

PROTECTING OUR CLIMATE
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National Case for Change: Executive Summary

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STRATEGIC TRANSPORT PROJECTS REVIEW#2

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Executive Summary

What is STPR2?

The second Strategic Transport Projects Review (STPR2) will guide the Scottish Government's transport investment programme in Scotland for the next 20 years and help to deliver the vision, priorities and outcomes that are set out in the new National Transport Strategy (NTS2)¹, published in February 2020. The aim of STPR2 is:

To conduct a Scotland wide, evidence-based review of the performance of the strategic transport system, across all transport modes, against multiple criteria including safety, environment, economy, integration, accessibility and social inclusion whilst fundamentally supporting Scottish Government's aims, including sustainable inclusive growth and the move to a low and zero carbon transport system.

In so doing, STPR2 will make recommendations for potential transport investments for Scottish Ministers to consider as national investment priorities, in an updated 20-Year transport investment plan for Scotland. STPR2 is being undertaken in 2 Phases, with Phase 1 focusing on options deliverable in the short term and Phase 2 the remainder of the 20 year horizon.

It is recognised that Scotland's geography is unique and varied, ranging from rural lowlands to remote uplands, and from large cities to sparsely inhabited islands, meaning no two parts of Scotland are the same nor are their travel patterns and demands. For that reason, STPR2 is being progressed at both a national and regional level in order to appraise options in the context of place. A total of eleven regions have been established for STPR2 as outlined in this report.

STPR2 will focus on Scotland's key strategic transport assets. In this context, the strategic transport network is defined as any transport project that materially contributes to Scottish Government/Transport Scotland policies and strategies.

Specifically, this will include:

- Any transport project that plays a significant part in supporting the four NTS2 priorities and related outcomes;
- Projects or groups of projects related to transport networks owned, operated and funded directly by Transport Scotland;
- Passenger and freight access to ports and airports of national significance; and
- The inter-urban bus and active travel networks and principal corridors within urban areas.

Strategic Transport Projects Review (STPR2)
Consultancy Support Services Contract

¹ New National Transport Strategy (NTS2), Transport Scotland, February 2020 www.transport.gov.scot/media/47052/national-transport-strategy.pdf



The Strategic Direction - NTS2

The NTS2 sets out the Scottish Government's *Case for Change*, to achieve a more sustainable, inclusive, safe and accessible transport system which helps to deliver a healthier, fairer and more prosperous Scotland for communities, businesses and visitors.

The NTS2 and STPR2 are set within the context of a Climate Emergency², with the Scottish Government committed to transitioning our transport system to one that is netzero in carbon emissions by 2045. STPR2 has a key part to play in supporting the delivery of the national priorities and outcomes by making recommendations on a range of targeted measures to achieve a reduction in travel demand and a mode shift to more sustainable modes such as walking, cycling and public transport, whilst transitioning to an inclusive net-zero economy as outlined within the sustainable travel hierarchy in Figure A.1.

Walking and wheeling Cycling Public transport Taxis & shared transport Private car

Figure A.1: NTS2 Sustainable Travel Hierarchy

The new NTS2 provides the national transport policy framework and outlines a strong strategic direction for transport over the next two decades. Figure A.2 illustrates how each of the 27 key challenges align with the four key priorities identified within NTS2. It demonstrates that the key challenges are interlinked and can be grouped under several, if not all, of the four NTS2 priority areas.

² The Global Climate Emergency - Scotland's Response: Climate Change Secretary Roseanna Cunningham's statement, Scottish Government,14 May 2019 https://www.gov.scot/publications/global-climate-emergency-scotlands-response-climate-change-secretary-roseanna-cunninghams-statement/



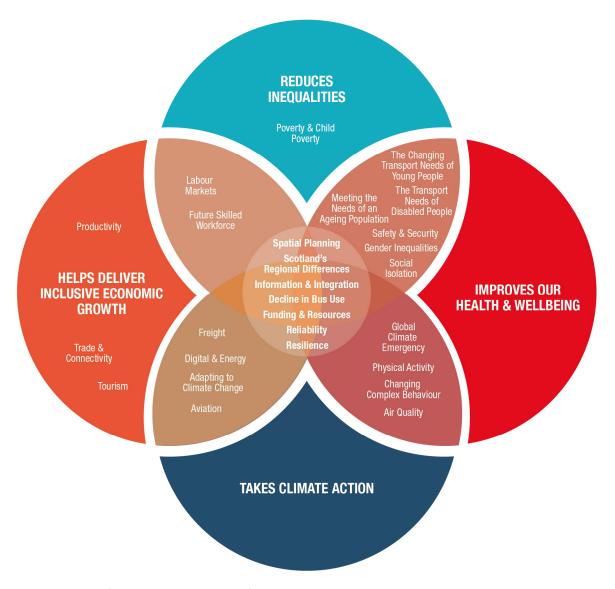


Figure A.2: : Current and Future Challenges

STPR2 is being developed within a period of rapid policy change across Scottish Government and is working collaboratively with the teams developing the Climate Change Plan Update and National Planning Framework 4 during the course of 2020 and 2021.



Key Challenges for Transport and Infrastructure

Building on the NTS2 and the extensive data analysis and stakeholder engagement undertaken during the first stages of STPR2, has identified the key challenges that need to be considered when planning for strategic transport and investment. These include:

- Transport's contribution to the climate emergency and net zero targets, means that there is a need to reduce travel and deliver modal shift towards walking, cycling and public transport. If we continue as we are now, forecasts suggest a 40% increase in vehicular travel could happen by 2037. However, the climate change plan³ set out the need for a 20% reduction in car kilometres with a modal shift from car to walking, cycling and public transport.
- To achieve a modal shift of the scale required to address the climate emergency, will require significant changes to the complex travel behaviours of users, operators and the public and private sectors. In accordance with the sustainable travel hierarchy, STPR2 should prioritise interventions that increase the modal share of shorter everyday trips by walking, wheeling and cycling; short to medium length trips by public transport and longer trips by rail and low emission vehicles.
- Transport is a derived demand⁴ and therefore key decisions and investments are required across several other sectors to meet net zero targets and in so doing put 'place' at the heart of the decision making process. Land use planning and digital connectivity are two areas not within the scope of STPR2 that will both have a significant part to play in meeting our net zero targets. This should help develop more sustainable and inclusive communities that encourage walking, wheeling and cycling as well as public transport as the preferred choice of travel. This will increase physical activity and realise health and wellbeing benefits.
- It is clear that efforts over the last decade have not had a sustained impact on the increase in walking and cycling particluary as a means to travel to work or education. In recent years, the Scottish Government, working with a number of key partners, has committed significant investment into active travel to help address this issue. Whilst the outcomes of this investment are still to be realised, it is clear that to make the sort of transformational change required, significant ongoing commitment to active travel investment is necessary, to not only deliver improved infrastructure and systems but to encourage the change needed in travel behaviours.
- The decades of decline in bus use across most of Scotland is linked to a range of complex factors. Despite this, bus use makes up three quarters of trips by public transport in Scotland. It therefore has a vital role to play in delivering our interim net zero targets by 2030. STPR2 should prioritise interventions that increase the modal share of journeys by bus over the next decade and beyond.

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³ Scottish Government, Climate Change Plan: Securing a Green Recovery on a Path to Net Zero 2018-2032, 2020, https://www.gov.scot/publications/securing-green-recovery-path-net zero-update-climate-change-plan-20182032/

⁴ Users of transport services are primarily consuming the service not because of its direct benefits, but because they wish to access other services (i.e. derived demand) such as jobs, health, education and leisure services.



- Whilst bus use in Scotland has been in decline, rail use has increased by over 30% in the last decade. Based on current forecasts for future housing and employment land uses there will continue to be strong demand for rail services particularly within the key corridors to, from and between Edinburgh and Glasgow. This will further heighten the current terminal station capacity issues within Scotland's two largest cities.
- The safe, efficient and resilient movement of goods is vital for Scotland's economy and related import/export market. Most freight in Scotland is moved by road. Maintaining efficient and resilient connections will continue to be important to business. However, the movement of goods and the freight industry in general will need to play its part in meeting net zero targets by 2045. Advances in low carbon technology for the movement of goods by aviation, maritime, rail and road will play a significant part and STPR2 will explore further opportunities to increase rail freight and reduce the level of goods transported by road.
- Scotland has strong trade links with over 100 countries across nearly 100 different industries and sectors. Over the coming years, Scotland's economic success will be increasingly realised through its ability to connect with and compete within a global market. Strengthening links with the global economy will mean increased trade, inward investment and create an environment for sharing skills, expertise and collaborating with others to support sustainable inclusive growth.
- The maintenance of safe and resilient transport networks and systems is also a vital part of the daily lives of all communities, businesses and visitors to Scotland. Recent examples of this include the A83 Rest and be Thankful, Winchburgh Junction and tunnel on the main rail line connecting Edinburgh and Glasgow, and the CalMac ferry network which all require further investment to maintain safe and resilient transport connections to all parts of Scotland. The sustainable investment hierarchy outlined within NTS2 makes clear that interventions should be prioritised firstly by their ability to reduce the need to travel and secondly their ability to help maintain and safely operate existing assets. This investment hierarchy will be imbedded within the STPR2 appraisal process.
- Fundamental to the delivery of an inclusive net zero economy and thus improve health and wellbeing, is the requirement to support and accelerate the just transition to low emission vehicles. A collaborative public and private sector relationship will be crucial in achieving this just transition.



The Impact of COVID-19 on Transport

At the time of writing the COVID-19 pandemic remains ongoing with the situation globally and within Scotland developing constantly. Whilst the pandemic has had an unprecedented impact on travel over the past year, forecasting the future medium and long term impacts with certainty will be challenging until the duration of the pandemic and the trajectory of recovery is known.

This deep uncertainty about the future relationships that drive the demand for transport mean that normal sensitivity testing is insufficient to tackle this problem, reinforcing the need for adopting scenario planning techniques within the STPR2 appraisal, to represent a range of possible futures to form the backdrop for the policies and proposals examined.

The extent to which recent changes in travel behaviour carry on into the future depends on a range of factors including the time taken to roll out the vaccine and policies employed by government to take advantage of the opportunities and mitigate the adverse impacts and uncertainties resulting from the pandemic. NTS2 and Transport Scotland's Transport Transition Plan already support many of the COVID-19 related opportunities identified – in particular taking climate action, reducing demand for unsustainable travel, encouraging shorter trips by active modes and increasing use of public transport. However, identified threats such as confidence in/viability of public transport, economic/tourism recovery, funding availability, and dis-proportionate social distributional impacts will continue to be monitored and will be regularly reviewed within the context of STPR2.



STPR2 Objectives

STPR2 is being carried out in accordance with Scottish Transport Appraisal Guidance (STAG)⁵, Transport Scotland's appraisal guidance. STAG is an objective led appraisal process, requiring Transport Planning Objectives (TPOs) to be developed that take full account of evidence on the particular problems and opportunities identified.

The new NTS2 sets out the *Case for Change* for Scotland and is at the heart of the objective setting process for STPR2. Following extensive engagement, review and iteration, five overarching TPOs have been developed that are directly linked to the NTS2 priorities and outcomes. The STPR2 TPOs are:

A sustainable strategic transport system that contributes significantly to the Scottish Government's net zero emissions target

An inclusive strategic transport system that improves the affordability and accessibility of public transport

A cohesive strategic transport system that enhances communities as places, supporting health and wellbeing

An integrated strategic transport system that contributes towards sustainable inclusive growth in Scotland

A reliable and resilient strategic transport system that is safe and secure for users

At the regional level, each *Case for Change* report aligns with the above TPOs supported with sub-objectives that seek to reflect the specific regional transport challenges and outcomes identified during the evidence gathering phase of STPR2.

Appraisal Approach and Next Steps

STAG represents best practice in transport appraisal guidance adopting an evidence-based and objective-led process. The four key phases of STAG are illustrated in Figure A.3.



Figure A.3: The Four Key Stages to the Scottish Transport Appraisal Guidance

⁵ Scottish Transport Appraisal Guidance (STAG), Transport Scotland, www.transport.gov.scot/media/41507/j9760.pdf



The Initial Appraisal: Case for Change constitutes the first stage of STAG. This report summarises the National Case for Change as laid out within the new NTS2, drawing upon additional and relevant data analysis and stakeholder engagement.

A long list of multi-modal options that may potentially address the identified problems, opportunities and key challenges was developed based on a range of sources, including: a review of options identified from recent local and regional studies and via extensive stakeholder engagement and public consultation activities. This included Stakeholder Workshops, Structured Telephone Interviews, an Elected Members briefing and an Online Survey. Options were also generated through discussions with the Regional Transport Working Groups and supplemented by the Consultant team

The long list was then 'sifted' to a more manageable and proportionate short list in line with the the sifting metholody outlined overleaf.

The short list of options will then be appraisal in line with the STPR2 appraisal methodology.



Option Generation and Sifting

National Regional

Generate Long List of Options

- Review of Policy and Previous Study Reports
- National Thematic Workshops
- National Business Breakfasts
- National Online Survey
- Input by Consultant Team, Transport Scotland and National Advisory Groups

- Review of Options from Regional Plans, Studies and City/Growth Deals
- Regional Option Workshops
- Structured 1-2-1 Interviews
- Online Survey (Regional feedback)
- 'Mini STPR2' Schools Engagement
- Input by Consultant Team, Transport Scotland and Regional Transport Working Groups

Clean, Consolidate and Package Options Long List

- Options categorised by mode/type
- Options categorised according to the Sustainable Investment Hierarchy
- Remove duplicates

- Options categorised by mode
- Options categorised according to the Sustainable Investment Hierarchy
- Remove duplicates
- Sift 'local non-strategic' options

Options sifted using STPR2 Appraisal Framework

Options assessed using Appraisal Framework, based on the following criteria:

- o STPR2 Objectives: Does the intervention broadly align with the STPR2 Objectives?
- o Deliverability: Is the intervention likely to be feasible and deliverable within the intended timescale?
- o Sustainable Investment Hierarchy: Can the intervention be sifted on the basis that there are other options which would address the same problem / opportunity, and better align with the Sustainable Investment Hierarchy?
- o Strategic Option: Is the intervention strategic (i.e. materially contributes to national policies and strategies)?

