STPR
STRATEGIC TRANSPORT PROJECTS REVIEW

PROTECTING OUR CLIMATE
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Appendix I: Recommendation Appraisal Summary Tables

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1. Detailed Appraisal Summary

An 'Appendix I: Recommendation Appraisal Summary Tables (ASTs) Explanatory Note' accompanies this AST.

1.1. Recommendation 37 – Improving active travel on trunk roads through communities

Recommendation Description

Where a trunk road passes through a community, the volume and speed of traffic on it often creates severance issues. This recommendation focuses on the provision of active travel and related interventions to reduce barriers within communities severed by trunk roads, complementing work already being undertaken by Transport Scotland.

As community severance produces a complex range of impacts, unique to the location, a package of mitigating interventions would be required, tailored to the specific circumstances of the affected communities. Packages would seek to address active travel challenges, including providing better (and safer) active travel routes, particularly for groups vulnerable to social exclusion and transport poverty, who may be reliant on active travel, or not have the confidence or ability to cross or move along the trunk road to access local amenities and opportunities. This recommendation would provide relatively modest interventions and could include reductions in traffic speeds where trunk roads pass through communities, and more/improved appropriate and safe crossing points for people walking, wheeling and cycling.

The implementation of these interventions has the potential to return benefits for community cohesion, and environmental protection. Interventions within this recommendation would integrate with existing active travel networks, both urban and rural, to provide continuous high-quality connections for active journeys, not only those along/across the trunk road.

1.2. Relevance

Relevant to settlements that have a trunk road passing through them

This recommendation is targeted at settlements which have trunk roads passing directly through them, and where those roads exacerbate issues of severance. It seeks to make it easier for people walking, wheeling and/or cycling to cross or move along the trunk road.

1.3. Estimated Cost

£26 million – £50 million

For the purposes of costing this recommendation, it has been estimated that at least minor measures may be appropriate in many of the settlements in Scotland through which trunk roads pass (though no assessment or feasibility work on the appropriateness of interventions in any specific location has been completed). Transport Scotland has estimated that there are 98 such locations.

Capital costs for a typical package of interventions (including improved road crossings, improved signage and implementation of 20mph zones) would vary significantly by settlement, but estimates made by Transport Scotland suggest that £400,000 - £500,000 is a reasonable average of the capital cost requirements; so around £40 million to £50 million in total. A modest additional maintenance cost is also likely to be required in each location.

1.4. Position in Sustainable Investment Hierarchy

Reduces the need to travel unsustainably

This recommendation would contribute to 10 of the 12 NTS2 outcomes, as follows:

- Provide fair access to services we need;
- Be easy to use for all;
- Be affordable for all;
- Help deliver our net-zero target;
- Promote greener, cleaner choices;
- Get people and goods to where they need to get to;
- Enable us to make healthy travel choices;
- Be reliable, efficient and high quality;
- Be safe and secure for all; and
- Help make our communities great places to live.

1.5. Summary Rationale

Summary of Appraisal

	TPO					STAG					SIA				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Low Scenario	+	+	+	+	++	+	+	++	+	++	+	+	0	+	+
High Scenario	+	+	+	+	++	+	+	++	+	++	+	+	0	+	+

This recommendation makes a contribution to all STPR2 Transport Planning Objectives, STAG criteria, and Statutory Impact Assessments. It is implementable by Transport Scotland, most likely in conjunction with local authorities to ensure that any measures implemented on trunk roads integrate with local networks.

This recommendation would assist in reducing the severance impacts of trunk road traffic on some of the communities through which those road pass and would complement and enhance Transport Scotland's on-going programme of road safety enhancements. Measures considered in this recommendation would need to be

assessed in detail to ensure they provide valuable benefits, and also that any disbenefits (especially to inappropriate rerouting of traffic away from main routes) are minimised.

Details behind this summary are discussed in Section 3, below.

2. Context

2.1. Problems and Opportunities

This recommendation could help to tackle the following problems and opportunities:

Problem & Opportunity Themes Identified in the National Case for Change
▪ **Changing Travel Behaviour:** changing people's travel behaviour to use more sustainable modes will have a positive impact on the environment, as well as health and wellbeing.
▪ **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[viii], the number of fatalities has increased. Women and disabled people in particular feel vulnerable when using public transport – particularly at bus stops, train stations or other transport interchanges.
▪ **Physical Activity:** the importance of active travel is becoming more evident as the consequences of physical inactivity are studied. It is recognised that one of the most effective ways to secure the required 30 minutes of moderate activity per day is to reduce reliance on motorised transport, changing the means of everyday travel to walking and cycling.
▪ **Social Isolation:** there is increasing recognition of social isolation and loneliness as major public health issues that can have significant impacts on physical and mental wellbeing. Disabled people in particular can feel trapped due to a lack of accessible transport, particularly on islands and in remote and rural areas.
▪ **Meeting the Needs of an Ageing Population:** older people are healthier, fitter, wealthier and more mobile compared with previous generations: they are likely to want to travel more and the transport system needs to ensure older people, wherever they live, are not socially isolated.

2.2. Interdependencies

This recommendation has potential overlap with other STPR2 recommendations and would also complement other areas of Scottish Government activity.

Other STPR2 Recommendations
▪ Connected neighbourhoods (1);
▪ Behavioural change initiatives (6);
▪ Changing road user behaviour (7);
▪ Increasing active travel to school (8);
▪ Expansion of 20mph limits and zones (10);
▪ Trunk road and motorway safety improvements to progress towards 'Vision Zero' (30); and
▪ Speed Management Plan (38).

Other areas of Scottish Government activity
▪ Active Travel Framework (2020);
▪ Scotland's Road Safety Framework to 2030; and
▪ The Place Principle .

In some instances, improving active travel on trunk roads through communities may require reallocation of road space away from other modes. Where this is the case, designs would need to be handled carefully in order to balance the sometimes-conflicting aspirations for reduced severance with other objectives, including minimisation of traffic pollution and congestion.

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3. Appraisal

This section provides an assessment of the recommendation against:

- STPR2 Transport Planning Objectives (TPOs);

- STAG criteria;

- Deliverability criteria; and

- Statutory Impact Assessment criteria.

The seven-point assessment scale has been used to indicate the impact of the recommendation when considered under the 'Low' and 'High' Transport Behaviour Scenarios (which are described in Appendix F of the Technical Report).

3.1. Transport Planning Objectives

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

Low Scenario	High Scenario
+	+

As fear of road danger is the biggest deterrent to use of active modes, measures to reduce the real and perceived impacts of severance are likely to have a positive impact on the share of trips made by walking, wheeling and cycling, contributing to a reduction in vehicle emissions.

As part of the Cycle City Ambition programme, a package of improvements in Oxford were proposed in order to improve problematic junctions and address the effects of community severance by improving accessibility to the City Centre from the west and south of the city. Counts in the city showed a steady increase in cycling over time following the implementation of interventions, with an increase of 13% in the four years following implementation.

This recommendation is therefore expected to have a minor positive impact on this objective in both Low and High scenarios.

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

Low Scenario	High Scenario
+	+

Fear of road danger is the biggest single barrier to active travel use, with children and older people particularly affected. Interventions to improving active travel on trunk roads through communities, such as implementation of improved crossings to

address physical barriers and reductions in traffic speeds, would improve transport inclusivity for these and other commonly disadvantaged groups, such as unemployed people and members of low-income households. It would do this by proving safe, low-cost transport choices and enhancing access to employment and other opportunities.

Improved conditions for walking and wheeling along and across trunk roads may also improve public transport accessibility in some communities by improving access to bus stops, perhaps especially where crossing of the trunk road is required.

This recommendation is therefore expected to have a minor positive impact on this objective in both Low and High scenarios.

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

Low Scenario	High Scenario
+	+

Active travel is beneficial to physical health and mental wellbeing. Keeping physically active can reduce the risk of heart and circulatory disease by as much as 35% and risk of early death by as much as 30%, and has also been shown to greatly reduce the chances of asthma, diabetes, lower blood pressure and cancer. Adults who cycle regularly can have the fitness levels of someone up to 10 years younger.

Where a community is severed by the presence of a trunk road, improving physical and social connectedness by reducing speeds and providing more crossing opportunities could enable and encourage many more people to be active for short- to medium-distance journeys. Improved community cohesion is also likely.

This recommendation is therefore expected to have a minor positive impact on this objective in both Low and High scenarios.

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

Low Scenario	High Scenario
+	+

By improving residents' access to key trip attractors in settlements, this recommendation could enhance access to employment, training opportunities and to goods and services. People with reduced mobility and those who do not have access to a car may be able to play a greater role in community life when active travel provisions are of a suitable standard.

The Westcott to Dorking Linking Communities scheme was designed specifically to address severance issues and connect people to employment. The scheme now carries around 15,000 walking and cycling trips per year, including commuting trips from Westcott to the estimated 10,500 jobs located within one mile of the scheme.

This recommendation is therefore expected to have a minor positive impact on this objective in both Low and High scenarios.

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

Low Scenario	High Scenario
++	++

Evidence suggests that perceived safety is more influential on active travel behaviour than reliability and speed. Providing severance-reducing interventions, which offer improved physical and social connectivity, could significantly improve safety conditions and perceptions for novice cyclists and pedestrians, especially children and disabled people.

No impact on network reliability or resilience is anticipated.

This recommendation is therefore expected to have a moderate positive impact on this objective in both Low and High scenarios.

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3.2. STAG Criteria

1. Environment	
Low Scenario	**High Scenario**
+	+

See Strategic Environmental Assessment (SEA) below.

This recommendation is expected to have a minor positive impact on this criterion in both Low and High scenarios.

2. Climate Change	
Low Scenario	**High Scenario**
+	+

This recommendation would help generate a modal shift from car to active modes for short journeys in settlements that have a trunk road through them, and hence create a modest reduction in greenhouse gas emissions.

No impact on the Vulnerability to Effects of Climate Change or Potential to Adapt to the Effects of Climate Change is anticipated.

This recommendation is expected to have a minor positive impact on this criterion in both Low and High scenarios.

3. Health, Safety and Wellbeing	
Low Scenario	**High Scenario**
++	++

Evidence suggests that perceived safety is more influential on active travel behaviour than reliability and speed. Providing severance mitigation interventions, which enhance physical and social connectedness within settlements, could significantly improve safety and perceptions of safety for novice cyclists and walkers, especially children and disabled people.

The resulting increase in rates of active travel would improve health and could improve access to health and wellbeing infrastructure, as well as improving personal security because of increased natural surveillance. Some adverse effects on visual amenity where new infrastructure is constructed could be anticipated during the construction period; however these interventions are unlikely to result in a significant adverse effects on visual amenity during operation.

This recommendation is expected to have a moderate positive impact on this criterion in both Low and High scenarios.

4. Economy

Low Scenario	High Scenario
+	+

Prioritising active modes can have economic benefits, as it offers the most inclusive means of connecting people to employment and services. By improving residents' access to key trip attractors in settlements, this recommendation could enhance access to employment, training opportunities and to goods and services. People with reduced mobility and those who do not have access to a car may be able to play a greater role in community life when active travel provision is of a suitable standard.

The Westcott to Dorking Linking Communities scheme was designed specifically to address severance issues and connect people to employment. The scheme now carries around 15,000 walking and cycling trips per year, including commuting trips from Westcott to the estimated 10,500 jobs located within one mile of the scheme.

No significant impact on Transport Economic Efficiency is anticipated.

This recommendation is expected to have a minor positive impact on this criterion in both Low and High scenarios.

5. Equality and Accessibility

Low Scenario	High Scenario
++	++

Where the trunk road passes through a community, it often creates severance issues, particularly for vulnerable groups who may not have the confidence or ability to cross the trunk road to access local amenities.

Evidence demonstrates that addressing severance issues around timing (hours of darkness) and attitudinal barriers, such as improved lighting to enhance real and perceived safety during the evening, and around omission barriers, such as wider footways to address mobility barriers, would provide safe and accessible environments for walking, wheeling, and cycling journeys for commonly underrepresented groups, including women, disabled people and elderly people. Studies demonstrate that improving physical connectedness through enhanced walkability and ease of access can result in individuals harnessing higher levels of social capital compared with those that are severed from local communities by limited transport options and poor awareness of active travel routes.

This recommendation is expected to have a moderate positive impact on this criterion in both Low and High scenarios.

3.3. Deliverability

1. Feasibility
Measures to reduce trunk road severance are, conceptually, readily feasible; this recommendation would comprise more extensive roll out of interventions for which there is already significant experience of implementation in Scotland and elsewhere.

Despite this, detailed development work is required to identify the most appropriate interventions and their suitability at specific locations, given constraints of space and requirements to fit with urban form in any given community. |

2. Affordability
Overall, the implementation costs for measures to improve active travel on trunk roads through communities are likely to be of modest scale and hence relatively affordable; however, some measures, such as junction reconfigurations, could be substantial in cost. There are likely to be some revenue costs to ensure that schemes are maintained and enforced. The roll out of the recommendation could be phased to match funding availability.

3. Public Acceptability
Over 25% of Scottish adults are 'looking to change' towards increased rates of active travel and 33% of Scottish adults would likely consider more active pursuits, such as walking and cycling, when the COVID-19 lockdown is eased. Across the UK, post-COVID recovery polling indicates that a substantial majority of the public want the government to focus on improving health and wellbeing over economic growth.

However, whilst experience suggests that interventions would be generally popular with local people post-implementation, some pre and post-implementation challenges are expected from a number of people that feel they would be adversely affected, in particular those that use the trunk roads as through routes in the communities affected. |

3.4. Statutory Impact Assessment Criteria

1. Strategic Environmental Assessment (SEA)

Low Scenario	High Scenario
+	+

This recommendation would likely result in positive effects on reducing greenhouse gas emissions and improving air quality (SEA Objectives 1 and 3 respectively) due to promoting a modal shift to more sustainable active travel options and, as a result, reducing greenhouse gas and air pollutant emissions. Positive effects are anticipated on four SEA Objectives that fall under the population and human health SEA topic. These objectives are related to quality of life and sustainable accessibility, noise and vibration, the public realm and safety (Objectives 4 to 7). This is due to an expected increase in users choosing more sustainable and safe routes to local amenities and a prioritisation of pedestrians in the public realm. Safer crossings are also likely to result in a small net decrease in road traffic collisions.

Further environmental assessment would be required as individual interventions are developed to determine local effects on cultural heritage and landscape and visual amenity (Objectives 13 and 14 respectively). Neutral effects are anticipated for the remaining SEA objectives, including biodiversity, soil and water, due to the focus of hubs within urban locations.

This recommendation is expected to have a minor positive effect on this criterion in both the Low and High scenarios.

2. Equalities Impact Assessment (EqIA)

Low Scenario	High Scenario
+	+

Where a trunk road passes through a community, it often creates severance issues, particularly for vulnerable groups who may not have the confidence or ability to cross or pass along the trunk road to access local amenities. Evidence demonstrates that addressing severance issues around timing and attitudinal barriers, such as improved lighting to enhance real and perceived safety during the evening, and around omission barriers, such as wider pavements to address mobility barriers, would provide safer and more accessible environments for walking, wheeling, and cycling journeys. This in turn would improve access to services such as employment, education, health facilities and other transport services which are important to groups with protected characteristics such as women, disabled people and older people. The infrastructure installed to address trunk road severance would also be designed to incorporate adapted cycles and as such address further mobility issues experienced by these groups.

An uptake in active travel may additionally improve health outcomes through

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physical fitness and is also likely to lead to air quality improvements if the uptake is matched by a reduction in private vehicle use and traffic congestion. Improved health outcomes as a result of better air quality are of particular benefit to those who are more vulnerable to air pollution, including children, older people and disabled people. Targeted safety measures incorporated as part of interventions under this recommendation could also reduce road and personal safety concerns for active travel users, including children. However, the extent to which groups with protected characteristics would benefit from this recommendation would depend on the location of the interventions and proximity to required services.

This recommendation is expected to have a minor positive impact on this criterion in both Low and High scenarios.

3. Island Communities Impact Assessment (ICIA)

Low Scenario	High Scenario
0	0

This recommendation could have benefits for communities on Skye that the A87 passes through, but also minor disbenefits (in terms of small increases in vehicular journey times to mainland ferry ports) for other islands.

This recommendation is expected to have a neutral impact on this criterion in both Low and High scenarios.

4. Children's Rights and Wellbeing Impact Assessment (CRWIA)

Low Scenario	High Scenario
+	+

The biggest concern of adults when it comes to children walking and cycling is danger caused by vehicular traffic, so lessening this danger by reducing severance though physical infrastructure interventions would provide benefits. Therefore, this recommendation is likely to lead to improvements for child rights and wellbeing due to a reduction in the perceived danger of road accidents and casualties.

This recommendation is likely to benefit children and young people by creating improvements in air quality if the uptake in active travel is accompanied by a decrease in private vehicle use and traffic congestion; providing better and less costly access to education and other services; and the consequential effects of improved access to services for the whole community (such as parent and carer access to employment).

This recommendation is expected to have a minor positive impact on this criterion in both Low and High scenarios.

5. Fairer Scotland Duty Assessment (FSDA)

Low Scenario	High Scenario
+	+

Beneficiaries of this recommendation are likely to include deprived communities as this recommendation partially targets these communities with consequential positive effects on access to services. As well as benefitting these 'communities of place', the recommendation is likely to additionally improve access to services for 'communities of interest', including those with lower access to private vehicle use (such as women, young people and low income households) and others who may benefit from less costly travel options. However, the extent to which this recommendation would reduce inequalities of outcome would depend on the location of the improvements, their proximity to required services and the ability for people from deprived and disadvantaged communities to access them.

This recommendation is expected to have a minor positive impact on this criterion in both Low and High scenarios.