Initial Appraisal	**Intervention 23: Upgrade of M80 Junction 1/M8 Junction 13**						
Estimated total Public Sector Funding Requirement:				***Capital Costs/grant***	£20m -100m		
Summary Impact on Key Strategic Outcomes		- - -	- -	-	*0*	+	++	+++
	Improve Journey Times and Connections							
	Reduce Emissions							
	Improve Quality, Accessibility and Affordability							

(Judgement based on available information against a 7pt. scale.)

Intervention Description:

Upgrading the merge between the M80 and M8 in Glasgow to improve the operation of the junction. This would involve the reconfiguration of the merges to reduce conflict between vehicles on the M8 and M80 motorways.

Summary: Rationale for Not Progressing

The costs involved in this intervention far outweigh the likely economic benefits gained in reducing congestion and improving journey times. In addition, there are potentially significant technical constraints, due to the relative position of adjacent junctions and the urban form, that are likely to impact on the ability to deliver this intervention. Furthermore, the motorway network would be better managed by taking forward Intervention D6 (Using Intelligent Transport Systems on Parts of the Road Network to Enhance Capacity and Operations).

Table C23.1.1 STPR Objectives

STPR Objectives	
STPR Objective 1: To address current and forecast rail overcrowding into Glasgow.	**1: Neutral –** This corridor currently suffers from rail overcrowding issues. Upgrade of the existing M8/M80 is concentrated on the road network and it would not have an impact on the rail network.
STPR Objective 2: To improve the efficiency and reliability of the operation of the southern sections of the M80 on approach to Glasgow, particularly for priority vehicles.	**2: Positive -** This intervention would increase capacity and reduce peak time tailbacks on the M8 network. This would lead to increased journey time reliability both for car and public transport users.
STPR Objective 3: To reduce the severity of accidents occurring to the national average.	**3: Neutral –** This intervention would not have an impact on accident severity in the corridor.
STPR Objective 4: To promote journey time reductions, particularly by public transport, between the Central Belt and Aberdeen/Inverness primarily to allow business to achieve an effective working day when travelling between these centres.	**4: Slightly Positive -** This intervention is likely to increase capacity on the M8, and reduce peak time tailbacks on approach to Glasgow. It is likely that removal of this constraint will slightly improve road based public transport strategic trips between Glasgow and all other major Scottish cities.

Table C23.1.2 Key Strategic Outcomes

Key Strategic Outcomes (KSO's)		
Objective:	**Assessment Summary:**	**Supporting Information:**
Improve Journey Times and Connections:	**Minor Benefit**	Journey time reliability would be improved for car, HGV and bus travel on approach to Glasgow.
Reduce Emissions:	**Minor Benefit**	Improvements to the road network could result in reduced congestion, resulting in a slight reduction in emissions. However, it is considered that the impact would be minimal.
Improve Quality, Accessibility and Affordability:	**Minor Benefit**	Junction improvements will improve the quality of car and public transport travel into Glasgow. Potential minor reduction in fuel and vehicle operating costs. This intervention would not directly decrease the costs of bus travel for commuters.

Table C23.1.3 Implementability Appraisal

Implementability Appraisal	
Technical:	Increasing capacity would involve major roadworks, including possible widening and realignment of the existing carriageway and new road markings.
Operational:	Construction works for this intervention are likely to result in delays on the road network. In addition to the presence of the roadworks reducing capacity and increasing tailbacks, it is likely that a 40mph limit would be implemented (possibly through the use of average speed cameras). However, following construction it is unlikely that any factors will adversely affect the operation of the intervention during its projected life.
Public:	This is a high profile intervention with interest at national level.

Table C23.1.4 Comparative Appraisal

Comparative Appraisal	
Intervention Hierarchy:	The M80 Stepps Bypass to M8 J13 capacity enhancement contains Level 3 intervention.
Interaction:	There are other interventions that need to be considered in combination with this intervention, such as intervention 140 (Intelligent Transport System initiatives on the M8 between Glasgow and Harthill), 141 (Intelligent Transport System initiatives on the M8 between Edinburgh and Harthill) and Intervention 85 (Intelligent Transport System Initiatives on the M74). Intervention 42 (M80/A80 Corridor Bus Priority Measures and Park-&-Ride Network) would also complement this intervention.
Mutually Exclusive:	There is no mutually exclusive intervention within Corridor 9.

Table C23.1.5 Environmental Appraisal

Environmental Appraisal	
Assessment Summary	The intervention has the potential for minor positive benefits to air quality and CO_2e emissions due to reduced congestion.