

Detailed Appraisal		D17: Rail Service Enhancements between Aberdeen and Inverness						
Estimated total Public Sector Funding Requirement:		<i>Capital Costs/grant</i>		£250m - £500m (Phase 1 £50m - £100m) (Phase 2 £100m - £250m)				
		<i>Annual Revenue Support Present</i>		-				
		<i>Value of Cost to Gvt</i>		Phase 1 £10m - £50m				
		<i>BCR/PVB</i>		Phase 1 < 0.75 / £10m - £50m				
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:								
<p>This intervention supports the objectives to reduce journey time and increase opportunities to travel, particularly by public transport, between Aberdeen and Inverness.</p> <p>The improvements to the railway between Aberdeen and Inverness would allow:</p> <ul style="list-style-type: none"> An increase in service frequency (minimum of hourly service over the full route); A reduction in journey time by about 20 minutes between Aberdeen and Inverness; Extra rail services between Nairn and Inverness to provide two trains per hour over this section; and A new station at Dalcross with Park-&-Ride facilities and interchange facilities with Inverness Airport. <p>Phase 1 would involve the introduction of new loops in the area and line speed improvements.</p> <p>Phase 2 would involve more comprehensive improvements to line speed, journey times and the provision of some double tracking on approaches to Inverness and Aberdeen.</p>								
Summary: Rationale for Selection								
<p>This intervention would reduce journey times between Aberdeen and Inverness and improve connectivity between the cities and the communities along the corridor. It would also increase opportunities to travel by providing a more frequent service at regular intervals throughout the day.</p> <p>At the Inverness end of the route, this intervention would improve connectivity by public transport between Inverness City Centre and the growth area to the east, including Inverness Airport.</p> <p>Within Aberdeen, this intervention would improve access to the Dyce area and, if combined with improvements to the connections between Aberdeen and the Central Belt (D18 Rail Enhancements between Aberdeen and the Central Belt), would also provide greater opportunity for cross city travel by rail.</p> <p>The journey time savings of approximately 20 minutes are significant and this, coupled with an increased frequency, would make rail travel a genuine alternative to car travel. There would also be benefits from emissions reduction resulting from the ability to capture a higher share of inter-city travel.</p> <p>The cost of this intervention is driven by the need to provide double track on the approach to Aberdeen. However, the improvements to journey time of around 20 per cent would be significant both for existing users and for those transferring from car and it is therefore considered to offer value-for-money.</p>								

Table D17.1.1 STPR Objectives

STPR Objectives	
<p><u>STPR Objective 4.1:</u> To improve connectivity, particularly by public transport, between Inverness City Centre and the growth area to the east, including Inverness Airport.</p>	<p>4.1: Strongly Positive – Network Rail's Route Utilisation Strategy (RUS) incorporates the option to enhance infrastructure between Aberdeen and Inverness. This would allow an increase in service frequency between Aberdeen and Inverness and would improve connectivity to Inverness City Centre and to the east of Inverness through intermediate stations. The reduction in journey time would provide an attractive alternative to the A96. The new station at Dalcross would further improve public transport access to/from the east of Inverness. However, the catchment area which the new station serves may not fully encompass this area.</p>
<p><u>STPR Objective 4.2:</u> To improve journey time and increase opportunities to travel, particularly by public transport, between Aberdeen and Inverness.</p>	<p>4.2: Strongly Positive – This intervention would result in improvements in journey time and increased opportunities to travel between Aberdeen and Inverness, due to the increased frequency of rail services. During a 3-hour peak, the improvements would enable a maximum increase in seat capacity arriving in Aberdeen and Inverness of up to 600 seats and 2,000 seats respectively. A reduction in journey time of 20 minutes for end to end travel would be achieved.</p>
<p><u>STPR Objective 4.3:</u> Reduce the accident rates and severity rates to current national average.</p>	<p>4.3: Neutral – It is expected that this intervention would have a neutral effect on accident rates and severity rates on the trunk road network.</p>

Table D17.1.2 STAG Criteria

STAG Criteria		
Criteria:	Assessment Summary:	Supporting Information:
Environment:	Minor Benefit/Major Negative Impact	This intervention has the potential for major adverse effects on the natural environment, including biodiversity, cultural heritage, soils and geology and the water environment; however, these effects are highly dependent on the finalised location of the works, and mitigation could be possible. Phase 1 works around Forres, Elgin and Keith need to take particular note of potential effects on heritage resources, in terms of Historic Gardens and Designed Landscape and listed buildings.
Safety:	Neutral	It is expected that this intervention would have a neutral effect on accident rate and severity rate. This intervention would be designed in line with best practice standards. It is anticipated that the new station would incorporate CCTV, lighting and surveillance to maintain a high level of personal safety for users of the new station.
Economy:	Moderate Benefit	<p>Transport Economic Efficiency (TEE): This intervention would improve public transport services between Inverness and Aberdeen through increased service frequency and travel time would be reduced by up to 20 minutes between Inverness and Aberdeen. This would result in travel time savings for those travelling by public transport to the Areas of Economic Activity in Aberdeen and Inverness.</p> <p>Wider Economic Benefits (WEBs): Improved service frequency and reduced travel time between Inverness and Aberdeen is expected to strengthen the inter-city connectivity between Inverness and Aberdeen and to subsequently promote the synergy between these two economic centres. This intervention is expected to improve access to and from the major employers in the area.</p> <p>Economic Activity and Location Impacts (EALIs): The proposed new station at Dalcross is anticipated to open up access to Inverness Airport and the adjacent development sites. Improved rail services between Aberdeen and Inverness would assist in the economic development and competitiveness of these two cities.</p>
Integration:	Moderate Benefit	<p>Transport Integration: This measure builds on the existing heavy rail network in the north of Scotland through the addition of a station at Dalcross and through improvements to service frequency and journey time savings. The creating of a new station with Park-and-Ride facilities is anticipated to have a positive impact with regard to promotion of sustainable modes of transport, and integration between road and rail.</p> <p>Transport Land-Use Integration: The <i>Inverness Local Plan (Highland Council, March 2006)</i> proposes focusing economic development in and around Inverness Airport, with the development of a business park, freight village and transport interchange. This intervention to develop a new station at Dalcross ties in with these local development plans.</p> <p>Policy Integration: It is anticipated that there would be improved access for Inverness and Nairn residents to the more specialised health services and facilities in Aberdeen. The development of Park-&-Ride facilities and improved rail services would encourage modal shift and would assist in achieving a healthy and inclusive society. It is anticipated that the new station at Dalcross would be compliant with the Disability Discrimination Act.</p>
Accessibility and Social Inclusion:	Moderate Benefit	<p>Community Accessibility: This intervention would have a positive impact on community accessibility as it improves public transport network coverage and promotes non-motorised trips to access local services.</p> <p>Comparative Accessibility: Improved access to Aberdeen may be beneficial in terms of access to the more specialised health services and facilities not found in Inverness. Improvements in sustainable forms of transport are anticipated to promote social</p>

		inclusion and improved access for the mobility and visually impaired, youth and elderly. This intervention may open up employment opportunities for the socially deprived areas in Nairn and central Inverness.
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Table D17.1.3 Key Strategic Outcomes

Key Strategic Outcomes (KSO's)		
Objective:	Assessment Summary:	Supporting Information:
Improve Journey Times and Connections :	Moderate Benefit	This intervention would improve connections and journey times for public transport travel between Inverness, Nairn and Aberdeen. In addition, the intervention would improve connectivity by public transport between Inverness City Centre and the growth area to the east, including Inverness Airport.
Reduce Emissions :	Minor Benefit	An increased frequency of rail services between Nairn and Inverness and the provision of a new station at Dalcross with Park-&-Ride facilities would encourage modal shift from road to rail, thereby contributing to a reduction in CO ₂ e emissions and an improvement in local air quality.
Improve Quality, Accessibility and Affordability :	Moderate Benefit	This intervention would have a positive impact in terms of improved access and quality of public transport between job seekers and employment opportunities, as rail services are improved between the socially deprived neighbourhoods of Nairn to the employment opportunities in Inverness. Additional seating capacity arriving during a three-hour peak at Aberdeen would be up to 600 seats and at Inverness would be up to 2,000 seats (based on a six-car set). It is unlikely that the intervention would impact on affordability.

Table D17.1.4 Scottish Government's Strategic Objectives

Scottish Government's Strategic Objectives		
Objective:	Assessment Summary:	Supporting Information:
Safer and Stronger:	Minor Benefit	This intervention would improve access to essential services and economic opportunities for residents of Nairn, and supports communities in less accessible or remote parts of Scotland. This intervention is expected to have a neutral impact on safety.
Smarter:	Minor Benefit	This intervention would offer improvements in accessibility to education facilities, such as the University of Aberdeen and the Robert Gordon University in Aberdeen and the University of the Highlands and Islands in Inverness.
Wealthier and Fairer:	Moderate Benefit	This intervention would improve journey times, service frequency and journey time reliability, sustaining and promoting economic growth in the north of Scotland between Inverness, Nairn and Aberdeen.
Greener:	Minor Benefit	Rail enhancements promote public transport use and have the potential to result in modal shift to rail thereby improving air quality and climatic factors.
Healthier:	Minor Benefit	This intervention encourages modal shift to public transport, and to healthier and physically active forms of transport with consequential health benefits. Access to health services would be enhanced through improved access to specialised health services and facilities in Aberdeen and Inverness.

Table D17.1.5 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>This intervention is in the public domain and it is anticipated that it will receive general public support.</p>