| **Detailed Appraisal** | **E20 - New Motorway Link between the M73 and Coatbridge** |
|---|---|
| **Estimated total Public Sector Funding Requirement:** | ***Capital Costs/grant*** £10m - £50m<br>***Annual Revenue Support Present*** -<br>***Value of Cost to Gvt*** £10m - £50m<br>***BCR/PVB*** <0.75 / <£10m |

**Summary Impact on STAG Criteria**

| | - - - | - - | - | 0 | + | ++ | +++ |
|---|---|---|---|---|---|---|---|
| **Environment** | | | | | | | |
| **Safety** | | | | | | | |
| **Economy** | | | | | | | |
| **Integration** | | | | | | | |
| **Accessibility and Social Inclusion** | | | | | | | |

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

**Intervention Description:**

This intervention targets the objective to facilitate a reduction in road based freight and to promote a reduction in accident rates.

This intervention consists of a new link road from the M73 to the Freightliner terminal at Coatbridge (Gartsherrie).

**Summary: - Rationale for Not Recommending**

While this intervention would improve road access to the Freightliner terminal at Coatbridge, thereby reducing delays for road freight using the terminal, the benefits would be felt largely at the local level.

In addition, although improved access would result in a modal shift from road to rail for longer distance trips, the impact would not be significant at a national level.

A combination of D15 (Rail Enhancements on the Highland Mainline between Perth and Inverness), D18 (Rail Enhancements between Aberdeen and the Central Belt) and D29 (Enhancements to Rail freight between Glasgow and the Border via West Coast Mainline) would better facilitate freight movement and greatly improve accessibility of the freight network.

**Table E20.1.1 STPR Objectives**

| STPR Objectives | |
|---|---|
| STPR Objective 18.1:<br><br>To make best use of the available road space and better manage peak demand, taking into account the need to contribute to emissions reduction. | **1: Negative –** This intervention proposes new road space and therefore does not seek to make better use of the existing network. The slight reduction in road-based freight traffic would have an indirect benefit on peak demand management on the M73; however this impact is expected to be minimal. |
| STPR Objective 18.2:<br><br>To contribute to emissions reduction by facilitating an increase in the proportion of freight passing through the corridor that is carried by rail. | **2: Slightly Positive –** The new road would provide a more direct route into the Freightliner terminal at Coatbridge, encouraging modal shift from road to rail. Since most of the journeys are long distance, this could contribute towards a reduction in emissions. |
| STPR Objective 18.3:<br><br>To promote continuing reduction in accident rates and severity rates across the strategic transport network. | **3: Slightly Positive –** The new road link would help to reduce accident rates as it would provide an alternative route for road freight travelling south on the M73. This would negate the current need to use Townhead Road when accessing Coatbridge Freightliner terminal. The accident severity rate may increase as a result of faster moving vehicles. |

**Table E20.1.2 STAG Criteria**

| STAG Criteria | | |
|---|---|---|
| **Criteria:** | **Assessment Summary:** | **Supporting Information:** |
| **Environment:** | **Minor benefit/ Minor Negative Impact** | Improved road links to the terminal could result in providing a more attractive option for longer distance rail freight movements. Given that most of these journeys are long distance this should result in a reduction in emissions. The construction of the new road link would require land-take; however the area is generally urban with few natural or heritage resources, and few adverse effects on the environment are therefore envisaged. |
| **Safety:** | **Minor Benefit** | Providing a new link for road freight would result in a reduction in accident and severity rates. The Design Manual for Roads and Bridges (DMRB) Volume 15 indicates that the difference in accident rates between urban single carriageway and typical rural single carriageway (10m) is around 75 per cent. The existing route taken by the majority of road vehicles accessing the terminal is through a mainly residential / urban environment, which is unsuitable for a high volume of HGVs. It is therefore forecast that access via a dedicated route to the M73 would result in a reduction of accident rates. However, the accident severity rate may increase as a result of faster moving vehicles. |
| **Economy:** | **Minor Benefit** | **Transport Economic Efficiency (TEE):** The provision of a new road link between the M73 and the Freightliner terminal would result in travel time savings and vehicle operating cost benefits for freight traffic, particularly during peak hours. However, given that the intervention would impact on relatively few vehicles, the benefit to cost ratio is forecast to be less than 0.75.<br><br>**Wider Economic Benefits (WEBs):** The provision of a new road link would provide the capacity for increased and more reliable movement of goods to and from the Freightliner terminal. The time taken to move freight would be reduced, resulting in increased productivity and improved long-distance freight movement through the corridor.<br><br>**Economic Activity and Location Impacts (EALIs):** The new road link would improve access to the Freightliner terminal and would act as a 'building block' in the continuing competitiveness of the west of Scotland as a strategic investment location for manufacturing. |
| **Integration:** | **Minor Benefit** | **Transport Integration:** This intervention would have a positive impact on enhancing the integration between road and rail freight distribution.<br><br>**Transport and Land Use Integration:** Effective and efficient freight transport is important for growth of the local and regional economy and this intervention would help to facilitate this growth.<br><br>**Policy Integration:** This intervention supports policies to transfer freight from road to rail. |
| **Accessibility and Social Inclusion:** | **Neutral** | **Community Accessibility:** This intervention would have no impact on community accessibility as it does not improve public transport network coverage nor does it promote non-motorised trips to access local services.<br><br>**Comparative Accessibility:** This intervention would primarily benefit freight transport. This intervention would improve road access to the Freightliner terminal. |

**Table E20.1.3 Key Strategic Outcomes**

| Key Strategic Outcomes (KSO's) | | |
|---|---|---|
| **Objective:** | **Assessment Summary:** | **Supporting Information:** |
| **Improve Journey Times and Connections:** | **Moderate Benefit** | The provision of a new road link between the M73 and Gartsherrie would improve road access into the Freightliner terminal, reducing delays for freight that is to be transferred to rail. This would help to reduce journey times for freight, making the service more attractive and helping to increase long-distance freight movement through the corridor and to the whole of Scotland. |
| **Reduce Emissions:** | **Minor/Moderate Benefit** | The new road would improve journey times to the Freightliner terminal, encouraging transfer of freight from Scotland by rail rather than road. Given the long distances over which these journeys occur, even a slight modal shift to rail is considered to result in a reduction in emissions. There would also be localised benefits within Coatbridge, where there is a designated Air Quality Management Area, through removal of HGV trips due to the new road link. The new road would improve journey times to the Freightliner terminal, encouraging transfer of freight from Scotland by rail rather than road. |
| **Improve Quality, Accessibility and Affordability:** | **Minor Benefit** | The new road link from the M73 to the Freightliner terminal would improve road access into the terminal and increase capacity thus improving travel quality and accessibility on this route. This intervention would not impact on affordability. |

**Table E20.1.4 Scottish Government's Strategic Objectives**

| Scottish Government's Strategic Objectives | | |
|---|---|---|
| **Objective:** | **Assessment Summary:** | **Supporting Information:** |
| **Safer and Stronger:** | **Minor Benefit** | Construction of the new road link would reduce accident rates as it would transfer a large number of HGVs from an urban route onto a dedicated route accessing the motorway network. The accident severity rate may increase as a result of faster moving vehicles. The new road link would improve access to the Freightliner terminal and would contribute to the continuing competitiveness of the west of Scotland as a strategic investment location. This intervention would not affect the quality, accessibility or affordability of public transport. |
| **Smarter:** | **Minor Benefit** | This intervention would benefit access to schools, colleges and universities. |
| **Wealthier and Fairer:** | **Moderate Benefit** | The new road link would increase productivity by reducing road journey times for freight. This intervention would also contribute to the continuing competitiveness of the west of Scotland as a strategic investment location, particularly for manufacturing. |
| **Greener:** | **Minor Benefit** | This intervention would improve journey times to the Freightliner terminal, encouraging transfer of freight from Scotland by rail rather than road thus reducing emissions and improving air quality. |
| **Healthier:** | **Neutral** | The new road link would have no impact on health or access to health services. It would also have no impact on the encouragement of modal shift from car to public transport and other sustainable modes. |

**Table E20.1.5 Implementability Appraisal**

| Implementability Appraisal | |
|---|---|
| **Technical:** | No untried techniques would be required when implementing any aspects of this intervention, although localised issues might arise during the design phase that require increased technical capabilities to overcome. The new road link may have to cross existing railway routes, in which case any associated technical issues would need to be considered early in the planning process.<br><br>Some disruption could occur on the M73 and Gartcosh Road during construction which would require detailed traffic management planning. Further disruption might arise from temporary closure of existing rail routes during construction. |
| **Operational:** | This intervention is considered to be operationally feasible and it is unlikely that any adverse factors would affect the operation of this intervention during its projected life.<br><br>The operation of the route is likely to become the responsibility of Transport Scotland and its maintenance contractor. |
| **Public:** | This intervention has not been made public. However, it is likely to be seen favourably by the local population as it would remove HGVs from inappropriate parts of the local road network. |