

Detailed Appraisal		D29 – Enhancements to Rail Freight between Glasgow and the Border via West Coast Main Line						
Estimated total Public Sector Funding Requirement:		<i>Capital Costs/grant</i>			£250m - £500m			
		<i>Annual Revenue Support Present</i>			-			
		<i>Value of Cost to Gvt</i>			£100m - £250m			
		<i>BCR/PVB</i>			N/A			
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 would allow an increase in the number of freight paths on the West Coast Main Line (WCML) between Glasgow and the Border by enhancing the rail infrastructure. This would include measures such as: <ul style="list-style-type: none">Lengthening of loops;Removal of speed limits that are below 75mph for freight trains;Increasing the loading gauge on the route; andIncreasing freight terminal capacity. <p>This intervention may also include a new line between Mossend and Coatbridge, which would involve providing an overbridge across the A8 and M8 when works are complete.</p> <p>Widening of the track may require land take or the construction of earth retaining structures where space is limited.</p>								
Summary: Rationale for Selection								
This intervention would improve capacity for rail freight between Scotland and England by providing enhanced facilities on the WCML. This would contribute to the freight objective identified on Corridor 18 (Glasgow to North West England and the Border) to transfer freight from road to rail.								
There would be environmental benefits, as rail would be expected to capture a greater proportion of cross-border freight traffic, thereby reducing road-related emissions. New rail infrastructure could adversely affect the environment; however, it is possible that any such impacts could be mitigated at project design level.								
This intervention could interact with similar proposals developed by the Department for Transport on the WCML south of Carlisle.								

Table D29.1.1 STPR Objectives

STPR Objectives	
<p><u>STPR Objective 1:</u> To make best use of the available road space and better manage peak demand taking into account the need to contribute to emissions reduction.</p> <p><u>STPR Objective 2:</u> To contribute to emissions reduction by facilitating an increase in the proportion of freight passing through the corridor that is carried by rail.</p> <p><u>STPR Objective 3:</u> To promote continuing reduction in accident rates and severity rates across the strategic transport network.</p>	<p>1: Slightly Positive – This corridor currently suffers from congestion in peak hours on the M74 and other approaches to Glasgow. This congestion will increase due to the forecast increase in traffic on the M74. Enhancements on the WCML to improve support for rail freight, and increase the number of available paths, would encourage logistics companies to choose rail over road for Anglo-Scottish flows. This in turn would have a slight benefit to the road network, although it is unlikely that there would be a significant impact on emissions.</p> <p>2: Slightly Positive – Increasing the number of paths for rail freight would increase capacity and accessibility for freight and encourage a modal shift from road to rail. Increasing the loading gauge would allow larger containers to be carried and would therefore increase the proportion of freight that could be carried by rail through the corridor.</p> <p>3: Slightly Positive - This intervention is unlikely to have a significant effect on promoting a continuing reduction in accident rates and severity rates across the strategic transport network. If some HGV movements are removed from the road then there may be a marginal benefit.</p>

Table D29.1.2 STAG Criteria

STAG Criteria		
Criteria:	Assessment Summary:	Supporting Information:
Environment:	Minor Benefit/ Moderate Negative Impact	Improvements to the WCML for rail freight have the potential for moderate adverse effects on cultural heritage, due to the multitude of designated sites in close proximity to the existing track. However, the extent of new infrastructure is small, and these effects are highly dependent on the location of the final works, with mitigation likely to be possible. These potential moderate adverse effects would be offset by beneficial effects on air quality and climate, resulting from the potential to promote modal shift from road based HGVs to rail.
Safety:	Minor Benefit	Increased rail freight adoption, by major freight forwarders operating to the south and England, should lead to the removal of some HGV journeys from the motorway network and M74. In Scotland, HGV accidents reduced between 2001 and 2006 by 31 per cent, and this can mainly be attributed to improved enforcement of drivers' hours and legislation, plus better vehicle design. However, improved utilisation of rail freight infrastructure is expected to lead to a reduction in growth of total road vehicle kilometres travelled and a subsequent reduction in accidents involving goods vehicles on this route.
Economy:	Major Benefit	<p>Transport Economic Efficiency: This intervention would make provisions for increasing the speed of freight trains and the size of containers that can be carried on them on the WCML resulting in greater productivity in the movement of goods.</p> <p>Wider Economic Benefits: The creation of faster rail freight links between the Central Belt and major freight hubs in England would encourage business development and stimulate economic growth in the Central Belt. In 2005-06, 14 million tonnes of freight was lifted in Scotland by rail, 24 per cent more than the previous year and over twice the amount in 1996-97.</p> <p>Economic Activity and Location Impacts: The creation of jobs in the Coatbridge area, an area with high unemployment following the closure of traditional businesses in the area such as Ravenscraig steelworks, would help boost the local and national economy.</p>
Integration:	Minor Benefit	<p>Transport Integration: Existing inter-modal facilities at Mossend and Coatbridge ensure that integration with other modes of transport, predominantly road, have been accomplished. The north end of the WCML, at Mossend, is approximately 30 kilometres from the port and rail freight facilities at Grangemouth, and there would be significant benefit in ensuring that improvements on the WCML integrate with those facilities.</p> <p>Transport and Land Use Integration: Mossend's central location means that it is well placed as a marshalling point, allowing freight from across Scotland to be combined into longer trains for travelling south across the Border.</p> <p>Policy Integration: Improved freight connection is one of the policy requirements of the National Planning Framework (NPF2), a document which encourages economic growth through sustainable development.</p>
Accessibility and Social Inclusion:	Neutral	<p>Community Accessibility: This intervention would not impact on community accessibility</p> <p>Comparative Accessibility: Rail freight improvements to the WCML are unlikely to bridge social exclusion problems.</p>

Table D29.1.3 Key Strategic Outcomes

Key Strategic Outcomes (KSO's)		
Objective:	Assessment Summary:	Supporting Information:
Improve Journey Times and Connections:	Major Benefit	Scotland's current freight network is concentrated around links from the south and England to the Central Belt. The WCML route benefits from being electrified allowing greater tractive power which speeds up rolling stock and reduces journey times for freight trains. Increasing the number of paths available would ensure that rail freight can remain competitive with road freight by allowing more freight to be transported at times suitable for the freight logistics companies and their clients. These improvements would also help to improve journey time reliability for rail freight, ensuring that connections with onward road haulage can be met.
Reduce Emissions:	Minor Benefit	Increased use of rail freight would continue to contribute to reduced lorry miles and hence reduced road vehicle pollution on the congested M74 corridor. WCML electrification allows the use of electric freight locomotives, which create less noise pollution and no exhaust fumes, plus there is the option to generate electricity from renewable sources.
Improve Quality, Accessibility and Affordability:	Minor Benefit	Rail freight enhancements are unlikely to have an effect on public transport links, accessibility issues and the affordability of public transport.

Table D29.1.4 Scottish Government's Strategic Objectives

Scottish Government's Strategic Objectives		
Objective:	Assessment Summary:	Supporting Information:
Safer and Stronger:	Moderate Benefit	Increasing terminal capacity at Mossend and Coatbridge, and upgrading the WCML for rail freight, would result in some modal shift of freight from road to rail for journeys to the south. This would improve road safety on major routes to the south. This intervention would have no impact on the quality, accessibility and affordability of public transport.
Smarter:	Neutral	This intervention would not improve links to schools, colleges or universities.
Wealthier and Fairer:	Minor Benefit	Enhanced use of existing infrastructure to reduce freight transport costs and speed up rail links with connections to the south would be expected to lead to economic growth through stimulated business investment, encouraging business relocation to benefit from these improved transport links. This in turn is likely to lead to job creation.
Greener:	Minor Benefit	Rail freight enhancements would encourage freight transfer from road, which decreases road traffic congestion and disruption. However, public transport is not promoted nor is modal shift away from the car. Use of the WCML utilises cleaner locomotives due to electrification with consequential benefits to air quality and reductions in CO ₂ e emissions.
Healthier:	Minor Benefit	Together with the Greener objective, reducing HGV traffic and improving air quality would impact on urban areas near to major trunk roads reducing health service costs and the negative effect of respiratory disease on society. This intervention would not improve access to health services.

Table D29.1.5 Implementability Appraisal

Implementability Appraisal	
Technical:	<p>It is expected that no untried techniques would be required when implementing any aspects of this intervention. However, as the design stages progress, localised issues may arise, such as the risk of subsidence due to mining, which may require increased technical capacities to overcome.</p> <p>Construction of some aspects of this intervention may have an impact on operating existing services, however much of this work could be carried out at times when the disruption would be minimised.</p>
Operational:	<p>Running additional rail services places extra pressure on the rail network and can increase the risk of delays. However, it is expected that these issues would be mitigated by ensuring that the works included within the intervention have sufficient capacity for the proposed service levels. No significant operational impacts are anticipated from this intervention.</p>
Public:	<p>There has been no detailed consultation specifically on this individual intervention; however, it is expected that any measure which promotes freight transfer from road to rail would achieve public support.</p>