

Detailed Appraisal D3 (Part 2): Targeted Programme of Measures to Reduce Accident Severity on the A9 and A835 between Inverness and Ullapool								
Estimated total Public Sector Funding Requirement:		<i>Capital Costs/grant</i>	£10m - £50m					
		<i>Annual Revenue Support Present</i>	-					
		<i>Value of Cost to Gvt</i>	£10 - £50m					
		<i>BCR/PVB</i>	N/A					
Summary Impact on STAG Criteria	Environment Safety Economy Integration Accessibility and Social Inclusion	---	--	-	0	+	++	+++
Intervention Description:								
This intervention supports the objective to reduce fatal and severe accident rates on these routes. This intervention would include measures such as:								
<ul style="list-style-type: none"> Physical works on the A835 aimed at providing safer overtaking opportunities, local realignments and localised widening of the carriageway. 								
It is envisaged that individual measures would be delivered in a targeted programme to address identified high severity accident clusters along the routes.								
In addition, speed enforcement measures could be considered at appropriate locations.								

Summary: Rationale for Selection
The local carriageway realignments and junction improvements are expected to improve road safety on the A835. 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.
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 indicates that a reduction in average speed results in significant reductions in accidents and accident severity.
The introduction of these measures is likely to bring the proportion of serious and fatal accidents closer to the national rate.

Table D3.2.1 STPR Objectives (Corridor 2)

STPR Objectives	
<p><u>STPR Objective 2.1:</u> To reduce the accident, fatal and severe rates to the national average</p>	<p>2.1: Positive - The A835 is single carriageway with poor road alignment and limited overtaking opportunities. This, combined with vehicle 'bunching' behind slow moving HGV's, can increase driver frustration, and in turn the likelihood that drivers would exceed the speed limit or take unnecessary risks. Improved road alignment would allow better visibility and overtaking opportunities for drivers, and reduce the likelihood of an accident. In addition, speed enforcement measures could force drivers to adhere to the speed limit, and reduce accident rates and severity rates on the A835, which are currently in excess of the national average for this type of road.</p>

Table D3.2.2 STAG Criteria

STAG Criteria		
Criteria:	Assessment Summary:	Supporting Information:
Environment:	Minor/Moderate Negative Impact	This intervention has the potential for impacts on biodiversity, water, geology/soils, landscape and cultural heritage, particularly where any widening of the carriageway is undertaken.
Safety:	Moderate Benefit	The accident rate (22.2 P.I.A./100MVKm) and fatal accident rate (1.2 fatal accidents/100MVKm) are both higher than the national accident and fatal accident rates for non built-up A class roads in Scotland of 15.5 P.I.A./100MVKm and 0.76 fatal accidents/100MVKm, respectively. A number of accident clusters were identified on the route, containing fatal and serious accidents. Potential route improvements and reducing the number of speeding drivers on these sections could reduce the number of accidents, and would reduce the severity of them if they do occur. Speed enforcement measures could force drivers to adhere to the speed limit, which may in turn reduce the rate of fatal accidents. 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 by up to 50 per cent.
Economy:	Minor Benefit	<p>Transport Economic Efficiency (TEE): Physical measures such as realignment and 2+1 sections would provide both accident and travel time savings due to reduced delays caused by accidents. This would also result in an economic saving in terms of accident benefits. Targeted introduction of speed enforcement measures, at locations where speeding has been identified as contributing to safety issues, could reduce the number of fatal accidents on those sections.</p> <p>Wider Economic Benefits (WEBs): Improvements would result in more consistent and reliable journey times as the high accident rate contributes to substantial delays when accidents occur. This would improve links between Inverness and Ullapool (and onto Stornoway) thus benefiting a wide network.</p> <p>Economic Activity and Land Use Impacts (EALIs): The intervention would support the general drive to improve the attractiveness of the A9 and A835 between Inverness and Ullapool.</p>
Integration:	Neutral	<p>Transport Integration: This intervention would have no effect on public transport integration and ticketing.</p> <p>Transport and Land Use Integration: This intervention would not affect the need to travel. A minor improvement in strategic journey times on the A835 would not significantly impact on development opportunities in the area.</p> <p>Policy Integration: Any improvement in connections between the rural communities along the corridor, would affect rural affairs.</p>

Accessibility and Social Inclusion:	Minor Benefit	<p>Community Accessibility: General upgrades along the route would improve access between rural communities and employment, education and health services.</p> <p>Comparative Accessibility: This intervention would not impact on comparative accessibility.</p>
--	----------------------	---

Table D3.2.3 Key Strategic Outcomes

Key Strategic Outcomes (KSO's)		
Objective:	Assessment Summary:	Supporting Information:
Improve Journey Times and Connections:	Minor Benefit	Improved alignment and overtaking opportunities, along with reduced delays caused by accidents, would improve journey times and improve connections with other modes of travel at both Ullapool and Inverness. Physical works could provide more safe overtaking opportunities which could improve journey time reliability.
Reduce Emissions:	Neutral	There would be little significant impacts on emissions.
Improve Quality, Accessibility and Affordability:	Minor Benefit	Improvements such as widening and realignment could reduce driver frustration caused by slower moving vehicles, as it would provide safer overtaking opportunities, therefore improving the quality of the journey along the corridor. Improvements to the A835 would improve access to the Ullapool ferry terminal for Western Isles. This intervention would not impact on affordability.

Table D3.2.4 Scottish Government's Strategic Objectives

Scottish Government's Strategic Objectives		
Objective:	Assessment Summary:	Supporting Information:
Safer and Stronger:	Moderate Benefit	Physical measures such as widened and realigned sections would result in improved safety. 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.
Smarter:	Neutral	This intervention would have no impact on access to schools, colleges and universities for those living along the corridor.
Wealthier and Fairer:	Minor Benefit	This intervention would not significantly improve journey times; however delays caused by accidents on the route may be reduced, thus leading to more efficient transfer of goods on the network.
Greener:	Neutral	This intervention would not have any impact on emissions or result in any shift from private car to public transport.
Healthier:	Neutral	This intervention of works would not have any impact on promoting healthier forms of transport or access to health services.

Table D3.2.5 Implementability Appraisal

Implementability Appraisal	
Technical:	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.
Operational:	The responsibility for operational issues on the proposed measures in this intervention would remain with Transport Scotland and its maintenance contractors.
Public:	It is possible that any negative visual impact on the area of natural beauty may cause public objection, however improving safety on the route would be met with a positive response.