

Detailed Appraisal		Intervention E10: Improved Road Links to Edinburgh Airport						
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>		1.75 – 2.25 / £50m - £100m		
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 intervention supports the objective to promote efficient and effective links to Edinburgh Airport, one of the proposed national developments identified in the draft NPF2. The intervention would consist of:								
<ul style="list-style-type: none">A new road link from the M8 between Junction 1 and 2 directly into Edinburgh Airport.								

Summary: Rationale for Not Recommending
Many of the objectives of the STPR for the Edinburgh Urban Network and surrounding corridors are better addressed in a more sustainable manner by the other interventions such as the new rail interchange serving Edinburgh Airport and the tram links to the airport.
There is a potential major adverse effect on cultural heritage, as the intervention could impact on a Scheduled Monument.
Any road based interventions necessary to support the West Edinburgh Planning Framework should be taken forward by the planning authority as part of the infrastructure intervention required to serve the land use developments in the area.

Table E10.1.1 STPR Objectives

STPR Objectives	
<p><u>STPR Objective 13.1:</u></p> <p>To increase public transport capacity and reduce journey time between Edinburgh and Glasgow.</p> <p><u>STPR Objective 13.2:</u></p> <p>To make best use of the available road space and better manage peak demand.</p> <p><u>STPR Objective 13.3:</u></p> <p>To increase public transport capacity and frequency between Livingston and Edinburgh.</p> <p><u>STPR Objective 13.4:</u></p> <p>To contribute to both a reduction in emissions per person kilometre and a reduction in overall emissions.</p> <p><u>STPR Objective 13.5:</u></p> <p>To promote continuing reduction in accident rates and severity rates across the strategic transport network.</p> <p><u>STPR Objective 13.6:</u></p> <p>To promote efficient and effective transport links to support the development and implementation of the proposed national developments at Grangemouth and Edinburgh Airport identified in the NPF2.</p>	<p>13.1: Neutral – This intervention is not expected to have a significant impact on public transport capacity and public transport journey times between Edinburgh and Glasgow.</p> <p>13.2: Neutral - This intervention proposes new road space and therefore does not specifically seek to make better use of the existing network. However, the transfer of traffic from existing roads will result in improved operation on the A8/M8 in the vicinity of the airport.</p> <p>13.3: Neutral – This intervention does not propose any direct change to public transport provision.</p> <p>13.4: Slightly Positive – Environmental modelling outputs indicate that if this intervention was to be implemented then there would be a slight decrease in forecast 2022 levels.</p> <p>13.5: Slightly Positive – This intervention would reduce accident and severity rates on this section of the road network, as the new provision would be safer than the current A8 dual carriageway.</p> <p>13.6: Strongly Positive – The provision of a new road link from the M8 between Junctions 1 and 2 connecting directly to Edinburgh Airport would have a significant impact on improving road based transport links to Edinburgh Airport from the Scottish road network.</p>

Table E10.1.2 STAG Criteria

STAG Criteria		
Criteria:	Assessment Summary:	Supporting Information:
Environment:	Moderate/Major Negative Impact	The effects of this intervention would be contained within an area of land already dominated by elements of an urban environment including transport infrastructure. There could be major detrimental effects of crossing a nationally designated Scheduled Monument. However there would be scope to mitigate effects by giving consideration during the detailed design stage.
Safety:	Minor Benefit	Providing a new road link from the M8 to Edinburgh Airport could result in a reduction of accident rates Due to reduced traffic levels at Gogar and Newbridge junctions.
Economy:	Moderate Benefit	Transport Economic Efficiency (TEE): The provision of a new road link between the M8 and Edinburgh Airport would result in

		<p>travel time savings and vehicle operating cost benefits for those travelling to the airport and adjacent economic development sites, particularly during peak hours. This would include bus services and freight movements. Journey time reliability would improve, particularly in the peak hours, due to the reduced need to travel via Gogar and Newbridge Junctions. A strong economic return with a benefit to cost ratio between 1.75 and 2.25 is forecast.</p> <p>Wider Economic Benefits (WEBs): This intervention would provide the capacity for increased and more reliable movement of goods and people between Edinburgh Airport, economic development land as identified within the <i>West Edinburgh Planning Framework (WEPF)</i> (Scottish Executive, 2006) and the surrounding area. West Edinburgh records an employment density of almost 8 strategic jobs per hectare, significantly above the local average. In 2005, the area was home to an estimated 35,600 jobs in strategic industries. Through implementation of this intervention, the time taken to move people and freight would be reduced, resulting in increased productivity for key employers and locations including Edinburgh Park, Gogarburn, Royal Bank of Scotland, BT, Scottish Equitable, BAE Systems and Diageo. It is expected that the proposed new road link would significantly increase the potential labour market to Edinburgh Airport and to a lesser extent in West Edinburgh. There would not be any impact on the labour catchment for the city centre.</p> <p>Economic Activity and Location Impacts (EALIs): This intervention would assist the development area in the immediate vicinity of the airport (as identified within the <i>WEPF</i>) and improve access to the airport, where the Aviation White Paper (<i>The Future of Air Transport, Department for Transport, December 2003</i>) suggests that passenger numbers could grow from 7 million per annum to over 20 million by 2030. The intervention would act as a fundamental 'building block' in the continuing competitiveness of Edinburgh and the surrounding area, at strategic investment locations.</p>
Integration:	Minor Negative Impact	<p>Transport Integration: This intervention would have no significant effect on transport integration.</p> <p>Transport and Land-Use Integration: This intervention would have a minor negative impact on the policy of reducing the need to travel. However, development of the West Edinburgh area is seen as important for growth of the local and regional economy and this intervention would help facilitate this development.</p> <p>Policy Integration: This intervention would not affect policies related to disability, health, rural affairs or social inclusion, as it does not include measures to encourage modal shift or assist in achieving a healthy and inclusive society.</p>
Accessibility and Social Inclusion:	Minor Negative Impact	<p>Community Accessibility: This intervention would not have any effect on community accessibility as it does not improve public transport network coverage nor does it promote "active transport" trips to access local services.</p> <p>Comparative Accessibility: This intervention would not affect any individual group of people. It would improve access to Edinburgh Airport and to the identified development areas to the west of Edinburgh, but would not provide greater accessibility for the more deprived and socially excluded regeneration areas.</p>

Table E10.1.3 Key Strategic Outcomes

Key Strategic Outcomes (KSO's)		
Objective:	Assessment Summary:	Supporting Information:
Improve Journey Times and Connections:	Moderate Benefit	This intervention would provide improvements in journey times between the M8 and Edinburgh Airport, with increased capacity. It would also potentially provide access to the economic development sites identified within the WEPF, as well as improving the connectivity of Edinburgh Airport to the Central Belt. The WEPF forecasts increased levels of congestion in the vicinity of the airport and this intervention would help to address this.
Reduce Emissions:	Neutral	This intervention would not lead to a substantial modal shift that could lead to local improvements in air quality or reduction in CO ₂ e emissions. Any reduction in emissions, due to the reduction of existing stop-start driving on the A8, would be offset by higher driving speeds, made possible due to infrastructure improvements.
Improve Quality, Accessibility and Affordability:	Minor Benefit	Construction of a new road link to Edinburgh Airport could improve the quality of the drive to the airport and accessibility would improve with the addition of a dedicated road link. However, this would provide greater benefits for those travelling by car than by public transport. This intervention would not impact on affordability.

Table E10.1.4 Scottish Government's Strategic Objectives

Scottish Government's Strategic Objectives		
Objective:	Assessment Summary:	Supporting Information:
Safer and Stronger:	Minor Benefit	This intervention would improve safety through the provision of a new road link which would be safer than the current dual carriageway arrangement. However, this could be counter-balanced by the overall increase in traffic levels which would have associated safety implications. It would not affect the quality, accessibility and affordability of public transport.
Smarter:	Neutral	This intervention would have no impact on access to schools, colleges and universities.
Wealthier and Fairer:	Moderate Benefit	The road link to Edinburgh Airport and the identified West Edinburgh economic development sites would benefit from the reduced time spent on the road by people and goods. This intervention would assist in the continuing competitiveness of Edinburgh and the surrounding area, as strategic investment locations.
Greener:	Neutral	The intervention would not affect air quality or CO ₂ e emissions. It would also not encourage modal shift from car to public transport.
Healthier:	Neutral	The road link would not impact on health and access to healthcare, nor would it encourage modal shift and associated health benefits.

Table E10.1.5 Implementability Appraisal

Implementability Appraisal	
Technical:	This intervention would not involve any untried techniques during its implementation. However, as the design stages progress, localised issues may arise which require increased technical capabilities to overcome.
Operational:	The operation of the route could become the responsibility of Transport Scotland and its maintenance contractor. There may be some disruption to road users on the M8 and A8 during construction, where the proposed link road connects with the existing road network.
Public:	The principle of the route was consulted on as part of wider consultation on the WEPF and gained support from stakeholders including BAA. It is possible that this intervention may be subject to opposition from local residents.