

Detailed Appraisal D3 (Part 3): Targeted Programme of Measures to Reduce Accident Severity between Inverness, Fort William, Mallaig and Skye (A82, A87, A830, A887)								
Estimated total Public Sector Funding Requirement:		<i>Capital Costs/grant</i>		£50m - 100m				
		<i>Annual Revenue Support Present</i>		-				
		<i>Value of Cost to Gvt</i>		£10m - £50m				
		<i>BCR/PVB</i>		N/A				
Summary Impact on STAG Criteria	Environment Safety Economy Integration Accessibility and Social Inclusion	---	--	-	0	+	++	+++
(Judgement based on available information against a 7pt. scale.)								
<b>Intervention Description:</b>								
<p>This intervention supports the objective to reduce the accident rate on these routes. This intervention would include measures such as:</p> <ul style="list-style-type: none"> <li>Physical works aimed at providing safer overtaking opportunities, hard strip provision for agricultural vehicles, local realignments and junction improvements.</li> </ul> <p>It is envisaged that individual elements would be delivered in a targeted programme to address identified accident clusters.</p> <p>In addition, speed enforcement measures could be considered at appropriate locations.</p>								
<b>Summary: Rationale for Selection</b>								
<p>Local carriageway realignments and junction improvements are expected to improve road safety on the routes. Evidence suggests that the introduction of climbing lanes can result in a significant reduction in accidents - of up to 50 per cent - on single carriageway routes.</p> <p>The introduction of appropriate speed enforcement measures could also result in the safer operation of the road network, due to a greater compliance with speed limits. Evidence from trials elsewhere indicates that a reduction in average speed results in significant reductions in accidents and accident severity.</p> <p>The introduction of these measures is likely to bring the proportion of serious and fatal accidents closer to the national rate.</p>								

Table D3.3.1 STPR Objectives (Corridor 3)

STPR Objectives	
<p><u>STPR Objective 3.1:</u>                      Reduce the accident rate to current national average without adversely impacting on accident severity.</p>	<p><b>3.1: Positive</b> – Potential junction improvements would provide safer access to the trunk road and local realignment of pinch points, lay-bys, hard strips and provision of climbing lanes on the route would provide opportunities for safer overtaking of slower moving vehicles, especially agricultural vehicles and tourists. Provision of speed enforcement measures could reduce the number of speeding vehicles, which could result in a reduction in fatal and serious accidents.</p>

Table D3.3.2 STAG Criteria

STAG Criteria		
Objective:	Assessment Summary:	Supporting Information:
<b>Environment:</b>	<b>Minor/Moderate Negative Impact</b>	There is the potential for impacts on biodiversity, noise, water, soils/geology, cultural heritage and landscape. However, these impacts need to be identified and mitigated at the detailed project design stage.
<b>Safety:</b>	<b>Moderate Benefit</b>	Infrastructure improvements on sections of the trunk road network within this corridor would result in reductions to the accident rates. The accident rates (ranging from 21.3 to 30.4 P.I.A./100MVKm) on all trunk roads (A82, A87, A887, and A830) within the corridor are significantly higher than the national rates for the road type of 15.5 P.I.A./100MVKm. For example national statistics indicate that the difference between the UK national rate for rural single carriageway roads and rural single carriageway roads with climbing lanes is a reduction of up to 50 per cent. The fatal accident rates on the A82 between Fort William and Inverness (1.3 fatal accidents/100MVKm) and the A887 (2.36 fatal accidents/100MVKm, based on accidents between 2001 and 2005) are both significantly higher than the national fatal accident rates for these road types (0.76 fatal accidents/100MVKm). Although the short length of the A887 contributes to this high rate, the widening and realignment intervention on this corridor would contribute to reducing these rates. In addition, speed enforcement measures may in turn reduce the number of severe accidents as speed contributes to the severity of accidents. A number of accident clusters were identified on the route, containing fatal and serious accidents. Therefore, targeting the speed enforcement measures at these locations may reduce the number of accidents and could reduce their severity if they do occur.
<b>Economy:</b>	<b>Minor Benefit</b>	<p><b>Transport Economic Efficiency (TEE):</b> Around 44 per cent of trips are wholly within this corridor and 42 per cent of trips are between the corridor and elsewhere, with most of this traffic routing through Inverness. This indicates the importance of maintaining and improving sections of the A82 between Fort William and Inverness, as it impacts on the vast majority of trips in the corridor. Potential route improvements would result in a degree of travel time savings, which would benefit all road users including public transport and freight vehicles. Introduction of speed enforcement measures, at targeted safety locations, could result in economic savings in terms of accident benefits.</p> <p><b>Wider Economic Benefits (WEBs):</b> Improvements would result in more consistent and reliable journey times. This corridor provides the main route to Skye and ferry links to the Western Isles, therefore any improvement, could also benefit development on the islands.</p> <p><b>Economic Activity and Location Impacts (EALIs):</b> This intervention would support the general drive to improve the attractiveness of the trunk road network with resultant economic benefits from reduced closures and casualties.</p>
<b>Integration:</b>	<b>Neutral</b>	<b>Transport Integration:</b> This intervention would have no effect on public transport integration or ticketing.

		<p><b>Transport and Land Use Integration:</b> This intervention would not affect the need to travel. A minor improvement in strategic journey times on the A82 would not significantly impact on development opportunities in the area.</p> <p><b>Policy Integration:</b> This intervention would not affect policies relating to disability, rural affairs or social inclusion.</p>
<b>Accessibility and Social Inclusion:</b>	<b>Minor Benefit</b>	<p><b>Community Accessibility:</b> General upgrades along the route would improve access between rural communities and employment, education and health services. End to end trips between Inverness and the more remote areas, such as the Western Isles, would also be improved due to journey time and reliability improvements on the route.</p> <p><b>Comparative Accessibility:</b> This intervention would not impact on comparative accessibility.</p>

Table D3.3.3 Key Strategic Outcomes

Key Strategic Outcomes (KSO's)		
Objective:	Assessment Summary:	Supporting Information:
<b>Improve Journey Times and Connections:</b>	<b>Minor Benefit</b>	Potential junction improvements, realignment of pinch points, climbing lanes, hard strips and lay-bys would result in a reduction in travel time and therefore would improve connection between Inverness and Fort William and with other modes of travel in the corridor.
<b>Reduce Emissions:</b>	<b>Neutral</b>	There would be no significant impact on emissions.
<b>Improve Quality, Accessibility and Affordability:</b>	<b>Minor Benefit</b>	This intervention would increase the quality of road standard at a number of locations along the route. Proposed 2+1 sections would allow more opportunities for safe overtaking which would lead to a reduction in driver frustration. Accessibility would be improved as rural communities within the corridor would have improved access to the trunk road network. This intervention would not impact on affordability.

Table D3.3.4 Scottish Government's Strategic Objectives

Scottish Government's Strategic Objectives		
Objective:	Assessment Summary:	Supporting Information:
<b>Safer and Stronger:</b>	<b>Moderate Benefit</b>	Physical improvements such as widened, realigned and 2+1 sections of road would lead to improvements in road safety as the average accident rates for these types of road are lower than for a rural single carriageway road. A reduction in speeding vehicles would also reduce the severity of accidents on the improved sections. This intervention would not improve the quality, accessibility and affordability of public transport.
<b>Smarter:</b>	<b>Neutral</b>	This intervention would have no impact on access to education and training opportunities for those living along the corridor.
<b>Wealthier and Fairer:</b>	<b>Minor Benefit</b>	A degree of journey time savings would occur due to improved road standards. Delays caused by accidents on the route may be reduced, thus leading to more efficient transfer of goods on the network.
<b>Greener:</b>	<b>Neutral</b>	This intervention would not have any impact on emissions or result in any shifts from private car to public transport.
<b>Healthier:</b>	<b>Neutral</b>	This intervention would not have any impact on promoting healthier forms of transport or access to health services.

**Table D3.3.5 Implementability Appraisal**

<b>Implementability Appraisal</b>	
<b>Technical:</b>	No major technical issues are anticipated to arise from this intervention; however design would have to account for conditions along the corridors including terrain and land issues. Ensuring speed enforcement measures do not affect the visual impact of the area would be an issue.
<b>Operational:</b>	The responsibility for operational issues on the proposed measures in this intervention would remain with Transport Scotland and its maintenance contractors
<b>Public:</b>	It is possible that any negative visual impact on areas of natural beauty may cause public objection. However, improving safety on the route is likely to be met with a positive response.