Detailed Appraisal	**E6 - Inverness Southern Bypass from the A9 to A82**
Estimated total Public Sector Funding Requirement:	***Capital Costs/grant*** £100m - £250m ***Annual Revenue Support Present*** - ***Value of Cost to Gvt*** £50m - £100m ***BCR/PVB*** <0.75 / £10m - £50m

Summary Impact on STAG Criteria

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Environment							
Safety							
Economy							
Integration							
Accessibility and Social Inclusion							

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

Intervention Description:

This intervention supports the objective to reduce the conflict between longer distance and local traffic in Inverness, by allowing long distance traffic to bypass the city. It consists of an Inverness bypass from the A9 to the A82, building on the suggested link road from the A96 at Smithton to the A9 at Inshes proposed as part of the upgrade of the A96 between Inverness and Nairn (Intervention D16). The extension to the A96-A9 link road would comprise:

- Upgrade to dual carriageway of the existing B8082 between Inshes and Dores Roundabout; and
- New crossing of the Caledonian Canal and the River Ness (by bridge over the River Ness and either a high level opening bridge over the canal or a tunnel / aqueduct crossing of the Caledonian Canal) between Dores Roundabout and the A82 at Torvean.

Summary: Rationale for not recommending

This intervention generally performs well against the set of defined objectives but is a high cost, road based intervention which largely provides local benefits for local traffic.

The environmental impacts this intervention has on designated sites, valued habitats, protected species and water quality have been identified at the strategic level as part of the Strategic Environmental Assessment and Appropriate Assessment.

The bypass would affect the landscape of the urban fringe of Inverness and may intersect with the Torvean landform which is noted for its landscape value. There are also potential adverse effects on noise and biodiversity.

The most technically challenging aspect of this proposal is the crossing of the River Ness and Caledonian Canal which is likely to have a potential major adverse impact on cultural heritage, soils and geology. High capital costs and relatively low benefits represent poor value for money.

Table E6.1.1 STPR Objectives

STPR Objectives	
STPR Objective 1: To reduce the conflict between longer distance and local traffic.	**1: Positive –** This intervention would help to reduce the conflict between long distance and local traffic by allowing long distance traffic travelling between the A9 and the A82, to avoid passing through Inverness City Centre. It would also further reduce conflict by allowing traffic between the A9 and A82 to avoid local traffic at Raigmore Interchange. Reducing this conflict and the delay at Raigmore would not only benefit trips from the south heading into Inverness or east towards Nairn, but would reduce delays for trips from Nairn and communities east of Inverness travelling to and from Inverness City Centre.
STPR Objective 2: To improve connectivity, particularly by public transport between Inverness City Centre and the growth area to the east including Inverness Airport.	**2: Slightly Positive –** An Inverness Southern Bypass from the A9 to A82 would improve access to the east of Inverness by allowing strategic traffic to avoid Raigmore Interchange. This would free up capacity at Raigmore Interchange, improving traffic flows in peak hours.
STPR Objective 3: To promote continuing reduction in accident rates and severity rates across the strategic transport network.	**3: Slightly Positive –** The provision of a Southern Bypass of Inverness would remove some strategic through trips from Inverness City Centre, which would reduce the conflict between strategic and local trips and between vehicles and pedestrians, resulting in improved accident rates.
STPR Objective 4: To promote journey time reductions, particularly by public transport, between Inverness and the Central Belt primarily to allow business to achieve an effective working day when travelling between these centres	**4: Neutral –** It is unlikely that the provision of an Inverness Southern Bypass would promote journey time reductions between Inverness and the Central Belt.

Table E6.1.2 STAG Criteria

STAG Criteria		
Criteria:	**Assessment Summary:**	**Supporting Information:**
Environment:	**Major / Moderate Negative Impact**	The Inverness Southern Bypass would have adverse effects on heritage, geology and landscape (mainly the urban fringe of Inverness), particularly resulting from the new section of road, which would necessitate crossing the Torvean Landforms Site of Special Scientific Interest, the Caledonian Canal, which is also a Scheduled Monument, and the River Ness. Even with standard mitigation in place, there could be substantial effects on these sites. .
Safety:	**Minor Benefit**	Provision of the Inverness Southern Bypass would remove a degree of traffic from the centre of Inverness, resulting in a reduction in accidents. The typical accident rate for a 7.3m urban single carriageway road is over 50 per cent higher than a typical 7.3m rural single road. Although there could be over 50 per cent fewer accidents on the proposed bypass, there may be an increase in accident severity, due to higher speeds on the bypass route. Overall, an improvement in safety would be expected.
Economy:	**Minor Benefit / Minor Negative Impact**	**Transport Economic Efficiency (TEE):** The provision of the Inverness Southern Bypass would reduce journey times and improve journey time reliability for strategic trips that are currently required to pass through the centre of Inverness. This intervention could also result in reduced congestion within Inverness and improve journey time reliability for trips in the city. However, the costs are such that the benefit to cost ratio is less than 0.75 and therefore the intervention would not provide value for money. **Wider Economic Benefits (WEBs):** Improvements to journey time, reliability and quality are likely to have a positive impact on the efficiency and productivity of businesses using the route to travel between destinations to the east and west of Inverness. Benefits would accrue from the lower cost of travel for freight and business users with improved access to customers and suppliers. **Economic Impact and Location Impacts (EALIs):** This intervention could improve journey times and journey time reliability for strategic and local trips, resulting in increased productivity through faster movement of people and goods. The intervention could also open up the strategic development opportunity area to the east of Inverness to the labour catchments in the south of Inverness.
Integration:	**Minor Benefit**	**Transport Integration:** This intervention is unlikely to have any significant effect on transport integration. **Transport and Land-Use Integration:** This intervention could support the development of areas within Inverness City Centre, however, the intervention would not reduce the need to travel. **Policy Integration:** This intervention is highlighted as a policy in Section 2 of The Highland Council's adopted Inverness Local Plan Policy 29 and within the Draft Corporate Plan of The Highland Council.
Accessibility and Social Inclusion:	**Minor Benefit**	**Community Accessibility:** This intervention is not likely to affect public transport network coverage. Walking and cycling accessibility within Inverness could be improved with the reduced traffic flows passing through the city. **Comparative Accessibility:** This intervention would affect those making strategic trips that currently have to pass through Inverness and would also affect people making trips within Inverness.

Table E6.1.3 Key Strategic Outcomes

Key Strategic Outcomes (KSO's)		
Objective:	**Assessment Summary:**	**Supporting Information:**
Improve Journey Times and Connections:	**Minor Benefit**	A reduction in traffic flows on the approaches to Raigmore Interchange and through Inverness would result in improved journey times for journeys to / from and through Inverness. Journey time reliability could also improve. However, the impact of this intervention would be largely on a local scale.
Reduce Emissions:	**Neutral**	A shift of traffic away from Inverness and busy junctions within the city could reduce traffic congestion and subsequently road vehicle emissions; however, this would be offset by the increased emissions of vehicles travelling at higher speeds on the proposed bypass. There are no existing air quality concerns within the city.
Improve Quality, Accessibility and Affordability:	**Neutral**	This intervention will improve journey times for some road users, improving the quality of their journeys. It is not expected that accessibility or affordability would be affected by this intervention.

Table E6.1.4 Scottish Government's Strategic Objectives

Scottish Government's Strategic Objectives		
Objective:	**Assessment Summary:**	**Supporting Information:**
Safer & Stronger:	**Minor Benefit**	This intervention could result in reduced accidents due to traffic transferring from the city centre routes to the proposed bypass, reducing the conflict with local vehicles, pedestrians and cyclists. A reduction in the number of vehicles in the city centre could also result in a safer environment within Inverness, resulting in a better quality of life. It would not affect the quality, accessibility and affordability of public transport.
Smarter:	**Neutral**	This intervention would have no significant impact on access to schools, colleges and universities.
Wealthier & Fairer:	**Moderate Benefit**	By 2022, the current population of Inverness is forecast to increase by 6 per cent and employment is forecast to increase by 25 per cent resulting in an increased number of trips. The Inverness Southern Bypass could result in improved journey times and journey time reliability for both strategic trips that currently have to pass through Inverness and for local trips within Inverness. The improved journey times would result in improved productivity in the movement of people and goods. The bypass would also link important tourist routes on the A82, A9 and A96.
Greener:	**Neutral**	The intervention would not affect air quality or CO_2e emissions. It would also not encourage modal shift from car to public transport.
Healthier:	**Minor Benefit**	This intervention is unlikely to encourage modal shift from the car to more healthy forms of transport. The bypass could improve private transport links to health services, especially to Raigmore Hospital from the south of Inverness.

Table E6.1.5 Implementability Appraisal

Implementability Appraisal	
Technical:	The main technical risks associated with this intervention involve the need to cross the River Ness and the Caledonian Canal. Other than this, implementing the intervention would be straightforward and would not involve any untried techniques. However, as the design stages progress, localised issues may arise which require increased technical capabilities to overcome. Construction of the Inverness Southern Bypass could have significant effects on existing users as the alternative routes involve travel through Inverness. During construction work, access for boat traffic on the canal may be limited. Limiting the effects on tourist traffic during the construction phase also provides technical challenges to the construction plan.
Operational:	Operation of the route is likely to become the responsibility of Transport Scotland and its maintenance contractors. The existing trunk routes through Inverness may be de-trunked and responsibility for them passed to The Highland Council. There are no envisaged operational issues relating to this intervention during its projected life.
Public:	There has been considerable public consultation on this intervention and there is significant public interest at both local and regional levels. The intervention could relieve traffic pressure within Inverness and improve links between the A96/A9 and A82.