

Intervention 17 – Investment in the trunk road network asset

1 Description of Package

Double investment in bridge and roads maintenance: a programme of around £1.5 billion over 5 years¹ to boost structural repairs and strengthen the network, improve road safety, deliver a range of improvements to trunk road ITS infrastructure, and strengthen key links such as the Tarbet to Inverarnan A82 section.

The measures would include maintenance and minor improvement programmes for Trunk Road Carriageways, Structures and Ancillary Assets. The increased investment will bring a number of benefits: safety, economic benefits, jobs, connectivity, resilience, reliable journey times and customer satisfaction. A high quality, well maintained and efficient network also supports other Scottish government programmes for Active Travel, development of Connected and Autonomous Vehicle infrastructure and Bus Priority Investment, and thereby contributes to the low carbon economy.

The programme would also include schemes being developed for the Removal of Accessibility Barriers (e.g. tactile paving, dropped kerbs, bus shelter and bus stop improvements, improved footway widths and crossfall) to assist pedestrian and wheeling access on the trunk road pedestrian network and for access to public transport, supporting equality.



¹ Scottish Government Draft Infrastructure Plan Investment Plan 2021-22 to 2025-26 <https://www.gov.scot/publications/national-mission-local-impact-draft-infrastructure-investment-plan-scotland-202122-202526/>

2 What we have heard?

A number of consultations and workstreams that have informed the NTS2 provide insight into the views of the public and stakeholders on issues related to roads maintenance, including a Citizens Panel report, which found that:

- Many citizens saw the maintenance of the transport system as a priority for NTS2 and closely linked to road safety and reliability. Specific reasons for this, as cited by several participants on the panel, were:
 - Maintenance of roads is closely linked to safety because poor quality road surfaces, such as icy roads or potholes, can cause accidents. Citizens asked for multiple improvements to the maintenance of roads to enhance safety, such as: changes to road maintenance in the event of extreme weather, and targeted improvements to roads and pathways with potholes; and
 - Maintenance of roads is closely linked to the reliability of networks, especially due to road works causing disruption.”

A key theme emerging from consultation as part of the NTS2 development process, notably with the Safe & Resilient Transport Thematic Working Group, was that maintaining current infrastructure and assets needed to be given greater value over building new infrastructure projects. The importance of investing in the maintenance of existing infrastructure and developing realistic, fully-costed maintenance plans from the outset of projects was a key theme emphasised by members of the Group.

The NTS2 identifies a number of Key Challenges that are related to this intervention as follows:

ADAPTING TO CLIMATE CHANGE

Climate change directly affects the transport sector through the increasing number of more severe and frequent extreme weather events and the disruption they cause to the transport system. Disruption often disproportionately impacts on vulnerable communities with fewer and less resilient transport options. In recent years, there have been several weather events which have led to significant disruption and had a large economic impact. The ‘Beast from the East’ in February 2018 cost the UK economy at least £1 billion per day as gridlocked roads, no trains and no buses meant many workers were unable to access employment.

FUNDING AND RESOURCES

The way in which the transport system is paid for and funded is complex, but it needs to be fair and sustainable and support wider outcomes. The costs of delivering Scotland’s transport system are significant. In 2017-18, total public sector expenditure on transport amounted to £2.95 billion. This compares with a figure of £2.72 billion in 2007-08, an increase of 8.4%. Going forward, there will continue to be competing demands and difficult funding choices to be made for both central and local government. This includes decisions about priorities within the transport infrastructure, and also between transport and other policy areas such as

housing, health, education and energy. In addition, achieving the net-zero target will put further pressure on limited budgets², as increasing focus is placed on areas where greenhouse gas emissions need to be reduced. A key challenge will relate to managing transport assets effectively and investing efficiently in the resources needed to maintain and safely operate them and to make better use of existing capacity.

SAFETY AND SECURITY

Scotland's transport system needs to be safe. Whilst the number of road accident casualties reduced by 11% between 2017 and 2018, the number of fatalities has increased. There are considerable inequalities: children in Scotland's 20% most deprived areas are more than three times as likely to be injured in a traffic accident than those in the 20% least deprived areas.

Women and disabled people are more likely to experience affordability barriers to transport: they are less likely to drive and more likely to use public transport, particularly buses. Many women and disabled people feel vulnerable when using public transport – particularly at bus stops, train stations or other transport interchanges.

RESILIENCE

When there are extreme weather incidents and planned or unplanned events which result in network disruption, it is vital that information is given to the public as early as possible so that they can act accordingly. Extreme weather leads to uncertainty about travel conditions for people and businesses. Dedicated walking and cycling infrastructure must be maintained to encourage use. Both trunk and local roads face considerable maintenance backlogs and need significant investment to ensure they are appropriately maintained. Both mainland to island and intra-island ferry fleets are ageing. The effective maintenance of transport networks is important in reducing disruption and delivering a resilient and reliable transport system. A key challenge is providing a transport system that is resilient and speedily recovers from disruption, thus minimising impacts of delayed journeys on networks and users. This requires strong planning in relation to physical resilience of the transport system, how disruption is managed and the speed of recovery, together with effective maintenance regimes and investment.

² It is noted that the recent UK Government pledge to phase out the sale of new petrol and diesel cars and vans by 2030 (currently 2032 in Scotland) to accelerate the transition to net-zero will result in shortfalls in tax revenue from fuel duty and vehicle excise duty which are reserved areas and may add further pressure to budgets.

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The STPR2 online survey demonstrates levels of public satisfaction across different aspects of travel. As outlined in Figure 1, across all responses, between 33% and 68% were dissatisfied with the different aspects of road travel, and between 18% and 36% were satisfied. Dissatisfaction was highest in relation to quality of road infrastructure, highlighting that efforts to improve road quality and condition through enhanced maintenance would likely be well-received publicly. After the quality of the road network, dissatisfaction was then greatest around the distance to EV charging points, then safety, whilst safe overtaking and resilience features at a similar level of dissatisfaction as traffic congestion. It is therefore clear that any measures aimed at improving road maintenance, road safety and resilience would be well received by the public.

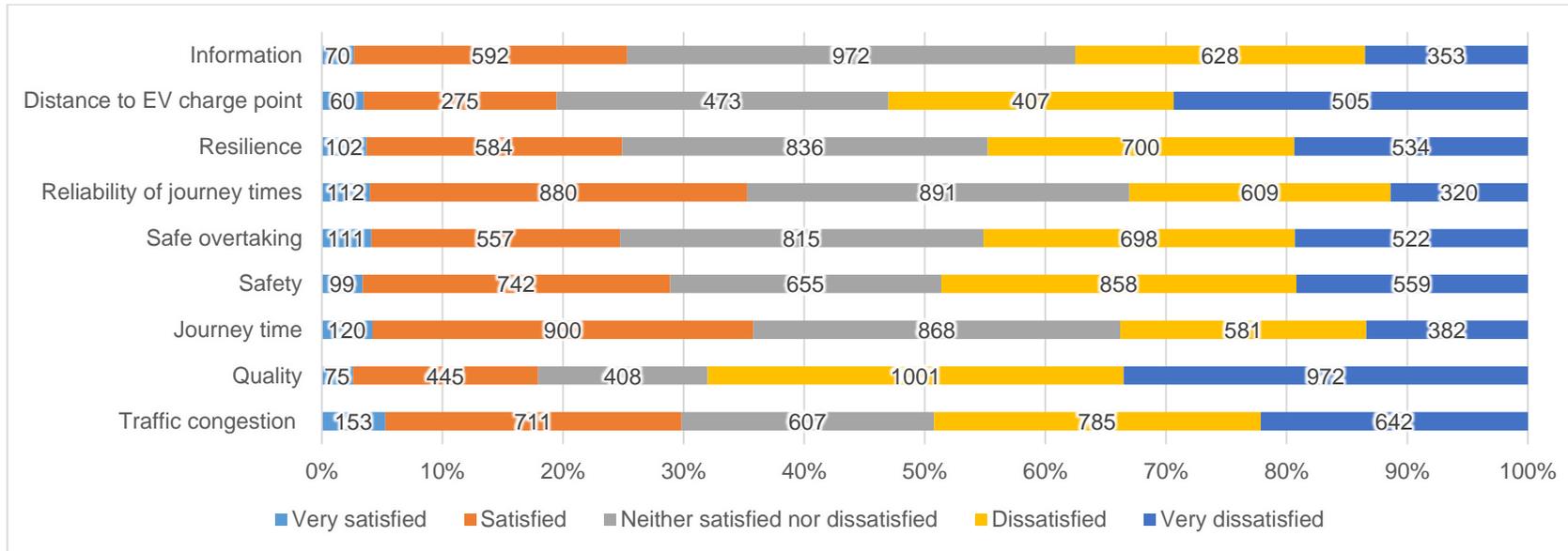


Figure 1: STPR2 Online Survey - All Responses - Satisfaction Road

In the STPR2 National Road workshop, stakeholders identified a need to address a massive maintenance backlog on the Trunk Road Network and increase funding for delivery of maintenance. Some stakeholders stressed the importance of adopting a ‘maintenance before failure’ approach, recognising that a co-ordinated programme of planned maintenance is less disruptive and more cost-effective than dealing with network failure. Some stakeholders also supported a more strategic approach to trunk road maintenance with fewer maintenance schemes which had a larger scope, which would also be less disruptive and more cost-effective.

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Transport Scotland’s trunk road maintenance team collate public satisfaction surveys each year (an extract is shown in Table 1 below). The surveys have found that there is a general trend of decreasing satisfaction with the condition of road surfaces and cycle lanes.

PERFORMANCE MEASURE ³	2013	2014	2015	2016	2017	2018
Customer satisfaction with the overall quality of service of the trunk roads and motorways	-	-	-	-	Fair (60%)	Fair (51%)
Customer satisfaction with the condition of road surfaces	Poor (32%)	Poor (40%)	Fair (45%)	Poor (40%)	Fair (50%)	Poor (39%)
Customer satisfaction with the condition of footways	Fair (44%)	Fair (49%)	Poor (35%)	Fair (44%)	Fair (55%)	Fair (50%)
Customer satisfaction with the condition of cycle lanes	Poor (30%)	Fair (42%)	Poor (39%)	Poor (34%)	Fair (50%)	Poor (40%)

Table 1: Customer Satisfaction

³ Transport Scotland Performance Management Framework Summary, Transport Scotland, 2020

3 The evidence base to support a case for change?

Through a review of the problems and opportunities of trunk road maintenance, several common themes were identified. With regards to problems, they are a number of issues identified that increased maintenance would seek to address:

- **Climate Change** – The Trunk Road Network must be able to adapt to the impact of climate change. In Scotland in the short and medium term, the impact is likely to be related to increased rainfall. New measures to increase the hydraulic capacity of drains and culverts have been implemented at sites throughout the Trunk Road Network but further work is required. Structures are also in need of preventative scour works to reduce vulnerability and are consequently at risk from climate change, as detailed in the Road Asset Management Plan for Scottish Trunk Roads, to improve resilience.
- **Economic Impact** – The Trunk Road Network provides economic benefits for road users and businesses through reduced travel times which results in wider access to employment opportunities and end markets. Road closures, diversions and/or lengthy maintenance works caused by the inability to adequately maintain Trunk Road Network assets can therefore have a significant economic impact. If the reliability of the Trunk Road Network deteriorates e.g. through poorly maintained roads, structural failure etc. then it is likely to result in significant economic implications.
- **Maintenance Backlog** – Investment in the Trunk Road Network is funded by the Scottish Government through capital and revenue budgets which are set out in Spending Reviews and utilises information about the current condition of assets to identify and prioritise schemes of work to improve and maintain the network. It was estimated by Transport Scotland's strategic financial models that £666m (excluding inflation and allowance for the improvement of skid resistance and a reduction in maintenance backlog) would be needed to maintain 87% of roads in good or fair condition over the following ten years⁴.
- **Vulnerability to disruption** – The impact of insufficient maintenance expenditure, Climate Change and traffic conditions means that the Trunk Road Network is becoming more vulnerable to disruption. Disruption on the Trunk Road Network can have significant economic and social impacts through reduced connectivity, longer journey times and social isolation. Unplanned disruption on the Trunk Road Network affects many of the growth sectors identified in Scotland's Economic Strategy.
- **Public Satisfaction** – Public satisfaction in the quality of the Trunk Road Network has been decreasing in recent years as shown in the 2018 customer survey which found that 56% of road users considered that the condition of the Trunk Road Network road

⁴ Road Asset Management Plan for Scottish Trunk Roads, Transport Scotland, 2016

<https://www.transport.gov.scot/media/32978/j408891.pdf>

surface worsened in the two years prior. Furthermore, 92% of users said they 'always', 'usually' or 'sometimes' encounter defects which they consider to be unsafe.

- Road Safety – As detailed in the Road Asset Management Plan for Scottish Trunk Roads a statutory obligation exists for Transport Scotland to maintain the trunk road assets in a safe condition. Asset management activities are designed to maintain and improve on high standards of road safety, any increase to the backlog of maintenance could increase the likelihood of risks to the public from road defects appearing. In terms of Road Safety, the deteriorating condition of ancillary assets can pose an increased risk of number of 'Category 1'⁵ safety defects such as electrical faults, worn road markings and flooding that require immediate or urgent attention.

Several themes regarding opportunities and benefits of trunk road maintenance have also been identified that support the case for increased investment in trunk road maintenance and safety improvements. These include:

- Environmental Benefits – Reductions in Trunk Road Network environmental emissions can be realised through improved surface conditions as vehicles experience greater fuel efficiency on good quality road surfaces⁶. The use of recycled materials, long-life treatments and synchronised maintenance activities can result in a reduction in emissions associated with the operation and management of the Trunk Road Network.
- Economic Benefits – The economic worth of Capital Maintenance was recently highlighted in research undertaken for the Scottish Government's Draft Infrastructure Plan Investment Plan 2021-22 to 2025-26 which indicated that capital maintenance has as a high a rate of return as building new infrastructure and reductions in maintenance have a cost to the wider economy⁷. It has been estimated that investment in road maintenance can provide a benefit of around £1.50 to the wider economy for every £1 that is spent⁶.
- Improved Road Safety – Maintenance of ancillary assets such as road lighting, vehicle restraint systems and drainage can lead to improved road safety on the Trunk Road Network, as these require prompt attention when they become defective. The

⁵ "Category 1 Defect" means a Defect that necessitates prompt attention because it presents:

(i) an immediate or imminent hazard, or (ii) a risk of rapid structural deterioration to the affected element. Schedule 1, [Part 1 of the 4th Generation Term Contract for management and maintenance of the Scottish Trunk Road Network](#)

⁶ Transport Research Laboratory, Economic, Environmental and Social Impact of Changes in Maintenance Spend on Roads in Scotland <https://www.transport.gov.scot/media/29455/j235740.pdf>

⁷ Scottish Government Draft Infrastructure Plan Investment Plan 2021-22 to 2025-26 <https://www.gov.scot/publications/national-mission-local-impact-draft-infrastructure-investment-plan-scotland-202122-202526/> - Annex B

Programme for Government states “We want to live in a Scotland where no one dies on our roads”. This is reflected in Transport Scotland’s Road Safety Framework and Strategic Road Safety Plan ‘Vision Zero’ approach and underpins all road safety activities on Scotland’s trunk road network. Strategic Road Safety delivers lower cost engineering designs specifically to reduce accidents and casualties in supporting the achievement of the Scottish Government’s 2020 casualty reduction targets and its statutory obligations under the Roads (Scotland) Act 1984.

- **Improved Resilience** – Increased expenditure in trunk road maintenance could result in improved Trunk Road Network asset conditions and resilience to change. Improved asset conditions and improved asset management activities are a factor in maintaining high levels of road safety, reduced environmental emissions and supporting sustainable economic growth in Scotland. The Road Asset Management Plan for Scottish Trunk Roads highlights that maintaining the trunk road network in a good condition helps to provide faster and more reliable journeys which improve opportunities for business, leisure and tourism. It also aids Scotland’s move towards a low carbon economy by improving traffic flows and avoiding stop-start travelling conditions; and ensures regions and individuals are well connected to economic opportunities.
- **Support Innovation** – Innovative technologies, materials and processes have the potential to provide greater value-for-money, extend asset lifespans and allow for Transport Scotland and its Operating Companies to monitor the condition of the Trunk Road Network more accurately. Transport Scotland’s Innovation Fund seeks to encourage Operating Companies to submit proposals for studies, trials or research aimed at delivering innovation and improvement.
- **Customer Experience** – The Trunk Road Asset Management Objective of ‘Customer Care and Travel Information’ seeks to provide trunk road customers with up-to-date and reliable travel information. Through improvements to the condition and capabilities of trunk road assets including Intelligent Transport Systems and Variable Message Signs, such as through the replacement of older assets, advances in the quantity and quality of travel information could be achieved.
- **Improved Data Analysis** – Transport Scotland’s management of trunk road maintenance through systems such as IRIS and its replacement the Asset Management Performance System (AMPS) relies on high quality, accurate data and for Transport Scotland staff to have the ability to interpret and apply it correctly. Improved data analysis can help improve asset condition monitoring and maintenance planning, improve road safety by helping to identify “problem” areas and aid in improving journey time reliability through more extensive real-time travel information provision.

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Scottish Transport Statistics (No 38 2019 Edition), Table 4.5 ‘Trunk Road Network: Residual Life (years)’, summarises the life of Trunk Road Networks, and highlights the percentage of trunk roads that need upgrading now or in the immediate future (see Table 2 below). It provisionally shows that 11% of the 3,735km trunk road network has no residual life and requires close monitoring.

YEARS	RESIDUAL LIFE (YEARS) OF PAVEMENTS (ROAD SURFACES)					
	<0 (%)	0-4 (%)	5-9 (%)	10-14 (%)	15-19 (%)	>19 (%)
2011-2012	10	7	10	10	11	52
2012-2013	13	8	10	10	12	46
2013-2014	14	8	10	9	11	49
2014-2015	13	7	9	9	12	50
2015-2016	12	9	9	9	13	48
2016-2017 ^(a)	12	9	9	9	12	49
2017-2018 ^(a)	11	9	9	9	12	51
2018-2019 ^(a)	11	9	9	9	12	51

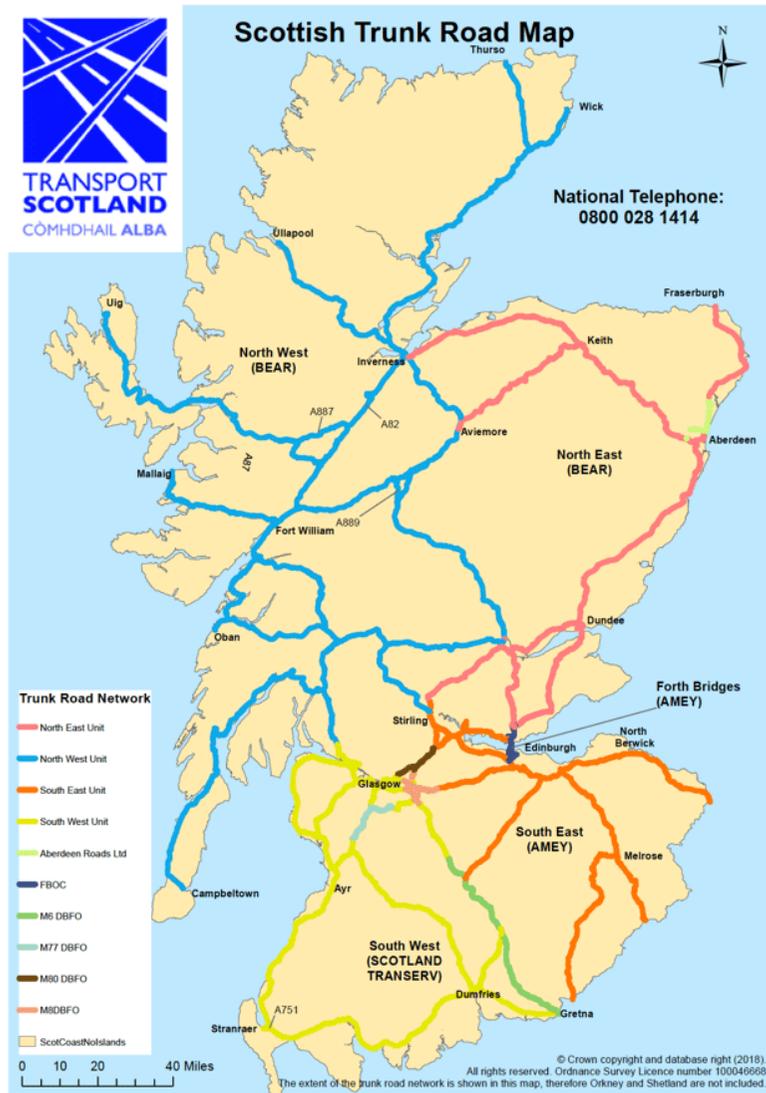
Table 2: Residual Life of Pavements (i.e. road surface) as percentage of whole network - (a) These figures are provisional

The transport statistics also provide data for trunk road type that show provisionally in 2017-18, 13.4% of the motorway network, 8.6% of the dual carriageway and 11.3% of the single carriageway trunk road network required close monitoring of the state of the road surface. In 2018-19, 14.5% of the motorway network, 9.2% of the dual carriageway and 10.7% of the single carriageway trunk road network required close monitoring.

The trunk road network is comprised of route corridors that are considered to be of strategic importance to the economic stability and growth and social wellbeing of Scotland. The trunk road network is vital because it connects our cities, rural communities and the ports that serve the islands. Key assets to maintain are shown in the Scottish Trunk Road Network Asset Management Strategy, November 2018, as shown in Figure 2 below.

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Our Assets

			
545km motorways	592km dual carriageways	2,381km single carriageways	
			
2,035 bridges	8,050 culverts	489 gantries	872km footways
			
65km cycle facilities	12,224km road markings	30,800 reflective road studs	24,555 lights
			
109,783 unlit road signs	5,524 lit road signs	94,376 gullies	63,902 manholes
			
12,170 trees	36,265m² grass	3,001km fences	1,956km safety barrier
			
2,233 traffic signals	4,491 bollards	189 weather stations	155 footbridges

Figure 2: Map of Scottish Trunk Road Network and key assets to maintain (as published in November 2018)

4 The Strategic Rationale

The sustainable transport investment hierarchy set out in the NTS2 and being actively applied on STPR2, has been mirrored and expanded upon within the 2020 Draft Infrastructure Investment Plan for Scotland, through a new Scottish Government-wide infrastructure investment hierarchy. A key focus from this will be to protect the environment by considering how to enhance and repurpose what we already have before building new infrastructure. To support this, it is proposed by the Scottish Government to double investment in bridge and roads capital maintenance over the next 5 years to address backlogs by undertaking maintenance and asset enhancement. It is in this context and as evidenced in the preceding sections, Trunk Road Safety and Resilience is a key recommendation within Phase 1 of STPR2.



Why now?

- It was estimated by Transport Scotland's strategic financial models that £666m (excluding inflation and allowance for the improvement of skid resistance and a reduction in maintenance backlog) would be needed to maintain 87% of roads in good or fair condition over the following ten years⁸. The impact of insufficient maintenance expenditure, Climate Change and traffic conditions means that the Trunk Road Network is becoming more vulnerable to disruption. Disruption on the Trunk Road Network can have significant economic and social impacts through reduced connectivity, longer journey times and social isolation;
- Public satisfaction in the quality of the Trunk Road Network has been decreasing in recent years as shown in the 2018 customer survey which found that 56% of road users considered that the condition of the Trunk Road Network road surface worsened in the two years prior. Furthermore, 92% of users said they 'always', 'usually' or 'sometimes' encounter defects which they consider to be unsafe;
- Police accident records indicate that the biggest cause of road accidents is driver error or reaction, being a factor in 68 per cent of all road traffic accidents. Poor road condition is a small, but still important, contributory factor in the causes of road traffic accidents. Poor and defective road condition may have been a contributory factor in six fatal, 64 serious and 234 slight road

⁸ Road Asset Management Plan for Scottish Trunk Roads, Transport Scotland, 2016

<https://www.transport.gov.scot/media/32978/j408891.pdf>

traffic accidents on Scottish roads over a five-year period, as calculated by Audit Scotland⁹.

Through engagement with stakeholders during STPR2 workshops and consultation with Trunk Road Maintenance teams, trunk road maintenance problems and opportunities have been identified. When considered alongside the draft £1.5bn funding announced by the Scottish Government, Transport Scotland is in a strong position to target expenditure in a manner that best reflects the policy obligations set out in the NTS2, as supported by the early findings of STPR2 and the draft 2020 Infrastructure Investment Plan.

⁹ Audit Scotland Maintaining Scotland's Roads – A follow up report 2016 https://www.audit-scotland.gov.uk/uploads/docs/report/2016/nr_160804_maintaining_roads.pdf

5 Meeting the STPR2 Transport Planning Objectives

TRANSPORT PLANNING OBJECTIVE	CONTRIBUTION	SCALE OF IMPACT (- 3 to +3)
 <p>A sustainable strategic transport system that contributes significantly to the Scottish Government’s net zero emissions target.</p>	<p>The condition of road surfaces impacts fuel consumption as the more a surface deteriorates, a greater amount of fuel is required. Bus operators require reliable and resilient roads to enable greater availability and frequency of bus services. A high quality, resilient and reliable Trunk Road Network can support wider coverage of public transport routes, footways and cycle-tracks and support Intelligent Transport System (ITS) assets.</p>	<p>✓</p>
 <p>An inclusive strategic transport system that improves the affordability and accessibility of public transport.</p>	<p>By ensuring that the Trunk Road Network is reliable, offers consistent journey times and is resilient to disruption, additional and/or more extensive public transport services can be supported. Quality active travel infrastructure on the Trunk Road Network can help promote a shift to sustainable modes of travel for short journeys on the Trunk Road Network instead of using private car.</p>	<p>✓</p>
 <p>A cohesive strategic transport system that enhances communities as places, supporting health and wellbeing.</p>	<p>Ensuring the safety of pedestrians and cyclists on the Trunk Road Network is a key aspect of promoting active travel. Active travel can be promoted further through improvements in road safety in terms of reductions in the number of accidents and also the perception of safety e.g. suitable lighting, adequate and accessible crossing points, dedicated cycleways.</p>	<p>✓</p>
 <p>An integrated strategic transport system that contributes towards sustainable inclusive growth in Scotland.</p>	<p>The maintenance and improvement of key transport links such as those provided by the Trunk Road Network can enable a greater number of people to enter the labour market due to improved and more reliable access to employment opportunities, also in supporting the industry sector and the tourism sectors.</p>	<p>✓✓</p>
 <p>A reliable and resilient strategic transport system that is safe and secure for users.</p>	<p>A lack of resilient and reliable road connections can act as constraints for communities. Maintenance of drainage and structures contributes to providing resilience from climate change. Poor road conditions can increase the risk of accidents due to skidding and also due to road users having to take evasive action to avoid hazards resulting from poor maintenance and can increase risks to cyclists.</p>	<p>✓✓✓</p>

6 Addressing the Post COVID-19 Priorities

POST-COVID19 PRIORITIES	CONTRIBUTION
Employment	<p>Estimates show the Scottish Trunk Road Network directly supports more than 31,000 jobs across the economy¹⁰ – approximately 1.2% of all jobs in the country, through road freight operations, public transport and construction and maintenance work on the Trunk Road Network and during COVID-19 has continued to operate for essential work.</p> <p>The maintenance and improvement of key transport links such as those provided by the Trunk Road Network can enable a greater number of people to enter the labour market. Businesses benefit from use of the Trunk Road Network through access to domestic and international markets. The Trunk Road Network provides economic benefits for road users through journey time savings relative to other roads.</p> <p>Evidence suggests considerable economic and distributional benefits arise from such a programme, particularly where the focus is on assets in the poorest condition, They also offer a wider regional distribution of and greater potential for Scottish Small and Medium sized Enterprises(SMEs) to engage in the work than is typical in larger construction programmes, being important in economic recovery.</p>
The Environment	<p>Improved road conditions can reduce fuel consumption due to greater running efficiency, which results in lower greenhouse gas emissions and quality active travel infrastructure on the Trunk Road Network can help promote a shift to sustainable modes of travel for short journeys on the Trunk Road Network instead of using private cars. Increasing the resilience of the Trunk Road Network through regular maintenance will also support key strategic bus services across Scotland and the vital connectivity benefits that provides various groups including those on low incomes.</p>
Education	<p>Wider access to employment and education opportunities relies on the quality and resilience of the Trunk Road Network. For example, frequent delays caused by road traffic accidents, roadworks and/or safety defects can significantly impact the reliability of journey times, therefore Roads Maintenance was seen as essential during and for recovery phases from to support education.</p>
Equalities	<p>The most deprived households are less likely to own a car and are therefore more reliant on travel by bus. By ensuring that the Trunk Road Network is reliable, this offers consistent journey times and resilience to disruption, additional and/or more extensive public transport services can be supported.</p> <p>Actions taken to improve the attractiveness of bus post-COVID-19 by supporting maintenance on trunk road bus routes and to reduce pressures on operating costs would increase the financial viability of services, which could otherwise be withdrawn, impacting disproportionately on more deprived households.</p>

¹⁰ <https://www.transport.gov.scot/media/33629/value-of-society-economy-to-Trunk-Road-Network-final-report-feb-2017.pdf>

7 SEA, EqIA and Other Impact Assessments

ASSESSMENT	COMMENTARY
SEA (Strategic Environmental Assessment)	There may be minor positive impacts on local air quality, reduced greenhouse gas emissions and reductions in accidents, as increased roads maintenance can provide better surfaces and reduce the use of longer diversionary routes. The intervention should aim to prioritise active travel infrastructure improvements and modal shift wherever possible. Design and construction environmental management plans will also be required, to consider how to protect and enhance landscape, drainage, amenity, biodiversity and cultural heritage. If these measures are put in place, the intervention is likely to complement the SEA and help progress the SEA objectives.
EqIA (Equality Impact Assessment)	There could be a slight beneficial impact of reduced barriers by a programme to improve accessibility at pedestrian crossings and footways, and bus stops use for those with reduced mobility, whether through age or disability, allowing easier access. More reliant bus services could also benefit certain Protected Characteristics, such as age, disability and sex.
ICIA (Island Communities Impact Assessment)	Trunk Roads Maintenance will have a slight beneficial impact on Island Communities. The Trunk Road Network provides access to and from the Ferry connections including on the Isle of Skye at Uig.
CRWIA (Children’s Rights and Wellbeing Impact Assessment)	There could be a neutral/slight beneficial impact on Children’s Rights and Wellbeing, given that 16% of children travel to school by bus (Sustrans Hands Up Scotland Survey 2019) and children may be more likely to use buses for leisure travel, given that those under 17 will not be able to drive.
FSDA (Fairer Scotland Duty Assessment)	There could be a slight beneficial impact on tackling inequality. The 2019 Scottish Household Survey indicated that 48% of the most deprived households (SIMD quintile 1) do not have access to a car and are twice as likely to use the bus to travel to work as households in the least deprived three quintiles. Therefore, actions taken to improve roads maintenance on bus routes and improve journey times could improve accessibility to employment, education, healthcare and leisure activities for those most in need.

8 Implementability and Interdependencies

IMPLEMENTABILITY CRITERIA	COMMENTARY
Feasibility	Largely feasible, subject to assessment of specific schemes. The targeting of trunk road maintenance measures, evaluation of the value for money and subsequent construction are common, so raise no concerns regarding feasibility.
Affordability	Generally, a programme of multiple measures that will be phased. The Scottish Government has committed to £1.5bn over 5 years in the Infrastructure Investment Plan.
Public Acceptability	Acceptability is likely to be strong given recent satisfaction surveys indicated that Customer satisfaction with the overall quality of service of the trunk roads and motorways has been reducing in recent years.

Key Interdependencies

Funding has been identified in the Scottish governments draft Infrastructure Investment Plan. Delivery of the schemes will be undertaken by already appointed Operating Companies. A high quality, well maintained and efficient network also supports other Scottish government programmes for Active Travel, development of Connected and Autonomous Vehicle infrastructure and Bus Priority Investment, and therefore contributing to the low carbon economy.

Measures to improve Trunk Road Safety and Resilience are important to maintain road carriageway, structures and ancillary assets for the efficient, safe and reliable movement of people and goods on the trunk road network contributing to the economy, environment and safety in Scotland. The schemes in the Trunk Roads Safety and Reliance category will be prioritised according to greatest need to address outstanding backlogs and road safety concerns.

