STRATEGIC TRANSPORT PROJECTS REVIEW

PROTECTING OUR CLIMATE AND IMPROVING LIVES

SUMMARY REPORT

20 January 2022

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Contents

1 Introduction

We all know the vital role that transport plays in our daily lives. Our transport networks help us to access education, jobs, and healthcare and are a vital link in the chain that supplies our goods and services.

Transport is in a period of change. Through the pandemic we have all thought more about how we move around, and in many cases, we have made changes. That has meant more working from home, an emphasis on local walking and cycling trips, and significant changes for our public transport networks. We are also in a period of longer term change as technology in particular revolutionises how we live, work and play, and is helping transform our cars, buses and trains to a decarbonised fleet.

The second National Transport Strategy (NTS2) is a strategy for change. It recognises the key role that transport has in reducing inequalities, delivering inclusive economic growth, improving our health and wellbeing, and tackling the climate emergency. At the heart of the Strategy is the recognition that we need to deliver a step-change in behaviour and provide attractive, affordable, accessible and sustainable travel options. The actions to take forward the NTS2 are outlined in the annual delivery plan.

Reducing our carbon emissions to net zero by 2045, a key part of the Scottish Government's policy to address the global climate emergency, will require significant changes to the transport choices we all make as well as the transport network and options that influence our decision making. Recognising this, the Scottish Government has committed to reducing car kilometres by 20 per cent by 2030, and recently published the Route Map outlining the actions that will be taken to achieve this acknowledging that technological advances will not be enough to achieve this on their own.

A core part of the delivery plan is the second Strategic Transport Projects Review (STPR2). The outcomes from this three year review address the challenges outlined above by identifying how and where we should make changes to our transport networks that will encourage more of our:

- shorter everyday trips to be made by walking, wheeling and cycling;
- short to medium-length trips to be made by public transport;
- longer trips to be made by public transport and low emission vehicles.

These choices are built on the foundation of the sustainable investment hierarchy from NTS2 that focuses us firstly on:

- reducing the need to travel unsustainably, then
- maintaining and safely operating existing assets, then
- making better use of existing capacity, and finally
- targeted infrastructure improvements.

By focusing investment on sustainable transport options for individuals, families, communities and businesses, the STPR2 recommendations will make it easier to access the transport networks and systems that Scotland will need to meet the challenges and changes over the next 20 years.

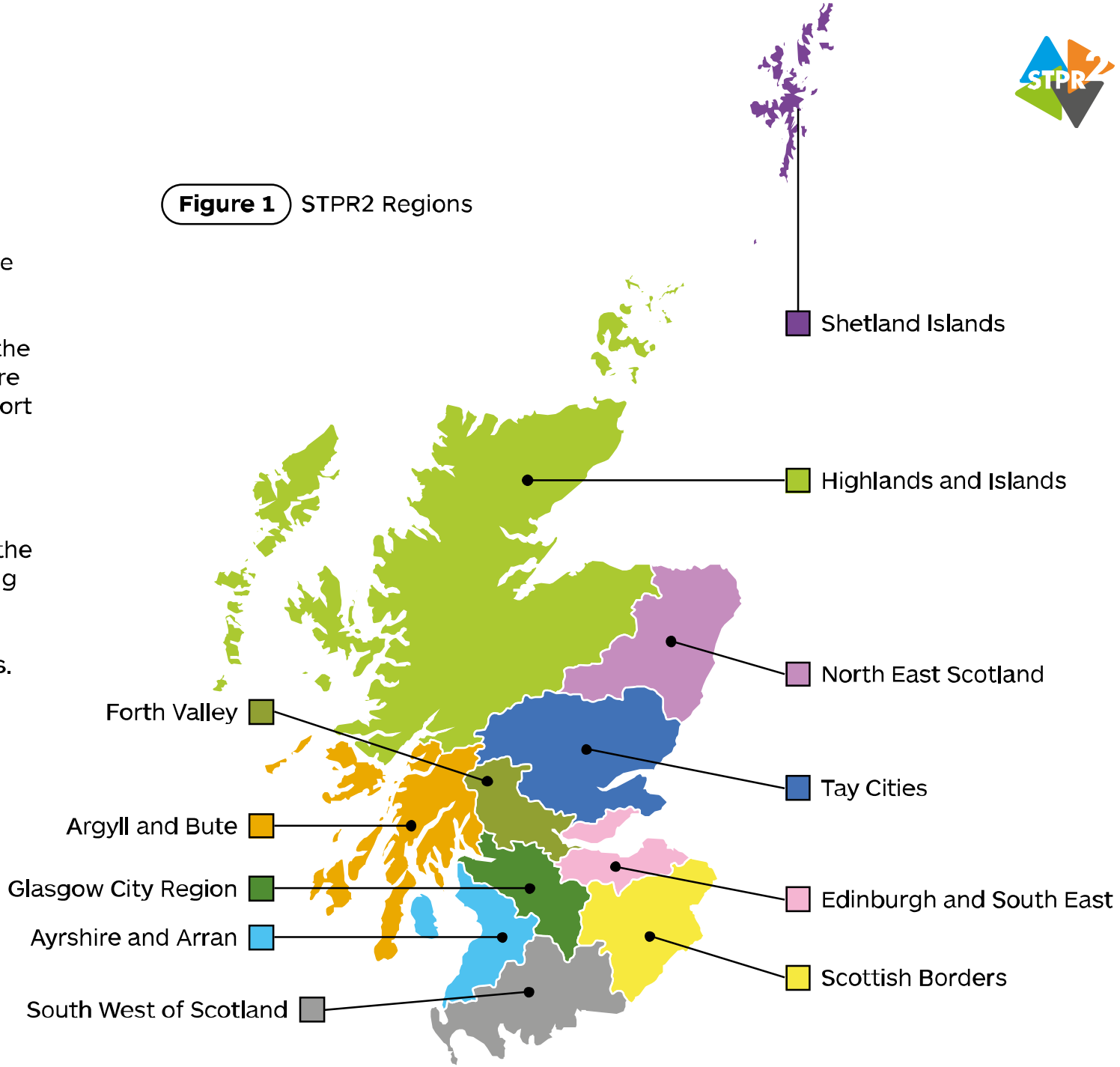
2 What is STPR2?

In 2019, Transport Scotland, the national transport agency of the Scottish Government, commenced the second Strategic Transport Projects Review, the first review having been published in 2008. It will help deliver the vision, priorities and outcomes that are set out in the second National Transport Strategy.

This review of the strategic transport network's performance will inform transport investment in Scotland for the next 20 years (2022-2042) by providing evidence-based recommendations on which Scottish Ministers can base future transport investment decisions.

STPR2 considers the transport needs of Scotland's people and communities, and examines active travel (walking, wheeling, cycling), bus, ferry, rail and motorways and trunk roads as well as passenger and freight access to major ports and airports. These needs are reviewed from national and regional perspectives to reflect their different geographies, travel patterns and demands.

Figure 1 STPR2 Regions



The objectives of STPR2 are consistent across Scottish Government policy. They cover these topics:

- takes climate action
- addressing inequalities & accessibility
- improving health & wellbeing
- supporting sustainable and inclusive economic growth and
- improving safety & resilience.

By addressing these topics, this ensures that STPR2 recommendations:

- align with relevant Scottish Government policy, delivery and investment plans in order to help achieve their priorities
- help achieve the priorities set out in the National Transport Strategy and its Delivery Plan
- meet the objectives and stated purpose of STPR2.

STPR2 provides an overview of transport investment, mainly infrastructure and other behaviour change recommendations, that are required to deliver the National Transport Strategy priorities and objectives of the Review. In many cases the recommendations build on the individual investment and policy decisions taken in recent years, but the overall balance of the recommendations reflects the vision, priorities and outcomes of the National Transport Strategy and commitments in its Delivery Plan. Some of the additional transport investments not covered by STPR2 include routine day-to-day motorway and trunk road maintenance and committed improvements; rail network operations, maintenance and renewal; and revenue funding for public transport services.

Within the list of draft recommendations there are no specific priorities, as each component is vital in addressing the complex needs of our nation. Neither are these recommendations the sole responsibility of Transport Scotland to deliver and, indeed, many will rely on working with partners to take forward. However, by including these within STPR2, Transport Scotland has confirmed its commitment to supporting and working in partnership with others to develop and deliver.

STPR2 presents the Strategic Business Case for the recommendations. After this consultation stage, the next stage will be further development of the recommendations, providing more detailed business cases to inform the investment decision making process. These will inform the Scottish Government's future spending as part of the overall investment programme in transport. Therefore, as development and business case work progresses, projects may become commitments with funding and a delivery programme. Or it may be determined that a recommendation is not a priority for investment or that it is of high priority.

Takes climate action

Addresses inequalities & accessibility

Improves health & wellbeing

Supports sustainable economic growth

Increases safety & resilience

Figure 2 STPR2 Has Five Key Objectives

Key objectives ▼	STPR2 aligns with and supports Scottish Government policies	STPR2 meets the second National Transport Strategy (NTS2) priorities	STPR2 reflects NTS2's Sustainable Investment and Travel Hierarchies	STPR2 meets Transport Planning Objectives to deliver:	STPR2 recommendations meet its stated purpose to:
Takes climate action	**Climate Change Plan Update (2020) & Route Map** target net zero carbon by 2045 and a world leading 20% reduction in car km by 2030	Takes climate action	Reducing the need to travel unsustainably	A sustainable transport system that contributes to zero emissions	Create better connectivity with sustainable, smart, cleaner transport options
Addresses inequalities & accessibility	Delivering a **Just Transition** to net zero in a way that delivers fairness and tackles inequality **Addressing Child Poverty**	Reduces inequalities	Enhances choice and access to active travel and public transport	An inclusive transport system that improves affordability/ accessibility of public transport	Improve accessibility for residents, visitors and business
Improves health & wellbeing	**Cleaner Air For Scotland 2 (2021) & Delivery Plan** – STPR2 recommendations will deliver further air quality improvements	Improves our health & wellbeing	Priority given to walking and wheeling, then cycling	A cohesive transport system that enhances communities as places – supporting health/ wellbeing	Create better connectivity with sustainable, smart, cleaner transport options

Key objectives ▼	STPR2 aligns with and supports Scottish Government policies	STPR2 meets the second National Transport Strategy (NTS2) priorities	STPR2 reflects NTS2's Sustainable Investment and Travel Hierarchies	STPR2 meets Transport Planning Objectives to deliver:	STPR2 recommendations meet its stated purpose to:
Supports sustainable economic growth	**Infrastructure Investment Plan (2021-2026)** – sets the context for future investment in transport to deliver an effective response to the COVID-19 pandemic and climate change. The draft **Fourth National Planning Framework (NPF4)** – presents the opportunity to embed the importance of "place" across land-use planning and transport.	Helps deliver inclusive economic growth	Making better use of existing capacity	An integrated transport system that contributes to sustainable inclusive growth	Enable and sustain economic growth Improve accessibility for residents, visitors and business
Increases safety & resilience	**National Transport Strategy 2** and **Scotland's Road Safety Framework to 2030**	Increase the safety of the transport system and meet casualty reduction targets	Maintain and safely operate existing assets	A reliable and resilient transport system – safe and secure for users	Improve accessibility for residents, visitors and business

3 How have the STPR2 recommendations been developed?

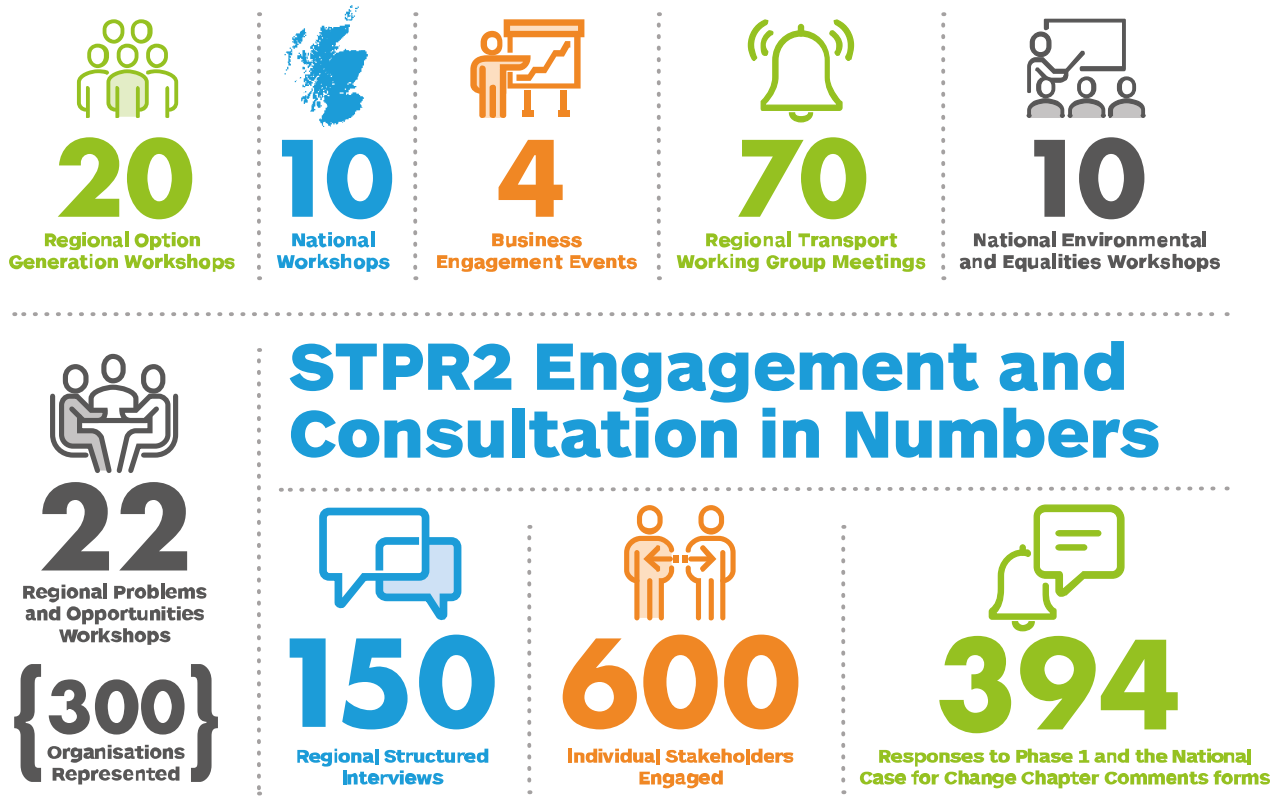
The STPR2 process follows Scottish Transport Appraisal Guidance (STAG), an established evidence-based approach to identify problems and opportunities, set transport objectives to address these and generate, sift and appraise options for changes to the transport system.

Participation and engagement with stakeholder groups across the country has been key to informing STPR2 with events and surveys open to the general public at key stages throughout the review. To guide the review in STPR2 regions and support collaborative working, Regional Transport Working Groups have been formed involving local authorities, national park authorities and regional transport partnerships.

Initially, approximately 14,000 collated ideas were reviewed, creating a long-list of 2,800 options. Further collaboration, sifting, consolidation and review led to 1,400 standalone options being grouped into 80 similar types of options for appraisal.

The appraisal criteria considered the objectives and the five STAG criteria to establish the best performing projects. The criteria also take into account risks, uncertainties and other factors such as affordability, deliverability and the wider acceptability of options. These will be important considerations given pressures on public finances.

Figure 3 STPR2 Engagement



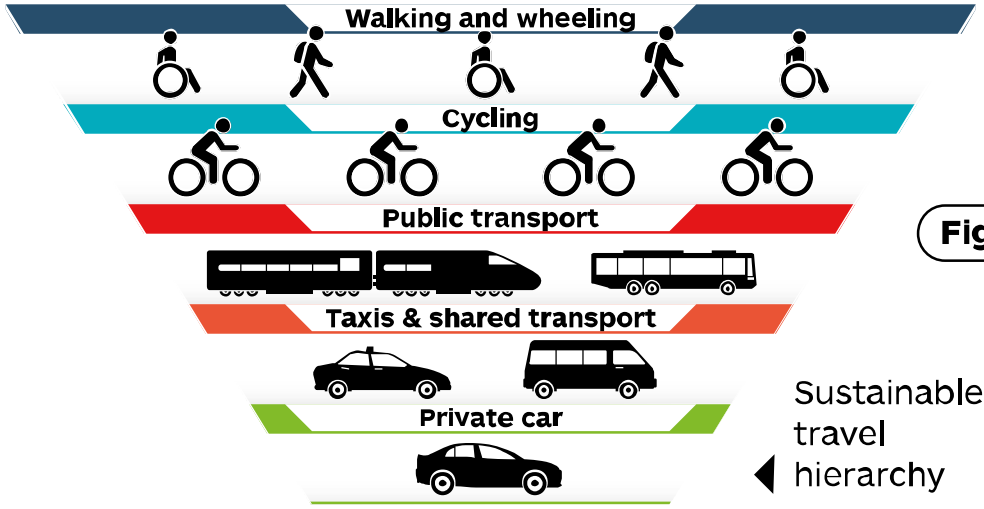


Figure 4

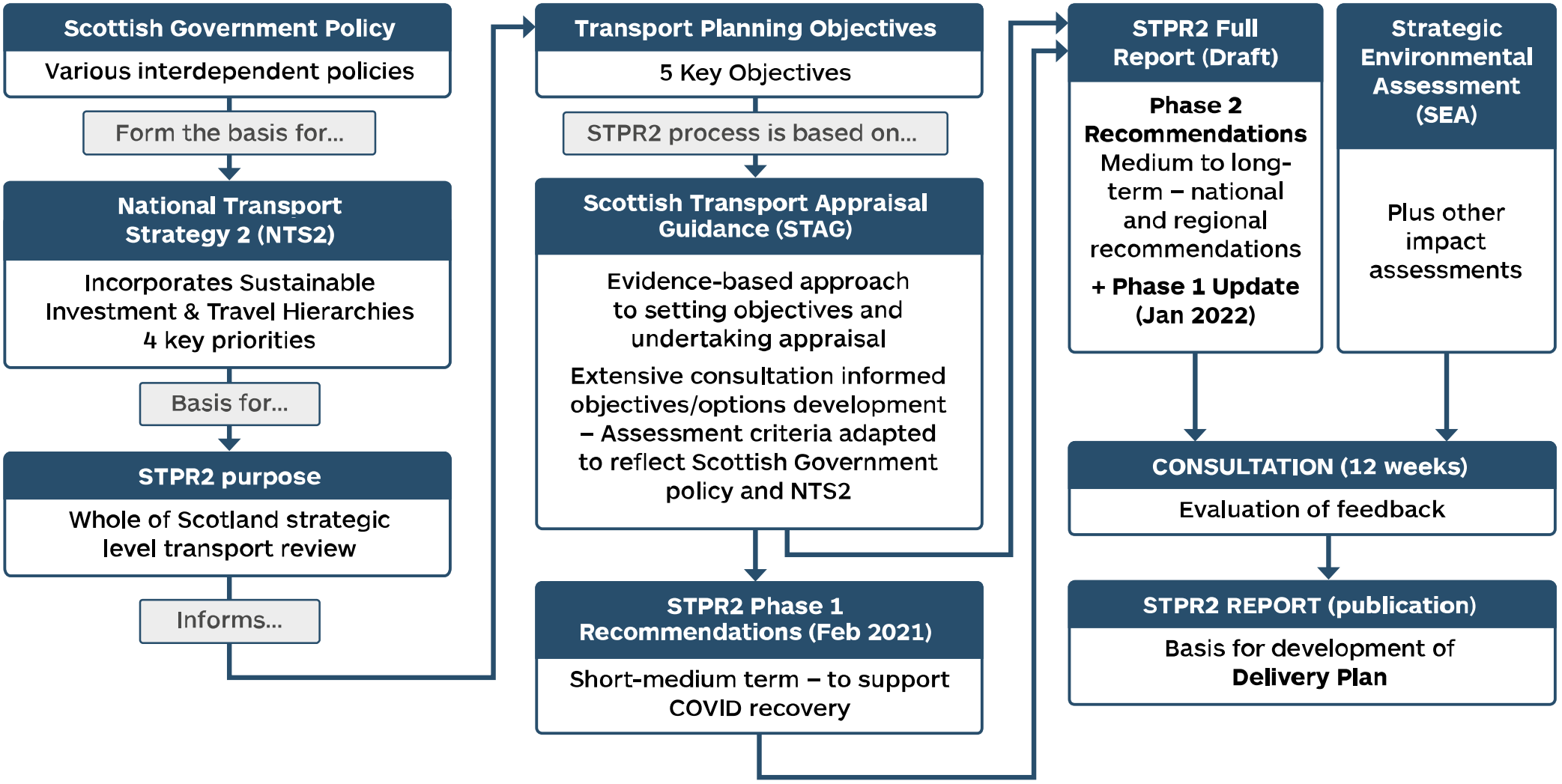
The appraisal process for STPR2 also takes account of government policy priorities. For example:

- a check has been implemented to ensure that STPR2 recommendations contribute to delivering the National Transport Strategy 2 (NTS2) priority "Takes Climate Action" and wider net zero carbon emission commitments
- each option considered within STPR2 has been assessed in terms of its position within the NTS2's Sustainable Travel and Investment Hierarchies. These prioritise:
  - walking, wheeling, cycling and public transport ahead of private car trips
  - reducing the need to travel unsustainably before targeted infrastructure measures.

The original scope of STPR2 has also been adapted to consider the COVID-19 pandemic. A Phase 1 report was published in February 2021 focusing on actions that can be taken in the next five years that could help increase sustainable travel and be brought forward to support economic recovery. The final report incorporates and therefore supersedes the Phase 1 recommendations and covers the period from 2022 to 2042. Lasting responses to the COVID-19 pandemic such as increased working from home do, however, create an element of uncertainty with regards to future travel patterns, but also opportunities for increased use of sustainable travel. The review has recognised this uncertainty and has ensured that there is an element of flexibility and agility to allow specific recommendations to be reviewed or amended as travel patterns become clearer.

A statutory Strategic Environmental Assessment (SEA) ensures the potential impact of transport projects on the environment are considered by STPR2. Impact assessments covering aspects such as equalities, children's wellbeing and island communities have also been undertaken to determine how STPR2 can have a positive impact on groups in society.

Figure 5 STPR2 Development Process Summary



4 Recommendations

STPR2 recommendations are grouped under six themes:

- improving active travel infrastructure
- influencing travel choices and behaviours
- enhancing access to affordable public transport
- decarbonising transport
- increasing safety and resilience on the strategic transport network
- strengthening strategic connections.

Summaries of each theme and related recommendations are provided in the remainder of this report. Figure 6 gives a snapshot of the benefits related to the recommendations. Further details are available on:

transport.gov.scot/stpr2/

The principal benefit of developing a series of recommendations across the whole country is that it maintains an element of consistency (i.e. the same general recommendation is developed for the same problem/ opportunity in multiple locations).

However, these overall recommendations then need to be tailored to respond to the regional problems and opportunities identified in particular parts of the country.

This has been achieved by developing a series of regional packages that incorporate the 45 recommendations.

Figure 7 (Page 17) shows recommendations by each STPR2 region.

Figure 6 Recommendations and Key Benefits

STPR2 objectives ▶	Protecting our Climate and Improving Lives									
	Net-Zero Emissions		Affordable and Accessible Public Transport		Places, Health and Wellbeing		Sustainable Inclusive Growth		Safe and Resilient	
Key themes and recommendations ▼	Benefits to Individuals, Communities and Organisations									
	More green transport options	Less pollution	More choice	Easier access	Better community environments	More healthier options	Access to key services and jobs	Connections to key markets	Safer travel	More reliable journeys
Improving active travel infrastructure	✓	✓	✓	✓	✓	✓	✓		✓	✓
(1) Connected neighbourhoods	✓	✓	✓	✓	✓	✓	✓		✓	✓
(2) Active freeways	✓	✓	✓		✓	✓	✓		✓	✓
(3) Village-town active travel connections	✓	✓	✓	✓	✓	✓	✓		✓	✓
(4) Connecting towns by active travel	✓	✓	✓	✓	✓	✓	✓		✓	✓
(5) Long distance active travel network	✓	✓			✓	✓	✓		✓	
Influencing travel choices and behaviours	✓	✓	✓	✓	✓	✓	✓		✓	✓
(6) Behaviour change initiatives	✓	✓	✓		✓	✓				✓
(7) Changing road user behaviour		✓			✓				✓	✓
(8) Increasing active travel to school	✓	✓		✓	✓	✓	✓		✓	✓
(9) Improving access to bikes	✓	✓			✓	✓				
(10) Expansion of 20mph limits and zones		✓		✓	✓	✓			✓	

STPR2 objectives ▶	Protecting our Climate and Improving Lives									
	Net-Zero Emissions		Affordable and Accessible Public Transport		Places, Health and Wellbeing		Sustainable Inclusive Growth		Safe and Resilient	
Key themes and recommendations ▼	Benefits to Individuals, Communities and Organisations									
	More green transport options	Less pollution	More choice	Easier access	Better community environments	More healthier options	Access to key services and jobs	Connections to key markets	Safer travel	More reliable journeys
Enhancing access to affordable public transport	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
(11) Clyde Metro	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
(12) Edinburgh & South East Scotland Mass Transit	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
(13) Aberdeen Rapid Transit	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
(14) Provision of strategic bus priority measures	✓	✓		✓	✓	✓	✓	✓		✓
(15) Highland Mainline rail corridor enhancements	✓	✓	✓			✓	✓	✓	✓	✓
(16) Perth-Dundee-Aberdeen rail corridor enhancements	✓	✓	✓			✓	✓	✓	✓	✓
(17) Edinburgh/Glasgow–Perth/Dundee rail corridor enhancements	✓	✓	✓			✓	✓	✓	✓	✓
(18) Supporting integrated journeys at ferry terminals	✓	✓	✓	✓	✓	✓	✓	✓		✓
(19) Infrastructure to provide access for all at railway stations	✓		✓	✓	✓		✓		✓	

STPR2 objectives ▶	Protecting our Climate and Improving Lives									
	Net-Zero Emissions		Affordable and Accessible Public Transport		Places, Health and Wellbeing		Sustainable Inclusive Growth		Safe and Resilient	
Key themes and recommendations ▼	Benefits to Individuals, Communities and Organisations									
	More green transport options	Less pollution	More choice	Easier access	Better community environments	More healthier options	Access to key services and jobs	Connections to key markets	Safer travel	More reliable journeys
(20) Investment in DRT and MaaS	✓	✓	✓		✓	✓	✓			
(21) Improved public transport passenger interchange facilities	✓	✓	✓	✓	✓	✓	✓	✓	✓	
(22) Framework for delivery of mobility hubs	✓	✓	✓	✓	✓	✓	✓		✓	
(23) Smart, integrated public transport ticketing	✓		✓	✓		✓	✓			
Decarbonising transport	✓	✓		✓	✓	✓		✓		
(24) Ferry vessel renewal and replacement and progressive decarbonisation	✓	✓		✓	✓	✓	✓	✓		✓
(25) Rail decarbonisation	✓	✓		✓	✓	✓				
(26) Decarbonisation of bus network	✓	✓		✓	✓	✓				
(27) Behaviour change and modal shift for freight	✓	✓			✓	✓		✓		✓
(28) Zero emissions vehicles and infrastructure transition	✓	✓			✓	✓				

STPR2 objectives ▶	Protecting our Climate and Improving Lives				
	Net-Zero Emissions	Affordable and Accessible Public Transport	Places, Health and Wellbeing	Sustainable Inclusive Growth	Safe and Resilient
Key themes and recommendations ▼	**Benefits to Individuals, Communities and Organisations**				
	More green transport options	Less pollution	More choice	Easier access	Better community environments	More healthier options	Access to key services and jobs	Connections to key markets	Safer travel	More reliable journeys
Increasing safety and resilience on the strategic transport network	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
(29) Access to Argyll A83		✓					✓	✓	✓	✓
(30) Trunk road and motorway safety Improvements					✓		✓	✓	✓	✓
(31) Trunk road and motorway climate change adaptation and resilience							✓	✓	✓	✓
(32) Trunk road and motorway renewal for reliability, resilience and safety					✓		✓	✓	✓	✓
(33, 34, 35) Enhancing Intelligent Transport Systems		✓	✓		✓		✓	✓	✓	✓
(36) Strategy for improving rest and welfare facilities for hauliers					✓		✓	✓	✓	

STPR2 objectives ▶	Protecting our Climate and Improving Lives									
	Net-Zero Emissions		Affordable and Accessible Public Transport		Places, Health and Wellbeing		Sustainable Inclusive Growth		Safe and Resilient	
Key themes and recommendations ▼	Benefits to Individuals, Communities and Organisations									
	More green transport options	Less pollution	More choice	Easier access	Better community environments	More healthier options	Access to key services and jobs	Connections to key markets	Safer travel	More reliable journeys
(37) Improving active travel on trunk roads through communities	✓	✓		✓	✓	✓			✓	
(38) Speed management plan		✓			✓		✓		✓	✓
Strengthen strategic connections	✓	✓	✓		✓	✓	✓	✓	✓	✓
(39) Sustainable access to Grangemouth Investment Zone	✓	✓	✓	✓	✓	✓	✓	✓		✓
(40) Access to Stranraer and ports at Cairnryan	✓			✓	✓		✓	✓	✓	✓
(41) Potential fixed links in Outer Hebrides and Mull				✓			✓	✓		✓
(42) Investment in port infrastructure	✓	✓		✓	✓		✓	✓		
(43) Major station masterplans				✓	✓	✓	✓	✓	✓	
(44) Rail freight terminals and facilities	✓	✓					✓	✓	✓	✓
(45) High speed and cross border rail enhancements	✓	✓	✓			✓	✓	✓	✓	✓

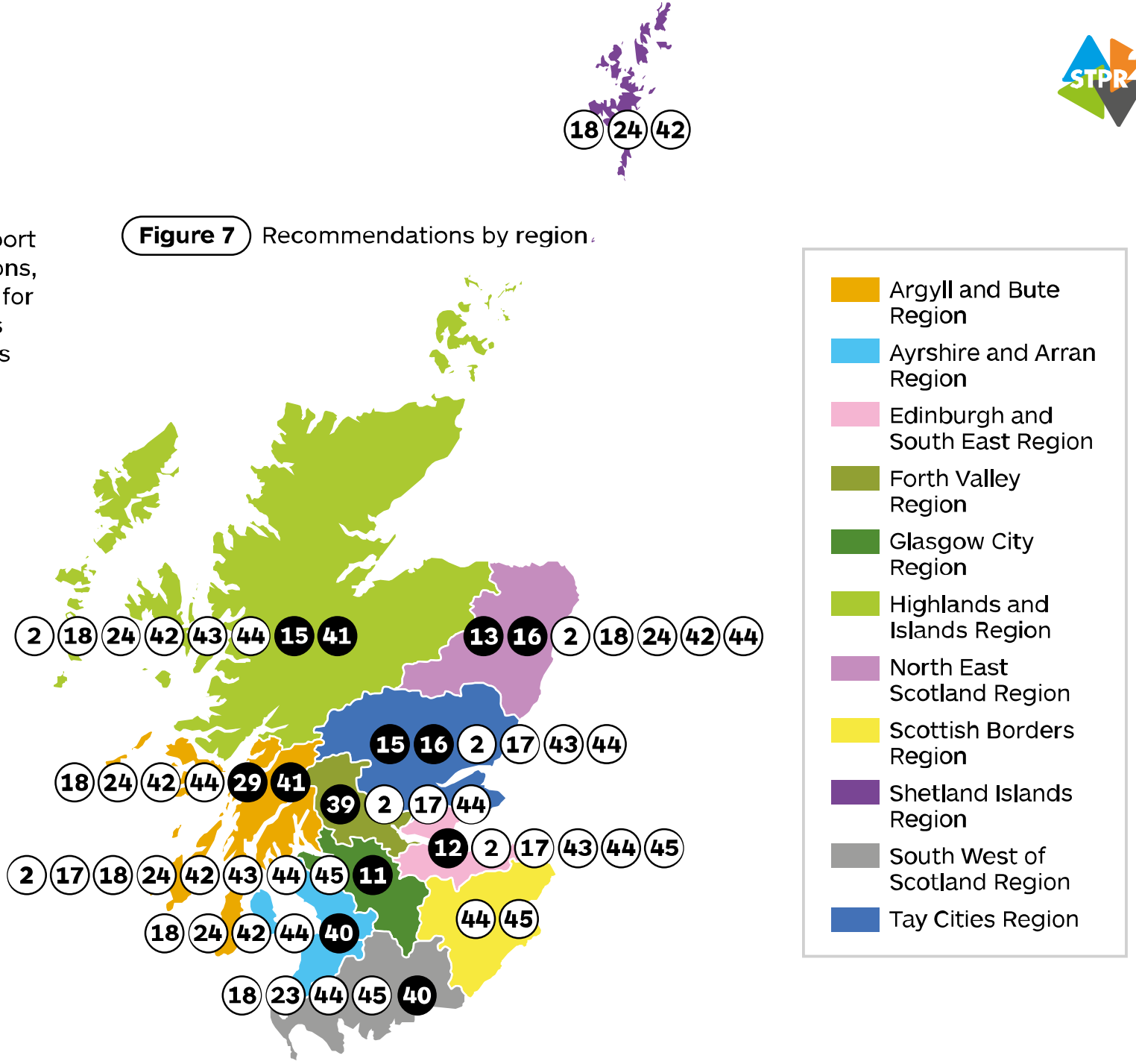
This draft report makes 45 recommendations that focus investment on sustainable transport options. Of those recommendations, the following 28 provide benefits for individuals, families, communities and businesses across most parts of Scotland:

1 3 4 5 6 7 8
9 10 14 19 20 21 22
23 25 26 27 28 30 31
32 33 34 35 36 37 38

A further 17 recommendations provide benefits in a number of regions. The regional map in Figure 7 highlights recommendations that:

- ● are specific to one or two regions
- ○ are general but will have particular benefit for certain regions.

Figure 7 Recommendations by region



Improving active travel infrastructure

Encouraging more people to walk, wheel and cycle more often:

- cuts carbon emissions
- reduces inequalities by improving access to jobs, services and leisure
- delivers more pleasant communities
- improves health
- supports sustainable economic growth.

Better active travel routes create particular opportunities for people vulnerable to social exclusion such as disabled, young and older people, and those without access to a car.

Three STPR2 recommendations; village-town active travel connections **(3)**, connecting towns by active travel **(4)** and long-distance active travel network **(5)**, would combine to provide a high quality, safe nationwide active travel network connecting Scotland's communities. These would integrate with existing networks including the National Cycle Network and provide links into urban areas via the STPR2 recommendations of connected neighbourhoods **(1)** and active freeways **(2)**.

To be effective, implementation of these STPR2 recommendations would require a partnership approach, principally with the local authorities and Regional Transport Partnerships.

1 Connected neighbourhoods

20-minute neighbourhoods are a method of achieving connected and more accessible neighbourhoods designed in such a way that as many people as possible can meet the majority of their daily needs within a reasonable walk, wheel or cycle of their home. Creating a fairer allocation of space for pedestrians and cyclists is a key principle in developing 20-minute neighbourhoods. Connected neighbourhoods would encourage walking, wheeling and cycling for short everyday journeys by creating safer, more attractive routes that better connect communities to services in our towns and cities.

There would be particular benefits for people that are often excluded from transport, including young and older people and those without access to a car.

STPR2 recommends delivering connected neighbourhoods which are the transport components of 20 minute neighbourhoods within towns and cities. This would consist of packages of improvements to active travel infrastructure in and around town and neighbourhood centres, for example, to footways, road crossings, route surfacing, lighting and street furniture.

Meets key objectives:

Climate Accessibility Health Economy Safety

2 Active freeways and cycle parking hubs

Active freeways would encourage more people to walk, wheel and cycle more often by providing high-quality direct active travel routes, segregated from traffic, on busy corridors in large urban areas. To cater for the increased demand, high-quality, secure cycle parking hubs could be provided. By improving safety, active freeways would help to address fear of road danger, the biggest single barrier to increasing such active travel.

STPR2 recommends development of active freeways on high-demand corridors in Scotland's large urban areas, with priority given initially to the larger cities. Comprehensive networks of active freeways would connect outlying neighbourhoods to city or town centres and to key services and popular destinations. Improved local routes such as those provided by connected neighbourhoods, would allow people to readily access active freeways from their homes, schools and workplaces.

Meets key objectives:

Climate Accessibility Health Economy Safety

3 Village-town active travel connections
4 Connecting towns by active travel
5 Long-distance active travel network

These recommendations would combine to provide a nationwide network connecting Scotland's communities for people walking, wheeling and cycling. They would also link with other active travel networks to provide good connections into towns and cities.

Providing high quality, safer and more convenient routes would encourage more walking, wheeling and cycling. A key factor is addressing safety fears through effective segregation from traffic, only making use of on-road routes if they are quiet and have low traffic speed limits.

STPR2 recommends developing the long-distance active travel network to connect Scotland's cities and regions. This would enhance the National Cycle Network.

Connecting towns active travel links would be provided between settlements that are relatively close to each other, and where there is good opportunity for switching from travel by car (and where the connections are not made by the long-distance network). Village-town active travel connections would be developed to support more rural journeys by active modes, encouraging a switch from short rural car trips, and allowing people to benefit from improved access to local goods and services.

Meets key objectives:

Climate Accessibility Health Economy Safety

Influencing travel choices and behaviours

The recommendations in this theme focus on influencing people to make healthier, more sustainable and safer travel choices. Some – behaviour change initiatives **(6)**, increasing active travel to school **(8)**, and increasing access to bikes **(9)** – seek to encourage and enable more people to make use of active modes and public transport. As well as delivering benefits in their own right, these recommendations will also improve the value provided by other STPR2 recommendations by enabling more people to make use of the infrastructure that they provide.

Other recommendations in this theme – changing road user behaviour **(7)**, and expansion of 20mph limits and zones **(10)** – seek to improve road safety by reducing traffic speeds and promoting more responsible road use. These will not only generate benefits of fewer accidents, but also help overcome perceptions of road danger, which can be a key barrier to use of active modes.

To be effective, implementation of these STPR2 recommendations would require a partnership approach between the many public, private and community organisations involved in delivering changes in travel choices and behaviours.

6 Behaviour change initiatives

Encouraging more people to make active and sustainable transport choices (walk, wheel, cycle, and take public transport) more often would have significant health, inclusion and environmental benefits, especially if the options being promoted are high quality and relevant to the individual.

STPR2 recommends
building on existing programmes to deliver local, regional and national initiatives that raise awareness of sustainable transport options and encourage individuals to make the most appropriate transport choices for their journeys.

These would include providing information, promotional activities, incentives and community events to encourage and enable use of active and sustainable modes. These initiatives can play a key role in raising awareness of new infrastructure and services, including those delivered by other STPR2 recommendations.

Meets key objectives:

7 Changing road user behaviour

Ensuring all road users understand their road safety responsibilities can increase the respect between them. This results in more responsible behaviour which, combined with speed enforcement, leads to fewer road casualties.

Improving safety is particularly important given other STPR2 recommendations which seek to encourage an increase in people walking, wheeling and cycling, and provide a safer environment for all road users.

STPR2 recommends implementation of speed enforcement technology and national road safety behaviour change campaigns, education and training initiatives. These would reduce road casualties and help to deliver the outcomes of Scotland's Road Safety Framework to 2030.

Meets key objectives:

Climate Health Safety

8 Increasing active travel to school

Increasing walking, wheeling and cycling to school leads to health and wellbeing benefits for young people and their family groups/ carers. This can help create healthy active travel habits for life.

The car journey to school, however, continues to be a major contributor to traffic levels. Rates of walking to school in Scotland have been steadily declining over the past decade, only partly offset by increases in scooting and cycling.

Research indicates that safer routes and slower traffic speeds are the main improvements that would encourage more walking, wheeling and cycling to school.

STPR2 recommends improved and safer walking, wheeling and cycling routes to primary and secondary schools, accompanied by measures to reduce traffic congestion, volumes and speeds in the vicinity of schools. Where schools are in or close to neighbourhood centres, improvements would be planned jointly with connected neighbourhoods **(1)**. STPR2 also recommends campaigns to promote better driver behaviour around schools, and to provide encouragement for pupils and their families to travel safely and actively.

Meets key objectives:

Climate Accessibility Health Economy Safety

9 Improving access to bikes

Many people do not own or have access to a bike. Only one-third of Scottish households have access to one or more cycles. Although the cost of a bike and associated accessories – such as lights, locks and helmets – can be fairly low, it is still significant for many people, especially families or people who need more specialist cycles. There is also often a lack of access to training or support that would give people the necessary confidence and skills to cycle.

As such, providing access to bikes, training and support would play a key role in enabling more people to cycle. In addition to health, environmental and accessibility benefits, this would also help make the most of investment in cycle routes. Those that could most benefit from the opportunities that cycling provides include young people, women, older people, disabled people, individuals with health problems and people from more deprived communities.

STPR2 recommends building on existing successful programmes and the work of established support groups to provide bikes, accessories and training to more people across Scotland. Support would also be provided for walking and wheeling where these are more appropriate. Particular focus would be given to people living in deprived communities, many of whom could substantially benefit from the opportunities that cycling (as well as walking and wheeling) provides.

Meets key objectives:

Climate Health

10 Expansion of 20mph limits and zones

Introducing more 20mph speed limits and zones in cities, towns and villages can reduce speeding traffic, making streets safer.

Evidence indicates that road casualty rates fall with the introduction of 20mph zones, and that accident survival rates are up to five times higher when a pedestrian is hit by a car driving at 20mph compared to 30mph. Safer environments can encourage more people to walk, wheel and cycle more often.

Lower speeds also increase the safety of people travelling in vehicles.

STPR2 recommends supporting the Scottish Government's 20mph Task Group by scaling up current local programmes and initiatives to provide new or expanded 20mph limits and zones on appropriate roads in cities, towns and villages across Scotland.

Accompanying road safety campaigns would encourage better driver behaviour in 20mph zones.

Meets key objectives:

Climate Accessibility Health Safety

Enhancing access to affordable public transport

For many people, having access to affordable and reliable public transport is necessary, as it allows them to access jobs and key services. This applies to those living in rural areas as well as our towns and cities. Investment in the necessary infrastructure would encourage greater use of public transport, which in turn would result in a reduction of car-based trips and associated emissions.

Addressing the differing needs of the population requires a suite of packages that recognise the particular challenges and barriers to those travelling by public transport. This includes improvements to transport stations and interchanges **(18, 19, 21, 22)**, and developing suitable smart integrated ticketing and payment schemes **(23)** to enhance the overall accessibility and affordability of services.

Complementing these are a range of measures that deal with more heavily populated regions. These include recommendations where mass transit can provide a transformational change in the service provision **(11, 12, 13)**, and focusing on strategic routes and or corridors where bus and rail provide the most effective service **(14, 15, 16, 17)**. In addition, the bespoke options can reflect the particular needs of the less densely populated communities, through an expansion of Demand Responsive Transport and Mobility as a Service **(20)**.

11 Clyde Metro

A metro transport system that transforms connectivity in the Glasgow City Region up to around 15km from the city centre would target areas where connections are currently poor, including places where there is deprivation. Metro transport systems include one of or a combination of bus rapid transit, light rail and metro rail. These options would complement the service provided by traditional railways and may include the conversion from existing railways to light rail or metro rail.

Improving access across the city region supports Scottish Government policies aimed at tackling deprivation and health issues. Connecting Clyde Metro with active travel and existing transport networks would remove shorter distance trips from the heavy rail network and free up additional rail capacity for longer journeys. The system would help to deliver environmental benefits and improve public transport journey times and journey time reliability, making sustainable travel options more attractive.

STPR2 Recommends that Transport Scotland continues to work with Glasgow City Council, Strathclyde Partnership for Transport and other regional partners on developing the business cases and delivery plan for Clyde Metro.

Meets key objectives:

Climate | Accessibility | Health | Economy | Safety

12 Edinburgh & South East Scotland Mass Transit

A mass transit system for the region would provide more public transport options for cross boundary travel, reducing the need to change between services. This would improve region wide connectivity and encourage a switch from car to public transport and other more sustainable travel options. The system would focus on key corridors of demand as well as where congestion impacts on bus services and where the public transport offer is more limited, including targeting more disadvantaged areas where there can be greater dependence on public transport.

The system would help to deliver environmental benefits and improve public transport journey times and journey time reliability, making sustainable travel options more attractive.

STPR2 recommends that Transport Scotland works with regional partners to develop and enhance the cross-boundary public transport system for the Edinburgh and South East Scotland region, potentially comprising tram and bus-based transit modes including Bus Rapid Transit (BRT). This would complement and integrate with the region's current bus, tram and heavy rail networks, to provide improved connectivity between Edinburgh and the surrounding communities in the region, as well as more direct connections between communities outside Edinburgh.

Meets key objectives:

13 Aberdeen Rapid Transit

A bus based rapid transit system for the region would provide a more competitive and efficient public transport into and around the Aberdeen City region. This would improve region-wide connectivity and encourage a switch from car to public transport and other more sustainable travel options. The system would focus on key corridors of demand as well as where congestion impacts on bus services. A switch from car to public transport for many would reduce the congestion impacts on bus services as a result of high car usage and offer opportunities for placemaking improvements to support healthy and active lifestyles.

The system would help to deliver air quality benefits and improve public transport journey times and journey time reliability, making sustainable travel options more attractive.

STPR2 recommends that Transport Scotland continues to work with local partners in developing plans for Aberdeen Rapid Transit. This would prioritise buses and connect key destinations on the outskirts of Aberdeen to the city centre via busy radial corridors (including the A96, A944 and A956).

Meets key objectives:

14 Provision of strategic bus priority measures

Bus priority measures, including reallocation of road space, can deliver greater punctuality and faster journey times. Research shows that such benefits would increase the attractiveness of travel by bus and help reverse the continued decline in use. Switching from car to this greener, cleaner option is essential if Scotland is to meet its net zero carbon emission target and the need for action is urgent, as confidence in the safety of travel by bus has reduced as a result of the COVID-19 pandemic.

STPR2 recommends bus priority options are implemented within Scotland's cities and towns where congestion is highest and that bus priority measures continue to be identified and implemented on the trunk road and motorway network. In the case of local networks the recommendation is to continue to use the mechanism of funding for local authorities through the Bus Partnership Fund.

Meets key objectives:

15 Highland Mainline rail corridor enhancements
16 Perth-Dundee-Aberdeen rail corridor enhancements
17 Edinburgh/Glasgow-Perth/Dundee rail corridor enhancements

The COVID-19 pandemic has highlighted significant challenges for rail with respect to maintaining financial viability; meeting changing passenger requirements; meeting changing freight customer requirements and achieving the passenger and freight growth required to meet net zero and car travel reduction targets.

For passengers, rail is typically best suited to the higher volume 'trunk' element of city-to-city journeys, complementing door-to-door connectivity by bus, active travel, and where appropriate, adequate parking facilities. For freight, rail is often suited for longer distance bulk / intermodal freight. Future passenger rail investment should therefore be targeted on the strongest city-to-city markets as the routes where the greatest value from improvements will be realised, and freight investment on corridors from the Central Belt across the border and towards Aberdeen and Inverness.

STPR2 recommends a programme of enhancements, which would achieve improvements to journey times and increases in capacity and reliability for passenger and freight services. Additional freight enhancements to increase volumes carried would also be considered where these would lower operational costs and encourage a faster shift from road to rail.

These improvements would integrate rail delivery across passenger and freight services.

Meets key objectives:

18 Supporting integrated journeys at ferry terminals

Improving the connections at ferry terminals to other types of public transport is important in encouraging people to switch from travel by car.

Historically, people are less likely to use public transport if limited travel choices or connections make it more difficult to reach their end destination.

Improving access and creating a better traveller experience at ferry terminals and interchange facilities would benefit rural and island communities as well as visitors. There would be particular benefits for longer distance travel with more seamless travel choices and improved services for those people not travelling by car. Reducing car usage also helps make better use of existing ferry capacity.

STPR2 recommends a detailed review of key ferry terminals to consider the improvements in timetable information, signing, ticketing and facilities required to deliver a seamless journey between different types of public transport to enhance the traveller experience and accessibility at ferry terminals.

Meets key objectives:

19 Infrastructure to provide access for all at railway stations

Implementing measures to improve the accessibility of Scotland's railway stations can help ensure that everyone can use the transport system with as few barriers as possible. This would encourage greater use of rail and a switch from the car. Examples include step-free routes and step-free platform access to passenger trains.

STPR2 recommends a review of station accessibility across Scotland to identify barriers and improve access for all to the rail network, prioritising those stations that have particular problems. This would include investigating the opportunities for new technology to improve safety and access at stations for people with reduced mobility. Opportunities for improving the accessibility of onward journeys from railway stations, particularly by bus and taxi, would also be considered.

Meets key objectives:

20 Investment in Demand Responsive Transport and Mobility as a Service

Targeted investment to make it easier for people to travel, particularly those without access to a car, can help promote equality through fairer access to jobs and services.

In locations where conventional fixed route bus services may not be suitable or viable, flexible options, such as Demand Responsive Transport (DRT), perhaps supported by Mobility as a Service (MaaS) and smart technology where appropriate, can be used to provide improved public transport connectivity.

This would be important in addressing the marked differences in public transport provision between and within regions.

STPR2 recommends that pilot schemes involving DRT and MaaS draw on innovative solutions, international best practice and smart technologies. These schemes will help to establish whether scarce existing resources could be better utilised across the public network, home to school transport, special educational needs travel and non-emergency patient travel, either on the basis of fixed route services or through flexible routeing.

Meets key objectives:

21 Improved public transport passenger interchange facilities

Improving the quality of passenger facilities at bus stations, railway stations and other transport interchanges encourages uptake of public transport and a switch from car use. This would include improving accessibility at bus stations and transport interchanges for people with reduced mobility. Improvements can also be made to infrastructure design and security, and by enhancing the quality of the waiting environment, information, signage and wayfinding for all users of the facilities.

STPR2 recommends building on STPR2 recommendation 19 (Infrastructure to provide access for all at railway stations) by upgrading the accessibility and quality of passenger facilities at existing bus stations and other transport interchanges, to improve the overall attractiveness of public transport services.

Meets key objectives:

22 Framework for delivery of mobility hubs

Mobility hubs are facilities where various types of transport, and potentially other services inter-connect. Improving links between public transport services, active travel (walking, wheeling and cycling) and shared transport makes it easier for people, particularly those without a car, to get around. This addresses one of the main barriers to the uptake of public transport services.

STPR2 recommends a delivery framework is developed, building on best practice, to optimise the effectiveness of mobility hubs and ensure a consistent and coordinated approach is taken to assessing locations, facilities and methods of community engagement. Best practice guidance would also be produced to support development.

Meets key objectives:

Climate Accessibility Health Economy Safety

23 Smart, integrated public transport ticketing

Making it easier for people to reach their end destination by simplifying how they book and pay for tickets with different providers makes public transport a more convenient, flexible and attractive travel option. This encourages people to switch from car use and supports more active travel (walking, wheeling and cycling). Improving integration involves introducing technologies and systems which support easier payment and the simplification of schemes or fares, including price capping.

STPR2 recommends continuing with the support and ongoing delivery of fully integrated smart ticketing and payment services across all public transport, to increase demand and encourage active travel. This recommendation supports the delivery of the objectives within the 2019 Transport (Scotland) Act, and subsequent workstreams, which aims to establish a National Smart Ticketing Advisory Board and set a technological standard for smart ticketing.

Meets key objectives:

Climate Accessibility Health Economy

Decarbonising transport

To meet its commitments on climate change, the Scottish Government has set a legally binding target to achieve net-zero greenhouse gas emissions by 2045.

Transport is currently the largest source of greenhouse gas emissions, with domestic transport taking the largest share. Car traffic on major roads has tripled during the last four decades, meaning that despite improvements in engine efficiency, cars account for 39 per cent of transport emissions while goods vehicles account for a further 25 per cent.

Evidence indicates that the only way the net-zero target can be achieved is by a combination of:

- rapid decarbonisation of passenger and freight transport
- reduction in vehicle usage by switching to public transport and active travel
- reduced demand through shorter trips and, where possible, avoiding trips.

Various STPR2 recommendations described in earlier themes are directed at support for active travel (walking, wheeling and cycling) and measures to improve the attractiveness of public transport.

STPR2 recommendations aimed at rapid decarbonisation of pasenger and freight transport are described in this section and include: ferry vessel renewal and replacement and progressive decarbonisation **(24)**, rail decarbonisation **(25)**, decarbonising the bus network **(26)**, behaviour change and modal shift for freight **(27)** and zero emission vehicles and infrastructure transition **(28)**.

These recommendations align with and support the draft Fourth National Planning Framework (NPF4) where decarbonisation of connectivity is a strong theme.

24 Ferry vessel renewal and replacement and progressive decarbonisation

Continued investment in ferry renewals would address the needs of rural and island communities by improving the resilience, reliability, capacity and accessibility of ferries. If this investment is focused on progressive decarbonisation of ferry networks, it will reduce emissions and help Scotland achieve its net zero carbon emission targets.

STPR2 recommends renewal and replacement of the Clyde and Hebrides Ferry Services (CHFS) and Northern Isles Ferry Services (NIFS) vessels including progressive decarbonisation by 2045.

Meets key objectives:

Climate | Accessibility | Health | Economy | Safety

25 Rail decarbonisation

Replacing diesel trains, the largest source of rail carbon emissions, with cleaner technologies offers multiple benefits in addition to helping meet net zero targets. Electrification would improve journey times and strengthen reliability of both freight and passenger rail services. Capacity could be expanded through the use of longer trains and timetable efficiencies from improved train acceleration. These provide indirect benefits because of the new incentives for passengers and freight to switch from road to rail.

New electric trains would reduce operation and maintenance costs and improve fleet efficiency. Routes where electrification is not appropriate offer significant opportunities for the introduction of rail technologies such as battery and hydrogen.

STPR2 recommends the priorities for decarbonising key rail routes should align with the Rail Services Decarbonisation Action Plan and focus, where appropriate, on routes with the most potential to switch traffic from road to rail.

Meets key objectives:

Climate Accessibility Health

26 Decarbonisation of the bus network

The Scottish Government has committed to remove the majority of diesel buses from public transport by the end of 2023 with an investment of £120m in support of this announced in 2021.

STPR2 recommends further investment to stimulate the commercial roll out of zero-emission buses with an extension of existing funding criteria to include vehicles used for home to school and community transport. This may involve an evolution of the Scottish Zero Emission Bus Challenge Fund (ScotZEB).

Meets key objectives:

Climate Accessibility Health Economy

27 Behaviour change and modal shift for freight

A significant amount of freight needs to shift from road to rail or water, and the overall distance travelled reduced. This is necessary if Scotland is to meet its net zero carbon emission targets as these cannot be achieved by changes in technology alone.

STPR2 recommends the Scottish Government brings together public and private sector organisations to develop a net zero freight and logistics network for Scotland that would encourage the switch to more sustainable and efficient freight transport. This involves considering road fleets, rail freight locomotives and best use of freight capacity.

Meets key objectives:

Climate Health Economy Safety

28 Zero emission vehicles and infrastructure transition

Alongside greater use of public transport and active travel and the required reduction in travel demand, switching to zero emission vehicles is a key element in reducing greenhouse gas emissions from transport. Encouraging this shift to zero emission vehicles requires additional transport infrastructure across Scotland including the alternative fuel supply and vehicle charging networks.

STPR2 recommends targeted funding from Transport Scotland to accelerate investment in zero emission fleets, facilities and emerging technologies. This would also require key industries in the private sector working together to co-ordinate investment in expanding and improving the recharging and alternative fuels supply networks. Where relevant, Transport Scotland would intervene to support a just transition of a national network that provides capacity for longer distance journeys.

Meets key objectives:

Climate Health Economy

Increasing safety and resilience on the strategic transport network

The recommendations within STPR2 supplement ongoing maintenance and operational requirements by focusing on particular challenges associated with the need to operate a safe and resilient motorway and trunk road network.

Transport Scotland will continue to assess the network and implement a programme of renewals and measures that will address safety **(30)**, climate change adaptation **(31)** and resilience **(32)**. STPR2 has considered these requirements and identified a series of routes and locations to prioritise. One specific location that is a current priority of the Scottish Government is to address the resilience of the A83 at the Rest and Be Thankful **(29)**.

Recommendations mitigating the impact of trunk roads on local communities **(37)** and considering the management of speed on trunk roads **(38)** would reduce risk of accidents and enhance the local environment.

The use of technologies will continue to play an important part in operating a safe and reliable system, and STPR2 recommends a suite of measures aimed at creating the next generation of control centres **(33)**, systems **(34)** and infrastructure **(35)**.

Recognising the specific needs of the road haulage industry, STPR2 recommends a national audit and review of lorry parks to address barriers hampering their development **(36)**.

29 Access to Argyll (A83)

Ongoing closures of the A83 due to landslides at the 'Rest and Be Thankful', or on other sections of the road in Argyll and Bute due to accidents, flooding or roadworks have a significant negative impact on the region and its economy. Closures at the 'Rest and Be Thankful' can add detours of up to 50 miles for residents, businesses and visitors.

New or improved road infrastructure to reduce the impact of landslides or other events would improve the reliability of the route which, as one of only two trunk roads linking Argyll and Bute to the central belt, serves as a vital artery through Argyll and a connection for both the Kintyre and Cowal peninsulas.

STPR2 recommends work continues on developing a more reliable route. A preferred corridor has been identified at Glen Croe and five possible route options are being considered with speed of delivery a key criterion for assessment.

Meets key objectives:

30 Trunk road and motorway network safety improvements

Safety improvements are required across the trunk road and motorway network to help meet Scotland's Road Safety Framework to 2030 vision for Scotland to have the best road safety performance in the world by 2030, with a long-term goal of Vision Zero, where there are zero road fatalities and serious injuries by 2050. An ambitious interim target for 2030 involves halving the number of people being killed or seriously injured on Scotland's roads. Safety improvements would also reduce delays associated with accidents and improve route reliability.

STPR2 recommends road safety improvements are progressed across the trunk road and motorway network with a primary, but not exclusive focus on rural sections where accident rates and severities are typically higher. While the location and nature of the improvements on specific routes requires further detailed study, these are likely to include one or a combination of junction improvements, carriageway widening, route realignment and provision of overtaking opportunities.

Where appropriate, these measures may be undertaken in conjunction with, and to support, the STPR2 trunk road and motorway network recommendations related to climate change adaptation **(31)** and renewal **(32)**.

Meets key objectives:

Health Economy Safety

31 Trunk road and motorway network climate change adaptation and resilience

The impacts from climate change require additional efforts, over and above ongoing maintenance, to adapt the trunk road and motorway network to ensure it is safe, reliable and resilient for the people of Scotland and its visitors. This includes developing measures to protect the operation of the network from severe weather-related events related to climate change such as flooding, landslides and high winds.

STPR2 recommends building on existing evidence to develop a fuller picture of those areas on the trunk road and motorway network most at risk of disruption due to future weather events. This would provide a basis for identifying, prioritising and implementing improvements to strengthen the resilience of the network. It is also recommended to build on existing processes and plans to help mitigate the impact of disruption associated with severe weather-related events.

While the location and specific nature of the improvements requires further detailed study, potential measures include, but are not limited to, improving sea walls, upgrading coastal fences and reinforcing slope stability.

Where appropriate, these measures may be undertaken in conjunction with and to support the STPR2 trunk road and motorway network recommendations related to renewal **(32)** and safety improvements **(30)**, with Access to Argyll A83 **(29)** a specific recommendation.

Meets key objectives:

Economy Safety

32 Trunk road and motorway network renewal for reliability, resilience and safety

An effective maintenance and renewal programme is required to improve the reliability, resilience and safety of the trunk road and motorway network. This needs to consider changes in both technology and how we use this national asset.

STPR2 recommends continued and increased investment in strengthening of the trunk road and motorway network over and above current maintenance levels. Potential measures would include carriageway and structure schemes as well as other roadside infrastructure, such as signage and safety barriers. This would also include development of integrated transport plans for Fort William and the A90 through Dundee.

Where appropriate, these measures may be undertaken in conjunction with and to support STPR2 motorway and trunk road network recommendations related to safety improvements **(30)** and climate change adaptation **(31)**.

Meets key objectives:

33 Control Centre of the future
34 Incident Management System upgrade
35 Enhancing Intelligent Transport Systems

These recommendations support Transport Scotland's management of traffic across the motorway and trunk road network, the roads maintained by the Scottish Government rather than local authorities. Traffic Scotland National Control Centre (TSNCC) uses the information it collects about roadworks, accidents, congestion and weather events to reduce disruption and improve the operational efficiency and safety of the network. A key element of the TSNCC is the Incident Management System (IMS), a core software system that supports its response to incidents.

Intelligent Transport Systems (ITS) deploy roadside infrastructure such as CCTV, traffic detectors sites, weather stations, gantry signals and variable message signs to provide more immediate travel information to enhance road safety and support the smoother flow of traffic. The enhanced management of congestion and incidents can also bring environmental benefits.

STPR2 recommends investment to enhance the TSNCC, upgrade IMS and expansion and renewal of ITS to ensure current and future requirements are met. This includes maximising benefits from emerging transport technologies. All passenger and freight transport data would be integrated into the TSNCC as opportunities arise.

Meets key objectives:

36 Strategy for improving rest and welfare facilities for hauliers

Providing adequate lorry parks would contribute to improving road safety, reducing crime and would significantly improve working conditions for HGV drivers. It also avoids disruption to other users in locations not designed to accommodate lorry parking. Rest and welfare facilities are a key part of national and international road freight infrastructure, and provision of these to an appropriate standard are therefore fundamental to ensuring safe, efficient and effective supply chains. Improvements to these would therefore also help support the Scottish economy and its growth.

STPR2 recommends a detailed national audit of lorry parks. The audit would indicate which routes have gaps in provision and develop a framework to address barriers hampering their development, consider their financial stability and develop adequate standards.

Meets key objectives:

Health Economy Safety

37 Improving active travel on trunk roads through communities

Where a trunk road passes through a community, measures may be able to be introduced to benefit people walking, wheeling and cycling. For example, safety may be able to be improved by reducing traffic speeds, or improving footways or road crossing facilities on or near the trunk road. Such measures can improve access to key destinations for local people, creating particular opportunities for people vulnerable to social exclusion such as disabled, young and older people.

STPR2 recommends the delivery of packages of measures to reduce the adverse effects of trunk road traffic in communities on walking, wheeling and cycling, tailored to local circumstances and informed by detailed feasibility studies. Where appropriate, these would be planned jointly with connected neighbourhoods **(1)** and school active travel **(8)**.

Meets key objectives:

Climate Accessibility Health Safety

38 Speed Management Plan

Scotland's Road Safety Framework to 2030 sets out the vision for Scotland to have the best road safety performance in the world by 2030, with a long-term goal of Vision Zero where there are zero fatalities and injuries on Scotland's roads by 2050.

An ambitious interim target for 2030 involves halving the number of people being killed or seriously injured on Scotland's roads. Speed management to reduce the occurrence of accidents and level of impact of any that do occur is a key element of the framework.

Changing how speeds are managed also has the potential to help meet net zero emissions targets by reducing vehicle fuel consumption. Reducing speed limits in communities can also improve the sense of place and encourage active travel, with a positive impact on emissions as well as health and well-being.

STPR2 recommends a national review to establish appropriate speed limits for different road types within Scotland. The plan would consider a range of measures such as speed management on motorways, speed limits through roadworks and rural settlements on trunk roads, and reducing speed limits in urban environments and residential areas as well as consideration of the national speed limits for heavy goods vehicles over 7.5 tonnes on the trunk road network. These may require significant changes to engineering, enforcement and education.
This recommendation would be complemented by the changing road user behaviour recommendation **(7)**.

Meets key objectives:

Climate Health Economy Safety

Strengthening strategic connections

It is important that long distance strategic connections are maintained to facilitate travel within Scotland and across its borders. Much of the strategic network is managed by Transport Scotland on behalf of Scottish Ministers and it is therefore appropriate for STPR2 to make a number of recommendations in this area. It also relevant and important that STPR2 addresses the role that connectivity plays in supporting the proposed national developments presented in the draft Fourth National Planning Framework (NPF4), and in facilitating passenger and freight movements through our major gateways.

Recommendations **(39)** and **(40)** address opportunities associated with access to two of the most significant gateways, and recognised in the draft NPF4 national developments, Grangemouth and Stranraer.

Addressing the needs of island communities to have reliable links to the mainland, STPR2 recommends investment in port infrastructure **(42)** and the investigation of some potential fixed link connections (bridges or tunnels) at Sounds of Harris and Barra, and between Mull and the Scottish mainland **(41)**.

Recognising the important part that rail plays in facilitating longer distance journeys, STPR2 makes three core recommendations. These involve continued development of the major railway stations in Edinburgh, Glasgow, Perth and Inverness **(43)**, leveraging investment in future rail freight terminals **(44)**, and Transport Scotland continuing to work with UK Government to take forward cross border high speed rail connections **(45)**.

39 Sustainable access to Grangemouth Investment Zone

Grangemouth Investment Zone contains important infrastructure, high value employment and manufacturing of materials that are currently vital for everyday life.

As this role will continue in the long term, the zone must seek to decarbonise to contribute to the significant reduction of industrial carbon emissions required to meet Scotland's net zero targets. A sustainable transport access strategy would contribute towards this aim.

STPR2 recommends improvements are made to transport that would enhance sustainable access to Grangemouth Investment Zone for both people and freight. This would include improved active travel and bus connections to Grangemouth from key areas, including neighbouring towns and stations, along with freight measures.

Meets key objectives:

40 Access to Stranraer and the ports at Cairnryan

Stranraer and the ports at Cairnryan act as an important gateway to Scotland for ferry passengers and freight. Improving the transport assets in this location would support regeneration in the South West of Scotland to benefit the economy and local communities.

STPR2 recommends that safety, resilience and reliability improvements are made on the A75 and A77 strategic road corridors, in turn supporting placemaking opportunities. This would include, but is not limited to enhancing overtaking opportunities, widening or realigning carriageways and improving junctions. To encourage greater use of public transport and enable regeneration activities, consideration would also be given to upgrading or relocating the railway station in Stranraer.

These would provide more resilient connections to the draft Fourth National Planning Framework (NPF4) national developments at Stranraer Gateway, Chapelcross Power Station Redevelopment and the ports at Cairnryan.

Meets key objectives:

Climate Accessibility Health Economy Safety

41 Potential Sound of Harris/Sound of Barra fixed links and fixed link between Mull and Scottish mainland

The current ferry routes on the Sound of Harris, Sound of Barra and between Craignure and Oban face a number of issues and challenges. Replacing ferry services with fixed links (bridges or tunnels) can improve reliability, connectivity, capacity and crossing times. A Sound of Harris fixed link would improve connectivity between the Uists and Lewis/Harris while a Sound of Barra fixed link would improve connectivity between Barra and the Uists. The provision of these fixed links would allow for the reconfiguration of transport provision between the Outer Hebrides and the mainland.

The provision of a fixed link between Mull and the Scottish mainland would allow for the reconfiguration of transport provision between the island and the mainland.

STPR2 recommends that further work is undertaken on business cases to better understand the benefits, costs and challenges associated with these options. These studies would consider the feasibility of replacing existing ferry services currently delivered by CalMac as part of the Clyde and Hebrides Ferry Services (CHFS) contract. These studies would also ascertain the potential savings associated with the public sector subsidies required to operate the ferry services and involve input from communities that may potentially be affected.

Meets key objectives:

Accessibility Economy Safety

42 Investment in port infrastructure to support vessel renewal and replacement and progressive decarbonisation

To facilitate ferry vessel renewal and replacement and progressive decarbonisation of the Clyde and Hebrides Ferry Services (CHFS) and Northern Isles Ferry Services (NIFS) vessels **(24)**, related investment in port infrastructure will be required. This would help meet the needs of rural and island communities by improving the capacity, resilience, reliability and accessibility of ferry services.

Investment in port infrastructure means that there can be progression to standardisation of new vessels. This investment would also contribute to reducing emissions across the ferry network and support Scotland's net zero carbon emission targets.

STPR2 recommends an investment programme in port infrastructure, including power supplies, to support STPR2 recommendation **(24)** renewal and replacement of the Clyde and Hebrides Ferry Services (CHFS) and Northern Isles Ferry Services (NIFS) vessels including progressive decarbonisation by 2045.

Meets key objectives:

Climate | Accessibility | Health | Economy

43 Major station masterplans

Network Rail, the UK agency responsible for developing and maintaining railway infrastructure, has identified capacity constraints at four major stations, Edinburgh Waverley, Glasgow Central, Perth and Inverness. Studies are continuing to progress plans to consider how remodelling the stations can deliver specific benefits.

STPR2 recommends that station plans and masterplans are progressed to align with and support the investment priorities of Transport Scotland and Network Rail.

Meets key objectives:

Accessibility | Health | Economy | Safety

44 Rail freight terminals and facilities

A sufficient provision of rail freight terminals is critical to achieving a significant shift of freight from road to rail. This would improve the competitiveness of Scotland's supply chain and help support the movement of freight from road to rail.

Rail freight works on a commercial basis and is carried out by private sector freight operating companies and logistics providers. The role of Government is to put policies and strategies in place that facilitate growth (with Network Rail managing the core rail infrastructure and the regulator regulating compliance, safety and issuing licences).

STPR2 recommends that Transport Scotland supports industry partners in carrying out an updated market study for rail freight growth in Scotland (linked to the 2019 industry growth plan) including a review of rail freight terminals/ hubs to confirm how to meet long-term mode shift requirements.

Meets key objectives:

45 High speed and cross border rail enhancements

Infrastructure upgrades to permit higher speeds on cross-border routes would enable faster journey times to London and other key destinations. This would encourage a shift from air to rail on longer-distance travel and support Scotland's net zero emission commitments. These improvements would also release capacity for enhanced regional passenger and freight services.

STPR2 recommends that Transport Scotland continues to work closely with the UK Government to take forward a programme of infrastructure on-line and off-line upgrades targeted at longer-distance cross-border routes. These will provide higher speed passenger services and increased capacity and reliability for freight.

Meets key objectives:

5 Your feedback is important

The draft STPR2 Report (January 2022) combines the previous Phase 1 recommendations published in February 2021 – which are the short term priorities – with the longer term recommendations. This, therefore, provides the full suite of recommendations for transport investment for the next 20 years for consultation.

While the appraisal process has been robust and involved extensive collaboration with stakeholders, these are draft recommendations, not a definitive list. There is still scope for refinement and additions.

Your feedback is important given STPR2 recommendations will influence the transport options and the transport choices we make for the next 20 years.

The public consultation is available at the Scottish Government consultation portal www.consult.gov and printed versions are available on request.

This summary report is part of a series of materials including:

- The Draft STPR2 Technical Report
- The Strategic Environmental Assessment (SEA) Draft Environmental Report
- Equality Impact Assessment Draft Report
- Island Communities Impact Assessment Draft Report
- Fairer Scotland Duty Assessment Draft Report
- Child Rights and Wellbeing Impact Assessment Draft Report
- Habitats Regulations Appraisal Draft Report
- Online digital project pages which allow users to access information that has informed the draft recommendations.

These materials and the consultation portal can be accessed from the Transport Scotland website.

Consultation responses will influence the final STPR2 Report, which will be the evidence base for future spending decisions on strategic transport investment by Scottish Ministers up to 2042 and inform the development of future transport investment delivery plans.

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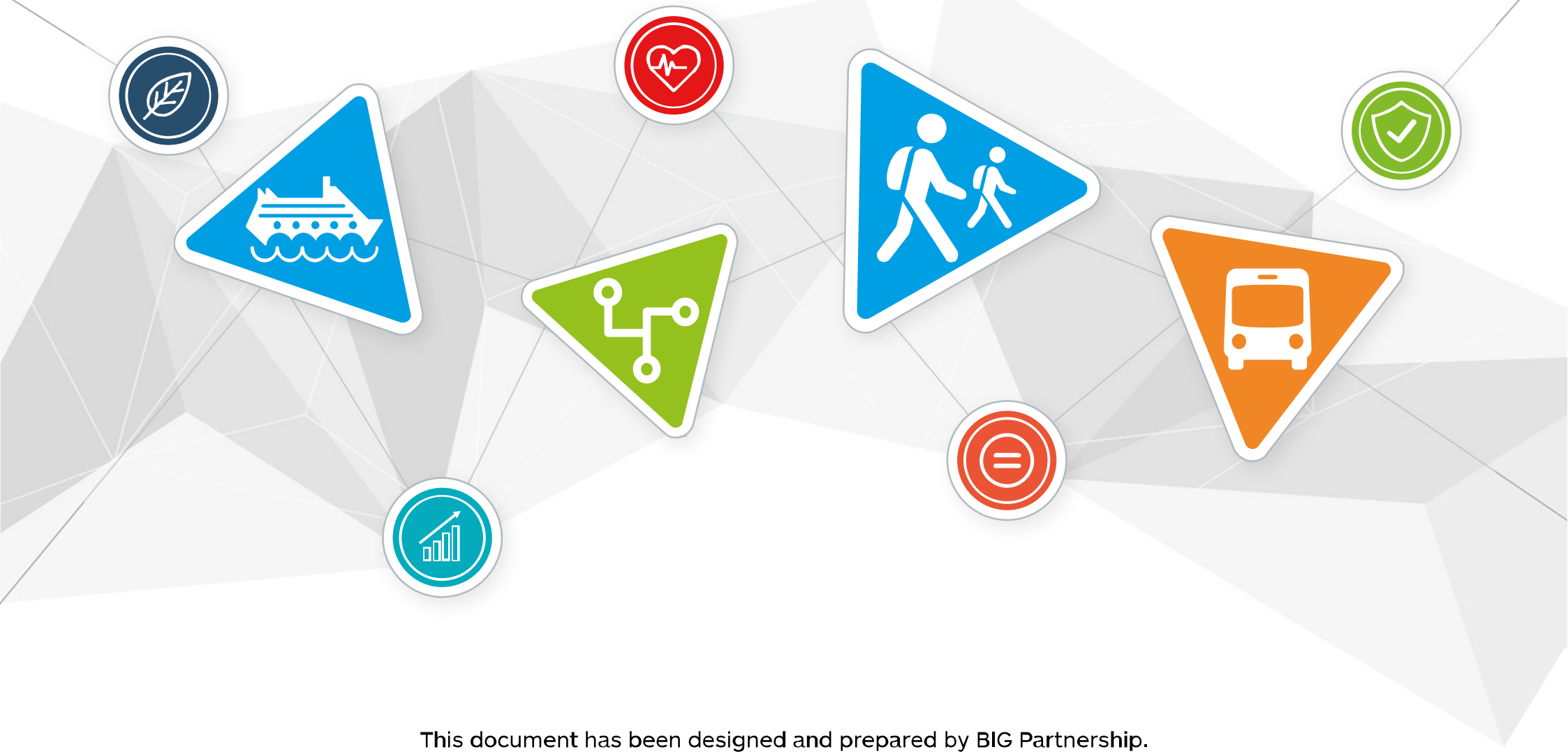

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