

Initial Appraisal		Intervention 32: New Light Rapid Transit Line between Edinburgh and Livingston						
Estimated total Public Sector Funding Requirement:		<i>Capital Costs/grant</i>					£100m - £500m	
Summary Impact on Key Strategic Outcomes	Improve Journey Times and Connections Reduce Emissions Improve Quality, Accessibility and Affordability	---	--	-	0	+	++	+++
(Judgement based on available information against a 7pt. scale.)								
Intervention Description:								
Extension of Edinburgh Tram from Gogar to Livingston, with a loop around Livingston serving both railway stations.								
Summary: Rationale for Not Progressing								
The costs of this intervention are considered excessive compared to alternative interventions such as D23 (Rail Enhancements in the East of Scotland), D6 (Using Intelligent Transport Systems on Parts of the Road Network to Enhance Capacity and Operations) and D11 (Strategic Park-&-Ride/Park-&-Choose Strategy).								

Table C32.1.1 STPR Objectives

STPR Objectives	
<p><u>STPR Objective 1:</u></p> <p>To increase public transport capacity and reduce journey time between Edinburgh and Glasgow.</p> <p><u>STPR Objective 2:</u></p> <p>To make best use of the available road space and better manage peak demand.</p> <p><u>STPR Objective 3:</u></p> <p>To increase public transport capacity and frequency between Livingston and Edinburgh.</p> <p><u>STPR Objective 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 5:</u></p> <p>To promote continuing reduction in accident rates and severity rates across the strategic transport network.</p> <p><u>STPR Objective 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>1: Slightly Positive – This intervention would help alleviate some of the existing capacity problems on the rail network between Glasgow and Edinburgh by offering an alternative to commuters between Livingston and Edinburgh.</p> <p>2: Neutral – This intervention makes no use of existing road space and will not manage peak demand on road.</p> <p>3: Strongly Positive – This intervention allows increased public transport options between Livingston and Edinburgh and increases capacity by offering an additional public transport option to train and bus travel.</p> <p>4: Slightly Positive – The provisions made as part of this intervention will encourage modal shift by making travelling by public transport (i.e. tram) more attractive. This will encourage a shift away from the private car, slightly reducing emissions.</p> <p>5: Neutral - This intervention is unlikely to have any significant effect upon accident incidence and severity rates across the strategic transport network. The impact of any modal shift on accident rates is forecast to be minimal.</p> <p>6: Neutral - The interventions highlighted in this intervention are unlikely to have any significant effect on promoting 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>

This intervention also addresses objectives in another urban network.

STPR Objective	Corridor, Urban Network or Strategic Node
To maintain the 60-minute commutable labour market area at the current level, with a particular focus on linking areas of economic activity.	Edinburgh
To enhance public transport interchange opportunities, where feasible to do so.	Edinburgh

Table C32.1.2 Key Strategic Outcomes

Key Strategic Outcomes (KSO's)		
Objective:	Assessment Summary:	Supporting Information:
Improve Journey Times and Connections:	Minor Benefit	This intervention would provide improved journey time reliability and better connections both between Livingston and Edinburgh and within Livingston itself. The impact of this intervention would be on a local/regional scale.
Reduce Emissions:	Minor Benefit	The tram extension promotes modal shift away from car use, potentially reducing the number of cars on the road and thereby slightly reducing emissions.
Improve Quality, Accessibility and Affordability:	Minor Benefit	This intervention would improve the quality of journeys into Edinburgh and improve accessibility and affordability to travel between Livingston and Edinburgh.

Table C32.1.3 Implementability Appraisal

Implementability Appraisal	
Technical:	Extension of the proposed Edinburgh Tram Line from Edinburgh to Livingston would require a tram loop between both Livingston stations.
Operational:	Construction of the intervention may cause delays to traffic if the tram passes or uses existing roads. Following construction, it is unlikely that any factors will adversely affect the operation of the intervention. Additional rolling stock will be required.
Public:	This intervention has not been made public; however this would be a high profile intervention with interest at national level.

Table C32.1.4 Comparative Appraisal

Comparative Appraisal	
Intervention Hierarchy:	The Edinburgh to Livingston Tram intervention is a Level 3 intervention.
Interaction:	In order to obtain full benefit from this intervention, other interventions such as intervention 114 (Suburban Rail Services across Edinburgh) and intervention 33 (Rail Service Frequency Enhancements between Edinburgh and Livingston South) need to be considered in relation to this intervention.
Mutually Exclusive:	This intervention is mutually exclusive with Edinburgh suburban line services and Livingston south rail service improvements.

Table C32.1.5 Environmental Appraisal

Environmental Appraisal	
Assessment Summary	A potential shift away from car use to tram may have slight benefits for air quality and CO ₂ e emissions. There is the possibility that cultural heritage could be adversely affected depending on the location of the new line.