoiding a negative impact on the environment have been examined. Includes measures to look at ways of reducing the extent or magnitude of the effect need to be considered. This could focus on timing or phasing of Draft RTS measures to reduce adverse effects. An example would be re-timing of all maintenance works outside of peak periods, to reduce greenhouse gas emissions associated with congestion. • Restoration and Offsets: Applicable only if no opportunities are available to either avoid or reduce adverse impacts on the environmental. Remedial measures. This could be financial compensation for the loss of, or damage to, environmental resources. It should be noted that the scope for this might be limited in the context of an RTS. However, it can also include restoring the resource, such	**p.36** **p.37** **p.38** **p.39** **p.40** **p.41** **p.42** **p.43** **p.44** **p.45** **p.46**

as planting trees or providing a wildlife corridor or bridge. This could be by providing a comparable or similar resource somewhere else, although this may not be an appropriate response if resources are unique or irreplaceable.

The below represents a selection of potential measures to further minimise the adverse environmental impacts when strategic actions are refined and considered at scheme level.

SEA Theme	Impact requiring Mitigation	Proposed Mitigation Measures
Biodiversity	An increase in waterborne freight and shipping activities in Dundee, Montrose and Perth could cause disruption to aquatic habitats and species.	Tactran will continue to work with the relevant authorities in the proposed locations to develop the details of any of the proposed actions to ensure the full environmental benefits from the RTS proposals are realised. Tactran will work with relevant authorities in relation to a continued monitoring of the conservation status of protected water habitats and species and corrective action applied should this be seen to be at risk.
	Works related to road construction and maintenance can result in temporary increased noise levels as well as other pollution. This can disrupt habitats and species.	Tactran will continue to work with the relevant authorities in the proposed locations to develop the details of any of the proposed actions to ensure the full environmental benefits from the RTS proposals are realised. Schemes will be delivered through the appropriate consenting process. Detailed mitigation and enhancement opportunities will be developed as part of the consenting process at scheme level. Tactran will work with relevant authorities to ensure that contractors are required to ensure that any works are completed to high standards in line with relevant regulations.

			Works should be completed swiftly to keep noise pollution to a minimum and to make every effort to minimise the risk of pollution and any other adverse impacts on habitats and species resulting from such works.
		Potential disruption to habitats and species through an increase in active travel routes and increased number of people walking and cycling through such areas.	Tactran will continue to work with the relevant authorities in the proposed locations to develop the details of any of the proposed actions to ensure the full environmental benefits from the RTS proposals are realised. Tactran will work with relevant authorities to ensure that proposals, as far as is reasonably practical, do not directly impact areas known for protected or vulnerable species and flora and fauna habitats. Schemes will be delivered through the appropriate consenting process. Detailed mitigation and enhancement opportunities will be developed as part of the consenting process at scheme level. Any proposals running past or through areas known for protected or vulnerable species and habitats will be required to demonstrate how disruption will be minimised and to identify measures to avoid, reduce and/or compensate the impacts to enhance biodiversity as part of scheme implementation. Tactran will work with relevant authorities to ensure this.
Landscape		Unsightly traffic management and speed reduction infrastructure can lead to more and more cluttered	Tactran will continue to work with the relevant authorities in the proposed locations to develop the details of any of the proposed actions to ensure the full environmental benefits from the RTS proposals are realised. Tactran will encourage its constituent Councils and other relevant partners to keep signage and traffic management

	(urban) environments.	infrastructure to a minimum and to ensure they are sensitively sited. The Partnership will also encourage use of innovative designs where possible so that such infrastructure complements and integrates with the landscape rather than detracting from it. Schemes will be delivered through the appropriate consenting process. Detailed mitigation and enhancement opportunities will be developed as part of the consenting process at scheme level.
	Flood defence infrastructure can impact on the appeal of streetscapes, townscapes and landscapes	Tactran will continue to work with the relevant authorities in the proposed locations to develop the details of any of the proposed actions to ensure the full environmental benefits from the RTS proposals are realised. Tactran will encourage its four constituent Councils to keep such infrastructure to a minimum and to ensure they are sensitively sited. The Partnership will also encourage use innovative designs where possible so that such infrastructure complements and integrates with the landscape rather than detracting from it. Schemes will be delivered through the appropriate consenting process. Detailed mitigation and enhancement opportunities will be developed as part of the consenting process at scheme level. The advice on the Scottish Planning Policy and the subsequent PAN 2 and PAN 71 advisory notes should be followed to determine appropriate mitigation measures.
Cultural Heritage	An increase in traffic management infrastructure can	Tactran will continue to work with the relevant authorities in the proposed locations to develop the details of any of the

	impact on the setting of such sites.	proposed actions to ensure the full environmental benefits from the RTS proposals are realised. Tactran will encourage its four constituent Councils to keep such infrastructure to a minimum and to ensure they are sensitively sited. The Partnership will also encourage use of innovative designs where possible so that such infrastructure complements and integrates with the landscape rather than detracting from it, especially in conservation areas and regarding buildings, monuments and structures of cultural and historical importance. Schemes will be delivered through the appropriate consenting process. Detailed mitigation and enhancement opportunities will be developed as part of the consenting process at scheme level. The advice on the Scottish Planning Policy and the subsequent PAN 2 and PAN 71 advisory notes should be followed to determine appropriate mitigation measures.
	Sites of cultural and historical importance within the region may suffer from unsightly surroundings and vibrations because of transport infrastructure improvement and maintenance works.	Tactran will continue to work with the relevant authorities in the proposed locations to develop the details of any of the proposed actions to ensure the full environmental benefits from the RTS proposals are realised. Schemes will be delivered through the appropriate consenting process. Detailed mitigation and enhancement opportunities will be developed as part of the consenting process at scheme level. The advice on the Scottish Planning Policy and the subsequent PAN 2 and PAN 71 advisory notes should be followed to determine appropriate mitigation measures.

			~~Contractors should be required to make every effort to preserve the setting of, and maintain access to, such sites.~~ Contractors should be required to complete the works as soon as possible to minimise disruption while adhering to industry standards.
	Climate Change	An increase in waterborne freight and subsequent shipping and activity around the harbours within the region could see an increase in relevant emissions.	Tactran will continue to work with the relevant authorities in the proposed locations to develop the details of any of the proposed actions to ensure the full environmental benefits from the RTS proposals are realised. The Regional Transport Strategy aims to offset any increase in shipping related emissions by a significant reduction in road freight movements within and through the region to ensure no net increase in carbon emissions. Tactran will continue to work with its constituent Councils and the freight industry through the Freight Quality Partnership as well as ports and harbours to identify ways of minimising the environmental impact of freight movements.
		Congestion and traffic displacement resulting from infrastructure improvement and maintenance schemes can result in increased emissions.	Tactran will continue to work with the relevant authorities in the proposed locations to develop the details of any of the proposed actions to ensure the full environmental benefits from the RTS proposals are realised. Schemes will be delivered through the appropriate consenting process. Detailed mitigation and enhancement opportunities will be developed as part of the consenting process at scheme level. Contractors will be required to ensure that any works are completed as timely as possible.

		Diversionary signage will be used to signpost the most appropriate alternative routes.
Air Quality	An increase in waterborne freight and a respective increase in shipping and subsequent traffic around the Port of Dundee, currently within an AQMA.	Tactran will continue to work with the relevant authorities in the proposed locations to develop the details of any of the proposed actions to ensure the full environmental benefits from the RTS proposals are realised. Tactran will continue to work with Dundee City Council with regards to the development and implementation of the Low Emission Zone in the city. Tactran will continue to work with Perth and Kinross Council in the development and delivery of the relevant AQMA's Action Plans. Tactran will also continue to work with Dundee and Forth Port Authority and the freight industry through the Freight Quality Partnership to identify ways of minimising the environmental impact of freight movements.
	Congestion and traffic displacement resulting from road improvement and maintenance schemes can result in increased pollution levels.	Tactran will continue to work with the relevant authorities in the proposed locations to develop the details of any of the proposed actions to ensure the full environmental benefits from the RTS proposals are realised. Schemes will be delivered through the appropriate consenting process. Detailed mitigation and enhancement opportunities will be developed as part of the consenting process at scheme level. Contractors will be required to ensure that any works are completed as timely as possible.

		Diversionary signage will be used to signpost the most appropriate alternative routes.
Noise and Vibration	Increased noise and vibration resulting from an increased number of freight trains on the railway lines within the region.	Tactran will continue to work with Network Rail and the freight industry through the Freight Quality Partnership to identify ways of minimising the impact of freight movements.
	Increased noise and vibration resulting from road infrastructure improvement and maintenance schemes, albeit these are only short-short term.	Tactran will continue to work with the relevant authorities in the proposed locations to develop the details of any of the proposed actions to ensure the full environmental benefits from the RTS proposals are realised. Contractors will be required to ensure that any works are completed as timely as possible. Diversionary signage will be used to signpost the most appropriate alternative routes.
Human Health	A decline in air quality in the areas adjacent to Dundee, Montrose and Perth harbours, resulting from increased waterborne freight and shipping.	The Regional Transport Strategy aims to offset any increase in shipping related emissions by a significant reduction in road freight movements within and through the region to ensure no net increase in carbon emissions. Tactran will continue to work with its constituent Councils and the freight industry through the Freight Quality Partnership to identify ways of minimising the environmental impact of freight movements.
	Increased congestion levels during road infrastructure maintenance works and the displacement	Contractors will be required to ensure that any works are completed as timely as possible. Diversionary signage will be used to signpost the most appropriate alternative routes.

		of traffic in adjacent neighbourhoods, with road safety and health implications.	
	Population	Delays and congestion resulting from improvement and maintenance schemes, albeit these are temporary term.	Tactran will continue to work with the relevant authorities in the proposed locations to develop the details of any of the proposed actions to ensure the full environmental benefits from the RTS proposals are realised. Contractors should be required to ensure that any works are completed as timely as possible. Diversionary signage should be used to signpost the most appropriate alternative routes.
	Geology and Soil	All proposed actions that include capital works to some degree have the potential to result in a range of both direct and indirect impacts on geology and soil. Potentially negative impacts relate to the anticipated increase in ULEVs within the region and the subsequent need for charging infrastructure.	It is anticipated that the physical impacts on geology and soil from RTS related actions and policies will be taken into account during the consenting process, with detailed mitigation and enhancement opportunities to be developed at the scheme level. Tactran will continue to work with its constituent Councils through the Regional EV Steering Group to identify ways of minimising and mitigating the environmental impact of the charging infrastructure.

		ULEVs have a disproportionate negative impact on land use, both with regards to the materials used in ULEV making and to refuelling.	
	Water	All proposed actions that include capital works to some degree have the potential to result in a range of both direct and indirect impacts on geology and soil. An increase in the volume of waterborne freight could lead to an increase in water pollution.	Tactran will continue to work with the relevant authorities in the proposed locations to develop the details of any of the proposed actions to ensure the full environmental benefits from the RTS proposals are realised. It is anticipated that the physical impacts on water from RTS related actions and policies will be taken into account during the consenting process, with detailed mitigation and enhancement opportunities to be developed at the scheme level. The partners will continue to work with relevant agencies in relation to a continued monitoring of the water quality and corrective action applied should this be seen to be at risk.
		Road infrastructure maintenance and improvement works, and flood prevention schemes could result in the release of pollutants into watercourses during the construction phase.	The four constituent Councils are responsible for road maintenance. They have policies in place for contractors will be required to adhere to industry standards to ensure that efforts are being made to minimise the risk of pollution resulting from such works. This falls to the four Councils and should therefore be dealt with in detail through local transport strategies. Transport Scotland is responsible for the strategic trunk road network, and Network Rail for the rail network.

			Improvements in building standards and advances in construction techniques mean that new and upgraded infrastructure will be built to higher standards. Schemes will have to be designed to take into account the effects of climate change and more severe weather events in line with national policy and best practice design.		

Chapter 8: How the SEA has informed the Draft RTS 2024-2034 New chapter introduced to provide a summary on how the Draft 2023-2034 has been informed as a result of the SEA	New text: 8. How the SEA has informed the Draft RTS 2024-2034 The SEA Regulations require consideration to be given to the measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme. The role of the Strategic Environmental Assessment is, subsequently, to devise appropriate mitigation and enhancement recommendations to address identified uncertainties, resolve deficiencies and strengthen the sustainability performance of the plan, programme or strategy being assessed. Tactran's Draft Regional Transport Strategy 2024-2034 is primarily a transport strategy, and its focus is, subsequently, on transport issues and opportunities. Related environmental issues and impacts have closely informed the development of the Draft RTS. Examples include climate change, both mitigation and adaptation, air quality as well as consideration of the impact of transport infrastructure on the wider environment, particularly in relation to the location of new infrastructure and what should be done to avoid damage, mitigate any potential issues and enhance the environment, when any new infrastructure locations are considered. Avoidance is the primary form of environmental mitigation already embedded within the Draft RTS 2024-2034. As already discussed in Chapter 6, the strategic framework that underpins the Draft RTS rests upon four equal and interlinked strategic objectives that embed the priorities of the NTS2 (2020) This has been key to informing and developing the Draft RTS 2024-2034. As such, climate change has been at the centre of informing the strategy and in many ways has already ensured that the primary mitigation in terms of the climate change is avoidance. The environmental changes being driven by climate change are also disturbing natural habitats and species in ways that are still only becoming clear. There are signs that rising temperatures are affecting biodiversity, while changing rainfall patterns, extreme weather events, and soil acidification are putting pressure on species already threatened by other human activities. The threat posed by climate change to biodiversity is expected to increase. With climate change having been at the heart of informing the strategy, this, in many ways, has already ensured that the biodiversity crisis has also informed the strategy. As with climate change, this has already ensured that the primary mitigation in terms of the biodiversity is avoidance. Where avoidance is not possible, other mitigation and where possible enhancement will be undertaken on a case-by-case basis.	**p.47** **p.48** **p.49**

Desk research into the main issues relating to transport has informed the development of the RTS from the outset. This has identified a number of challenges and opportunities, including many current environmental issues, that have been reflected.

A copy of the Main Issues report is available online. The Main Issues Report focuses on the areas where significant policy change is required. These have been key to both the development of the Draft RTS and how the SEA has considered the strategic objectives and subsequent delivery themes and associated policies and actions.

Considering both the high-level strategic and regional focus of the Regional Transport Strategy, the SEA focused on distinguishing the regional and local aspects in relation to the RTS proposals and the recommendations of the SEA. Two recommendations for further clarifications within the Draft RTS were made at this point:

i. Be clear about the role of SEA and Integrated Impact Assessment in shaping the Draft RTS to date.

ii. Be clear about the important role of sub-regional partnerships and local organisations in taking account of the considerations and recommendations of the SEA in delivering the RTS at a local level.

The above recommendations were subsequently addressed within the Draft RTS, demonstrating how the SEA process has directly informed and improved the preparation of the Draft RTS.

The SEA has not identified any likely significant adverse environmental impacts from either the strategic objectives and strategic delivery themes, or the suite of actions and policies of the Draft RTS in its current version. Despite this, it is possible to consider ways to further refine parts of the Draft RTS to minimise and mitigate any adverse impacts or realising environmental enhancements and to inform the RTS Delivery Plan.

The proposed actions within the RTS are indicative at this stage and yet to be finalised as part of the RTS Delivery Plan. It is therefore not possible to fully assess the potential environmental effects of each action.

Tactran is committed to address potential issues and uncertainties in relation to individual actions and policies that were identified through the full SEA (Appendix E refers) for the Draft RTS to fully address the identified environmental challenges. Table 8.1 below identifies further mitigation and enhancement

recommendations that are due to be considered during the development of the subsequent RTS Delivery Plan.

Table 8.1: Recommended Mitigation to be considered for the RTS Delivery Plan
Consider opportunities to incorporate proposals to enhance biodiversity into proposed new and improvements to existing active travel routes that the Councils will seek to deliver over the RTS period by adopting a green infrastructure approach.
Consider options to mitigate adverse environmental impacts from proposals aiming to boost regional economic growth through measures to ease congestion and improve journey times and, from proposals to increase the accessibility to and from the rural areas.
All proposed actions that include capital works to some degree have the potential to result in a range of both direct and indirect impacts and both the natural and build environment. Respective proposals will need to contribute to sustainable development and must ensure that the impact on the environment is appropriately spatially planned and based on an approach that takes account of climate change and recognises the environmental protection and environmental management needs according to its significance. Proposals must be designed, constructed and operated in accordance with statutory requirements and current best practice to realise the full environmental benefits from the RTS proposals. Strategic transport infrastructure schemes will have to be designed to take into the effects of climate change in line with national policy and best practice. They will be subject to Environmental Impact Assessment and relevant environmental mitigation. Detailed mitigation and monitoring measures will be developed as part of the Environmental Impact Assessment process. Further assessment under the Habitats Regulations will provide further information with regards to mitigation associated with potential significant effects on European sites. A particular concern is flood risk, and any work proposed should not increase the risk of flooding. SEPA (Scottish Environmental Protection Agency) is now likely to require that a flood risk assessment is undertaken as part of the planning process for major (transport) schemes. Detailed mitigation and enhancement opportunities will be developed as part of the design and consenting process which will provide a sound assessment framework to identify both the required measures to avoid and / or minimise likely significant adverse environmental impacts. Enhancement opportunities should also be considered as part of the development and consenting process of the respective schemes. Such scheme specific assessments will also provide the framework needed to understand the role of individual schemes in wider cumulative regional environmental enhancement and

	nature conservation. All four constituent Councils have developed Biodiversity Action Plans that commit the authorities to protecting, enhancing and incorporating quality green infrastructure and to delivering a net gain for the environment. Cultural heritage and landscape/townscape and visual assessments will be part of the Environmental Impact Assessment where appropriate. The detailed SEA identifies likely environmental impacts arising from the RTS actions and policies and identifies where Tactran will be working with the relevant delivery partners in relation to the proposed RTS actions to avoid and / or mitigate these and to understand options for biodiversity enhancements and nature conservation. The Partnership considers this to be the most significant output from the SEA that will be considered when developing the subsequent RTS Delivery Plan is being developed and, indeed, implemented. The above further demonstrates how the SEA has informed the development of the RTS and how it will guide its delivery.	
Appendix A: Policy Context – Links to other Policies, Plans, Programmes and Sustainability Objectives (PPS)		
National Plans and Policies: Add reference to the Ancient Monuments and Archaeological Areas Act (1979)	New text: Name of PPS: Ancient Monuments and Archaeological Areas Act (1979) Requirement of PPS: Defines scheduled monuments as sites that warrant protection and makes damage to and metal detecting on scheduled monuments a criminal offence. Impact on the emerging PPS: The emerging RTS should ensure that scheduled monuments are not adversely affected by transport problems and transport projects.	**p.6**

National Plans and Policies: Add reference to the Flood Risk Management Plans (2022)	New text: Name of PPS: Flood Risk Management Plans (2022) Requirement of PPS: Ensures that efforts to reduce flood risk are coordinated. The plans outline the long-term ambition by setting objectives and identifying actions. There are multiple organisations responsible for flood risk management and the plans focus their efforts to where the risk of flooding and benefits of actions are greatest. Impact on the emerging PPS: The emerging RTS must not promote development that would have adverse impacts on flood risks and lead to the authorities failing to mitigate the risk of flooding.	**p.7**
National Plans and Policies: Add reference to the River Basin Management Plan 2021 – 2027 (2021)	New text: Name of PPS: River Basin Management Plan 2021 – 2027 (2021) Requirement of PPS: Sets out a framework for protecting and improving the benefits provided by the water environment across Scotland. Impact on the emerging PPS: The emerging RTS must not promote development that would have adverse impacts on the water environment and lead to the authorities failing to ensure water bodies achieve good ecological status.	**pp.7**

National Plans and Policies: Add reference to the Historic Environment Policy for Scotland (HEPS) (2019)	New text: Name of PPS: Historic Environment Policy for Scotland (HEPS) (2019) Requirement of PPS: Provides a policy framework which define how the historic environment should be managed, including: • Policies for managing the historic environment • Decisions affecting any part of the historic environment should be informed by an inclusive understanding of its breadth and cultural significance. • Decisions affecting the historic environment should ensure that its understanding and enjoyment as well as its benefits are secured for present and future generations. • Plans, programmes, policies and strategies, and the allocation of resources, should be approached in a way that protects and promotes the historic environment. If detrimental impact on the historic environment is unavoidable, it should be minimised. Steps should be taken to demonstrate that alternatives have been explored, and mitigation measures should be put in place. • Changes to specific assets and their context should be managed in a way that protects the historic environment. Opportunities for enhancement should be identified where appropriate. If detrimental impact on the historic environment is unavoidable, it should be minimised. Steps should be taken to demonstrate that alternatives have been explored, and mitigation measures should be put in place. • Decisions affecting the historic environment should contribute to the sustainable development of communities and places. HEPS should be read alongside two new documents. The designation policy and selection guidance and the scheduled monument consents policy. Impact on the emerging PPS: The emerging RTS should contribute to the management of the historic environment in a sustainable way which avoids adverse impacts as a result of new development.	**p.15** **p.16**

National Plans and Policies: Change reference from National Planning Framework for Scotland 3 (NPF3) (2014) to National Planning Framework for Scotland 4 (NPF4) (2023)	New text: Name of PPS: National Planning Framework for Scotland ~~3 (NPF3)(2014)~~ 4 (NPF4)(2023) Requirement of PPS: Sets out the Government's development priorities for the next years, including on the promotion of sustainable transport. Impact on the emerging PPS: The emerging RTS must reflect the Government's commitment to, and support the delivery of, these national development priorities. Tactran appreciates the advancement in thinking of biodiversity and climate change. Biodiversity is an issue that the RTS can (and wishes to) support. It should be noted, though, that it is not a problem that is fundamentally addressed through regional transport strategies.	**p.17**
National Plans and Policies: Scottish Government Infrastructure Investment Plan (IIP) 2021/22 to 2025/26	Name of PPS: Scottish Government Infrastructure Investment Plan (IIP) 2021/22 to 2025/26 Requirement of PPS: Provides an overview of the Scottish Government's plans for investment over the next decade, setting out the key requirements for each sector. For transport, the IIP identifies three themes: • Decarbonisation of Transport and Active Travel; • Driving Economic Growth; • Building Resilient and Sustainable Places The IPP builds on projects identified in the STPR(2), as well as both the Stirling and Clackmannanshire and Tay Cities Region Deals, and reaffirms both the need to support investment in active travel infrastructure projects (mainly through the Places for Everyone Programme) and improve bus priority infrastructure to tackle the negative impacts of congestion on bus services and raise bus usage (cp. Tay Cities Park & Choose Bus Partnership Fund Project) Impact on the emerging PPS: The emerging RTS must reflect and support these committed projects, identifying how the constituent Councils will take advantage of these schemes in meeting their vision for transport in the Tactran region. It is worth noting that much of the transport infrastructure is of historic interest and the RTS must reflect and support its continued use and maintenance in line with the published Infrastructure Investment Plan.	**p.23**

National Plans and Policies: Add reference to the Historic Environment Scotland: Our Place, Our Future (2023)	New text: Name of PPS: Historic Environment Scotland: Our Place, Our Future (2023) Requirement of PPS: Sets the direction of travel for the historic environment sector and identifies the priority areas of action to focus work to support this mission. Details the importance of the contribution that the maintenance, reuse and adaptation of our historic environment can make in preventing waste and reducing carbon emissions is recognised under the transition to net zero priority. Impact on the emerging PPS: The emerging RTS should contribute to the management of the historic environment in a sustainable way which avoids adverse impacts.	**p.24**
Appendix B: Baseline Environmental Data, Targets and Trends Affecting Tayside and Central Scotland		
Biodiversity, Flora, Fauna: Reference checked on Nature Scotland's Nature Network Tool at https://www.nature.scot/doc/nature-networks-tool. Reference corrected from SNH Gateway to Nature Scotland Site Link https://www.nature.scot/professional-advice/protected-areas-and-species/protected-areas		**p.1**

Water: Reference year for the data provided checked on https://www.sepa.org.uk/data-visualisation/water-classification-hub and corrected from 2015 to 2020.		**p.26**
Appendix D: SEA Themes – Likely Evolution with and without the emerging Regional Transport Strategy 2024 - 2034		

SEA Theme 'Climate Change' Theme had been omitted from the table. Respective section has now been included.	New text: SEA Theme: Climate Change **Issues / Problems / Trends: Currently, transport accounts for 37% of total Scottish emissions. The largest contributor to transport emissions is the road sector, accounting for 68% of total transport emissions.** **The towns and cities serve large rural hinterlands. Whilst 62% of trips to work in Dundee are made by car, as the population becomes more rural this % increases: 69% in Stirling; 77% of trips in Angus; and 79% in Perth & Kinross** **For residents of Angus, Perth and Kinross and Stirling, whilst only 26%-29% of personal trips are over 10km, these trips account for 81%-84% of total km driven. In Dundee 93% of the trips are under 10km, where this accounts for 60% of km driven** Approximately 4.5% of vehicles registered in the region were hybrid, electric or ULEV in 2023. Likely Evolution without the RTS: Without the RTS 2024-2034 and the respective policies and measures implemented through the new RTS, traffic levels may continue to increase and will result in increased levels of greenhouse gas emissions. Without a strong policy framework at a regional level implementation of cross border projects or implementing low emission vehicles or other new technologies may not happen. It should be noted that the majority of projects will be taken forward by the four local authorities through their Local Transport Strategies. However, a strategic approach to encouraging more people to travel more actively and sustainably more often is required. Other PPS will also affect climatic factors, particularly in terms of developments within the region. Without the RTS 2024-2034 and other complementary strategies, programmes would still be financed and delivered by Angus, Dundee City, Perth and Kinross and Striling Councils. However, there would be a significantly reduced level of co-ordination between the four areas and the required cross-border work. Unnecessary duplication of work would also undermine effectiveness. Possible Role of the RTS: The RTS 2024-2034 supports land use development plans which are well served by sustainable modes of transport and promote design principles that encourage walking, cycling and public transport use to / from and within the site as well as enhanced provision of cycle parking, electric vehicle charging infrastructure and car parking standards.	**p.1** **p.2**

	The RTS considers the greenhouse gas emissions impact of transport and support the roll out of low emission vehicles that are electric, and hydrogen powered. The RTS also promotes active travel including electric bikes and cargo bikes as a transport mode and for 'last mile' and local deliveries. Through its policies and projects, the RTS 2024-2034 also promotes the application of both the travel and investment hierarchy to reduce the reliance on private cars and encourage a modal shift towards walking, cycling and public transport. It is acknowledged, though, that the RTS can play a role in protecting carbon rich soils and peatland habitats when identifying potential locations for new or improved infrastructure. The RTS 2024-2034 will also help to support wider digital strategies that will enable a reduction in the need to travel for example online meetings or virtual health care appointments.	

SEA Theme 'Biodiversity' Strengthen the potential for enhancing biodiversity through the RTS 2024-2034. Respective reference included in the column detailing the possible role of the RTS.	New text: SEA Theme: Biodiversity Issues / Problems / Trends: Transport development involves land take, which can contribute to disturbance and fragmentation of habitats and result in pressure on, and even the loss of, vulnerable habitats and species. The presence of people and vehicles can create noise and artificial light, disturbing wildlife. Transport is a major contributor to air pollution, particularly oxides of nitrogen (NO_X), which can disturb or even lead to the loss of biodiversity of both land- and water-based ecosystems. Likely Evolution without the RTS: If the RTS 2024-2034 is not implemented and demand for motorised travel increases, there will likely be a requirement for new and significant transport infrastructure to cope with this demand. Construction of such infrastructure could put pressure on biodiversity, including the loss and fragmentation of habitats. Continued increases in traffic, and the pollution, noise and artificial light resulting from this, could continue to disturb sensitive species, potentially resulting in irreversible damage and loss. Possible Role of the RTS: The RTS 2024-2034 must limit the negative effects of transport on biodiversity, by: • Reducing land take from transport, thus reducing the likelihood of damage to or disturbance/severance of habitats and species; • Reducing road traffic and therefore the impact of traffic on biodiversity in terms of air and water pollution, noise, and light; and • Investigating methods of reducing surface water run-off. The RTS framework can also assist in the enhancement of biodiversity through the creation of new habitats and wildlife corridors.	**p.3**

	While limited in scope, the RTS 2024-2034 can also indirectly influence the condition of designated and protected sites through partnership working and ensuring appropriate environmental assessment is undertaken at project level. The RTS 2024-2034 will maximise the delivery of climate change mitigation and adaptation measures. For example, through asset management of infrastructure and easier access to greenspace all.	
SEA Theme 'Landscape' Additional paragraph introduced to better align the individual assessment with the cumulative assessment	New text: The RTS 2024-2034 should protect the landscapes from the development of unsightly transport infrastructure. Delivery of the RTS will have largely positive impacts on the landscape in the long-term through a reduced need for construction of new roads etc. which may otherwise be inevitable with continually increasing car use and which could lead to an unsightly urban and rural landscape.	**p.3**

SEA Theme 'Noise and Vibration' Theme had been omitted from the table. Respective section has now been included.	New text: SEA Theme: Noise and Vibration Issues / Problems / Trends: Although little information is available on noise and vibration generally across the region, it is estimated that levels of road traffic noise are the primary noise source in most parts of the region. Likely Evolution without the RTS: If the RTS 2024-2034 is not implemented, the actual level of noise and vibrations from traffic may continue to increase due to increasing levels of motorised traffic, subsequently exacerbating health inequalities due to low incomes and/or social deprivation. Increased noise levels may also impact on geographies, leading to an erosion of rural character through further suburbanisation and the intrusion of noise and light pollution. Increased noise levels due to location near a major road or port, harbour or airport may also impact on local communities. Possible Role of the RTS: The RTS 2024-2034 has a role to play in reducing noise levels from transport which can be harmful to human health and in ensuring that transport does not contribute to a further deterioration in noise quality. Measures to reduce the levels of motorised traffic within the region along with a greater emphasis on active travel and public and shared transport will positively impact on noise levels. Seeking to support improvements to the public realm will also be aimed at encouraging a mode shift towards more active and sustainable modes of transport.	**p.5**
Appendix E: Full SEA Assessment Tables		

Delivery Theme: Improving safety **Assessment: Preferred option (with RTS 2024-2034)** Additional clarification provided that the section provides a high-level assessment of likely environmental effects from the policies and the suite of actions. Local effects on biodiversity, flora and fauna, geology and soil, cultural heritage and landscape will need to be identified and addressed on a scheme-specific basis. Specific significant impacts are difficult to identify at this stage. SEA Themes: • Biodiversity, Flora and Fauna • Landscape • Cultural Heritage • Geology and Soil	New text: No significant effects identified. Local effects on biodiversity, flora and fauna, geology and soil, cultural heritage and landscape will need to be identified and addressed on a scheme-specific basis. Specific significant impacts are difficult to identify at this stage.	**p.1** **p.2** **p.9** **p.10**

Additional paragraph introduced to cover peatland and carbon-rich soils more explicitly and, detail the potential role of the RTS in protecting them. SEA Themes: • Geology and Soil	New text: The RTS can play a role in protecting carbon rich soils and peatland habitats when identifying potential locations for new infrastructure or routes. Detailed mitigation and enhancement opportunities will be developed as part of the design and consenting process at scheme level.	**p.9** **p.26** **p.36** **p.228**
Additional clarification provided that the section provides a high-level assessment of likely environmental effects from the policies and the suite of actions. Local effects on biodiversity, flora and fauna, geology and soil, cultural heritage and landscape will need to be identified and addressed on a scheme-specific basis. Specific significant impacts are difficult to identify at this stage. SEA Themes: • Biodiversity, Flora and Fauna • Landscape • Cultural Heritage • Geology and Soil	New text: The policy is aimed at safety-led improvements to rest and welfare facilities along the arterial road network which are either already in place, but development including land take will be required. The general effect in the long term will be negative and will need to be mitigated. Local effects on biodiversity, flora and fauna, geology and soil, cultural heritage and landscape will need to be identified and addressed on a scheme-specific basis. Development will broadly follow the existing road network, but specific significant impacts are difficult to identify at this stage.	**p.19** **p.20** **p.21** **p.25** **p.26**

Delivery Theme: Influencing travel choices and behaviour **Assessment: Preferred option (with RTS 2024-2034)** Additional clarification provided that the section provides a high-level assessment of likely environmental effects from the policies and the suite of actions. Local effects on biodiversity, flora and fauna, geology and soil, cultural heritage and landscape will need to be identified and addressed on a scheme-specific basis. Specific significant impacts are difficult to identify at this stage. SEA Themes: • Biodiversity, Flora and Fauna • Landscape • Cultural Heritage • Geology and Soil	New text: A shift towards active and sustainable travel will result in a long-term positive impact on biodiversity, reducing the negative impacts of indiscriminate car usage. With the latter potentially disrupting and damaging vulnerable habitats and species. The policy is aimed at the enhancement of active travel links which are either already in existence, or which may need to be constructed. The general effect in the long term will be positive if a modal shift away from private transport is achieved. For new developments which include land take there may be some negative impacts which will need to be mitigated. Local effects on biodiversity, flora and fauna, geology and soil, cultural heritage and landscape will need to be identified and addressed on a scheme-specific basis. Specific significant impacts are difficult to identify at this stage. As part of infrastructure investments to further improve the infrastructure for active and sustainable travel there will be opportunities to realise a net gain in biodiversity.	**p.27** **p.28** **p.29** **p.30** **p.31** **p.36** **p.37**

SEA Objective 'Air Quality' amended from "To reduce all forms of transport related air pollution and improve air quality" to "To reduce all forms of transport related air pollution and improve air quality, in particularly with regards to the three declared Air Quality Management Areas in Crieff, Dundee and Perth."	New text: Objectives: To reduce all forms of transport related air pollution and improve air quality, in particularly with regards to the three declared Air Quality Management Areas in Crieff, Dundee and Perth.	**p.4** **p.13** **p.22** **p.33** **p.41** **p.49** **p.58** **p.68** **p.76** **p.85** **p.93** **p.104** **p.112** **p.120** **p.129** **p.137** **p.144** **p.152** **p.159** **p.168** **p.175** **p.182** **p.189** **p.197** **p.205**

		p.214 **p.225** **p.233** **p.241** **p250** **p.257**
Additional paragraph introduced to cover the impacts on the three declared AQMAs more explicitly. SEA Themes: • Air Quality	New text: Considerable improvement of air quality within the region, with long-term positive impacts. Air Quality impacts are positive largely through contribution to modal shift away from private car journeys. Within the Tactran region, the declared AQMAs in Crieff, Dundee and Perth would benefit through reduced private car journeys.	**p.37** **p.42** **p.49** **p.50** **p.58**
Additional paragraph introduced to cover peatland and carbon-rich soils more explicitly and, detail the potential role of the RTS in protecting them. SEA Themes: • Geology and Soil	New text: The RTS can play a role in protecting carbon rich soils and peatland habitats when identifying potential locations for new infrastructure or routes. Detailed mitigation and enhancement opportunities will be developed as part of the design and consenting process at scheme level.	**p.36**
Additional paragraph introduced to better highlight the support for the Low Emission Zone in Dundee. SEA Themes: • Air Quality	New text: Air quality and improving air quality are a large part of the RTS, to improve health. This includes support for demand management measures such as the Low Emission Zone in Dundee and other measures to encourage a behavioural change and modal shift.	**p.58**

Additional paragraph introduced to highlight the risk of identify problems simply being shifted to boundary areas. SEA Themes: • Air Quality	New text: Encouraging especially short trips to shift to active and sustainable modes will have long-term positive impacts on air quality by reducing the number of car trips and the vehicle kilometres driven. The subsequent reduction in emitted pollutants will have a long-term positive impact on air quality. Especially in areas that have been declared Air Quality Management Areas. Although some potentially negative impacts on air quality and congestion elsewhere if journeys are redistributed. As with all demand management policies, ensuring that congestion, additional parking, and general intensification effects of private car journeys will be essential to avoid problems simply being shifted to boundary areas.	**p.68** **p.69** **p.76** **p.77**
Additional paragraph introduced to highlight the risk of identify problems simply being shifted to boundary areas. SEA Themes: • Noise and Vibrations	New text: Reduced noise levels due to reduced traffic levels. Although some potentially negative impacts on air quality and congestion elsewhere if journeys are redistributed. As with all demand management policies, ensuring that congestion, additional parking, and general intensification effects of private car journeys will be essential to avoid problems simply being shifted to boundary areas.	**p.69** **p.77** **p.85** **p.95**
Additional paragraph introduced to highlight the risk of identify problems simply being shifted to boundary areas. SEA Themes: • Air Quality	New text: Supressed demand for active and sustainable travel will be released through less car traffic as a result from respective network management measures to improve walking and cycling infrastructure, as well as to implement public transport priority measures and improve interchanges such as bus stops and railway stations, with a long-term positive impact on air quality. Although some potentially negative impacts on air quality and congestion elsewhere if journeys are redistributed. As with all demand management policies, ensuring that congestion and intensification effects of private car journeys will be essential to avoid problems simply being shifted to boundary areas.	**p.84** **p.85**

Additional paragraph introduced to highlight the risk of identify problems simply being shifted to boundary areas. SEA Themes: • Air Quality	New text: Reduced traffic levels and subsequently reduced carbon emissions and air pollutants, with increased bus, rail and active travel use, with a long-term positive impact on climate change. There was a reduction in traffic movements into central London in May 2019 and September 2019 of between three and nine per cent when compared to 2018, indicating the wider benefits of the London ULEZ in encouraging people to shift to walking, cycling or using public transport instead of driving. The Congestion Charge in London has helped London to become the only major city in the world to see a considerable shift from private car use to public transport, walking and cycling . Less polluting and likely reduced vehicles in the city centre and an associated reduction in tail-pipe carbon emissions and air pollution. Preliminary results from the introduction of the Ultra LEZ in London shows that approximately 13,500 fewer polluting cars enter the zone each day , with 77% of vehicles entering the zone now meeting the clean emissions standards, with a long-term positive impact on air quality. As with all demand management policies, ensuring that congestion, additional parking, and general intensification effects of private car journeys will be essential to avoid problems simply being shifted to boundary areas.	**p.94**
Additional paragraph introduced to highlight the risk of for those segments of society who may continue to require private or assisted car journeys. SEA Themes: • Human Health	New text: Significant improvements to public transport services will be required to achieve this reduction in car dependency. At present, many people have no choice but to drive, particularly for trips within the region, rather than into the city centres and towns. Significant improvements to public transport services will be required to achieve this reduction in car dependency. Income from charging mechanism could help fund the required improvements. Measures that reduce car dependency will free up space for essential freight and business trips. There are, however, potential negative impacts on disabled people who may continue to require private and assisted car journeys. This can be further assessed with mitigation identified through Equality Impact Assessment and Health Impact Assessment.	**p.97**

Additional paragraph introduced to highlight the risk of for those segments of society who may continue to require private or assisted car journeys. SEA Themes: • Population	New text: Respective measures will support social inclusion by enabling those segments of the regional population who currently perceive the transport network as being unsafe to walk or cycle to access the nearest bus stop / train station or, indeed, travel actively all the way to key destinations within the region without anxiety. This may be of particular benefit to adults and young people. Participation is physical activity is lower in older people (75+), unemployed and low-income groups, and people with disabilities. However, providing for safer travel may remove some barriers to active travel modes. There are, however, potential negative impacts on disabled people who may continue to require private and assisted car journeys. This can be further assessed with mitigation identified through Equality Impact Assessment and Health Impact Assessment.	**p.98**
Delivery Theme: Improving access to public transport **Assessment: Preferred option (with RTS 2024-2034)** Additional paragraph introduced to cover the impacts on the three declared AQMAs more explicitly. SEA Themes: • Air Quality	New text: Increased mode shares for public transport within the region at the expense of car trips will have a long-term positive impact on air quality through reducing emissions and pollution. Air Quality impacts are positive, largely through contribution to modal shift away from private car journeys. Low emission and alternative fuels including potential shift to hydrogen would see benefits increase sooner – although the pace at which such developments are coming forward is beyond the influence of the RTS. AQMAs located in Crieff, Dundee and Perth in particular would benefit through reduced levels of private car journeys.	**p.103** **p.104** **p.111** **p.112**
Additional paragraph introduced to cover the impacts on the three declared AQMAs more explicitly. SEA Themes: • Air Quality	New text: Increased mode shares for public transport within the region at the expense of car trips will have a long-term positive impact on air quality through reducing emissions and pollution. AQMAs located in Crieff, Dundee and Perth would benefit through reduced private car movements into Crieff, Dundee and Perth.	**p.119**

Additional paragraph introduced to cover the impacts on the three declared AQMAs more explicitly. SEA Themes: • Cultural Heritage	New text: Fewer cars in conservation areas and around distinctive cultural and historical sites within the region could improve the setting and distinctiveness of these sites and areas, with a long-term positive impact on cultural heritage. Improved public transport interchange could also facilitate (improved) access to such sites. In considering improvements to access to public transport we would note that new and improved rail and bus stations have implications of the historic environment that can lead to both positive and negative effects. For example, improvements at stations may have challenges associated with existing infrastructure that is of historic merit. Schemes will be delivered through the appropriate consenting process. Detailed mitigation and enhancement opportunities will be developed as part of the consenting process at scheme level, weighing up access improvements with other aspects. Assessment score changed from '+' to '+ / -'	**P102** **p.103**

Delivery Theme: Improving sustainable travel opportunities **Assessment: Preferred option (with RTS 2024-2034)** Additional clarification provided that the section provides a high-level assessment of likely environmental effects from the policies and the suite of actions. Local effects on biodiversity, flora and fauna, geology and soil, cultural heritage and landscape will need to be identified and addressed on a scheme-specific basis. Specific significant impacts are difficult to identify at this stage. SEA Themes: • Biodiversity, Flora and Fauna	New text: An increase in mode shares for walking and cycling will help to contribute to a decline in car use. This would have a long-term positive impact on biodiversity, particularly for those species and habitats currently suffering from disturbance caused by transport. A decline in the number of car trips would also remove the need for construction of new transport infrastructure, such as roads etc. which could also negatively impact on biodiversity through damaging, disrupting and severing species and habitats. The policy is aimed at the enhancement of active travel links which are either already in existence, or which may need to be constructed. The general effect in the long term will be positive if a modal shift away from private transport is achieved. For new developments which include land take there may be some negative impacts which will need to be mitigated. Local effects on biodiversity, flora and fauna, geology and soil, cultural heritage and landscape will need to be identified and addressed on a scheme-specific basis. Specific significant impacts are difficult to identify at this stage. At the same time, the proposals may comprise plans to improve active travel routes through areas of natural beauty, including parks and greenspaces. This could encourage increased human activity around sensitive species and habitats or even cause severance of habitats. This might have long-term negative impacts on biodiversity.	**p.124** **p.125**

Additional clarification provided that the section provides a high-level assessment of likely environmental effects from the policies and the suite of actions. Local effects on biodiversity, flora and fauna, geology and soil, cultural heritage and landscape will need to be identified and addressed on a scheme-specific basis. Specific significant impacts are difficult to identify at this stage. SEA Themes: • Landscape	New text: Increased mode shares for walking and cycling at the expense of car trips hold the potential to reduce the need for construction of new, unsightly transport infrastructure, such as roads etc., with a long-term positive impact on landscape. The policy is aimed at the enhancement of active travel links which are either already in existence, or which may need to be constructed. The general effect in the long term will be positive if a modal shift away from private transport is achieved. For new developments which include land take there may be some negative impacts which will need to be mitigated. Local effects on biodiversity, flora and fauna, geology and soil, cultural heritage and landscape will need to be identified and addressed on a scheme-specific basis. Specific significant impacts are difficult to identify at this stage.	**p.126**

Additional clarification provided that the section provides a high-level assessment of likely environmental effects from the policies and the suite of actions. Much of our existing active travel network utilises historic environment features such as former branch railway lines, canal towpaths and historic routes and ways. Therefore, investment and maintenance in such routes can also be a positive effect for the historic environment. SEA Themes: • Cultural Heritage	New text: Fewer cars in conservation areas and around distinctive cultural and historical sites within the region could improve the setting and distinctiveness of these sites and areas, with a long-term positive impact on cultural heritage. Improved active travel networks could also facilitate (improved) access to such sites. Active travel opportunities we would add that much of our existing active travel network utilises historic environment features such as former branch railway lines, canal towpaths and historic routes and ways. Therefore, investment and maintenance in such routes can also be a positive effect for the historic environment.	**p.128**

Additional clarification provided that the section provides a high-level assessment of likely environmental effects from the policies and the suite of actions. Local effects on biodiversity, flora and fauna, geology and soil, cultural heritage and landscape will need to be identified and addressed on a scheme-specific basis. Specific significant impacts are difficult to identify at this stage. SEA Themes: • Geology and Soil	New text: Increased mode shares for active travel within the region at the expense of car trips are likely to reduce the necessity for new road infrastructure, such as roads etc. The construction of which could lead to the loss or contamination of soil. Air quality improvements will have a positive impact on soil resulting from less air pollution, with a long-term positive impact on soil. The policy is aimed at the enhancement of active travel links which are either already in existence, or which may need to be constructed. The general effect in the long term will be positive if a modal shift away from private transport is achieved. For new developments which include land take there may be some negative impacts which will need to be mitigated. Local effects on biodiversity, flora and fauna, geology and soil, cultural heritage and landscape will need to be identified and addressed on a scheme-specific basis. Specific significant impacts are difficult to identify at this stage.	**p.131** **p.132**
Additional paragraph introduced to cover the impacts on the three declared AQMAs more explicitly while also highlighting the limitations of mode shift, i.e. acknowledging that some will shift from active travel to improved public transport services. SEA Themes: • Air Quality	New text: An increase in mode shares for public transport within the region at the expense of the car trips will have a long-term positive impact on air quality through reducing emissions and pollution. Air Quality impacts are positive, largely through contribution to modal shift away from private car journeys. Low emission and alternative fuels including potential shift to hydrogen would see benefits increase sooner – although the pace at which this development will come forward is not within the scope of the RTS. AQMAs located in Crieff, Dundee and Perth would benefit through reduced private car trips. The level of emissions reductions may be tempered because a section of ridership will be switching from active travel to new and improved public transport services.	**p.143** **p.144**

Additional paragraph introduced to cover the impacts on the three declared AQMAs more explicitly while also highlighting the limitations of mode shift, i.e. acknowledging that some will shift from active travel to improved public transport services. SEA Themes: • Air Quality	New text: Increasing the number and routes served by both community transport and demand responsive transport services could encourage more people to use such services in preference to the private car. This will have a long-term positive impact on air quality through reducing emissions and pollution. AQMAs located in Crieff, Dundee and Perth would particularly benefit through reduced private car ownership and journeys.	**p.158** **p.166**
Delivery Theme: Decarbonising transport and a just transition **Assessment: Preferred option (with RTS 2024-2034)** Additional reference to relevant commitments within NTS2 added SEA Themes: • Biodiversity, Flora and Fauna	New text: Electrification of the rail network across the region facilitates the deployment of electric trains on the network with a reduction in vehicle pollutants. NTS2 commits to replacement of diesel stock with alternative fuels including potential shift to hydrogen and if this can be delivered in the medium rather than long term then benefits will increase.	**p.178**

Additional reference to relevant commitments within NTS2 added SEA Themes: • Climate Change	New text: An increased deployment of electric trains has long-term positive impacts on the climate by reducing transport related carbon emissions and pollution. Carbon emissions would reduce at point of use, but overall carbon emissions would only be reduced if the electricity utilised were generated from green sources. NTS2 commits to replacement of diesel stock with alternative fuels including potential shift to hydrogen and if this can be delivered in the medium rather than long term then benefits will increase.	**p.179** **p.180**
Additional reference to relevant commitments within NTS2 added SEA Themes: • Air Quality	New text: An increase in the deployment of electric trains on the rail network across the region at the expense of diesel trains will have a long-term positive impact on air quality through reducing emissions and pollution. NTS2 commits to replacement of diesel stock with alternative fuels including potential shift to hydrogen and if this can be delivered in the medium rather than long term then benefits will increase.	**p.181**
Additional reference to relevant commitments within NTS2 added SEA Themes: • Human Health • Population	New text: Reduced emissions and improve air quality and in turn have a positive effect on health on everyone, particularly of those most at risk of respiratory illness including older people and children (including unborn children). NTS2 commits to replacement of diesel stock with alternative fuels including potential shift to hydrogen and if this can be delivered in the medium rather than long term then benefits will increase.	**p.182** **p.183**

Delivery Theme: Improving accessibility and security of our transport networks **Assessment: Preferred option (with RTS 2024-2034)** Additional paragraph introduced to cover the impacts on the three declared AQMAs more explicitly. SEA Themes: • Air Quality	New text: An increase in mode shares for public transport within the region at the expense of the car trips will have a long-term positive impact on air quality through reducing emissions and pollution. Low emission and alternative fuels including potential shift to hydrogen would see benefits increase sooner – although the pace at which such developments are brought forward is beyond the scope of the RTS. AQMAs located in Crieff, Dundee and Perth would benefit through reduced private car movements and a shift to public and shared transport.	**p.203** **p.204**
Additional paragraph introduced to cover the impacts on the three declared AQMAs more explicitly. SEA Themes: • Human Health	New text: An increased mode share for public transport at the expense of car trips within the region will have significant long-term benefits for human health. It will result in less pollution and emissions, subsequently reducing incidences of respiratory problems, and poor air quality which is known to reduce life expectancy. Low emission and alternative fuels including potential shift to hydrogen would see benefits increase sooner – although the pace at which such developments are brought forward is beyond the scope of the RTS. AQMAs located in Crieff, Dundee and Perth would benefit through reduced private car movements and a shift to public and shared transport. Improved public transport routes and services could also improve access to key services, such as healthcare facilities etc.	**p.205**

Delivery Theme: Improving strategic connectivity **Assessment: Preferred option (with RTS 2024-2034)** Additional paragraph introduced to better highlight the general effects in the long term will be negative and will need to be mitigated. SEA Themes: • Biodiversity, Flora and Fauna	New text: More reliable and safer trunk road network may encourage more car trips. This could subsequently increase car kilometres and respective emissions, impacting on habitats and species. The policy is aimed at safety-led road improvements on roads which are either already in place or for which development including land take will be required. The general effect in the long term will be negative and will need to be mitigated. Use of land for new transport infrastructure may also cause disturbance of habitats and species and result in negative effects because of human activities, such as recreational activities outdoors, noise from transport etc. It may also result in coastal squeeze and pollution of other environmental media, including water, soil and air.	**p.219**
Additional paragraph introduced to better highlight the general effects in the long term will be negative and will need to be mitigated. SEA Themes: • Landscape	New text: Effects can arise within the landscape and/or townscape and visual baseline context. The policy is aimed at safety-led road improvements on roads which are either already in place or for which development including land take will be required. The general effect in the long term will be negative and will need to be mitigated. Considerable potential to cause irreversible harm.	**p.220**
Additional paragraph introduced to better highlight the general effects in the long term will be negative and will need to be mitigated. SEA Themes: • Cultural Heritage	New text: The policy is aimed at safety-led road improvements on roads which are either already in place or for which development including land take will be required. The general effect in the long term will be negative and will need to be mitigated. Use of land for new infrastructure may cause disturbance of heritage assets and their settings because of human activity, such as recreation, transport related noise pollution etc. and more direct pollution of environmental media, including water, soil, and air.	**p.220**

Additional paragraph introduced to better highlight the general effects in the long term will be negative and will need to be mitigated. SEA Themes: • Climate Change	New text: More reliable and safer trunk road network may encourage more car trips, dependent on the scale of the scheme(s) implemented. This could subsequently increase car kilometres and respective carbon emissions and pollutants. May contradict objectives and policies aimed at encouraging modal shift, although this will be dependent on the provision of attractive and realistic non-car alternatives en route. The policy is aimed at safety-led road improvements on roads which are either already in place or for which development including land take will be required. The general effect in the long term will be negative and will need to be mitigated. Loss of potentially designated lands during construction and operation has the potential for permanent, minor negative or uncertain effects on the climate. It is acknowledged that the RTS can play a role in protecting carbon rich soils and peatland habitats when identifying potential locations for new infrastructure or routes. Manufacture of materials and construction activities would release emissions which would add to the atmospheric concentration of greenhouse gases.	**p.221** **p.222**
Additional paragraph introduced to better highlight the general effects in the long term will be negative and will need to be mitigated. Especially with regards to carbon-rich soil and peatland habitats. SEA Themes: • Geology and Soil	New text: The policy is aimed at safety-led road improvements on roads which are either already in place, but development including land take will be required. The general effect in the long term will be negative and will need to be mitigated The RTS can play a role in protecting carbon rich soils and peatland habitats when identifying potential locations for new infrastructure or routes. Detailed mitigation and enhancement opportunities will be developed as part of the design and consenting process at scheme level. Use of land for new transport infrastructure, and an associated increase in impermeable surfaces. Land that is sealed no longer performs many of its former ecological functions. Rain no longer stays were it falls to be used by plants but runs off the impervious surface causing problems of flooding, erosion, and sedimentation.	**p.226**

Additional paragraph introduced to better highlight the general effects in the long term will be negative and will need to be mitigated. SEA Themes: • Water	New text: The policy is aimed at safety-led road improvements on roads which are either already in place, but development including land take will be required. The general effect in the long term will be negative and will need to be mitigated. Use of land for new transport infrastructure, and an associated increase in impermeable surfaces. Risk of significant flooding events is also likely to increase in the future, particularly because of climate change. Pollution from transport related infrastructure such as roads and rail lines, areas of parking etc.) discharging into waterbodies can result in exceedances of water quality standards.	**p.227**
Additional paragraph introduced to better highlight the role of efficient freight movements in achieving the aims of NTS2 and the RTS. The policy provides the opportunity for engagement and discussion and to better understand the needs of the freight industry. SEA Themes: • Biodiversity, Flora and Fauna	New text: Efficient freight movement is essential to achieving the aims of NTS2 and the RTS. The policy provides the opportunity for engagement and discussion and to better understand the needs of the freight industry. The policy aims to ensure freight vehicles are routed via the most appropriate modes and routes, avoiding city and town centres where possible. Achieving a transfer of freight from road to rail and water could have benefits for some land-based species through reduced road traffic but negative impacts on water-based species and habitats, especially around the ports of Dundee, Montrose and Perth, through an increase in shipping.	**p.236**

Additional paragraph introduced to better highlight the role of efficient freight movements in achieving the aims of NTS2 and the RTS. The policy provides the opportunity for engagement and discussion and to better understand the needs of the freight industry. SEA Themes: • Landscape	New text: Efficient freight movement is essential to achieving the aims of NTS2 and the RTS. The policy provides the opportunity for engagement and discussion and to better understand the needs of the freight industry. The policy aims to ensure freight vehicles are routed via the most appropriate modes and routes, avoiding city and town centres where possible. A reduction in the number of HGVs on the road network within the region as well as a reduction in vans could have a long-term positive impact on the landscape.	**p.236** **p.237**
Additional paragraph introduced to better highlight the role of efficient freight movements in achieving the aims of NTS2 and the RTS. The policy provides the opportunity for engagement and discussion and to better understand the needs of the freight industry. SEA Themes: • Cultural Heritage	New text: Efficient freight movement is essential to achieving the aims of NTS2 and the RTS. The policy provides the opportunity for engagement and discussion and to better understand the needs of the freight industry. The policy aims to ensure freight vehicles are routed via the most appropriate modes and routes, avoiding city and town centres where possible. A reduction in HGVs around cultural and historical sites and conservation areas could improve the setting of such sites and reduce damage resulting from pollution and emissions.	**p.237**

Additional paragraph introduced to better highlight the role of efficient freight movements in achieving the aims of NTS2 and the RTS. The policy provides the opportunity for engagement and discussion and to better understand the needs of the freight industry. SEA Themes: • Air Quality	New text: Efficient freight movement is essential to achieving the aims of NTS2 and the RTS. The policy provides the opportunity for engagement and discussion and to better understand the needs of the freight industry. The policy aims to ensure freight vehicles are routed via the most appropriate modes and routes, avoiding city and town centres where possible. Achieving a transfer of freight from road to rail and water could have a long-term positive impact on climate change through reducing the number of high-emitting HGVs on our roads. An increase in shipping, however, could have long-term negative impacts, as harbour traffic is known to be a significant contributor to pollution and emissions, both from ships themselves and from traffic accessing the harbour.	**p.239**
Additional paragraph introduced to better highlight the role of efficient freight movements in achieving the aims of NTS2 and the RTS. The policy provides the opportunity for engagement and discussion and to better understand the needs of the freight industry. SEA Themes: • Human Health	New text: Efficient freight movement is essential to achieving the aims of NTS2 and the RTS. The policy provides the opportunity for engagement and discussion and to better understand the needs of the freight industry. The policy aims to ensure freight vehicles are routed via the most appropriate modes and routes, avoiding city and town centres where possible. Achieving a transfer of freight from road to rail and water would reduce the number of HGVs and LGVs on the roads within the region, resulting in fewer harmful emissions and reducing the likelihood of accidents involving large vehicles of this nature. An increase in shipping, however, could have long-term negative impacts on air quality, as harbour traffic is known to be a significant contributor to poor air quality in the City Centre (currently and AQMA) through emissions from ships themselves and via traffic accessing the harbour. The impact on human health is therefore mixed.	**p.241** **p.242**

Additional paragraph introduced to better highlight the role of efficient freight movements in achieving the aims of NTS2 and the RTS. The policy provides the opportunity for engagement and discussion and to better understand the needs of the freight industry. SEA Themes: • Population	New text: Efficient freight movement is essential to achieving the aims of NTS2 and the RTS. The policy provides the opportunity for engagement and discussion and to better understand the needs of the freight industry. The policy aims to ensure freight vehicles are routed via the most appropriate modes and routes, avoiding city and town centres where possible. An increase in the volume of freight moved by rail and water could reduce congestion and enable the more efficient movement of freight.	**p.242**

Appendix C

Changes to the consultation draft of the Tayside and Central Scotland Regional Transport Strategy

New or changed text highlighted.

Table 1: Amendments agreed at Partnership Meeting of 12th December 2023		
Proposed amendment	**Proposed text**	**New page**
FOREWORD		
Introduce foreword includes importance of transport and accessibility to supporting other policy areas; and demonstrates '*that we have listened*'	"On behalf of the Tactran Board, I know that we all care passionately about the climate emergency that faces us; the health problems poor air quality causes; the inequalities that prevent people having equal opportunities and living comfortable, healthy and happy lives; the health of our population and the consequences of this not only on individuals now but also public services in the long term; and the impact travel constraints place on our economy. The role of the Tayside and Central Scotland Regional Transport Strategy is to provide a framework for all public sector agencies in the region to perform their functions as they relate to transport and travel to help address these issues. The scale of the challenge is significant, and we recognise that for meaningful progress to be made, step changes are required by the public sector, individuals and businesses.	3

Table 1: Amendments agreed at Partnership Meeting of 12th December 2023		
Proposed amendment	**Proposed text**	**New page**
	We do not underestimate the scale of this challenge. You have told us about your travel constraints and the potential implications of change. We have listened. We know the changes will be difficult for all of us. But we also know that the majority of you do care about addressing the issues identified above, and are prepared to make changes provided opportunities exist and the ask of yourselves is fair and equitable. To help address the priorities identified, this Regional Transport Strategy seeks to: • Focus activity on where it will have the greatest impact on reducing carbon emissions; improving air quality; health outcomes; enabling the most vulnerable in society to access services and opportunities; enabling inclusive economic growth • Co-ordinate partner resources and programmes to ensure that we provide integrated solutions that present realistic options for yourselves The changes for all are significant. We know we need to keep this conversation open to help us all understand, plan for and navigate the changes required in a fair and equitable manner. We cannot do this alone, we need everyone to do what they can. Please continue to play your role in this transformation, and tell us when we're getting it right, and especially, when you think we're getting it wrong."	
CONTEXT		
Additional issues Reflect aging population, disability and tourism issues	**Section 1.2 Key Issues: nature of the region** *(new text)* **Population size and age:** By 2035, the populations of Angus and Dundee are expected to decline, whilst the populations of Perth and Kinross and Stirling increase. Across Scotland by 2035 the population of pensionable age will have risen from 18.3% (2020)	15

Table 1: Amendments agreed at Partnership Meeting of 12th December 2023		
Proposed amendment	**Proposed text**	**New page**
	to 22% placing greater pressure on public resources[1]. These figures are likely to be higher across the Tactran region where, in 2022, the over 65s already make up 25.1% of the population in Angus; 24.7% in Perth & Kinross; 20.5% in Stirling; and 18.1% in Dundee[2]. ~~**Travel to Work**~~ **Where people live and work:** Most people…Oban. Less than a fifth of trips made by residents are commuting trips[3] **Tourism**: Tourism is a key element of our economy. The region features many of Scotland's top tourist destinations, attracting millions of visitors every year from our coast to our mountains (approx. 17million domestic day visits per year[4]).	
Update	**Section 1.2 Key Issues: nature of the region** **Wealth**: 36% of the population of Dundee, and 7%, 6% and 12% of Angus, Perth and Kinross and Stirling residents live in the least affluent 20% of SIMD data zones[ii] / 20.6% of children in Angus, 24.5% in Dundee, 17.9% in Perth and Kinross and 16.6% in Stirling are living in relative poverty[v]. / 6.2% of 16-19yr olds in Dundee, 4.8% in Angus, 3.5% in Perth & Kinross and 2.9% in Stirling are not participating in education, training or employment [vi]	15
Update	**Key Issues: Transport**	16

[1] National Records of Scotland: Projected Population
[2] Scotland's Census 2022
[3] Transport and Travel in Scotland 2019
[4] Visit Scotland 2019 Factsheets

Table 1: Amendments agreed at Partnership Meeting of 12th December 2023		
Proposed amendment	**Proposed text**	**New page**
	• Our towns & cities serve large rural hinterlands. Whilst 62% of trips to work in Dundee are made by car, as the population becomes more rural this % increases: 69% in Stirling; 77% of trips in Angus; and 79% in Perth & Kinross • For residents of Angus, Perth and Kinross and Stirling, whilst only 26%-29% of personal trips are over 10km, these trips account for 81%-84% of total km driven. In Dundee 93% of the trips are under 10km, where this accounts for 60% of km driven • Approximately 4.5% of vehicles registered in the region were hybrid, electric or ULEV in 2023[14] • Approximately a 1/5th of the jobs in the region cannot be accessed within 60minutes by public transport by the working age population[18] . However, 68% of residents do not believe that the trip they make to work or education can be carried out using public transport[19] • But also 63% (Stirling) to 75% (Dundee) of residents are satisfied with public transport in their area[20]. • 37% never walk as a means of transport, 26% never for pleasure[12]. 57% of people in the 20% most deprived areas regularly walk for recreation, compared to 78% of people in the least 20% deprived areas[20]	
Additional issues Reflect disability issues	**1:5 Key Issues: Social exclusion** See text below	
***Additional issues:* public issues with the transport network**	*Section 1.3 Key Issues: transport* *Car dependency in our rural hinterlands*	16

Table 1: Amendments agreed at Partnership Meeting of 12th December 2023		
Proposed amendment	**Proposed text**	**New page**
car dependency in the rural areas;	• *Our towns & cities serve large rural hinterlands. Whilst 62% of trips to work in Dundee are made by car, as the population becomes more rural this % increases: 69% in Stirling; 77% of trips in Angus; and 79% in Perth & Kinross*[5]	
***Additional issues:* public issues with the transport network** especially affordability and loss of confidence with public transport;	**Availability and cost of transport to access jobs, education and services** *New text: Additional bullet:* 68% of residents do not believe that the trip they make to work or education can be carried out using public transport.[6]	16
***Additional issues:* public issues with the transport network** safety and security concerns for young people	*New text* Many of the more vulnerable groups in society have safety concerns when it comes to using public transport. This includes the young[7], females[8], disabled, members of the LGBTQ+ community, religious belief, and ethnicity	18
***Additional issues:* public transport** issues with strategic network, including Perth to Edinburgh rail	**Section 1.3 Key Issues: transport** *New para* **Strategic connectivity** Many (but not all) of our larger settlements are well located on the strategic road and/or rail network. But at each of our cities, there are pinch points on the strategic	16

[5] Transport and Travel in Scotland 2021: Results from the Scottish Household Survey; Usual method of travel to work
[6] Tactran Representative Public Opinion Survey 2023
[7] Transport Scotland Baseline data report - June 2022 - Young Persons' Free Bus Travel Scheme
[8] Women's and girls' views and experiences of personal safety when using public transport | Transport Scotland

Table 1: Amendments agreed at Partnership Meeting of 12th December 2023		
Proposed amendment	**Proposed text**	**New page**
	road network; and the rail journey from Perth to Edinburgh is not competitive with the car in terms of time or cost	
Additional issues Importance of digital and energy networks	*See 3.1.2 How will this affect regional partners*	36
Additional issues Road safety issues	**Section 1.3 Key Issues: transport** *New para* **Road safety** Any number of fatalities or casualties are too many. While good progress has been, and continues to be, made across most of the region in the last 10years, close attention needs to continue to be paid to longer term trends	16
Strengthen Strengthen climate change (+ including public attitudes data)	*Section 1.4: Key Issues: Climate emergency* See below	17
Strengthen key messages from engagement and the representative public opinion survey across the document to help reinforce that *we have listened*	**What you told us** This strategy is asking big changes of all of us. To help get it right, it is critical that we have listened to what you told us. In addition to receiving responses from individuals and organisations we undertook two representative public opinion surveys[9]. Key messages from these surveys were:	20

[9] Tactran Representative Public Opinion Survey (Taylor McKenzie Research 'Tactran Quantitative Research' Reports November 2022 and October 2023)

Table 1: Amendments agreed at Partnership Meeting of 12th December 2023		
Proposed amendment	**Proposed text**	**New page**
	Problems and priorities • 80% believe that climate change is an immediate and urgent problem • 85% believe they personally have a duty to help combat climate change • Approximately 80% support the principles of taking climate action, reducing inequalities, improving health and wellbeing and supporting inclusive economic growth. But improving health and wellbeing receives a little more support than the other three priorities. **Constraints and opportunities** • 68% do not believe their trip to work or education can be undertaken by public transport • The main reason people travel by the mode they are most reliant on is convenience. The least important reason is environmental benefit. **Solutions** • 53% would be willing to change how they travel to help achieve climate change targets • If there were safe, affordable and convenient transport alternatives provided ○ 29% were more likely to travel to facilities closer to home (71% if those who are a little more likely are included) ○ 18% were more likely to walk more instead of drive (62% if those who are a little more likely are included)	

Table 1: Amendments agreed at Partnership Meeting of 12th December 2023		
Proposed amendment	**Proposed text**	**New page**
	○ 20% were more likely to get the bus instead of drive (59% if those who are a little more likely are included) ○ 20% were more likely to get the train instead of drive (53% if those who are a little more likely are included) ○ 10% were more likely to cycle more than drive (26% if those who are a little more likely are included) • There is net positive support for all measures, with the exception of new charges for motorists. Amongst the submitted responses, the concern that the Partners would be unable to deliver the strategy is perhaps the most significant response. The full consultation results are available on the RTS website.	
WHAT WE WANT TO ACHIEVE		
Confidence re delivery: Highlight those population and location types where interventions will have the greatest impact on the targets.	2.2 Outcomes (*New text after table 2.1*) Where does attention need to be focused? Given the number of trips made each day in each Council area, any real progress against the strategic objectives is unlikely unless **measures are directed at those populations and locations where they are most are most likely to have the greatest impact**. For example:	26

Table 1: Amendments agreed at Partnership Meeting of 12th December 2023		
Proposed amendment	**Proposed text**	**New page**
	▪ **To reduce inequalities**: Target access improvements at the least affluent communities and vulnerable groups (*e.g. disabled; young; over 65's; groups identified in the child poverty action plans and the Integrated Impact Assessment*), especially where these groups are located in areas where there is poor access (*as indicated by SIMD access domain*) and/or at risk of transport poverty (*see Transport Scotland STPR2 transport poverty mapping*) ▪ **To address climate change**: Target measures at those trips and locations that generate the most km driven (i.e. 75% of km driven by those who live in the region is generated by trips over 10km[10], and 82% of car km driven is generated to/from/between our rural areas[11]) ▪ **To improve health and wellbeing**: ○ Promote active travel in the communities with the poorest health (*as defined by the SIMD health domain*) ○ Promote modal shift to reduce the number of car trips in those locations where there are air quality issues ○ Target road safety interventions at pedestrians, cyclists, children and older people, locations in the lower SIMD quintile ▪ **To assist the delivery of sustainable inclusive economic growth:** ○ Target access improvements to education, training and employment for 16-24 year olds; the least affluent SIMD datazones as targeted by each Council[12]; and	

[10] Transport and Travel in Scotland 2021: Distance travelled

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

[12] See respective local outcome improvement plans: Angus Local Outcomes Improvement Plan 2022-2030; City Plan for Dundee 2022-32; Perth and Kinross

Table 1: Amendments agreed at Partnership Meeting of 12th December 2023		
Proposed amendment	**Proposed text**	**New page**
	those identified in child poverty action plans (*lone parent families, the large majority of which are headed by women; families which include a disabled adult or child; larger families; minority ethnic families; families with a child under one year old; families where the mother is under 25 years of age*.[13]) ○ Promote modal shift in and around major traffic corridors and pinch points in our urban areas.	
Targets: Review text relating to '% of employed adults who could use public transport for work in least affluent areas to be equal to or better than the average for the Council area Given the difficulty in identifying an alternative target which reflects the problems the vulnerable groups face and which is measurable, it is suggested that: • the target is retained; • text emphasises the need to focus interventions on the target groups identified; and	*New text*: **2.3 The scale of the challenge: Targets** <u>Proposed Regional Target</u> The ability to access services is influenced by a number of factors including availability and awareness of services; cost; difficulties in planning and undertaking multi-stage / multi-modal journeys etc. There are limited data sources to track ability of the target groups to access jobs, education and services. Whilst the following target is used to support this subject, it is acknowledged that a wider set of indicators that drive progress are required (see Section 4 for a fuller range of indicators) • % of employed adults who could use public transport for work/college in the least affluent areas to be equal to or better than the average (mode) for the Council area <u>Scale of the challenge</u>	29

Community Plan 2022-2032; The Stirling Plan 2017-2027

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

Table 1: Amendments agreed at Partnership Meeting of 12th December 2023				
Proposed amendment	**Proposed text**			**New page**
• the identification of other indicators which will help provide identify whether progress is being made in favour of the target groups.	Lack of access to affordable transport is identified as a key driver of Child Poverty[14]. Limited public transport services in many localities and limited ability to influence commercial fares. Centralisation of public services. Location of services in 'out-of-centre' locations.			
	TABLE 4.1: THE INDICATORS WHICH WILL BE USED TO MEASURE PROGRESS AGAINST THE OUTCOMES Outcome: Improve ability of all in the least affluent SIMD data zones (all domains) targeted by the respective Council to access jobs, education and services Remove: Limited data available. SHS includes 'Employed adults(16+) car/van commuters – could they use public transport' . This question could be repeated in a separate survey aimed at the regions least affluent areas. Replace with Indicator: % who feel the journey to or from work/ college/university could be carried out using public transport Baseline:			74
	% who feel the journey to or from work/ college/university could	Least affluent SIMD quintile	Average (mode)	

[14] Child Poverty Act

Table 1: Amendments agreed at Partnership Meeting of 12th December 2023				
Proposed amendment	**Proposed text**			**New page**
	be carried out using public transport[15]			
	Angus	27%	76%	
	Dundee	23%	29%	
	Perth & Kinross	31%	41%	
	Stirling	28%	55%	
	Indicator: Further indicators to be developed, including: • Frequency of services outside peak hours between least affluent areas and jobs, education and services • Cost of travel			
HOW WE WILL DELIVER THE STRATEGY				
Reflect the need to recognise the underlying (non-transport) circumstances which underpin peoples travel behaviours and add to the complexity and scale of the behaviour change issue	**3.1.1 How this will affect individuals and busineses?** This includes ensuring that the move towards net zero reduces social inequalities and does not exacerbate them. *new bullet after 2nd bullet point* • Changing behaviour can be difficult, and providing transport solutions alone may not in themselves enable change. People may not have a choice about			33

[15] Tactran Representative Public Opinion Survey (Taylor McKenzie Research 'Tactran Quantitative Research Report' October 2023)

Table 1: Amendments agreed at Partnership Meeting of 12th December 2023		
Proposed amendment	**Proposed text**	**New page**
	where and when they travel. This will inevitably restrict their travel options. People will also have to weigh up the costs of different options. These complexities are recognised, and underline the need to view the problems and solutions within a wider societal context.	
Confidence in delivery Board report 3.29 Secondly, highlighting the need to identify governance arrangements that ensure that programmes are prioritised and co-ordinated to deliver integrated solutions. For example, a senior management co-ordination group **Reflect importance of electric and digital networks**	**3.1.2 How this will affect the regional partners?** *Amend 7th bullet point to:* • As well as the co-ordination (aligning priorities and programmes) required to provide integrated solutions, finding solutions to the big issues (i.e. improving public transport; decarbonisation of transport; demand management required to support 20% car km reduction target) requires effective collaborative working across the respective transport agencies (including the third and private sectors). The regional Partners will accordingly identify partnership arrangements that ensure programmes are prioritised and co-ordinated to deliver integrated solutions. *bullet "Furthermore, addressing….provided locally." Amend to* - Addressing the issues cannot be resolved by the transport agencies alone: ○ People need to get to healthcare, to education, to employment. Only by working together can relevant agencies identify the co-ordinated activity required to support the user across all of their journey. The users' journey does not start with "where do I catch the bus"…it starts with "I want to go to college". The first step in this process – and one which is essential to deliver the 20min/liveable neighbourhoods principle – is that all public sector partners need to consider how services are to be provided locally. ○ The digital and electricity networks are critical to how we access services and how our transport networks work. Transport agencies must ensure that our	35

Table 1: Amendments agreed at Partnership Meeting of 12th December 2023		
Proposed amendment	**Proposed text**	**New page**
	transport aspirations align with the capacity of both digital and electricity network providers.	
Introduce the 'Offer / ask' principle • Introducing the offer/ask principle in the RTS. This should highlight the national targets we aspire to support, and the bigger commitments for the partners included in the RTS, e.g.: ▪ Prioritising and co-ordinating activity (integrated solutions) to target those locations/populations where the most progress is required to make a difference against climate change / reducing inequalities targets ▪ Investigating new models of public transport provision ▪ Investigating charging mechanisms to encourage a modal shift ▪ Identify the gaps, and the activities to address these gaps in the RTS delivery plan.	**(*new text*) 3.1.3 The role of the Scottish Government** The Partnership are committed to achieving the targets set by the Scottish Government in relation to climate change; reducing inequalities; improving road safety; active lifestyles and air quality amongst others. In striving towards these targets the Partners will: ▪ Prioritise and co-ordinate activity to target those locations/populations where the most progress is required to make a difference against national targets ▪ Investigate with operators new models of public transport provision ▪ Investigate charging mechanisms to encourage a modal shift However, the work undertaken to develop this strategy suggests that is unlikely that a number of national targets will be achieved in the region within the existing resources and powers available to the Partners. Where gaps are identified between the 'best that the Tactran partners can do' and the aspiration of a national target, we ask that ongoing engagement with the Scottish Government and its officials be established to work together to help each other achieve these critical national aspirations.	37

<table>
<tr><th colspan="3">Table 1: Amendments agreed at Partnership Meeting of 12th December 2023</th><th></th></tr>
<tr><th>Proposed amendment</th><th colspan="2">Proposed text</th><th>New page</th></tr>
<tr><td rowspan="6">○ Include in the RTS a simple ‘risk register’ which would identify the external factors (i.e. outwith the partners control) which would be likely to have an impact on the achievement of the national targets (this could be included as an appendix)</td><td colspan="2">New table to be included</td><td rowspan="6">35</td></tr>
<tr><td>Target</td><td>Risks</td></tr>
<tr><td>Promote Ultra Low Emission Vehicle adoption to achieve 72.7% of the 56% reduction in CO_2 by 2030</td><td>Attractiveness of ULEV to purchasers (public and fleet) due to:
• Cost
• Confidence and ease of charging EVs</td></tr>
<tr><td>Reduce car kilometres driven in line with the national target of reducing car km driven by 20% by 2030 (compared to 2019 levels)</td><td>• Ability to provide alternatives for those trips that generate most milage by 2030
• Restraint measures likely to be required. Ability to implement appropriate measures in timescales</td></tr>
<tr><td>Meet the targets set out in Scotland's Road Safety Framework to 2030</td><td>• Impact of other programmes, e.g.
○ Reduced road maintenance
• Resources, particularly in terms of
○ Enforcement
○ Ability to make sufficient infrastructure improvements</td></tr>
<tr><td>Emissions are reduced to below National Emission Ceiling Directive thresholds in Crieff, Dundee City and Perth City</td><td>• Speed of adoption of ULEV
• Ability to provide sustainable alternatives to the car
• Ability to introduce restraint measures within timescales</td></tr>
<tr><td>(For the least affluent SIMD data zones) achieve the Transport</td><td>• Ability to ensure that sufficient destinations are within walking or cycling distance</td></tr>
</table>

Table 1: Amendments agreed at Partnership Meeting of 12th December 2023			
Proposed amendment	**Proposed text**		**New page**
	Scotland's forecasts for journeys walked and cycled by 2030	• Ability to make sufficient improvements to the pedestrian and cycling environment • Ability to encourage behaviour change	
	Support child poverty targets by addressing the lack of access to affordable transport	• Ability to provide transport services outside core public transport hours • Ability to improve affordability for the target groups	
Strengthen text in relation to investigating new models with operators include reference to community transport operators	*Our transport networks cannot work without a strong and reliable public transport network* "operators (including community transport operators) have agreed to work in partnership with Tactran and the Councils to explore future models of provision through the bus alliances"		38
Impact on communities of car charging mechanisms charging must not undermine local centres / viability of living in rural areas	Current text: *Not make it more attractive to visit centre(s) further away. Co-ordination of measures across local authority boundaries will be required* Proposed text: Must not undermine the viability of a location (whether that be a local centre if it becomes cheaper to travel to a centre further away; or the viability of living in a rural area by significantly adding to the relative costs of living in a rural area). Co-ordination of measures across local authority boundaries will be required to achieve this.		39 and 40

Table 1: Amendments agreed at Partnership Meeting of 12th December 2023		
Proposed amendment	**Proposed text**	**New page**
The 'polluter pays' principle as included in Scotland's Guiding Principles on the Environment: Statutory Guidance – Parliamentary Statement and Analysis Report	**3.3 Reducing car kilometres driven** *New sentence after 'any charging mechanism' bullets* Our representative public opinion survey suggests that there is strong public support for following these principles when investigating how to reduce car km[16]. *New sentence at end* Recent consultation on Scotland's Guiding principles on the Environment[17] has confirmed the appropriateness of: - The precautionary principle as it relates to the environment - The principle that the polluter should play Both these principles are useful to be conscious of when considering options to help reduce car mileage.	39
Relocate section *3.3 Reducing car kilometres driven after section 3.1.3* and emphasise the relationship between improving public transport services and charging for car use	Introduce 'new models / charging mechanism' diagram (see below)	40

[16] Tactran Representative Public Opinion Survey (Taylor McKenzie Research 'Tactran Quantitative Research Report' October 2023)
[17] Scotland's Guiding Principles on the Environment: Statutory Guidance – Parliamentary Statement and Analysis Report

Table 1: Amendments agreed at Partnership Meeting of 12th December 2023		
Proposed amendment	**Proposed text**	**New page**
Reflect the proposals included in the Councils' draft Electric Vehicle Expansion Plans	**3.5 Decarbonising transport** Supporting the uptake of electric vehicles is key to the Scottish Government's Climate Change Plan and is aligned with the outcome of phasing out the need for new petrol and diesel cars and vans by 2030. Research commissioned by the Scottish Government suggests 72.7% of the 2030 interim transport CO_2 emissions target will be as a result of changing technologies which help decarbonise transport.[18] Both the scale and pace of investment in charging infrastructure will need to be accelerated to meet the anticipated demand over the coming years. The Scottish Government aims to grow the public charging network to at least 6,000 public charge points by 2026[19], with the expectation of leveraging private investment to complement and improve the current charging network. Angus, Dundee City, Perth & Kinross and Stirling Councils are each developing their Electric Vehicle Strategies and Infrastructure Expansion Plans, to identify and take forward the opportunities to work with the private sector to grow the public charging network within the region. These plans are identifying local and regional charge point needs, the investment requirements, as well as the best approaches to delivering collaborative investments with commercial charge point operators. Tactran and its constituent local authorities are open to operating different types of zero-emission technology in public sector, business and bus fleets which includes hydrogen fuel cell vehicles (FCEVs). FCEVs are less common at present, and the scale of their role in the future zero-carbon transport system is currently uncertain. However, infrastructure for fuelling FCEVs must also be considered to support their deployment	41

[18] Element Energy 'Decarbonising the Scottish Transport Sector' 2021

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

Table 1: Amendments agreed at Partnership Meeting of 12th December 2023		
Proposed amendment	**Proposed text**	**New page**
	as the technology becomes more readily available. Tactran and its constituent local authorities are currently engaged in a regional hydrogen project which will provide further insights into the requirements for integrating FCEVs to support the decarbonisation of transport.	
Confidence in delivery: identification of priorities / focus of activity **Reflect rural tourism and car dependency issues** **Reflect appropriate geographies, such as travel to work areas and National Parks** **The relevance of these priorities (para 3.28) to localities can be reflected in the Rural / Urban / Strategic Corridor Integrated Solutions sections.**	**3.2.1 Integrated solutions: rural areas** 37% of the population in the region live in rural areas[20] **Residents often have to travel further** for services - **increasing costs**: increasing the risk of transport poverty - **limiting opportunities**: for example, being restricted to arriving later and leaving earlier will reduce the courses you can attend at college Most of our rural areas, be it coast or mountains, are also **popular tourist destinations** attracting significant numbers of visitors (this includes areas within two national parks). **81% of car km driven in the Region is to, from or between our rural areas** helping contribute to the higher transport CO2 emissions per capita in Angus, Perth & Kinross and Stirling compared to the national average. Low population densities mean it is **difficult to provide extensive and regular public transport**. **Consequently, many residents and visitors rely on the car**. However, it would be wrong to assume all households have access to a car.	43

[20] Scottish Government Urban Rural Classification 2020

Table 1: Amendments agreed at Partnership Meeting of 12th December 2023		
Proposed amendment	**Proposed text**	**New page**
	To help people access services in their local centres and nearby towns and cities (and conversely help visitors and workers access our rural areas); **and to reduce car km** - there is a need to: - **enable people to access interchange points by foot, bike and public and shared transport** but also by car (as sufficient public or shared transport options are unlikely to be able to be provided to meet all travel demands in rural areas) in their local centre and in (or adjacent to) nearby towns and cities - **improve bus, coach and train services** between our centres **Provide more services locally** <u>Areas in which people live and work</u> TayCities: **West and North Perthshire; Angus Mearns; Angus Glens; Kinross-shire** Forth Valley: **Central and East Stirling; Stirling Eastern Villages** South Aberdeenshire: **Angus Mearns; North Angus** Glasgow: **West Stirling** Breadalbane: **North Stirling; West and North Perthshire** Fife: **Kinross-shire**	
	3.2.2 Integrated solutions: urban areas	45

Table 1: Amendments agreed at Partnership Meeting of 12th December 2023		
Proposed amendment	**Proposed text**	**New page**
	63% of the population in the region live in urban areas[21]. Most (but not all) of **our least affluent areas, and most of our concentrations of poor health are within our urban areas**[22]. These centres are the focus of many of the trips from around the region, concentrating traffic and **creating problems of air quality and journey time reliability**, including on those strategic routes which pass through, or by, our urban areas. While many trips within our urban areas may be short, cost, convenience, time constraints and physical abilities mean that many travel by car rather than walk, cycle and use public transport. There is a need to: - **promote and improve active and sustainable travel opportunities, especially for our least affluent communities**, to connect everyone to jobs; education and training; local services (such as shops and open space); and health facilities - **reduce the traffic entering and leaving our towns** by enabling people to transfer to public transport In doing so, we will help reduce the adverse impacts of traffic on our communities and on local and national economies. Areas in which people live and work TayCities: **Arbroath, Dundee, Forfar, Montrose, Perth** Forth Valley: **Stirling (including Bridge of Allan)** South Aberdeenshire: **Montrose**	

[21] Scottish Government Urban Rural Classification 2020
[22] Scottish Index of Multiple Deprivation 2020

Table 1: Amendments agreed at Partnership Meeting of 12th December 2023		
Proposed amendment	**Proposed text**	**New page**
	3.2.3 Integrated solutions: strategic corridors The region lies at the heart of Scotland. Residents and visitors travel to and from the region from elsewhere in Scotland, and in particular to/from the neighbouring cities of Aberdeen, Dunfermline, Edinburgh, Glasgow and Inverness. In addition, most vehicular and rail trips to or from Northeast Scotland and the Highlands and Islands will pass through the region. Whilst ensuring that many centres in the region are well served by strategic road and rail (a notable exception being rail between Perth and Edinburgh), conversely the through traffic contributes to the air quality, noise and journey time reliability issues at and around Dundee, Perth and Stirling affecting local and national economies and local communities. There is a need to: - **Reduce the impact of pinch points on these strategic networks** for local and national freight, bus and coach services - **Improve public transport on these strategic corridors** within and through the region. - **Provide opportunities for people to access these strategic coach and rail services** at the earliest opportunity to reduce car km both across Scotland and neighbouring areas	46

Table 1: Amendments agreed at Partnership Meeting of 12th December 2023		
Proposed amendment	**Proposed text**	**New page**
	Areas in which people live and work TayCities: Rail: Aberdeen/Inverness to Edinburgh/Glasgow; Road: M9 / M80 / M90 / A9 / A90 / A85 Forth Valley: Rail: Aberdeen/Inverness to Glasgow; Alloa/Dunblane to Edinburgh/Glasgow Road: M9 / M80 / A9 / A90 / A82 / A84 / A85 South Aberdeenshire: Road: M9 / M80 / M90 / A9 / A90 Breadalbane: West Highland Line; Road: A82 / A84 / A85 Fife: Road: M90	
ACTIONS		
Note how the actions will be identified and delivered through different delivery plans e.g. Bus Service Improvement Plan; LEZ; Council Local Transport Strategies etc	***3.4 Actions*: Introduction** *Delete:* Following consultation on this draft RTS, the final RTS will be accompanied by a Delivery Plan. *New text*:	48

Table 1: Amendments agreed at Partnership Meeting of 12th December 2023		
Proposed amendment	**Proposed text**	**New page**
Note the need to consider the impacts of particular measures on particular groups as highlighted in the SEA and Impacts Assessment reports. The identification of the particular measures relevant to the particular measures can be included in the RTS Delivery Plan	Actions have been identified that help deliver each outcome identified in Table 2.1. These actions have been grouped into nine delivery themes. Fig 3.6 below highlights the nine delivery themes and how they relate to the outcomes and the strategic objectives (the diagram also highlights how many delivery themes will help address more than one outcome). Each of the tables 3.1-3.9 below reflect the nine delivery themes and their respective actions. For each action, the tables also suggest how and where the respective agencies could deliver the action in respect to the different geographies of rural areas, urban areas and strategic corridors. Further detail on how the actions are to be taken forward will be included in the RTS Delivery Plan which will be developed to accompany the Strategy. This includes identifying: - Responsible partner(s) - Target locations and populations - Any appropriate metrics - Potential risks and mitigation (including opportunities for bio-diversity enhancement) - Relevant guidance and best practice - Where actions are likely to be included in specific theme or locality action programmes (e.g. Bus Service Improvement Partnerships; Low	
Reflect the need for interventions to follow best practice in implementation to protect and enhance bio-diversity when possible		

Table 1: Amendments agreed at Partnership Meeting of 12th December 2023		
Proposed amendment	**Proposed text**	**New page**
	Emission Zones and Air Quality Management Plans; Local Transport Strategies or plans; NHS and National Park Authority programmes etc) The delivery themes have been ordered to reflect the principles of the sustainable investment hierarchy contained in Scotland's Second National Transport Strategy. This approach recognises the need to make as much progress in the first instance with the resources we have.	
Reflect MaaS tools can enable new transport services	**Action 4 All agencies will promote awareness and advantages of sustainable travel** Notes: (new text) - MaaS tools offer the opportunity to not only promote sustainable travel, they can also help improve the viability of interventions (particularly shared transport measures) **Action 22 Tactran, Councils and public sector agencies will investigate and promote initiatives that allow the easier planning and booking of journeys** MaaS products can provide both improved journey planning and provide smart, integrated ticketing. They can also help promote, and potentially improve the viability of, new transport services	54 and 64
Action 5: note role of Transport Scotland for those communities on national networks	**Action 5: ~~Councils Respective roads authorities will utilise demand management measures to promote sustainable travel and reduce the impact of travel on communities~~**	53

Table 1: Amendments agreed at Partnership Meeting of 12th December 2023					
Proposed amendment		**Proposed text**			**New page**
		Roads authorities will reduce the impact of traffic on communities and promote sustainable travel through demand management measures			
Reflect co-ordination of timetables along with other aspects of interchange		**Action 17 Tactran and the Councils will work with operators to improve the frequency, comfort, cost and integration of public transport services**			61
HOW WE WILL MEASURE SUCCESS					
Update data using ▪ Census and Scottish household survey data ▪ Sustrans Hands-up Survey data	% of vehicles which are EV and low emission vehicles		% Cars (Q1 2023)	% All vehicles (Q3 2023)	69
		Angus	5.5%	1.7%	
		Dundee	5.3%	2.3%	
		Perth & Kinross	6.0%	2.2%	
		Stirling	18.0%[23]	12.5%	
	estimated Transport kt $C0_2$ emissions per capita	2021	Kt $C0_2$ / capita		69
		Angus	1.99		
		Dundee	1.23		

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

Table 1: Amendments agreed at Partnership Meeting of 12th December 2023					
Proposed amendment		**Proposed text**			**New page**
		Perth & Kinross	3.31		
		Stirling	2.64		
	% road mileage that is freight	*% mileage which is freight traffic 2022*			70
		Angus	27.8%		
		Dundee	18.9%		
		Perth & Kinross	28.9%		
		Stirling	25.0%		
	Rail services cancelled/delayed as a consequence of weather	In 2023 160 services serving the Tactran region were partly cancelled, and 251 fully cancelled due to adverse weather. 1736 services were delayed due to adverse weather			70
	people killed people seriously injured	2018-22 average[24]	Killed	All severities	71
		Angus	2	154	
		Dundee	1	156	

[24] Reported Road Casualties 2022 NB No local datasets other than KSIs

Table 1: Amendments agreed at Partnership Meeting of 12th December 2023					
Proposed amendment		**Proposed text**			**New page**
		Perth & Kinross	7	212	
		Stirling	5	139	
	Pedestrian and cycle survey data in least affluent SIMD data zones	Normal method of travel to work/education 2023[25]	Least affluent 20%		73
			Walk	Cycle	
		Angus	23%	5%	
		Dundee	8%	3%	
		Perth & Kinross	21%	5%	
		Stirling	12%	3%	
	% of population within the least affluent SIMD data zones within 5min walk of their local	2019	20% least affluent SIMD data zones	Whole Council area	73
		Angus	0	65	
		Dundee	46	48	
		Perth & Kinross	0	66	

[25] Tactran Representative Public Opinion Survey (Taylor McKenzie Research 'Tactran Quantitative Research Report' October 2023)

Table 1: Amendments agreed at Partnership Meeting of 12th December 2023					
Proposed amendment		**Proposed text**			**New page**
	green or blue space[26]	Stirling	0	84	
	Congestion delays experienced by drivers[27]	% delayed	2017-2019		76
		Angus	9%		
		Dundee	13%		
		Perth & Kinross	8%		
		Stirling	15%		

[26] Scottish Household Survey Table 10.15: Walking distance to nearest useable green or blue space

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

Table 2: Other changes proposed by officers		
Proposed amendment	**Proposed text**	**New page**
Update	If you require help in reading this strategy, for example a version in an easy read format or in an alternative language, please leave a message at Info@tactran.gov.uk or 01738 475775	**2**
EXECUTIVE SUMMARY		
Improving sentence	In discouraging car use to support climate change targets, aims to ensure it is co-ordinated across the respective travel to work areas in the region: • Improving alternatives to the car in those corridors/locations, and for those trips, which generate the most kilometres driven by car	5
Update	Achieving these aspirations, especially those that support the targets included in the Climate Change Act which all four Councils have committed to, is a significant challenge, and one that will not be easy for any of us. Whilst this strategy sets out where we need to focus activity to support the national targets and aspirations, we need to: • Continue to understand the implications of the scale of change for our communities, our businesses, our visitors and those that travel through the region, to help design and bring forward solutions which are fair and equitable • To identify what Tactran and its constituent Councils can do, but also where further support and joint work with the Scottish Government is required to meet the national climate change and social inclusion targets	9

Table 2: Other changes proposed by officers		
Proposed amendment	**Proposed text**	**New page**
CONTENTS		
Update	Tactran Representative Public Opinion Survey (Taylor McKenzie Research 'Tactran Quantitative Research Report' October 2023 SEA Integrated Impact Assessment Remove: How to comment on the draft Tayside and Central Scotland Regional Transport Strategy and impact assessment reports	10
CONTEXT		
Correction	**Figure 1.1: The strategies which the RTS seeks to support, and the plans and programmes which are vital to delivering the RTS** Regional and Local Strategies and Frameworks: Tay Cities…. /Local Outcome Improvement Plans / National Park Partnership Plans and Local Development Plans / Regional Economic…..	13
Update	**Addressing climate change** • For residents of Angus, Perth and Kinross and Stirling, whilst only 26%-29% of personal trips are over 10km, these trips account for 81%-84% of total km driven. In Dundee 93% of the trips are under 10km, where this accounts for 60% of km driven[vii] • Approximately 4.5% of vehicles registered in the region were hybrid, electric or ULEV in 2023[ix]	16

Table 2: Other changes proposed by officers		
Proposed amendment	**Proposed text**	**New page**
Reflecting consultation response	**Impact on communities** • The number of transport services serving a community, and the resilience of these in the face of adverse weather events, will have an impact on the resilience of the community itself	16
Update	**Freight** • Freight traffic accounts for 26% of the vehicle mileage in the Region[xi] • 24% of UK freight with an origin or destination in Scotland starts, ends or passes through the Region[xii]	16
Additional supporting info	**Further information** See also Public Health Scotland Transport Poverty Jan 2024 and Joseph Rowntree Foundation 'Poverty in Scotland 2023'	20
WHAT WE WANT TO ACHIEVE		
Improve clarity of wording	**Table 2.2: Where we need to get to and the scale of the challenge** Promote Ultra Low Emission Vehicle (ULEV) adoption to achieve 72.7%[28] of the target of a 56% reduction in transport CO_2 emissions by 2030	26
Improve accuracy of statement	82% of car mileage is generated to, from or between our rural areas and towns	26
Correction	**Table 2.2: Where we need to get to and the scale of the challenge** Lack of access to affordable transport is identified as a key driver of Child Poverty.	28

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

Table 2: Other changes proposed by officers		
Proposed amendment	**Proposed text**	**New page**
Update	**Table 2.2: Where we need to get to and the scale of the challenge** • Improve public transport journey time and journey time reliability on key bus corridors in accord with Tayside and Forth Valley Bus Alliances Strategic Business Cases developed through the Bus Partnership Fund.	29
Update	Remove footnote as no longer necessary "To monitor this outcome, a survey repeating the SHS question '% of employed adults who could use public transport for work' would need to be undertaken in the regions' least affluent areas"	28
Additional supporting info	Further information Jacobs 'Tactran RTS Targets: baseline and options' September 2023 HITRANS Fish n Trips December 2018 Mobility and Access Committee for Scotland 'Transport to Health and Social Care' December 2019	29
HOW WE WILL DELIVER THE STRATEGY		
Better wording	**3.1 Step changes in approach required** This scale of change requires significant changes in how we travel and service provision for individuals, businesses, the Councils and other delivery agencies	31
More accurate wording	Consultation responses suggest that the public has lost confidence in bus travel in the Region	

Table 2: Other changes proposed by officers		
Proposed amendment	**Proposed text**	**New page**
ACTIONS		
Correction	Action 1 *Development plans promoting land use patterns that reduce the need to travel, and enable travel by sustainable modes* should be across both rural and urban categories	51
Additional supporting info	Table 3.2: Reducing the need to travel by car through the location of development and services NHS Scotland climate emergency and sustainability strategy: 2022-2026 West Stirlingshire, Dumbarton and Helensburgh Market	52
Additional supporting info	Table 3.3: Influencing travel choices and behaviour • Transport Scotland A route map to achieve a 20 per cent reduction in car kilometres by 2030 • Reducing car use through parking policies: an evidence review (climatexchange.org.uk) • Reducing speed limits can help reduce carbon and particulate emissions University of Oxford CE Delft Transport for London • Transport Scotland 'Developing an Active Nation'	54
Additional supporting info	Table 3.4: Decarbonising transport • Scotland's Railway 'Sustainability'	55
Additional supporting info	Table 3.5: Improving safety • Scotland's Road Safety Framework to 2030	57

Table 2: Other changes proposed by officers		
Proposed amendment	**Proposed text**	**New page**
	• Scotland's Road Safety Framework to 2030 - Delivery Plan 2021/22	
Clarification	**Action 14** Protection of road and rail networks from flooding / landslips	59
Additional supporting info	Table 3.8: Improving sustainable travel opportunities • Action 15: Regional Active Travel Network (arcgis.com) • Action 20: Freight transfer and consolidation hubs within the region to reduce road freight and also allow freight to be moved by rail and water. LaMilo SURFLOGH	62
Additional supporting info	Table 3.9: Improving access to public transport • Tactran ENABLE • Integrated Mobility Partnership	64
Correction	**Action 23** (iv) Grade separation of the A9 between Kier and Inverness (Kier, Auchterader) (vi) A82 Inverarnan – Tarbert	65
Update	delete Further information During autumn 2022, we sought your views on the proposed objectives and outcomes; the step changes required; and the potential interventions to be included in the RTS via a	

Table 2: Other changes proposed by officers		
Proposed amendment	**Proposed text**	**New page**
	conversation about changing how we travel (Consultation Summary) and also quantative public opinion research.	
Update	**Impact Assessments** It is both a duty and best practice for impacts assessments to be undertaken to inform the strategy. These have included: The conclusions of the impact assessments have been broadly supportive of the RTS. However, the principal issues raised by the draft impact assessments up to now have been: • Many of the possible benefits of the strategy in terms of it mitigating against social or environmental issues will only be realised if the strategy is delivered. • The potential for restrictive measures to help reduce car use having a greater impact on the least affluent and more vulnerable groups in society	67
HOW WE WILL MEASURE SUCCESS		
Update	To understand if the strategic objectives of the strategy are being achieved within the desired timescales, it is vital that the strategy includes a robust monitoring framework. Table 4.1 below identifies indicators which can help track progress through available information sources. We will continue to improve the Monitoring Framework and prepare a monitoring report every other year during the lifetime of this strategy. Please note, not all the indicators have highlighted the latest set of data in early 2024 as the baseline as some data during representing issues during the Covid-19 pandemic may not have been representative of 'normal' conditions. Further information is available in the RTS Monitoring Framework.	69

Table 2: Other changes proposed by officers		
Proposed amendment	**Proposed text**	**New page**
Update	**Mode share travel to school in least affluent SIMD data zones** Data to be included in Monitoring Framework	73
Correction	% 16-24yr olds able to access a range of employment opportunities within 40mins / 60mins by public transport	74
Update	**Journey times to key destinations / reliability** Data to be identified and included in Monitoring Framework	77
CONTACT PAGE		
New text	For further information, please Visit the RTS page on the Tactran website https://tactran.gov.uk/ or Contact: Info@tactran.gov.uk or 01738 475775	78

1.4 Key Issues: Climate Emergency

The Scottish Government and all four Councils in the region have declared a Climate Emergency[31]. This has resulted in targets in the Government's Climate Change Action Plan[32] to reduce transport carbon emissions (compared to 1990) by 56% by 2030 and net zero by 2045 by:

- **Decarbonising transport**
- **Reducing the car km driven**

Work undertaken for Transport Scotland suggests that climate change will only be met by[33]

- **Rapid introduction of low and zero-emission technologies**
- Reducing passenger and freight **vehicle kilometres travelled** in the region through:
    - modal shift
    - reduced travel through shorter trips and trip avoidance

Across the region **there is strong public support for combating climate change**[34]:

- 80% see climate change as an immediate and urgent problem
- 85% believe they have a personal duty to combat climate change; but also 74% believe it is primarily the government's responsibility
- 53% would be willing to change how they travel to help address climate change

Table 1.1 Climate action targets

Targets	The scale of the challenge
Decarbonisation of transport, interim targets includes: • phasing out need for new petrol or diesel light commercial vehicles in public bodies by 2025 • phasing out need for any new petrol or diesel vehicles in public sector fleets by 2030 • phasing out need for new petrol or diesel cars or vans by 2030 • removal of diesel passenger trains from the Scottish network by 2035	Approximately 4.5% of vehicles registered in the region were hybrid, electric or ULEV in 2023[29] If sales rates are maintained, ULEVs are expected to be only be approximtaley 13% of the car fleet by 2030[30]
	Electrification between Edinburgh / Dunblane and Aberdeen / Inverness required. Alternative fuels required on West Highland Line
Reducing car km by 20% by 2030 compared to a 2019 base	This means reversing 29+ yrs of growth in car km in 6 years 82% car mileage is generated to, from or between our rural areas and towns. Over ¾ of personal mileage is generated by trips over 10km

[29] DfT / DVLA Vehicle licensing statistics

[30] Jacobs 'Tactran RTS Targets: Baseline and Options' September 2023

[31] Angus Council Transition to Net Zero Action Plan: 2022 to 2030 Dundee Climate Action Plan Perth and Kinross Climate Change Strategy and Action Plan Stirling Climate and Nature Emergency Plan, 2021–45

[32] See also Transport Scotland Mission Zero for transport

[33] Decarbonising the Scottish Transport Sector Final Report for Transport Scotland

[34] Tactran Representative Public Opinion Survey 2023. See also SHS 2021, where 83% believe Climate change is an immediate and urgent problem

1.5 Key Issues: Social exclusion

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

- **Least affluent areas**: Table 1.2 highlights the % of LA population living within the 20% least affluent SIMD data zones
- **Rural isolation**: 20.7% of Angus, 20.4% of Perth and Kinross and 18.2% of Stirling data zones are in the 10% most access deprived geographies as defined by the Scottish Indices of Multiple Deprivation

Table 1.2: Population living within the 20% least affluent SIMD data zones in Scotland[2]

	Pop in 20% least affluent areas	% of pop in 20% least affluent areas
Angus	9,291	8%
Dundee	55,840	38%
Perth & Kinross	8,508	6%
Stirling	11,110	12%

- **Disability**[35]: Approximately 9% of the region's population are limited by a long-term health problem or disability[36]
- **Discrimination** as a result of gender; pregnancy / maternity; sexual orientation; ethnicity; religious belief, disability or age
- **Discrimination** as a result of low income[37], low wealth[38], material deprivation[39] or socio-economic background[40].

For many, more than one of the above characteristics apply, compounding problems.

Child poverty

To help address inequalities the Government has set ambitious targets for child poverty. The lack of affordable and accessible transport is one of the drivers of child poverty[1].

Table 1.3: Child poverty targets

Scale of the challenge	Child poverty rates in 2022[41]			
Child poverty targets include:	Angus	Dundee	Perth & Kinross	Stirling
By 2030, less than 10% of children should be living in relative poverty	20.6%	24.5%	17.9%	16.6%
By 2030, less than 5% of children should be living in absolute poverty	16.4%	19.0%	14.2%	13.4%

[35] Transport Scotland Disability and Transport 2021
[36] Scotland's Census 2011
[37] Low income: cannot afford to maintain regular payments such as bills, food, clothing
[38] Low wealth: enough money to meet basic living costs and pay bills but have no savings to deal with any unexpected spends and no provision for the future
[39] Material deprivation: being unable to access basic goods and services i.e. financial products like life insurance, repair/replace broken electrical goods, warm home, leisure and hobbies
[40] Socio-economic background: disadvantage that can arise from parents' education, employment and income – in other words, social class
[41] Department for Work and Pensions: Children in low income families: local area statistics

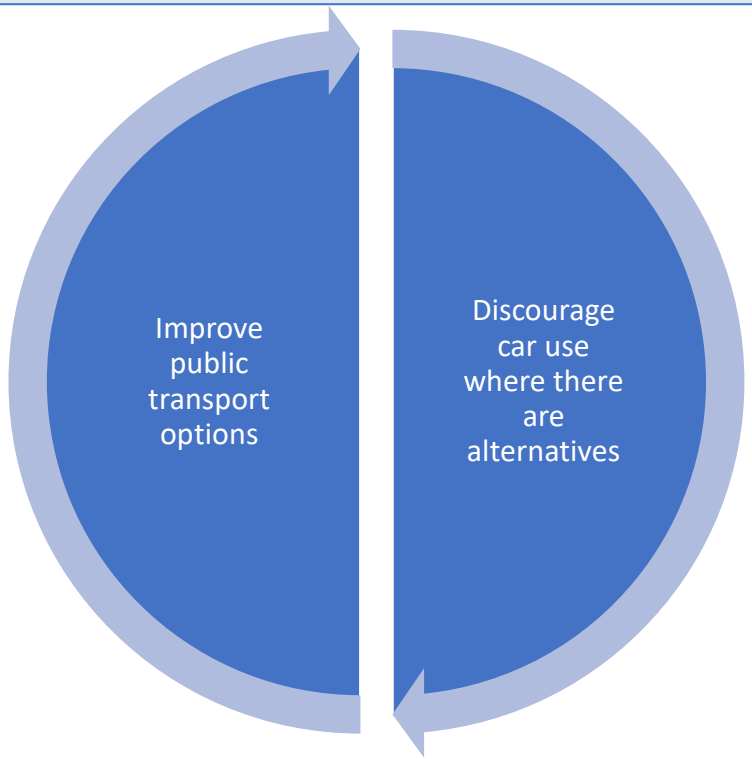
New models of bus provision need to be explored to address user confidence, integration and affordability.

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

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

Charging mechanisms need to follow provision of realistic alternatives

Improved public transport will provide options for those with and without access to a car



Whilst the most affluent drive the most, the least affluent are most likely to be affected by an insensitive charging regime

Charging mechanisms can help fund alternatives

Any charging mechanism must:

- Follow sufficient improvement in alternatives to the car
- Have an impact on kilometres driven
- Must not undermine the viability of a location (whether that be a local centre if it becomes cheaper to travel to a centre further away; or the viability of living in a rural area by significantly adding to the relative costs of living in a rural area). Co-ordination of measures across local authority boundaries will be required
- Not increase transport poverty
- Be able to be responsive to changes in fuel duty or its successor
- Recognise that people need to travel, and in rural areas the only way for many people to access their closet facilities (including public transport interchanges) is currently by car

Appendix D

Tayside and Central Scotland Regional Transport Strategy 2024-2034

Draft for submission to the Minister for Transport

January 2024

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

Foreword

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

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

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

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

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

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

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

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

Depute Provost Andrew Parrott, Chair Tactran

Executive Summary

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

Through stakeholder engagement we have:

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

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

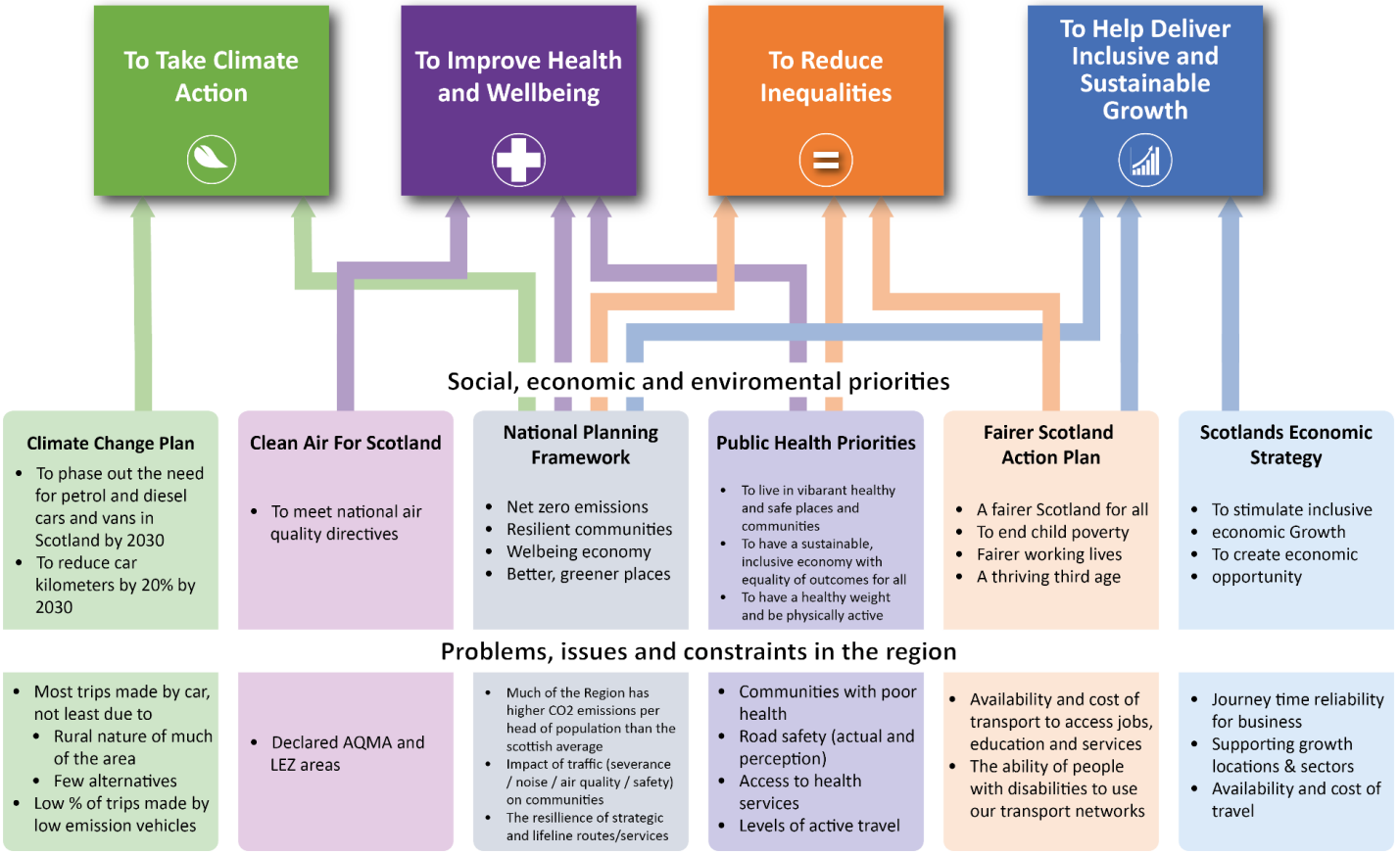


Fig. 1: Relationship between strategic objectives and key issues

The strategy recognises:

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

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

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

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

TABLE 1: WHERE WE NEED TO GET TO AND THE SCALE OF THE CHALLENGE			
Key RTS Outcomes	Proposed Regional Target	Scale of the challenge	What needs to be done
Reduce estimated CO_2 emissions from transport in the region	Reduce emissions from transport in line with the national target of a reduction of 56% by 2030 (compared to 1990)	Angus, Perth & Kinross and Stirling all have higher transport CO_2 emissions per head than the Scottish average If current trends are maintained, it is likely that a reduction of only 11% may be likely.	Decarbonisation of vehicle transmissions Reduce mileage driven
Increase the share of EV and low emission vehicle use	Promote Ultra Low Emission Vehicle (ULEV) adoption to achieve 72.7%[1] of the target of a 56% reduction in transport CO_2 emissions by 2030	Approximately 4.5% of vehicles registered in the region were hybrid, electric or ULEV in 2023	Rapid introduction and adoption of low and zero-emission technologies
Reduce car kilometres driven	Reduce car kilometres driven in line with the national target of reducing car km driven by 20% by 2030 (compared to 2019 levels)	National target means reversing 29+ yrs of growth in car km in 6 years 82% of car mileage is generated to, from or between our rural areas and towns Over ¾ of personal mileage is generated by trips over 10km	Improve alternatives for longer trips Improve access to public transport interchange Facilitate shorter trips through more services being delivered locally Discourage car trips where there are reasonable alternatives and facilitate shorter trips Improve access to public transport

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

TABLE 1: WHERE WE NEED TO GET TO AND THE SCALE OF THE CHALLENGE			
Key RTS Outcomes	Proposed Regional Target	Scale of the challenge	What needs to be done
Reduce fatalities and injuries	Meet the targets set out in Scotland's Road Safety Framework to 2030[2]	Any number of fatalities or casualties are too many. While good progress has been, and continues to be, made across most of the region in the last 10years, close attention needs to continue to be paid to longer term trends	Reduce traffic speeds and consider engineering solutions to address identified safety concerns Provide road safety education and campaigns
Increase the levels of walking and cycling in the least affluent SIMD datazones	For the least affluent SIMD data zones achieve Transport Scotland's[3] forecasts for average proportion of journeys walked and cycled by 2030[4] ▪ Large urban areas: 30% walk / 24% cycle ▪ Other urban areas: 24% walk /19% cycle ▪ Accessible small towns: 26% walk 13% cycle	The current average proportion of journeys walked / cycled are: • Large urban areas: 24% walk / 1.5% cycle • Other urban areas: 19% walk / 0.4% cycle • Accessible small towns: 20% walk / 0.5% cycle Within existing parameters, walking can be expected to increase in the least affluent communities by an additional 1% point, and cycling by 2-4% points	Improve walking and cycling opportunities to local facilities

[2] Scotland's Road Safety Framework to 2030 indicators

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

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

TABLE 1: WHERE WE NEED TO GET TO AND THE SCALE OF THE CHALLENGE			
Key RTS Outcomes	Proposed Regional Target	Scale of the challenge	What needs to be done
Reduce transport emissions in declared air quality management areas	National Emission Ceiling Directive[5] thresholds are reflected in the Crieff, Dundee City and Perth City Air Quality Management Plans and Dundee Low Emission Zone. Including. • NO_2 annual mean (not to exceed 40µg m-3) • number of NO_2 exceedances (200µg m-3 not to be exceeded more than 18 times a year)	Our towns & cities serve large rural hinterlands. 60% of trips made by those living in the region are by car (2019)	Support the introduction and adoption of low and zero-emission technologies Reduce the number of car journeys in our towns through promoting walking, cycling and public transport
Improve ability of all in the least affluent SIMD data zones targeted by the respective Council to access jobs, education and services	The ability to access services is influenced by a number of factors including availability and awareness of services; cost; difficulties in planning and undertaking multi-stage / multi-modal journeys etc. There are limited data sources to track ability of the target groups to access jobs, education and services. Whilst the following target is used to support this subject, it is acknowledged that a wider set of indicators that drive progress are required (see Section 4 for a fuller range of indicators) % of employed adults who could use public transport for work in least affluent	Lack of access to affordable transport is identified as a key driver of Child Poverty. Limited public transport services in many localities and limited ability to influence commercial fares Centralisation of public services. Location of services in 'out-of-centre' locations.	Improve public and shared transport opportunities Improve ability to access and use public and shared transport opportunities

[5] National Emission Ceilings Directive

TABLE 1: WHERE WE NEED TO GET TO AND THE SCALE OF THE CHALLENGE			
Key RTS Outcomes	Proposed Regional Target	Scale of the challenge	What needs to be done
	areas to be equal to or better than the average for the Council area[6]		
Improve journey times and journey time reliability on strategic road and rail routes to key destinations for (a) public transport (b) freight	• Improve public transport journey time and journey time reliability on key bus corridors in accord with Tayside and Forth Valley Bus Alliances Strategic Business Cases developed through the Bus Partnership Fund. • Ensure journey time reliability to key freight origins/destinations remains with 95% of average journey time	The region is both peripheral to the central belt, as well as accommodating almost all surface trips to North-East Scotland and the Highlands and Islands	Reduce the number of trips passing through the pinch points on our strategic routes

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

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

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

[6] To monitor this outcome, a survey repeating the SHS question '% of employed adults who could use public transport for work' would need to be undertaken in the regions' least affluent areas

Contents

1.Context

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

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

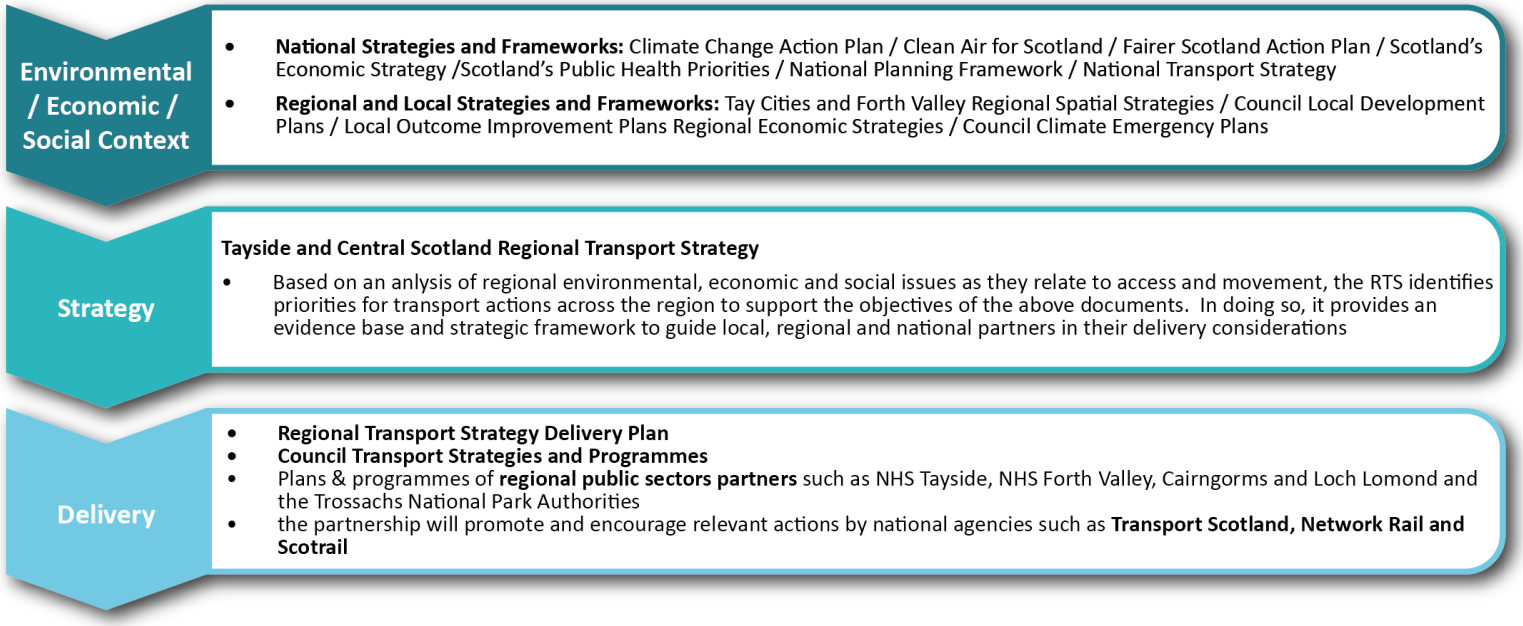
It provides a unique and complementary role to support local and national strategies, focusing on regionally significant issues. Figure 1 highlights the strategies it seeks to support, and the plans and programmes which are vital to delivering the RTS.

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

The strategy seeks to:

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

Figure 1.1: The strategies which the RTS seeks to support, and the plans and programmes which are vital to delivering the RTS



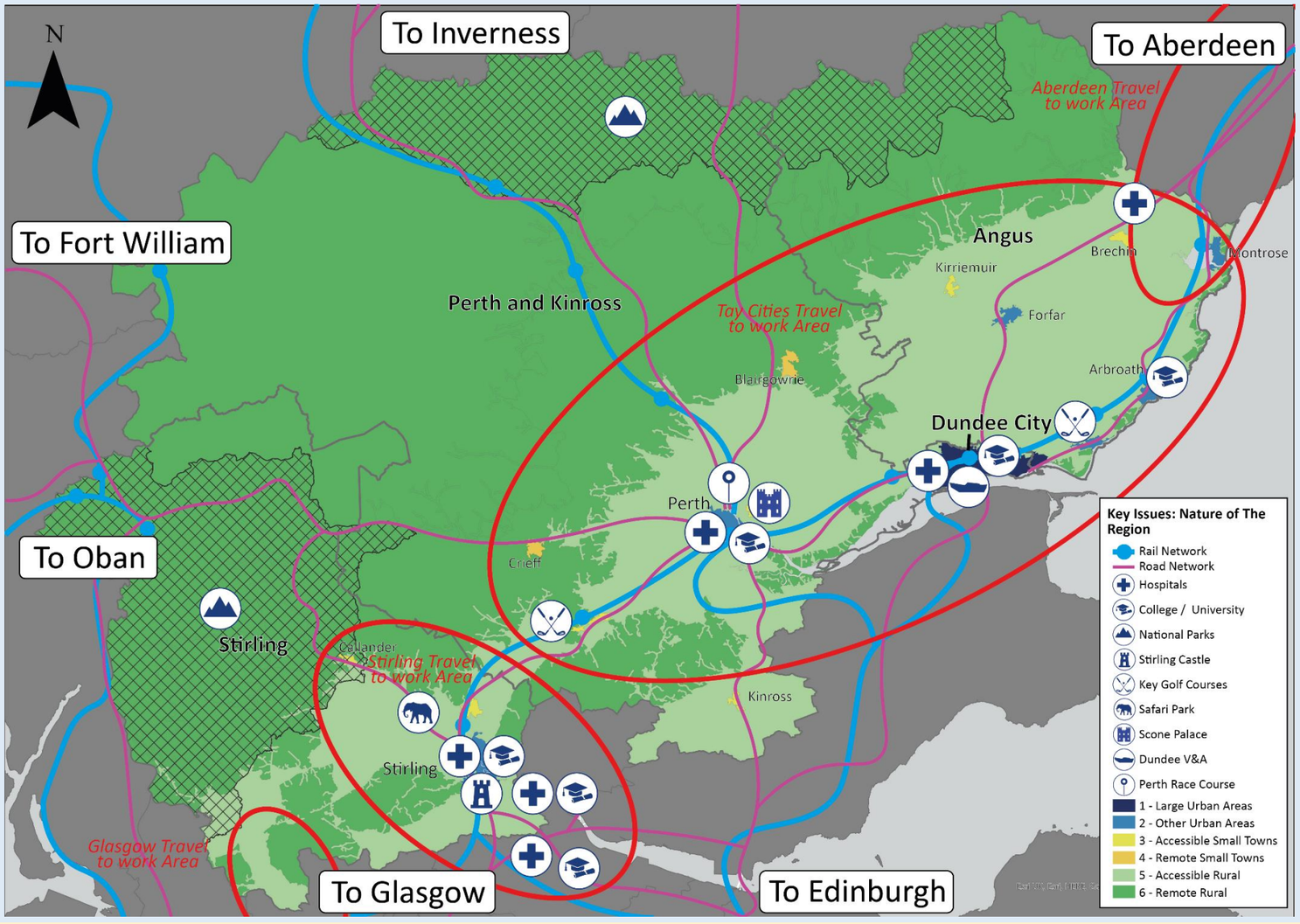
1.2: Key issues: Nature of the region

The urban / rural split: Whilst 63% of the population live in the urban areas of Arbroath, Dundee, Forfar, Montrose, Perth and Stirling, 37% of the region live in rural areas: 67.3% of people in Perth & Kinross, 46.9% in Stirling and 38.4% in Angus live in rural areas [1]. Many of whom are dependent on strategic routes to access jobs, services and healthcare. Approximately 29%-36% of the populations of Angus, Stirling and Perth & Kinross are in the lowest 20% SIMD data zones for access[2]

What you told us

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

- Adressing the impacts and causes of climate change
- Availability and cost of transport to access jobs, education and services
- Impact of traffic: Many communities are located on trunk roads and regionally significant routes and are subject to the traffic volumes these routes bring
- The ability of people with disabilities to use our transport networks. Nearly 9% of people in the Region are limited a lot by a long-term health problem or disability[3]



Where people live and work

Most people who live in the region, work in the region[4]

- 79.8% Tay Cities residents work in Tay Cities area
- 65.1% Forth Valley residents work in Forth Valley area

There are also strong links between the region and NE Angus / Aberdeenshire; SW Stirling / Glasgow; NW Stirling / Oban

Less than a fifth of trips made by residents are commuting trips[5].

Relationship to the rest of Scotland

The region is both peripheral to the Central Belt, as well as accommodating almost all surface trips to North-East Scotland and the Highlands and Islands.

Tourism

Tourism is a key element of our economy. The region features many of Scotland's top tourist destinations, attracting millions of visitors every year from our coast to our mountains (e.g. approx. 17million domestic day visits per year[6]).

Population size and age: By 2035, the populations of Angus and Dundee are expected to decline, whilst the populations of Perth & Kinross and Stirling increase. Across Scotland by 2035 the population of pensionable age will have risen from 18.3% (2020) to 22% placing greater pressure on public resources[7]. These figures are likely to be higher across the Tactran region where, in 2022, the over 65s already make up 25.1% of the population in Angus; 24.7% in Perth & Kinross; 20.5% in Stirling; and 18.1% in Dundee[8].

Wealth: 36% of the population of Dundee, and 7%, 6% and 12% of Angus, Perth & Kinross and Stirling residents live in the least affluent 20% of SIMD data zones[2] / 20.6% of children in Angus, 24.5% in Dundee, 17.9% in Perth & Kinross and 16.6% in Stirling are living in relative poverty[9]. / 6.2% of 16-19yr olds in Dundee, 4.8% in Angus, 3.5% in Perth & Kinross and 2.9% in Stirling are not participating in education, training or employment [10]

Health: 37% of Dundee is in the lowest 20% SIMD data zones for health (10.74% for Stirling, 3.23% for Perth & Kinross, 1.94% for Angus)[2]

1.3: Key Issues: Transport

Consequences of rural hinterlands

- Average car km driven/person/year is 12,547km in Perth & Kinross, 11,054km in Stirling, 7,512km in Angus, and 4,471km in Dundee (the Scottish average is 6,723km) [11]
- Our towns & cities serve large rural hinterlands. Whilst 62% of trips to work in Dundee are made by car, as the population becomes more rural this % increases: 69% in Stirling; 77% of trips in Angus; and 79% in Perth & Kinross [12]
- Angus, Perth & Kinross and Stirling all have higher per capita transport CO_2 emissions compared to the Scottish average[13]

Road safety

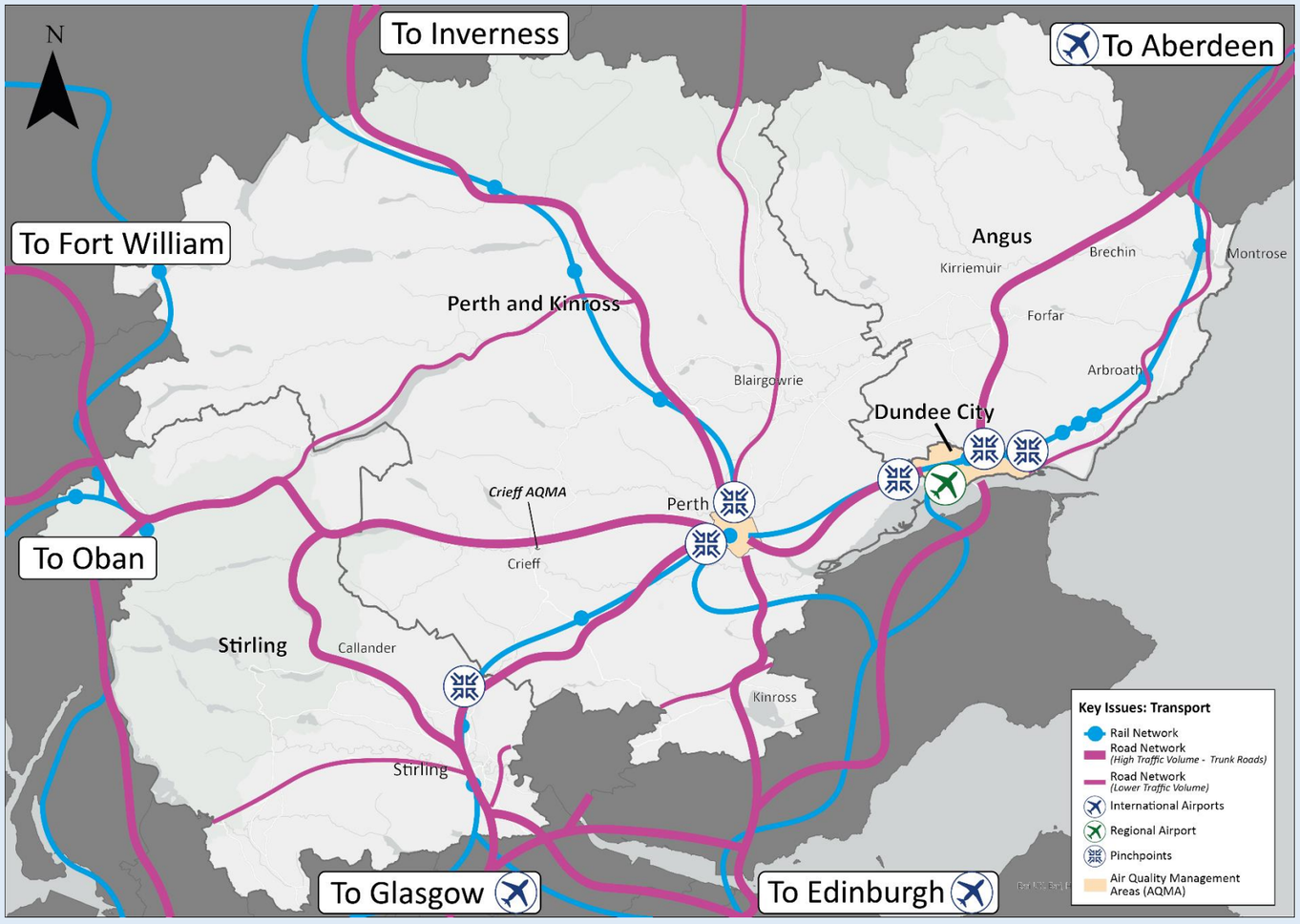
Any number of fatalities or casualties are too many. While good progress has been, and continues to be, made across most of the region in the last 10years, close attention needs to continue to be paid to longer term trends

Impact on communities

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

Congestion and journey times

- 11% of drivers experience congestion on their journeys[12]
- vehicle miles could increase by up to 28% by 2037 compared to 2017, with a corresponding 51% increase in pm peak delays (secs/mile) in the Tayside area and 9% in the Forth Valley area [15]



Strategic connectivity

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

Freight

- Freight traffic accounts for 26% of the vehicle mileage in the Region[16]
- 24% of UK freight with an origin or destination in Scotland starts, ends or passes through the Region[17]

Addressing climate change

- For residents of Angus, Perth & Kinross and Stirling, whilst only 26%-29% of personal trips are over 10km, these trips account for 81%-84% of total km driven. In Dundee 93% of the trips are under 10km, where this accounts for 60% of km driven[12]
- Approximately 4.5% of vehicles registered in the region were hybrid, electric or ULEV in 2023[14]

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

Limited public transport services in many localities and limited ability to influence commercial fares

- Approximately a 1/5th of the jobs in the region cannot be accessed within 60minutes by public transport by the working age population[18]. However, 68% of residents do not believe that the trip they make to work or education can be carried out using public transport[19]
- 12% of 16-24 year olds cannot access further education within 60minutes by public transport [18]
- 14% of the population cannot access a hospital within 60mins by public transport; and approximately 8% cannot access a GP within 30mins by public transport[18]

Health

37% never walk as a means of transport, 26% never for pleasure[12]. 57% of people in the 20% most deprived areas regularly walk for recreation, compared to 78% of people in the least 20% deprived areas[20]

1.4 Key Issues: Climate emergency

The Scottish Government and all four Councils in the region have declared a Climate Emergency[22]. This has resulted in targets in the Government's Climate Change Action Plan[7] to reduce transport carbon emissions (compared to 1990) by 56% by 2030 and net zero by 2045 by:

- **Decabonisation of transport**
- **Reducing the car km driven**

Work undertaken for Transport Scotland[23] suggests that climate change will only be met by:

- **Rapid introduction of low and zero-emission technologies**
- Reducing passenger and freight **vehicle kilometres travelled** in the region through:
  - modal shift
  - reduced travel through shorter trips and trip avoidance

Across the region **there is strong public support for combating climate change**[8]:

- 80% see climate change as an immediate and urgent problem
- 85% believe they have a personal duty to combat climate change; but also 74% believe it is primarily the government's responsibility
- 53% would be willing to change how they travel to help address climate change

Table 1.1 Climate action targets

Targets	The scale of the challenge
Decarbonisation of transport, interim targets includes: • phasing out need for new petrol or diesel light commercial vehicles in public bodies by 2025 • phasing out need for any new petrol or diesel vehicles in public sector fleets by 2030 • phasing out need for new petrol or diesel cars or vans by 2030 • removal of diesel passenger trains from the Scottish network by 2035 • beginning work to decarbonise HGVs, ferries and aviation	Approximately 4.5% of vehicles registered in the region were hybrid, electric or ULEV in 2023[14] If sales rates are maintained, ULEVs are expected to be only be approximtaley 13% of the car fleet by 2030[21] Electrification between Edinburgh / Dunblane and Aberdeen / Inverness required. Alternative fuels required on West Highland Line
Reducing car km by 20% by 2030 compared to a 2019 base	This means reversing 29+ yrs of growth in car km in 6 years 82% car mileage is generated to, from or between our rural areas and towns. ¾ of personal mileage is generated by trips over 10km

[7] See also Transport Scotland Mission Zero for transport
[8] Tactran Representative Public Opinion Survey 2023. See also SHS 2021, where 83% believe Climate change is an immediate and urgent problem

1.5 Key Issues: Social inclusion

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

- **Least affluent areas**: Table 1.2 highlights the % of LA population living within the 20% least affluent SIMD data zones
- **Rural isolation**: 20.7% of Angus, 20.4% of Perth & Kinross and 18.2% of Stirling data zones are in the 10% most access deprived geographies as defined by the Scottish Indices of Multiple Deprivation
- **Disability**[24]: Approximately 9% of the region's population are limited by a long-term health problem or disability[3]
- **Discrimination** as a result of gender; pregnancy / maternity; sexual orientation; ethnicity; religious belief, disability or age
- **Discrimination** as a result of low income, low wealth, material deprivation or socio-economic background[9],.

Table 1.2: Population living within the 20% least affluent SIMD data zones in Scotland[2]

	Pop in 20% least affluent areas	% of pop in 20% least affluent areas
Angus	9,291	8%
Dundee	55,840	38%
Perth & Kinross	8,508	6%
Stirling	11,110	12%

For many, more than one of the above characteristics apply, compounding problems[25]. Many of the more vulnerable groups in society have safety concerns when it comes to using public transport. This includes the young[26], females[27], disabled, members of the LGBTQ+ community, religious belief, and ethnicity

Child poverty

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

Table 1.3: Child poverty targets	**Child poverty rates in 2022[9]**			
Child poverty targets include	Angus	Dundee	Perth & Kinross	Stirling
By 2030, less than 10% of children should be living in relative poverty	20.6%	24.5%	17.9%	16.6%
By 2030, less than 5% of children should be living in absolute poverty	16.4%	19.0%	14.2%	13.4%

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

1.6 What you told us

This strategy is asking big changes of all of us. To help get it right, it is critical that we have listened to what you told us. In addition to receiving responses from individuals and organisations we undertook two representative public opinion surveys[28]. Key messages from these surveys were:

Problems and priorities

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

Constraints and opportunities

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

Solutions

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

Amongst the submitted responses, the concern that the Partners would be unable to deliver the strategy is perhaps the most significant response. The full consultation results are available on the RTS website.

Further information

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

References in Section1

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

2.What we want to achieve

2.1 Strategic objectives

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

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

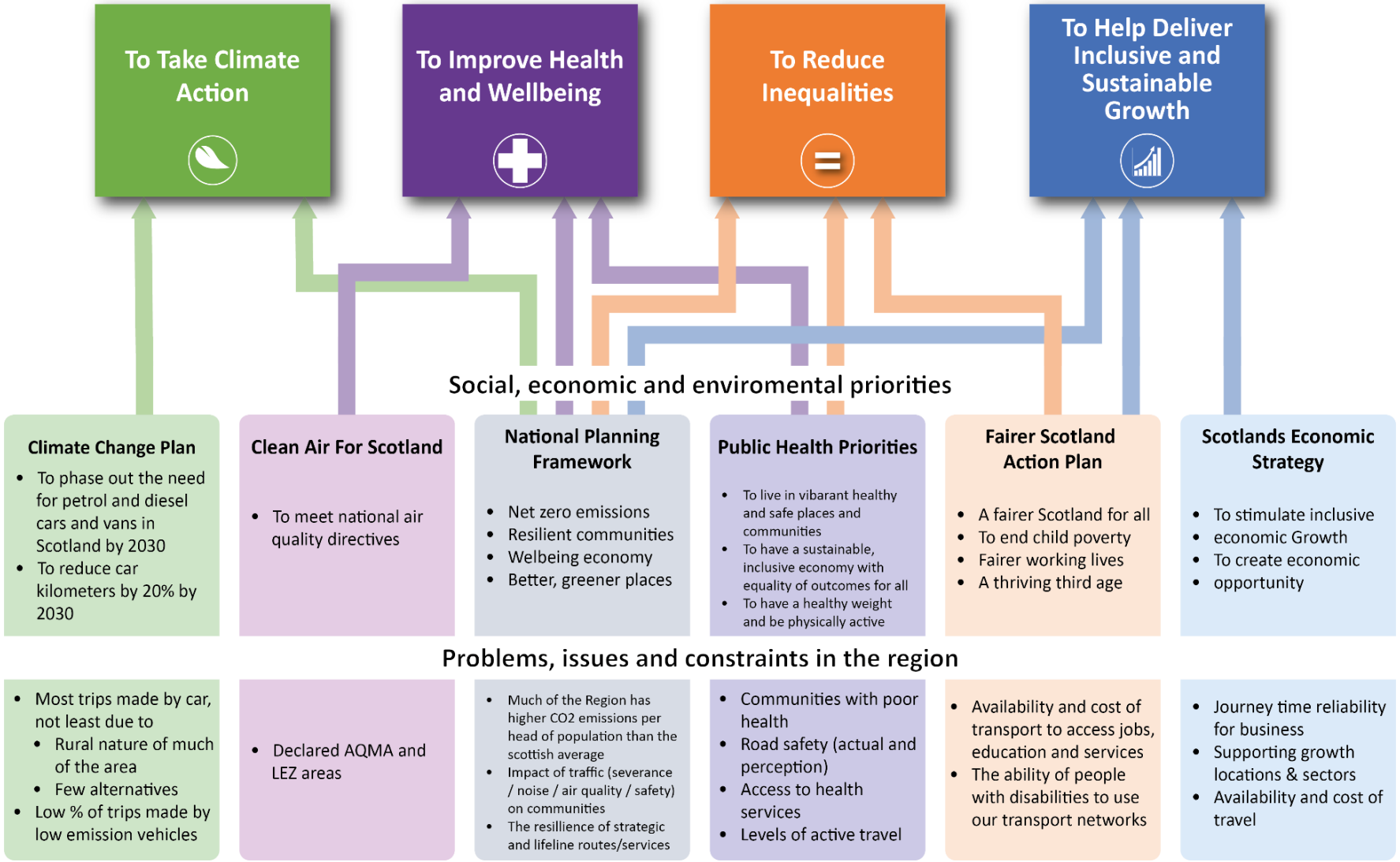


Fig. 2.1: Relationship between strategic objectives and key issues

2.2 Outcomes

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

TABLE 2.1: OUTCOMES
To take climate action
Reduce estimated CO_2 emissions from transport in the region • Increase the share of EV and low emission vehicle use • Reduce freight mileage by road • Reduce car kilometres driven **Ensure strategic and lifeline routes (& services) are resilient to climate change, extreme weather and emergencies**
To improve health and wellbeing
Improve road safety for vulnerable users (pedestrians, cyclists, children and older people, lower SIMD quintile) **Reduce transport emissions in declared air quality management areas** **Improve access to healthcare** • Improve the ability of all in the lowest SIMD datazones (health domain) targeted by the respective Council to access healthcare • Improve the ability of rural communities to access healthcare • Improve the ability of over 65s to access healthcare (Primary health care / Hospitals) **Increase the share of personal trips made by sustainable modes such as walking, cycling and public transport** **Increase levels of physical activity** • Increase the levels of walking and cycling in the lowest SIMD datazones (health domain) targeted by the respective Council • Improve the ability to access active leisure facilities and green space for lowest SIMD datazones

TABLE 2.1: OUTCOMES
Reduce the impact of traffic on communities on strategic routes
To reduce inequalities
Improve ability for young people, and disadvantaged & rural communities to access jobs, education and services • Improve ability of 16-24 year olds to access jobs and further education • Improve ability of all in the lowest SIMD datazones (all domains) targeted by the respective Council to access jobs, education and services • Improve ability of families targeted in local child poverty action plans to access jobs, education and services • Improve ability of rural communities to access jobs, education and services • Improve the ability of older (65+) people and those in lowest SIMD datazones targeted by the respective Council to access social activities **Improve the ability of people with disabilities to access jobs, education and services** **Improve the safety and security of vulnerable and protected characteristic groups in the street environment and on public transport**
To help deliver sustainable, inclusive economic growth
Reliable inter and intra-regional journey times • Improve public transport journey times and journey time reliability on strategic road and rail routes • Improve journey time reliability for freight through the Region and to key destinations in the Region **Improved ability for young people, and disadvantaged & rural communities to access jobs and education** ▪ *see outcomes to reduce inequalities above*

Where does attention need to be focused?

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

- **To reduce inequalities**: Target access improvements at the least affluent communities and vulnerable groups (*e.g. disabled; young; over 65's; groups identified in the child poverty action plans and the Integrated Impact Assessment*), especially where these groups are located in areas where there is poor access (*as indicated by SIMD access domain*) and/or at risk of transport poverty (*see Transport Scotland STPR2 transport poverty mapping*)

- **To address climate change**: Target measures at those trips and locations that generate the most km driven (i.e. 75% of km driven by those who live in the region is generated by trips over 10km[10], and 82% of car km driven is generated to/from/between our rural areas[11])

- **To improve health and wellbeing**:
  - Promote active travel in the communities with the poorest health (*as defined by the SIMD health domain*)
  - Promote modal shift to reduce the number of car trips in those locations where there are air quality issues
  - Target road safety interventions at pedestrians, cyclists, children and older people, locations in the lower SIMD quintile

- **To assist the delivery of sustainable inclusive economic growth:**
  - Target access improvements to education, training and employment for 16-24 year olds; the least affluent SIMD datazones as targeted by each Council[12]; and those identified in child poverty action plans (*lone parent families, the large majority of which are headed by women; families which include a disabled adult or child; larger families; minority ethnic families; families with a child under one year old; families where the mother is under 25 years of age*.[13])
  - Promote modal shift in and around major traffic corridors and pinch points in our urban areas.

[10] Transport and Travel in Scotland 2021: Distance travelled
[11] Jacobs 'Achieving a 20% reduction in car km: Options for the Tactran Region' January 2023
[12] See respective local outcome improvement plans: Angus Local Outcomes Improvement Plan 2022-2030; City Plan for Dundee 2022-32; Perth & Kinross Community Plan 2022-2032; The Stirling Plan 2017-2027
[13] Scottish Government Poverty and Social Justice 'Every child, every chance: tackling child poverty delivery plan 2018-2022' 2018; Annex 2

2.3 The scale of the challenge: Targets

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

TABLE 2.2: WHERE WE NEED TO GET TO AND THE SCALE OF THE CHALLENGE

Key RTS Outcomes	Proposed Regional Target	Scale of the challenge	What needs to be done
Reduce estimated CO_2 emissions from transport in the region	Reduce emissions from transport in line with the national target of a reduction of 56% by 2030 (compared to 1990)	Angus, Perth & Kinross and Stirling all have higher transport CO_2 emissions per head than the Scottish average If current trends are maintained, it is likely that a reduction of only 11% may be likely.	Decarbonisation of vehicle transmissions Reduce mileage driven
Increase the share of EV and low emission vehicle use	Promote Ultra Low Emission Vehicle (ULEV) adoption to achieve 72.7%[14] of the target of a 56% reduction in transport CO_2 emissions by 2030	Approximately 4.5% of vehicles registered in the region were hybrid, electric or ULEV in 2023[15]	Rapid introduction and adoption of low and zero-emission technologies
Reduce car kilometres driven	Reduce car kilometres driven in line with the national target of reducing car km driven by 20% by 2030 (compared to 2019 levels)	National target means reversing 29+ yrs of growth in car km in 6 years 82% car mileage is generated to, from or between rural areas and towns	Improve alternatives for longer trips Facilitate shorter trips through more services being delivered locally

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

[15] Vehicle licensing statistics data tables DVLA / DfT

TABLE 2.2: WHERE WE NEED TO GET TO AND THE SCALE OF THE CHALLENGE			
Key RTS Outcomes	Proposed Regional Target	Scale of the challenge	What needs to be done
		Over ¾ of personal mileage is generated by trips over 10km	Discourage car trips where there are reasonable alternatives and facilitate shorter trips Improve access to public transport
Reduce fatalities and injuries	Meet the targets set out in Scotland's Road Safety Framework to 2030[16]	Any number of fatalities or casualties are too many. While good progress has been, and continues to be, made across most of the region in the last 10years, close attention needs to continue to be paid to longer term trends	Reduce traffic speeds and consider engineering solutions to address identified safety concerns Provide road safety education and campaigns
Increase the levels of walking and cycling in the least affluent SIMD data zones	For the least affluent SIMD data zones achieve the Transport Scotland's[17] forecasts for average proportion of journeys walked and cycled by 2030[18] ▪ Large urban areas: 30% walk / 24% cycle ▪ Other urban areas: 24% walk /19% cycle ▪ Accessible small towns: 26% walk 13% cycle	The current average proportion of journeys walked / cycled are: • Large urban areas: 24% walk / 1.5% cycle • Other urban areas: 19% walk / 0.4% cycle • Accessible small towns: 20% walk / 0.5% cycle Within existing parameters, walking can be expected to	Improve the proportion of facilities that are within walking/cycling distance of communities. Improve walking and cycling opportunities to local facilities

[16] Scotland's Road Safety Framework to 2030 indicators

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

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

TABLE 2.2: WHERE WE NEED TO GET TO AND THE SCALE OF THE CHALLENGE			
Key RTS Outcomes	Proposed Regional Target	Scale of the challenge	What needs to be done
		increase in the least affluent communities by an additional 1% point, and cycling by 2-4% points	
Reduce transport emissions in declared air quality management areas	National Emission Ceiling Directive[19] thresholds are reflected in Crieff, Dundee City and Perth City Air Quality Management Plans and Dundee Low Emission Zone. Including. • NO_2 annual mean (not to exceed 40µg m-3) • number of NO_2 exceedances (200µg m-3 not to be exceeded more than 18 times a year)	Our towns & cities serve large rural hinterlands. 60% of trips made by those living in the region are by car (2019)	Support the introduction and adoption of low and zero emission technologies Reduce the number of car journeys in our towns through promoting walking, cycling and public transport
Improve ability of all in the least affluent SIMD data zones targeted by the respective Council to access jobs, education and services	The ability to access services is influenced by a number of factors including availability and awareness of services; cost; difficulties in planning and undertaking multi-stage / multi-modal journeys etc. There are limited data sources to track ability of the target groups to access jobs, education and services. Whilst the following target is used to support this subject, it is acknowledged that a wider set of	Lack of access to affordable transport is identified as a key driver of Child Poverty[20]. Limited public transport services in many localities and limited ability to influence commercial fares. Centralisation of public services.	Improve the proportion of facilities that are within walking/cycling distance of communities. Improve public and shared transport opportunities Improve ability to access and use public and shared transport opportunities

[19] National Emission Ceilings Directive

[20] Child Poverty Act

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

Further information

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

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

3.How we will deliver the strategy

3.1 Step changes in approach required

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

This scale of change requires:

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

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

3.1.1 How this will affect individuals and businesses?

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

We hope this will mean:

- *People will have the choice to make fewer trips by using technology to reduce the need to travel*
- *People have confidence that they can make car based trips by low emission vehicles and reduce car mileage by making most trips by sustainable modes. Our settlements will be healthier places to live, where people are able to access more services locally by walking and cycling*

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

- *That reliable and affordable public transport and shared transport[22] networks enable everyone to access jobs, education and services*
- *Journey times to and between centres will be reliable due to less congestion and more resilient networks*

3.1.2 How this will affect the regional partners?

- Implementing the scale of alternatives to the car and demand management measures that discourage car use to hit the 2030 climate change targets will be challenging and require a step change in delivery:
    - The scale of behaviour change for individuals and businesses will be challenging. We will need to take everyone with us, carefully explaining the changes required, why they are required, listening and understanding the consequences, and shaping proposals accordingly. This is likely to require widespread hearts and minds campaigns with clear and co-ordinated messaging across partners. This RTS seeks to support this process, and partners may wish to consider how further regional messaging could assist.
    - The resources to improve alternatives to the car everywhere by 2030 will not be available. With scarce resources there is a need to:
        - prioritise where action is most required and will have the greatest impact on targets
        - improve co-ordination of delivery programmes between partners to deliver realistic alternative to car travel. Integrated programmes are required to deliver integrated solutions
        - make the case for more investment and explore other funding models

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

- As well as the co-ordination (*aligning priorities and programmes*) required to provide integrated solutions, finding solutions to the big issues (*i.e. improving public transport; decarbonisation of transport; demand management required to support 20% car km reduction target*) requires effective collaborative working across the respective transport agencies (*including the third and private sectors*). The regional partners will accordingly identify partnership arrangements that ensure programmes are prioritised and co-ordinated to deliver integrated solutions.
- When considering the appropriate solution to any problem, the principles of both the sustainable investment and mode hierarchies will be applied. This means always considering whether actions higher up the hierarchy can provide a solution to the problem, before considering an action lower down the hierarchy.

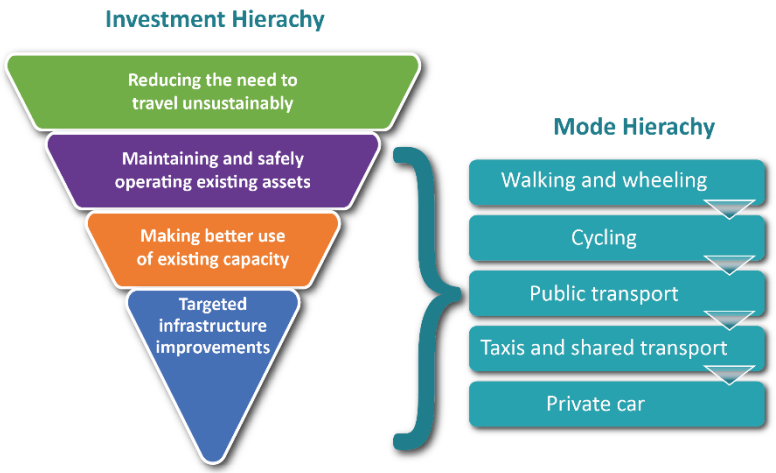


Fig 3.1 Investment and mode hierarchies

- The identification of solutions and co-ordination of delivery must look beyond local authority boundaries. People live their lives across local authority boundaries, and the integrated solutions provided must work across the individual's journey, which is often across a local authority boundary, and sometimes across regional boundaries. The areas to work across include:
  - Tay Cities area (Angus, Dundee, Perth&Kinross and North East Fife)
  - Forth Valley area (Stirling, Clackmannanshire and Falkirk)
  - North Angus and South Aberdeenshire
  - South-west Stirling and North East Glasgow
  - Cairngorms and the Loch Lomond and the Trossachs National Parks

- Addressing the issues can not be resolved by the transport agencies alone.
  - People need to get to healthcare, to education, to employment. Only by working together can relevant agencies identify the co-ordinated activity required to support the user across all of their journey. The users' journey does not start with "where do I catch the bus"…it starts with "I want to go to college". The first step in this process – and one which is

essential to deliver the 20min/liveable neighbourhoods principle[23] – is that all public sector partners need to consider how services are to be provided locally.

- The digital and electricity networks are critical to how we access services and how our transport networks work. Transport agencies must ensure that our transport aspirations align with the capacity of both digital and electricity network providers.

- The RTS encourages regional partners to continue to investigate ways of working together to improve the ability of all to meet the challenging aspirations that everyone shares. It may be worthwhile noting, the Scottish Government's Net Zero, Energy and Transport Committee recommendations in its consideration of 'The role of local government and its cross-sectoral partners in financing and deliverying a net zero Scotland':

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

[23] National Planning Framework 4

3.2 The role of the Scottish Government

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

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

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

Table3.1: Risks to achieving national aspirations

Target	Risks
Promote Ultra Low Emission Vehicle adoption to achieve 72.7% of the 56% reduction in CO_2 by 2030	Attractiveness of ULEV to purchasers (public and fleet) due to: • Cost • Confidence and ease of charging EVs
Reduce car kilometres driven in line with the national target of 20% by 2030 (compared to 2019 levels)	Ability to provide alternatives for those trips that generate most milage by 2030 Restraint measures likely to be required. Ability to implement appropriate measures in timescales
Meet the targets set out in Scotland's Road Safety Framework to 2030	Impact of other programmes, e.g. ○ Reduced road maintenance Resources, particularly in terms of ○ Enforcement ○ Ability to make sufficient infrastructure improvements
Emissions are reduced to below National Emission Ceiling Directive thresholds in Crieff, Dundee City and Perth City	Speed of adoption of ULEV Ability to provide sustainable alternatives to the car Ability to introduce restraint measures within timescales
(For the least affluent SIMD data zones) achieve the Transport Scotland's forecasts for journeys walked and cycled by 2030	Ability to ensure that sufficient destinations are within walking or cycling distance Ability to make sufficient improvements to the pedestrian and cycling environment Ability to encourage behaviour change
Support child poverty targets by addressing the lack of access to affordable transport	Ability to provide transport services outside core public transport hours Ability to improve affordability for the target groups

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

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

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

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

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

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

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

- regional models or
- local models

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

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

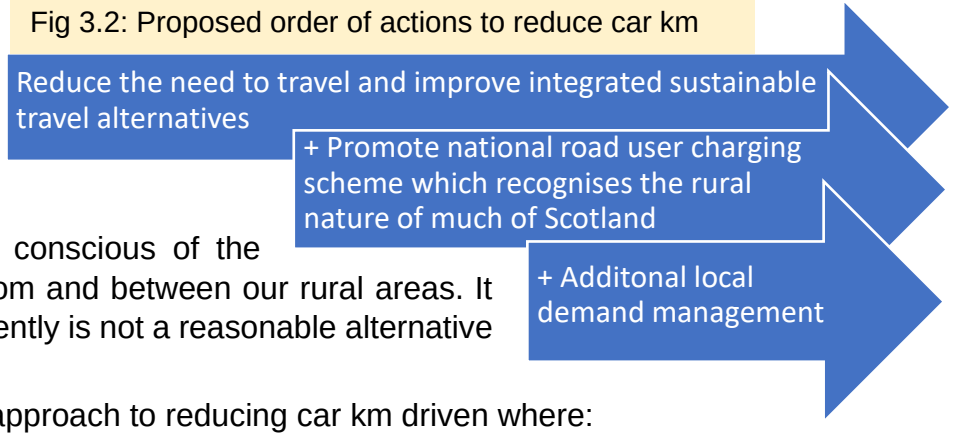
Where fixed route services are not viable or best value for money due the low density of population, then Tactran and the Councils want to explore ways to work with and support communities identify and provide the solutions that best work for them.

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

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

3.4 Reducing car kilometres driven[24]

Fig 3.2: Proposed order of actions to reduce car km



The Scottish Government has set a target to reduce car km driven by 20% by 2030 compared to 2019 levels. Research commissioned by the Scottish Government suggest that this will deliver approximately 27% of the transport carbon emission reductions required by 2030[25].

Tactran and the Councils are supportive of this target, but are also conscious of the implications of delivering this target. Most of the car km driven is to, from and between our rural areas. It would be wrong to add to the costs of living by charging where there currently is not a reasonable alternative to the car.

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

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

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

[25] Element Energy 'Decarbonising the Scottish transport sector' September 2021

Our representative public opinion survey suggests that there is strong public support for following these principles when investigating how to reduce car km[26].

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

Recent consultation on Scotland's Guiding principles on the Environment[27] has confirmed the appropriateness of:

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

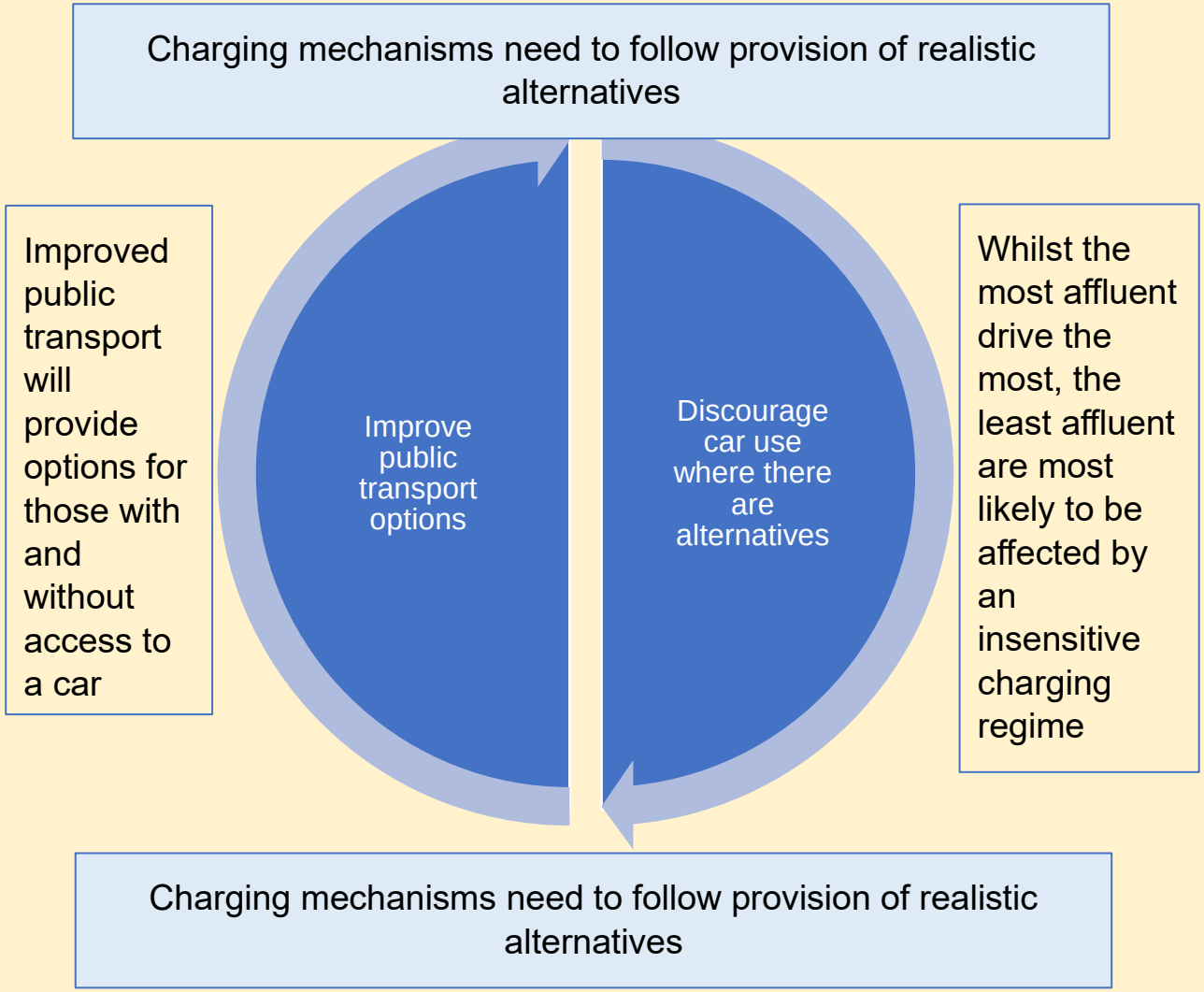
Both these principles are useful to be conscious of when considering options to help reduce car mileage.

[26] Tactran Representative Public Opinion Survey (Taylor McKenzie Research 'Tactran Quantitative Research Report' October 2023)
[27] Scotland's Guiding Principles on the Environment: Statutory Guidance – Parliamentary Statement and Analysis Report

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

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

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



Any charging mechanism must:

- Follow sufficient improvement in alternatives to the car
- Have an impact on kilometres driven
- Not undermine the viability of a location (whether that be a local centre if it becomes cheaper to travel to a centre further away; or the viability of living in a rural area by significantly adding to the relative costs of living in a rural area). Co-ordination of measures across local authority boundaries will be required
- Not increase transport poverty
- Be able to be responsive to changes in fuel duty or its successor
- Recognise that people need to travel, and in rural areas the only way for many people to access their closet facilities (including public transport interchanges) is currently by car

3.5 Decarbonising transport

Supporting the uptake of electric vehicles is key to the Scottish Government's Climate Change Plan and is aligned with the outcome of phasing out the need for new petrol and diesel cars and vans by 2030. Research commissioned by the Scottish Government suggests 72.7% of the 2030 interim transport CO_2 emissions target will be as a result of changing technologies which help decarbonise transport.[28]

Both the scale and pace of investment in charging infrastructure will need to be accelerated to meet the anticipated demand over the coming years. The Scottish Government aims to grow the public charging network to at least 6,000 public charge points by 2026[29], with the expectation of leveraging private investment to complement and improve the current charging network.

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

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

[28] Element Energy 'Decarbonising the Scottish Transport Sector' 2021

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

3.6 Integrated solutions

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

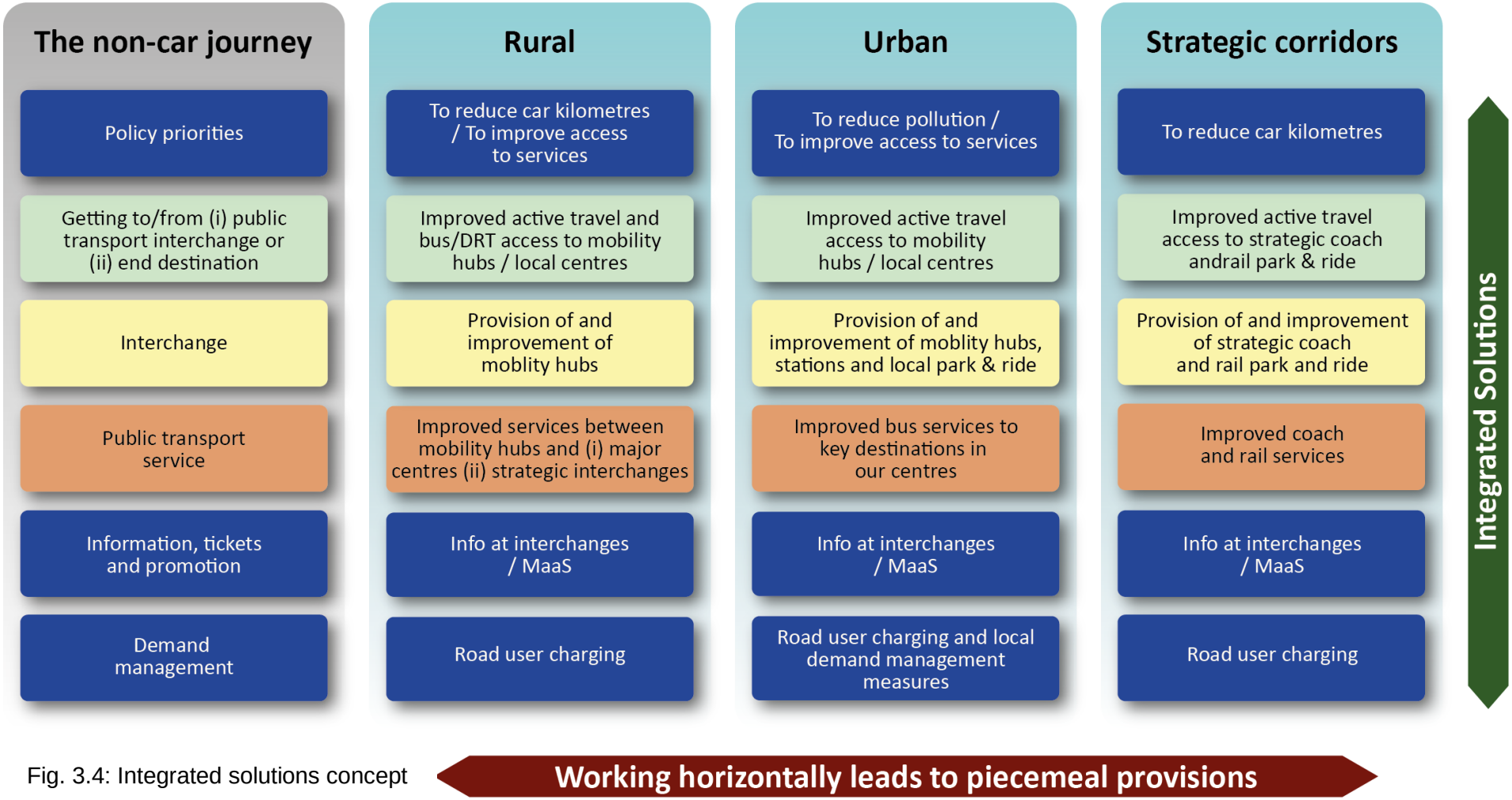


Fig. 3.4: Integrated solutions concept

Working horizontally leads to piecemeal provisions

3.6.1 Integrated solutions: Rural areas

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

37% of the population in the region live in rural areas[30].

Residents often have to travel further for services

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

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

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

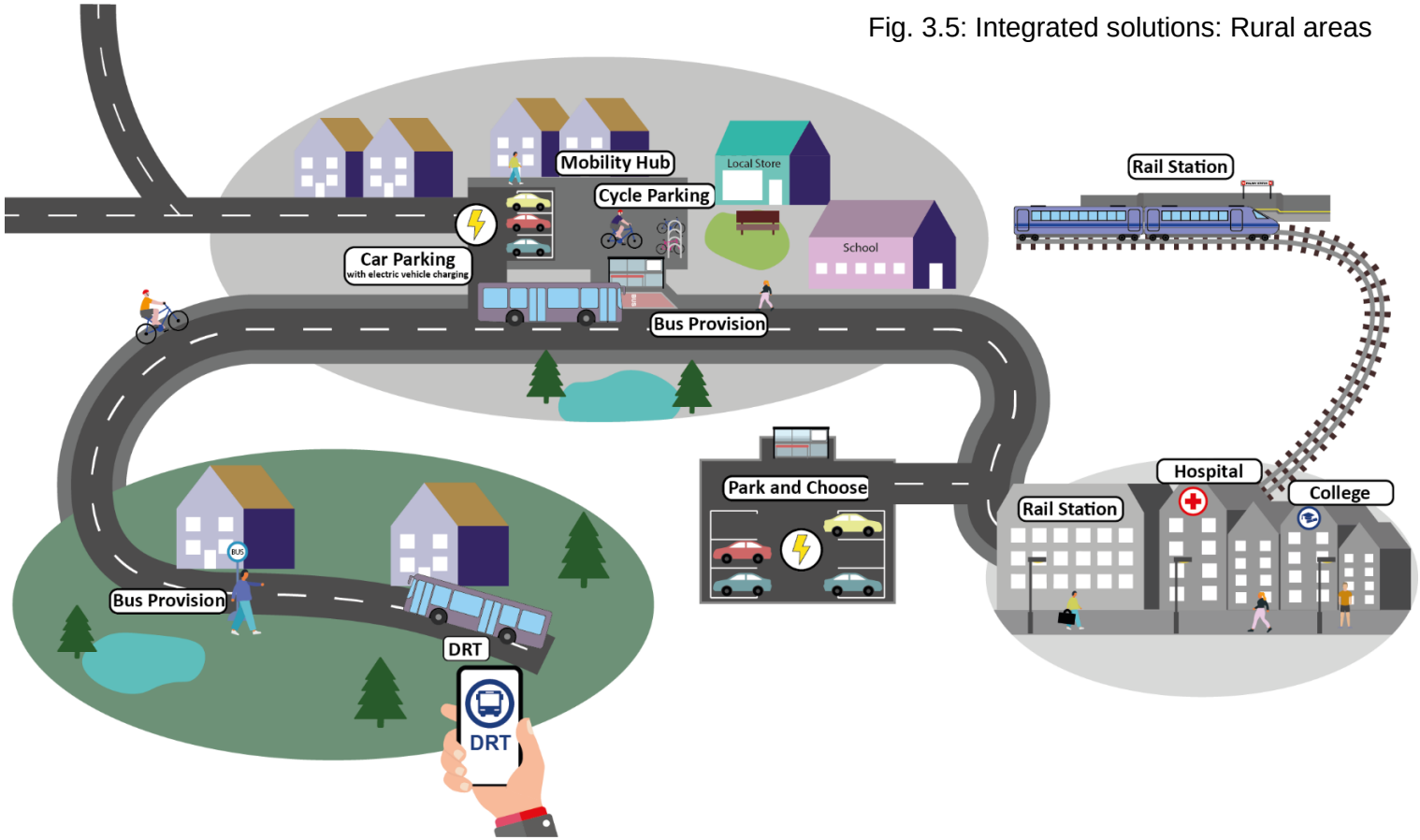


Fig. 3.5: Integrated solutions: Rural areas

[30] Scottish Government Urban Rural Classification 2020

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

To help people access services in their local centres and nearby towns and cities (and conversely help visitors and workers access our rural areas); **and to reduce car km** - there is a need to:

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

More services also need to be provided locally

Low population densities mean it is **difficult to provide extensive and regular public transport**. **Consequently many residents and visitors rely on the car** to travel to, from and between our rural areas. However, it would be wrong to assume all households have access to a car.

.

3.6.2 Integrated solutions: Urban areas

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

63% of the population in the region live in urban areas[31].

Most (but not all) of **our least affluent areas, and most of our concentrations of poor health are within our urban areas**[32].

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

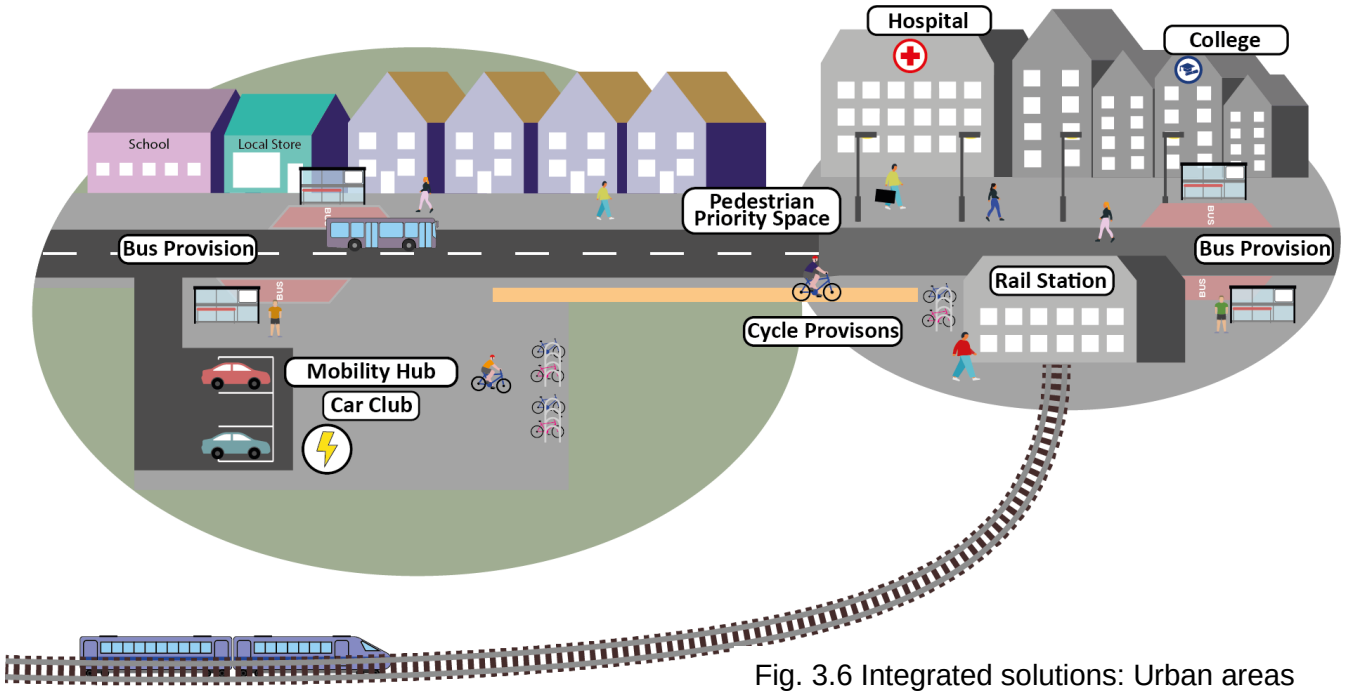


Fig. 3.6 Integrated solutions: Urban areas

There is a need to:

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

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

[31] Scottish Government Urban Rural Classification 2020
[32] Scottish Index of Multiple Deprivation 2020

3.6.3 Integrated solutions: strategic corridors

Rail: Aberdeen/Inverness to Edinburgh/Glasgow; West Highland Line; Alloa/Dunblane to Edinburgh/Glasgow

Road: M9 / M80 / M90 / A9 / A90 / A82 / A84 / A85

The region lies at the heart of Scotland.

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

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

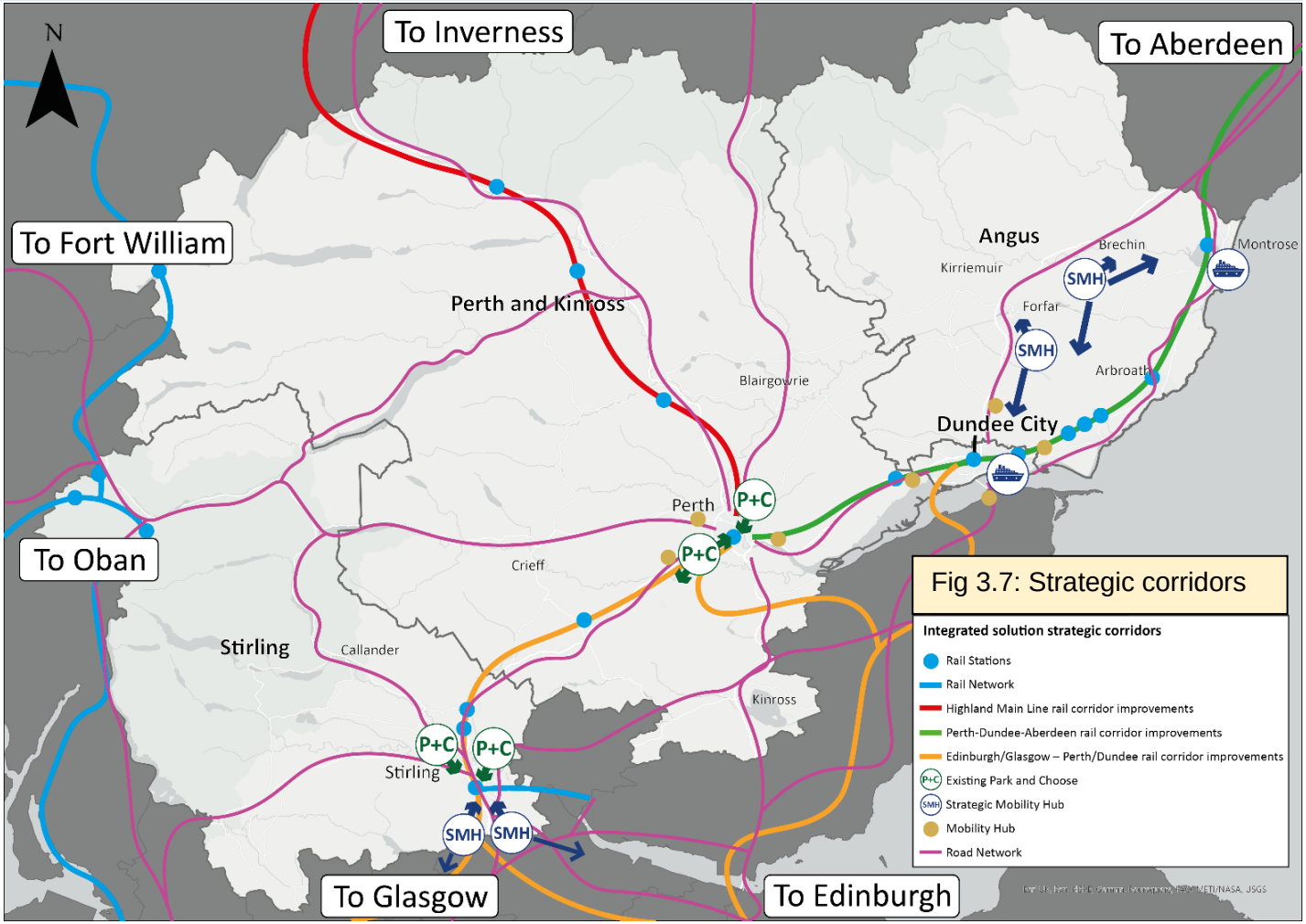


Fig 3.7: Strategic corridors

noise, and journey time reliability issues at and around Dundee, Perth and Stirling affecting local and national economies and local communities.

There is a need to:

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

3.7 Actions

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

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

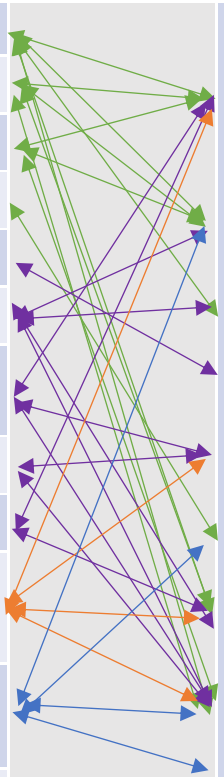
Each of the tables 3.2-3.10 below reflect the nine delivery themes and their respective actions.

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

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

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

FIGURE 3.8: DELIVERY THEMES TO ADDRESS THE STRATEGIC OBJECTIVES AND OUTCOMES

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

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

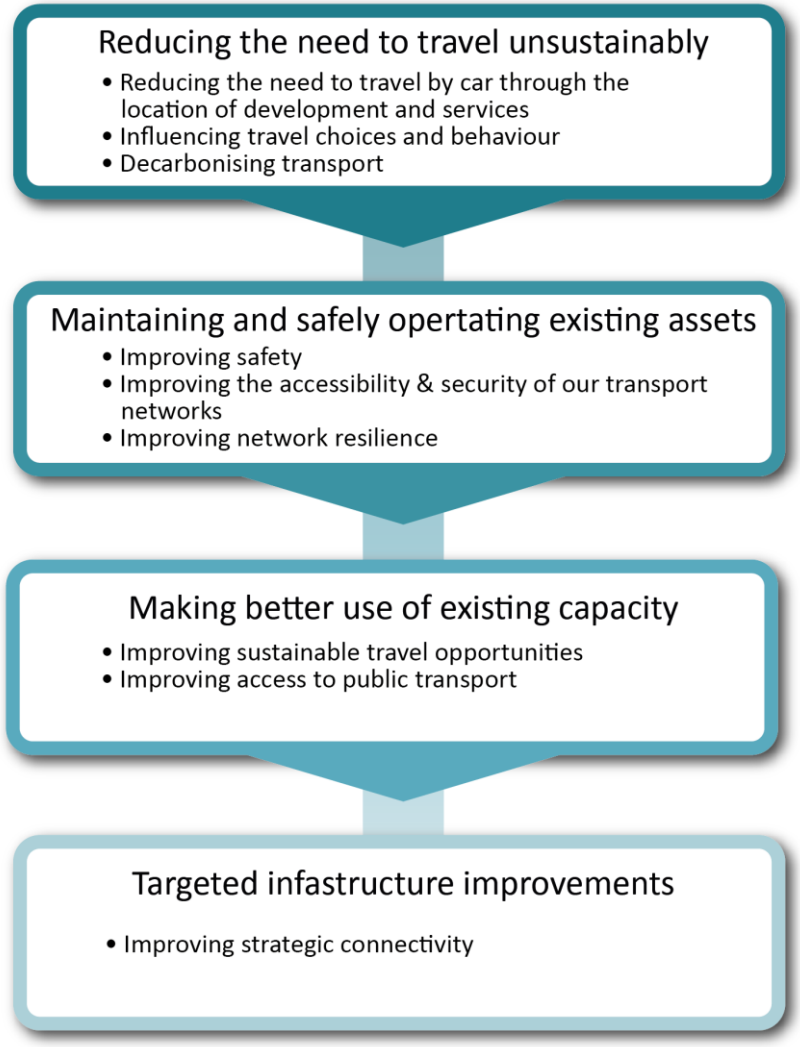


Fig. 3.9: Alignment of delivery themes and the investment hierarchy

Reducing the need to travel unsustainably

<table>
<tr><th colspan="4">TABLE 3.2: REDUCING THE NEED TO TRAVEL BY CAR THROUGH THE LOCATION OF DEVELOPMENT AND SERVICES</th></tr>
<tr><th rowspan="2">ACTION</th><th colspan="3">WHERE AND HOW AGENCIES MAY APPLY THE ACTION</th></tr>
<tr><th>Rural (Small towns, villages, countryside)</th><th>Urban (Larger towns and cities)</th><th>Strategic Corridors</th></tr>
<tr><td rowspan="2">Action 1
Planning authorities will reduce the car dependency of new developments</td><td colspan="2">Development plans promoting land use patterns that reduce the need to travel, and enable travel by sustainable modes</td><td rowspan="2"></td></tr>
<tr><td colspan="2">The development management process ensuring new development is realistically accessible by a range of modes</td></tr>
<tr><td>Action 2
Public sector agencies, will be encouraged to make available, and locate new, services within communities</td><td colspan="2">Public services will be encouraged to work together to improve the range of local services that can be available at a neighbourhood level to support the 20minute / liveable neighbourhood principle</td><td></td></tr>
<tr><td>Action 3
Councils will work with Scottish Government and suppliers to promote digital inclusivity across their areas</td><td colspan="3">Full fibre and mobile coverage are essential to:
Enable remote access to services and reducing the need to travel
Enable access to MaaS (Mobility as a Service) journey planning tools which enable the planning, booking and paying of transport service
To ensure digital access for all, Councils will be encouraged to ensure there is public access to the internet in settlements (e.g. libraries and community hubs)</td></tr>
<tr><td colspan="4">Notes:
Action 1: Tactran will support the planning authorities prepare</td></tr>
</table>

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

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

<table>
<tr><th colspan="4">TABLE 3.3: INFLUENCING TRAVEL CHOICES AND BEHAVIOUR</th></tr>
<tr><th rowspan="2">ACTION</th><th colspan="3">WHERE AND HOW AGENCIES MAY APPLY THE ACTION</th></tr>
<tr><th>Rural (Small towns, villages, countryside)</th><th>Urban (Larger towns and cities)</th><th>Strategic Corridors</th></tr>
<tr><td rowspan="4">Roads authorities will reduce the impact of traffic on communities and promote sustainable travel through demand management measures</td><td></td><td>Reallocation / Reduction of the numbers of both on-street and off-street parking spaces within town and city centres
Reallocation of carriageway, giving more space to active and sustainable modes</td><td rowspan="3"></td></tr>
<tr><td colspan="2">Expansion of 20mph limits and zones</td></tr>
<tr><td colspan="2">Re-routing motorised traffic on longer and/or less direct routes for the benefit of the wider network</td></tr>
<tr><td colspan="3">Speed limits to reduce carbon and particulate emissions</td></tr>
<tr><td>Action 6
Tactran and the Councils will work with Transport Scotland to consider a national demand management mechanism (such as road user charging) to reduce car km driven</td><td colspan="3">Demand management measures include road user charging where road users are charged for the length of trip made. If such an approach was pursued by the Scottish Government, Partners will encourage a just mechanism which takes account of geographic and social circumstances</td></tr>
<tr><td colspan="4">Notes
Action 4:
Agencies include: Local, regional and national agencies; local, regional and national public sector agencies; third sector agencies</td></tr>
</table>

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

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

TABLE 3.4: DECARBONISING TRANSPORT			
ACTION	WHERE AND HOW AGENCIES MAY APPLY THE ACTION		
	Rural (Small towns, villages, countryside)	**Urban** (Larger towns and cities)	**Strategic Corridors**
	(iv) Partners will continue to review hydrogen studies and how they might support the integration of **Hydrogen Fuel-Cell Vehicles** (FCEV) in the future		
Action 8 **Tactran and the Councils will work with the rail industry to support Rail Decarbonisation**			Support the **decarbonisation of the rail network** by 2035 through (i) Electrification of Dunblane to Perth / Dundee / Aberdeen (ii) Battery Electric Trains from Edinburgh to Perth / Dundee (short term) (iii) Electrification from Edinburgh to Perth / Dundee (long term) (iv) Electrification from Perth to Inverness (v) Battery Electric Trains on the West Highland Line

Notes:

Action 7:

- A Regional EV Strategy was produced in 2019. The Councils are currently preparing EVIF Expansion Plans which will set out the requirements to meet the EV adoption targets. This work is expected to be completed TBC by Councils.
- Zero Emission Truck Taskforce ROAD HAULAGE DECARBONISATION OVERVIEW REPORT

Action 8:

- see Transport Scotland's Rail Services Decarbonisation Action Plan
- Scotland's Railway 'Sustainability'
- Rail industry includes: Transport Scotland, Network Rail and Train Operating Companies

Maintaining and safely operating existing capacity

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

TABLE 3.5: IMPROVING SAFETY			
ACTION	WHERE AND HOW AGENCIES MAY APPLY THE ACTION		
	Rural (Small towns, villages, countryside)	**Urban** (Larger towns and cities)	**Strategic Corridors**
improve rest and welfare facilities for hauliers			themselves and other road users. Opportunities to **increase the range of rest facilities** available to drivers should be investigated.

Notes:

Action 9: speed controls can also help make the street environments feel safer for walking and cycling, and reduce carbon emissions. See Action 4

Action 10: Public sector agencies: Police, Fire Services

Scotland's Road Safety Framework to 2030

Scotland's Road Safety Framework to 2030 - Delivery Plan 2021/22

TABLE 3.6: IMPROVING THE ACCESSIBILITY & SECURITY OF OUR TRANSPORT NETWORKS			
ACTION	WHERE AND HOW AGENCIES MAY APPLY THE ACTION		
	Rural (Small towns, villages, countryside)	**Urban** (Larger towns and cities)	**Strategic Corridors**
Action 12 **Roads and planning authorities will improve the accessibility & security of the street environment**	**Step free routes** and appropriate crossing facilities to public transport interchange points; local centres (i.e. within 20min neighbourhoods); and key local services **Seating** **Lighting and reviewing the design of the public realm** to improve security **Signage and wayfinding** Number and location of **disabled car parking spaces**		**Reducing severance & improving active travel on trunk roads** through communities
	Promoting changes to our transport networks to people with learning difficulties		
Action 13 **Tactran and Councils will work with transport operators to promote improved accessibility & security for all across public transport:**	**Improvements at interchanges**, step free access, improved seating, improved lighting, security improvements **Improved accessibility of buses and trains** for all, including for people with mobility issues **Improved information provision** for all, including for people with mobility issues **Assistance to public transport users**		

Notes

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

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

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

Making better use of existing capacity

<table>
<tr><th colspan="4">TABLE 3.8: IMPROVING SUSTAINABLE TRAVEL OPPORTUNITIES</th></tr>
<tr><th rowspan="2">ACTION</th><th colspan="3">WHERE AND HOW AGENCIES MAY APPLY THE ACTION</th></tr>
<tr><th>Rural (Small towns, villages, countryside)</th><th>Urban (Larger towns and cities)</th><th>Strategic Corridors</th></tr>
<tr><td rowspan="3">Action 15
Tactran, the Councils and the National Park Authorities will improve walking and cycling opportunities</td><td colspan="2">Connected neighbourhoods, enabling people to access local facilities, including mobility and public transport hubs, by walking and cycling
Cycle hire schemes, increasing access to cycles through cycle hire schemes (whether that be conventional or electric cycles)</td><td rowspan="2"></td></tr>
<tr><td></td><td>Active freeways, cycle priority routes into our town and city centres</td></tr>
<tr><td colspan="3">Strategic, high quality, walking and cycling networks, providing walking and cycling links between villages, towns and cities, connecting settlements and public transport interchanges by walking and cycling routes; and supporting the National Cycle Network
Ensuring secure cycle parking at homes, workplaces, schools, interchanges and other destinations</td></tr>
<tr><td>Action 16
Tactran and the Councils will promote active and sustainable access to schools</td><td colspan="2">(i) safer routes to schools - improving walking and cycling routes to schools, including reducing traffic speeds around schools
(ii) school exclusion zones - limiting traffic around schools at peak times to improve safety and air quality for children
(iii) cycle parking; cycle training and improving access to bikes</td><td></td></tr>
<tr><td>Action 17</td><td></td><td colspan="2">Strategic Bus Priority Corridors, improving journey time and reliability through bus priority measures, traffic management etc.</td></tr>
</table>

<table>
<tr><th colspan="4">TABLE 3.8: IMPROVING SUSTAINABLE TRAVEL OPPORTUNITIES</th></tr>
<tr><th rowspan="2">ACTION</th><th colspan="3">WHERE AND HOW AGENCIES MAY APPLY THE ACTION</th></tr>
<tr><th>Rural (Small towns, villages, countryside)</th><th>Urban (Larger towns and cities)</th><th>Strategic Corridors</th></tr>
<tr><td rowspan="3">Tactran and the Councils will work with operators to improve the frequency, comfort, cost and integration of public transport services</td><td colspan="3">Increasing Bus Services, improving the frequency, quality and coverage of public transport through fixed routes and feeder services (including Demand Responsive Transport)</td></tr>
<tr><td>Demand Responsive Transport (DRT): on demand (rather than timetabled services) to link to existing traditional fixed route bus services, and to cover areas where fixed route services are not viable</td><td colspan="2"></td></tr>
<tr><td colspan="3">Improved rail services: making the most of the rail network to provide sustainable transport links between settlements within and outwith the region</td></tr>
<tr><td>Action 18
Tactran and the Councils will investigate and support community and shared transport services where commercial fixed route services are not financially sustainable</td><td colspan="2">Support for community and volunteer transport services
Car Clubs: to provide access to a car without the need to own one</td><td></td></tr>
<tr><td>Action 19</td><td colspan="3">Encourage & support public transport providers to review fares to:</td></tr>
</table>

<table>
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<tr><th rowspan="2">ACTION</th><th colspan="3">WHERE AND HOW AGENCIES MAY APPLY THE ACTION</th></tr>
<tr><th>Rural (Small towns, villages, countryside)</th><th>Urban (Larger towns and cities)</th><th>Strategic Corridors</th></tr>
<tr><td>Tactran and the Councils will work with Transport Scotland and operators to Promote Fair Fares</td><td colspan="3">(i) enhance social inclusion by providing a realistic alternative to a wider range of people, including disadvantaged communities
(ii) help balance demand for public transport throughout the day and reduce pressure on services at peak times</td></tr>
<tr><td rowspan="2">Action 20
Tactran and the Councils will work with industry, the port authorities and the rail industry to identify and promote opportunities to reduce road freight</td><td colspan="2">First and last mile distribution services, such as vans, drones, cargo bikes etc.</td><td rowspan="2">(i) Road and rail freight hubs
(ii) Consolidation centres
(iii) Improving opportunities for freight modal transfer onto the rail network</td></tr>
<tr><td>Work with Stirling and Tayside Timber Transfer Timber Group to identify and support timber transfer facilities</td><td></td></tr>
<tr><td colspan="4">Notes
Action 15:
• See Scotland's Let's Get Scotland Walking The National Walking Strategy and Cycling Framework for Active Travel - A plan for everyday cycling ("local authorities to prioritise investment in the creation of connected cycling infrastructure, protected from traffic and integrated with public transport")
• Regional Active Travel Network (arcgis.com)
Action 16: Such physical improvements should be linked to the school travel planning process (see Action 4)
Action 17: The Forth Valley and TayCities Bus Alliances will both lead on this action
Action 19: Fair Fares will not only serve the objective of making public transport more affordable and inclusive, they would also assist working towards public transport being competitively priced compared to car travel
Action 20: Freight transfer and consolidation hubs within the region to reduce road freight and also allow freight to be moved by rail and water. LaMilo SURFLOGH</td></tr>
</table>

<table>
<tr><th colspan="4">TABLE 3.9: IMPROVING ACCESS TO PUBLIC TRANSPORT</th></tr>
<tr><th rowspan="2">ACTION</th><th colspan="3">WHERE AND HOW AGENCIES MAY APPLY THE ACTION</th></tr>
<tr><th>Rural (Small towns, villages, countryside)</th><th>Urban (Larger towns and cities)</th><th>Strategic Corridors</th></tr>
<tr><td rowspan="6">Action 21
Tactran and the Councils will work with respective partners to provide and improve public transport interchanges</td><td colspan="2">Mobility Hubs link a number of transport services within a community to improve access via different modes to enable your onward journey. This usually means improving the ability to access bus services by, e.g. car and bicycle parking; bike hire; walking and cycling links; demand responsive bus services. But they could also help accessing car club & car sharing facilities.</td><td></td></tr>
<tr><td></td><td colspan="2">Strategic multi-modal interchange sites to transfer from bus or car to coach or rail those long-distance trips heading to Scotland's cities
Passenger facilities along strategic bus corridors: improve access to and ensure accessible waiting facilities with information along strategic bus corridors</td></tr>
<tr><td></td><td>Local Park and Choose sites to provide interchange facilities at railway stations, bus stations and on public transport corridors serving towns to enable transfer to train, bus or bike into our larger towns and cities</td><td></td></tr>
<tr><td rowspan="2"></td><td>New and improved bus stations</td><td></td></tr>
<tr><td colspan="2">New and improved rail stations on existing lines to improve access to the rail network and reduce car trips on strategic routes</td></tr>
<tr><td>Action 22</td><td colspan="3">Journey planning tools to help people be aware of all the choices they have to make a journey</td></tr>
</table>

TABLE 3.9: IMPROVING ACCESS TO PUBLIC TRANSPORT			
ACTION	WHERE AND HOW AGENCIES MAY APPLY THE ACTION		
	Rural (Small towns, villages, countryside)	**Urban** (Larger towns and cities)	**Strategic Corridors**
Tactran, Councils and public sector agencies will investigate and promote initiatives that allow the easier planning and booking of journeys	**Smart and integrated ticketing** whereby tickets are stored electronically, usually on a smart card or other forms of smart media, enabling a person to use a single 'ticket' on different modes of transportation, such as bus and rail, or across different operators. **MaaS** products can provide both improved journey planning and provide smart, integrated ticketing. They can also help promote, and potentially improve the viability of, new transport services		

Notes

Action 21: Scotland's Railway 'Sustainable Travel to Stations' June 2023

Action22:

- Mobility as a Service (MaaS)
- Tactran ENABLE
- Integrated Mobility Partnership

Targeted infrastructure improvements

TABLE 3.10: IMPROVING STRATEGIC CONNECTIVITY	
ACTION	WHERE AND HOW AGENCIES MAY APPLY THE ACTION
	Strategic Corridors
Action 23 **Tactran and the Councils will work with Transport Scotland to address pinch points on strategic roads to address issues of road safety, freight and bus/coach journey times / journey time reliability**	**Improvements to address key pinch points**, focused on improving public transport and freight journey time reliability and road safety: **(i) Kingsway, Dundee A90/A972** **(ii) Broxden and Inveralmond, A9 Perth** **(iii) Craigforth, M9 Stirling** **(iv) Grade separation of the A9 between Kier and Inverness (Kier, Auchterader)** **(v) Dualling of the A9 north of Perth** **(vi) A82 Inverarnan – Tarbert**
Action 24 **Tactran and the Councils will work with Transport Scotland and the rail industry to promote improved rail connectivity**	**(i) Physical and operational improvements to reduce journey times and improve resilience of routes from and through the region to/from Edinburgh; Glasgow; Aberdeen; Inverness; including** • *Highland Mainline (i.e. Inverness to Perth) rail corridor enhancements* • *Aberdeen to Central Belt (i.e Dundee/Perth/Stirling to Aberdeen/Edinburgh/Glasgow) rail corridor enhancements* **(ii) Improved frequency and capacity of services to Edinburgh and Glasgow**, including consideration of intermediate stations **(iii) Improve resilience of West Highland line**
Action 25	**Improving journey time reliability** through the Region and to major freight destinations in the Region

TABLE 3.10: IMPROVING STRATEGIC CONNECTIVITY	
ACTION	WHERE AND HOW AGENCIES MAY APPLY THE ACTION
	Strategic Corridors
Tactran and the Councils will work with Transport Scotland and the rail and freight industries to improve connectivity to freight destinations	
Action 26 **Tactran and the Councils will promote direct rail and air links to and from the Region**	Work with transport operators and the Airport Authorities to: **(i) Promote sustainable access to Scotland's airports by public transport** **(ii) Promote flight connections to and from Dundee Airport** Work with train operating companies and other Regional Transport Partnerships to **(iii) Promote direct long distance rail connections into the region and onwards to Aberdeen and Inverness**
Notes **Action 25:** See also Action 20 for improving opportunities for freight modal transfer onto the rail network	

Impact Assessments

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

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

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

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

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

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

4.How we will measure success

4.1 How we will measures success

To understand if the strategic objectives of the strategy are being achieved within the desired timescales, it is vital that the strategy includes a robust monitoring framework. Table 4.1 below identifies indicators which can help track progress through available information sources[33]. We will continue to improve the Monitoring Framework and prepare a monitoring report every other year during the lifetime of this strategy. Please note, not all the indicators have highlighted the latest set of data in early 2024 as the baseline as some data during representing issues during the Covid-19 pandemic may not have been representative of 'normal' conditions. Further information is available in the RTS Monitoring Framework.

TABLE 4.1: THE INDICATORS WHICH WILL BE USED TO MEASURE PROGRESS AGAINST THE OUTCOMES

Outcome (summary)	Outcome (detailed)	Indicator	Baseline		
Reduce greenhouse gas emissions	Increase the share of EV and low emission vehicle use	% of vehicles which are EV and low emission vehicles[34]	2023	%cars	% all vehicles
			Angus	5.5%	1.7%
			Dundee	5.3%%	2.3%
			Perth & Kinross	6.0%	2.2%
			Stirling	18.0%[35]	12.5%
	Reduce estimated CO_2 emissions from transport in the region	estimated Transport kt $C0_2$ emissions per capita[36]	2021	Kt CO_2 / capita	
			Angus	1.99	
			Dundee	1.23	
			Perth & Kinross	3.31	
			Stirling	2.64	
Modal shift to more	Personal travel: Increase the share of trips made by sustainable modes		*Main Mode 2019*	% Car	% Other
			Angus	58	42

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

[34] DfT / DVLA Vehicle licensing statistics data tables

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

[36] UK local authority and regional greenhouse gas emissions national statistics

TABLE 4.1: THE INDICATORS WHICH WILL BE USED TO MEASURE PROGRESS AGAINST THE OUTCOMES					
Outcome (summary)	**Outcome (detailed)**	**Indicator**	**Baseline**		
sustainable modes of travel	such as walking, cycling and public transport	mode share: main mode of travel[37]	Dundee	49	51
			Perth & Kinross	66	34
			Stirling	69	31
	Reducing freight mileage by road	% road mileage that is freight[38]	2022		
			Angus	27.8%	
			Dundee	18.9%	
			Perth & Kinross	28.9%	
			Stirling	25.0%	
Reduce car kilometres driven	Reduce car kilometres driven	Car km travelled on roads[39]	Cars & taxis	Million vehicle km 2019	
			Angus	837.6	
			Dundee	680.64	
			Perth & Kinross	1870.24	
			Stirling	1025.76	
Ensure our transport networks are resilient	Ensure strategic and lifeline routes (& services) are resilient to climate change, extreme weather and emergencies	number of road/bridge closures per year on strategic road network	*Monitoring framework required*		
		Rail services cancelled/delayed as a consequence of weather	In 2023 160 services serving the Tactran region were partly cancelled, and 251 fully cancelled due to adverse weather. 1736 services were delayed due to adverse weather		

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

[38] DfT Road Traffic Statistics

[39] DfT Road Traffic Statistics

TABLE 4.1: THE INDICATORS WHICH WILL BE USED TO MEASURE PROGRESS AGAINST THE OUTCOMES					
Outcome (summary)	**Outcome (detailed)**	**Indicator**	**Baseline**		
Reduce fatalities and injuries	Improve road safety for vulnerable users (pedestrians, cyclists, children and older people)	• people killed • people seriously injured • children (aged <16) killed • children (aged <16) seriously injured • pedestrians killed or seriously injured • cyclists killed or seriously injured • motorcyclists killed or seriously injured • road users aged 70 and over killed or seriously injured • road users aged between 17 and 25 killed or seriously injured • Percentage of motorists driving/riding within the posted speed limit; • The casualty rate for the most deprived 10% SIMD areas compared to the least deprived 10% SIMD areas.	2018-22 average[40]	Killed	All severities
			Angus	2	154
			Dundee	1	156
			Perth & Kinross	7	212
			Stirling	5	139
Reduce the impact of traffic on communities	Reduce transport emissions in declared air quality management areas	NO_2 annual mean (not to exceed 40µg m^{-3}) and number of NO_2 exceedances (200µg m^{-3} not to be exceeded more than 18 times a year)	Air Quality in Scotland: Annual Statistic Reports		
	Reduce the impact of traffic on communities on strategic routes	(i) traffic volumes/type for identified communities[41] (ii) noise monitoring for candidate noise management areas (iii) accident data for identified communities (iv) air quality monitoring for identified communities	*Some, but not all, the data sets are available for identified settlements on the strategic network. See RTS Monitoring Framework*		
Improve the ability for older		(i) % of over 65s able to access a hospital within 30mins/60mins by public transport	2023[42]	30mins of a hospital	30mins of a GP

[40] Reported Road Casualties 2022 NB No local datasets other than KSIs

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

[42] Tactran NAPTAT Accessibility Modelling 2023

TABLE 4.1: THE INDICATORS WHICH WILL BE USED TO MEASURE PROGRESS AGAINST THE OUTCOMES					
Outcome (summary)	**Outcome (detailed)**	**Indicator**	**Baseline**		
people and rural and disadvantaged communities to access healthcare	Improve the ability of over 65s to access healthcare (Primary health care /Hospitals)	(ii) % of over 65s able to access primary health care (GP) within 30mins/60mins by public transport	Angus	41.5%	89.0%
			Dundee	33.2%	99.8%
			Perth & Kinross	60.3%	87.7%
			Stirling	43.3%	92.9%
	Ability of all in the least affluent SIMD data zones (health domain) targeted by the respective Council to access healthcare	% of population within least affluent SIMD data zones able to access (a) primary (GP) and (b) secondary (hospitals) healthcare by public transport within 30mins / 60mins	2023:% of 20% SIMD within[43]	30mins of GPs	30mins of Hospitals
			Angus	100%	41,.7%
			Dundee	100%	38.6%
			Perth & Kinross	100%	100%
			Stirling	100%	73.3%
	Ability of rural communities to access healthcare	% of population within rural areas able to access (a) primary (GP) and (b) secondary (hospital) healthcare by public transport within 30mins / 60mins	2023[44]	30mins of GPs	60mins of Hospitals
			Angus	60.5%	58.1%
			Perth & Kinross	72.3%	73.5%
			Stirling	76.7%	46.5%
Improve ability for the most vulnerable to access social activities	Ability of older people and those in least affluent SIMD data zones (health domain) targeted by the respective Council to access social activities	% population unable to access community facilities by public transport within 30mins / 60mins	Whilst likely that there are more community facilities than local shops, suggest access to local centres be used as a reasonable proxy.		

[43] Tactran NAPTAT Accessibility Modelling 2023
[44] Tactran NAPTAT Accessibility Modelling 2023

TABLE 4.1: THE INDICATORS WHICH WILL BE USED TO MEASURE PROGRESS AGAINST THE OUTCOMES					
Outcome (summary)	**Outcome (detailed)**	**Indicator**	**Baseline**		
Increase levels of physical activity	Levels of walking and cycling in the least affluent SIMD data zones (health domain) targeted by the respective Council	Pedestrian and cycle data in least affluent SIMD data zones	Normal method of travel to work/education 2023[45] in 20% least affluent data zones	Walk	Cycle
			Angus	23%	5%
			Dundee	8%	3%
			Perth & Kinross	21%	5%
			Stirling	12%	3%
		Mode share travel to school in least affluent SIMD data zones[46]	Data to be included in Monitoring Framework		
	Improved ability to access active leisure facilities and green space least affluent SIMD data zones	% of population within the least affluent SIMD data zones within 5min walk of their local green or blue space[47]	2019	20% least affluent data zones	Whole Council area
			Angus	0%	65%
			Dundee	46%	48%
			Perth & Kinross	0%	66%
			Stirling	0%	84%
		% population within the least affluent SIMD data zones able to access a public leisure centre by	2023	30mins	60mins
			Angus	100%	100%
			Dundee	100%	100%
			Perth & Kinross	100%	100%

[45] Tactran Representative Public Opinion Survey (Taylor McKenzie Research 'Tactran Quantitative Research Report' October 2023)

[46] Sustrans Hands Up Scotland Survey

[47] Scottish Household Survey Table 10.15: Walking distance to nearest useable green or blue space

TABLE 4.1: THE INDICATORS WHICH WILL BE USED TO MEASURE PROGRESS AGAINST THE OUTCOMES					
Outcome (summary)	**Outcome (detailed)**	**Indicator**	**Baseline**		
		public transport within 30mins/60mins by public transport [48]	Stirling	80%	100%
Improve ability for young people, disadvantaged and rural communities to access jobs, education and services	Improve ability of 16-24 year olds to access jobs and further education	% 16-24yr olds able to access a range of employment opportunities within 40mins / 60mins by public transport[49]	2023	40mins	60mins
			Angus	92.0%	76.9%
			Dundee	99.7%	99.7%
			Perth & Kinross	80.5%	63.8%
			Stirling	83.0%	88.7%
		% 16-24yr olds able to access further education facilities within 30mins / 60mins by public transport[50]	2023	30mins	60mins
			Angus	37.4%	87.6%
			Dundee	97.7%	99.7%
			Perth & Kinross	38.0%	74.3%
			Stirling	55.1%	88.8%
	Improve ability of all in the least affluent SIMD data zones (all domains) targeted by the respective Council to access jobs, education and services	% population in least affluent SIMD data zones to access a range of employment opportunities within 40mins / 60mins by public transport[51] [52]	2023	40mins	60mins
			Angus	100.0%	83.3%
			Dundee	100.0%	100.0%
			Perth & Kinross	100.0%	81.8%
			Stirling	100.0%	100.0%
			2023	Least affluent SIMD quintile	Average (mode)
			Angus	27%	76%

[48] Tactran NAPTAT Accessibility Modelling
[49] Tactran NAPTAT Accessibility Modelling
[50] Tactran NAPTAT Accessibility Modelling
[51] Tactran NAPTAT Accessibility Modelling
[52] SIMD20, comprising the 20% most deprived data zones

TABLE 4.1: THE INDICATORS WHICH WILL BE USED TO MEASURE PROGRESS AGAINST THE OUTCOMES

Outcome (summary)	Outcome (detailed)	Indicator	Baseline			
		% who feel the journey to or from work/ college/university could be carried out using public transport[53] Further indicators to be developed, including: • Frequency of services outside peak hours between least affluent areas and jobs, education and services • Cost of travel	Dundee	23%	29%	
			Perth & Kinross	31%	41%	
			Stirling	28%	55%	
	Improve ability of families targeted in local child poverty action plans to access jobs, education and services	Indicators of child poverty exist at Council level. Whilst concentrations of child poverty are most likely in the least affluent SIMD data zones, the problem reaches deeper into society than these geographic areas. Target groups have been identified in the Child Poverty Action Plan which along with SIMD geographical data allows targeting of interventions. An accurate indicator of the ability of the target groups to access jobs, education and services is however difficult to identify.				
	Improve ability of rural communities to access jobs, education and services	% of population within rural areas able to access by public transport within 30mins / 60mins: (a) range of employment opportunities, (b) further education and (c) centres with a large food store and (d) post office[54]	2023: 30mins	Emp[55]	FE	SMrkt
			Angus	69.8%	25.6%	55.8%
			Perth & Kinross	63.9%	15.7%	41.0%
			Stirling	39.5%	9.3%	30.2%
	Ability of people with disabilities to access jobs, education and services	While the issues that people with disabilities have using our transport services are acknowledged as a problem requiring to be addressed, there are limited datasets to understand whether the 'whole journey' is accessible. Data exists for the accessibility of our stations, the % of the public transport fleet which is deemed accessible and the number of publicly available disabled parking spaces.				
	The safety and security of vulnerable and protected characteristic groups			Bus 2021	Train 2021	
			Angus	98%	n/a	

[53] Tactran Representative Public Opinion Survey (Taylor McKenzie Research 'Tactran Quantitative Research Report' October 2023)
[54] Tactran NAPTAT Accessibility Modelling
[55] Accessebility by public transport within 40mins

TABLE 4.1: THE INDICATORS WHICH WILL BE USED TO MEASURE PROGRESS AGAINST THE OUTCOMES					
Outcome (summary)	**Outcome (detailed)**	**Indicator**	**Baseline**		
	in the street environment and on public transport	% felt safe and secure on bus/train in last month[56]	Dundee	99%	n/a
			Perth & Kinross	100%	n/a
			Stirling	97%	100%
		% perception of people feeling very/fairly safe when walking alone in their neighbourhood after dark[57]	2019		
			Angus	87%	
			Dundee	81%	
			Perth & Kinross	86%	
			Stirling	89%	
Reliable inter and intra-regional journey times	Improve journey times and journey time reliability on strategic road and rail routes for public transport to key destinations (e.g. major centres and economic locations)	Congestion delays experienced by drivers[58]	% delayed	2017-2019	
			Angus	9%	
			Dundee	13%	
			Perth & Kinross	8%	
			Stirling	15%	
		Journey times to key destinations / reliability[59]	Road/rail (mins) 2021	Edinburgh	Glasgow
			Forfar	107 (road)	125 (road)
			Montrose	102 (rail)	114 (rail)
			Dundee	87 / 65	103 / 96
			Perth	64 / 75	74 / 73
			Stirling	62 / 40	39 / 40

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

[57] SHS Perceptions of safety when walking alone after dark

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

[59] Rail: Scotrail timetables Road: Google maps

TABLE 4.1: THE INDICATORS WHICH WILL BE USED TO MEASURE PROGRESS AGAINST THE OUTCOMES			
Outcome (summary)	**Outcome (detailed)**	**Indicator**	**Baseline**
Improved ability for young people, and disadvantaged and rural communities to access jobs, education and training	Improve journey time reliability for freight to key destinations (e.g. major centres and economic locations / air and sea ports)	Journey times to key destinations / reliability[60]	*Data to be identified and included in Monitoring Framework*
	Improve ability of 16-24 year olds to access jobs and further education Improve ability of all in the lowest SIMD data zones (all domains) targeted by the respective Council to access jobs and further education Improve ability of families targeted in local child poverty action plans to access jobs and further education Improve ability of working age population in rural communities to access jobs and further education	See 'Improved ability for young people, and disadvantaged and rural communities to access jobs, education and services' indicators above	

[60] INRIX

Contact

For further information, please

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

or

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

This questionnaire can be found at the RTS Homepage