

Proposal Details			
Name and address of authority or organisation promoting the proposal: (Also provide name of any subsidiary organisations also involved in promoting the proposal)		TACTRAN, Bordeaux House, 31 Kinnoull Street, Perth, PH1 5EN	
Proposal Name:	New rail station at Blackford	Name of Planner:	<i>Name of principle contact within the authority or organisation promoting the proposal.</i>
Proposal Description:	Construct a new station on the site of the former station at Blackford. Stop all ScotRail services at the new station rather than Gleneagles.	Estimated Total Public Sector Funding Requirement:	<i>Capital costs/grant: £4.5m</i>
			<i>Annual revenue support: £nil</i>
			<i>Present Value of Cost to Govt: £2.6m</i>
Funding Sought From: (if applicable)		Amount of Application:	<i>Sum:</i>
Background Information			
Geographic Context:	<p>The TACTRAN region covers the Angus Council, Dundee City Council, Perth and Kinross and Stirling Council authority areas, located to the north, east and west of Scotland's Central Belt. It is a unique geographical region including the three cities of Stirling, Perth and Dundee and an extensive rural hinterland of inter-connected towns, villages and rural areas, many of which are located within the Loch Lomond and Trossachs National Park and Cairngorms National Park. In general moving from north west to south east in the TACTRAN area moves from rural to more urban areas and the population density increases. The scope and influence of this study extends to Aberdeen in the north and Glasgow to the south, embracing the outskirts of the Grampians and the Central Belt area. 10% of the population in the TACTRAN area live in small towns with populations between three and ten thousand with 25% of the population living in rural settlements where the population is less than three thousand people. The majority of the population reside in the main urban settlements of Dundee, Perth, Stirling and Arbroath which range in size from between 20,000 and approximately 145,000 inhabitants.</p>		

<p>Social Context:</p>	<p>The demographic profile of the TACTRAN region is not dissimilar to Scotland as a whole, with around 19% of the population under the age of 16, 20% of the population over the pensionable age and the remainder of 61% between these two ranges. Angus, Dundee City and Perth &amp; Kinross all have higher percentages of their population over the pensionable age than the Scottish average, but this is reduced across the region as a whole by the lower than average percentage observed in the Stirling Council area. The average number of persons per household is broadly consistent across the TACTRAN region and aligns with the Scottish average: the average number of people per household is highest in Stirling at 2.36 and lowest in Dundee City at 2.13. The percentage of residents in Dundee City who live in a household with no available car (46%) is much higher than the national average of 34% and compares to percentages of 24%, 24% and 25% in Stirling, Perth &amp; Kinross and Angus respectively. Whilst the average across the region for people with no access to a car is 31%, car ownership in the TACTRAN area is higher than that observed in the rest of Scotland. The preferred mode for travel to work is dominated by the car, which is used for an average of 66% of journeys, above the Scottish average of 64%. The use of rail and bus is low within the Council areas of Angus, Perth and Kinross and Stirling ranging between 6% and 10% of journeys in those areas, corresponding to the availability and frequency of Public Transport. More than 17% of the population in Angus, Perth &amp; Kinross and Stirling travel over 10 kilometres to work, compared to only 4% who travel this distance and reside in Dundee City. Work journeys account for 22% of all trips that are made. Whilst 78% of resident's travel to work trips are within local authority areas; Dundee City has the highest proportion of internal trips (88%) followed by Perth and Kinross (82%), Angus (69%) and Stirling (68%). Currently 69% of journeys to work in the region are made by car with a relatively high mode share of 10% bus trips. Walking accounts for a high proportion of trips (17%), with rail and cycling accounting for 2% of trips each. Within Dundee the public transport mode share is high (19%) but within Angus, Perth and Stirling the public transport mode share is much lower (9%). Public transport provision and related services within the urban and rural areas are regarded as good and poor respectively, albeit within the wider rural hinterland this is exacerbated by the dispersed nature of surrounding settlements. A greater percentage of residents than the Scottish average are considered to be in 'good' health across the TACTRAN area. This is true for the individual authorities apart from Dundee City which sees a lower than average percentage of 'good' health and a higher than average percentage with 'not good' health, rather than 'fairly good' health. It is also the case in Dundee City that there is a greater percentage occurrence of a limiting long term illness than the Scottish average.</p>
<p>Economic Context:</p>	<p>The distinct urban and rural areas across the TACTRAN region serve various functions. Dundee is a vibrant economic centre with a growing employment and residential market. As well as its function as a tourism destination, Stirling City also plays a key service role for the wider Stirlingshire area, providing a wide range of employment and other services for the surrounding communities as well as for visitors and passing trade. The wider Stirling authority area covers a deep rural hinterland, many areas of which are captured within the Loch Lomond and Trossachs National Park where tourism is a key industry. These patterns can be demonstrated by looking at industries which employ the greatest percentage of people in each of the Council areas compared to the Scottish average. In Angus it the extraction industries such as Agriculture, hunting and forestry, mining and quarrying and manufacturing employ a greater percentage than the Scottish average while Dundee City conforms much more to the Scottish average but is more heavily biased towards health, social work and manufacturing. Throughout the TACTRAN region, employment in the construction industry is higher than in other parts of the country, and the impact of the large Universities in Dundee and Stirling is reflected in the percentage of people who work in the education sector. The industries with the highest percentages in Perth &amp; Kinross are agriculture, hunting and forestry and hotels and restaurants, reflecting a higher dependency on tourism. Retail employment in this area is also high. Stirling shows a high percentage of the population employed in the hotel and restaurant sector as well as a high financial and educational bias. The percentage of the population within the TACTRAN area who are unemployed varies considerably between the constituent Council areas and is potentially compounded by the urban and rural characteristics of these areas. The Perth &amp; Kinross and Stirling Council areas both have fewer than 3% unemployment compared with the national average of 4%, while Dundee City had over 5% of its population unemployed at the time of the last Census. The percentage of the economically active population who are undertaking full time study in the TACTRAN area is higher than the Scottish average and this is due to the impact of the large universities at Stirling and Dundee. Unemployment figures show that there are significant areas of high unemployment in the east of the TACTRAN region, primarily in Angus but also in the rural areas north of Kirriemuir and Brechin and around Crianlarich and Killin.</p>

Planning Objectives	
Objective:	Performance against planning objective:
<b>EC1.</b> Ensure that rail provides and supports economic growth by connecting key business & employment sectors where possible	Minor Positive – a new station would facilitate rail travel for the surrounding catchment. Improved access would support economic growth at both local and regional levels, providing good direct links with employment of the Highland Spring Factory.
<b>EC2.</b> Improve the efficiency, reliability and integration of rail services in the Tay Estuary study area specifically where this will benefit key business and employment sectors	Minor Positive – demand forecasting indicates a new station would generate up to 15,000 additional journeys over the do-nothing option of using the existing Gleneagles station, assuming an hourly direct service was provided to Glasgow and Perth with connections available to Dundee and Aberdeen.
<b>ACC1.</b> Increase accessibility to key service destinations in the TACTRAN area (e.g. employment, health and education sites) and to/from key external destinations by rail without compromising wider inter-regional rail connectivity	Minor Positive – a new station would facilitate rail travel for the surrounding catchment and increase accessibility assuming the station was provided with an hourly direct service to Glasgow and Perth with connections available to Dundee and Aberdeen.
<b>ENV1.</b> Contribute to national greenhouse gas emission reductions through rail based interventions where possible	Minor Positive - the proposed car park at Blackford is likely to encourage a modal change from cars to rail.
<b>ENV2.</b> Contribute to the management of air quality in the TACTRAN area, particularly the AQMA's across the Dundee City Council area and Perth	Minor Positive – the proposed car park is likely to encourage a modal change from cars to rail and therefore contribute to, albeit minor, air quality improvements in the TACTRAN area.
<b>SEC1.</b> Maintain or improve real and perceived levels of safety and personal security on the rail network	Moderate Positive – the new station will be fitted with lighting, CCTV which would enhance the levels of safety and personal security.
<b>INT1.</b> Ensure that rail is fully integrated with relevant land-use and planning projects	Minor Positive – the station will enhance the integration of rail with relevant land-use. In particular this station is sited close to the employment destination of the Highland Spring factory.
<b>INT2.</b> Ensure the rail network is integrated with the wider public transport network	Neutral– the station will allow improved access to onward rail services at other stations, particularly Glasgow and Perth. The extent to which further integration occurs is dependant on how services develop. It also is located close to existing local bus services.

<p>Rationale for Selection or Rejection of Proposal:</p>	<p>Whilst the preferred option would be to locate Blackford station at the alternative site adjacent to the Highland Spring factory, this, at present, is not practicable due to studies underway to provide a rail freight facility for the factory. The station is therefore assumed as having to be located at the site of the former station. This adds some construction complexity and conflicts with existing sidings. There are high levels of local support for reopening a station in Blackford. A station here would provide good direct links with employment and education in Stirling, Perth and Glasgow. However a station at Blackford share's the catchment area of the existing station at Gleneagles. Demand forecasting indicates a new station would generate up to 15,000 additional journeys compared with providing the proposed hourly service at the existing Gleneagles station. It is estimated that improving accessibility and security Gleneagles would generate an additional 10,000 journeys compared to the existing. It is assumed that it is would not be practicable to close the existing Gleneagles station and replace it with a new facility at Blackford because of the fact it is a listed structure and receives two Inverness – London services per day.</p> <p>The proposals meet the targets of government objectives and should therefore be accepted as an option at this stage.</p>
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<b>Implementability Appraisal</b>	
<p>Technical:</p>	<p>Although the B8081 connects with the A9 northbound, north of Blackford, this junction does not allow traffic from the southbound A9 to access the B-road. All traffic from the north accessing the station site will have to travel through Blackford.</p> <p>From a construction perspective, the best station location is to the east of the level crossing, adjacent to the Highland Spring factory. However the land here is owned by Highland Spring and is presently subject to an advanced study to accommodate a rail freight hub. The only remaining option is to locate the station to the west of the level crossing where the original station stood. The railway is at grade throughout Blackford. This site has some complexities to provide full length 6 car platforms. On the down side, the land rises steeply behind the tracks at the western end and there is a single track road approximately 9m from the running line near the B8081. The single track road would require to be realigned to ensure a safe junction if the platform is constructed in this location. A retaining wall would also be required to create space for construction of the platform. The length of the up platform is constrained to a 4 car length by the turnout accessing the existing freight sidings. The sidings will require to be recovered or relocated in order to provide a full 6 car length platform.</p> <p>It should be notes there are no significant constraints to constructing the platforms on the alternative site to the east of the level crossing. Platform to platform access is proposed via the level crossing – this saves the significant cost of a DDA compliant footbridge.</p>

Operational:	<p>Blackford station will be unstaffed. The station is located within a standard signalling block section so trains stopping in the section will not have a significantly detrimental impact on the capacity of the main line. Blackford signal box is staffed and controls the level crossing over the B8081.</p> <p>The sidings on the up line are privately owned (Highland Spring) and they may be willing to allow these to be recovered if they develop a new freight hub to the east of the level crossing.</p> <p>It is not proposed to provide a new station at Blackford with the full length platforms required to accommodate the London and Inverness intercity services which currently call at Gleneagles. It is felt that it would be impracticable to close Gleneagles station and therefore ScotRail services would call at Blackford and the London / Inverness services would continue to call at Gleneagles.</p>
Financial:	<p>The station and car park development at Blackford would cost circa £4.5m including a 44% uplift for risk and optimum bias.</p> <p>An operating cost of £30k pa is estimated for maintenance and utilities plus an annual lease charge of £30k pa to Network Rail to contribute to heavy maintenance.</p> <p>The maximum demand identified for the catchment of both Gleneagles and Blackford stations is circa 45,000 journeys pa. If a new station was provided in addition to Gleneagles, we estimate most of the existing patronage for ScotRail services at Gleneagles would abstract to Blackford due to the better road links and accessibility. It therefore does not appear to justify stopping the proposed new services at both Blackford and Gleneagles because no further patronage would be attracted and journey time disbenefits would be incurred for the users of the service from other stations. Therefore to justify a new station at Blackford all ScotRail services would have to call there but not at Gleneagles.</p> <p>At present, Gleneagles station receives circa 23,000 ScotRail journeys pa. We estimate this would grow to 30,000 pa. if the proposed hourly service to Glasgow and Perth was provided. Growth would then be inhibited because of poor accessibility and safety and security perceptions. Improving accessibility at Gleneagles (another package under appraisal) would result in a further 10,000 journeys pa. being generated. Moving all ScotRail services to a new station at Blackford would result in a further 15,000 journeys pa being generated, ie. Up to 45,000 journeys pa.</p> <p>The 15,000 journey increase over the do minimum option would be sufficient to cover the £60k pa operating costs of the new station.</p> <p>It is estimated that the timeframe for the station development would be 2017+ due to the availability of funding required.</p>

Public:	Not currently public but acceptability anticipated to be high given improved access to the rail network for the surrounding catchment. There is significant local support for a new rail station at Blackford with a campaign group to reopen the station again active. Planning issues would be resolvable as a station previously existed here.		
<b>Environment</b>			
Mitigation Options Included: (Cost & Benefits)			
Sub-objective	Qualitative information	Quantitative information	Significance of Impact
Noise and Vibration	It could be expected that there will be moderate noise and vibration impacts to properties living within the vicinity of the station during the construction process. Post construction the level of noise and vibration will be generated from the cars entering and exiting Blackford to access the car park, station announcements, trains halting and station announcements.	The monetised net benefit for noise over the 60 year appraisal period is £5,000. This is negligible in terms of the overall present value of benefits (PVB) generated.	Neutral
Air Quality – Overall	Air quality overall is expected to marginally improve as a result of some modal shift to train from private car journeys occurs when people, as a result of the new station facilities, are able to park their cars at the station and get better access to train services.	The monetised net benefit for local air quality over the 60 year appraisal period is £7,000.	Neutral
CO2 – Global	Whilst global CO <sub>2</sub> emissions could be expected to improve as a new station will result in some modal shift to train from private car journeys, this is considered negligible at a global level given the type of proposal, scale (service frequency) and context, as well as the benefits being slightly negated by the proposed service's reliance on diesel fuel. It could be expected, in coming years, that the proportion of diesel generated by renewable sources increases, thereby contributing to a reduction in global CO <sub>2</sub> emissions.	The monetised net benefit for greenhouse gases over the 60 year appraisal period is circa £9,000. This is negligible in terms of the overall present value of benefits (PVB) generated.	Neutral

PM10 – Local	Local PM <sub>10</sub> emissions are expected to improve as a result of some modal shift to train from private car journeys. Whilst this is expected to be relatively minimal, given the geographical scope of service and the population centres served by the line/ service, it is expected that collectively, there will be “worthwhile” local emission improvements.	The local PM <sub>10</sub> impacts overall arising as a result of an additional station will be negligible and therefore quantitative information has not been gathered.	Neutral
NO2 – Local	Local NO <sub>2</sub> emissions are expected to improve as a result of some modal shift to train from private car journeys. Whilst this is expected to be relatively minimal, given the geographical scope of service and the population centres served by the line/ service, it is expected that collectively, there will be “worthwhile” local emission improvements.	The local NO <sub>2</sub> impacts overall arising as a result of an additional station will be negligible and therefore quantitative information has not been gathered.	Neutral
Water Quality, Drainage and Flood Defence	Water quality, drainage and flood defence impacts will not arise as a result of this proposal. The station will be located close to an existing station where water quality, drainage and flood defence issues will have not caused a problem. Additionally the design and construction of the station will be managed / mitigated against impacts likely to be caused to water quality or drainage.	The additional water quality, drainage and flood defence impacts arising a new station, on an established railway line will be negligible and therefore quantitative information has not been gathered.	Neutral
Geology	Geology impacts will not arise as a result of this proposal. The site does not require extensive excavation to provide the station infrastructure.	The additional geology impacts arising as the result of a new station, on an established railway line will be negligible and therefore quantitative information has not been gathered.	Neutral
Biodiversity	It could be expected that, as a result of the preparation of land for the new station infrastructure and the noise and vibration impacts during construction, there will be some marginal impacts to fauna within the site boundaries. If the site to the east of the level crossing was unattainable the other design option would impact biodiversity more significantly. The west site would require road realignment to ensure a safe junction to access it and a retaining wall on the steep embankment to create space for construction of the platform. Both potential sites are presently brownfield rather than Greenfield.	The additional biodiversity impacts arising as the result of the new Blackford station would be very hard to quantify. Given that the established railway line already causes a degree of severance and thus limits biodiversity in the area the impact is not considered very significant and therefore quantitative information has not been gathered.	Minor negative

Visual Amenity	There will be minor visual amenity impacts as a result of this proposal. Building the station will replace currently open space with platform infrastructure reducing the visual appeal from nearby houses. Albeit this will be managed through mitigative (natural or other) screening.	With mitigation measures in place the visual amenity impact arising as the result of a new station will only be minor and therefore quantitative information has not been gathered.	Minor Negative
Agriculture and Soils	Agriculture and soils impacts will not arise as a result of this proposal.	The additional agriculture and soils impacts arising as the result of a new station at Blackford will be negligible and therefore quantitative information has not been gathered.	Neutral
Cultural Heritage	<p>Cultural heritage impacts will not arise as a result of this proposal. The proposed site boundaries and plan designs do not contain or impede upon any areas of cultural heritage or areas of significant historical or archaeological importance.</p> <p>In order to make maximise the viability of a new station at Blackford, the existing station of Gleneagles would receive less services per day than at present. This is a listed structure.</p>	The additional cultural heritage impacts arising as the result of a new station at Blackford are negligible and therefore quantitative information has not been gathered.	Neutral
Landscape	There will be minor changes to the landscape as a result of this proposal. The new station will mean the construction of platforms and a car park. Any significant landscape issues will have been managed through mitigative (natural or other) screening/ environmental enhancement.	The additional landscape impacts arising as the result of a new station at Blackford will be negligible and therefore quantitative information has not been gathered.	Minor Negative

Safety			
Sub-objective	Item	Qualitative information	Quantitative information
Accidents	Change in Annual Personal Injury Accidents	A change in Annual Personal Injury Accidents will not arise as a result of this proposal. The new station will be designed to meet the relevant Network Rail operational and safety criteria. Whilst it could be considered that on one hand, greater numbers of private cars travelling through Blackford may create more potential for road accidents and on the other hand as a result of the station creating some modal shift to train from private car journeys, there may be some road accident savings, both would be extremely marginal and, quantification of, out with the scope of this study.	
	Change in Balance of Severity	A change in the balance of severity of accidents will not arise as a result of this proposal. The station will meet the relevant network rail operational and safety criteria.	The proposal of a new station at Blackford next to an established railway line will have no effect on the balance of severity of accidents on the rail network and therefore quantitative information has not been gathered.
	Total Discounted Savings		The proposal to locate a new station at Blackford will have a monetised net benefit of £68,000.
Security		Personal security benefits are expected as a result of this proposal: CCTV and lighting will improve the areas security level. Stopping services at Blackford will increase patronage generating increased footfall which will create a form of human surveillance.	The proposal of a new station at Blackford, is likely to have a moderate positive effect on security on the rail network. Due to the difficulty of quantifying levels of perceived security, no data is given.

Economy (Transport Economic Efficiency)			
Sub-objective	Item	Qualitative information	Quantitative Information
User Benefits	Travel Time	<p>The largest impact on travel time is through the new hourly train services to Glasgow and Perth rather than through provision of a new station at Blackford.</p> <p>Travel time for those in the walk in catchment for Blackford will be reduced as currently the closest station is Gleneagles. However overall most of the catchment has a quicker drive time to Gleneagles compared with Blackford. Poor road access will constrain future use of Gleneagles station. However Blackford only gives a minor positive impact in travel time in comparison to the Gleneagles proposal.</p> <p>The current walk in catchment for Blackford is currently 500-600 persons although this is forecast to grow through future developments.</p>	Travel time monetised costs and benefits for Blackford station is circa £680,,000. This includes time benefits to both road and rail users.
	User Charges	The station will not directly affect user charges. The station does however provide access to services that has the potential to reduce the cost of travel in efficiency and time terms as opposed to other transport modes.	
	Vehicle Operating Costs	NA	NA
	Quality / Reliability Benefits	Good station design and park and ride facilities will positively benefit the user's journey experience.	
Private Sector Operator Impacts	Investment Costs	The investment cost is greater than the option to enhance Gleneagles due to the significantly increased workscope. Station and car park development at Blackford is estimated as £4.4m	-£3,327,000 (2002 prices, discounted to 2002)
	Operating & Maintenance Costs	<p>An operating cost of £30k pa is estimated for maintenance and utilities plus an annual lease charge at £30k pa to Network Rail.</p> <p>It is not anticipated that Blackford station could replace Gleneagles station therefore the £60k pa. would be additional to the operating cost of the existing rail network.</p>	-£1,106,000 (2002 prices, discounted to 2002)

	Revenues	<p>An hourly Scotrail service to Glasgow and Perth calling at a Blackford station, but not Gleneagles is estimated to generate circa £315k (at 2008 prices) compared with a do nothing revenue of £210k (at 2008 prices) at Gleneagles receiving the same level of service.</p> <p>The estimated £105k difference between the do nothing and this option will not make a significant impact on the capital cost investment once estimated annual operating costs of £60k pa are covered.</p>	£2,786,000 (2002 prices, discounted to 2002)
	Grant/Subsidy Payments	It is estimated that there will be a subsidy requirement to operate the service of £1,964,000 over the full appraisal period (2002 prices, discounted to 2002)	£1,647,000 (2002 prices, discounted to 2002)

Economic Activity and Location Impacts	Local Economic Impacts	Current business use of the route is limited to travel between the key centres of Dundee, Perth, Stirling and Glasgow. This proposal to build a new station at Blackford will increase accessibility to these destinations from intermediate stations and will therefore bring GVA benefits to local businesses and may lead to an increase in local output and employment, particularly over the key centres of Stirling, Perth and Dundee. In the future, the increased opportunities for travel to intermediate and wider destinations may lead to increased economic activity for tourism and leisure sectors.	
	National Economic Impacts	This option will fully achieve the study planning objectives which have been set, which in turn contribute to achieving Local and Regional Transport Strategy objectives. In turn, these have been shown to contribute to national transport objectives, including economy-specific objectives.	
	Distributional Impacts	Improvements to accessibility through increased choice of service and to all stops also contributes to reliability and travel choice thereby benefiting all sectors of society within the Blackford catchment area.	

<b>Integration</b>			
<b>Sub-objective</b>	<b>Item</b>	<b>Qualitative Information</b>	<b>Quantitative Information</b>
Transport Interchanges	Services & Ticketing	Whilst the Blackford station will be unstaffed, the franchisee provides good quality train service information at each location and ticketing facilities are available from the ticket examiner on the train. The facilities available are equivalent to those at the majority of stations on the Scottish rail network.	
	Infrastructure & Information	The new station will be installed with real time visual display information for passengers and a remote public address / help system.  Covered waiting shelters would be provided along with step free access from the car park to the platform.	
Land-use Transport Integration		Overall the proposal integrates well with land-use policy and proposals. The proposal will bring a number of positive contributions to a number of the objectives contained in Scottish Planning Policy (SPP) 17: Planning for Transport. The proposal also brings a largely positive contribution to the objectives and policies of the relevant Local Plans across the Region, including a positive effect on connecting business and employment centres across the region with local population centres. Development proposed for Dundee (Harbour area) and the Stirling Major Growth Area will benefit from the increased rail and access opportunities arising as a result of the proposal. Specifically a enhanced link to the Highland Spring factory is gained through the Blackford proposal	
Policy Integration		The proposal has a strong positive fit with National, Regional and Local policy and, in particular, a strong positive fit with the TACTRAN Regional Transport Policy.	

<b>Accessibility and Social Inclusion</b>			
<b>Sub-objective</b>	<b>Item</b>	<b>Qualitative Information</b>	<b>Quantitative Information</b>
Community Accessibility	Public Transport Network Coverage	Public transport network coverage is enhanced through this proposal: the new station increases travel options for passengers by providing access to services at intermediate stations that provide connectivity across the region and beyond. As a result of the new station there will be increased opportunities for on-bound travel to other destinations from the key centres within (and beyond) the region. For this to occur local bus services should aim to integrate their time tables with that of the train service.	Public transport would be greatly enhanced for the walk in catchment at Blackford (currently 500-600 persons) and will directly benefit those in the community with restricted access to a car.
	Access to Other Local Services	Access to other local services is enhanced and increased through this proposal: the hourly service to stop at Blackford increases travel options for passengers whilst providing connectivity across the region and beyond. As a result of the proposal there will be increased opportunities for on-bound travel to other local destinations from the key centres within (and beyond) the region. The proposal also improves local access opportunities for tourists travelling to and through the region.	
Comparative Accessibility	Distribution/Spatial Impacts by Social Group	All communities and population centres served by the proposal will experience a positive impact including residents, tourists, businesses and, to an extent, agriculture and leisure, through increased travel to work opportunities and improved service times/ frequencies.	
	Distribution/Spatial Impacts by Area	The proposal will enhance travel choice and travel opportunities to, between and through the key regional centres of Stirling, Perth and Dundee and the smaller communities and population centres in between. Travel choice and opportunities will also be enhanced for those connecting with onward train and public transport services from the key regional centres as well as the Central Belt.	

<b>Cost to Public Sector</b>		
<b>Item</b>	<b>Qualitative Information</b>	<b>Quantitative Information</b>
Public Sector Investment Costs		£0
Public Sector Operating and Investment Costs		£0
Grant Subsidy Payments		£2,246,000
Revenues		£0
Taxation Impacts		£380,000

<b>Monetised Summary</b>	
Present Value of Transport Benefits	£769,000
Present Value of Cost to Government	£2,626,000
Net Present Value	-£1,857,000
Benefit-Cost to Government Ratio	-0.2

Proposal Details			
Name and address of authority or organisation promoting the proposal: (Also provide name of any subsidiary organisations also involved in promoting the proposal)		TACTRAN, Bordeaux House, 31 Kinnoull Street, Perth, PH1 5EN	
Proposal Name:	Enhanced Gleneagles Station	Name of Planner:	<i>Name of principle contact within the authority or organisation promoting the proposal.</i>
Proposal Description:	Provide improved road access from A9. Provide additional car parking, CCTV and help points and step free access to both platforms.	Estimated Total Public Sector Funding Requirement:	<i>Capital costs/grant: £3.8m</i>
			<i>Annual revenue support: £nil</i>
			<i>Present Value of Cost to Govt:£2,629,000</i>
Funding Sought From: (if applicable)		Amount of Application:	<i>Sum:</i>
Background Information			
Geographic Context:	<p>The TACTRAN region covers the Angus Council, Dundee City Council, Perth and Kinross and Stirling Council authority areas, located to the north, east and west of Scotland's Central Belt. It is a unique geographical region including the three cities of Stirling, Perth and Dundee and an extensive rural hinterland of inter-connected towns, villages and rural areas, many of which are located within the Loch Lomond and Trossachs National Park and Cairngorms National Park. In general moving from north west to south east in the TACTRAN area moves from rural to more urban areas and the population density increases. The scope and influence of this study extends to Aberdeen in the north and Glasgow to the south, embracing the outskirts of the Grampians and the Central Belt area. 10% of the population in the TACTRAN area live in small towns with populations between three and ten thousand with 25% of the population living in rural settlements where the population is less than three thousand people. The majority of the population reside in the main urban settlements of Dundee, Perth, Stirling and Arbroath which range in size from between 20,000 and approximately 145,000 inhabitants.</p>		

<p>Social Context:</p>	<p>The demographic profile of the TACTRAN region is not dissimilar to Scotland as a whole, with around 19% of the population under the age of 16, 20% of the population over the pensionable age and the remainder of 61% between these two ranges. Angus, Dundee City and Perth &amp; Kinross all have higher percentages of their population over the pensionable age than the Scottish average, but this is reduced across the region as a whole by the lower than average percentage observed in the Stirling Council area. The average number of persons per household is broadly consistent across the TACTRAN region and aligns with the Scottish average: the average number of people per household is highest in Stirling at 2.36 and lowest in Dundee City at 2.13. The percentage of residents in Dundee City who live in a household with no available car (46%) is much higher than the national average of 34% and compares to percentages of 24%, 24% and 25% in Stirling, Perth &amp; Kinross and Angus respectively. Whilst the average across the region for people with no access to a car is 31%, car ownership in the TACTRAN area is higher than that observed in the rest of Scotland. The preferred mode for travel to work is dominated by the car, which is used for an average of 66% of journeys, above the Scottish average of 64%. The use of rail and bus is low within the Council areas of Angus, Perth and Kinross and Stirling ranging between 6% and 10% of journeys in those areas, corresponding to the availability and frequency of Public Transport. More than 17% of the population in Angus, Perth &amp; Kinross and Stirling travel over 10 kilometres to work, compared to only 4% who travel this distance and reside in Dundee City. Work journeys account for 22% of all trips that are made. Whilst 78% of resident's travel to work trips are within local authority areas; Dundee City has the highest proportion of internal trips (88%) followed by Perth and Kinross (82%), Angus (69%) and Stirling (68%). Currently 69% of journeys to work in the region are made by car with a relatively high mode share of 10% bus trips. Walking accounts for a high proportion of trips (17%), with rail and cycling accounting for 2% of trips each. Within Dundee the public transport mode share is high (19%) but within Angus, Perth and Stirling the public transport mode share is much lower (9%). Public transport provision and related services within the urban and rural areas are regarded as good and poor respectively, albeit within the wider rural hinterland this is exacerbated by the dispersed nature of surrounding settlements. A greater percentage of residents than the Scottish average are considered to be in 'good' health across the TACTRAN area. This is true for the individual authorities apart from Dundee City which sees a lower than average percentage of 'good' health and a higher than average percentage with 'not good' health, rather than 'fairly good' health. It is also the case in Dundee City that there is a greater percentage occurrence of a limiting long term illness than the Scottish average.</p>
<p>Economic Context:</p>	<p>The distinct urban and rural areas across the TACTRAN region serve various functions. Dundee is a vibrant economic centre with a growing employment and residential market. As well as its function as a tourism destination, Stirling City also plays a key service role for the wider Stirlingshire area, providing a wide range of employment and other services for the surrounding communities as well as for visitors and passing trade. The wider Stirling authority area covers a deep rural hinterland, many areas of which are captured within the Loch Lomond and Trossachs National Park where tourism is a key industry. These patterns can be demonstrated by looking at industries which employ the greatest percentage of people in each of the Council areas compared to the Scottish average. In Angus it the extraction industries such as Agriculture, hunting and forestry, mining and quarrying and manufacturing employ a greater percentage than the Scottish average while Dundee City conforms much more to the Scottish average but is more heavily biased towards health, social work and manufacturing. Throughout the TACTRAN region, employment in the construction industry is higher than in other parts of the country, and the impact of the large Universities in Dundee and Stirling is reflected in the percentage of people who work in the education sector. The industries with the highest percentages in Perth &amp; Kinross are agriculture, hunting and forestry and hotels and restaurants, reflecting a higher dependency on tourism. Retail employment in this area is also high. Stirling shows a high percentage of the population employed in the hotel and restaurant sector as well as a high financial and educational bias. The percentage of the population within the TACTRAN area who are unemployed varies considerably between the constituent Council areas and is potentially compounded by the urban and rural characteristics of these areas. The Perth &amp; Kinross and Stirling Council areas both have fewer than 3% unemployment compared with the national average of 4%, while Dundee City had over 5% of its population unemployed at the time of the last Census. The percentage of the economically active population who are undertaking full time study in the TACTRAN area is higher than the Scottish average and this is due to the impact of the large universities at Stirling and Dundee. Unemployment figures show that there are significant areas of high unemployment in the east of the TACTRAN region, primarily in Angus but also in the rural areas north of Kirriemuir and Brechin and around Crianlarich and Killin.</p>

Planning Objectives	
Objective:	Performance against planning objective:
<b>EC1.</b> Ensure that rail provides and supports economic growth by connecting key business & employment sectors where possible	Minor Positive – an enhanced station would encourage a switch to rail travel for the surrounding catchment. Improved access to services and destinations would support economic growth at both local and regional levels.
<b>EC2.</b> Improve the efficiency, reliability and integration of rail services in the Tay Estuary study area specifically where this will benefit key business and employment sectors	Moderate Positive – demand forecasting indicates an enhanced station would generate 10,000 additional journeys over the do-nothing option, assuming an hourly direct service was provided to Glasgow and Perth with connections available to Dundee and Aberdeen. This service would be in addition to the existing intercity services to Inverness and London providing excellent levels of connectivity for a rural location.
<b>ACC1.</b> Increase accessibility to key service destinations in the TACTRAN area (e.g. employment, health and education sites) and to/from key external destinations by rail without compromising wider inter-regional rail connectivity	Minor Positive – an enhanced station would facilitate rail travel for the surrounding catchment and increase accessibility assuming the station was provided with an hourly direct service to Glasgow and Perth with connections available to Dundee and Aberdeen.
<b>ENV1.</b> Contribute to national greenhouse gas emission reductions through rail based interventions where possible	Minor Positive - the enlarged car park proposed for Gleneagles is likely to encourage a modal change from cars to rail.
<b>ENV2.</b> Contribute to the management of air quality in the TACTRAN area, particularly the AQMA's across the Dundee City Council area and Perth	Minor Positive – the proposed car park is likely to encourage a modal change from cars to rail and therefore contribute to, albeit minor, air quality improvements in the TACTRAN area.
<b>SEC1.</b> Maintain or improve real and perceived levels of safety and personal security on the rail network	Moderate Positive – the enhanced station will be fitted with lighting, CCTV which would enhance the levels of safety and personal security.
<b>INT1.</b> Ensure that rail is fully integrated with relevant land-use and planning projects	Minor Positive – the station will enhance the integration of rail with relevant land-use.
<b>INT2.</b> Ensure the rail network is integrated with the wider public transport network	Neutral– the station will allow improved access to onward rail services at other stations, particularly Glasgow and Perth. The extent to which further integration occurs is dependant on how services develop. Local bus services exist at the station, it would need to be assured that these would integrate with the proposed train services.

<p>Rationale for Selection or Rejection of Proposal:</p>	<p>Gleneagles station is well known nationally and investment to improve accessibility to this underused facility would be welcomed. Improving the existing station would appear to be the most cost effective option to make rail a viable public transport choice for the communities of Blackford, Auchterarder and Crieff. There is a strategic link between the proposed works and other nationally committed schemes such as improvements to the A9 trunk road. This option meets the planning objectives and government policies as it provides a station that will promote rail travel through the implementation of a secure and more user friendly station environment. Demand forecasting indicates an enhanced station would generate 10,000 additional journeys compared with the do-nothing option of providing the proposed hourly service at the existing Gleneagles station. It is estimated that providing a new station at Blackford would at most generate an additional 5,000 journeys compared to the enhanced Gleneagles. The capital investment required to enhance Gleneagles and annual operating costs are less than for a new station at Blackford. The potential increase in revenue generated by a new Blackford station compared to an enhanced Gleneagles will be negated by the increased operating costs.</p> <p>The proposals meet the targets of government objectives and should therefore be accepted as an option at this stage.</p>
<p><b>Implementability Appraisal</b></p>	
<p>Technical:</p>	<p>The station is well located for drive-up passengers from both nearby and more remote communities. Current road access to Gleneagles station from the A9 is not sufficient to safely accommodate an increase in usage. This could be enhanced with the location of a link road (7.3m carriageway) between the station and the A823 which has full slip road access to the A9 both north and southbound. Closure of the existing access junction from the A9 would have a strategic fit with Transport Scotland's scheme to upgrade the A9 trunk road.</p> <p>The road would be located on the solum of the original Crieff branch line at the station then rise up the slope to cross over farmland parallel to the railway with a new junction formed at the A823. This concept has in principal support from Perth &amp; Kinross Council, Network Rail and Transport Scotland. There is an application for planning approval under consideration by Perth and Kinross Council for junction improvements at Loaninghead. This application proposes the creation of separate on and off slips to the southbound carriageway from the A823 to the A9. A consultation on funding for developer contributions to Loaninghead junction improvements is ongoing. This proposes funding for the improvements be sourced from developer contributions in addition to Government funding. There is an embargo on new development in the wider Auchterarder area until junction improvements are in place.</p>
<p>Operational:</p>	<p>There is scope for increasing the size of the station car park to facilitate a park and ride function although land acquisition would be necessary for more than approx 150 spaces. The lack of CCTV and CIS is of significant concern to existing station users, the remoteness of the station meaning there is no physical surveillance of the station buildings. Provision of these facilities together with the introduction of heated waiting spaces will significantly enhance customer satisfaction.</p> <p>The lack of compliant access can be resolved with a new ramp constructed up to the station buildings/ platforms and installation of lifts to serve the footbridge. Neither of these proposals is considered to have an adverse impact on the listed</p>

	<p>buildings and the industry in now experienced in installing lifts in a sensitive manner to listed structures.</p> <p>The station buildings are currently Category B listed. The view of Perth and Kinross Council and Historic Scotland is that listed buildings should remain in active use and that so long as any accessibility improvements made in line with the DDA are done sensitively in terms of design and materials used and do not have a detrimental impact upon the character and setting of the building they would be supportive of such improvements.</p> <p>An opportunity exists for local community use of the presently unused station buildings. This type of initiative is supported by Transport Scotland and First ScoRail and would further contribute to an enhanced perception of safety and security.</p> <p>As well as the proposed new hourly ScotRail service, the twice daily London and Inverness intercity services would continue to call at Gleneagles.</p> <p>It is proposed that in the enhanced form, Gleneagles station will remain unstaffed.</p>
Financial:	<p>Provision of a new road access, an extended car park, DDA compliant access CCTV and passenger help points is estimated at a cost of £3.8m including a 44% uplift for risk and optimum bias. Funding sources could come from Access for all, the A9 improvement project and listed building conservation bodies as well as the more traditional rail budgets.</p> <p>It is estimated that the additional infrastructure would increase existing operating costs by £30k pa through a mix of increased lease, maintenance and utility charges.</p> <p>The maximum demand identified for the catchment of both Gleneagles and Blackford stations is circa 45,000 journeys pa. At present, Gleneagles station receives circa 23,000 ScotRail journeys pa. We estimate this would grow to 30,000 pa. if the proposed hourly service to Glasgow and Perth was provided but station facilities were not improved, ie. the do nothing option. Growth would then be inhibited because of poor accessibility and safety and security perceptions. Improving accessibility at Gleneagles would result in a further 10,000 journeys pa. being generated ie. upto 40,000 journeys pa.</p> <p>The 10,000 journey increase over the do minimum option would be sufficient to cover the £30k pa operating costs of the enhanced station.</p> <p>There is an opportunity to deliver these enhancement works in a manner which would link to the Ryder cup being hosted at Gleneagles in 2014.</p>
Public:	<p>Not currently public but acceptability anticipated to be high given improved access to the rail network for the surrounding catchment. The safety and security proposals, would in particular be supported by users of the rail network. Investment in historical stations such as Gleneagles is supported, in general, by the public. Due to the isolation of Gleneagles station increased noise level and other general disturbance issues caused by construction is not likely to raise any problems albeit screening/ mitigative measures could be adopted.</p>

Environment			
Mitigation Options Included: (Cost & Benefits)			
Sub-objective	Qualitative information	Quantitative information	Significance of Impact
Noise and Vibration	It could be expected that there will be minor noise and vibration impacts associated with this proposal. Installing enhanced features will not contribute as high noise and vibration levels than a new build. Post enhancement the level of noise and vibration will only be generated from the cars entering and exiting to access the car park, additional trains halting and station announcements. The station is isolated from residential areas as such there are no disturbance issues.	The monetised net benefit for noise over the 60 year appraisal period is £3,000. This is negligible in terms of the overall present value of benefits (PVB) generated.	Neutral
Air Quality – Overall	Air quality overall is expected to marginally improve as a result of some modal shift to train from private car journeys occurs when people, as a result of the new station facilities, are able to park their cars at the station and get better access to train services.	The overall air quality impacts arising as a result of an enhanced station will be negligible and therefore quantitative information has not been gathered.  The monetised net benefit for local air quality over the 60 year appraisal period is £3,000.	Neutral
CO2 – Global	Whilst global CO <sub>2</sub> emissions could be expected to improve as an enhanced station will result in some modal shift to train from private car journeys, this is considered negligible at a global level given the type of proposal, scale (service frequency) and context, as well as the benefits being slightly negated by the proposed service's reliance on diesel fuel. It could be expected, in coming years, that the proportion of diesel generated by renewable sources increases, thereby contributing to a reduction in global CO <sub>2</sub> emissions.	The monetised net benefit for greenhouse gases over the 60 year appraisal period is circa £5,000. This is negligible in terms of the overall present value of benefits (PVB) generated.	Neutral
PM10 – Local	Local PM <sub>10</sub> emissions are expected to improve as a result of some modal shift to train from private car journeys. Whilst this is expected to be relatively minimal, given the geographical scope of service and the population centres served by the line/ service, it is expected that collectively, there will be “worthwhile” local emission improvements.	The local PM <sub>10</sub> impacts overall arising as a result of an additional station will be negligible and therefore quantitative information has not been gathered.	Neutral
NO2 – Local	Local NO <sub>2</sub> emissions are expected to improve as a result of some modal shift to train from private car journeys. Whilst	The local NO <sub>2</sub> impacts overall arising as a result of an enhanced station will be negligible and	Neutral

	this is expected to be relatively minimal, given the geographical scope of service and the population centres served by the line/ service, it is expected that collectively, there will be “worthwhile” local emission improvements.	therefore quantitative information has not been gathered.	
Water Quality, Drainage and Flood Defence	Water quality, drainage and flood defence impacts will not arise as a result of this proposal. The station enhancements do not impact water quality, drainage and flood defence.	As no impacts to water quality, drainage and flood defence arise from Gleneagles enhancement, quantitative information has not been gathered.	Neutral
Geology	Geology impacts will not arise as a result of this proposal. The site does not require extensive excavation to provide the enhanced infrastructure.	The additional geology impacts arising as the result of an enhanced station, on an established railway line will be negligible and therefore quantitative information has not been gathered.	Neutral
Biodiversity	It could be expected that, as a result of the preparation of land for the improved station car park there will be some marginal impacts to fauna.	Given that the established railway line already causes a degree of severance and thus limits biodiversity in the area the impact is not considered very significant and therefore quantitative information has not been gathered. The minimal construction work in this proposal presents less of an impact in this category compared to a new station proposal at Blackford.	Minor negative
Visual Amenity	There are little visual amenity impacts as a result of this proposal. The new lift and footramp will be constructed sensitively to the design and protection of the listed building. The only downside visually would be the car park extension. However as this is an expansion and not a new land use, the impact lessens to a degree.	With mitigation measures in place the visual amenity impact arising as the result of station enhancements will only be minor and therefore quantitative information has not been gathered.	Minor Negative
Agriculture and Soils	Agriculture and soils impacts will not arise as a result of this proposal.	The additional agriculture and soils impacts arising as the result of enhancing Gleneagles will be negligible and therefore quantitative information has not been gathered.	Neutral
Cultural Heritage	None of the enhancement proposals are considered to have an adverse impact on the listed buildings and the industry is experienced in installing lifts in a sensitive manner to listed structures. The continuing use of Gleneagles ensures that the listed building remains in use and will be properly maintained.	The additional cultural heritage impacts arising as the result of enhancing Gleneagles are negligible and therefore quantitative information has not been gathered.	Minor Positive
Landscape	There will be no changes to the landscape as a result of this proposal. The enhanced station will only change the landscape through a minor expansion to the car park.	The additional landscape impacts arising as the result of an enhanced station at Gleneagles will be negligible and therefore quantitative information has not been gathered.	Neutral

Safety			
Sub-objective	Item	Qualitative information	Quantitative information
Accidents	Change in Annual Personal Injury Accidents	A change in Annual Personal Injury Accidents will not arise as a result of this proposal. The enhanced station will be designed to meet the relevant Network Rail operational and safety criteria. Whilst it could be considered that as a result of the station creating some modal shift to train from private car journeys, there may be some road accident savings, this would be extremely marginal and, quantification of, outwith the scope of this study.	
	Change in Balance of Severity	A change in the balance of severity of accidents will not arise as a result of this proposal. The station will meet the relevant network rail operational and safety criteria.	The proposal of an enhanced station at Gleneagles will have no effect on the balance of severity of accidents on the rail network and therefore quantitative information has not been gathered.
	Total Discounted Savings	NA	The proposal to locate an enhanced station at Gleneagles will have a monetised net benefit of £34,000.
Security		Personal security benefits are expected as a result of this proposal: CCTV and lighting will improve the areas security level. Stopping services at Gleneagles will increase patronage generating increased footfall which will create a form of human surveillance. This is particularly important to enhance patronage at Gleneagles given its remote location.	The proposal of an enhanced station at Gleneagles is likely to have a moderate positive effect on security on the rail network. Due to the difficulty of quantifying levels of perceived security, no data is given.

<b>Economy (Transport Economic Efficiency)</b>			
<b>Sub-objective</b>	<b>Item</b>	<b>Qualitative information</b>	<b>Quantitative Information</b>
User Benefits	Travel Time	This is an existing station so travel time will be unaffected by the new facilities. Travel time will be improved for most people through the more frequent service proposed. The enhancements proposed will allow the patronage of these new services to be maximised.	Travel time monetised costs and benefits for Gleneagles station is circa £340,000. This includes time benefits to both road and rail users.
	User Charges	The station will not directly affect user charges. The station does however provide access to services that has the potential to reduce the cost of travel in efficiency and time terms as opposed to other transport modes.	
	Vehicle Operating Costs	NA	NA
	Quality / Reliability Benefits	Good station design and park and ride facilities will positively benefit the user's journey experience.	
Private Sector Operator Impacts	Investment Costs	Station enhancement and car park development at Gleneagles is estimated at £3.7m including 44% optimism bias. Construction risk associated with the investment is low.	£-2,795,000 (2002 prices, discounted to 2002)
	Operating & Maintenance Costs	The increase in annual operating cost from the present sum is estimated as £30k pa.	£-737,000(2002 prices, discounted to 2002)
	Revenues	An hourly Scotrail service to Glasgow and Perth calling at an enhanced Gleneagles station, is estimated to generate revenue of circa £280k (at 2008 prices) compared with a do nothing revenue of £210k (at 2008 prices).	£1,665,000 (2002 prices, discounted to 2002)
	Grant/Subsidy Payments	Funding would be required for the capital works. Funding sources are suggested as "Access for all", the A9 trunk road improvement project and listed building conservation bodies as well as the more traditional rail budgets.  It is estimated that there will be a subsidy requirement to operate the service of £1,964,000 over the full appraisal period (2002 prices, discounted to 2002)	£1,868,000 (2002 prices, discounted to 2002)

Economic Activity and Location Impacts	Local Economic Impacts	Current business use of the route is limited to travel between the key centres of Dundee, Perth, Stirling and Glasgow. This proposal to enhance Gleneagles will increase accessibility to these destinations from intermediate stations and will therefore bring GVA benefits to local businesses and may lead to an increase in local output and employment, particularly over the key centres of Stirling, Perth and Dundee. In the future, the increased opportunities for travel to intermediate and wider destinations may lead to increased economic activity for tourism and leisure sectors.	
	National Economic Impacts	This option will fully achieve the study planning objectives which have been set, which in turn contribute to achieving Local and Regional Transport Strategy objectives. In turn, these have been shown to contribute to national transport objectives, including economy-specific objectives.	
	Distributional Impacts	Improvements to accessibility through increased choice of service and to all stops also contributes to reliability and travel choice thereby benefiting all sectors of society within the Gleneagles catchment area.	

<b>Integration</b>			
<b>Sub-objective</b>	<b>Item</b>	<b>Qualitative Information</b>	<b>Quantitative Information</b>
Transport Interchanges	Services & Ticketing	Whilst Gleneagles station will be unstaffed, the franchisee provides good quality train service information at each location and ticketing facilities are available from the ticket examiner on the train. The facilities available are equivalent to those at the majority of stations on the Scottish rail network.	
	Infrastructure & Information	The enhanced station will be installed with real time visual display information for passengers and a remote public address / help system.  Step free access would also be provided from the car park to both platforms.	
Land-use Transport Integration		Overall the proposal integrates well with land-use policy and proposals. The proposal will bring a number of positive contributions to a number of the objectives contained in Scottish Planning Policy (SPP) 17: Planning for Transport. The proposal also brings a largely positive contribution to the objectives and policies of the relevant Local Plans across the Region, including a positive effect on connecting business and employment centres across the region with local population centres. Development proposed for Dundee (Harbour area) and the Stirling Major Growth Area will benefit from the increased rail and access opportunities arising as a result of the proposal. Specifically an enhanced link to proposed new housing developments in the wider Auchterarder area is created.	
Policy Integration		The proposal has a strong positive fit with National, Regional and Local policy and, in particular, a strong positive fit with the TACTRAN Regional Transport Policy.	

<b>Accessibility and Social Inclusion</b>			
<b>Sub-objective</b>	<b>Item</b>	<b>Qualitative Information</b>	<b>Quantitative Information</b>
Community Accessibility	Public Transport Network Coverage	Public transport network coverage is enhanced through this proposal: the enhanced station increases travel options for passengers by providing access to services at intermediate stations that provide connectivity across the region and beyond. As a result of the enhanced station there will be increased opportunities for on-bound travel to other destinations from the key centres within (and beyond) the region.	
	Access to Other Local Services	<p>Access to other local services is enhanced and increased through this proposal: the hourly service to stop at Gleneagles increases travel options for passengers whilst providing connectivity across the region and beyond. As a result of the proposal there will be increased opportunities for on-bound travel to other local destinations from the key centres within (and beyond) the region. The proposal also improves local access opportunities for tourists travelling to and through the region.</p> <p>As the walk in catchment to Gleneagles is very small (circa 30 persons), and given the remote location the station does not give great access to public transport to people who are unable to access it by foot or by private car. As such there is opportunity for the local bus services to offer improved integration by linking in with proposed hourly train times.</p>	
Comparative Accessibility	Distribution/Spatial Impacts by Social Group	All communities and population centres served by the proposal will experience a positive impact including residents, tourists, businesses and, to an extent, agriculture and leisure, through increased travel to work opportunities and improved service times/ frequencies.	
	Distribution/Spatial Impacts by Area	<p>The proposal will enhance travel choice and travel opportunities to, between and through the key regional centres of Stirling, Perth and Dundee and the smaller communities and population centres in between. Travel choice and opportunities will also be enhanced for those connecting with onward train and public transport services from the key regional centres as well as the Central Belt.</p> <p>The station proposal will only score high in comparative accessibility if bus routes and times are integrated with the proposed new services to meet the needs of those wishing to travel via public transport to the stations catchment area.</p>	

<b>Cost to Public Sector</b>		
<b>Item</b>	<b>Qualitative Information</b>	<b>Quantitative Information</b>
Public Sector Investment Costs		£0
Public Sector Operating and Investment Costs		£0
Grant Subsidy Payments		£2,439,000
Revenues		£0
Taxation Impacts		£190,000

<b>Monetised Summary</b>	
Present Value of Transport Benefits	£385,000
Present Value of Cost to Government	£2,629,000
Net Present Value	-£2,244,000
Benefit-Cost to Government Ratio	-0.2

Proposal Details			
Name and address of authority or organisation promoting the proposal: (Also provide name of any subsidiary organisations also involved in promoting the proposal)		TACTRAN, Bordeaux House, 31 Kinnoull Street, Perth, PH1 5EN	
Proposal Name:	Dundee West Station	Name of Planner:	<i>Name of principle contact within the authority or organisation promoting the proposal.</i>
Proposal Description:	Close Invergowrie and build new station located 700m east called Dundee West. Car parking for 300 vehicles.	Estimated Total Public Sector Funding Requirement:	<i>Capital costs/grant: £5.3m</i>
			<i>Annual revenue support: £nil</i>
			<i>Present Value of Cost to Govt: -£2,498,000</i>
Funding Sought From: (if applicable)		Amount of Application:	<i>Sum:</i>
Background Information			
Geographic Context:	<p>The TACTRAN region covers the Angus Council, Dundee City Council, Perth and Kinross and Stirling Council authority areas, located to the north, east and west of Scotland's Central Belt. It is a unique geographical region including the three cities of Stirling, Perth and Dundee and an extensive rural hinterland of inter-connected towns, villages and rural areas, many of which are located within the Loch Lomond and Trossachs National Park and Cairngorms National Park. In general moving from north west to south east in the TACTRAN area moves from rural to more urban areas and the population density increases. The scope and influence of this study extends to Aberdeen in the north and Glasgow to the south, embracing the outskirts of the Grampians and the Central Belt area. 10% of the population in the TACTRAN area live in small towns with populations between three and ten thousand with 25% of the population living in rural settlements where the population is less than three thousand people. The majority of the population reside in the main urban settlements of Dundee, Perth, Stirling and Arbroath which range in size from between 20,000 and approximately 145,000 inhabitants.</p>		

<p>Social Context:</p>	<p>The demographic profile of the TACTRAN region is not dissimilar to Scotland as a whole, with around 19% of the population under the age of 16, 20% of the population over the pensionable age and the remainder of 61% between these two ranges. Angus, Dundee City and Perth &amp; Kinross all have higher percentages of their population over the pensionable age than the Scottish average, but this is reduced across the region as a whole by the lower than average percentage observed in the Stirling Council area. The average number of persons per household is broadly consistent across the TACTRAN region and aligns with the Scottish average: the average number of people per household is highest in Stirling at 2.36 and lowest in Dundee City at 2.13. The percentage of residents in Dundee City who live in a household with no available car (46%) is much higher than the national average of 34% and compares to percentages of 24%, 24% and 25% in Stirling, Perth &amp; Kinross and Angus respectively. Whilst the average across the region for people with no access to a car is 31%, car ownership in the TACTRAN area is higher than that observed in the rest of Scotland. The preferred mode for travel to work is dominated by the car, which is used for an average of 66% of journeys, above the Scottish average of 64%. The use of rail and bus is low within the Council areas of Angus, Perth and Kinross and Stirling ranging between 6% and 10% of journeys in those areas, corresponding to the availability and frequency of Public Transport. More than 17% of the population in Angus, Perth &amp; Kinross and Stirling travel over 10 kilometres to work, compared to only 4% who travel this distance and reside in Dundee City. Work journeys account for 22% of all trips that are made. Whilst 78% of resident's travel to work trips are within local authority areas; Dundee City has the highest proportion of internal trips (88%) followed by Perth and Kinross (82%), Angus (69%) and Stirling (68%). Currently 69% of journeys to work in the region are made by car with a relatively high mode share of 10% bus trips. Walking accounts for a high proportion of trips (17%), with rail and cycling accounting for 2% of trips each. Within Dundee the public transport mode share is high (19%) but within Angus, Perth and Stirling the public transport mode share is much lower (9%). Public transport provision and related services within the urban and rural areas are regarded as good and poor respectively, albeit within the wider rural hinterland this is exacerbated by the dispersed nature of surrounding settlements. A greater percentage of residents than the Scottish average are considered to be in 'good' health across the TACTRAN area. This is true for the individual authorities apart from Dundee City which sees a lower than average percentage of 'good' health and a higher than average percentage with 'not good' health, rather than 'fairly good' health. It is also the case in Dundee City that there is a greater percentage occurrence of a limiting long term illness than the Scottish average.</p>
<p>Economic Context:</p>	<p>The distinct urban and rural areas across the TACTRAN region serve various functions. Dundee is a vibrant economic centre with a growing employment and residential market. As well as its function as a tourism destination, Stirling City also plays a key service role for the wider Stirlingshire area, providing a wide range of employment and other services for the surrounding communities as well as for visitors and passing trade. The wider Stirling authority area covers a deep rural hinterland, many areas of which are captured within the Loch Lomond and Trossachs National Park where tourism is a key industry. These patterns can be demonstrated by looking at industries which employ the greatest percentage of people in each of the Council areas compared to the Scottish average. In Angus it the extraction industries such as Agriculture, hunting and forestry, mining and quarrying and manufacturing employ a greater percentage than the Scottish average while Dundee City conforms much more to the Scottish average but is more heavily biased towards health, social work and manufacturing. Throughout the TACTRAN region, employment in the construction industry is higher than in other parts of the country, and the impact of the large Universities in Dundee and Stirling is reflected in the percentage of people who work in the education sector. The industries with the highest percentages in Perth &amp; Kinross are agriculture, hunting and forestry and hotels and restaurants, reflecting a higher dependency on tourism. Retail employment in this area is also high. Stirling shows a high percentage of the population employed in the hotel and restaurant sector as well as a high financial and educational bias. The percentage of the population within the TACTRAN area who are unemployed varies considerably between the constituent Council areas and is potentially compounded by the urban and rural characteristics of these areas. The Perth &amp; Kinross and Stirling Council areas both have fewer than 3% unemployment compared with the national average of 4%, while Dundee City had over 5% of its population unemployed at the time of the last Census. The percentage of the economically active population who are undertaking full time study in the TACTRAN area is higher than the Scottish average and this is due to the impact of the large universities at Stirling and Dundee. Unemployment figures show that there are significant areas of high unemployment in the east of the TACTRAN region, primarily in Angus but also in the rural areas north of Kirriemuir and Brechin and around Crianlarich and Killin.</p>

Planning Objectives	
Objective:	Performance against planning objective:
<b>EC1.</b> Ensure that rail provides and supports economic growth by connecting key business & employment sectors where possible	Minor Positive – a new station would facilitate rail travel for the surrounding catchment. Improved access would support economic growth at both local and regional levels.
<b>EC2.</b> Improve the efficiency, reliability and integration of rail services in the Tay Estuary study area specifically where this will benefit key business and employment sectors	Moderate Positive – demand forecasting indicates a station in this area would generate approximately 120,000 additional journeys over the do-nothing option which is to have all services call at Invergowrie. This assumes an hourly direct service was provided to Dundee and Perth with connections available to Glasgow and Aberdeen.
<b>ACC1.</b> Increase accessibility to key service destinations in the TACTRAN area (e.g. employment, health and education sites) and to/from key external destinations by rail without compromising wider inter-regional rail connectivity	Moderate Positive – a new station would facilitate rail travel for the surrounding catchment and increase accessibility assuming the station was provided with an hourly direct service to Dundee and Perth with connections available to Glasgow and Aberdeen. The new station would be located close to Ninewells hospital and Dundee Technology Park which greatly increases access to health services and a major employment generator in the TACTRAN area.
<b>ENV1.</b> Contribute to national greenhouse gas emission reductions through rail based interventions where possible	Minor Positive – The proposed station at Dundee West would provide P+R facilities but the largest encouragement for a modal shift from car to rail is anticipated to be through provision of an east – west commuting corridor across the city.
<b>ENV2.</b> Contribute to the management of air quality in the TACTRAN area, particularly the AQMA's across the Dundee City Council area and Perth	Minor Positive – the proposed P+R and provision of an east – west commuting corridor to Dundee West is likely to encourage a modal change from cars to rail and therefore contribute to, albeit minor, air quality improvements in the TACTRAN area.
<b>SEC1.</b> Maintain or improve real and perceived levels of safety and personal security on the rail network	Moderate Positive – the new station will be fitted with lighting, CCTV which would enhance the levels of safety and personal security.
<b>INT1.</b> Ensure that rail is fully integrated with relevant land-use and planning projects	Minor Positive – the station will enhance the integration of rail with relevant land-use projects.
<b>INT2.</b> Ensure the rail network is integrated with the wider public transport network	Neutral– the station will allow improved access to onward rail services at other stations, particularly Dundee and Perth. The extent to which further integration occurs is dependant on how services develop. It also is located close to existing local bus services.

<p>Rationale for Selection or Rejection of Proposal:</p>	<p>The proposal to relocate the current Invergowrie station 800m east to Dundee West is justified by a combination of the 30% larger walk in population catchment and the walk in employment centres provided by the Ninewells hospital and Dundee Technology Park. National Cycle Route 77 links the new site with Invergowrie. A station here would firstly allow improved access to the health services at Ninewells hospital and the associated employment generated at this site to a wider community. Secondly it will link more people with better services to employment generators of Perth and Stirling. This option should be retained for further appraisal to identify the likely increase in demand which would be generated through relocating the station from the current location in Invergowrie.</p>
<p><b>Implementability Appraisal</b></p>	
<p>Technical:</p>	<p>A long linear car park can be created in this location with capacity for at least 300 vehicles. The site is adjacent to a main Scottish Water sewer as indicated by the presence of manholes adjacent to the site. This will not prohibit development in the area but the design and construction proposals will require approval from Scottish Water. Further investigation on this issue is required prior to detailed proposals being developed.</p> <p>There is limited space for the northbound platform with a degree of retaining likely to be required along the back of the platform. The southbound platform construction would be elevated due to the existing ground topography but would have level access from the car park/ access road. A new footbridge would need to be constructed to provide platform to platform access.</p>
<p>Operational:</p>	<p>This site is adjacent to the A85, Riverside Avenue, providing good access to Dundee City Centre and surrounding areas. A new junction would require to be formed to give access to the station site. To the east of the station site there is an existing pedestrian underpass to the railway which gives access to Perth Road with nearby bus stops for local bus services and with a fairly laborious walk to Ninewells hospital. The pedestrian route would require to be developed with new surfacing and lighting. Ideally a pedestrian route would run from the station footbridge between two properties on Perth Road giving a reasonable link to Ninewells hospital. This would require land purchase from private owners and therefore has not been included in the current estimate of cost.</p> <p>To minimise journey time penalties and operating costs, it is proposed this station replaces Invergowrie station. Station closure is a difficult process but is generally made easier when a replacement (and improved) facility is provided close by. The walk-in distance from Invergowrie is between 500 and 1000m.</p> <p>The Down and Up Perth Lines between Longforgan and Dundee are worked under Track Circuit Block regulations. Down trains from Lonforgan (Signal No.4) to Signal D697 are controlled by Lonforgan Signal Box. Up trains from Dundee (Signal No.D698) to Invergowrie Signal D672 are controlled from Dundee Signal Box. The line speed of Down and Up Perth Lines at the proposed Dundee West Station is 75 mph.</p>

	<p>The preferred site for the proposed Dundee West Station is in the vicinity of 3 Mile Post between the existing Invergowrie Station and Dundee Central Junction. The station should be ideally situated clear of the overlap for Signal D697. This would allow Longforgan SB to send an Up train up to Signal D697 whilst the Down Platform of Dundee West station is occupied.</p> <p>Up trains stopped at the new Dundee West station will enforce following trains to be held at Signal D698 until the train has departed from the station and cleared the overlap track circuit for Signal D762.</p> <p>The consequences (rear end collision) of a SPAD at Signal D697 whilst a train is stopped in the new station is increased. It is likely that TPWS (TSS) will be recommended at Signals D697 and possibly Signal D698.</p> <p>There is not likely to be any signal sighting issues for Down trains.</p> <p>Signal D672 will be visible to a train stopped in the Up Platform and may be classified as a 'Remote Platform Starting Signal'. There may however be a signal sighting issue for non-stopping Up trains in the new station. Signal D672 may be obscured by the new station platform shelter / furniture and lighting. The worst case would be provision of a banner repeating signal on the approach to the Up Platform.</p>
Financial:	<p>The station and car park development at Dundee West would cost circa £5.3m including a 44% uplift for risk and optimum bias.</p> <p>The estimated annual operating costs of £60k pa for a Dundee West station would be offset by those already payable for Invergowrie as the overall quantum of stations on the network remains static. The net operating cost impact is estimated as £35k pa inclusive of additional lease, maintenance and utility costs of the new station over the existing.</p> <p>Provision of the proposed hourly service to Invergowrie is estimated to generate 35,000 additional journeys pa. Moving to Dundee west would result in an estimated additional 52,000 new journey's pa. The additional patronage estimated from the employment centres adjacent to the new station is estimated to add a further 100,000 journey's pa. In summary providing an hourly service at Dundee West compared to the existing station at Invergowrie is estimated to generate a further 120,000 journeys pa giving a revenue increase of £500k pa (at 2008 prices). The new station at Dundee West can therefore meet it's the net increase in operating costs of £35k pa. .</p> <p>It is estimated that the timeframe for the station development would be 2017+ due to the availability of funding required.</p>
Public:	<p>Not currently public but acceptability anticipated to be high given improved access to the rail network for the surrounding catchment.</p> <p>Noise level and other general disturbance issues may be raised by dwellers of the housing estates that border parts of the proposed station boundaries, albeit screening/ mitigative measures could be adopted.</p>

Environment			
	Mitigation Options Included: (Cost & Benefits)		
Sub-objective	Qualitative information	Quantitative information	Significance of Impact
Noise and Vibration	It could be expected that there will be moderate noise and vibration impacts to properties living within the vicinity of the station during the construction process. Post construction the level of noise and vibration will be generated from the cars entering and exiting Dundee West to access the car park, station announcements, trains halting and station announcements.	The monetised net benefit for noise over the 60 year appraisal period is £35,000 This is negligible in terms of the overall present value of benefits (PVB) generated.	Neutral
Air Quality – Overall	Air quality overall is expected to marginally improve as a result of some modal shift to train from private car journeys occurs when people, as a result of the new station facilities, are able to park their cars at the station and get better access to train services.	The overall air quality impacts arising as a result of a new station will be negligible and therefore quantitative information has not been gathered.  The monetised net benefit for local air quality over the 60 year appraisal period is £43,000	Neutral
CO2 – Global	Whilst global CO <sub>2</sub> emissions could be expected to improve as a new station will result in some modal shift to train from private car journeys, this is considered negligible at a global level given the type of proposal, scale (service frequency) and context, as well as the benefits being slightly negated by the proposed service's reliance on diesel fuel. It could be expected, in coming years, that the proportion of diesel generated by renewable sources increases, thereby contributing to a reduction in global CO <sub>2</sub> emissions.	The monetised net benefit for greenhouse gases over the 60 year appraisal period is circa £59,000. This is negligible in terms of the overall present value of benefits (PVB) generated.	Neutral
PM10 – Local	Local PM <sub>10</sub> emissions are expected to improve as a result of some modal shift to train from private car journeys. Whilst this is expected to be relatively minimal, given the geographical scope of service and the population centres served by the line/ service, it is expected that collectively, there will be “worthwhile” local emission improvements.	The local PM <sub>10</sub> impacts overall arising as a result of an additional station will be negligible and therefore quantitative information has not been gathered.	Neutral
NO2 – Local	Local NO <sub>2</sub> emissions are expected to improve as a result of some modal shift to train from private car journeys. Whilst this is expected to be relatively minimal, given the geographical scope of service and the population centres served by the line/ service, it is expected that collectively, there will be “worthwhile” local emission improvements.	The local NO <sub>2</sub> impacts overall arising as a result of an additional station will be negligible and therefore quantitative information has not been gathered.	Neutral

Water Quality, Drainage and Flood Defence	Water quality, drainage and flood defence impacts will not arise as a result of this proposal. The station will be located close to an existing station where water quality, drainage and flood defence issues will have not caused a problem. Additionally the design and construction of the station will managed/ mitigated against impacts likely to be caused to water quality or drainage.	The additional water quality, drainage and flood defence impacts arising a new station, on an established railway line will be negligible and therefore quantitative information has not been gathered.	Neutral
Geology	Geology impacts will not arise as a result of this proposal. The site does not require extensive excavation to provide the station infrastructure.	The additional geology impacts arising as the result of a new station, on an established railway line will be negligible and therefore quantitative information has not been gathered.	Neutral
Biodiversity	It could be expected that, as a result of the preparation of land for the new station infrastructure and the noise and vibration impacts during construction, there will be some marginal impacts to fauna within the site boundaries. The long linear car park for 300 vehicles will build on undeveloped land, which is adjacent to the existing railway line.	The additional biodiversity impacts arising as the result of the new Dundee West station would be very hard to quantify. Given that the established railway line already causes a degree of severance and thus limits biodiversity in the area the impact is not considered very significant and therefore quantitative information has not been gathered.	Minor negative
Visual Amenity	There will be minor visual amenity impacts as a result of this proposal. Building the station will replace currently open space with platform infrastructure reducing the visual appeal from nearby houses. Albeit this will be managed through natural or other screening.	With mitigation measures in place the visual amenity impact arising as the result of a new station will only be minor and therefore quantitative information has not been gathered.	Minor Negative
Agriculture and Soils	Agriculture and soils impacts will not arise as a result of this proposal.	The additional agriculture and soils impacts arising as the result of a new station at Dundee West will be negligible and therefore quantitative information has not been gathered.	Neutral
Cultural Heritage	Cultural heritage impacts will not arise as a result of this proposal. The proposed site boundaries and plan designs do not contain or impede upon any areas of cultural heritage or areas of significant historical or archaeological importance.	The additional cultural heritage impacts arising as the result of a new station at Dundee West are negligible and therefore quantitative information has not been gathered.	Neutral
Landscape	There will be minor changes to the landscape as a result of this proposal. The new station will mean the construction of platforms and a car park. Any significant landscape issues will have been managed through mitigative (natural or other) screening/ environmental enhancement.	The additional landscape impacts arising as the result of a new station at Dundee West will be negligible and therefore quantitative information has not been gathered.	Minor Negative

Safety			
Sub-objective	Item	Qualitative information	Quantitative information
Accidents	Change in Annual Personal Injury Accidents	A change in Annual Personal Injury Accidents will not arise as a result of this proposal. The new station will be designed to meet the relevant Network Rail operational and safety criteria. Whilst it could be considered that as a result of the station creating some modal shift to train from private car journeys, there may be some road accident savings, would be extremely marginal and, quantification of, out with the scope of this study.	
	Change in Balance of Severity	A change in the balance of severity of accidents will not arise as a result of this proposal. The station will meet the relevant network rail operational and safety criteria.	The proposal of a new station at Dundee West will have no effect on the balance of severity of accidents on the rail network and therefore quantitative information has not been gathered.
	Total Discounted Savings	NA	The proposal to locate a new station at Dundee West will have a monetised net benefit of £428,000
Security		Personal security benefits are expected as a result of this proposal: CCTV and lighting will improve the areas security level. Stopping services at Dundee West will increase patronage generating increased footfall which will create a form of human surveillance.	The proposal of a new station at Dundee West, is likely to have a moderate positive effect on security on the rail network. Due to the difficulty of quantifying levels of perceived security, no data is given.

Economy (Transport Economic Efficiency)			
Sub-objective	Item	Qualitative information	Quantitative Information
User Benefits	Travel Time	Travel time to rail users in the surrounding catchment will increase as Dundee West has a greater catchment than the current Invergowrie station. Moving to Dundee West would result in an estimated additional 120,000 new journey's pa. Travel time to the hospital and technology park would also be reduced if a direct pedestrian route was constructed on the north side of the station.	Travel time monetised costs and benefits for Dundee West station is circa £4,409,000. This includes time benefits to both road and rail users.
	User Charges	The station will not directly affect user charges. The station does however provide access to services that has the potential to reduce the cost of travel in efficiency and time terms as opposed to other transport modes.	
	Vehicle Operating Costs	NA	NA
	Quality / Reliability Benefits	Good station design and park and ride facilities will positively benefit the user's journey experience.	
Private Sector Operator Impacts	Investment Costs	The station and car park at Dundee West would cost circa £5.3 million including 44% optimism bias provision.	£3,960,000 (2002 prices, discounted to 2002)
	Operating & Maintenance Costs	The estimated annual operating costs of £60k pa for a Dundee West station would be offset by those already payable for Invergowrie as the overall quantum of stations on the network remains static. The net operating cost impact is estimated as £35k pa inclusive of additional lease, maintenance and utility costs of the new station over the existing.  The total additional revenue forecast is circa £500k therefore the station will cover its operating costs and make a significant return on the capital investment.	£553,000 (2002 prices, discounted to 2002)
	Revenues	An hourly service to Dundee and Perth with connections to Glasgow and Aberdeen calling at Dundee West station but not Invergowrie, is estimated to generate circa £650k (at 2008 prices). The do nothing scenario of using Invergowrie station is estimated to generate £145k revenue.	£9,493,000 (2002 prices, discounted to 2002)
	Grant/Subsidy Payments	It is estimated that there will be a subsidy requirement to operate the service of £1,964,000 over the full appraisal period (2002 prices, discounted to 2002)	£4,981,000 (2002 prices, discounted to 2002)

Economic Activity and Location Impacts	Local Economic Impacts	Current business use of the route is limited to travel between the key centres of Dundee, Perth, Stirling and Glasgow. This proposal to build a new station at Dundee West will increase accessibility to these destinations from intermediate stations and will therefore bring GVA benefits to local businesses and may lead to an increase in local output and employment, particularly over the key centres of Stirling, Perth and Dundee. In the future, the increased opportunities for travel to intermediate and wider destinations may lead to increased economic activity for tourism and leisure sectors.	
	National Economic Impacts	This option will fully achieve the study planning objectives which have been set, which in turn contribute to achieving Local and Regional Transport Strategy objectives. In turn, these have been shown to contribute to national transport objectives, including economy-specific objectives.	
	Distributional Impacts	Improvements to accessibility through increased choice of service and to all stops also contributes to reliability and travel choice thereby benefiting all sectors of society within the Dundee West catchment area.	

<b>Integration</b>			
<b>Sub-objective</b>	<b>Item</b>	<b>Qualitative Information</b>	<b>Quantitative Information</b>
Transport Interchanges	Services & Ticketing	Whilst the Dundee West station will be unstaffed, the franchisee provides good quality train service information at each location and ticketing facilities are available from the ticket examiner on the train. The facilities available are equivalent to those at the majority of stations on the Scottish rail network.	
	Infrastructure & Information	The new station will be installed with real time visual display information for passengers and a remote public address / help system.  Covered waiting shelters would be provided along with step free access from the car park to the platform.	
Land-use Transport Integration		Overall the proposal integrates well with land-use policy and proposals. The proposal will bring a number of positive contributions to a number of the objectives contained in Scottish Planning Policy (SPP) 17: Planning for Transport. The proposal also brings a largely positive contribution to the objectives and policies of the relevant Local Plans across the Region, including a positive effect on connecting business and employment centres across the region with local population centres. Development proposed for Dundee (Harbour area) and the Stirling Major Growth Area will benefit from the increased rail and access opportunities arising as a result of the proposal. Specifically a enhanced link will be created to the Ninewells Hospital and Dundee Technology Park.	
Policy Integration		The proposal has a strong positive fit with National, Regional and Local policy and, in particular, a strong positive fit with the TACTRAN Regional Transport Policy.	

Accessibility and Social Inclusion			
Sub-objective	Item	Qualitative Information	Quantitative Information
Community Accessibility	Public Transport Network Coverage	Public transport network coverage is enhanced through this proposal: the new station increases travel options for passengers by providing access to services at intermediate stations that provide connectivity across the region and beyond. As a result of the new station there will be increased opportunities for on-bound travel to other destinations from the key centres within (and beyond) the region.	Public transport would be greatly enhanced for the 30% increased catchment of a Dundee West station compared with Invergowrie. However the fundamental difference is the estimated 100,000 additional journeys pa which would be generated through travel to the employment centres adjacent to the new station.
	Access to Other Local Services	Access to other local services is enhanced and increased through this proposal: the hourly service to stopping at Dundee West increases travel options for passengers whilst providing connectivity across the region and beyond. As a result of the proposal there will be increased opportunities for on-bound travel to other local destinations from the key centres within (and beyond) the region. The proposal also improves local access opportunities for tourists travelling to and through the region.	
Comparative Accessibility	Distribution/Spatial Impacts by Social Group	All communities and population centres served by the proposal will experience a positive impact including residents, tourists, businesses and, to an extent, agriculture and leisure, through increased travel to work opportunities and improved service times/ frequencies.	
	Distribution/Spatial Impacts by Area	The proposal will enhance travel choice and travel opportunities to, between and through the key regional centres of Stirling, Perth and Dundee and the smaller communities and population centres in between. Travel choice and opportunities will also be enhanced for those connecting with onward train and public transport services from the key regional centres as well as the Central Belt.	

<b>Cost to Public Sector</b>		
<b>Item</b>	<b>Qualitative Information</b>	<b>Quantitative Information</b>
Public Sector Investment Costs		£0
Public Sector Operating and Investment Costs		£0
Grant Subsidy Payments		-£4,210,000
Revenues		£0
Taxation Impacts		£1,713,000

<b>Monetised Summary</b>	
Present Value of Transport Benefits	£4,974,000
Present Value of Cost to Government	-£2,498,000
Net Present Value	£7,471,000
Benefit-Cost to Government Ratio	0.4