

| Detailed Appraisal | d Safety Pl | lan | | | | | | | |
|------------------------------------|---|----------|--------------|-------------|-------------------|-----------------------------------|------------|-----|--|
| Estimated total Public Sector Fur | ding Requirement: | Ann | ual Revenu | alue of Cos | Present < | None £10m/yr £10m/yr N/A | | | |
| Summary Impact on STAG Criteria | Environment Safety Economy Integration Accessibility and Social Inclusion | (Judgeme | ent based or | available i | 0 nformation a | + Igainst a 7pt | ++ scale.) | +++ | |
| Intervention Description: | | • | • | | | • | • | | |

The Scottish Government is prioritising road safety, through funding for Road Safety Scotland, Safety Camera Partnerships and other initiatives. A strategic direction to road safety has been developed through Transport Scotland's recently published ten-year Strategic Road Safety Plan. In addition, the Government intends to publish its Road Safety Strategy.

This intervention relates to a key objective of the STPR which is to continue the delivery of the Strategic Road Safety Plan, through the period 2012-2022. Building on this, the relevant proposed measures would be implemented on the strategic road network in order to reduce the rate and severity of road accidents on Scotland's trunk roads.

Summary: Rationale for Selection

The intervention is specifically aimed at reducing accident rates and achieving the national targets for casualty reductions in the UK. These targets envisage, by 2010: a 40 per cent reduction in the number of people killed or seriously injured; a 50 per cent reduction in child deaths and serious injuries, when compared with the 1994-8 average, and a 10 per cent reduction in the slight casualty rate.

Due to the general nature of this intervention, this OST provides a qualitative review of the strategy rather than a detailed assessment of the specific road safety measures that could be delivered.







Table D1.1.1 STPR Objectives

STPR Objectives

National Objective 1:

To promote 'competitive' inter-urban journey times.

National Objective 2:

To reduce inter-urban journey time on public transport.

National Objective 3:

Promote journey time reduction on the trunk road network for prioritised vehicles and users (e.g. HOV, freight, bus) or provide improvements to journey time reliability.

National Objective 4:

To promote journey time reductions between the Central Belt and Aberdeen/Inverness primarily to allow business to achieve an effective working day between these centres.

National Objective 5:

Maximise the labour catchment area in city regions (favouring PT and HOVs and balancing with other policy measures that promote reduction in need to travel).

National Objective 6:

Support the development and implementation of the emerging national development interventions.

- 1: Neutral Whilst the planned review of speed limits could result in lower speed limits in some locations, the Plan encourages an overall approach that takes account of the function of trunk roads in providing quick and efficient links between key centres. The immediate impact on average inter-urban journey times would therefore be negligible. The Strategic Road Safety Plan supports safe design standards that would contribute to smoother traffic flows in the long term.
- 2: **Neutral -** The measures in this intervention would not impact on average inter-urban journey times for public transport vehicles.
- **3: Positive -** The Plan aims to reduce the risk of incidents through proactive risk removal and speed management. An assessment process to prioritise rural junctions for improvement is also proposed. Incident management through automatic queue control and lane control systems in densely trafficked sections of the network are promoted to minimise the risk of secondary incidents. Speed management at roadworks is promoted as a safety measure with the additional benefit of improving traffic flow and reducing congestion. All these measures would be effective in reducing disruption from planned and unplanned incidents across the network, resulting in enhanced journey time reliability.

The measures promoted in the Strategic Road Safety Plan should be considered in combination with Targeted Programme of Measures (TPMs) (Interventions D3, D4 and D5). Together, the measures proposed in these four interventions define a strategy for managing the performance of key corridors and the wider network, and their implementation would optimise the efficient and safe operation of the network. A pro-active approach to network management could generate considerable benefits to the performance of the network in terms of journey time reliability, particularly for prioritised road users.

- **4: Neutral -** Road safety strategies focus on speed management promoting appropriate speeds, rather than aiming to reduce speeds throughout the network. The measures promoted in the Plan would therefore not have significant impacts on average journey times.
- **5: Neutral -** Although the measures proposed in this intervention reduce disruption from incidents, they would not impact on average journey times, and the overall impact on the labour catchment for all road users would be negligible. However, some of the Intelligent Transport System (ITS) infrastructure used in incident management, e.g. Variable Message Signs (VMS) and lane control systems, could assist in managing roadspace during busy hours, prioritising public transport and HOVs where appropriate.
- 6: Neutral The measures proposed in this intervention would have a negligible impact on this objective.









| National | Ob | iective | 7 |
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| | | | |

Reduce CO₂e emissions per person km.

National Objective 8:

Stabilise total CO₂e emissions.

National Objective 9:

Reduce CO₂e emissions in line with expectations from the emerging climate change bill.

National Objective 10:

To promote continuing reduction in accident rates and severity rates across the strategic transport network, supporting the work of the Strategic Road Safety Plan.

National Objective 11:

To promote seamless travel.

National Objective 12:

Improve the competitiveness of public transport relative to the car.

National Objective 13:

To improve overall perceptions of public transport.

7: Neutral - The measures proposed in this intervention would have a negligible impact on this objective.

8: Neutral - The measures proposed in this intervention would have a negligible impact on this objective.

9: Neutral - The measures proposed in this intervention would have a negligible impact on this objective.

10: Strongly Positive - This intervention would include updates of the Strategic Road Safety Plan to take account of any changes in the road network. These changes include those to infrastructure, traffic regulations and restrictions and the use of the strategic road network. Updates of the plan to respond to these changes are essential to ensure the appropriateness and effectiveness of the safety measures proposed.

11: Neutral - The measures proposed in this intervention would have a negligible impact on this objective.

12: Neutral - The Plan would result in safety benefits for all road users, including public transport and the private car. The measures promoted in the Strategic Road Safety Plan would not impact on the competitiveness of public transport relative to the private car.

13: Neutral - The measures proposed in this intervention would not affect the overall perception of public transport.

Table D1.1.2 STAG Criteria

| STAG Criteria | | |
|---------------|---------------------|--|
| Criteria: | Assessment Summary: | Supporting Information: |
| Environment: | Neutral | Minor improvements such as widening or realignment of routes could have environmental impacts depending on their location. This will need further consideration at design stage to minimise any impact. |
| Safety: | Major Benefit | The intervention is specifically aimed at reducing accident rates and achieving the national targets for casualty reductions in the UK (<i>Tomorrow's Roads: safer for everyone, Department for Transport</i>). By 2010, these targets envisage a 40 per cent reduction in the number of people killed or seriously injured, a 50 per cent reduction in child deaths and serious injuries, when compared with the 1994-8 average, and a 10 per cent reduction in the slight casualty rate. Regular updates of the Strategic Road Safety Plan, to take account of infrastructure changes, and changes in the usage of the network, are essential to identify current safety blackspots and to ensure the continued appropriateness and effectiveness of the Plan. These updates will ensure accident rates can be maintained at their target levels or wherever possible reduced. The overall impact of this intervention on safety is therefore expected to be major positive. The improvements achieved by the measures identified in the Strategic Road Safety Plan can be quantified in terms of the monetary cost of the accident savings compared with the baseline |









| | | situation. |
|-------------------------------------|---------------|---|
| Economy: | Minor Benefit | Transport Economic Efficiency (TEE): The review of speed limits would result in the introduction of lower speed limits in some locations. Overall, average journey times would be generally unaffected however; the measures proposed in this intervention could assist in minimising accidents and their associated cost. The impact in terms of transport economic efficiency is expected to be positive. Wider Economic Benefits (WEBs): The Strategic Road Safety Plan promotes incident prevention through measures such as proactive risk removal and a safety review of rural junctions. Improvements to incident management are aimed at reducing response times, reducing the risk of secondary incidents and minimising disruption. Beneficial impacts on journey time reliability would ensue, allowing businesses to plan their time more reliably. Economic Activity and Location Impacts (EALIs): The measures promoted in this intervention are not targeted at specific locations. The impact on the competitiveness of key areas of economic development is therefore not known. |
| Integration: | Neutral | Transport Integration: This intervention would have no effect on Transport Integration. Transport and Land-Use Integration: This intervention would not have an impact on Transport and Land-Use Integration. Policy Integration: By improving safety for pedestrian and cyclists, this intervention would promote active travel and would go some way towards creating healthier more inclusive communities. It would not significantly impact on aspirations to reduce road traffic. |
| Accessibility and Social Inclusion: | Minor Benefit | Community Accessibility: This intervention promotes safety strategies specifically targeted at vulnerable road users. Although the intervention does not promote any public transport service enhancements, it does specifically aim to improve conditions for pedestrians and cyclists. This could open opportunities to use these modes in accessing local services. With specific regard to promoting safe access to education, the Plan aims to implement 20 mph speed limits at schools. The overall impact on Accessibility and Social Inclusion would be minor positive. Comparative Accessibility: The Strategic Road Safety Plan contains measures specifically targeted to improve safety for vulnerable road users. Some benefits in terms of comparative accessibility would ensue. |







Table D1.1.3 Key Strategic Outcomes

| Key Strategic Outcomes (KSO's) | | | |
|---|---------------|---|--|
| Objective: | Assessment | Supporting Information: | |
| | Summary: | | |
| Improve Journey Times and Connections: | Neutral | This intervention contains measures promoting effective prevention and efficient management of incidents, minimising associated disruption to traffic flow and improving journey time reliability. However, average journey times would remain unaffected. No impacts on connections are expected to arise as a result of this Intervention. | |
| Reduce Emissions: | Neutral | The intervention would not have a significant affect on CO ₂ e emissions. | |
| Improve Quality, Accessibility and Affordability: | Minor Benefit | The Strategic Road Safety Plan contains measures specifically targeted at improving safety for pedestrians and cyclists. These measures would improve the quality of the experience for these user groups. Strategies to improve safety for the elderly could produce benefits in terms of comparative accessibility. | |
| | | Although the intervention does not contain improvements to public transport network coverage or service provision, some improvements to community accessibility would ensue from safer provision for pedestrians and cyclists. Specific measures are targeted at providing safer access to education. The measures proposed in this intervention would not impact on affordability. | |

Table D1.1.4 Scottish Government's Strategic Objectives

| Objective: | Assessment Summary: | Supporting Information: |
|-----------------------|---------------------|---|
| Safer and Stronger: | Major Benefit | This intervention would contribute to a Safer and Stronger Scotland by reducing accidents through investing in infrastructure, technologies and strategies to promote road safety. It would not improve the quality, accessibility and affordability of public transport. |
| Smarter: | Moderate Benefit | This intervention would help to improve access to schools, colleges and universities. With specific regard to promoting safe access to education, the plan aims to implement 20 mph speed limits at schools. |
| Wealthier and Fairer: | Minor Benefit | The measures contained in this intervention would not result in journey time savings or improved connections across Scotland. However, the intervention would result in more reliable journey times by minimising and managing disruption of traffic due to incidents. This would allow businesses to plan effectively, resulting in some minor benefits to the economy. |
| Greener: | Neutral | The intervention would not encourage a modal shift from car to public transport, and would therefore not contribute to any improvement in emissions or air quality. |
| Healthier: | Minor Benefit | By improving safety for pedestrians and cyclists, the strategies promoted under this Intervention would increase the attractiveness of these modes and encourage a greater uptake of active travel. The measures proposed would not affect access to healthcare. Overall, the intervention would contribute to the Government's objective to promote healthier and more active communities. |

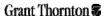








Table D1.1.5 Implementability Appraisal

| Implementability | y Appraisal |
|------------------|--|
| Technical: | The implementation of the intervention is considered technically feasible. Although some new technologies may be put forward for implementation, following research and development, the Strategic Road Safety Plan promotes a structured approach to adopting these techniques, making use of Demonstration Road Safety Projects and knowledge sharing. This approach would minimise any risks associated with the implementation of new techniques. The collation of road safety statistics to inform any updates of the Plan is a well established procedure. |
| | The timing and arrangements pertaining to the delivery of Interventions D3, D4 and D5 (Enhanced Route Action Plans (RAPs), Targeted Programme of Measures (TPMs) and Managed Corridors) should be taken into account when planning the implementation of any measures proposed as part of this intervention. This will assist in maximising the effectiveness of the intervention and minimising any disruption. |
| Operational: | The implementation of updates to the Strategic Road Safety Plan is considered to be operationally feasible. It is expected that any data required to inform the updates can be collected without disruption to the network. |
| Public: | There has been no detailed consultation on this intervention. |

