

Detailed Appraisal		D24 Targeted Road Congestion / Environmental Relief Schemes - (Part 2) Enhancements on the A737						
Estimated total Public Sector Funding Requirement:		<i>Capital Costs/grant</i> <i>Annual Revenue Support Present</i> <i>Value of Cost to Gvt</i> <i>BCR/PVB</i>				£10m - £50m - <£10m >3 / £10m - £50m		
Summary Impact on STAG Criteria	Environment Safety Economy Integration Accessibility and Social Inclusion	---	--	-	0	+	++	+++
(Judgement based on available information against a 7pt. scale.)								
Intervention Description:								
This forms Part 2 of Intervention D24 aimed at reducing conflicts between strategic and local traffic and impacting on road safety and journey time reliability. The specific improvements would consist of enhancements on the A737 such as a bypass around Dalry.								

Summary: Rationale for Selection
This intervention forms Part 2 of D24 to provide enhancements on the A737 such as a bypass around Dalry
Providing improvements on the A737 such as a bypass of Dalry would help to reduce the conflict between local and strategic traffic that occurs along this route, thus improving road safety and journey time reliability on the A737.
The environmental impacts this intervention has on cultural heritage and landscape have been identified at the strategic level as part of the Strategic Environmental Assessment. Appropriate mitigation and avoidance measures have been identified and will be further refined should this intervention be taken forward.

Table D24.2.1 STPR Objectives

STPR Objectives	
<p><u>STPR Objective 1:</u> To increase rail capacity between Ayrshire and Glasgow including the Kilmarnock line.</p> <p><u>STPR Objective 2:</u> To promote continuing reduction in accident rates and severity rates across the strategic transport network, recognising the need to continue the work of the Strategic Road Safety Plan through the STPR period.</p> <p><u>STPR Objective 3:</u> To reduce the conflict between longer distance and local traffic with a focus on identified key constraint points.</p>	<p>1: Neutral - This intervention would have no effect on rail capacity in the area.</p> <p>2: Positive - Providing a bypass on the A737 at Dalry would help to reduce traffic within this town and improve accident rates by reducing the conflict between local and strategic traffic. While severity rates could increase due to the higher vehicle speed on the bypass, overall, safety on the route would be improved.</p> <p>3: Positive – This intervention could include a number of measures that would reduce the conflict between local and long distance traffic at key constraint points along the route, such as at Dalry.</p>

Table D24.2.2 STAG Criteria

STAG Criteria		
Criteria:	Assessment Summary:	Supporting Information:
Environment:	Minor Benefit	This intervention would have minor positive effects on noise levels as it is envisaged that re-routing traffic away from Dalry would reduce the levels of noise on sensitive receptors within the town. However, there is the potential for impacts on new noise receptors in the vicinity of new road infrastructure. The bypass could also contribute to an improvement in local air quality in Dalry, if traffic is removed from this town. Impacts on biodiversity, water, soils/geology, cultural heritage and landscape are uncertain as they depend on the form and location of the new infrastructure. It is envisaged that the bypass could contribute to a reduction in CO ₂ e emissions if congestion through Dalry is improved. However, this may be offset by increased vehicle speeds, therefore the effect of the bypass on climatic factors is uncertain at this stage.
Safety:	Moderate Benefit	Accident rates for rural single carriageway are generally 55 per cent lower than the existing roads within the town of Dalry. Constructing the bypass therefore could lower the accident rate to around the current national average. However, accident severity could increase on the new bypass due to increased speeds.
Economy:	Major Benefit	<p>Transport Economic Efficiency: This intervention would provide benefits of between £50m and £100m and a benefit to cost ratio of greater than three providing a strong economic case for promoting it. Strategic trips on the A737 through Dalry would achieve journey time savings with the new bypass in place. Congestion through Dalry would be reduced resulting in increased reliability of journeys for local and through traffic.</p> <p>This intervention would also benefit public transport services and freight movement from Ayrshire to the Central Belt. (A previous study by Mouchel Parkman in 2006 on the A737 Dalry Bypass indicated a potential journey time saving of £80m and vehicle operating cost saving of £1.2m).</p> <p>Wider Economic Benefits (WEBs): Reductions in journey time, reliability and quality could have a positive impact on the efficiency and productivity of businesses using the route to travel between destinations in North Ayrshire and Glasgow/Renfrewshire. Benefits would accrue from a lower cost of travel for freight and business users, with improved access</p>

		<p>to customers and suppliers.</p> <p>Economic Activity and Location Impacts (EALIs): This intervention would support and encourage proposed growth within Ayrshire including the port of Hunterston and the Irvine Bay Regeneration area.</p>
Integration:	Moderate Benefit	<p>Transport Integration: This intervention would have no effect on public transport integration.</p> <p>Transport and Land Use Integration: This intervention would not affect the need to travel. The Dalry bypass would result in improved access and reduced journey times for all trips on the A737. It would also enhance development opportunities in Ayrshire including at the port of Hunterston and in the Irvine Bay Regeneration Area, in line with local, regional and national policies.</p> <p>Policy Integration: This intervention would contribute to an improvement in health in Dalry due to the reduced emissions from reduced traffic levels in the town. The bypass could result in reductions in road traffic within the town of Dalry. Overall, the intervention could have a negative effect on road traffic reduction aspirations.</p>
Accessibility and Social Inclusion:	Minor Benefit	<p>Community Accessibility: A bypass would improve local accessibility, within Dalry, in terms of the opportunities to walk and cycle within the town.</p> <p>Comparative Accessibility: The main beneficiaries of this intervention would be commuters along the A737 and local residents in the town.</p>

Table D24.2.3 Key Strategic Outcomes

Key Strategic Outcomes (KSO's)		
Objective:	Assessment Summary:	Supporting Information:
Improve Journey Times and Connections:	Moderate Benefit	The provision of a bypass around Dalry would reduce journey times on the A737 and benefit local trips within Dalry which currently conflict with strategic trips. This intervention would also improve journey time reliability.
Reduce Emissions:	Neutral	The reduced congestion in Dalry as a result of the provision of a bypass would allow vehicles to travel at more fuel efficient speeds, resulting in a reduction in CO ₂ e emissions. However, increased capacity and potential additional trips using this capacity could negate this.
Improve Quality, Accessibility and Affordability:	Minor Benefit	This intervention could provide a bypass of Dalry on the A737, thereby increasing capacity and reducing congestion on the route. The quality of service provided would therefore be enhanced. This intervention would benefit commuters along the A737 and local residents in the town of Dalry. This intervention does not impact on affordability.

Table D24.2.4 Scottish Government's Strategic Objectives

Scottish Government's Strategic Objectives		
Objective:	Assessment Summary:	Supporting Information:
Safer and Stronger:	Moderate Benefit	The provision of a bypass at Dalry would result in reduced road accident rates, although severity rates may increase due to increased speeds. Conflict between strategic and local trips in the town would be reduced resulting in an overall improvement in road safety. This intervention would not improve the quality, accessibility and affordability of public transport.
Smarter:	Neutral	This intervention would promote improved links to education facilities, such as schools and colleges within the corridor But this would be limited.
Wealthier and Fairer:	Moderate Benefit	The introduction of a bypass around Dalry would reduce journey times along the A737 and also within the town resulting in increased productivity of people and goods deliveries. This intervention would assist in the economic development of Ayrshire including the Irvine Bay Regeneration Area.
Greener:	Neutral	The bypass would help to relieve congestion which could reduce bus journey times on the local road network, potentially encouraging greater use of public transport. Transport related emissions within the town should reduce.
Healthier:	Minor Benefit	The provisions would be unlikely to improve access to health services. Reduction of traffic flows through Dalry could result in improved health benefits.

Table Corridor D24.2.5 Implementability Appraisal

Implementability Appraisal	
Technical:	Provision of a bypass of Dalry on the A737 would involve major infrastructure works. The route of the bypass would cross the main Glasgow-Ayr railway line and the River Garnock. Construction work may affect the environment of surrounding areas and may cause delays to traffic. Operation of the new A737 route would be the responsibility of Transport Scotland with responsibility for the existing portions through the town passing to the local authority.
Operational:	The responsibility for operational issues on the proposed measures in this intervention would remain with Transport Scotland and its maintenance contractors.
Public:	The bypass around Dalry has been the subject of public consultation as part of the previous assessment. A favourable public reaction to the intervention is expected since journey times would be reduced from Glasgow to North Ayrshire and traffic within Dalry would also be reduced. The environmental impacts of the intervention may produce some adverse public reaction.