

Detailed Appraisal		E1 – Suburban Rail Services Across Dundee						
Estimated total Public Sector Funding Requirement:					<i>Capital Costs/grant</i>	£50m - £100m		
					<i>Annual Revenue Support Present</i>	-		
					<i>Value of Cost to Gvt</i>	£10m - £50m		
					<i>BCR/PVB</i>	0.75 - 1.25 / £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:								
This intervention supports the objective to improve public transport accessibility and competitiveness to the west of Dundee. It includes:								
<ul style="list-style-type: none"><li>• A 30 minute frequency service from Arbroath to Perth;</li><li>• A new station at Dundee West and services calling at all intermediate stations;</li><li>• Additional suburban rolling stock; and</li><li>• Changes to track layout and signalling to allow for the increased service frequency and construction of the new station.</li></ul>								
Summary: Rationale for Not Recommending								
Analysis shows that providing suburban rail services across Dundee would result in a negligible modal shift from car and therefore the intervention would not have a strategic impact.								
The potential for improved public transport service provision for Dundee is better captured within the Interventions D10 (Reconfiguration of the National Timetable) and D18 (Rail Enhancements between Aberdeen and the Central Belt).								

Table E1.1.1 STPR Objectives

STPR Objectives	
<p><u>STPR Objective 1:</u> To reduce the conflict between long distance and local traffic.</p> <p><u>STPR Objective 2:</u> To improve bus / rail interchange opportunities.</p> <p><u>STPR Objective 3:</u> To improve the public transport accessibility and competitiveness to Dundee West.</p> <p><u>STPR Objective 4:</u> To promote continuing reduction in accident rates and severity rates across the strategic transport network.</p> <p><u>STPR Objective 5:</u> To promote journey time reductions, particularly by public transport, between Aberdeen and the Central Belt primarily to allow business to achieve an effective working day when travelling between these centres.</p>	<p><b>1: Slightly Positive</b> – Forecast modal shift from car is low but the intervention is still likely to remove a small amount of local trips from the road leaving more road space for longer distance or strategic trips.</p> <p><b>2: Positive</b> – This intervention would improve the connectivity and accessibility between Dundee and the suburbs to the east and west of the city. The development of this intervention would be additional to existing InterCity and First ScotRail Express services. The proposed Dundee West station provides a key link to integration with existing employment centres and planned housing development areas. This intervention would improve the economic performance of Dundee West by improving access to communities, new business sectors and the city centre.</p> <p><b>3: Positive</b> – This intervention would improve the accessibility and competitiveness of public transport and encourage use of rail services. This would provide a more attractive public transport mode and improve connections between Dundee and surrounding towns.</p> <p><b>4: Neutral</b> – The overall impact of the intervention on accident rates and severity rates is likely to be negligible.</p> <p><b>5: Slightly Positive</b> – This proposed intervention would improve the connectivity and accessibility between Dundee and its suburbs to the east and west of the city. This would result in reduced bus-rail interchange times and improved journey times, which would allow businesses to achieve an effective working day when travelling between Dundee and other cities.</p>

Table E1.1.2 STAG Criteria

STAG Criteria		
Criteria:	Assessment Summary:	Supporting Information:
Environment:	Minor Benefit	It is envisaged that this intervention will encourage a degree of modal shift from road to rail, with a potential beneficial effect on air quality, especially in relation to the Air Quality Management Areas in Perth and Dundee. There is envisaged to be little new land-take required for this intervention, and while there are some uncertain neutral to minor adverse effects on cultural heritage and water, these could easily be mitigated depending on the location and scale of the works.
Safety:	Neutral	The improvements would make some contribution to accident savings, by reducing car use; however, the overall impact of this intervention on road safety is likely to be negligible.
Economy:	Minor Benefit	<p><b>Transport Economic Efficiency (TEE):</b> Economic benefits are anticipated as a result of improved connection times between modes. Improved frequency of service introduces economic benefits through the potential travel time savings for trips to economic development sites, particularly during peak hours. Service frequency enhancements would provide up to 4,300 seats arriving at Dundee over a three hour peak period (based on two additional six carriage services per hour between Perth and Dundee and between Arbroath and Dundee) extending these benefits to a large number of passengers. The forecast number of passengers using stations along the line (e.g. Arbroath, Dundee, Dundee West and Perth) would increase under this intervention. However, the increase would be such that this intervention offers only marginal value for money.</p> <p><b>Wider Economic Benefits (WEBs):</b> The provision of rail services to local areas not currently served by rail (Dundee West) introduces economic benefits in terms of improved access to a wider pool of employment opportunities to suburban communities in Dundee and to a larger labour pool for businesses located in centres such as Dundee, Perth, and Arbroath. Improvements to signalling and service along the rail corridor would provide economic benefit for the broader corridor between Perth and Arbroath and to suburban communities in Dundee.</p> <p><b>Economic Activity and Location Impacts (EALIs):</b> The new station at Dundee West would improve access to labour markets and employment opportunities. Dundee Technology Park and the employment centre of Ninewells Hospital would benefit from improved access to labour markets. This intervention could act as a 'building block' in the continuing competitiveness of the area, and in particular Dundee West, as a strategic investment location.</p>
Integration:	Minor Benefit	<p><b>Transport integration:</b> This measure builds on the existing heavy rail network in the east of Scotland through the addition of a station (Dundee West) and through improvements to signalling and services. The creation of a new station would increase the potential for interchange between rail and other modes. It is anticipated that any new station would be designed to promote integration with pedestrian, cycling and bus public transport networks and that the overall impact on integration would be positive.</p> <p><b>Transport land-use integration:</b> Improving rail transport services in suburban Dundee promotes transport land-use integration through promotion of modal shift. It is anticipated that the design of the station would not only integrate with other modes of travel but would also be designed to complement the surrounding setting. This intervention would help facilitate the growth of economic activity in Dundee City Centre and Dundee West.</p> <p><b>Policy integration:</b> This intervention is considered to integrate with existing policy. Promotion and enhancement of public transport facilities and services, particularly in the suburban areas of Dundee, supports social inclusion and rural access. This intervention encourages modal shift and would assist in achieving a healthy and inclusive society. It is anticipated that the new</p>

		station would comply with the Disability Discrimination Act (DDA) and would improve access to the rail network for the mobility impaired. The Dundee Local Plan supports the improvement of rail services and infrastructure and the development of a new station within Dundee and its hinterland in order to promote and reflect Dundee as a major city. The Dundee and Angus Structure Plan promotes the improvement of transport links on the Perth-Dundee-Arbroath corridor, through enhancements to local rail services and dedicated local rail services operating within and beyond the Dundee and Angus Coastal Corridor.
<b>Accessibility and Social Inclusion:</b>	<b>Minor Benefit</b>	<p><b>Community Accessibility:</b> The public transport network coverage would improve access to jobs, training, health services, shopping and other locally significant trips by providing a fast, efficient and direct link between the residential areas in suburban Dundee and the core employment centres of central Dundee, Perth and Arbroath. This option is therefore expected to improve public transport network coverage and promote non-motorised trips. Local accessibility would increase as this intervention would provide an additional public transport link between residential, commercial and industrial areas in the settlements on route. Access to health services would be improved as the proposed new station at Dundee West is in proximity to Ninewells Hospital.</p> <p><b>Comparative Accessibility:</b> It is anticipated that the new station would be designed to accommodate the mobility-impaired. This intervention would provide greater accessibility for the more deprived and socially excluded regeneration areas.</p>

Table E1.1.3 Key Strategic Outcomes

Key Strategic Outcomes (KSO's)		
Objective:	Assessment Summary:	Supporting Information:
<b>Improve Journey Times and Connections:</b>	<b>Moderate Benefit</b>	Journey times may be improved as a result of improvements to the track layout and signalling. This could allow more trains to run at faster speeds on the rail network in the Dundee area. The provision of new services would significantly enhance rail connectivity and provide better access to longer distance services.
<b>Reduce Emissions:</b>	<b>Minor Benefit</b>	It is envisaged that this intervention would encourage a slight modal shift from road to rail, this is not considered likely to result in a substantial impact on overall CO <sub>2</sub> e emissions.
<b>Improve Quality, Accessibility and Affordability:</b>	<b>Minor Benefit</b>	Implementing this intervention would potentially increase access to key services locally. Approximately 4300 additional seats would be provided on services arriving at Dundee over a three-hour peak period (based on two additional six carriage services per hour between Perth and Dundee and between Arbroath and Dundee), thus improving the quality of passenger journeys. Congestion at peak times is expected to be reduced through an increase in local services.

Table E1.1.4 Scottish Government's Strategic Objectives

Scottish Government's Strategic Objectives		
Objective:	Assessment Summary:	Supporting Information:
<b>Safer and Stronger:</b>	<b>Minor Benefit</b>	This intervention would improve the quality and accessibility of public transport and open up rail access to suburban communities in Dundee. Modal shift is forecast to be limited and any potential impacts on safety are likely to be negligible.
<b>Smarter:</b>	<b>Minor Benefit</b>	The improved service provision could result in enhanced access to and from Dundee University, Ninewells Teaching Hospital and related sites.

<b>Wealthier and Fairer:</b>	<b>Moderate Benefit</b>	This intervention would improve journey times and their reliability, sustaining and promoting economic growth in Dundee and improving access to Dundee City Centre and the areas of economic activity in Dundee.
<b>Greener:</b>	<b>Minor Benefit</b>	This intervention promotes a marginal modal shift to rail and therefore could contribute to improved air quality and reductions in carbon emissions. However, the impact is expected to be low. The intervention would also promote the use of sustainable transport.
<b>Healthier:</b>	<b>Moderate Benefit</b>	This intervention encourages the use of public transport and healthier, physically active forms of transport. Access to health services is enhanced through the development of a new station close to Ninewells Hospital.

**Table E1.1.5 Implementability Appraisal**

<b>Implementability Appraisal</b>	
<b>Technical:</b>	<p>In general, no untried techniques would be required when implementing any aspects of this intervention. However, as the design stages progress, localised issues may arise that require increased technical capabilities 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>
<b>Operational:</b>	<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>
<b>Public:</b>	<p>There has been no specific detailed consultation on this individual intervention. However, it is expected that any intervention that promotes modal shift to more sustainable transport would achieve general public support.</p>