

**STRATEGIC ENVIRONMENTAL
ASSESSMENT OF THE HITRANS
REGIONAL TRANSPORT
STRATEGY**

**Annex C - Full Environmental
Assessment**

Report

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1. FULL ENVIRONMENTAL ASSESSMENT

- 1.1 This annex provides the full assessment tables for the environmental assessment of each element of the Regional Transport Strategy.

TABLE 1.1 ASSESSMENT OF RTS COMPONENTS: STRATEGIC NETWORK INTERVENTIONS

Strategy element / Action		Noise	Greenhouse gas emissions	Local air quality	Water, geology and soils	Biodiversity	Cultural heritage	Landscape and visual amenity	Health and other social impacts	Comments and overall assessment (including information on short, medium, long term; permanent, temporary; secondary, cumulative, synergistic effects) and proposed changes to the strategy.
A82 Corridor	<i>Western bypass at Crianlarich and Pulpit Rock Tunnel</i>	-	-	+/-		?	+	+/-	+	Slight negative on noise, local air quality and greenhouse gas emissions. May impact on a local nature reserve and SSSI in the vicinity. Will improve reliability and consistency of traffic flow along the A82 and help improve accessibility of the region. In terms of local air quality, this will be improved in the population centre, but re-distributed to the new location (away from the people). Similarly, in terms of landscape, the scheme will improve the townscape, but result in a negative impact on the landscape of the new location in terms of construction of a new feature in the landscape and any new street lighting associated with the new road.
	<i>Ballachulish to Fort William route enhancements</i>	-	-	-		?			+	Slight negative on noise, local air quality and greenhouse gas emissions. May impact National Nature Reserves and SAC in the vicinity. Will improve flow of traffic along the A82 and help improve accessibility of the region.
	<i>Tarbet to Ballachulish strategy (road improvement Tarbet to Inverarnan & route enhancement Tyndrum to Ballachulish)</i>	-	-	-		?			+	Slight negative on noise, local air quality and greenhouse gas emissions. May impact SSSIs and SAC in the vicinity. Will improve flow of traffic along the A82 and help improve accessibility of the region.
	<i>Pinch points / junction improvements Fort William to Inverness</i>	-	-	-					+	Slight negative on noise, local air quality and greenhouse gas emissions. Will improve regional accessibility.

Strategy element / Action	Noise	Greenhouse gas emissions	Local air quality	Water, geology and soils	Biodiversity	Cultural heritage	Landscape and visual amenity	Health and other social impacts	Comments and overall assessment (including information on short, medium, long term; permanent, temporary; secondary, cumulative, synergistic effects) and proposed changes to the strategy.
<i>A82 to A9 / A96 Inverness link road</i>	-	-	+/-	-	?	+	+/-	+	Slight negative on noise, local air quality and greenhouse gas emissions. May impact on SSSI in the vicinity. Potential negative impact on soils and drainage. There will be some temporary negative effects on noise and local air quality during construction and potentially on water quality of the River Ness. Will improve regional accessibility. There will be a re-distribution of the impact of traffic, by moving it away from the town centre. In terms of landscape, the scheme will improve the townscape, but result in a negative impact on the landscape of the new location in terms of construction of a new feature in the landscape and any new street lighting associated with the new road.
<i>Modern 2-track standard Inverness - Glasgow</i>	--	--	--		?			+	Significant negative impact on noise, local air quality and greenhouse gas emissions. Will improve regional accessibility. May impact on SSSIs and SACs in the vicinity. Potential negative impact on soils and drainage. There will be some temporary negative effects on noise and local air quality during construction.
Highland mainline <i>Journey time and frequency improvements (hrly departure)</i>	+/-	+	+					+	Increase frequency of trains will result in increased frequency of railway noise, although the volume itself is not likely to increase, this is therefore only a slight negative impact. A positive will also result from reduced traffic noise on the roads, resulting from mode shift to rail. Positive impact on local air quality and greenhouse gas emissions through encouragement of mode shift. Improvements in safety if mode shift away from private car. Increased accessibility of the region.
A9 Inverness to Edinburgh (Road) <i>Dual carriageway options between Inverness and Perth ()</i>	--	--	--		?		-	+	Negative impact on noise, local air quality and greenhouse gas emissions. Potential negative impact on protected areas along the route. Will improve regional accessibility.
A9 Inverness to Edinburgh (Road) <i>Variants of the above option include schemes to provide dual carriageway sections; and/or wide 2+1; and</i>	--	--	--		?		-	+	Negative impact on noise, local air quality and greenhouse gas emissions. Potential negative impact on protected areas along the route. Will improve regional accessibility.

Strategy element / Action	Noise	Greenhouse gas emissions	Local air quality	Water, geology and soils	Biodiversity	Cultural heritage	Landscape and visual amenity	Health and other social impacts	Comments and overall assessment (including information on short, medium, long term; permanent, temporary; secondary, cumulative, synergistic effects) and proposed changes to the strategy.
<i>full dualling of route</i>									
Inverness airport and flights									
<i>Surface Access Strategy to deliver integration</i>		+	+				+	+	Overall positive as promoting sustainable travel choices, thus achieving modal shift and improved levels of physical activity. Will reduce traffic at congestion hotspots and improve access to the airport for those without access to a car.
<i>Terminal building and runway extension</i>	--	--	--	?	?	?	-	+	Increasing the capacity of Inverness airport is likely to result in a significant negative impact on noise, carbon dioxide emissions and local air quality. Further assessment would be required to establish the environmental impacts of extending the runway and terminal buildings on water, soils, biodiversity and cultural heritage. A Masterplan for Inverness airport is currently being developed.
Inverness – Aberdeen rail line (A96)									
<i>Commuter services Elgin – Inverness</i>	+/-	+	+				+	+	Slight negative impact on noise through increased intermittent noise of additional trains, however will remove traffic noise from town centres on route. Will contribute to improved local air quality in Elgin, Nairn and Forres through removal of through traffic. Will contribute to improved health through mode shift away from the private car.
<i>Dalcross Station at Inverness airport</i>	+/-	+	+	?	?	?	-	+	Improving access to the airport by non-car modes will encourage mode shift and improve local air quality. Additional noise created through the stopping and starting of trains, however reduced noise of road traffic through mode shift. Significant growth in housing and industry in the airport vicinity is forecast for the future and this scheme will therefore provide significant benefits in the future by providing an alternative to the private car.
<i>Journey time improvements and hourly Inverness to Aberdeen</i>	+	+	+					+	A positive impact will result on noise, greenhouse gas emissions and local air quality from reduced traffic on the roads, resulting from mode shift to rail. Improvements in safety if mode shift away from private car. Increased accessibility of the region.
A96 Corridor									
<i>Dual carriageway Inverness – Airport</i>	-	-	-	-	?	?	-		Slight negative on noise, local air quality and greenhouse gas emissions. Potential negative impact on protected areas along the route. Will improve the reliability and consistency of journeys and the accessibility of the region.

Strategy element / Action	Noise	Greenhouse gas emissions	Local air quality	Water, geology and soils	Biodiversity	Cultural heritage	Landscape and visual amenity	Health and other social impacts	Comments and overall assessment (including information on short, medium, long term; permanent, temporary; secondary, cumulative, synergistic effects) and proposed changes to the strategy.
(road) <i>Fochabers bypass with demand management and provision of road space for passenger transport / cycling through Fochabers plus bus priority on approaches and park and ride</i>	+	-	+	-	?	+/?	+/-	++	There will be a redistribution of impacts away from the town centre of Fochabers. This will result in positive impacts on noise, local air quality cultural heritage and townscape in Fochabers itself, but a negative impact on these in the new location. . In terms of landscape, the scheme will improve the townscape, but result in a negative impact on the landscape of the new location in terms of construction of a new feature in the landscape and any new street lighting associated with the new road.
<i>Elgin bypass with demand management and provision of road space for passenger transport / cycling through Elgin plus bus priority on approaches and park and ride.</i>	+	-	+	-	?	+/?	+/-	++	There will be a redistribution of impacts away from the town centre of Elgin. This will result in positive impacts on noise, local air quality cultural heritage and townscape in Elgin itself, but a negative impact on these in the new location. . In terms of landscape, the scheme will improve the townscape, but result in a negative impact on the landscape of the new location in terms of construction of a new feature in the landscape and any new street lighting associated with the new road.
<i>Other bypasses on route with demand management and provision of road space for passenger transport / cycling through settlements, plus bus priority on approaches and park and ride</i>	+	-	+	-	?	+/?	+/-	++	There will be a redistribution of impacts away from the town centres affected. This will result in positive impacts on noise, local air quality cultural heritage and townscape in the town centres, but a negative impact on these in the new location. . In terms of landscape, the scheme will improve the townscape, but result in a negative impact on the landscape of the new location in terms of construction of a new feature in the landscape and any new street lighting associated with the new road.
<i>Dual carriageway options on A96.</i>	-	-	-	-	?	?	-		Slight negative on noise, local air quality and greenhouse gas emissions. Potential negative impact on protected areas along the route. Will improve the reliability and consistency of journeys and the accessibility of the region.

Strategy element / Action	Noise	Greenhouse gas emissions	Local air quality	Water, geology and soils	Biodiversity	Cultural heritage	Landscape and visual amenity	Health and other social impacts	Comments and overall assessment (including information on short, medium, long term; permanent, temporary; secondary, cumulative, synergistic effects) and proposed changes to the strategy.
<i>Variants of the above option would include providing dual carriageway sections</i>	-	-	-	-	?	?	-		Slight negative on noise, local air quality and greenhouse gas emissions. Potential negative impact on protected areas along the route. Will improve the reliability and consistency of journeys and the accessibility of the region.
A83 Argyll & Bute Sea Crossings to A82 for Glasgow									
<i>Modern 2-track standard Campbeltown to A82</i>	-	-	-		?			+	Negative impact on noise, local air quality and greenhouse gas emissions. Will improve regional accessibility. Potential negative impact on soils and drainage. There will be some temporary negative effects on noise and local air quality during construction.
<i>Address pinch points on route</i>	-	-	-		-	?	-	+	Slight negative impact on noise, local air quality, greenhouse gas emissions and biodiversity through increased road traffic. Slight negative impact on landscape through increased traffic. Positive impact on health and social impacts through improved accessibility.
Far North Line									
<i>New station at Conon Bridge</i>	+/-	+	+	?	?	?	-	+	This will enable commuting to Inverness by non-car modes and will encourage mode shift. Additional noise created through the stopping and starting of trains, however reduced noise of road traffic through mode shift.
A9 north (road)									
<i>Berriedale Braes crossing</i>		-		-	?	?	-	+	There will be some impact on greenhouse gas emissions due to some increase in traffic levels. However no human impact resulting from noise or local air quality due to sparse population in the vicinity. May impact on a SSSI in the vicinity and on water, geology and soils. Will improve flow of traffic along the A9 and help improve accessibility of the region.
<i>Bypass settlements on route</i>	+	-	+	-	?	+/?	+/-	++	There will be a redistribution of impacts away from the settlements affected. This will result in positive impacts on noise, local air quality cultural heritage and townscape in the town centres, but a negative impact on these in the new location. . In terms of landscape, the scheme will result in a negative impact on the landscape of the new location in terms of construction of a new feature in the landscape and any new street lighting associated with the new road.

Strategy element / Action	Noise	Greenhouse gas emissions	Local air quality	Water, geology and soils	Biodiversity	Cultural heritage	Landscape and visual amenity	Health and other social impacts	Comments and overall assessment (including information on short, medium, long term; permanent, temporary; secondary, cumulative, synergistic effects) and proposed changes to the strategy.
<i>Provision of road space for passenger transport / cycling to the north of Inverness and P&R facilities and services</i>	+	+	+				+	++	Positive impact on local air quality and health through reduction in congestion near and in Inverness and promotion of active forms of travel.
<i>Route Action Plan to provide climbing lanes</i>	-	-	-		?	?		+	Very slight negative impact on noise, local air quality and greenhouse gas emissions through some increase in traffic levels, although this is expected to be slight. May impact on a number of SSSIs, SACs, SPAs and wetland areas along the route, although route the route already exists. Positive impact on health through increased accessibility within the region, particularly for those in the remote far north and the Orkney islands who use this as a key route to reach Inverness.
Oban A85 connections to Glasgow (A820) <i>Oban Development Road and demand management measures in Oban</i>	+	-	+	-	?	+/?	+/-	++	There will be a redistribution of impacts away from the town centre of Oban. This will result in positive impacts on noise, local air quality cultural heritage and townscape in the town centre, but a negative impact on these in the location of the new section of road.
<i>Oban and Fort William rail line service enhancement / frequency increase</i>	+/-	+	+					+	Increase frequency of trains will result in increased frequency of railway noise, although the volume itself is not likely to increase, this is therefore only a slight negative impact. A positive will also result from reduced traffic noise on the roads, resulting from mode shift to rail. Positive impact on local air quality and greenhouse gas emissions through encouragement of mode shift. Improvements in safety if mode shift away from private car. Increased accessibility of the region.
Western Isles & Skye connections to Glasgow (A82) <i>Skye air service to the Central Belt.</i>	--	-	-	?	?		-	++	Negative impact on noise through introduction of scheduled air service, although this will be intermittent. Negative impact on air quality and greenhouse gas emissions through new aviation emissions. Both factors are however starting from a very low baseline level. Significant positive impact on health through improved accessibility to the central belt. Potential impact on water and soils and biodiversity, depending on the siting of the air strip. Slight negative impact on landscape through construction of

Strategy element / Action		Noise	Greenhouse gas emissions	Local air quality	Water, geology and soils	Biodiversity	Cultural heritage	Landscape and visual amenity	Health and other social impacts	Comments and overall assessment (including information on short, medium, long term; permanent, temporary; secondary, cumulative, synergistic effects) and proposed changes to the strategy.
										terminal buildings however these will be small and similar to other HIAL terminal buildings which are important local assets.
Kyle rail line	<i>Commuter service to Inverness</i>	+/-	+	+	?	?	?	-	+	Some increase in noise (although this will be intermittent) through increased rail services, however reductions in road traffic noise through mode shift away from the car. Positive impact on local air quality, greenhouse gas emissions and health through improving the public transport network and encouraging mode shift. Increased accessibility to employment, education and health facilities in Inverness.
Moray connections to Edinburgh (A9)	<i>Elgin to Craigellachie A941 road improvements</i>	-	-	-		?		-	++	Slight negative on noise, local air quality and greenhouse gas emissions depending on how much traffic flow increases. Will improve regional accessibility. May impact on SSSIs in the vicinity. There will be some temporary negative effects on noise and local air quality during construction.
	<i>A95 road improvements</i>	-	-	-		?			++	Slight negative on noise, local air quality and greenhouse gas emissions. Will improve regional accessibility. May impact on a SSSI in the vicinity. Potential negative impact on soils and drainage. There will be some temporary negative effects on noise and local air quality during construction.
Barra flights	<i>Fixed landing strip and surface access strategy to deliver better integration.</i>				?	?	?	-		Fixed landing strip to replace existing beach landing strip. Potential impact on water, geology and soils, biodiversity and cultural heritage although the extent of this is unknown at present. Will provide more consistent accessibility to the mainland for Barra residents.

TABLE 1.2 ASSESSMENT OF RTS COMPONENTS: REGIONAL NETWORK INTERVENTIONS

Strategy element	Action	Noise	Greenhouse gas emissions	Local air quality	Water, geology and soils	Biodiversity	Cultural heritage	Landscape and visual amenity	Health and other social impacts	Comments and overall assessment (including information on short, medium, long term; permanent, temporary; secondary, cumulative, synergistic effects) and proposed changes to the strategy.
Orkney internal connectivity	<i>Inter-isle ferry and air service connectivity enhancements</i>		+		+ / -	-	?	-	+	Positive impact on greenhouse gas emissions through the use of cleaner vessels. Cleaner vessels will also have a positive impact on water quality and marine biodiversity, however some negative impact on water through construction of improved harbour infrastructure. Potential negative impact on marine biodiversity during construction of infrastructure. Potential negative impact on landscape through construction of new ferry infrastructure. Positive impact on health through improved accessibility.
Easdale, Lismore, Luing and Islay – Jura ferry services	<i>Replacement vessels and / or infrastructure</i>		+		+/-	-	?	-	+	Positive impact on greenhouse gas emissions through the use of cleaner vessels. The scheme will also make ferries more attractive, especially in comparison to air travel. Cleaner vessels will also have a positive impact on water quality, however some negative impact on water through construction of improved harbour infrastructure. Potential negative impact on marine biodiversity as SSSI's and SAC on Lismore and SAC surrounding Luing and Easdale. Potential negative impact on landscape through construction of new ferry infrastructure. Positive impact on health through improved accessibility.
Raasay ferry terminal	<i>New terminal</i>				-	-	?	-	+	A new ferry terminal is required to safeguard the existing ferry service between Raasay and Skye. Construction of a new pier is likely to have a negative impact on water quality and marine biodiversity, both during the construction and operation phases. Depending on the size and design of new infrastructure there may be a negative impact on landscape. A positive impact on health will result through the safeguarding of this essential link.
Western Isles spinal route	<i>Fixed links on the sounds</i>		-	-	-	-	-	--	+	Negative environmental impacts on most areas, through construction of new roads across the sounds. However, positive impact on health and other social impacts through improved accessibility. In terms of landscape, the scheme will result in a negative impact on the landscape in terms of construction of a new feature in the landscape and any new street lighting associated with the new links.

Strategy element	Action	Noise	Greenhouse gas emissions	Local air quality	Water, geology and soils	Biodiversity	Cultural heritage	Landscape and visual amenity	Health and other social impacts	Comments and overall assessment (including information on short, medium, long term; permanent, temporary; secondary, cumulative, synergistic effects) and proposed changes to the strategy.
	<i>Faster, more frequent ferry crossings</i>		-	-					+	Improvements to ferry services are likely to increase the propensity to travel, therefore resulting in a slight negative impact on greenhouse gas emissions and local air quality. It will however have a positive impact on the accessibility of the Western Isles.
	<i>Road improvement options</i>	-	-	-		-	?	-	+	Slight negative impact on noise, local air quality, greenhouse gas emissions and biodiversity through increased road traffic and road improvements. Slight negative impact on landscape through increased traffic. Positive impact on health and social impacts through improved accessibility.
A816 Oban to Lochgilphead	<i>Road improvement options</i>	-	-	-		-	?	-	+	Slight negative impact on noise, local air quality, greenhouse gas emissions and biodiversity through increased road traffic. Slight negative impact on landscape through increased traffic. Positive impact on health and social impacts through improved accessibility.
A848 & A849 Tobermory to Fionnphort and Iona Ferry	<i>Route enhancement</i>	-	-	-		-	?	-	+	Slight negative impact on noise, local air quality, greenhouse gas emissions and biodiversity through increased road traffic. Slight negative impact on landscape through increased traffic. Positive impact on health and social impacts through improved accessibility.
A941 Dufftown to A95	<i>Road improvement including addressing pinch points and providing overtaking opportunities</i>	-	-	-		-	?	-	+	Slight negative impact on noise, local air quality, greenhouse gas emissions and biodiversity through increased road traffic. Slight negative impact on landscape through increased traffic. Positive impact on health and social impacts through improved accessibility.
A838 Kinlochbervie to Lairg	<i>Removal of single track section at Laxford Bridge</i>	-	-	-		-	?	-	+	Slight negative impact on noise, local air quality, greenhouse gas emissions and biodiversity through increased road traffic resulting from removal of a pinch point. Slight negative impact on landscape through increased traffic. Positive impact on health and social impacts through improved accessibility.

Strategy element	Action	Noise	Greenhouse gas emissions	Local air quality	Water, geology and soils	Biodiversity	Cultural heritage	Landscape and visual amenity	Health and other social impacts	Comments and overall assessment (including information on short, medium, long term; permanent, temporary; secondary, cumulative, synergistic effects) and proposed changes to the strategy.
	<i>Route enhancement</i>	-	-	-		-	?	-	+	Slight negative impact on noise, local air quality, greenhouse gas emissions and biodiversity through increased road traffic. Slight negative impact on landscape through increased traffic. Positive impact on health and social impacts through improved accessibility.
A890 Lochcarron to A832	<i>Route enhancement including single track sections and visibility improvements in vicinity of Achnashellach</i>	-	-	-		-	?	-	+	Slight negative impact on noise, local air quality, greenhouse gas emissions and biodiversity through increased road traffic. Slight negative impact on landscape through increased traffic. Positive impact on health and social impacts through improved accessibility.
A939 Tomintoul to A95	<i>Road improvement options</i>	-	-	-		-	?	-	+	Slight negative impact on noise, local air quality, greenhouse gas emissions and biodiversity through increased road traffic. Slight negative impact on landscape through increased traffic. Positive impact on health and social impacts through improved accessibility.
A98 from Elgin to Fraserburgh and A950 to Peterhead	<i>Road improvement options</i>	-	-	-		-	?	-	+	Slight negative impact on noise, local air quality, greenhouse gas emissions and biodiversity through increased road traffic. Slight negative impact on landscape through increased traffic. Positive impact on health and social impacts through improved accessibility.
A832 Gairloch to Garve	<i>Road improvement options</i>	-	-	-		-	?	-	+	Slight negative impact on noise, local air quality, greenhouse gas emissions and biodiversity through increased road traffic. Slight negative impact on landscape through increased traffic. Positive impact on health and social impacts through improved accessibility.

TABLE 1.3 ASSESSMENT OF RTS COMPONENTS: HORIZONTAL MEASURES

Strategy element Action	Noise	Greenhouse gas emissions	Local air quality	Water, geology and soils	Biodiversity	Cultural heritage	Landscape and visual amenity	Health and other social impacts	Comments and overall assessment (including information on short, medium, long term; permanent, temporary; secondary, cumulative, synergistic effects) and proposed changes to the strategy.
Mainstream passenger transport	<i>Multi-modal/operator ticketing</i>	+	+	+		+	+	+	General improvement to the public transport network – will result in positive impact on noise, greenhouse gas emissions and local air quality through encouragement of mode shift away from the private car. Positive impact on cultural heritage and townscape through reduced traffic in town centres. Positive impact on health through improved accessibility.
	<i>Comprehensive and user-friendly information and mapping</i>	+	+	+		+	+	+	General improvement to the public transport network – will result in positive impact on noise, greenhouse gas emissions and local air quality through encouragement of mode shift away from the private car. Positive impact on cultural heritage and townscape through reduced traffic in town centres. Positive impact on health through improved accessibility.
	<i>Consistent standard for supporting infrastructure</i>	+	+	+		+	+	+	General improvement to the public transport network – will result in positive impact on noise, greenhouse gas emissions and local air quality through encouragement of mode shift away from the private car. Positive impact on cultural heritage and townscape through reduced traffic in town centres. Positive impact on health through improved accessibility.
	<i>Integrated timetabling across the region</i>	+	+	+		+	+	+	General improvement to the public transport network – will result in positive impact on noise, greenhouse gas emissions and local air quality through encouragement of mode shift away from the private car. Positive impact on cultural heritage and townscape through reduced traffic in town centres. Positive impact on health through improved accessibility.
	<i>Hub and spoke interchange network, including infrastructure</i>	+	+	+		+	+	+	General improvement to the public transport network – will result in positive impact on noise, greenhouse gas emissions and local air quality through encouragement of mode shift away from the private car. Positive impact on cultural heritage and townscape through reduced traffic in town centres. Positive impact on health through improved accessibility.

Strategy element Action	Noise	Greenhouse gas emissions	Local air quality	Water, geology and soils	Biodiversity	Cultural heritage	Landscape and visual amenity	Health and other social impacts	Comments and overall assessment (including information on short, medium, long term; permanent, temporary; secondary, cumulative, synergistic effects) and proposed changes to the strategy.
<i>Targeted support for socially excluded groups to improve access opportunities. This could include tackling any aspect of accessibility – physical, awareness, affordability, acceptability and availability</i>								++	Positive impact on health and other social impacts through increased accessibility of the public transport network.
<i>Development of Taxi sector as part of passenger transport network</i>								+	Positive impact on health and other social impacts through development of this door-to-door transport services.
<i>Bus Quality Partnerships / Contracts</i>	+	+	+			+	+	+	General improvement to the public transport network – will result in positive impact on noise, greenhouse gas emissions and local air quality through encouragement of mode shift away from the private car. Positive impact on cultural heritage and townscape through reduced traffic in town centres. Positive impact on health through improved accessibility.
<i>Invest in poor quality transport terminals and vehicles (including continued investment in accessible vehicle fleet)</i>	+	+	+			+	+	+	General improvement to the public transport network and facilities – will result in positive impact on noise, greenhouse gas emissions and local air quality through encouragement of mode shift away from the private car. Positive impact on cultural heritage and townscape through reduced traffic in town centres. Positive impact on health through improved accessibility.

Strategy element Action	Noise	Greenhouse gas emissions	Local air quality	Water, geology and soils	Biodiversity	Cultural heritage	Landscape and visual amenity	Health and other social impacts	Comments and overall assessment (including information on short, medium, long term; permanent, temporary; secondary, cumulative, synergistic effects) and proposed changes to the strategy.
<i>Strategic Park & Ride facilities and service</i>	-	-	-	?	?	?	-	+	More detailed assessment of impacts required on specific sites. Potential positive impact on reducing congestion within built up areas. Potential negative impacts from generation of net additional vehicle kms on the roads surrounding any new P&R sites. Negative impacts from land take of P&R. Positive impacts from improving accessibility.
<i>Rail service enhancement / frequency increase – incremental improvements to the region's rail network</i>	+/-	+	+				+	+	Slight negative impact on noise through increased intermittent noise of additional trains, however will remove traffic noise from the road network. Will contribute to improved local air quality and carbon dioxide emissions as part of the package of measures to make public transport more attractive and encourage modal shift away from the car. Will also contribute to improved health through mode shift away from the private car.
Community and health transport									
<i>Baseline review including gap analysis</i>								+	No significant environmental effects on its own, but will contribute to identifying where improvements to the community and health transport network are needed and will therefore provide a positive contribution to health and other social impacts
<i>Demonstration project of a good practice example of joined up working</i>								+	Positive impact on health through contributing to increasing the accessibility of the transport network and improving access to health services.
<i>Consistent monitoring and evaluation framework for region</i>								+	Positive impact on health through contributing to increasing the accessibility of the transport network and improving access to health services.
<i>Securing additional funding including alternative funding mechanisms to current</i>								+	Positive impact on health through improving provision of community and health transport services.

Strategy element Action	Noise	Greenhouse gas emissions	Local air quality	Water, geology and soils	Biodiversity	Cultural heritage	Landscape and visual amenity	Health and other social impacts	Comments and overall assessment (including information on short, medium, long term; permanent, temporary; secondary, cumulative, synergistic effects) and proposed changes to the strategy.
<i>Training and mentoring programme for sector</i>								+	Positive impact on health through improving provision of community and health transport services.
<i>Common standards to guide decision making on procurement of local transport services</i>								+	Positive impact on health through improving provision of community and health transport services.
<i>Sharing of resources (e.g. vehicles) and knowledge (e.g. good practice)</i>								+	Positive impact on health through contributing to increasing the accessibility of the transport network and improving access to health services.
<i>Integration of services & with mainstream passenger transport (including interchange facilities)</i>								+	Positive impact on health through contributing to increasing the accessibility of the transport network and improving access to health services.
<i>Car sharing (lifts)</i>	+	+	+			+	+	+	Positive impact on noise, greenhouse gas emissions and local air quality through reductions in traffic volumes. Positive impact on cultural heritage and townscape through reduction of vehicles in town centres. Positive impact on health through improved air quality.
<i>Car sharing (community)</i>	+	+	+			+	+	+	Positive impact on noise, greenhouse gas emissions and local air quality through reductions in traffic volumes. Positive impact on cultural heritage and townscape through reduction of vehicles in town centres. Positive impact on health through improved air quality.

Strategy element Action	Noise	Greenhouse gas emissions	Local air quality	Water, geology and soils	Biodiversity	Cultural heritage	Landscape and visual amenity	Health and other social impacts	Comments and overall assessment (including information on short, medium, long term; permanent, temporary; secondary, cumulative, synergistic effects) and proposed changes to the strategy.
<i>Freight Quality Partnership</i>	-	-	-				-	-	Will enable increased movement of freight in the region, therefore increasing the volume of freight on the roads. This will have a slight negative impact on noise, greenhouse gas emissions and local air quality. Some negative impact on landscape and visual amenity through increased freight vehicles on roads. Negative impact on road safety as a result of increased number of HGVs on roads.
<i>Addressing inefficiencies / constraints in the transport network</i>	-	-	-				-	-	Will enable increased movement of freight in the region, therefore increasing the volume of freight on the roads. This will have a slight negative impact on noise, greenhouse gas emissions and local air quality. Some negative impact on landscape and visual amenity through increased freight vehicles on roads. Negative impact on road safety as a result of increased number of HGVs on roads.
<i>Review of grant funding to better fit with market needs</i>	-	-	-				-	-	Will enable increased movement of freight in the region, therefore increasing the volume of freight on the roads. This will have a slight negative impact on noise, greenhouse gas emissions and local air quality. Some negative impact on landscape and visual amenity through increased freight vehicles on roads. Negative impact on road safety as a result of increased number of HGVs on roads.
<i>Evaluation of programme to reduce the cost of moving goods</i>	-	-	-				-	-	Will enable more freight to be transported across the region. This will have a slight negative impact on noise, greenhouse gas emissions and local air quality. Some negative impact on landscape and visual amenity through increased freight vehicles on roads. Negative impact on road safety as a result of increased number of HGVs on roads.
Ports, ferries, and <i>Understand origin and destination patterns for passengers and freight</i>									No significant environmental impact on its own but will contribute to successful implementation of other elements of the strategy.

Strategy element Action	Noise	Greenhouse gas emissions	Local air quality	Water, geology and soils	Biodiversity	Cultural heritage	Landscape and visual amenity	Health and other social impacts	Comments and overall assessment (including information on short, medium, long term; permanent, temporary; secondary, cumulative, synergistic effects) and proposed changes to the strategy.
waterways transport									
<i>Rationalise the waterborne transport network</i>	-	-	-	-	-			+	Enhancing the ferry network will increase the attractiveness of this form of transport and is therefore likely to increase demand. An increase in demand will result in more ferry crossings and therefore a slight negative impact on noise, carbon dioxide emissions and local air quality. An increase in the number of ferry sailings could also have a slight negative impact on water quality and marine biodiversity through an increased risk of spillage. Improving ferry links will however have a positive impact on health through enhancing accessibility within the region, particularly for remote communities.
<i>Enhance ferry services and develop fit for purpose timetables</i>	-	-	-	-	-	?		+	Slight negative impact on noise, greenhouse gas emissions and local air quality through increased number of ferry trips. Slight negative impact on water and marine biodiversity as a result of increased movement of vessels in sea. Slight negative impact on landscape and visual amenity through increased movement of vessels. Positive impact on health and other social impacts as a result of increased movement / availability of goods on remote islands.
<i>Evaluate alternative pricing mechanisms</i>	-	-	-	-	-			+	This option is likely to increase demand for travel and therefore have a slight negative impact on noise, carbon dioxide emissions and local air quality. There is also likely to be a slight negative impact on water quality and marine biodiversity through increased risk of spillage into the marine environment. Positive impact on health by making this mode of transport more accessible.
<i>Regional investment strategy</i>	-	-	-	-	-			+	Regional investment in ferry infrastructure will contribute to making this mode of transport more attractive and will contribute to an increasing demand for travel. This increase in travel is likely to result in slight negative impacts on noise, greenhouse gas emissions, local air quality, water quality and marine biodiversity through increased ferry movements. Positive impact on health by making travel by ferry more accessible.

Strategy element Action	Noise	Greenhouse gas emissions	Local air quality	Water, geology and soils	Biodiversity	Cultural heritage	Landscape and visual amenity	Health and other social impacts	Comments and overall assessment (including information on short, medium, long term; permanent, temporary; secondary, cumulative, synergistic effects) and proposed changes to the strategy.
<i>Evaluate economic and social opportunities of providing other / enhancing existing air connections around the region</i>	--	--	--					+	Will encourage expansion of air services in the region. Increased number of flights will result in a significant negative impact on noise, greenhouse gas emissions and local air quality. Airports in the region are however located in areas that are sparsely populated and so will have only a limited impact on human health. A positive impact on health and other social impacts through increased accessibility and connectivity of the region.
<i>Evaluate the impacts and outcomes of Air Discount Scheme. Assess options for further development.</i>	--	--	--					+	Will encourage expansion of air services in the region. Increased number of flights will result in a significant negative impact on noise, greenhouse gas emissions and local air quality. Airports in the region are however located in areas that are sparsely populated and so will have only a limited impact on human health. A positive impact on health and other social impacts through increased accessibility and connectivity of the region.
Aviation and the region's air network <i>Development of direct rail services between Inverness and Edinburgh airport.</i>	+	-	+				+	+	Positive impact on noise and local air quality as improving access to the airport by non-car modes. This will also result in a slight positive impact on landscape and visual amenity through a reduction in car traffic. Slight negative impact on greenhouse gas emissions through improved accessibility of the airport and a likely increase in the number of people able / wishing to fly. Positive impact on health and other social impacts through increased accessibility of the region.
<i>Passenger transport access to Wick airport</i>	+	-	+				+	+	Positive impact on noise and local air quality as improving access to the airport by non-car modes. This will also result in a slight positive impact on landscape and visual amenity through a reduction in car traffic. Slight negative impact on greenhouse gas emissions through improved accessibility of the airport and a likely increase in the number of people able / wishing to fly. Positive impact on health and other social impacts through increased accessibility of the region.
Locally significant network and <i>Attract additional funding</i>				+			+		Will enable appropriate maintenance of the regions road network thus ensuring a positive impact on water, geology and soils through improved drainage on roads and a positive impact on landscape and visual amenity.

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Strategy element Action	Noise	Greenhouse gas emissions	Local air quality	Water, geology and soils	Biodiversity	Cultural heritage	Landscape and visual amenity	Health and other social impacts	Comments and overall assessment (including information on short, medium, long term; permanent, temporary; secondary, cumulative, synergistic effects) and proposed changes to the strategy.
the region's road maintenance									
Active Travel <i>Clearer policy to promote in land use planning and development control process across the region</i>	+	+	+			+	+	++	Will ensure that new developments are located in areas that are well served by modes of transport other than the private car. This will encourage more sustainable travel patterns into the future and will therefore have a positive impact on the environment. Collective impact on emissions when implemented on a regional basis.
<i>Active travel infrastructure audits in Regional Centres and other localities around the region</i>	+	+	+			+	+	++	Overall positive as promoting sustainable travel choices, thus achieving mode shift and improved levels of physical activity. Collective impact on emissions when implemented on a regional basis. Positive impact on cultural heritage and townscape through reductions in traffic in built up areas. Some new infrastructure may be required e.g. a new section of cycle path, however the impact of this is not expected to be significant.
<i>Longer-term investment programme in response to audits</i>	+	+	+			+	+	++	Overall positive as promoting sustainable travel choices, thus achieving mode shift and improved levels of physical activity. Collective impact on emissions when implemented on a regional basis. Positive impact on cultural heritage and townscape through reductions in traffic in built up areas. Some new infrastructure may be required e.g. a new section of cycle path, however the impact of this is not expected to be significant.
<i>Travel behaviour change programme</i>	+	+	+			+	+	++	Overall positive as promoting sustainable travel choices, thus achieving mode shift and improved levels of physical activity. Collective impact on emissions when implemented on a regional basis. Positive impact on cultural heritage and townscape through reductions in traffic in built up areas.

Strategy element Action	Noise	Greenhouse gas emissions	Local air quality	Water, geology and soils	Biodiversity	Cultural heritage	Landscape and visual amenity	Health and other social impacts	Comments and overall assessment (including information on short, medium, long term; permanent, temporary; secondary, cumulative, synergistic effects) and proposed changes to the strategy.
<i>Bespoke travel plan elements and support</i>	+	+	+			+	+	++	Overall positive as promoting sustainable travel choices, thus achieving mode shift and improved levels of physical activity. Collective impact on emissions when implemented on a regional basis. Positive impact on cultural heritage and townscape through reductions in traffic in built up areas.
Congestion and urban issues <i>Improve transport infrastructure</i>	+	+	+			+	+	++	Overall positive as will make the public transport network more attractive and contribute to encouraging mode shift away from the private car. Collective impact on emissions when implemented on a regional basis. Positive impact on cultural heritage and townscape through reductions in traffic in built up areas.
<i>Travel demand management package</i>	+	+	+			+	+	++	Overall positive as promoting sustainable travel choices, thus achieving mode shift and improved levels of physical activity. Collective impact on emissions when implemented on a regional basis. Positive impact on cultural heritage and townscape through reductions in traffic in built up areas.
<i>Package to increase the appeal of active travel and public transport</i>	+	+	+			+	+	++	Overall positive as promoting sustainable travel choices, thus achieving mode shift and improved levels of physical activity. Positive impact on cultural heritage and townscape through reductions in traffic in built up areas.
<i>Strategic Park & Ride sites and services</i>	+/-	-	+/-	?	?	?	-	+	More detailed assessment of impacts required when specific sites identified. Potential positive impact on reducing congestion at a localised level, however potential negative impacts from generation of additional vehicles on the network surrounding the P&R site. Negative impacts from land take of P&R. Positive impacts from improving accessibility.
<i>Evaluate options for parking / pricing strategy for urban centres</i>	+	+	+			+	+	+	Aimed at discouraging car use in built up areas. Will contribute to reductions in noise and air pollution generated by traffic. Collective impact on emissions when implemented at a regional level. Positive impact on townscape and cultural heritage in towns and health through a reduction in car traffic.

Strategy element Action	Noise	Greenhouse gas emissions	Local air quality	Water, geology and soils	Biodiversity	Cultural heritage	Landscape and visual amenity	Health and other social impacts	Comments and overall assessment (including information on short, medium, long term; permanent, temporary; secondary, cumulative, synergistic effects) and proposed changes to the strategy.
<i>Enhance connectivity between Inverness Retail Park and the city centre</i>	+		+			+	+	+	Improving connections between these two important locations by means other than the private car will have a positive impact on health and population by increasing accessibility for those without access to a car. Also likely to contribute to encouraging mode shift away from the car on this route and have a positive impact on noise and local air quality as a result.

CONTROL SHEET

Project/Proposal Name: STRATEGIC ENVIRONMENTAL ASSESSMENT OF THE HITRANS REGIONAL TRANSPORT STRATEGY

Document Title: Annex C - Full Environmental Assessment

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