

Appendix E: Full SEA Assessment Tables

Delivery Theme: Improving safety						
Proposal relevant to the RTS 2024 – 2034: Reduce speeds						
SEA Theme	Objectives	Will the delivery theme...?	Assessment – Preferred Option (with RTS)	Score	Assessment – Alternative Option (without RTS)	Score
Biodiversity, Flora and Fauna	To protect, maintain and enhance biodiversity and ecosystem services, avoiding damage to or loss of designated and undesignated wildlife sites and protected species	Will the proposal cause disturbance or damage to any protected species or habitat?	No significant effects identified. Local effects on biodiversity, flora and fauna, geology and soil, cultural heritage and landscape will need to be identified and addressed on a scheme-specific basis. Specific significant impacts are difficult to identify at this stage.	0	No significant effects identified.	0
		Will the proposal protect and enhance the quality and extent of designated and undesignated sites?				
		Will the proposal result in a greener public realm, resulting in a net gain of biodiversity?				
Landscape	To safeguard and enhance the character and diversity of the landscape and areas of valuable landscape	Will the proposal protect and enhance the character and integrity of the distinctive landscapes and areas of valuable landscapes?	Additional infrastructure to manage traffic / reduce speeds could detract from and/or harm the landscape setting of certain areas within the region and within towns and villages, with a long-term negative impact and will need to be mitigated.	-	No significant effects identified.	0

			Local effects on biodiversity, flora and fauna, geology and soil, cultural heritage and landscape will need to be identified and addressed on a scheme-specific basis. Specific significant impacts are difficult to identify at this stage.			
Cultural Heritage	To protect and enhance historic and archaeological sites and other culturally and historically important features, landscapes and their settings.	<p>Will the proposal protect and enhance sites, features and areas of historical, archaeological and cultural value?</p> <p>Will the proposal help to improve the wider historic environment and sense of place?</p> <p>Will the proposal improve access to sites of historic and/or cultural interest?</p>	<p>Potential for improved setting of heritage assets. Townscapes, streetscapes and heritage conversation sites will benefit from reduced congestion levels and reduced levels of pollutants as more people take up active modes or shift to public transport.</p> <p>Local effects on biodiversity, flora and fauna, geology and soil, cultural heritage and landscape will need to be identified and addressed on a scheme-specific basis. Specific significant impacts are difficult to identify at this stage.</p>	+	No significant effects identified.	0
Climate Change	To reduce greenhouse gas emissions from transport	Will the proposal help to reduce emissions of greenhouse gases and, help Scotland meet its emission targets?	A reduction in transport related emissions including pollutants related to poor air quality. Results of an assessment by Transport for London concluded that 20 mph zones	+	No significant effects identified.	0

			<p>have no net negative effect on emissions.</p> <p>Results indicated clear benefits to driving style and associated carbon and particulate emissions. The research found that vehicles moved more smoothly, with fewer accelerations and decelerations, than in 30mph zones, reducing particulate emissions from tyre and brake wear.</p> <p>Research also suggests that nearly a fifth of people in Scotland feel that too much traffic, and traffic travelling too fast, are major barriers to walking¹; and over half say that fear of being in a collision is a major barrier to them cycling².</p> <p>A higher number of residents participating in active travel</p>			
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¹ Paths for All (2019): National survey of attitudes and barriers to walking in Scotland

<https://www.pathsforall.org.uk/mediaLibrary/other/english/paths-for-all-national-survey--attitudes-and-barriers-to-walking-in-scotland.pdf>

² Cycling Scotland (2022): Cycling Scotland Attitudes and Behaviours Towards Cycling in Scotland

<https://www.cycling.scot/mediaLibrary/other/english/Cycling-Attitudes-and-Behaviours-Report-Wave-4-2022.pdf>

			impacts carbon emissions positively.			
	To adapt the transport network to the predicted effects of climate change	Will the proposal protect the Tactran region from climate change impacts and help the region function during extreme weather events?	No significant effects identified.	0	No significant effects identified.	0
		Will the proposal improve access to services during severe weather events?				
		Will the proposal help those communities at risk during severe weather to recover?				
Air Quality	To reduce all forms of transport related air pollution and improve air quality, in particularly with regards to the three declared Air Quality Management Areas in Crieff, Dundee and Perth	Will the proposal help to reduce emissions of priority pollutants in line with Scottish and European standards (e.g., PM10, NOX, NO2)?	A reduction in transport related emissions including pollutants related to poor air quality. Results of an assessment by Transport for London concluded that 20 mph zones have no net negative effect on emissions. Results indicated clear benefits to driving style and both associated carbon and	++	No significant effects identified.	0

			<p>particulate emissions. The research found that vehicles moved more smoothly, with fewer accelerations and decelerations, than in 30mph zones, reducing particulate emissions from tyre and brake wear.</p> <p>Research also suggests that nearly a fifth of people in Scotland feel that too much traffic, and traffic travelling too fast, are major barriers to walking³; and over half say that fear of being in a collision is a major barrier to them cycling⁴.</p> <p>A higher number of residents participating in active travel impacts emissions and particulate matter positively.</p>			
Noise and Vibration	Reduce noise and vibration associated with the transport network	<p>Will the proposal reduce the levels of noise generated?</p> <p>Will the proposal reduce inequalities</p>	No significant effects identified.	0	No significant effects identified.	0

³ Paths for All (2019): National survey of attitudes and barriers to walking in Scotland

<https://www.pathsforall.org.uk/mediaLibrary/other/english/paths-for-all-national-survey---attitudes-and-barriers-to-walking-in-scotland.pdf>

⁴ Cycling Scotland (2022): Cycling Scotland Attitudes and Behaviours Towards Cycling in Scotland

<https://www.cycling.scot/mediaLibrary/other/english/Cycling-Attitudes-and-Behaviours-Report-Wave-4-2022.pdf>

		in exposure to ambient noise? Will the proposal reduce the number of people exposed to high levels of noise with the potential to cause health problems, particularly those in deprived / vulnerable communities and those groups at risk?				
Human Health	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and the natural environment	Will the proposal promote social inclusion and improve access to services, including healthcare, and opportunities, especially for those without a private car? Will the proposal reduce the likelihood of transport-related road accidents and casualties?	A reduced number of road casualties from road safety infrastructure improvements and lower speeds as well as increased safety awareness and training. The Edinburgh 20mph scheme has seen a statistically significant reduction in average speed of 1.34mph across the 66 speed survey locations where the speed limit was reduced. Providing for safer travel may encourage more active travel and increase the use of public transport within the region.	++	An unsafe road environment will increase the likelihood of accidents and injuries. As a result, people may be less willing to walk or cycle as they perceive these modes as unsafe, with a long-term negative impact both on personal and public health.	--

			<p>This may result in positive effects on physical activity, providing mental and physical health benefits.</p> <p>This may be of particular to adults and young people. Participation in physical activity is lower in older people (75+), unemployed and low-income groups, and people with disabilities. However, providing for safer travel may remove some barriers to active travel modes.</p>		
	<p>To promote, invest in, build and maintain infrastructure to support the development of high-quality places</p>	<p>Will the proposal protect and enhance the character, integrity and liveability of the towns and villages and, rural communities across the region?</p>	<p>Townscapes, streetscapes and heritage conservation will benefit from reduced congestion levels and reduced levels of pollutants as more people take up active modes or shift to public transport.</p>		<p>Declining road safety and security, with a long-term negative impact on the local communities including decreased footfall, declining retail performance, as well as a general downturn in community vitality.</p>
		<p>Will the proposal improve the public realm by improving the public realm and access?</p>	<p>Interventions should result in positive effects for access and accessibility. Providing safe and convenient options to walk and cycle will encourage public transport use. They may also increase accessibility to people who may otherwise have not felt safe. Interventions will result in an increase in</p>		

			accessible places, and opportunities for interaction. The groups most likely to feel the benefits are older people (65+) and those who are socially isolated, have a disability, or are from low-income households.			
Population	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and the natural environment	<p>Will the proposal promote social inclusion and improve access to key services and opportunities, especially for those without a private car?</p> <p>Will the proposal help to improve access to greenspaces both for recreational and health benefits?</p> <p>Will the proposal help to support an ageing population by providing appropriate transport choices to meet their needs?</p>	Interventions should result in positive effects for access and accessibility. Providing safe and convenient options to walk and cycle will encourage public transport use. They may also increase accessibility to people who may otherwise have not felt safe. Interventions will result in an increase in accessible places, and opportunities for interaction, including access to greenspaces. The groups most likely to feel the benefits are older people (65+) and those who are socially isolated, have a disability, or are from low-income households.	++	Declining road safety and security, with a long-term negative impact on the local communities including decreased footfall, declining retail performance, as well as a general downturn in community vitality.	--

Geology and Soil	To safeguard and improve soil quality, particularly high value agricultural land and carbon rich soil and peatland habitats	Does the proposal cause soil sealing and compaction?	No significant effects identified.	0	No significant effects identified.	0
		Does the proposal result in the release of substances that could potentially contaminate the soil?	Local effects on biodiversity, flora and fauna, geology and soil, cultural heritage and landscape will need to be identified and addressed on a scheme-specific basis. Specific significant impacts are difficult to identify at this stage.			
		Does the proposal ensure that possible contamination will be properly remediated and not impact upon on sensitive receptors, such as surface water and groundwater?	The RTS can play a role in protecting carbon rich soils and peatland habitats when identifying potential locations for new infrastructure or routes. Detailed mitigation and enhancement opportunities will be developed as part of the design and consenting process at scheme level.			
	To protect sites designated for their geological interest	Will the proposal protect and enhance sites, designated for their geological interest?	No significant effects identified.		No significant effects identified.	
Water	To protect, maintain and improve the quality of water environment and wetlands that could be directly or	Does the proposal result in the release of water-borne pollution into watercourses, groundwater or reservoirs?	Reducing transport related emissions indirectly has the potential to improve water quality. Local effects on biodiversity, flora and fauna, geology and	+	No significant effects identified.	0

	indirectly affected by transport infrastructure and protect against the risk of flooding	Does the proposal increase the amount of surface water run-off into water environment? Or increase the risk of flooding?	soil, cultural heritage and landscape will need to be identified and addressed on a scheme-specific basis. Specific significant impacts are difficult to identify at this stage.			
		Does the proposal physically impact on a watercourse?				
Material assets	To promote and improve the sustainable use and management of the transport network	Will the proposal provide adequate transport choices that meet the needs of the people within the Tactran region?	Proposals will contribute to the Vision Zero objective is to reduce road deaths and serious injuries by 50 per cent by 2030 and for all deaths and serious injuries from road collisions to be eliminated from Scotland's streets by 2050, influencing travel choices positively.	+	Local (and regional and national) material assets may become increasingly unsafe to use. Likely to require the use of large quantities of natural resources for repair and maintenance.	-
	To reduce the use of natural resources	Does the proposal allow for the sustainable use of natural resources?				

Delivery Theme: Improving safety						
Proposal relevant to the RTS 2024 – 2034: Road Education						
SEA Theme	Objectives	Will the delivery theme...?	Assessment – Preferred Option (with RTS)	Score	Assessment – Alternative Option (without RTS)	Score
Biodiversity, Flora and Fauna	To protect, maintain and enhance biodiversity and ecosystem services, avoiding damage to or loss of designated and undesignated wildlife sites and protected species	Will the proposal cause disturbance or damage to any protected species or habitat?	No significant effects identified.	0	No significant effects identified.	0
		Will the proposal protect and enhance the quality and extent of designated and undesignated sites?				
		Will the proposal result in a greener public realm, resulting in a net gain of biodiversity?				
Landscape	To safeguard and enhance the character and diversity of the landscape and areas of valuable landscape	Will the proposal protect and enhance the character and integrity of the distinctive landscapes and areas of valuable landscapes?	No significant effects identified.	0	No significant effects identified.	0
Cultural Heritage	To protect and enhance historic and archaeological	Will the proposal protect and enhance sites,	No significant effects identified.	0	No significant effects identified.	0

	sites and other culturally and historically important features, landscapes and their settings.	features and areas of historical, archaeological and cultural value?				
		Will the proposal help to improve the wider historic environment and sense of place?				
		Will the proposal improve access to sites of historic and/or cultural interest?				
Climate Change	To reduce greenhouse gas emissions from transport	Will the proposal help to reduce emissions of greenhouse gases and, help Scotland meet its emission targets?	No significant effects identified.	0	No significant effects identified.	0
	To adapt the transport network to the predicted effects of climate change	Will the proposal protect the Tactran region from climate change impacts and help the region function during extreme weather events?	No significant effects identified.		No significant effects identified.	
		Will the proposal improve access to services during				

		severe weather events? Will the proposal help those communities at risk during severe weather to recover?				
Air Quality	To reduce all forms of transport related air pollution and improve air quality, in particularly with regards to the three declared Air Quality Management Areas in Crieff, Dundee and Perth	Will the proposal help to reduce emissions of priority pollutants in line with Scottish and European standards (e.g., PM10, NOX, NO2)?	No significant effects identified.	0	No significant effects identified.	0
Noise and Vibration	Reduce noise and vibration associated with the transport network	Will the proposal reduce the levels of noise generated? Will the proposal reduce inequalities in exposure to ambient noise? Will the proposal reduce the number of people exposed to high levels of noise with the potential to cause health problems,	No significant effects identified.	0	No significant effects identified.	0

		particularly those in deprived / vulnerable communities and those groups at risk?				
Human Health	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and the natural environment	<p>Will the proposal promote social inclusion and improve access to services, including healthcare, and opportunities, especially for those without a private car?</p> <p>Will the proposal reduce the likelihood of transport-related road accidents and casualties?</p>	<p>Delivering a programme of education training and publicity to increase awareness and knowledge, creating positive attitudes and behaviours which will contribute to safer roads for all road users.</p> <p>Education is key in reducing both the number and severity of accidents and casualties. According to METHEKA ET AL. (2015) the chance of injury was 1.3 times higher for those who had not received road safety education.</p> <p>Providing for safer travel may encourage more active travel and increase the use of public transport within the region. This may result in positive effects on physical activity, providing mental and physical health benefits.</p>	+	<p>Reducing road safety inputs through educational inputs on safe walking/cycling etc. would be to the detriment of a number of protected groups.</p> <p>This may impact the overall cost to society, with the Department for Transport estimating the wider costs to society that can be attached to road traffic collisions involving personal injury are as follows per incident: Fatal - £2,053,814; Serious - £237,527; and Slight - £ 24,911.</p> <p>There will still be road safety activities that are progressed with regional and national partners, however these will be more limited in scope and may take longer to deliver.</p>	-

			This may be of particular to adults and young people. Participation in physical activity is lower in older people (75+), unemployed and low-income groups, and people with disabilities. However, providing for safer travel may remove some barriers to active travel modes.			
	To promote, invest in, build and maintain infrastructure to support the development of high-quality places	Will the proposal protect and enhance the character, integrity and liveability of the towns and villages and, rural communities across the region?	No significant effects identified.		No significant effects identified.	
		Will the proposal improve the public realm by improving the public realm and access?				
Population	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including	Will the proposal promote social inclusion and improve access to key services and opportunities, especially for those without a private car?	Delivering a programme of education training and publicity to increase awareness and knowledge, creating positive attitudes and behaviours which will contribute to safer roads for all road users.	+	Reducing road safety inputs through educational inputs on safe walking/cycling etc. would be to the detriment of a number of protected groups. This may impact the overall cost to society, with the Department for Transport	-

	healthcare), employment and the natural environment	<p>Will the proposal help to improve access to greenspaces both for recreational and health benefits?</p> <p>Will the proposal help to support an ageing population by providing appropriate transport choices to meet their needs?</p>	<p>Education is key in reducing both the number and severity of accidents and casualties. According to METHEKA ET AL. (2015) the chance of injury was 1.3 times higher for those who had not received road safety education.</p> <p>Providing for safer travel may encourage more active travel and increase the use of public transport within the region. This may result in positive effects on physical activity, providing mental and physical health benefits.</p> <p>This may be of particular to adults and young people. Participation in physical activity is lower in older people (75+), unemployed and low-income groups, and people with disabilities. However, providing for safer travel may remove some barriers to active travel modes.</p>		<p>estimating the wider costs to society that can be attached to road traffic collisions involving personal injury are as follows per incident: Fatal - £2,053,814; Serious - £237,527; and Slight - £ 24,911.</p> <p>There will still be road safety activities that are progressed with regional and national partners, however these will be more limited in scope and may take longer to deliver.</p>	
Geology and Soil	To safeguard and improve soil quality, particularly high value agricultural land	<p>Does the proposal cause soil sealing and compaction?</p> <p>Does the proposal result in the release</p>	No significant effects identified.	0	No significant effects identified.	0

	and carbon rich soil and peatland habitats	of substances that could potentially contaminate the soil?				
		Does the proposal ensure that possible contamination will be properly remediated and not impact upon sensitive receptors, such as surface water and groundwater?				
	To protect sites designated for their geological interest	Will the proposal protect and enhance sites, designated for their geological interest?	No significant effects identified.		No significant effects identified.	
Water	To protect, maintain and improve the quality of water environment and wetlands that could be directly or indirectly affected by transport infrastructure and protect against the risk of flooding	Does the proposal result in the release of water-borne pollution into watercourses, groundwater or reservoirs? Does the proposal increase the amount of surface water run-off into water environment? Or	Reducing transport related emissions indirectly has the potential to improve water quality.	+	No significant effects identified.	0

		increase the risk of flooding?				
		Does the proposal physically impact on a watercourse?				
Material assets	To promote and improve the sustainable use and management of the transport network	Will the proposal provide adequate transport choices that meet the needs of the people within the Tactran region?	No significant effects identified.	0	No significant effects identified.	0
	To reduce the use of natural resources	Does the proposal allow for the sustainable use of natural resources?				

Delivery Theme: Improving safety						
Proposal relevant to the RTS 2024 – 2034: Improve Rest and Welfare Facilities for Hauliers						
SEA Theme	Objectives	Will the delivery theme...?	Assessment – Preferred Option (with RTS)	Score	Assessment – Alternative Option (without RTS)	Score
Biodiversity, Flora and Fauna	To protect, maintain and enhance biodiversity and ecosystem services, avoiding damage to or loss of designated and undesignated wildlife sites and protected species	Will the proposal cause disturbance or damage to any protected species or habitat?	Biodiversity loss, including direct or indirect impacts on designated or undesignated sites.	-	No significant effects identified.	0
		Will the proposal protect and enhance the quality and extent of designated and undesignated sites?	The policy is aimed at safety-led improvements to rest and welfare facilities along the arterial road network which are either already in place, but development including land take will be required. The general effect in the long term will be negative and will need to be mitigated.			
		Will the proposal result in a greener public realm, resulting in a net gain of biodiversity?	Local effects on biodiversity, flora and fauna, geology and soil, cultural heritage and landscape will need to be identified and addressed on a scheme-specific basis.			

			Development will broadly follow the existing road network, but specific significant impacts are difficult to identify at this stage.			
Landscape	To safeguard and enhance the character and diversity of the landscape and areas of valuable landscape	Will the proposal protect and enhance the character and integrity of the distinctive landscapes and areas of valuable landscapes?	<p>Potentially significant landscape and visual impacts, including potential impacts on sensitive landscapes.</p> <p>The policy is aimed at safety-led improvements to rest and welfare facilities along the arterial road network which are either already in place, but development including land take will be required. The general effect in the long term will be negative and will need to be mitigated.</p> <p>Local effects on biodiversity, flora and fauna, geology and soil, cultural heritage and landscape will need to be identified and addressed on a scheme-specific basis.</p> <p>Development will broadly follow the existing road network, but specific significant impacts are difficult to identify at this stage.</p>	--	No significant effects identified.	0
Cultural Heritage	To protect and enhance historic	Will the proposal protect and	Potential direct or indirect impacts on designated or	-	No significant effects identified.	0

	and archaeological sites and other culturally and historically important features, landscapes and their settings.	enhance sites, features and areas of historical, archaeological and cultural value? Will the proposal help to improve the wider historic environment and sense of place? Will the proposal improve access to sites of historic and/or cultural interest?	undesigned heritage assets or their setting. The policy is aimed at safety-led improvements to rest and welfare facilities along the arterial road network which are either already in place, but development including land take will be required. The general effect in the long term will be negative and will need to be mitigated. Local effects on biodiversity, flora and fauna, geology and soil, cultural heritage and landscape will need to be identified and addressed on a scheme-specific basis. Development will broadly follow the existing road network, but specific significant impacts are difficult to identify at this stage.			
Climate Change	To reduce greenhouse gas emissions from transport	Will the proposal help to reduce emissions of greenhouse gases and, help Scotland meet its emission targets?	Potentially minor negative implications for carbon emissions, either through vehicle traffic, embodied carbon in construction materials, or loss of carbon-rich soils such as peat.	-	No significant effects identified.	0

	To adapt the transport network to the predicted effects of climate change	<p>Will the proposal protect the Tactran region from climate change impacts and help the region function during extreme weather events?</p> <p>Will the proposal improve access to services during severe weather events?</p> <p>Will the proposal help those communities at risk during severe weather to recover?</p>	<p>Carbon loss to the atmosphere as carbon dioxide through oxidation of exposed organic soils resulting in feedback to climate change.</p> <p>When a soil is sealed it is no longer able to assimilate and take up any more carbon.</p>		No significant effects identified.	
Air Quality	To reduce all forms of transport related air pollution and improve air quality, in particularly with regards to the three declared Air Quality Management Areas in Crieff, Dundee and Perth	Will the proposal help to reduce emissions of priority pollutants in line with Scottish and European standards (e.g., PM10, NOX, NO2)?	Impacts on air quality from construction activities and from traffic during operation	-	No significant effects identified.	0
Noise and Vibration	Reduce noise and vibration	Will the proposal reduce the levels of noise generated?	Potentially minor negative noise impacts from	-	No significant effects identified.	0

	associated with the transport network	Will the proposal reduce inequalities in exposure to ambient noise?	construction machinery and traffic or operational traffic.			
		Will the proposal reduce the number of people exposed to high levels of noise with the potential to cause health problems, particularly those in deprived / vulnerable communities and those groups at risk?				
Human Health	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and the natural environment	Will the proposal promote social inclusion and improve access to services, including healthcare, and opportunities, especially for those without a private car?	Potentially significant noise or air quality impacts from construction machinery and traffic or operational traffic. There are also potentially significant positive impacts through improved safety and reduced accident risk.	+ / -	Not improving and increasing the range of rest facilities within the region would be to the detriment of overall road safety. With hauliers required to take mandatory breaks and rest periods, building better roadside facilities will improve the quality of HGV drivers' rest and recovery, ensuring everyone can feel safe on our roads.	-
		Will the proposal reduce the likelihood of transport-related road accidents and casualties?				

	To promote, invest in, build and maintain infrastructure to support the development of high-quality places	Will the proposal protect and enhance the character, integrity and liveability of the towns and villages and, rural communities across the region?	No significant effects identified.		No significant effects identified.	
		Will the proposal improve the public realm by improving the public realm and access?				
Population	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and the natural environment	Will the proposal promote social inclusion and improve access to key services and opportunities, especially for those without a private car?	Potentially significant noise or air quality impacts from construction machinery and traffic or operational traffic. There are also potentially significant positive impacts through improved safety and reduced accident risk.	+ /-	Not improving and increasing the range of rest facilities within the region would be to the detriment of overall road safety. With hauliers required to take mandatory breaks and rest periods, building better roadside facilities will improve the quality of HGV drivers' rest and recovery, ensuring everyone can feel safe on our roads.	-
		Will the proposal help to improve access to greenspaces both for recreational and health benefits?				
		Will the proposal help to support an ageing population				

		by providing appropriate transport choices to meet their needs?				
Geology and Soil	To safeguard and improve soil quality, particularly high value agricultural land and carbon rich soil and peatland habitats	Does the proposal cause soil sealing and compaction?	Potential loss of soil during construction, erosion, surface water pollution, compaction, sealing.	-	No significant effects identified.	0
		Does the proposal result in the release of substances that could potentially contaminate the soil?	The policy is aimed at safety-led improvements to rest and welfare facilities along the arterial road network which are either already in place, but development including land take will be required. The general effect in the long term will be negative and will need to be mitigated.			
	Does the proposal ensure that possible contamination will be properly remediated and not impact upon on sensitive receptors, such as surface water and groundwater?	Local effects on biodiversity, flora and fauna, geology and soil, cultural heritage and landscape will need to be identified and addressed on a scheme-specific basis.				
	To protect sites designated for their geological interest	Will the proposal protect and enhance sites, designated for their geological interest?	Development will broadly follow the existing road network, but specific significant impacts are difficult to identify at this stage.		No significant effects identified.	

			The RTS can play a role in protecting carbon rich soils and peatland habitats when identifying potential locations for new infrastructure or routes. Detailed mitigation and enhancement opportunities will be developed as part of the design and consenting process at scheme level.			
Water	To protect, maintain and improve the quality of water environment and wetlands that could be directly or indirectly affected by transport infrastructure and protect against the risk of flooding	<p>Does the proposal result in the release of water-borne pollution into watercourses, groundwater or reservoirs?</p> <p>Does the proposal increase the amount of surface water run-off into water environment? Or increase the risk of flooding?</p> <p>Does the proposal physically impact on a watercourse?</p>	<p>Potential effects on the severity of flood risk at specific locations or on water quality from pollution.</p> <p>The policy is aimed at safety-led improvements to rest and welfare facilities along the arterial road network which are either already in place, but development including land take will be required. The general effect in the long term will be negative and will need to be mitigated.</p> <p>Local effects on biodiversity, flora and fauna, geology and soil, cultural heritage and landscape will need to be identified and addressed on a scheme-specific basis.</p>	-	No significant effects identified.	0

			Development will broadly follow the existing road network, but specific significant impacts are difficult to identify at this stage.			
Material assets	To promote and improve the sustainable use and management of the transport network	Will the proposal provide adequate transport choices that meet the needs of the people within the Tactran region?	No significant effects identified.	0	No significant effects identified.	0
	To reduce the use of natural resources	Does the proposal allow for the sustainable use of natural resources?				

Delivery Theme: Influencing travel choices and behaviour						
Proposal relevant to the RTS 2024 – 2034: Promoting smarter choices						
SEA Theme	Objectives	Will the delivery theme...?	Assessment – Preferred Option (with RTS)	Score	Assessment – Alternative Option (without RTS)	Score
Biodiversity, Flora and Fauna	To protect, maintain and enhance biodiversity and ecosystem services, avoiding damage to or loss of designated and undesignated wildlife sites and protected species	<p>Will the proposal cause disturbance or damage to any protected species or habitat?</p> <p>Will the proposal protect and enhance the quality and extent of designated and undesignated sites?</p> <p>Will the proposal result in a greener public realm, resulting in a net gain of biodiversity?</p>	<p>A shift towards active and sustainable travel will result in a long-term positive impact on biodiversity, reducing the negative impacts of indiscriminate car usage. With the latter potentially disrupting and damaging vulnerable habitats and species.</p> <p>The policy is aimed at the enhancement of active travel links which are either already in existence, or which may need to be constructed. The general effect in the long term will be positive if a modal shift away from private transport is achieved. For new developments which include land take there may be some negative impacts which will need to be mitigated.</p> <p>Local effects on biodiversity, flora and fauna, geology and</p>	+	Not promoting active and sustainable modes means that the negative impacts of the indiscriminate use of cars will remain and will, indeed, become worse.	-

			<p>soil, cultural heritage and landscape will need to be identified and addressed on a scheme-specific basis. Specific significant impacts are difficult to identify at this stage.</p> <p>As part of infrastructure investments to further improve the infrastructure for active and sustainable travel there will be opportunities to realise a net gain in biodiversity.</p>			
Landscape	To safeguard and enhance the character and diversity of the landscape and areas of valuable landscape	Will the proposal protect and enhance the character and integrity of the distinctive landscapes and areas of valuable landscapes?	<p>A subsequent decline in indiscriminate car usage holds the potential for long-term positive impacts, with landscapes, townscapes and streetscapes benefitting from reduced visual intrusion from road traffic.</p> <p>The policy is aimed at the enhancement of active travel links which are either already in existence, or which may need to be constructed. The general effect in the long term will be positive if a modal shift away from private transport is achieved. For new developments which include land take there may be some</p>	+	Not promoting active and sustainable modes means that the negative impacts of the indiscriminate use of cars will remain and is, indeed likely to increase, with long-term negative impacts on landscapes, townscapes and streetscapes within the region.	-

			<p>negative impacts which will need to be mitigated.</p> <p>Local effects on biodiversity, flora and fauna, geology and soil, cultural heritage and landscape will need to be identified and addressed on a scheme-specific basis. Specific significant impacts are difficult to identify at this stage.</p>			
Cultural Heritage	To protect and enhance historic and archaeological sites and other culturally and historically important features, landscapes and their settings.	<p>Will the proposal protect and enhance sites, features and areas of historical, archaeological and cultural value?</p> <p>Will the proposal help to improve the wider historic environment and sense of place?</p> <p>Will the proposal improve access to sites of historic and/or cultural interest?</p>	<p>Townscapes, streetscapes and heritage conversation sites will benefit through improved setting of heritage assets.</p> <p>With air pollution known to have a damaging impact on historical buildings and assets, a reduction in the indiscriminate use of cars will also help preserve those assets for future generations.</p> <p>Improving awareness of the active and sustainable modes available can also improve accessibility of these sites by such modes.</p> <p>The policy is aimed at the enhancement of active travel links which are either already in</p>	++	Failing to promote active and sustainable modes means that the negative impacts of the indiscriminate use of cars will remain and is, indeed likely to increase, with road traffic distracting from the setting of historic sites, traffic pollution adding to the environmental damage of buildings and monuments, with long-term negative impacts.	-

			<p>existence, or which may need to be constructed. The general effect in the long term will be positive if a modal shift away from private transport is achieved. For new developments which include land take there may be some negative impacts which will need to be mitigated.</p> <p>Local effects on biodiversity, flora and fauna, geology and soil, cultural heritage and landscape will need to be identified and addressed on a scheme-specific basis. Specific significant impacts are difficult to identify at this stage.</p>			
Climate Change	To reduce greenhouse gas emissions from transport	Will the proposal help to reduce emissions of greenhouse gases and, help Scotland meet its emission targets?	Increased and more readily available information on Smarter Choices and a greater awareness of walking and cycling and public transport and its benefits through marketing could lead to more people to travel by active and sustainable modes more often, with an associated reduction in emissions and subsequent improved air quality.	++	Not promoting active and sustainable modes means that the negative impacts of the indiscriminate use of cars will remain and will, indeed, become worse.	-

			Reduced traffic levels and subsequently reduced carbon emissions and air pollutants, with increased bus, rail and active travel use.			
	To adapt the transport network to the predicted effects of climate change	Will the proposal protect the Tactran region from climate change impacts and help the region function during extreme weather events?	No positive or significant negative effects on soil have been identified.		No positive or significant negative effects on soil have been identified.	
		Will the proposal improve access to services during severe weather events?				
		Will the proposal help those communities at risk during severe weather to recover?				
Air Quality	To reduce all forms of transport related air pollution and improve air quality, in particularly with regards to the three declared Air Quality Management Areas	Will the proposal help to reduce emissions of priority pollutants in line with Scottish and European standards (e.g., PM10, NOX, NO2)?	Considerable improvement of air quality within the region, with long-term positive impacts. Air Quality impacts are positive largely through contribution to modal shift away from private car journeys. Within the Tactran region, the declared AQMAs in	++	Not promoting active and sustainable modes means that the negative impacts of the indiscriminate use of cars on local air quality through high levels of harmful emissions will remain and will, indeed, become worse.	-

	in Crieff, Dundee and Perth		Crieff, Dundee and Perth would benefit through reduced private car journeys.			
Noise and Vibration	Reduce noise and vibration associated with the transport network	<p>Will the proposal reduce the levels of noise generated?</p> <p>Will the proposal reduce inequalities in exposure to ambient noise?</p> <p>Will the proposal reduce the number of people exposed to high levels of noise with the potential to cause health problems, particularly those in deprived / vulnerable communities and those groups at risk?</p>	Reduced noise levels due to reduced traffic levels.	+	Not promoting active and sustainable modes means that the negative impacts of the indiscriminate use of cars on noise pollution through will remain and will, indeed, become worse.	-
Human Health	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare),	Will the proposal promote social inclusion and improve access to services, including healthcare, and opportunities, especially for those without a private car?	<p>Overall improved health and wellbeing outcomes because of reduced pollution, improved air quality and increased levels of active travel use.</p> <p>Encouraging active travel will have a long-term positive impact upon human health by encouraging more people to</p>	++	Not promoting active and sustainable travel could result in fewer people walking and cycling. Indiscriminate car usage may increase, subsequently increasing the levels of pollutants, with long-term negative impacts both on private and public health.	--

	employment and the natural environment	Will the proposal reduce the likelihood of transport-related road accidents and casualties?	<p>travel more actively more often. A reduction in indiscriminate car use will result in a decline in emissions of pollutants which can contribute to a number of respiratory conditions, ultimately reducing life expectancy, and reduce accidents and casualties on the roads within the region.</p> <p>Making people aware of the active and sustainable travel opportunities available to them can also increase their ability to access healthcare facilities and areas of open space by such modes, especially those without car access.</p>			
	To promote, invest in, build and maintain infrastructure to support the development of high-quality places	Will the proposal protect and enhance the character, integrity and liveability of the towns and villages and, rural communities across the region?	Less car dominated streetscapes and townscapes would help to improve both formal and informal surveillance including a higher number of people using the public realm.		No positive or significant negative effects on soil have been identified.	
		Will the proposal improve the public realm by improving the public realm and access?				

Population	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and the natural environment	Will the proposal promote social inclusion and improve access to key services and opportunities, especially for those without a private car?	A decline in indiscriminate use of the private car and a shift to active and sustainable modes will reduce congestion, allowing for a more efficient movement of freight as well as allowing for greater journey time reliability.	+	Not promoting active and sustainable travel is likely to result in a further increase of indiscriminate car usage within the region, resulting in increased congestion and more unreliable journey times both for people and goods, with long-term negative impacts.	--
		Will the proposal help to improve access to greenspaces both for recreational and health benefits?	Some population segments may benefit from being made aware of active and sustainable travel options, and hence social, training, educational or employment opportunities that they were previously unaware of, with a long-term positive impact on the population within the region.			
		Will the proposal help to support an ageing population by providing appropriate transport choices to meet their needs?				
Geology and Soil	To safeguard and improve soil quality, particularly high value agricultural land and carbon rich soil and peatland habitats	Does the proposal cause soil sealing and compaction?	No positive or significant negative effects on soil have been identified.	0	No positive or significant negative effects on soil have been identified.	0
		Does the proposal result in the release of substances that could potentially contaminate the soil?	The policy is aimed at the enhancement of active travel links which are either already in existence, or which may need to be constructed. The general			

		Does the proposal ensure that possible contamination will be properly remediated and not impact upon on sensitive receptors, such as surface water and groundwater?	<p>effect in the long term will be positive if a modal shift away from private transport is achieved. For new developments which include land take there may be some negative impacts which will need to be mitigated.</p> <p>Local effects on biodiversity, flora and fauna, geology and soil, cultural heritage and landscape will need to be identified and addressed on a scheme-specific basis. Specific significant impacts are difficult to identify at this stage.</p> <p>The RTS can play a role in protecting carbon rich soils and peatland habitats when identifying potential locations for new infrastructure or routes. Detailed mitigation and enhancement opportunities will be developed as part of the design and consenting process at scheme level</p>			
	To protect sites designated for their geological interest	Will the proposal protect and enhance sites, designated for their geological interest?	No positive or significant negative effects on soil have been identified.		No positive or significant negative effects on soil have been identified.	

Water	To protect, maintain and improve the quality of water environment and wetlands that could be directly or indirectly affected by transport infrastructure and protect against the risk of flooding	Does the proposal result in the release of water-borne pollution into watercourses, groundwater or reservoirs?	Reducing transport related emissions indirectly has the potential to improve water quality.	+	No positive or significant negative effects have been identified.	0
		Does the proposal increase the amount of surface water run-off into water environment? Or increase the risk of flooding?	The policy is aimed at the enhancement of active travel links which are either already in existence, or which may need to be constructed. The general effect in the long term will be positive if a modal shift away from private transport is achieved. For new developments which include land take there may be some negative impacts which will need to be mitigated.			
		Does the proposal physically impact on a watercourse?	Local effects on biodiversity, flora and fauna, geology and soil, cultural heritage and landscape will need to be identified and addressed on a scheme-specific basis. Specific significant impacts are difficult to identify at this stage.			
Material assets	To promote and improve the sustainable use and management of the transport network	Will the proposal provide adequate transport choices that meet the needs of the	Promoting active and sustainable modes also promotes a more effective use of the transport infrastructure	+	Not promoting active and sustainable modes will not address the current inefficient use of the region's transport infrastructure and assets,	-

		people within the Tactran region?	and assets as well as the sustainable use of resources.		contributing to the medium- to long-term decline of such assets.	
	To reduce the use of natural resources	Does the proposal allow for the sustainable use of natural resources?				

Delivery Theme: Influencing travel choices and behaviour						
Proposal relevant to the RTS 2024 – 2034: Develop and deliver Travel Plans and School Travel Plans						
SEA Theme	Objectives	Will the delivery theme...?	Assessment – Preferred Option (with RTS)	Score	Assessment – Alternative Option (without RTS)	Score
Biodiversity, Flora and Fauna	To protect, maintain and enhance biodiversity and ecosystem services, avoiding damage to or loss of designated and undesignated wildlife sites and protected species	Will the proposal cause disturbance or damage to any protected species or habitat?	Travel Plans hold the potential for long-term positive impacts with regard to biodiversity. They are aimed to encourage people to use alternatives to cars and, include a range of measures which encourage people to walk, cycle, use public transport and share car journeys. They can, subsequently, help to reduce the size of car parks required for new developments and improve air quality, with long-term positive impacts to flora and fauna.	+	Not engaging in the development and delivery of travel plans could result in an increase of car trips, with negative impacts on biodiversity. Both from land take for car related infrastructure, such as car parks, and increased pollution levels.	-
		Will the proposal protect and enhance the quality and extent of designated and undesignated sites?				
		Will the proposal result in a greener public realm, resulting in a net gain of biodiversity?				
Landscape	To safeguard and enhance the character and diversity of the landscape and areas of valuable landscape	Will the proposal protect and enhance the character and integrity of the distinctive landscapes and areas of valuable landscapes?	Travel Plans hold the potential for long-term positive impacts on the landscape. They are aimed at minimising the impacts that developments have on their surroundings by encouraging people to use alternatives to cars and, include a range of measures which encourage people to walk,	+	Not engaging in the development and delivery of travel plans could result in an increase of car trips, with negative impacts on the landscape due to a significantly higher development footprint resulting from the land take required for transport related infrastructure.	-

			cycle, use public transport and share car journeys. They can, subsequently help to reduce the development footprint considerably.			
Cultural Heritage	To protect and enhance historic and archaeological sites and other culturally and historically important features, landscapes and their settings.	Will the proposal protect and enhance sites, features and areas of historical, archaeological and cultural value? Will the proposal help to improve the wider historic environment and sense of place? Will the proposal improve access to sites of historic and/or cultural interest?	Travel Plans hold the potential for minor long-term positive impacts regarding protecting and enhancing the cultural heritage by reducing traffic related pollutants with the latter causing serious corrosion effects on stone, wood, metals, paints and other materials on the surface of the heritage through acidification reactions and oxidation reactions.	+	Not engaging in the development and delivery of travel plans could result in minor negative impact regarding protecting and enhancing the cultural heritage due continued high levels of traffic related pollutants, resulting in continued damage to the heritage.	-
Climate Change	To reduce greenhouse gas emissions from transport	Will the proposal help to reduce emissions of greenhouse gases and, help Scotland meet its emission targets?	Travel Plans hold the potential for significant long-term positive impacts regarding climatic factors by encouraging people to use alternatives to cars and, include a range of measures which encourage people to walk, cycle, use public transport and share car journeys. They can,	++	Not engaging in the development and delivery of travel plans could result in an increase of car trips, with long-term negative impacts on climatic factors due to increasing high levels of carbon emissions from road transport.	-

			subsequently, significantly reduce the level of carbon emissions from road transport.			
	To adapt the transport network to the predicted effects of climate change	Will the proposal protect the Tactran region from climate change impacts and help the region function during extreme weather events?	No positive or significant negative effects have been identified.		No positive or significant negative effects have been identified.	
		Will the proposal improve access to services during severe weather events?				
		Will the proposal help those communities at risk during severe weather to recover?				
Air Quality	To reduce all forms of transport related air pollution and improve air quality, in particularly with regards to the three declared Air Quality Management Areas in Crieff, Dundee and Perth	Will the proposal help to reduce emissions of priority pollutants in line with Scottish and European standards (e.g., PM10, NOX, NO2)?	Travel Plans hold the potential for significant long-term positive impacts regarding climatic factors by encouraging people to use alternatives to cars and, include a range of measures which encourage people to walk, cycle, use public transport and share car journeys. They can, subsequently, significantly	++	Not engaging in the development and delivery of travel plans could result in an increase of car trips, with long-term negative impacts on air quality due to increasing high levels of harmful pollutants, including particulate matter, from road transport.	-

			<p>reduce the level of harmful pollutants, including particulate matter, from road transport.</p> <p>Air Quality impacts are positive largely through contribution to modal shift away from private car journeys. Within the Tactran region, the declared AQMAs in Crieff, Dundee and Perth would benefit through reduced private car journeys.</p>			
Noise and Vibration	Reduce noise and vibration associated with the transport network	<p>Will the proposal reduce the levels of noise generated?</p> <p>Will the proposal reduce inequalities in exposure to ambient noise?</p> <p>Will the proposal reduce the number of people exposed to high levels of noise with the potential to cause health problems, particularly those in deprived / vulnerable communities and those groups at risk?</p>	Reduced noise levels due to reduced traffic levels.	+	Not engaging in the development and delivery of travel plans means that the negative impacts of the indiscriminate use of cars on noise pollution will remain and will, indeed, become worse.	-

Human Health	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and the natural environment	Will the proposal promote social inclusion and improve access to services, including healthcare, and opportunities, especially for those without a private car?	Travel Plans hold the potential for long-term positive impacts with regard to human health. They are aimed to encourage people to use alternatives to cars and, include a range of measures which encourage people to walk, cycle, use public transport and share car journeys.	+	Not engaging in the development and delivery of travel plans could result in an increase of car trips at the expense of active travel. Increasing volumes of car traffic present a barrier to people to travel more actively more often and encourage a more sedentary travel behaviour, with negative impacts on human health. An increased number in car trips can also result in increased pollution levels that are damaging to human health.	-	
		Will the proposal reduce the likelihood of transport-related road accidents and casualties?	They can, subsequently, help to reduce emissions and improve air quality, with long-term positive impacts to human health. They also encourage people to travel more actively more often.				
	To promote, invest in, build and maintain infrastructure to support the development of high-quality places	Will the proposal protect and enhance the character, integrity and liveability of the towns and villages and, rural communities across the region?	Proposals may include changes to the public realm in the area immediately surrounding the school to improve visual attractiveness. The aim of this is to create a place that is enjoyable to be in and which fosters greater social interactions, such as between parents, between members of the school community and local residents etc.				Not engaging in the development and delivery of travel plans and changes to the public realm could result in an increase of car trips, contributing to congestion and reduced journey time reliability. Not engaging in the development and delivery of travel plans also supports car-dependent developments difficult to access by those without a car. There could therefore be a long-term negative impact on human health.
		Will the proposal improve the public realm by improving the public realm and access?	Small scale opportunities for play should be included to make the last section of the				

			journey more fun and subsequently encourage active modes of transport.			
Population	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and the natural environment	Will the proposal promote social inclusion and improve access to key services and opportunities, especially for those without a private car?	Travel Plans hold the potential for long-term positive impacts with regard to the population. They are aimed to encourage people to use alternatives to cars and, include a range of measures which encourage people to walk, cycle, use public transport and share car journeys.	++	Not engaging in the development and delivery of travel plans could result in an increase of car trips, contributing to congestion and reduced journey time reliability. Not engaging in the development and delivery of travel plans also supports car-dependent developments difficult to access by those without a car. There could therefore be a long-term negative impact on the population.	
		Will the proposal help to improve access to greenspaces both for recreational and health benefits?	By encouraging travel by active travel and public transport, they can help reduce congestion and improve journey time reliability. By raising awareness of and facilitating travel by alternative modes, they can help promote social inclusion, ensuring that sites are less car-orientated and accessible by a variety of modes.			
		Will the proposal help to support an ageing population by providing appropriate transport choices to meet their needs?				
Geology and Soil	To safeguard and improve soil quality, particularly high value agricultural land	Does the proposal cause soil sealing and compaction?	Travel Plans hold the potential for long-term positive impacts on soil. They are aimed to encourage people to use alternatives to cars and, include	+	Not engaging in the development and delivery of travel plans could result in long-term negative impacts on soil arising from the increased	-
		Does the proposal result in the release				

	and carbon rich soil and peatland habitats	of substances that could potentially contaminate the soil?	a range of measures which encourage people to walk, cycle, use public transport and share car journeys.		development footprint and subsequent land take for transport related infrastructure. Any negative impacts on air quality arising from this objective will also negatively impact on soil as a result of increased air pollution.	
		Does the proposal ensure that possible contamination will be properly remediated and not impact upon on sensitive receptors, such as surface water and groundwater?	They, subsequently, help to reduce the development footprint required for new developments, reducing land take. Any positive impacts on air quality arising from this objective will also benefit soil by reducing air pollution, with long-term positive impacts.			
	To protect sites designated for their geological interest	Will the proposal protect and enhance sites, designated for their geological interest?	No positive or significant negative effects have been identified.		No positive or significant negative effects have been identified.	
Water	To protect, maintain and improve the quality of water environment and wetlands that could be directly or indirectly affected by transport infrastructure and protect against the risk of flooding	Does the proposal result in the release of water-borne pollution into watercourses, groundwater or reservoirs?	Reducing transport related emissions indirectly has the potential to improve water quality.	+	No positive or significant negative effects have been identified.	0
		Does the proposal increase the amount of surface water run-off into water environment? Or				

		increase the risk of flooding?				
		Does the proposal physically impact on a watercourse?				
Material assets	To promote and improve the sustainable use and management of the transport network	Will the proposal provide adequate transport choices that meet the needs of the people within the Tactran region?	Travel Plans hold the potential for long-term. They are aimed to encourage people to use alternatives to cars and, include a range of measures which encourage people to walk, cycle, use public transport and share car journeys.	+	Not engaging in the development and delivery of travel plans could result in long-term negative impacts on material assets arising from the increased number of car trips and subsequent high use of transport related infrastructure, thus reducing their lifespan.	-
	To reduce the use of natural resources	Does the proposal allow for the sustainable use of natural resources?	By encouraging a more efficient sustainable use of the regional transport infrastructure, they can bring long-term positive benefits to material assets.			

Delivery Theme: Influencing travel choices and behaviour						
Proposal relevant to the RTS 2024 – 2034: Promote LiftShare and Ride Sharing schemes						
SEA Theme	Objectives	Will the delivery theme...?	Assessment – Preferred Option (with RTS)	Score	Assessment – Alternative Option (without RTS)	Score
Biodiversity, Flora and Fauna	To protect, maintain and enhance biodiversity and ecosystem services, avoiding damage to or loss of designated and undesignated wildlife sites and protected species	Will the proposal cause disturbance or damage to any protected species or habitat?	Increased levels of car sharing hold the potential for a long-term positive impact on biodiversity through reducing traffic, thus resulting in less run-off from roads, less air pollution, less noise pollution, less light pollution etc. All of which can have a damaging and disruptive impact on species.	+	Not promoting and supporting car sharing could result in an increased number of car trips, resulting from the high number of single occupancy car trips undertaken within the region, with long-term negative impacts on biodiversity due to increased run-off from roads, increased air pollution, increased noise pollution, increased light pollution etc. All of which can have a damaging and disruptive impact on species.	-
		Will the proposal protect and enhance the quality and extent of designated and undesignated sites?				
		Will the proposal result in a greener public realm, resulting in a net gain of biodiversity?				
Landscape	To safeguard and enhance the character and diversity of the landscape and areas of valuable landscape	Will the proposal protect and enhance the character and integrity of the distinctive landscapes and areas of valuable landscapes?	Minor benefits from a reduced number of single occupancy car trips and a subsequent reduction in the numbers of vehicles on the road and vehicle kilometres driven.	+	Minor disbenefits from a continued increasing number of single occupancy car trips and a subsequent increase in the numbers of vehicles on the road and vehicle kilometres driven.	-

Cultural Heritage	To protect and enhance historic and archaeological sites and other culturally and historically important features, landscapes and their settings.	Will the proposal protect and enhance sites, features and areas of historical, archaeological and cultural value?	Minor benefits from a reduced number of single occupancy car trips and a subsequent reduction in the numbers of vehicles on the road and vehicle kilometres driven.	+	An increase in the number of car trips and the subsequent number of vehicles on the road and kilometres driven could accelerate the deterioration of the heritage because of the increasing levels of pollutants. It could also detract from the setting of such sites, with long-term negative impacts.	-
		Will the proposal help to improve the wider historic environment and sense of place?	This could result in less damage of the heritage from reduced levels of traffic related pollutants. It could improve the setting of such sites, with long-term positive impacts on the cultural heritage.			
		Will the proposal improve access to sites of historic and/or cultural interest?				
Climate Change	To reduce greenhouse gas emissions from transport	Will the proposal help to reduce emissions of greenhouse gases and, help Scotland meet its emission targets?	Increased levels of car sharing hold the potential for a long-term positive impact on climate change through reducing traffic, thus resulting in less traffic related carbon emissions. Furthermore, they also significantly increase car occupancy and reduce emissions per kilometre. As important, car sharing schemes also encourage a behavioural shift towards multi-modal, sustainable transport	+	Not promoting and supporting car sharing could result in an increased number of car trips, resulting from the high number of single occupancy car trips undertaken within the region, with long-term negative impacts on climate change due to increased levels of transport related carbon emissions, with a long-term negative impact.	-

			which complements public transport and active travel.			
	To adapt the transport network to the predicted effects of climate change	Will the proposal protect the Tactran region from climate change impacts and help the region function during extreme weather events?	No positive or significant negative effects have been identified.		No positive or significant negative effects have been identified.	
		Will the proposal improve access to services during severe weather events?				
		Will the proposal help those communities at risk during severe weather to recover?				
Air Quality	To reduce all forms of transport related air pollution and improve air quality, in particularly with regards to the three declared Air Quality Management Areas in Crieff, Dundee and Perth	Will the proposal help to reduce emissions of priority pollutants in line with Scottish and European standards (e.g., PM10, NOX, NO2)?	Increased levels of car sharing hold the potential for a long-term positive impact on air quality through reducing traffic, thus resulting in less traffic related pollutants. Furthermore, while long-distance car-sharing services do compete with rail and coach services they also significantly increase car occupancy and reduce emissions per kilometre.	+	Not promoting and supporting car sharing could result in an increased number of car trips, resulting from the high number of single occupancy car trips undertaken within the region, with long-term negative impacts on climate change due to increased levels of transport related pollutants, with a long-term negative impact.	-

			Air Quality impacts are positive largely through contribution to modal shift away from individual private car journeys. Within the Tactran region, the declared AQMAs in Crieff, Dundee and Perth would benefit through reduced private car journeys.			
Noise and Vibration	Reduce noise and vibration associated with the transport network	Will the proposal reduce the levels of noise generated?	Reduced noise levels due to reduced traffic levels.	+	Not promoting and supporting car sharing schemes means that the negative impacts of the indiscriminate use of cars on noise pollution will remain and will, indeed, become worse.	-
		Will the proposal reduce inequalities in exposure to ambient noise?				
		Will the proposal reduce the number of people exposed to high levels of noise with the potential to cause health problems, particularly those in deprived / vulnerable communities and those groups at risk?				
Human Health	To improve quality of life and human health by	Will the proposal promote social inclusion and	Increased levels of car sharing hold the potential for a long-term positive impact on human	+	Not promoting and supporting car sharing could result in an increased number of car trips,	-

	<p>promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and the natural environment</p>	<p>improve access to services, including healthcare, and opportunities, especially for those without a private car?</p>	<p>health through reducing the number of cars on the roads and the number of kilometres travelled. This, subsequently, means a reduction in the levels of harmful pollutants emitted from road transport and a reduction in the number of traffic accidents.</p>		<p>resulting from the high number of single occupancy car trips undertaken within the region, with long-term negative impacts on human health due to increased levels of transport related pollutants, with a long-term negative impact.</p>	
	<p>To promote, invest in, build and maintain infrastructure to support the development of high-quality places</p>	<p>Will the proposal reduce the likelihood of transport-related road accidents and casualties?</p>	<p>Townscapes, streetscapes and heritage conversation will benefit from less car dominated public realms.</p>		<p>As above.</p>	
		<p>Will the proposal protect and enhance the character, integrity and liveability of the towns and villages and, rural communities across the region?</p>				
		<p>Will the proposal improve the public realm by improving the public realm and access?</p>				
Population	<p>To improve quality of life and human health by promoting active lifestyles and increasing</p>	<p>Will the proposal promote social inclusion and improve access to key services and opportunities,</p>	<p>Increased levels of car sharing hold the potential for a long-term positive impact on the population through reducing the number of single occupancy car trips, thus reducing</p>	+	<p>Not promoting and supporting car sharing could result in an increased number of car trips, resulting from the high number of single occupancy car trips undertaken within the region,</p>	-

	sustainable access for all to essential services (including healthcare), employment and the natural environment	<p>especially for those without a private car?</p> <p>Will the proposal help to improve access to greenspaces both for recreational and health benefits?</p> <p>Will the proposal help to support an ageing population by providing appropriate transport choices to meet their needs?</p>	congestion and allowing the transport infrastructure to operate more efficiently.		with long-term negative impacts on the population. Leading to more congestion and unreliable journey times.	
Geology and Soil	To safeguard and improve soil quality, particularly high value agricultural land and carbon rich soil and peatland habitats	<p>Does the proposal cause soil sealing and compaction?</p> <p>Does the proposal result in the release of substances that could potentially contaminate the soil?</p> <p>Does the proposal ensure that possible contamination will be properly remediated and</p>	A reduced number of single occupancy car trips and a subsequent reduction in the numbers of vehicles on the road and vehicle kilometres driven will realise improvements to local air quality. Any air quality improvements arising from this objective will reduce the impacts of air pollution on soil.	+	Increased air pollution resulting from the increased number of car trips and the increase in the vehicle kilometres driven will have a long-term negative impact on soil.	-

		not impact upon on sensitive receptors, such as surface water and groundwater?				
	To protect sites designated for their geological interest	Will the proposal protect and enhance sites, designated for their geological interest?				
Water	To protect, maintain and improve the quality of water environment and wetlands that could be directly or indirectly affected by transport infrastructure and protect against the risk of flooding	Does the proposal result in the release of water-borne pollution into watercourses, groundwater or reservoirs? Does the proposal increase the amount of surface water run-off into water environment? Or increase the risk of flooding? Does the proposal physically impact on a watercourse?	Reducing transport related emissions indirectly has the potential to improve water quality.	+	No positive or significant negative effects have been identified.	0
Material assets	To promote and improve the sustainable use and management of the transport network	Will the proposal provide adequate transport choices that meet the needs of the	Increased levels of car sharing hold the potential for a long-term positive impact on material assets through reducing the number of single	+	Not promoting and supporting car sharing could result in an increased number of car trips, resulting from the high number of single occupancy car trips	-

		people within the Tactran region?	occupancy car trips, thus reducing congestion and allowing the transport infrastructure to operate more efficiently.		undertaken within the region, with long-term negative impacts on material assets. Leading to more congestion and unreliable journey times.	
	To reduce the use of natural resources	Does the proposal allow for the sustainable use of natural resources?				

Delivery Theme: Influencing travel choices and behaviour						
Proposal relevant to the RTS 2024 – 2034: Workplace Parking Levy / Congestion Charges						
SEA Theme	Objectives	Will the delivery theme...?	Assessment – Preferred Option (with RTS)	Score	Assessment – Alternative Option (without RTS)	Score
Biodiversity, Flora and Fauna	To protect, maintain and enhance biodiversity and ecosystem services, avoiding damage to or loss of designated and undesignated wildlife sites and protected species	Will the proposal cause disturbance or damage to any protected species or habitat?	No positive or significant negative effects have been identified.	0	No positive or significant negative effects have been identified.	0
		Will the proposal protect and enhance the quality and extent of designated and undesignated sites?				
		Will the proposal result in a greener public realm, resulting in a net gain of biodiversity?				
Landscape	To safeguard and enhance the character and diversity of the landscape and areas of valuable landscape	Will the proposal protect and enhance the character and integrity of the distinctive landscapes and	Reduced number of car trips resulting in a reduced number of parking spaces will have a long-term positive impact on the streetscapes, townscapes and landscapes, especially in conservation areas and other	+	Parking detracts from the settings of streetscapes, townscapes and landscapes within the region.	-

		areas of valuable landscapes?	areas noted for their local distinctiveness.			
Cultural Heritage	To protect and enhance historic and archaeological sites and other culturally and historically important features, landscapes and their settings.	Will the proposal protect and enhance sites, features and areas of historical, archaeological and cultural value? Will the proposal help to improve the wider historic environment and sense of place? Will the proposal improve access to sites of historic and/or cultural interest?	Improved setting of heritage assets. Such sites will benefit from less car dominated public realms, especially in conservation areas and other areas noted for their local distinctiveness. Such schemes further hold the potential for minor long-term positive impacts regarding protecting and enhancing the cultural heritage by reducing traffic related pollutants with the latter causing serious corrosion effects on stone, wood, metals, paints and other materials on the surface of the heritage through acidification reactions and oxidation reactions. An adequate supply of appropriate parking in the vicinity of culturally and historically important features will improve access to such sites.	++	Parking detracts from the settings of streetscapes, townscapes and landscapes within the region.	-
Climate Change	To reduce greenhouse gas	Will the proposal help to reduce emissions of	Such schemes could lead to more people to travel by active and sustainable modes more	++	The oversupply of free parking is a considerable public subsidy that makes driving less	-

	emissions from transport	greenhouse gases and, help Scotland meet its emission targets?	often, with an associated reduction in car trips and subsequently reduced carbon emissions and air pollutants, with long-term positive impacts on climate change. Less polluting vehicles in town and city centres and an associated reduction in carbon emissions and air pollution. Preliminary results from the introduction of the Ultra LEZ in London show that approximately 13,500 fewer polluting cars enter the zone each day ⁵ , with 77% of vehicles entering the zone now meeting the clean emissions standards.		expensive than it should be, further skewing travel choices, with long-term negative impacts on air quality.	
	To adapt the transport network to the predicted effects of climate change	Will the proposal protect the Tactran region from climate change impacts and help the region function during extreme weather events?	No positive or significant negative effects have been identified.		No positive or significant negative effects have been identified.	
		Will the proposal improve access to services during				

⁵ <https://www.london.gov.uk/WHAT-WE-DO/environment/environment-publications/central-london-ulez-six-month-report>

		severe weather events?				
Air Quality	To reduce all forms of transport related air pollution and improve air quality, in particularly with regards to the three declared Air Quality Management Areas in Crieff, Dundee and Perth	Will the proposal help to reduce emissions of priority pollutants in line with Scottish and European standards (e.g., PM10, NOX, NO2)?	<p>Reduced number of car journeys and subsequently reduced carbon emissions and air pollutants, with increased bus, rail and active travel use.</p> <p>Air quality and improving air quality are a large part of the RTS, to improve health. This includes support for demand management measures such as the Low Emission Zone in Dundee and other measures to encourage a behavioural change and modal shift.</p> <p>Air Quality impacts are positive largely through contribution to modal shift away from individual private car journeys. Within the Tactran region, the declared AQMAs in Crieff, Dundee and Perth would benefit through reduced private car journeys.</p>	++	The oversupply of free parking is a considerable public subsidy that makes driving less expensive than it should be, further skewing travel choices, with long-term negative impacts on air quality.	-

			<p>In Nottingham, for example, there has been a 15% rise in public transport use since 2004, a 9% decline in traffic since 2004, a 33% increase in cycle trips since 2010 and a 33% reduction in carbon emissions since 2005 since the Workplace Parking Levy scheme was introduced in 2012.</p> <p>The Congestion Charge in London has helped London to become the only major city in the world to see a considerable shift from private car use to public transport, walking and cycling⁶.</p> <p>Less polluting and likely reduced vehicles in the city centre and an associated reduction in tail-pipe carbon emissions and air pollution. Preliminary results from the introduction of the Ultra LEZ in London shows that appr. 13,500 fewer polluting cars enter the zone each day⁷, with</p>			
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⁶ <http://content.tfl.gov.uk/congestion-charge-factsheet.pdf>

⁷ <https://www.london.gov.uk/WHAT-WE-DO/environment/environment-publications/central-london-ulez-six-month-report>

			77% of vehicles entering the zone now meeting the clean emissions standards. A potentially negative impact on air quality elsewhere if journeys are redistributed away from the zone. However, preliminary results from the introduction of the London Ultra LEZ show no increase in pollution around the ULEZ boundary.			
Noise and Vibration	Reduce noise and vibration associated with the transport network	Will the proposal reduce the levels of noise generated?	Reduced noise levels due to reduced traffic levels.	+	The oversupply of free parking is a considerable public subsidy that makes driving less expensive than it should be, further skewing travel choices, with long-term negative impacts on noise pollution.	-
		Will the proposal reduce inequalities in exposure to ambient noise?				
		Will the proposal reduce the number of people exposed to high levels of noise with the potential to cause health problems, particularly those in deprived / vulnerable communities and those groups at risk?				

Human Health	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and the natural environment	Will the proposal promote social inclusion and improve access to services, including healthcare, and opportunities, especially for those without a private car?	<p>Overall improved health and wellbeing outcomes because of reduced pollution, improved air quality and increased levels of active travel use, with long-term positive impacts on human health.</p> <p>Transport for London established that with the introduction of the congestion charge in London, levels of cycling within the congestion zone increased by 66% after implementation of the scheme with the associated health benefits. It should be noted, though, that the implementation of the congestion zone was supplemented with significant investment in respective cycling infrastructure.</p> <p>The introduction of the congestion zone in London resulted in a 25% increase in bus patronage entering the zone⁸.</p> <p>Reduce accidents, particularly within centres due to reduced</p>	++	The oversupply of free parking is a considerable public subsidy that makes driving less expensive than it should be, further skewing travel choices, with long-term negative impacts on human health.	--
		Will the proposal reduce the likelihood of transport-related road accidents and casualties?				

⁸ IBID

			<p>traffic levels and reduced traffic cruising for parking.</p> <p>Increased levels of traffic and traffic cruising in areas outside the charging zone may result in a greater number of accidents in those areas.</p>			
	To promote, invest in, build and maintain infrastructure to support the development of high-quality places	Will the proposal protect and enhance the character, integrity and liveability of the towns and villages and, rural communities across the region?	Less car dominated streetscapes and townscapes would help to improve both formal and informal surveillance including a higher number of people using the public realm.		As above.	
		Will the proposal improve the public realm by improving the public realm and access?				
Population	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and	<p>Will the proposal promote social inclusion and improve access to key services and opportunities, especially for those without a private car?</p> <p>Will the proposal help to improve</p>	<p>By reversing the collectivizing of the cost of parking to provide everyone to park free at everyone else's expense holds the potential for a long-term positive impact on the population.</p> <p>While current parking policies realise a local benefit—ample</p>	++	The oversupply of free parking is a considerable public subsidy that makes driving less expensive than it should be, further skewing travel choices, with long-term negative impacts on the population.	-

	the natural environment	access to greenspaces both for recreational and health benefits?	free parking— they harm the wider cities / towns / villages. Free parking increases the demand for cars, and more cars increase traffic congestion, air pollution, and energy consumption. More traffic congestion in turn spurs the search for more local improvements, such as street widenings and even higher demand for parking. Oversupply of free parking quietly create wider problems that are far worse than the local ones they are meant to solve. A shift in existing parking policies will have a long-term positive impact on the population.			
		Will the proposal help to support an ageing population by providing appropriate transport choices to meet their needs?				
Geology and Soil	To safeguard and improve soil quality, particularly high value agricultural land and carbon rich soil and peatland habitats	Does the proposal cause soil sealing and compaction? Does the proposal result in the release of substances that could potentially contaminate the soil?	A reduced number of car trips and a subsequent reduction in the numbers of vehicles on the road and vehicle kilometres driven will realise improvements to local air quality. Any air quality improvements arising from this	+	Increased air pollution resulting from the increased number of car trips and the increase in the vehicle kilometres driven will have a long-term negative impact on soil.	-

		Does the proposal ensure that possible contamination will be properly remediated and not impact upon sensitive receptors, such as surface water and groundwater?	objective will reduce the impacts of air pollution on soil.			
	To protect sites designated for their geological interest	Will the proposal protect and enhance sites, designated for their geological interest?				
Water	To protect, maintain and improve the quality of water environment and wetlands that could be directly or indirectly affected by transport infrastructure and protect against the risk of flooding	Does the proposal result in the release of water-borne pollution into watercourses, groundwater or reservoirs? Does the proposal increase the amount of surface water run-off into water environment? Or increase the risk of flooding?	Reducing transport related emissions indirectly has the potential to improve water quality.	+	No positive or significant negative effects have been identified.	0

		Does the proposal physically impact on a watercourse?				
Material assets	To promote and improve the sustainable use and management of the transport network	Will the proposal provide adequate transport choices that meet the needs of the people within the Tactran region?	Respective schemes hold the potential for long-term benefits. They are aimed to encourage people to use alternatives to cars and, include a range of measures which encourage people to walk, cycle, use public transport and share car journeys. By encouraging a more efficient sustainable use of the regional transport infrastructure, they can bring long-term positive benefits to material assets.	+	Not engaging in respective schemes could result in long-term negative impacts on material assets arising from the increased number of car trips and subsequent high use of transport related infrastructure, thus reducing their lifespan.	-
	To reduce the use of natural resources	Does the proposal allow for the sustainable use of natural resources?				

Delivery Theme: Influencing travel choices and behaviour						
Proposal relevant to the RTS 2024 – 2034: Public parking charges / Reduction of the number of both on-street and off-street parking spaces						
SEA Theme	Objectives	Will the delivery theme...?	Assessment – Preferred Option (with RTS)	Score	Assessment – Alternative Option (without RTS)	Score
Biodiversity, Flora and Fauna	To protect, maintain and enhance biodiversity and ecosystem services, avoiding damage to or loss of designated and undesignated wildlife sites and protected species	Will the proposal cause disturbance or damage to any protected species or habitat?	No positive or significant negative effects have been identified.	0	No positive or significant negative effects have been identified.	0
		Will the proposal protect and enhance the quality and extent of designated and undesignated sites?				
		Will the proposal result in a greener public realm, resulting in a net gain of biodiversity?				
Landscape	To safeguard and enhance the	Will the proposal protect and	With the aim to minimise the negative impacts of parking on	++	The oversupply of free parking is a considerable public subsidy	--

	character and diversity of the landscape and areas of valuable landscape	enhance the character and integrity of the distinctive landscapes and areas of valuable landscapes?	streetscapes and townscapes, this will have a long-term impact on the character of the villages, towns and cities within the region, especially in conservation areas and other areas noted for their distinctiveness.		that makes driving less expensive than it should be, further skewing travel choices, with long-term negative impacts on landscape.	
Cultural Heritage	To protect and enhance historic and archaeological sites and other culturally and historically important features, landscapes and their settings.	Will the proposal protect and enhance sites, features and areas of historical, archaeological and cultural value? Will the proposal help to improve the wider historic environment and sense of place? Will the proposal improve access to sites of historic and/or cultural interest?	Improved setting of heritage assets. Such sites will benefit from less car dominated public realms, especially in conservation areas and other areas noted for their local distinctiveness. An adequate number of appropriately priced parking spaces in the vicinity of such sites will, however, improve access to them.	+	Parking detracts from the settings of culturally and historically important sites and can have a subsequent negative impact on such sites.	-
Climate Change	To reduce greenhouse gas emissions from transport	Will the proposal help to reduce emissions of greenhouse gases and, help Scotland meet its emission targets?	With the aim to shift especially short trips to active and sustainable modes, this will have a long-term positive impact on climate change by reducing the number of car trips and the vehicle kilometres driven. The subsequent	++	The oversupply of free parking is a considerable public subsidy that makes driving less expensive than it should be, further skewing travel choices, with long-term negative impacts on climate change.	-

			reduction in carbon emissions will have a long-term positive impact on climate change.			
	To adapt the transport network to the predicted effects of climate change	Will the proposal protect the Tactran region from climate change impacts and help the region function during extreme weather events?	No positive or significant negative effects have been identified.			No positive or significant negative effects have been identified.
		Will the proposal improve access to services during severe weather events?				
		Will the proposal help those communities at risk during severe weather to recover?				
Air Quality	To reduce all forms of transport related air pollution and improve air quality, in particularly with regards to the three declared Air Quality Management Areas in Crieff, Dundee and Perth	Will the proposal help to reduce emissions of priority pollutants in line with Scottish and European standards (e.g., PM10, NOX, NO2)?	Encouraging especially short trips to shift to active and sustainable modes will have long-term positive impacts on air quality by reducing the number of car trips and the vehicle kilometres driven. The subsequent reduction in emitted pollutants will have a long-term positive impact on air	++	The oversupply of free parking is a considerable public subsidy that makes driving less expensive than it should be, further skewing travel choices, with long-term negative impacts on air quality.	-

			<p>quality. Especially in areas that have been declared Air Quality Management Areas.</p> <p>Although some potentially negative impacts on air quality and congestion elsewhere if journeys are redistributed. As with all demand management policies, ensuring that congestion, additional parking, and general intensification effects of private car journeys will be essential to avoid problems simply being shifted to boundary areas.</p>			
Noise and Vibration	Reduce noise and vibration associated with the transport network	Will the proposal reduce the levels of noise generated?	Reduced noise levels due to reduced traffic levels.	+	The oversupply of parking is a considerable public subsidy that makes driving less expensive than it should be, further skewing travel choices, with long-term negative impacts on noise pollution.	-
		Will the proposal reduce inequalities in exposure to ambient noise?	Although some potentially negative impacts on air quality and congestion elsewhere if journeys are redistributed. As with all demand management policies, ensuring that congestion, additional parking, and general intensification effects of private car journeys will be essential to avoid problems simply being shifted to boundary areas.			
		Will the proposal reduce the number of people exposed to high levels of noise with the potential to cause health problems, particularly those in deprived / vulnerable	Although some potentially negative impacts on air quality and congestion elsewhere if journeys are redistributed. As with all demand management policies, ensuring that congestion, additional parking, and general intensification effects of private car journeys will be essential to avoid problems simply being shifted to boundary areas.			

		communities and those groups at risk?				
Human Health	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and the natural environment	<p>Will the proposal promote social inclusion and improve access to services, including healthcare, and opportunities, especially for those without a private car?</p> <p>Will the proposal reduce the likelihood of transport-related road accidents and casualties?</p>	<p>Overall improved health and wellbeing outcomes because of reduced pollution, improved air quality and increased levels of active travel use, with long-term positive impacts on human health.</p> <p>The charging scheme that was introduced in Durham in 2012 resulted in a 10% increase of pedestrians^{9 10}.</p> <p>An adequate supply of short stay parking close to healthcare services will improve access to such services, especially for those who find it difficult to walk, cycle or use public transport.</p> <p>A reduction in traffic volumes and subsequent car kilometres is likely to reduce the number of road accidents.</p>	++	The oversupply of free parking is a considerable public subsidy that makes driving less expensive than it should be, further skewing travel choices, with long-term negative impacts on human health.	-

⁹ https://www.ciht.org.uk/media/8057/durham_city_centre_road_charging_scheme.pdf

¹⁰ <https://www.durham.gov.uk/article/3437/Durham-Road-User-Charge-Zone-congestion-charge>

			Increased levels of traffic and traffic cruising in areas outside the charging zone may result in a greater number of accidents in those areas. As with all demand management policies, ensuring that congestion, additional parking, and general intensification effects of private car journeys will be essential to avoid problems simply being shifted to boundary areas.			
	To promote, invest in, build and maintain infrastructure to support the development of high-quality places	Will the proposal protect and enhance the character, integrity and liveability of the towns and villages and, rural communities across the region?	Major positive impact. Potential to reallocate spaces used for parking for clear walking routes, cycle hire facilities, bus connections and an attractive, accessible and inclusive public realm, rather than for car parking.		Without respective interventions, streets, town centres and communities will continue to be traffic dominated, noisy and polluted, which impacts on residents' quality of life.	
		Will the proposal improve the public realm by improving the public realm and access?				
Population	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access	Will the proposal promote social inclusion and improve access to key services and opportunities, especially for those	As above.	++	As above.	-

	for all to essential services (including healthcare), employment and the natural environment	without a private car? Will the proposal help to improve access to greenspaces both for recreational and health benefits? Will the proposal help to support an ageing population by providing appropriate transport choices to meet their needs?				
Geology and Soil	To safeguard and improve soil quality, particularly high value agricultural land and carbon rich soil and peatland habitats	Does the proposal cause soil sealing and compaction? Does the proposal result in the release of substances that could potentially contaminate the soil? Does the proposal ensure that possible contamination will be properly remediated and not impact upon on sensitive receptors, such as surface	A reduced number of car trips and a subsequent reduction in the numbers of vehicles on the road and vehicle kilometres driven will realise benefits to local air quality. Any air quality improvements arising from this objective will reduce the impacts of air pollution on soil.	+	Increased air pollution resulting from the increased number of car trips and the increase in the vehicle kilometres driven will have a long-term negative impact on soil.	-

		water and groundwater?				
	To protect sites designated for their geological interest	Will the proposal protect and enhance sites, designated for their geological interest?				
Water	To protect, maintain and improve the quality of water environment and wetlands that could be directly or indirectly affected by transport infrastructure and protect against the risk of flooding	Does the proposal result in the release of water-borne pollution into watercourses, groundwater or reservoirs? Does the proposal increase the amount of surface water run-off into water environment? Or increase the risk of flooding? Does the proposal physically impact on a watercourse?	Reducing transport related emissions indirectly has the potential to improve water quality. Opportunity to adopt sustainable drainage options and incorporate blue-green infrastructure to the design of remaining car parking spaces within the region.	+	No positive or significant negative effects have been identified.	0
Material assets	To promote and improve the sustainable use and management of the transport network	Will the proposal provide adequate transport choices that meet the needs of the people within the Tactran region?	Developing an appropriate car parking scheme holds the potential for long-term benefits. They are aimed to encourage people to use alternatives to cars and, include a range of measures which encourage	+	The oversupply of free parking is a considerable public subsidy that makes driving less expensive than it should be, further skewing travel choices, with long-term negative impacts on material assets.	-

	To reduce the use of natural resources	Does the proposal allow for the sustainable use of natural resources?	<p>people to walk, cycle, use public transport and share car journeys.</p> <p>By encouraging a more efficient sustainable use of the regional transport infrastructure, they can bring long-term positive benefits to material assets.</p>		In fact, cruising for parking results in a tremendous amount of excess driving and all of its associated negative impacts — including congestion.	
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Delivery Theme: Influencing travel choices and behaviour						
Proposal relevant to the RTS 2024 – 2034: Reallocation of carriageway						
SEA Theme	Objectives	Will the delivery theme...?	Assessment – Preferred Option (with RTS)	Score	Assessment – Alternative Option (without RTS)	Score
Biodiversity, Flora and Fauna	To protect, maintain and enhance biodiversity and ecosystem services, avoiding damage to or loss of designated and undesignated wildlife sites and protected species	Will the proposal cause disturbance or damage to any protected species or habitat?	No positive or significant negative effects have been identified.	0	No positive or significant negative effects have been identified.	0
		Will the proposal protect and enhance the quality and extent of designated and undesignated sites?				
		Will the proposal result in a greener public realm, resulting in a net gain of biodiversity?				

Landscape	To safeguard and enhance the character and diversity of the landscape and areas of valuable landscape	Will the proposal protect and enhance the character and integrity of the distinctive landscapes and areas of valuable landscapes?	Reduced number of cars resulting from reallocation of carriageway will have a long-term positive impact on the streetscapes, townscapes and landscapes, especially in conservation areas and other areas noted for their local distinctiveness.	+	No positive or significant negative effects have been identified.	0
Cultural Heritage	To protect and enhance historic and archaeological sites and other culturally and historically important features, landscapes and their settings.	Will the proposal protect and enhance sites, features and areas of historical, archaeological and cultural value? Will the proposal help to improve the wider historic environment and sense of place? Will the proposal improve access to sites of historic and/or cultural interest?	Reduced number of cars resulting from reallocation of carriageway will have a long-term positive impact on the streetscapes, townscapes and landscapes, especially in conservation areas and other areas noted for their local distinctiveness.	+	No positive or significant negative effects have been identified.	0
Climate Change	To reduce greenhouse gas emissions from transport	Will the proposal help to reduce emissions of greenhouse gases and, help Scotland meet its emission targets?	Supressed demand for active and sustainable travel will be released through reallocated carriageway to improve walking and cycling infrastructure, as well as to implement public transport priority measures and	+	No positive or significant negative effects have been identified.	0

			improve interchanges such as bus stops and railway stations, with a long-term positive impact on climate change.			
	To adapt the transport network to the predicted effects of climate change	Will the proposal protect the Tactran region from climate change impacts and help the region function during extreme weather events?	No positive or significant negative effects have been identified.			
		Will the proposal improve access to services during severe weather events?				
		Will the proposal help those communities at risk during severe weather to recover?				
Air Quality	To reduce all forms of transport related air pollution and improve air quality, in particularly with regards to the three declared Air Quality Management Areas in Crieff, Dundee and Perth	Will the proposal help to reduce emissions of priority pollutants in line with Scottish and European standards (e.g., PM10, NOX, NO2)?	Suppressed demand for active and sustainable travel will be released through reallocated carriageway to improve walking and cycling infrastructure, as well as to implement public transport priority measures and improve interchanges such as bus stops and railway stations,	+	No positive or significant negative effects have been identified.	0

			<p>with a long-term positive impact on air quality.</p> <p>Although some potentially negative impacts on air quality and congestion elsewhere if journeys are redistributed. As with all demand management policies, ensuring that congestion and general intensification effects of private car journeys will be essential to avoid problems simply being shifted to boundary areas.</p>			
Noise and Vibration	Reduce noise and vibration associated with the transport network	<p>Will the proposal reduce the levels of noise generated?</p> <p>Will the proposal reduce inequalities in exposure to ambient noise?</p> <p>Will the proposal reduce the number of people exposed to high levels of noise with the potential to cause health problems, particularly those in deprived / vulnerable communities and</p>	<p>Reduced noise levels due to reduced traffic levels.</p> <p>Although some potentially negative impacts on air quality and congestion elsewhere if journeys are redistributed. As with all demand management policies, ensuring that congestion and general intensification effects of private car journeys will be essential to avoid problems simply being shifted to boundary areas.</p>	+	No positive or significant negative effects have been identified.	0

		those groups at risk?				
Human Health	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and the natural environment	Will the proposal promote social inclusion and improve access to services, including healthcare, and opportunities, especially for those without a private car?	A reduction in traffic volumes and subsequent car kilometres is likely to reduce the number of road accidents. Providing for safer travel may encourage more active travel and increase the use of public transport within the region. This may result in positive effects on physical activity, providing mental and physical health benefits.	++	Not improving the infrastructure for active and sustainable travel could result in fewer people walking and cycling or using public transport. Indiscriminate car usage may result in less people travel more actively more often and, will also increase the levels of pollutants, with long-term negative impacts both on private and public health.	--
		Will the proposal reduce the likelihood of transport-related road accidents and casualties?	This may be of particular to adults and young people. Participation in physical activity is lower in older people (75+), unemployed and low-income groups, and people with disabilities. However, providing for safer travel may remove some barriers to active travel modes.			
	To promote, invest in, build and maintain infrastructure to support the development of high-quality places	Will the proposal protect and enhance the character, integrity and liveability of the towns and villages and, rural	No positive or significant negative effects have been identified.			

		communities across the region?				
		Will the proposal improve the public realm by improving the public realm and access?				
Population	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and the natural environment	Will the proposal promote social inclusion and improve access to key services and opportunities, especially for those without a private car? Will the proposal help to improve access to greenspaces both for recreational and health benefits? Will the proposal help to support an ageing population by providing appropriate transport choices to meet their needs?	Respective measures will support social inclusion by enabling those segments of the regional population who currently perceive the transport network as being unsafe to walk or cycle to access the nearest bus stop / train station or, indeed, travel actively all the way to key destinations within the region without anxiety. This may be of particular to adults and young people. Participation in physical activity is lower in older people (75+), unemployed and low-income groups, and people with disabilities. However, providing for safer travel may remove some barriers to active travel modes.	+	Not improving the infrastructure for active and sustainable travel could result in fewer people walking and cycling or using public transport. Indiscriminate car usage may result in less people travel more actively more often and will also increase the levels of pollutants, with long-term negative impacts both on the population.	-
Geology and Soil	To safeguard and improve soil quality, particularly	Does the proposal cause soil sealing and compaction?	A reduced number of car trips and a subsequent reduction in the numbers of vehicles on the	+	No positive or significant negative effects have been identified.	0

	high value agricultural land and carbon rich soil and peatland habitats	Does the proposal result in the release of substances that could potentially contaminate the soil?	road and vehicle kilometres driven will realise benefits to local air quality. Any air quality improvements arising from this objective will reduce the impacts of air pollution on soil.			
		Does the proposal ensure that possible contamination will be properly remediated and not impact upon on sensitive receptors, such as surface water and groundwater?				
	To protect sites designated for their geological interest	Will the proposal protect and enhance sites, designated for their geological interest?				
Water	To protect, maintain and improve the quality of water environment and wetlands that could be directly or indirectly affected by transport infrastructure and	Does the proposal result in the release of water-borne pollution into watercourses, groundwater or reservoirs?	No positive or significant negative effects have been identified.	0	No positive or significant negative effects have been identified.	0
		Does the proposal increase the amount of surface water run-off into				

	protect against the risk of flooding	water environment? Or increase the risk of flooding?				
		Does the proposal physically impact on a watercourse?				
Material assets	To promote and improve the sustainable use and management of the transport network	Will the proposal provide adequate transport choices that meet the needs of the people within the Tacran region?	<p>Reallocation of carriageway holds the potential for long-term benefits. Respective measures are aimed to encourage people to use alternatives to cars and, include a range of measures which encourage people to walk, cycle, use public transport and share car journeys.</p> <p>By encouraging a more efficient sustainable use of the regional transport infrastructure, they can bring long-term positive benefits to material assets.</p>	+	Not engaging in respective schemes could result in long-term negative impacts on material assets arising from the increased number of car trips and subsequent high use of transport related infrastructure, thus reducing their lifespan.	-
	To reduce the use of natural resources	Does the proposal allow for the sustainable use of natural resources?				

Delivery Theme: Influencing travel choices and behaviour						
Proposal relevant to the RTS 2024 – 2034: Rerouting of motorised traffic on longer and / or less direct routes for the benefit of the wider network						
SEA Theme	Objectives	Will the delivery theme...?	Assessment – Preferred Option (with RTS)	Score	Assessment – Alternative Option (without RTS)	Score
Biodiversity, Flora and Fauna	To protect, maintain and enhance biodiversity and ecosystem services, avoiding damage to or loss of designated and undesignated wildlife sites and protected species	Will the proposal cause disturbance or damage to any protected species or habitat?	No positive or significant negative effects have been identified.	0	No positive or significant negative effects have been identified.	0
		Will the proposal protect and enhance the quality and extent of designated and undesignated sites?				
		Will the proposal result in a greener public realm, resulting in a net gain of biodiversity?				

Landscape	To safeguard and enhance the character and diversity of the landscape and areas of valuable landscape	Will the proposal protect and enhance the character and integrity of the distinctive landscapes and areas of valuable landscapes?	Reduced number of cars resulting from rerouting of car traffic will have a long-term positive impact on the streetscapes, townscapes and landscapes, especially in conservation areas and other areas noted for their local distinctiveness.	+	No positive or significant negative effects have been identified.	0
Cultural Heritage	To protect and enhance historic and archaeological sites and other culturally and historically important features, landscapes and their settings.	<p>Will the proposal protect and enhance sites, features and areas of historical, archaeological and cultural value?</p> <p>Will the proposal help to improve the wider historic environment and sense of place?</p> <p>Will the proposal improve access to sites of historic and/or cultural interest?</p>	Reduced number of cars resulting from rerouting of car traffic will have a long-term positive impact on the streetscapes, townscapes and landscapes, especially in conservation areas and other areas noted for their local distinctiveness.	+	No positive or significant negative effects have been identified.	0
Climate Change	To reduce greenhouse gas emissions from transport	Will the proposal help to reduce emissions of greenhouse gases and, help Scotland meet its emission targets?	Supressed demand for active and sustainable travel will be released through less car traffic as a result from respective network management measures to improve walking and cycling infrastructure, as	+	No positive or significant negative effects have been identified.	0

			well as to implement public transport priority measures and improve interchanges such as bus stops and railway stations, with a long-term positive impact on climate change.			
	To adapt the transport network to the predicted effects of climate change	Will the proposal protect the Tactran region from climate change impacts and help the region function during extreme weather events?	No positive or significant negative effects have been identified.		No positive or significant negative effects have been identified.	
		Will the proposal improve access to services during severe weather events?				
		Will the proposal help those communities at risk during severe weather to recover?				
Air Quality	To reduce all forms of transport related air pollution and improve air quality, in particularly with regards to the three declared Air Quality Management Areas	Will the proposal help to reduce emissions of priority pollutants in line with Scottish and European standards (e.g., PM10, NOX, NO2)?	Supressed demand for active and sustainable travel will be released through less car traffic as a result from respective network management measures to improve walking and cycling infrastructure, as	+	No positive or significant negative effects have been identified.	0

	in Crieff, Dundee and Perth		<p>well as to implement public transport priority measures and improve interchanges such as bus stops and railway stations, with a long-term positive impact on air quality.</p> <p>Although some potentially negative impacts on air quality and congestion elsewhere if journeys are redistributed. As with all demand management policies, ensuring that congestion and intensification effects of private car journeys will be essential to avoid problems simply being shifted to boundary areas.</p>			
Noise and Vibration	Reduce noise and vibration associated with the transport network	<p>Will the proposal reduce the levels of noise generated?</p> <p>Will the proposal reduce inequalities in exposure to ambient noise?</p> <p>Will the proposal reduce the number of people exposed to high levels of noise with the potential to cause</p>	<p>Reduced noise levels due to reduced traffic levels.</p> <p>Although some potentially negative impacts on air quality and congestion elsewhere if journeys are redistributed. As with all demand management policies, ensuring that congestion and general intensification effects of private car journeys will be essential to</p>	+	No positive or significant negative effects have been identified.	0

		health problems, particularly those in deprived / vulnerable communities and those groups at risk?	avoid problems simply being shifted to boundary areas.			
Human Health	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and the natural environment	Will the proposal promote social inclusion and improve access to services, including healthcare, and opportunities, especially for those without a private car?	A reduction in traffic volumes and subsequent car kilometres is likely to reduce the number of road accidents. Providing for safer travel may encourage more active travel and increase the use of public transport within the region. This may result in positive effects on physical activity, providing mental and physical health benefits.	++	Not improving the network management to improve and promote active and sustainable travel could result in fewer people walking and cycling or using public transport. Indiscriminate car usage may result in less people travel more actively more often and will also increase the levels of pollutants, with long-term negative impacts both on private and public health.	--
		Will the proposal reduce the likelihood of transport-related road accidents and casualties?	This may be of particular to adults and young people. Participation in physical activity is lower in older people (75+), unemployed and low-income groups, and people with disabilities. However, providing for safer travel may remove some barriers to active travel modes.			
	To promote, invest in, build and	Will the proposal protect and	Less car dominated streetscapes and townscapes would help to			

	maintain infrastructure to support the development of high-quality places	enhance the character, integrity and liveability of the towns and villages and, rural communities across the region? Will the proposal improve the public realm by improving the public realm and access?	improve both formal and informal surveillance including a higher number of people using the public realm.		centres and communities are often traffic dominated, noisy and polluted, which impacts the residents' quality of life.	
Population	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and the natural environment	Will the proposal promote social inclusion and improve access to key services and opportunities, especially for those without a private car? Will the proposal help to improve access to greenspaces both for recreational and health benefits? Will the proposal help to support an ageing population by providing appropriate	Respective measures will support social inclusion by enabling those segments of the regional population who currently perceive the transport network as being unsafe to walk or cycle to access the nearest bus stop / train station or, indeed, travel actively all the way to key destinations within the region without anxiety. This may be of particular to adults and young people. Participation in physical activity is lower in older people (75+), unemployed and low-income groups, and people with disabilities. However, providing for safer travel may remove	+	Not improving the network management to improve and promote active and sustainable travel could result in fewer people walking and cycling or using public transport. Indiscriminate car usage may result in less people travel more actively more often and will also increase the levels of pollutants, with long-term negative impacts on the population within the region.	-

		transport choices to meet their needs?	some barriers to active travel modes.			
Geology and Soil	To safeguard and improve soil quality, particularly high value agricultural land and carbon rich soil and peatland habitats	Does the proposal cause soil sealing and compaction?	A reduced number of car trips and a subsequent reduction in the numbers of vehicles on the road and vehicle kilometres driven will realise benefits to local air quality. Any air quality improvements arising from this objective will reduce the impacts of air pollution on soil.	+	No positive or significant negative effects have been identified.	0
		Does the proposal result in the release of substances that could potentially contaminate the soil?				
		Does the proposal ensure that possible contamination will be properly remediated and not impact upon on sensitive receptors, such as surface water and groundwater?				
	To protect sites designated for their geological interest	Will the proposal protect and enhance sites, designated for their geological interest?				
Water	To protect, maintain and improve the quality of water environment and	Does the proposal result in the release of water-borne pollution into watercourses,	Reducing transport related emissions indirectly has the potential to improve water quality.	+	No positive or significant negative effects have been identified.	0

	wetlands that could be directly or indirectly affected by transport infrastructure and protect against the risk of flooding	groundwater or reservoirs? Does the proposal increase the amount of surface water run-off into water environment? Or increase the risk of flooding? Does the proposal physically impact on a watercourse?	Opportunity to adopt sustainable drainage options and incorporate blue-green infrastructure to the active and public transport networks within the region.			
Material assets	To promote and improve the sustainable use and management of the transport network To reduce the use of natural resources	Will the proposal provide adequate transport choices that meet the needs of the people within the Tactran region? Does the proposal allow for the sustainable use of natural resources?	Reallocation of carriageway holds the potential for long-term benefits. Respective measures are aimed to encourage people to use alternatives to cars and, include a range of measures which encourage people to walk, cycle, use public transport and share car journeys. By encouraging a more efficient sustainable use of the regional transport infrastructure, they can bring long-term positive benefits to material assets.	+	Not engaging in respective schemes could result in long-term negative impacts on material assets arising from the increased number of car trips and subsequent high use of transport related infrastructure, thus reducing their lifespan.	-

Delivery Theme: Influencing travel choices and behaviour						
Proposal relevant to the RTS 2024 – 2034: Road user charging						
SEA Theme	Objectives	Will the delivery theme...?	Assessment – Preferred Option (with RTS)	Score	Assessment – Alternative Option (without RTS)	Score
Biodiversity, Flora and Fauna	To protect, maintain and enhance biodiversity and ecosystem services, avoiding damage to or loss of designated and undesignated wildlife sites and protected species	Will the proposal cause disturbance or damage to any protected species or habitat?	No positive or significant negative effects have been identified.	0	No positive or significant negative effects have been identified.	0
		Will the proposal protect and enhance the quality and extent of designated and undesignated sites?				
		Will the proposal result in a greener public realm,				

		resulting in a net gain of biodiversity?				
Landscape	To safeguard and enhance the character and diversity of the landscape and areas of valuable landscape	Will the proposal protect and enhance the character and integrity of the distinctive landscapes and areas of valuable landscapes?	No positive or significant negative effects have been identified.	0	No positive or significant negative effects have been identified.	0
Cultural Heritage	To protect and enhance historic and archaeological sites and other culturally and historically important features, landscapes and their settings.	Will the proposal protect and enhance sites, features and areas of historical, archaeological and cultural value?	Reduced number of cars resulting either from a charge for the length of the trip or, for entering a respective cordon will have a long-term positive impact on the streetscapes, townscapes and landscapes, especially in conservation areas and other areas noted for their local distinctiveness.	+	No positive or significant negative effects have been identified.	0
		Will the proposal help to improve the wider historic environment and sense of place?				
		Will the proposal improve access to sites of historic and/or cultural interest?				
Climate Change	To reduce greenhouse gas emissions from transport	Will the proposal help to reduce emissions of greenhouse gases	Reduced traffic levels and subsequently reduced carbon emissions and air pollutants, with increased bus, rail and	++	Not promoting and supporting road user charging schemes could result in an increased number of car trips, resulting	-

		<p>and, help Scotland meet its emission targets?</p>	<p>active travel use, with a long-term positive impact on climate change.</p> <p>There was a reduction in traffic movements into central London in May 2019 and September 2019 of between three and nine per cent when compared to 2018, indicating the wider benefits of the London ULEZ in encouraging people to shift to walking, cycling or using public transport instead of driving.</p> <p>The Congestion Charge in London has helped London to become the only major city in the world to see a considerable shift from private car use to public transport, walking and cycling¹¹.</p> <p>Less polluting and likely reduced vehicles in the city centre and an associated reduction in tail-pipe carbon emissions and air pollution. Preliminary results from the introduction of the Ultra LEZ in London shows that approximately 13,500 fewer polluting cars enter the zone</p>		<p>from the high number of single occupancy car trips undertaken within the region, with long-term negative impacts on climate change due to increased levels of transport related pollutants, with a long-term negative impact.</p>	
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¹¹ <http://content.tfl.gov.uk/congestion-charge-factsheet.pdf>

			each day ¹² , with 77% of vehicles entering the zone now meeting the clean emissions standards.			
	To adapt the transport network to the predicted effects of climate change	Will the proposal protect the Tactran region from climate change impacts and help the region function during extreme weather events?	No positive or significant negative effects have been identified.		No positive or significant negative effects have been identified.	
		Will the proposal improve access to services during severe weather events?				
		Will the proposal help those communities at risk during severe weather to recover?				
Air Quality	To reduce all forms of transport related air pollution and improve air quality, in particularly with regards to the three declared Air Quality Management Areas	Will the proposal help to reduce emissions of priority pollutants in line with Scottish and European standards (e.g., PM10, NOX, NO2)?	Reduced traffic levels and subsequently reduced carbon emissions and air pollutants, with increased bus, rail and active travel use, with a long-term positive impact on climate change.	++	No positive or significant negative effects have been identified.	0

¹² <https://www.london.gov.uk/WHAT-WE-DO/environment/environment-publications/central-london-ulez-six-month-report>

	in Crieff, Dundee and Perth		<p>There was a reduction in traffic movements into central London in May 2019 and September 2019 of between three and nine per cent when compared to 2018, indicating the wider benefits of the London ULEZ in encouraging people to shift to walking, cycling or using public transport instead of driving.</p> <p>The Congestion Charge in London has helped London to become the only major city in the world to see a considerable shift from private car use to public transport, walking and cycling¹³.</p> <p>Less polluting and likely reduced vehicles in the city centre and an associated reduction in tail-pipe carbon emissions and air pollution. Preliminary results from the introduction of the Ultra LEZ in London shows that approximately 13,500 fewer polluting cars enter the zone each day¹⁴, with 77% of vehicles</p>			
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¹³ <http://content.tfl.gov.uk/congestion-charge-factsheet.pdf>

¹⁴ <https://www.london.gov.uk/WHAT-WE-DO/environment/environment-publications/central-london-ulez-six-month-report>

			<p>entering the zone now meeting the clean emissions standards, with a long-term positive impact on air quality.</p> <p>As with all demand management policies, ensuring that congestion, additional parking, and general intensification effects of private car journeys will be essential to avoid problems simply being shifted to boundary areas.</p>			
Noise and Vibration	Reduce noise and vibration associated with the transport network	<p>Will the proposal reduce the levels of noise generated?</p> <p>Will the proposal reduce inequalities in exposure to ambient noise?</p> <p>Will the proposal reduce the number of people exposed to high levels of noise with the potential to cause health problems, particularly those in deprived / vulnerable communities and</p>	<p>Reduced noise levels due to reduced traffic levels.</p> <p>As with all demand management policies, ensuring that congestion, additional parking, and general intensification effects of private car journeys will be essential to avoid problems simply being shifted to boundary areas.</p>	+	No positive or significant negative effects have been identified.	0

		those groups at risk?				
Human Health	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and the natural environment	Will the proposal promote social inclusion and improve access to services, including healthcare, and opportunities, especially for those without a private car?	A reduction in traffic volumes and subsequent car kilometres is likely to reduce the number of road accidents, particularly within centres due to reduced traffic levels and reduced traffic cruising for parking. Providing for safer travel may encourage more active travel and increase the use of public transport within the region. This may result in positive effects on physical activity, providing mental and physical health benefits. This may be of particular benefit to adults and young people. Participation in physical activity is lower in older people (75+), unemployed and low-income groups, and people with disabilities. However, providing for safer travel may remove some barriers to active travel modes.	++	Not promoting and supporting road user charging schemes could result in an increased number of car trips, resulting from the high number of single occupancy car trips undertaken within the region, with long-term negative impacts on human health due to increased levels of transport related pollutants and noise levels, with a long-term negative impact.	--
	To promote, invest in, build and maintain infrastructure to	Will the proposal reduce the likelihood of transport-related road accidents and casualties?	Significant improvements to public transport services will be required to achieve this reduction in car dependency. At			

	support the development of high-quality places	and liveability of the towns and villages and, rural communities across the region? Will the proposal improve the public realm by improving the public realm and access?	present, many people have no choice but to drive, particularly for trips within the region, rather than into the city centres and towns. Significant improvements to public transport services will be required to achieve this reduction in car dependency. Income from charging mechanism could help fund the required improvements. Measures that reduce car dependency will free up space for essential freight and business trips. There are, however, potential negative impacts on disabled people who may continue to require private and assisted car journeys. This can be further assessed with mitigation identified through Equality Impact Assessment and Health Impact Assessment.		and polluted, which impacts the residents' quality of life.	
Population	To improve quality of life and human health by promoting active lifestyles and	Will the proposal promote social inclusion and improve access to key services and	Respective measures will support social inclusion by enabling those segments of the regional population who currently perceive the transport	+	Not implementing road user charging schemes to improve and promote the active and sustainable travel offer within the region could result in fewer	-

	<p>increasing sustainable access for all to essential services (including healthcare), employment and the natural environment</p>	<p>opportunities, especially for those without a private car?</p> <p>Will the proposal help to improve access to greenspaces both for recreational and health benefits?</p> <p>Will the proposal help to support an ageing population by providing appropriate transport choices to meet their needs?</p>	<p>network as being unsafe to walk or cycle to access the nearest bus stop / train station or, indeed, travel actively all the way to key destinations within the region without anxiety.</p> <p>This may be of particular benefit to adults and young people. Participation in physical activity is lower in older people (75+), unemployed and low-income groups, and people with disabilities. However, providing for safer travel may remove some barriers to active travel modes.</p> <p>There are, however, potential negative impacts on disabled people who may continue to require private and assisted car journeys. This can be further assessed with mitigation identified through Equality Impact Assessment and Health Impact Assessment.</p>		<p>people walking and cycling or using public transport. Indiscriminate car usage may result in less people travel more actively more often and will also increase the levels of pollutants and noise levels, with long-term negative impacts on the population within the region.</p>	
Geology and Soil	<p>To safeguard and improve soil quality, particularly high value agricultural land and carbon rich soil</p>	<p>Does the proposal cause soil sealing and compaction?</p> <p>Does the proposal result in the release of substances that</p>	<p>A reduced number of car trips and a subsequent reduction in the numbers of vehicles on the road and vehicle kilometres driven will realise benefits to local air quality. Any air quality</p>	+	<p>No positive or significant negative effects have been identified.</p>	0

	and peatland habitats	could potentially contaminate the soil? Does the proposal ensure that possible contamination will be properly remediated and not impact upon on sensitive receptors, such as surface water and groundwater?	improvements arising from this objective will reduce the impacts of air pollution on soil.			
	To protect sites designated for their geological interest	Will the proposal protect and enhance sites, designated for their geological interest?				
Water	To protect, maintain and improve the quality of water environment and wetlands that could be directly or indirectly affected by transport infrastructure and protect against the risk of flooding	Does the proposal result in the release of water-borne pollution into watercourses, groundwater or reservoirs? Does the proposal increase the amount of surface water run-off into water environment? Or	Reducing transport related emissions indirectly has the potential to improve water quality.	+	No positive or significant negative effects have been identified.	0

		increase the risk of flooding? Does the proposal physically impact on a watercourse?				
Material assets	To promote and improve the sustainable use and management of the transport network	Will the proposal provide adequate transport choices that meet the needs of the people within the Tactran region?	Respective measures are aimed to encourage people to use alternatives to cars and, include a range of measures which encourage people to walk, cycle, use public transport and share car journeys.	+	Not engaging in respective schemes could result in long-term negative impacts on material assets arising from the increased number of car trips and subsequent high use of transport related infrastructure, thus reducing their lifespan.	-
	To reduce the use of natural resources	Does the proposal allow for the sustainable use of natural resources?	By encouraging a more efficient sustainable use of the regional transport infrastructure, they can bring long-term positive benefits to material assets. Without significant improvements to both the public realm and active and sustainable transport networks, it is likely that a range of improvements would not be delivered. This would jeopardise the region's vision of creating an effective and integrated transport system which meets the needs of all those living in, working in, and visiting the region.			

			Charging mechanism may provide the required local and regional funding.			
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Delivery Theme: Improving access to public transport						
Proposal relevant to the RTS 2024 – 2034: Improved Public Transport Interchange						
SEA Theme	Objectives	Will the delivery theme...?	Assessment – Preferred Option (with RTS)	Score	Assessment – Alternative Option (without RTS)	Score
Biodiversity, Flora and Fauna	To protect, maintain and enhance biodiversity and ecosystem services, avoiding damage to or loss of designated and undesignated wildlife sites and protected species	Will the proposal cause disturbance or damage to any protected species or habitat?	An increase in mode share for public transport would result in less car trips. This would have a long-term positive impact on biodiversity, particularly for those species and habitats currently suffering from disturbance caused by road transport. Reduced car trips would also remove the need for construction of new transport	+	Not achieving increased mode share for bus and rail will mean that car trips are set to continue to increase within the region. This could have a long-term negative impact on biodiversity, particularly for those species and habitats currently suffering from disturbance from road transport. Increased car use	-
		Will the proposal protect and enhance the quality and extent of designated and undesignated sites?				

		Will the proposal result in a greener public realm, resulting in a net gain of biodiversity?	infrastructure which could also negatively impact on biodiversity through damaging, disrupting and severing species and habitats. This objective therefore has a long-term positive impact on biodiversity and is preferable to the alternative scenario which is predicted to have a negative impact.		could also increase the need for construction of new transport infrastructure which could also negatively impact on biodiversity through damaging, disrupting and severing species and habitats. This therefore has a long-term negative impact on biodiversity.	
Landscape	To safeguard and enhance the character and diversity of the landscape and areas of valuable landscape	Will the proposal protect and enhance the character and integrity of the distinctive landscapes and areas of valuable landscapes?	Increased mode shares for bus and rail within the region at the expense of car trips could reduce the need for construction of new, unsightly transport facilities, such as roads etc. This objective therefore has a long-term positive impact on landscape.	+	Not achieving increased mode shares for bus and rail within the region will mean that car use is set to continue to increase. This may ultimately necessitate the construction of new roads etc. to cope with demand which could have long-term negative impacts on the landscape.	-
Cultural Heritage	To protect and enhance historic and archaeological sites and other culturally and historically important features, landscapes and their settings.	Will the proposal protect and enhance sites, features and areas of historical, archaeological and cultural value? Will the proposal help to improve the wider historic environment and sense of place?	Fewer cars in conservation areas and around distinctive cultural and historical sites within the region could improve the setting and distinctiveness of these sites and areas, with a long-term positive impact on cultural heritage. Improved public transport interchange could also facilitate (improved) access to such sites.	+/-	Not achieving increased mode shares for bus and rail within the region could result in more cars in conservation areas and around cultural and historical sites and areas, thus detracting from their setting and contributing to their degradation because of increased pollution, with long-term negative impacts.	-

		Will the proposal improve access to sites of historic and/or cultural interest?	<p>In considering improvements to access to public transport we would note that new and improved rail and bus stations have implications of the historic environment that can lead to both positive and negative effects. For example, improvements at stations may have challenges associated with existing infrastructure that is of historic merit.</p> <p>Schemes will be delivered through the appropriate consenting process. Detailed mitigation and enhancement opportunities will be developed as part of the consenting process at scheme level, weighing up access improvements with other aspects.</p>			
Climate Change	To reduce greenhouse gas emissions from transport	Will the proposal help to reduce emissions of greenhouse gases and, help Scotland meet its emission targets?	An increase in mode shares for public transport within the region at the expense of car trips will have a long-term positive impact on climate change through reducing emissions and pollution.	+	Not achieving increased mode shares for bus and rail within the region means that car trips will be continuing to increase. This could have a long-term negative impact on climactic factors, resulting from increased emissions.	-
	To adapt the transport network	Will the proposal protect the Tactran				

	to the predicted effects of climate change	<p>region from climate change impacts and help the region function during extreme weather events?</p> <p>Will the proposal improve access to services during severe weather events?</p> <p>Will the proposal help those communities at risk during severe weather to recover?</p>	No positive or significant negative effects have been identified.		No positive or significant negative effects have been identified.	
Air Quality	To reduce all forms of transport related air pollution and improve air quality, in particularly with regards to the three declared Air Quality Management Areas in Crieff, Dundee and Perth	Will the proposal help to reduce emissions of priority pollutants in line with Scottish and European standards (e.g., PM10, NOX, NO2)?	<p>Increased mode shares for public transport within the region at the expense of car trips will have a long-term positive impact on air quality through reducing emissions and pollution.</p> <p>Air Quality impacts are positive, largely through contribution to modal shift away from private car journeys. Low emission and alternative fuels including potential shift to hydrogen would see benefits increase</p>	+	Not achieving increased mode shares for bus and rail within the region means that car trips will be continuing to increase. This could have a long-term negative impact on air quality, resulting from increased emissions and subsequent pollution.	-

			sooner – although the pace at which such developments are coming forward is beyond the influence of the RTS. AQMAS located in Crieff, Dundee and Perth in particular would benefit through reduced levels of private car journeys.			
Noise and Vibration	Reduce noise and vibration associated with the transport network	Will the proposal reduce the levels of noise generated? Will the proposal reduce inequalities in exposure to ambient noise? Will the proposal reduce the number of people exposed to high levels of noise with the potential to cause health problems, particularly those in deprived / vulnerable communities and those groups at risk?	Reduced noise levels due to reduced traffic levels.	+	No positive or significant negative effects have been identified.	0
Human Health	To improve quality of life and human health by promoting active	Will the proposal promote social inclusion and improve access to	Increased mode shares for public transport within the region at the expense of car trips will have significant long-	+	Not achieving increased mode shares for bus and rail within the region means that car trips will be continuing to increase,	-

	<p>lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and the natural environment</p>	<p>services, including healthcare, and opportunities, especially for those without a private car?</p>	<p>term benefits for human health. It will result in less pollution and emissions, thus positive impacting on incidences of respiratory problems, and poor air quality which is known to reduce life expectancy.</p> <p>Improved public transport interchange could also improve access to healthcare facilities and areas of open space by bus and rail.</p>		<p>thus increasing emissions and contributing to poor air quality.</p> <p>Not seeking to improve public transport interchange could see some key destinations, such as healthcare facilities remain fairly inaccessible to those without access to a private car, potentially contributing towards social exclusion, especially of the elderly who are typically more reliant on such services. This will therefore have long-term negative impacts on health.</p>	
	<p>To promote, invest in, build and maintain infrastructure to support the development of high-quality places</p>	<p>Will the proposal protect and enhance the character, integrity and liveability of the towns and villages and, rural communities across the region?</p>	<p>Significant improvements to public transport services will be required to achieve this reduction in car dependency. At present, many people have no choice but to drive, particularly for trips within the region, rather than into the city centres and towns.</p> <p>Significant improvements to public transport services will be required to achieve this reduction in car dependency.</p> <p>Measures that reduce car dependency will free up space</p>		<p>The region's high streets, town centres and communities are often traffic dominated, noisy and polluted, which impacts the residents' quality of life.</p>	
		<p>Will the proposal improve the public realm by improving the public realm and access?</p>				

			for essential freight and business trips.			
Population	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and the natural environment	<p>Will the proposal promote social inclusion and improve access to key services and opportunities, especially for those without a private car?</p> <p>Will the proposal help to improve access to greenspaces both for recreational and health benefits?</p> <p>Will the proposal help to support an ageing population by providing appropriate transport choices to meet their needs?</p>	<p>Increased mode shares for bus and rail within the region will have long-term positive impacts on the economy by reducing congestion and improving journey time reliability, enabling the more efficient movement of people and freight.</p> <p>Improvements to, and increase in the number of, public transport interchanges, such as mobility hubs, serving a range of destinations, will have a long-term positive impact on social inclusion by encouraging and facilitating greater use of public transport to access key destinations, including employment, education, and healthcare services which will be of particular benefit to those without access to a car or who have given up driving, such as the elderly.</p>	++	<p>Not achieving increased mode shares for bus and rail within the region means that car trips will be continuing to increase, thus exacerbating congestion and contributing to journey time unreliability.</p> <p>Not seeking to improve, and increase the number of, public transport interchanges, could see some locations remain fairly inaccessible to those without access to a private car, potentially contributing towards social exclusion, especially of the elderly who are typically more reliant on such services. This therefore has long-term negative impacts on the population.</p>	--
Geology and Soil	To safeguard and improve soil quality, particularly high value agricultural land and carbon rich soil	<p>Does the proposal cause soil sealing and compaction?</p> <p>Does the proposal result in the release of substances that</p>	Increased mode shares for bus and rail within the region at the expense of car trips are likely to reduce the necessity for new road infrastructure, such as roads etc. The construction of	+	Not achieving increased mode shares for bus and rail within the region means that car trips will be continuing to increase. This could ultimately lead to a need for more transport	-

	and peatland habitats	could potentially contaminate the soil?	which could lead to the loss or contamination of soil.		infrastructure in line with demand. The construction of which could lead to the loss of or contamination of soil.	
		Does the proposal ensure that possible contamination will be properly remediated and not impact upon on sensitive receptors, such as surface water and groundwater?	Air quality improvements will have a positive impact on soil resulting from less air pollution, with a long-term positive impact on soil.		This could also lead to an increase in air pollution, with long-term negative impacts on soil.	
	To protect sites designated for their geological interest	Will the proposal protect and enhance sites, designated for their geological interest?				
Water	To protect, maintain and improve the quality of water environment and wetlands that could be directly or indirectly affected by transport infrastructure and protect against the risk of flooding	Does the proposal result in the release of water-borne pollution into watercourses, groundwater or reservoirs? Does the proposal increase the amount of surface water run-off into water environment? Or	Increased mode shares for bus and rail within the region at the expense of car trips are likely to reduce the necessity for new road infrastructure, such as roads etc. The construction of which could lead to water pollution. Reducing transport related emissions indirectly has the potential to improve water quality.	+	Not achieving increased mode shares for bus and rail within the region means that car trips will be continuing to increase. This could ultimately lead to a need for more transport infrastructure in line with demand. The construction of which could lead to water pollution.	-

		increase the risk of flooding?	Opportunity to adopt sustainable drainage options and incorporate blue-green infrastructure to the active and public transport networks within the region.			
		Does the proposal physically impact on a watercourse?				
Material assets	To promote and improve the sustainable use and management of the transport network	Will the proposal provide adequate transport choices that meet the needs of the people within the Tactran region?	Improvements to, and increase in the number of, public transport interchanges, will have a long-term positive impact on the region's material assets, enabling a more efficient sustainable use of the regional transport infrastructure, with long-term positive benefits to material assets.	+	Not improving, and increasing the number of, public transport interchanges will have long-term negative impacts on material assets arising from the increased number of car trips and subsequent high use of transport related infrastructure, thus reducing their lifespan.	-
	To reduce the use of natural resources	Does the proposal allow for the sustainable use of natural resources?				

Delivery Theme: Improving access to public transport						
Proposal relevant to the RTS 2024 – 2034: New and improved rail and bus stations						
SEA Theme	Objectives	Will the delivery theme...?	Assessment – Preferred Option (with RTS)	Score	Assessment – Alternative Option (without RTS)	Score
Biodiversity, Flora and Fauna	To protect, maintain and enhance biodiversity and ecosystem services, avoiding damage to or loss of designated and undesignated wildlife sites and protected species	Will the proposal cause disturbance or damage to any protected species or habitat?	An increase in mode share for public transport would result in less car trips. This would have a long-term positive impact on biodiversity, particularly for those species and habitats currently suffering from disturbance caused by road transport. Reduced car trips would also remove the need for construction of new transport infrastructure which could also negatively impact on biodiversity through damaging, disrupting and severing species and habitats. This objective therefore has a long-term positive impact on biodiversity and is preferable to the alternative scenario which is predicted to have a negative impact.	+	Not achieving increased mode share for bus and rail will mean that car trips are set to continuing to increase within the region. This could have a long-term negative impact on biodiversity, particularly for those species and habitats currently suffering from disturbance from road transport. Increased car use could also increase the need for construction of new transport infrastructure which could also negatively impact on biodiversity through damaging, disrupting and severing species and habitats. This therefore has a long-term negative impact on biodiversity.	-
		Will the proposal protect and enhance the quality and extent of designated and undesignated sites?				
		Will the proposal result in a greener public realm, resulting in a net gain of biodiversity?				
Landscape	To safeguard and enhance the character and diversity of the landscape and	Will the proposal protect and enhance the character and integrity of the	Increased mode shares for bus and rail within the region at the expense of car trips could reduce the need for construction of new, unsightly	+	Not achieving increased mode shares for bus and rail within the region will mean that car use is set to continuing to increase. This may ultimately	-

	areas of valuable landscape	distinctive landscapes and areas of valuable landscapes?	transport facilities, such as roads etc., with a long-term positive impact on landscape.		necessitate the construction of new roads etc. to cope with demand which could have long-term negative impacts on the landscape.	
Cultural Heritage	To protect and enhance historic and archaeological sites and other culturally and historically important features, landscapes and their settings.	Will the proposal protect and enhance sites, features and areas of historical, archaeological and cultural value?	Fewer cars in conservation areas and around distinctive cultural and historical sites within the region could improve the setting and distinctiveness of these sites and areas, with a long-term positive impact on cultural heritage. Improved public transport interchange could also facilitate (improved) access to such sites.	+	Not achieving increased mode shares for bus and rail within the region could result in more cars in conservation areas and around cultural and historical sites and areas, thus detracting from their setting and contributing to their degradation because of increased pollution, with long-term negative impacts.	-
		Will the proposal help to improve the wider historic environment and sense of place?				
		Will the proposal improve access to sites of historic and/or cultural interest?				
Climate Change	To reduce greenhouse gas emissions from transport	Will the proposal help to reduce emissions of greenhouse gases and, help Scotland meet its emission targets?	An increase in mode shares for public transport within the region at the expense of car trips will have a long-term positive impact on climate change through reducing emissions and pollution.	+	Not achieving increased mode shares for bus and rail within the region means that car trips will be continuing to increase. This could have a long-term negative impact on climactic factors, resulting from increased emissions.	-
	To adapt the transport network to the predicted	Will the proposal protect the Tactran region from climate	No positive or significant negative effects have been identified.			

	effects of climate change	change impacts and help the region function during extreme weather events? Will the proposal improve access to services during severe weather events? Will the proposal help those communities at risk during severe weather to recover?				
Air Quality	To reduce all forms of transport related air pollution and improve air quality, in particularly with regards to the three declared Air Quality Management Areas in Crieff, Dundee and Perth	Will the proposal help to reduce emissions of priority pollutants in line with Scottish and European standards (e.g., PM10, NOX, NO2)?	Increased mode shares for public transport within the region at the expense of car trips will have a long-term positive impact on air quality through reducing emissions and pollution. Air Quality impacts are positive, largely through contribution to modal shift away from private car journeys. Low emission and alternative fuels including potential shift to hydrogen would see benefits increase sooner – although the pace at	+	Not achieving increased mode shares for bus and rail within the region means that car trips will be continuing to increase. This could have a long-term negative impact on air quality, resulting from increased emissions and subsequent pollution.	-

			which such developments are coming forward is beyond the influence of the RTS. AQMAs located in Crieff, Dundee and Perth in particular would benefit through reduced levels of private car journeys.			
Noise and Vibration	Reduce noise and vibration associated with the transport network	<p>Will the proposal reduce the levels of noise generated?</p> <p>Will the proposal reduce inequalities in exposure to ambient noise?</p> <p>Will the proposal reduce the number of people exposed to high levels of noise with the potential to cause health problems, particularly those in deprived / vulnerable communities and those groups at risk?</p>	Reduced noise levels due to reduced traffic levels.	+	No positive or significant negative effects have been identified.	0
Human Health	To improve quality of life and human health by promoting active lifestyles and	Will the proposal promote social inclusion and improve access to services, including	Increased mode shares for public transport within the region at the expense of car trips will have significant long-term benefits for human health.	+	Not achieving increased mode shares for bus and rail within the region means that car trips will be continuing to increase,	-

	<p>increasing sustainable access for all to essential services (including healthcare), employment and the natural environment</p>	<p>healthcare, and opportunities, especially for those without a private car?</p>	<p>It will result in less pollution and emissions, thus positive impacting on incidences of respiratory problems, and poor air quality which is known to reduce life expectancy.</p>		<p>thus increasing emissions and contributing to poor air quality.</p> <p>Not seeking to improve public transport interchange could see some key destinations, such as healthcare facilities remain fairly inaccessible to those without access to a private car, potentially contributing towards social exclusion, especially of the elderly who are typically more reliant on such services. This will therefore have long-term negative impacts on health.</p>	
	<p>To promote, invest in, build and maintain infrastructure to support the development of high-quality places</p>	<p>Will the proposal protect and enhance the character, integrity and liveability of the towns and villages and, rural communities across the region?</p>	<p>Significant improvements to public transport services will be required to achieve this reduction in car dependency. At present, many people have no choice but to drive, particularly for trips within the region, rather than into the city centres and towns.</p>		<p>The region's high streets, town centres and communities are often traffic dominated, noisy and polluted, which impacts the residents' quality of life.</p>	
		<p>Will the proposal improve the public realm by improving the public realm and access?</p>	<p>Significant improvements to public transport services will be required to achieve this reduction in car dependency. Income from charging mechanism could help fund the required improvements.</p>			

			Measures that reduce car dependency will free up space for essential freight and business trips.			
Population	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and the natural environment	<p>Will the proposal promote social inclusion and improve access to key services and opportunities, especially for those without a private car?</p> <p>Will the proposal help to improve access to greenspaces both for recreational and health benefits?</p> <p>Will the proposal help to support an ageing population by providing appropriate transport choices to meet their needs?</p>	<p>Increased mode shares for bus and rail within the region will have long-term positive impacts on the economy by reducing congestion and improving journey time reliability, enabling the more efficient movement of people and freight.</p> <p>Improvements to, and an increase in the number of, public transport services, serving a range of destinations, will have a long-term positive impact on social inclusion by encouraging and facilitating greater use of public transport to access key destinations, including employment, education, and healthcare services which will be of particular benefit to those without access to a car or who have given up driving, such as the elderly.</p>	++	<p>Not achieving increased mode shares for bus and rail within the region means that car trips will be continuing to increase, thus exacerbating congestion and contributing to journey time unreliability.</p> <p>Not seeking to improve, and increase the number of, public transport interchanges, serving a range of destinations, could see some locations remain fairly inaccessible to those without access to a private car, potentially contributing towards social exclusion, especially of the elderly who are typically more reliant on such services. This therefore has long-term negative impacts on the population.</p>	--
Geology and Soil	To safeguard and improve soil quality, particularly	Does the proposal cause soil sealing and compaction?	Increased mode shares for bus and rail within the region at the expense of car trips are likely to	+	Not achieving increased mode shares for bus and rail within the region means that car trips	-

	high value agricultural land and carbon rich soil and peatland habitats	Does the proposal result in the release of substances that could potentially contaminate the soil?	reduce the necessity for new road infrastructure, such as roads etc. The construction of which could lead to the loss or contamination of soil.		will be continuing to increase. This could ultimately lead to a need for more transport infrastructure in line with demand. The construction of which could lead to the loss of or contamination of soil.	
		Does the proposal ensure that possible contamination will be properly remediated and not impact upon on sensitive receptors, such as surface water and groundwater?	Air quality improvements will have a positive impact on soil resulting from less air pollution, with a long-term positive impact on soil.		This could also lead to an increase in air pollution, with long-term negative impacts on soil.	
	To protect sites designated for their geological interest	Will the proposal protect and enhance sites, designated for their geological interest?				
Water	To protect, maintain and improve the quality of water environment and wetlands that could be directly or indirectly affected by transport infrastructure and	Does the proposal result in the release of water-borne pollution into watercourses, groundwater or reservoirs?	Increased mode shares for bus and rail within the region at the expense of car trips are likely to reduce the necessity for new road infrastructure, such as roads etc. The construction of which could lead to water pollution.	+	Not achieving increased mode shares for bus and rail within the region means that car trips will be continuing to increase. This could ultimately lead to a need for more transport infrastructure in line with demand. The construction of which could lead to water pollution.	-
		Does the proposal increase the amount of surface water run-off into	Reducing transport related emissions indirectly has the			

	protect against the risk of flooding	water environment? Or increase the risk of flooding?	potential to improve water quality. Opportunity to adopt sustainable drainage options and incorporate blue-green infrastructure to the active and public transport networks within the region.			
		Does the proposal physically impact on a watercourse?				
Material assets	To promote and improve the sustainable use and management of the transport network	Will the proposal provide adequate transport choices that meet the needs of the people within the Tactran region?	Improvements to public transport routes, services and infrastructure will have a long-term positive impact on our material assets, enabling a more efficient sustainable use of the regional transport infrastructure, with long-term positive benefits to material assets.	+	Not improving, and increasing the number of, public transport interchanges will have long-term negative impacts on material assets arising from the increased number of car trips and subsequent high use of transport related infrastructure, thus reducing their lifespan.	-
	To reduce the use of natural resources	Does the proposal allow for the sustainable use of natural resources?				

Delivery Theme: Improving access to public transport						
Proposal relevant to the RTS 2024 – 2034: Easier planning and booking of journeys						
SEA Theme	Objectives	Will the delivery theme...?	Assessment – Preferred Option (with RTS)	Score	Assessment – Alternative Option (without RTS)	Score
Biodiversity, Flora and Fauna	To protect, maintain and enhance biodiversity and ecosystem services, avoiding damage to or loss of designated and undesignated wildlife sites and protected species	Will the proposal cause disturbance or damage to any protected species or habitat?	Increasing the number of trips by sustainable modes will result in a long-term positive impact on biodiversity, reducing the negative impacts of an increasing number of car trips. With the latter potentially disrupting and damaging vulnerable habitats and species.	+	Not enabling and promoting trips by sustainable transport means that the negative impacts of indiscriminate car use within the region on biodiversity remain and potentially worsen, resulting from an increase in car trips.	-
		Will the proposal protect and enhance the quality and extent of designated and undesignated sites?				
		Will the proposal result in a greener public realm, resulting in a net gain of biodiversity?				
Landscape	To safeguard and enhance the character and diversity of the landscape and areas of valuable landscape	Will the proposal protect and enhance the character and integrity of the distinctive landscapes and	Increased mode shares for bus and rail within the region at the expense of car trips could reduce the need for construction of new, unsightly transport facilities, such as roads etc., with a long-term positive impact on landscape.	+	Not achieving increased mode shares for bus and rail within the region will mean that car use is set to continue to increase. This may ultimately necessitate the construction of new roads etc. to cope with demand which could have long-	-

		areas of valuable landscapes?			term negative impacts on the landscape.	
Cultural Heritage	To protect and enhance historic and archaeological sites and other culturally and historically important features, landscapes and their settings.	Will the proposal protect and enhance sites, features and areas of historical, archaeological and cultural value?	Fewer cars in conservation areas and around distinctive cultural and historical sites within the region could improve the setting and distinctiveness of these sites and areas, with a long-term positive impact on cultural heritage. Improved journey planning tools and integrated ticketing options could also facilitate (improved) access to such sites.	+	Not achieving increased mode shares for bus and rail within the region could result in more cars in conservation areas and around cultural and historical sites and areas, thus detracting from their setting and contributing to their degradation because of increased pollution, with long-term negative impacts.	-
		Will the proposal help to improve the wider historic environment and sense of place?				
		Will the proposal improve access to sites of historic and/or cultural interest?				
Climate Change	To reduce greenhouse gas emissions from transport	Will the proposal help to reduce emissions of greenhouse gases and, help Scotland meet its emission targets?	An increase in mode shares for public transport within the region at the expense of car trips will have a long-term positive impact on climate change through reducing emissions.	+	Not achieving increased mode shares for bus and rail within the region means that car trips will be continuing to increase. This could have a long-term negative impact on climactic factors, resulting from increased emissions.	-
	To adapt the transport network to the predicted effects of climate change	Will the proposal protect the Tactran region from climate change impacts and help the region function during	No positive or significant negative effects have been identified.			

		extreme weather events?				
		Will the proposal improve access to services during severe weather events?				
		Will the proposal help those communities at risk during severe weather to recover?				
Air Quality	To reduce all forms of transport related air pollution and improve air quality, in particularly with regards to the three declared Air Quality Management Areas in Crieff, Dundee and Perth	Will the proposal help to reduce emissions of priority pollutants in line with Scottish and European standards (e.g., PM10, NOX, NO2)?	Increased mode shares for public transport within the region at the expense of car trips will have a long-term positive impact on air quality through reducing emissions and pollution. AQMA's located in Crieff, Dundee and Perth would benefit through reduced private car movements into Crieff, Dundee and Perth.	+	Not achieving increased mode shares for bus and rail within the region means that car trips will be continuing to increase. This could have a long-term negative impact on air quality, resulting from increased emissions and subsequent pollution.	-
Noise and Vibration	Reduce noise and vibration associated with the transport network	Will the proposal reduce the levels of noise generated? Will the proposal reduce inequalities	Reduced noise levels due to reduced traffic levels.	+	No positive or significant negative effects have been identified.	0

		in exposure to ambient noise? Will the proposal reduce the number of people exposed to high levels of noise with the potential to cause health problems, particularly those in deprived / vulnerable communities and those groups at risk?				
Human Health	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and the natural environment	Will the proposal promote social inclusion and improve access to services, including healthcare, and opportunities, especially for those without a private car? Will the proposal reduce the likelihood of transport-related road accidents and casualties?	Increased mode shares for public transport within the region at the expense of car trips will have significant long-term benefits for human health. It will result in less pollution and emissions, thus positive impacting on incidences of respiratory problems, and poor air quality which is known to reduce life expectancy. Improved journey planning tools and integrated ticketing options could also improve access to healthcare facilities and areas of open space by bus and rail.	+	Not achieving increased mode shares for bus and rail within the region means that car trips will be continuing to increase, thus increasing emissions and contributing to poor air quality. Not seeking to improve journey planning tools and integrated ticketing options could see some key destinations, such as healthcare facilities remain fairly inaccessible to those without access to a private car, potentially contributing towards social exclusion, especially of the elderly who are typically more reliant on such	-

					services. This will therefore have long-term negative impacts on health.	
	To promote, invest in, build and maintain infrastructure to support the development of high-quality places	Will the proposal protect and enhance the character, integrity and liveability of the towns and villages and, rural communities across the region?	Using new data to develop and improve online journey planning and navigation tools that will make public transport and walking and cycling trips the easiest journeys to plan., will improve access.		No positive or significant negative effects have been identified.	
		Will the proposal improve the public realm by improving the public realm and access?	Continuing to improve journey planning tools will be important in helping disabled and older people feel confident in using the public transport network.			
Population	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and the natural environment	Will the proposal promote social inclusion and improve access to key services and opportunities, especially for those without a private car?	Increased mode shares for bus and rail within the region will have long-term positive impacts on the economy by reducing congestion and improving journey time reliability, enabling the more efficient movement of people and freight.	++	Not achieving increased mode shares for bus and rail within the region means that car trips will be continuing to increase, thus exacerbating congestion and contributing to journey time unreliability.	--
		Will the proposal help to improve access to greenspaces both for recreational and health benefits?	Improvements to journey planning tools and integrated ticketing options, will have a long-term positive impact on social inclusion by encouraging and facilitating greater use of		Not seeking to improve to journey planning tools and integrated ticketing options, could see some locations remain fairly inaccessible to those without access to a private car, potentially	

		Will the proposal help to support an ageing population by providing appropriate transport choices to meet their needs?	public transport to access key destinations, including employment, education, and healthcare services which will be of particular benefit to those without access to a car or who have given up driving, such as the elderly.		contributing towards social exclusion, especially of the elderly who are typically more reliant on such services. This therefore has long-term negative impacts on the population.	
Geology and Soil	To safeguard and improve soil quality, particularly high value agricultural land and carbon rich soil and peatland habitats	Does the proposal cause soil sealing and compaction?	Increased mode shares for bus and rail within the region at the expense of car trips are likely to reduce the necessity for new road infrastructure, such as roads etc. The construction of which could lead to the loss or contamination of soil.	+	Not achieving increased mode shares for bus and rail within the region means that car trips will be continuing to increase. This could ultimately lead to a need for more transport infrastructure in line with demand. The construction of which could lead to the loss of or contamination of soil. This could also lead to an increase in air pollution, with long-term negative impacts on soil.	-
		Does the proposal result in the release of substances that could potentially contaminate the soil?				
	Does the proposal ensure that possible contamination will be properly remediated and not impact upon on sensitive receptors, such as surface water and groundwater?	Air quality improvements will have a positive impact on soil resulting from less air pollution, with a long-term positive impact on soil.				
	To protect sites designated for their geological interest	Will the proposal protect and enhance sites, designated for their geological interest?				

Water	To protect, maintain and improve the quality of water environment and wetlands that could be directly or indirectly affected by transport infrastructure and protect against the risk of flooding	Does the proposal result in the release of water-borne pollution into watercourses, groundwater or reservoirs?	Increased mode shares for bus and rail within the region at the expense of car trips are likely to reduce the necessity for new road infrastructure, such as roads etc. The construction of which could lead to water pollution. Reducing transport related emissions indirectly has the potential to improve water quality.	+	Not achieving increased mode shares for bus and rail within the region means that car trips will be continuing to increase. This could ultimately lead to a need for more transport infrastructure in line with demand. The construction of which could lead to water pollution.	-
		Does the proposal increase the amount of surface water run-off into water environment? Or increase the risk of flooding?				
		Does the proposal physically impact on a watercourse?				
Material assets	To promote and improve the sustainable use and management of the transport network	Will the proposal provide adequate transport choices that meet the needs of the people within the Tactran region?	Improvements to journey planning tools and integrated ticketing options will have a long-term positive impact on our material assets, enabling a more efficient sustainable use of the regional transport infrastructure, with long-term positive benefits to material assets.	+	Not improving journey planning tools and integrated ticketing options will have long-term negative impacts on material assets arising from the increased number of car trips and subsequent high use of transport related infrastructure, thus reducing their lifespan.	-
	To reduce the use of natural resources	Does the proposal allow for the sustainable use of natural resources?				

Delivery Theme: Improving sustainable travel opportunities						
Proposal relevant to the RTS 2024 – 2034: Improved Active Travel Opportunities						
SEA Theme	Objectives	Will the delivery theme...?	Assessment – Preferred Option (with RTS)	Score	Assessment – Alternative Option (without RTS)	Score
Biodiversity, Flora and Fauna	To protect, maintain and enhance biodiversity and ecosystem services, avoiding damage to or loss of designated and undesignated wildlife sites and protected species	Will the proposal cause disturbance or damage to any protected species or habitat?	An increase in mode shares for walking and cycling will help to contribute to a decline in car use. This would have a long-term positive impact on biodiversity, particularly for those species and habitats currently suffering from disturbance caused by transport. A decline in the number of car trips would also remove the need for construction of new transport infrastructure, such as roads etc. which could also negatively impact on biodiversity through damaging, disrupting and severing species and habitats. The policy is aimed at the enhancement of active travel links which are either already in	+ / -	Not achieving increased mode shares for walking and cycling means that car trips will be continuing to increase. This could have a long-term negative impact on biodiversity, particularly for those species and habitats currently suffering from disturbance from transport. An increasing number of car trips and a subsequent increased traffic volume could also increase the need for construction of new transport infrastructure, such as roads etc. This could also negatively impact on biodiversity through damaging, disrupting and severing species and habitats, with a long-term negative impact on biodiversity.	-
		Will the proposal protect and enhance the quality and extent of designated and undesignated sites?				
		Will the proposal result in a greener public realm, resulting in a net gain of biodiversity?				

			<p>existence, or which may need to be constructed. The general effect in the long term will be positive if a modal shift away from private transport is achieved. For new developments which include land take there may be some negative impacts which will need to be mitigated.</p> <p>Local effects on biodiversity, flora and fauna, geology and soil, cultural heritage and landscape will need to be identified and addressed on a scheme-specific basis. Specific significant impacts are difficult to identify at this stage.</p> <p>At the same time, the proposals may comprise plans to improve active travel routes through areas of natural beauty, including parks and greenspaces. This could encourage increased human activity around sensitive species and habitats or even cause severance of habitats. This might have long-term negative impacts on biodiversity.</p>			
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Landscape	To safeguard and enhance the character and diversity of the landscape and areas of valuable landscape	Will the proposal protect and enhance the character and integrity of the distinctive landscapes and areas of valuable landscapes?	<p>Increased mode shares for walking and cycling at the expense of car trips hold the potential to reduce the need for construction of new, unsightly transport infrastructure, such as roads etc., with a long-term positive impact on landscape.</p> <p>The policy is aimed at the enhancement of active travel links which are either already in existence, or which may need to be constructed. The general effect in the long term will be positive if a modal shift away from private transport is achieved. For new developments which include land take there may be some negative impacts which will need to be mitigated.</p> <p>Local effects on biodiversity, flora and fauna, geology and soil, cultural heritage and landscape will need to be identified and addressed on a scheme-specific basis. Specific significant impacts are difficult to identify at this stage.</p>	+	Not achieving increased mode shares for walking and cycling within the region means that car trips will be continuing to increase. This could ultimately lead to a need for more transport infrastructure in line with demand. The construction of which could have a long-term negative impact on landscape.	-
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Cultural Heritage	To protect and enhance historic and archaeological sites and other culturally and historically important features, landscapes and their settings.	Will the proposal protect and enhance sites, features and areas of historical, archaeological and cultural value?	Fewer cars in conservation areas and around distinctive cultural and historical sites within the region could improve the setting and distinctiveness of these sites and areas, with a long-term positive impact on cultural heritage. Improved active travel networks could also facilitate (improved) access to such sites. Much of our existing active travel network utilises historic environment features such as former branch railway lines, canal towpaths and historic routes and ways. Therefore, investment and maintenance in such routes can also be a positive effect for the historic environment.	+	Not achieving increased mode shares for walking and cycling within the region could result in more cars in conservation areas and around cultural and historical sites and areas, thus detracting from their setting and contributing to their degradation because of increased pollution, with long-term negative impacts.	-
		Will the proposal help to improve the wider historic environment and sense of place?				
		Will the proposal improve access to sites of historic and/or cultural interest?				
Climate Change	To reduce greenhouse gas emissions from transport	Will the proposal help to reduce emissions of greenhouse gases and, help Scotland meet its emission targets?	An increase in mode shares for active travel within the region at the expense of car trips will have a long-term positive impact on climate change through reducing emissions and pollution.	+	Not achieving increased mode shares for walking and cycling within the region means that car trips will be continuing to increase. This could have a long-term negative impact on climactic factors, resulting from increased emissions.	-
	To adapt the transport network	Will the proposal protect the Tactran				

	to the predicted effects of climate change	<p>region from climate change impacts and help the region function during extreme weather events?</p> <p>Will the proposal improve access to services during severe weather events?</p> <p>Will the proposal help those communities at risk during severe weather to recover?</p>	No positive or significant negative effects have been identified.		No positive or significant negative effects have been identified.	
Air Quality	To reduce all forms of transport related air pollution and improve air quality, in particularly with regards to the three declared Air Quality Management Areas in Crieff, Dundee and Perth	Will the proposal help to reduce emissions of priority pollutants in line with Scottish and European standards (e.g., PM10, NOX, NO2)?	An increase in mode shares for active travel within the region at the expense of the car trips will have a long-term positive impact on air quality through reducing emissions and pollution.	++	Not achieving increased mode shares for walking and cycling within the region means that car trips will be continuing to increase. This could have a long-term negative impact on air quality, resulting from increased emissions.	-
Noise and Vibration	Reduce noise and vibration associated with the transport network	<p>Will the proposal reduce the levels of noise generated?</p> <p>Will the proposal reduce inequalities</p>	Reduced noise levels due to reduced traffic levels.	+	No positive or significant negative effects have been identified.	0

		in exposure to ambient noise?				
		Will the proposal reduce the number of people exposed to high levels of noise with the potential to cause health problems, particularly those in deprived / vulnerable communities and those groups at risk?				
Human Health	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and the natural environment	Will the proposal promote social inclusion and improve access to services, including healthcare, and opportunities, especially for those without a private car?	An increased mode share for active travel at the expense of the car trips will have significant long-term benefits for human health. It will result in less pollution and emissions, thus reducing incidences of respiratory problems, and poor air quality which is known to reduce life expectancy.	+	Not achieving increased mode shares for walking and cycling within the region means that car trips will be continuing to increase. This could have a long-term negative impact on air quality, resulting from increased emissions.	--
		Will the proposal reduce the likelihood of transport-related road accidents and casualties?	Improved active travel routes and services could also improve access to key destinations, such as healthcare services.		Not seeking to increase and improve active travel within the region could see some locations remain fairly inaccessible to those without access to a private car, potentially contributing towards social exclusion, especially of the elderly who are typically more	

					reliant on such services. Long-term negative impacts on health.	
	To promote, invest in, build and maintain infrastructure to support the development of high-quality places	Will the proposal protect and enhance the character, integrity and liveability of the towns and villages and, rural communities across the region?	Less car dominated streetscapes and townscapes would help to improve both formal and informal surveillance including a higher number of people using the public realm.		No positive or significant negative effects on soil have been identified.	
		Will the proposal improve the public realm by improving the public realm and access?				
Population	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and the natural environment	Will the proposal promote social inclusion and improve access to key services and opportunities, especially for those without a private car?	Measures to improve active travel and increase their mode share will have long-term positive impacts on the economy by reducing congestion and improving journey time reliability, enabling the more efficient movement of people and freight. Increased enforcement of bus priority measures will also support this.	++	Not achieving increased mode shares for active travel within the region means that car trips will be continuing to increase, exacerbating congestion and contributing to journey time unreliability. Not tackling violations of bus priority measures could also contribute to this.	--
		Will the proposal help to improve access to greenspaces both for recreational and health benefits?	Improvements to active travel infrastructure serving a range of destinations, will have a long-		Not seeking to increase and improve active travel could see some key services and opportunities remain fairly	

		Will the proposal help to support an ageing population by providing appropriate transport choices to meet their needs?	term positive impact on social inclusion by facilitating greater access to key services and opportunities, including employment and healthcare services. This will be of particular benefit to those without access to a car. Improved active travel could have long-term positive impacts on social inclusion.		inaccessible to those without access to a private car, potentially contributing towards social exclusion. Long-term negative impacts on the population.	
Geology and Soil	To safeguard and improve soil quality, particularly high value agricultural land and carbon rich soil and peatland habitats	Does the proposal cause soil sealing and compaction?	Increased mode shares for active travel within the region at the expense of car trips are likely to reduce the necessity for new road infrastructure, such as roads etc. The construction of which could lead to the loss or contamination of soil.	+	Not achieving increased mode shares for active travel within the region means that car trips will be continuing to increase. This could ultimately lead to a need for more transport infrastructure in line with demand. The construction of which could lead to the loss of or contamination of soil. This could also lead to an increase in air pollution, with long-term negative impacts on soil.	-
		Does the proposal result in the release of substances that could potentially contaminate the soil?	Air quality improvements will have a positive impact on soil resulting from less air pollution, with a long-term positive impact on soil.			
		Does the proposal ensure that possible contamination will be properly remediated and not impact upon on sensitive receptors, such as surface water and groundwater?	The policy is aimed at the enhancement of active travel links which are either already in existence, or which may need to be constructed. The general			

	To protect sites designated for their geological interest	Will the proposal protect and enhance sites, designated for their geological interest?	<p>effect in the long term will be positive if a modal shift away from private transport is achieved. For new developments which include land take there may be some negative impacts which will need to be mitigated.</p> <p>Local effects on biodiversity, flora and fauna, geology and soil, cultural heritage and landscape will need to be identified and addressed on a scheme-specific basis. Specific significant impacts are difficult to identify at this stage.</p>			
Water	To protect, maintain and improve the quality of water environment and wetlands that could be directly or indirectly affected by transport infrastructure and protect against the risk of flooding	<p>Does the proposal result in the release of water-borne pollution into watercourses, groundwater or reservoirs?</p> <p>Does the proposal increase the amount of surface water run-off into water environment? Or increase the risk of flooding?</p>	<p>Reducing transport related emissions indirectly has the potential to improve water quality.</p> <p>Opportunity to adopt sustainable drainage options and incorporate blue-green infrastructure to the active and public transport networks within the region.</p>	+	No positive or significant negative effects have been identified.	0

		Does the proposal physically impact on a watercourse?				
Material assets	To promote and improve the sustainable use and management of the transport network	Will the proposal provide adequate transport choices that meet the needs of the people within the Tactran region?	Improvements to active travel, and infrastructure hold the potential to have a long-term positive impact on material assets. By encouraging a more efficient sustainable use of the regional transport infrastructure, they can bring long-term positive benefits to material assets.	+	Not engaging in respective schemes could result in long-term negative impacts on material assets arising from the increased number of car trips and subsequent high use of transport related infrastructure, thus reducing their lifespan.	-
	To reduce the use of natural resources	Does the proposal allow for the sustainable use of natural resources?				

Delivery Theme: Improving sustainable travel opportunities						
Proposal relevant to the RTS 2024 – 2034: Promoting and sustainable travel to school						
SEA Theme	Objectives	Will the delivery theme...?	Assessment – Preferred Option (with RTS)	Score	Assessment – Alternative Option (without RTS)	Score
Biodiversity, Flora and Fauna	To protect, maintain and enhance biodiversity and ecosystem services, avoiding damage to or loss of designated and undesignated wildlife sites and protected species	Will the proposal cause disturbance or damage to any protected species or habitat?	An increase in mode shares for walking and cycling as well as public transport will help to contribute to a decline in car use. This would have a long-term positive impact on biodiversity, particularly for those species and habitats currently suffering from disturbance caused by transport. A decline in the number of car trips would also remove the need for construction of new transport infrastructure, such as roads etc. which could also negatively impact on biodiversity through damaging, disrupting and severing species and habitats.	+	Not achieving increased mode shares for walking and cycling and public transport means that car trips will be continuing to increase. This could have a long-term negative impact on biodiversity, particularly for those species and habitats currently suffering from disturbance from transport. Negative impacts are likely to worsen with an increasing number of car trips. An increasing number of car trips and a subsequent increased traffic volume could also increase the need for construction of new transport infrastructure, such as roads etc. This could also negatively impact on biodiversity through damaging, disrupting and severing species and habitats, with a long-term negative impact on biodiversity.	-
		Will the proposal protect and enhance the quality and extent of designated and undesignated sites?				
		Will the proposal result in a greener public realm, resulting in a net gain of biodiversity?				

Landscape	To safeguard and enhance the character and diversity of the landscape and areas of valuable landscape	Will the proposal protect and enhance the character and integrity of the distinctive landscapes and areas of valuable landscapes?	Increased mode shares for walking and cycling and public transport at the expense of car trips hold the potential to reduce visual intrusion resulting from road traffic and congestion, with a long-term positive impact on landscape.	+	Not achieving increased mode shares for walking and cycling and public transport within the region means that car trips will be continuing to increase, with long-term negative impacts on the landscape.	-
Cultural Heritage	To protect and enhance historic and archaeological sites and other culturally and historically important features, landscapes and their settings.	Will the proposal protect and enhance sites, features and areas of historical, archaeological and cultural value? Will the proposal help to improve the wider historic environment and sense of place? Will the proposal improve access to sites of historic and/or cultural interest?	Fewer cars in conservation areas and around distinctive cultural and historical sites within the region could improve the setting and distinctiveness of these sites and areas as well as their preservation. Pollution is known to have damaging effects on cultural heritage. Long-term positive impact on cultural heritage.	+	Not achieving increased mode shares for walking and cycling within the region could result in more cars in conservation areas and around cultural and historical sites and areas, thus detracting from their setting and contributing to their degradation because of increased pollution, with long-term negative impacts.	-
Climate Change	To reduce greenhouse gas emissions from transport	Will the proposal help to reduce emissions of greenhouse gases and, help Scotland meet its emission targets?	An increase in mode shares for active travel and public transport within the region at the expense of car trips will have a long-term positive impact on climate change through	+	Not achieving increased mode shares for walking and cycling and public transport within the region means that car trips will be continuing to increase. This could have a long-term negative impact on climactic factors,	-

			reducing emissions and pollution.		resulting from increased emissions.	
	To adapt the transport network to the predicted effects of climate change	Will the proposal protect the Tactran region from climate change impacts and help the region function during extreme weather events?	No positive or significant negative effects have been identified.		No positive or significant negative effects have been identified.	
		Will the proposal improve access to services during severe weather events?				
		Will the proposal help those communities at risk during severe weather to recover?				
Air Quality	To reduce all forms of transport related air pollution and improve air quality, in particularly with regards to the three declared Air Quality Management Areas in Crieff, Dundee and Perth	Will the proposal help to reduce emissions of priority pollutants in line with Scottish and European standards (e.g., PM10, NOX, NO2)?	An increase in mode shares for active travel and public transport within the region at the expense of the car trips will have a long-term positive impact on air quality through reducing emissions and pollution.	++	Not achieving increased mode shares for walking and cycling and public transport within the region means that car trips will be continuing to increase. This could have a long-term negative impact on air quality, resulting from increased emissions.	-

Noise and Vibration	Reduce noise and vibration associated with the transport network	Will the proposal reduce the levels of noise generated?	Reduced noise levels due to reduced traffic levels.	+	No positive or significant negative effects have been identified.	0
		Will the proposal reduce inequalities in exposure to ambient noise?				
		Will the proposal reduce the number of people exposed to high levels of noise with the potential to cause health problems, particularly those in deprived / vulnerable communities and those groups at risk?				
Human Health	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and the natural environment	Will the proposal promote social inclusion and improve access to services, including healthcare, and opportunities, especially for those without a private car?	Encouraging more young people to walk and cycle can have significant long-term health benefits by encouraging and promoting healthy lifestyles from a young age and addressing obesity in children which can have significant negative health implications as children develop into adults.	++	Not promoting and encouraging active and sustainable modes of transport could result in fewer children walking and cycling. Not adopting a healthy lifestyle including regular physical activity while young can lead to significant health problems later in life. Car travel may also increase, thus increasing the release of	--
		Will the proposal reduce the likelihood of	Fewer cars around schools at peak times also reduce the			

		transport-related road accidents and casualties?	likelihood of road accidents and casualties and reduce the volume of harmful emissions in the air breathed by children.		harmful emissions. An increase in cars around the school gates could lead to an increase in accidents and collisions involving schoolchildren. Long-term negative impacts on health.	
	To promote, invest in, build and maintain infrastructure to support the development of high-quality places	Will the proposal protect and enhance the character, integrity and liveability of the towns and villages and, rural communities across the region?	No positive or significant negative effects have been identified.		No positive or significant negative effects have been identified.	
		Will the proposal improve the public realm by improving the public realm and access?				
Population	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and	Will the proposal promote social inclusion and improve access to key services and opportunities, especially for those without a private car?	Increasing proportions of school run journeys undertaken by active and sustainable modes of transport can relieve pressure on the road network when it is most under strain, reducing congestion and improving journey time reliability.	++	Not promoting and encouraging sustainable modes of transport could see an increase in private car traffic, resulting in increased congestion and unreliable journey times for people and goods, with long-term negative impacts.	--
		Will the proposal help to improve access to	Measures to improve routes to and from schools, and to provide statutory school bus			

	the natural environment	greenspaces both for recreational and health benefits? Will the proposal help to support an ageing population by providing appropriate transport choices to meet their needs?	services, will also improve their accessibility by non-car modes, with a long-term positive impact on the population, particularly those without access to a private car.		pupils, especially if their households do not have access to a car.	
Geology and Soil	To safeguard and improve soil quality, particularly high value agricultural land and carbon rich soil and peatland habitats	Does the proposal cause soil sealing and compaction?	Air quality improvements will have a positive impact on soil resulting from less air pollution, with a long-term positive impact on soil.	+	Not achieving increased mode shares for walking and cycling within the region means that car trips will be continuing to increase. This could also lead to an increase in air pollution, with long-term negative impacts on soil.	-
		Does the proposal result in the release of substances that could potentially contaminate the soil?				
		Does the proposal ensure that possible contamination will be properly remediated and not impact upon on sensitive receptors, such as surface water and groundwater?				
	To protect sites designated for their geological interest	Will the proposal protect and enhance sites,				

		designated for their geological interest?				
Water	To protect, maintain and improve the quality of water environment and wetlands that could be directly or indirectly affected by transport infrastructure and protect against the risk of flooding	Does the proposal result in the release of water-borne pollution into watercourses, groundwater or reservoirs? Does the proposal increase the amount of surface water run-off into water environment? Or increase the risk of flooding? Does the proposal physically impact on a watercourse?	Reducing transport related emissions indirectly has the potential to improve water quality. Opportunity to adopt sustainable drainage options and incorporate blue-green infrastructure to Safer Routes to School networks within the region.	+	No positive or significant negative effects have been identified.	0
Material assets	To promote and improve the sustainable use and management of the transport network To reduce the use of natural resources	Will the proposal provide adequate transport choices that meet the needs of the people within the Tacran region? Does the proposal allow for the sustainable use of natural resources?	By encouraging a more efficient sustainable use of the regional transport infrastructure, they can bring long-term positive benefits to material assets. Safer Routes to School interventions can involve the improvement or provision of safe pedestrian and cycle links, benefitting the wider community.	+	Not promoting active travel and public transport could result in long-term negative impacts on material assets arising from the increased number of car trips and subsequent high use of transport related infrastructure, thus reducing their lifespan.	-

Delivery Theme: Improving sustainable travel opportunities						
Proposal relevant to the RTS 2024 – 2034: Improved public transport						
SEA Theme	Objectives	Will the delivery theme...?	Assessment – Preferred Option (with RTS)	Score	Assessment – Alternative Option (without RTS)	Score
Biodiversity, Flora and Fauna	To protect, maintain and enhance biodiversity and ecosystem services, avoiding damage to or loss of designated and undesignated wildlife sites and protected species	Will the proposal cause disturbance or damage to any protected species or habitat?	An increase in mode shares for walking and cycling as well as public transport will help to contribute to a decline in car use. This would have a long-term positive impact on biodiversity, particularly for those species and habitats currently suffering from disturbance caused by transport. A decline in the number of car trips would also remove the need for construction of new transport infrastructure, such as roads etc. which could also negatively impact on biodiversity through damaging, disrupting and severing species and habitats.	+	Not achieving increased mode shares for public transport means that car trips will be continuing to increase. This could have a long-term negative impact on biodiversity, particularly for those species and habitats currently suffering from disturbance from transport. Negative impacts are likely to worsen with an increasing number of car trips. An increasing number of car trips and a subsequent increased traffic volume could also increase the need for construction of new transport infrastructure, such as roads etc. This could also negatively impact on biodiversity through damaging, disrupting and severing species and habitats,	-
		Will the proposal protect and enhance the quality and extent of designated and undesignated sites?				
		Will the proposal result in a greener public realm, resulting in a net gain of biodiversity?				

					with a long-term negative impact on biodiversity.	
Landscape	To safeguard and enhance the character and diversity of the landscape and areas of valuable landscape	Will the proposal protect and enhance the character and integrity of the distinctive landscapes and areas of valuable landscapes?	Increased mode shares public transport at the expense of car trips hold the potential to reduce visual intrusion resulting from road traffic and congestion, with a long-term positive impact on landscape.	+	Not achieving increased mode shares public transport within the region means that car trips will be continuing to increase, with long-term negative impacts on the landscape.	-
Cultural Heritage	To protect and enhance historic and archaeological sites and other culturally and historically important features, landscapes and their settings.	Will the proposal protect and enhance sites, features and areas of historical, archaeological and cultural value?	Fewer cars in conservation areas and around distinctive cultural and historical sites within the region could improve the setting and distinctiveness of these sites and areas as well as their preservation. Pollution is known to have damaging effects on cultural heritage. Long-term positive impact on cultural heritage.	+	Not achieving increased mode shares for public transport within the region could result in more cars in conservation areas and around cultural and historical sites and areas, thus detracting from their setting and contributing to their degradation because of increased pollution, with long-term negative impacts.	-
		Will the proposal help to improve the wider historic environment and sense of place?				
		Will the proposal improve access to sites of historic and/or cultural interest?				
Climate Change	To reduce greenhouse gas emissions from transport	Will the proposal help to reduce emissions of greenhouse gases and, help Scotland	An increase in mode shares for public transport within the region at the expense of car trips will have a long-term positive impact on climate	+	Not achieving increased mode shares for public transport within the region means that car trips will be continuing to increase. This could have a long-	-

		meet its emission targets?	change through reducing emissions and pollution.		term negative impact on climactic factors, resulting from increased emissions.	
	To adapt the transport network to the predicted effects of climate change	Will the proposal protect the Tactran region from climate change impacts and help the region function during extreme weather events?	No positive or significant negative effects have been identified.		No positive or significant negative effects have been identified.	
		Will the proposal improve access to services during severe weather events?				
		Will the proposal help those communities at risk during severe weather to recover?				
Air Quality	To reduce all forms of transport related air pollution and improve air quality, in particularly with regards to the three declared Air Quality Management Areas in Crieff, Dundee and Perth	Will the proposal help to reduce emissions of priority pollutants in line with Scottish and European standards (e.g., PM10, NOX, NO2)?	An increase in mode shares for public transport within the region at the expense of the car trips will have a long-term positive impact on air quality through reducing emissions and pollution. Air Quality impacts are positive, largely through contribution to modal shift away from private	++	Not achieving increased mode shares for public transport within the region means that car trips will be continuing to increase. This could have a long-term negative impact on air quality, resulting from increased emissions.	-

			<p>car journeys. Low emission and alternative fuels including potential shift to hydrogen would see benefits increase sooner – although the pace at which this development will come forward is not within the scope of the RTS. AQMAs located in Crieff, Dundee and Perth would benefit through reduced private car trips. The level of emissions reductions may be tempered because a section of ridership will be switching from active travel to new and improved public transport services.</p>			
Noise and Vibration	Reduce noise and vibration associated with the transport network	<p>Will the proposal reduce the levels of noise generated?</p> <p>Will the proposal reduce inequalities in exposure to ambient noise?</p> <p>Will the proposal reduce the number of people exposed to high levels of noise with the potential to cause health problems, particularly those in</p>	Reduced noise levels due to reduced traffic levels.	+	No positive or significant negative effects have been identified.	0

		deprived / vulnerable communities and those groups at risk?				
Human Health	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and the natural environment	Will the proposal promote social inclusion and improve access to services, including healthcare, and opportunities, especially for those without a private car?	Encouraging more people to use public transport can have significant long-term health benefits by encouraging and promoting healthy lifestyles. Fewer cars around schools at peak times also reduce the likelihood of road accidents and casualties and reduce the volume of harmful emissions in the air breathed by children.	++	Not promoting and encouraging active and sustainable modes of transport could result in fewer children walking and cycling. Not adopting a healthy lifestyle including regular physical activity while young can lead to significant health problems later in life. Car travel may also increase, thus increasing the release of harmful emissions. An increase in cars around the school gates could lead to an increase in accidents and collisions involving schoolchildren. Long-term negative impacts on health.	--
		Will the proposal reduce the likelihood of transport-related road accidents and casualties?				
	To promote, invest in, build and maintain infrastructure to support the development of high-quality places	Will the proposal protect and enhance the character, integrity and liveability of the towns and villages and, rural	Improvements to public transport services will reduce car dependency. This will free up space to improve the accessibility of streets for (especially older and disabled)		The region's high streets, town centres and communities are often traffic dominated, noisy and polluted, which impacts the residents' quality of life.	

		communities across the region?	residents through measures such as removing obstacles, widening pavements for wheelchair access, introducing tactile paving, raising sections of roadway to make crossing easier, providing seating, mitigating the impact of street works and, where possible, ensuring on-street cycling facilities cater for the wide range of cycles used by disabled people.			
		Will the proposal improve the public realm by improving the public realm and access?				
Population	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and the natural environment	Will the proposal promote social inclusion and improve access to key services and opportunities, especially for those without a private car?	Increasing the number and routes of public transport services will provide a valuable means of travel for those without a car. Such services will subsequently also improve access to key service, such as healthcare facilities, and, will allow vulnerable members of society to remain mobile and take a more active role in community life, providing mental health benefits. Services may also result in a decrease in private vehicle traffic, resulting in less harmful emissions and pollution.	++	Not promoting and encouraging sustainable modes of transport could see an increase in private car traffic, resulting in increased congestion and unreliable journey times for people and goods, with long-term negative impacts.	--
		Will the proposal help to improve access to greenspaces both for recreational and health benefits?				
		Will the proposal help to support an ageing population by providing appropriate				

		transport choices to meet their needs?	Long-term positive impact on health.			
Geology and Soil	To safeguard and improve soil quality, particularly high value agricultural land and carbon rich soil and peatland habitats	Does the proposal cause soil sealing and compaction?	Air quality improvements will have a positive impact on soil resulting from less air pollution, with a long-term positive impact on soil.	+	Not achieving increased mode shares for walking and cycling within the region means that car trips will be continuing to increase. This could also lead to an increase in air pollution, with long-term negative impacts on soil.	-
		Does the proposal result in the release of substances that could potentially contaminate the soil?				
		Does the proposal ensure that possible contamination will be properly remediated and not impact upon on sensitive receptors, such as surface water and groundwater?				
	To protect sites designated for their geological interest	Will the proposal protect and enhance sites, designated for their geological interest?				
Water	To protect, maintain and improve the quality of water environment and	Does the proposal result in the release of water-borne pollution into watercourses,	Reducing transport related emissions indirectly has the potential to improve water quality.	+	No positive or significant negative effects have been identified.	0

	wetlands that could be directly or indirectly affected by transport infrastructure and protect against the risk of flooding	groundwater or reservoirs? Does the proposal increase the amount of surface water run-off into water environment? Or increase the risk of flooding? Does the proposal physically impact on a watercourse?	Opportunity to adopt sustainable drainage options and incorporate blue-green infrastructure to the public transport network within the region.			
Material assets	To promote and improve the sustainable use and management of the transport network	Will the proposal provide adequate transport choices that meet the needs of the people within the Tactran region?	By encouraging a more efficient sustainable use of the regional transport infrastructure, they can bring long-term positive benefits to material assets.	+	Not promoting active travel and public transport could result in long-term negative impacts on material assets arising from the increased number of car trips and subsequent high use of transport related infrastructure, thus reducing their lifespan.	-
	To reduce the use of natural resources	Does the proposal allow for the sustainable use of natural resources?				

Delivery Theme: Improving sustainable travel opportunities						
Proposal relevant to the RTS 2024 – 2034: Community Transport and Demand Responsive Transport Services						
SEA Theme	Objectives	Will the delivery theme...?	Assessment – Preferred Option (with RTS)	Score	Assessment – Alternative Option (without RTS)	Score
Biodiversity, Flora and Fauna	To protect, maintain and enhance biodiversity and ecosystem services, avoiding damage to or loss of designated and undesignated wildlife sites and protected species	Will the proposal cause disturbance or damage to any protected species or habitat?	No positive or significant negative effects on soil have been identified.	0	No positive or significant negative effects on soil have been identified.	0
		Will the proposal protect and enhance the quality and extent of designated and undesignated sites?				
		Will the proposal result in a greener public realm, resulting in a net gain of biodiversity?				
Landscape	To safeguard and enhance the character and diversity of the landscape and areas of valuable landscape	Will the proposal protect and enhance the character and integrity of the distinctive landscapes and areas of valuable landscapes?	No positive or significant negative effects on soil have been identified.	0	No positive or significant negative effects on soil have been identified.	0

Cultural Heritage	To protect and enhance historic and archaeological sites and other culturally and historically important features, landscapes and their settings.	Will the proposal protect and enhance sites, features and areas of historical, archaeological and cultural value?	No positive or significant negative effects on soil have been identified.	0	No positive or significant negative effects on soil have been identified.	0
		Will the proposal help to improve the wider historic environment and sense of place?				
		Will the proposal improve access to sites of historic and/or cultural interest?				
Climate Change	To reduce greenhouse gas emissions from transport	Will the proposal help to reduce emissions of greenhouse gases and, help Scotland meet its emission targets?	Increasing the number and routes served by both community and demand responsive transport services could encourage more people to use such services in preference to the private car. This will have a long-term positive impact on air quality through reducing emissions and pollution.	+	Not increasing the provision of such services means that car trips will be continuing to increase as people will use their car to access key services, thus increasing emissions and contributing to climate change.	-
	To adapt the transport network to the predicted effects of climate change	Will the proposal protect the Tactran region from climate change impacts and help the region function during	No positive or significant negative effects have been identified.		No positive or significant negative effects have been identified.	

		extreme weather events?				
		Will the proposal improve access to services during severe weather events?				
		Will the proposal help those communities at risk during severe weather to recover?				
Air Quality	To reduce all forms of transport related air pollution and improve air quality, in particularly with regards to the three declared Air Quality Management Areas in Crieff, Dundee and Perth	Will the proposal help to reduce emissions of priority pollutants in line with Scottish and European standards (e.g., PM10, NOX, NO2)?	Increasing the number and routes served by both community transport and demand responsive transport services could encourage more people to use such services in preference to the private car. This will have a long-term positive impact on air quality through reducing emissions and pollution.	+	Not increasing the provision of such services means that car trips will be continuing to increase as people will use their car to access key services, thus increasing emissions and contributing to climate change.	-
Noise and Vibration	Reduce noise and vibration associated with the transport network	Will the proposal reduce the levels of noise generated? Will the proposal reduce inequalities in exposure to ambient noise?	Reduced noise levels due to reduced traffic levels.	+	No positive or significant negative effects have been identified.	0

		Will the proposal reduce the number of people exposed to high levels of noise with the potential to cause health problems, particularly those in deprived / vulnerable communities and those groups at risk?				
Human Health	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and the natural environment	<p>Will the proposal promote social inclusion and improve access to services, including healthcare, and opportunities, especially for those without a private car?</p> <p>Will the proposal reduce the likelihood of transport-related road accidents and casualties?</p>	<p>Increasing the number and routes of community transport and demand responsive transport services will provide a valuable means of travel for those unable to use more conventional modes of transport. Such services will subsequently also improve access to key service, such as healthcare facilities, and, will allow vulnerable members of society to remain mobile and take a more active role in community life, providing mental health benefits.</p> <p>Services may also result in a decrease in private vehicle</p>	+	<p>Not achieving increased mode shares for walking and cycling within the region means that car trips will be continuing to increase. This could have a long-term negative impact on air quality, resulting from increased emissions.</p> <p>Not seeking to increase and improve public transport services within the region could see some locations remain fairly inaccessible to those without access to a private car, potentially contributing towards social exclusion, especially of the elderly who are typically more reliant on such</p>	--

			<p>traffic, resulting in less harmful emissions and pollution.</p> <p>Long-term positive impact on health.</p>		<p>services. Long-term negative impacts on health.</p>	
	<p>To promote, invest in, build and maintain infrastructure to support the development of high-quality places</p>	<p>Will the proposal protect and enhance the character, integrity and liveability of the towns and villages and, rural communities across the region?</p>	<p>No positive or significant negative effects have been identified.</p>		<p>No positive or significant negative effects have been identified.</p>	
		<p>Will the proposal improve the public realm by improving the public realm and access?</p>				
Population	<p>To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and the natural environment</p>	<p>Will the proposal promote social inclusion and improve access to key services and opportunities, especially for those without a private car?</p>	<p>Increasing the number and routes of community transport and demand responsive transport services will provide a valuable means of travel for those unable to use more conventional modes of transport, such as the elderly and disabled. Such services will subsequently also improve access to key services and opportunities, such as healthcare facilities and</p>	++	<p>Not providing community and demand responsive transport services could see those who are unable to use mainstream transport struggle to get around and subsequently suffer social exclusion, with long-term negative impacts.</p>	-
		<p>Will the proposal help to improve access to greenspaces both</p>				

		for recreational and health benefits?	education and employment, and will allow vulnerable members of society to remain mobile and take a more active role in community life, providing mental health benefits.			
		Will the proposal help to support an ageing population by providing appropriate transport choices to meet their needs?	Long-term positive impact on the population.			
Geology and Soil	To safeguard and improve soil quality, particularly high value agricultural land and carbon rich soil and peatland habitats	Does the proposal cause soil sealing and compaction?	Air quality improvements will have a positive impact on soil resulting from less air pollution, with a long-term positive impact on soil.	+	Not providing community and demand responsive transport services within the region means that car trips will be continuing to increase. This could also lead to an increase in air pollution, with long-term negative impacts on soil.	-
		Does the proposal result in the release of substances that could potentially contaminate the soil?				
		Does the proposal ensure that possible contamination will be properly remediated and not impact upon on sensitive receptors, such as surface water and groundwater?				
	To protect sites designated for their geological interest	Will the proposal protect and enhance sites,				

		designated for their geological interest?				
Water	To protect, maintain and improve the quality of water environment and wetlands that could be directly or indirectly affected by transport infrastructure and protect against the risk of flooding	Does the proposal result in the release of water-borne pollution into watercourses, groundwater or reservoirs?	Reducing transport related emissions indirectly has the potential to improve water quality.	+	No positive or significant negative effects have been identified.	0
		Does the proposal increase the amount of surface water run-off into water environment? Or increase the risk of flooding?				
		Does the proposal physically impact on a watercourse?				
Material assets	To promote and improve the sustainable use and management of the transport network	Will the proposal provide adequate transport choices that meet the needs of the people within the Tactran region?	Improvements to and an increase in community transport and demand responsive transport services hold the potential to have a long-term positive impact on material assets.	+	Not having such services would deprive some segments of the population of a valuable asset.	-
	To reduce the use of natural resources	Does the proposal allow for the sustainable use of natural resources?				

			additional sustainable way of getting about and participating in society.			
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Delivery Theme: Improving sustainable travel opportunities						
Proposal relevant to the RTS 2024 – 2034: Car Clubs						
SEA Theme	Objectives	Will the delivery theme...?	Assessment – Preferred Option (with RTS)	Score	Assessment – Alternative Option (without RTS)	Score
Biodiversity, Flora and Fauna	To protect, maintain and enhance biodiversity and ecosystem services, avoiding damage to or loss of designated and undesignated wildlife sites and protected species	Will the proposal cause disturbance or damage to any protected species or habitat?	No positive or significant negative effects on soil have been identified.	0	No positive or significant negative effects on soil have been identified.	0
		Will the proposal protect and enhance the quality and extent of designated and undesignated sites?				
		Will the proposal result in a greener public realm, resulting in a net gain of biodiversity?				
Landscape	To safeguard and enhance the character and diversity of the	Will the proposal protect and enhance the character and	Carplus estimates that, in favour of using a car club, 5.4 people per car club car give up their personal vehicle. This means	+	No positive or significant negative effects on soil have been identified.	0

	landscape and areas of valuable landscape	integrity of the distinctive landscapes and areas of valuable landscapes?	that for each new car club car, 4 parking spaces are no longer required. Long-term positive impact on the landscape.			
Cultural Heritage	To protect and enhance historic and archaeological sites and other culturally and historically important features, landscapes and their settings.	Will the proposal protect and enhance sites, features and areas of historical, archaeological and cultural value? Will the proposal help to improve the wider historic environment and sense of place? Will the proposal improve access to sites of historic and/or cultural interest?	Providing car clubs can play a part in improving access to sites of historic and cultural interest so have long-term positive impacts.	+	Not expanding the car club offer within the region could make certain sites inaccessible to those without access to a private car, with long-term negative impacts.	-
Climate Change	To reduce greenhouse gas emissions from transport	Will the proposal help to reduce emissions of greenhouse gases and, help Scotland meet its emission targets?	The continued facilitation and promotion of car clubs within the region will have a positive impact on carbon emissions. The continued facilitation and promotion of car clubs help to encourage car free developments and can lead to	+	Not promoting and supporting car clubs within the region means that car trips will be continuing to increase, subsequently increasing emissions and contributing to climate change.	-

			people giving up their own private cars.			
	To adapt the transport network to the predicted effects of climate change	Will the proposal protect the Tactran region from climate change impacts and help the region function during extreme weather events?	No positive or significant negative effects have been identified.			
		Will the proposal improve access to services during severe weather events?				
		Will the proposal help those communities at risk during severe weather to recover?				
Air Quality	To reduce all forms of transport related air pollution and improve air quality, in particularly with regards to the three declared Air Quality Management Areas in Crieff, Dundee and Perth	Will the proposal help to reduce emissions of priority pollutants in line with Scottish and European standards (e.g., PM10, NOX, NO2)?	Increasing the number and routes served by both community transport and demand responsive transport services could encourage more people to use such services in preference to the private car. This will have a long-term positive impact on air quality	+	Not increasing the provision of such services means that car trips will be continuing to increase as people will use their car to access key services, thus increasing emissions and contributing to climate change.	-

			through reducing emissions and pollution. AQMA's located in Crieff, Dundee and Perth would particularly benefit through reduced private car ownership and journeys.			
Noise and Vibration	Reduce noise and vibration associated with the transport network	Will the proposal reduce the levels of noise generated? Will the proposal reduce inequalities in exposure to ambient noise? Will the proposal reduce the number of people exposed to high levels of noise with the potential to cause health problems, particularly those in deprived / vulnerable communities and those groups at risk?	Reduced noise levels due to reduced traffic levels.	+	No positive or significant negative effects have been identified.	0
Human Health	To improve quality of life and human health by promoting active	Will the proposal promote social inclusion and improve access to	Research demonstrated that car clubs reduce car ownership. If people do not own cars, they are more likely to undertake	+	Failing to promote and support car clubs within the region could result in declining awareness and membership, meaning	--

	lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and the natural environment	services, including healthcare, and opportunities, especially for those without a private car?	everyday journeys by active travel and public transport. This will have significant long-term positive impacts on human health by encouraging more people to travel more often and by reducing the negative health impacts of car use resulting from emissions and pollution.		people continue to own their own cars. As well as resulting in fewer journeys undertaken by walking and cycling, a continued increase in car trips could result in a growth in harmful emissions released into the air. Not having the accessibility offered by car club could also restrict people's ability to reach healthcare facilities etc. if they do not have access to their own car or a realistic alternative forms of transport. There will therefore be a long-term negative impact on health.
		Will the proposal reduce the likelihood of transport-related road accidents and casualties?	The ability to use a car without the burden of ownership will also improve accessibility, allowing those without a car to access key services and opportunities including healthcare facilities. Long-term positive impact on health.		
	To promote, invest in, build and maintain infrastructure to support the development of high-quality places	Will the proposal protect and enhance the character, integrity and liveability of the towns and villages and, rural communities across the region?	Minor positive impact. The space currently taken up by cars could be used more efficiently, particularly as the region's population grows. However, increasing access to car sharing could bring benefits, but these could be outweighed by the impacts on congestion, emissions and health if cheap, convenient car travel is extended to residents who do		Failing to facilitate and promote will not address the increasing number of cars and subsequent car trips within the region.
		Will the proposal improve the public realm by improving			

		the public realm and access?	not own a car or do not have a driving licence. Even if technology is able to improve how efficiently cars use road space, connected and autonomous cars will not be as space-efficient as walking, cycling or public transport			
Population	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and the natural environment	Will the proposal promote social inclusion and improve access to key services and opportunities, especially for those without a private car? Will the proposal help to improve access to greenspaces both for recreational and health benefits? Will the proposal help to support an ageing population by providing appropriate transport choices to meet their needs?	The continued facilitation and promotion of car clubs brings long-term positive benefits to the population. It promotes social inclusion by giving a greater range of the population access to a car for essential journeys. It also helps reduce congestion. Long-term positive impact on the population.	++	Failing to facilitate and promote car clubs within the region could exacerbate social exclusion as the model enable access to key destinations which may only be accessible by car to those who do not own their own cars. Car clubs also play a role in addressing traffic growth and congestion, allowing the more efficient movement of people and freight – problems may increase therefore without the continued operation and expansion of the car club model within the region. There will therefore be a long-term negative impact on the population.	-

Geology and Soil	To safeguard and improve soil quality, particularly high value agricultural land and carbon rich soil and peatland habitats	Does the proposal cause soil sealing and compaction?	Carplus estimates that, in favour of using a car club, 5.4 people per car club car give up their personal vehicle. This means that for each new car club car, 4 parking spaces are no longer required. Air quality improvements will have a positive impact on soil resulting from less air pollution, with a long-term positive impact on soil.	+	Not facilitating and promoting car clubs within the region means that car trips will be continuing to increase. This may have long-term negative impacts on soil through increased air pollution.	-
		Does the proposal result in the release of substances that could potentially contaminate the soil?				
		Does the proposal ensure that possible contamination will be properly remediated and not impact upon on sensitive receptors, such as surface water and groundwater?				
	To protect sites designated for their geological interest	Will the proposal protect and enhance sites, designated for their geological interest?				
Water	To protect, maintain and improve the quality of water environment and wetlands that could be directly or	Does the proposal result in the release of water-borne pollution into watercourses, groundwater or reservoirs?	Reducing transport related emissions indirectly has the potential to improve water quality.	+	No positive or significant negative effects have been identified.	0

	indirectly affected by transport infrastructure and protect against the risk of flooding	Does the proposal increase the amount of surface water run-off into water environment? Or increase the risk of flooding?				
		Does the proposal physically impact on a watercourse?				
Material assets	To promote and improve the sustainable use and management of the transport network	Will the proposal provide adequate transport choices that meet the needs of the people within the Tacran region?	Facilitating and promoting car clubs within the region holds the potential to have a long-term positive impact on material assets. Such services will increase the range of transport options available to residents providing an additional sustainable way of getting about and participating in society.	+	Not facilitating and promoting car clubs within the region could result in the deterioration of a significant asset.	-
	To reduce the use of natural resources	Does the proposal allow for the sustainable use of natural resources?				

Delivery Theme: Improving sustainable travel opportunities						
Proposal relevant to the RTS 2024 – 2034: Promote Fair Fares						
SEA Theme	Objectives	Will the delivery theme...?	Assessment – Preferred Option (with RTS)	Score	Assessment – Alternative Option (without RTS)	Score
Biodiversity, Flora and Fauna	To protect, maintain and enhance biodiversity and ecosystem services, avoiding damage to or loss of designated and undesignated wildlife sites and protected species	Will the proposal cause disturbance or damage to any protected species or habitat?	An increase in mode shares for public transport will help to contribute to a decline in car use. This would have a long-term positive impact on biodiversity, particularly for those species and habitats currently suffering from disturbance caused by transport.	+	Not achieving increased mode shares for public transport means that car trips will be continuing to increase. This could have a long-term negative impact on biodiversity, particularly for those species and habitats currently suffering from disturbance from transport. Negative impacts are likely to worsen with an increasing number of car trips. An increasing number of car trips and a subsequent	-
		Will the proposal protect and enhance the quality and extent of designated and undesignated sites?				
		Will the proposal result in a greener public realm, resulting in a net gain of biodiversity?	A decline in the number of car trips would also remove the need for construction of new transport infrastructure, such as roads etc. which could also negatively impact on			

			biodiversity through damaging, disrupting and severing species and habitats.		increased traffic volume could also increase the need for construction of new transport infrastructure, such as roads etc. This could also negatively impact on biodiversity through damaging, disrupting and severing species and habitats, with a long-term negative impact on biodiversity.	
Landscape	To safeguard and enhance the character and diversity of the landscape and areas of valuable landscape	Will the proposal protect and enhance the character and integrity of the distinctive landscapes and areas of valuable landscapes?	Increased mode shares public transport at the expense of car trips hold the potential to reduce visual intrusion resulting from road traffic and congestion, with a long-term positive impact on landscape.	+	Not achieving increased mode shares public transport within the region means that car trips will be continuing to increase, with long-term negative impacts on the landscape.	-
Cultural Heritage	To protect and enhance historic and archaeological sites and other culturally and historically important features, landscapes and their settings.	Will the proposal protect and enhance sites, features and areas of historical, archaeological and cultural value? Will the proposal help to improve the wider historic environment and sense of place? Will the proposal improve access to	Fewer cars in conservation areas and around distinctive cultural and historical sites within the region could improve the setting and distinctiveness of these sites and areas as well as their preservation. Pollution is known to have damaging effects on cultural heritage. Long-term positive impact on cultural heritage.	+	Not achieving increased mode shares for public transport within the region could result in more cars in conservation areas and around cultural and historical sites and areas, thus detracting from their setting and contributing to their degradation because of increased pollution, with long-term negative impacts.	-

		sites of historic and/or cultural interest?				
Climate Change	To reduce greenhouse gas emissions from transport	Will the proposal help to reduce emissions of greenhouse gases and, help Scotland meet its emission targets?	An increase in mode shares for public transport within the region at the expense of car trips will have a long-term positive impact on climate change through reducing emissions and pollution.	+	Not achieving increased mode shares for public transport within the region means that car trips will be continuing to increase. This could have a long-term negative impact on climactic factors, resulting from increased emissions.	-
	To adapt the transport network to the predicted effects of climate change	Will the proposal protect the Tactran region from climate change impacts and help the region function during extreme weather events?	No positive or significant negative effects have been identified.		No positive or significant negative effects have been identified.	
		Will the proposal improve access to services during severe weather events?				
		Will the proposal help those communities at risk during severe weather to recover?				
Air Quality	To reduce all forms of transport related air pollution and	Will the proposal help to reduce emissions of	An increase in mode shares for public transport within the region at the expense of the car	++	Not achieving increased mode shares for public transport within the region means that car	-

	improve air quality, in particular with regards to the three declared Air Quality Management Areas in Crieff, Dundee and Perth	priority pollutants in line with Scottish and European standards (e.g., PM10, NOX, NO2)?	trips will have a long-term positive impact on air quality through reducing emissions and pollution. AQMAs located in Crieff, Dundee and Perth would particularly benefit through reduced private car ownership and journeys.		trips will be continuing to increase. This could have a long-term negative impact on air quality, resulting from increased emissions.	
Noise and Vibration	Reduce noise and vibration associated with the transport network	Will the proposal reduce the levels of noise generated? Will the proposal reduce inequalities in exposure to ambient noise? Will the proposal reduce the number of people exposed to high levels of noise with the potential to cause health problems, particularly those in deprived / vulnerable communities and those groups at risk?	Reduced noise levels due to reduced traffic levels.	+	No positive or significant negative effects have been identified.	0
Human Health	To improve quality of life and human	Will the proposal promote social	An increased mode share for public transport at the expense	+	Not achieving increased mode share for bus and rail could see	--

	<p>health by promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and the natural environment</p>	<p>inclusion and improve access to services, including healthcare, and opportunities, especially for those without a private car?</p>	<p>of car trips will have significant long-term benefits for human health.</p> <p>It will result in less pollution and emissions, subsequently reducing incidences of respiratory problems, and poor air quality which is known to reduce life expectancy.</p> <p>Revised public transport fares could also improve access to healthcare facilities etc.</p>		<p>an increase in car trips within the region, subsequently increasing emissions and contributing to poor air quality.</p> <p>Not revising the fares structure of public transport services could see some locations, including healthcare facilities remain fairly inaccessible to those without access to a private car, potentially contributing towards social exclusion, especially of the elderly who are typically more reliant on such services. Long-term negative impacts on health.</p>	
	<p>Will the proposal reduce the likelihood of transport-related road accidents and casualties?</p>	<p>Will the proposal protect and enhance the character, integrity and liveability of the towns and villages and, rural communities across the region?</p> <p>Will the proposal improve the public realm by improving the public realm and access?</p>	<p>Using new data to develop an affordable fares system, both now and in the future, is essential to encouraging a shift from car to public transport. This will improve access, especially for those groups who are more reliant on public transport services.</p>		<p>No positive or significant negative effects have been identified.</p>	
<p>To promote, invest in, build and maintain infrastructure to support the development of high-quality places</p>						

Population	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and the natural environment	Will the proposal promote social inclusion and improve access to key services and opportunities, especially for those without a private car?	Measures to increase public transport patronage will have long-term positive impacts on the economy by reducing congestion and improving journey time reliability, enabling the more efficient movement of people and freight.	++	Not achieving increased mode shares for bus and rail could lead to a continued increase in car trips within the region, exacerbating congestion and contributing to journey time unreliability. Not seeking to revise the fare structure could see some locations remain fairly inaccessible to those without access to a private car, potentially contributing towards social exclusion. Long-term negative impacts on the population.	--
		Will the proposal help to improve access to greenspaces both for recreational and health benefits?	Revising the fare structure will have a long-term positive impact on social inclusion by encouraging and facilitating more people to travel by public transport more often, enabling access to key services and opportunities, such as employment, education, and healthcare. This will be of particular benefit to those living in deprived communities.			
		Will the proposal help to support an ageing population by providing appropriate transport choices to meet their needs?				
Geology and Soil	To safeguard and improve soil quality, particularly high value agricultural land and carbon rich soil and peatland habitats	Does the proposal cause soil sealing and compaction?	Air quality improvements will have a positive impact on soil resulting from less air pollution, with a long-term positive impact on soil.	+	Not achieving increased mode shares for public transport within the region means that car trips will be continuing to increase. This could also lead to an increase in air pollution, with long-term negative impacts on soil.	-
		Does the proposal result in the release of substances that could potentially contaminate the soil?				
		Does the proposal ensure that				

		possible contamination will be properly remediated and not impact upon sensitive receptors, such as surface water and groundwater?				
	To protect sites designated for their geological interest	Will the proposal protect and enhance sites, designated for their geological interest?				
Water	To protect, maintain and improve the quality of water environment and wetlands that could be directly or indirectly affected by transport infrastructure and protect against the risk of flooding	Does the proposal result in the release of water-borne pollution into watercourses, groundwater or reservoirs? Does the proposal increase the amount of surface water run-off into water environment? Or increase the risk of flooding? Does the proposal physically impact on a watercourse?	Reducing transport related emissions indirectly has the potential to improve water quality.	+	No positive or significant negative effects have been identified.	0

Material assets	To promote and improve the sustainable use and management of the transport network	Will the proposal provide adequate transport choices that meet the needs of the people within the Tactran region?	By encouraging a more efficient sustainable use of the regional transport infrastructure, they can bring long-term positive benefits to material assets.	+	Long-term negative impacts on material assets arising from the increased number of car trips and subsequent high use of transport related infrastructure, thus reducing their lifespan.	-
	To reduce the use of natural resources	Does the proposal allow for the sustainable use of natural resources?				

Delivery Theme: Decarbonising transport and a just transition						
Proposal relevant to the RTS 2024 – 2034: Promote and enable electric and low emission vehicles						
SEA Theme	Objectives	Will the delivery theme...?	Assessment – Preferred Option (with RTS)	Score	Assessment – Alternative Option (without RTS)	Score
Biodiversity, Flora and Fauna	To protect, maintain and enhance biodiversity and ecosystem services, avoiding damage to or loss of designated and undesignated wildlife sites and protected species	Will the proposal cause disturbance or damage to any protected species or habitat?	Increased availability of electric charging points facilitates a greater uptake of electric vehicles with a reduction in vehicle pollutants.	+	Not supporting an increase in the shares of ultra-low emission vehicles means that the number of internal combustion engines will be continuing to increase. This could have a long-term negative impact on biodiversity due to the subsequent increase in vehicle pollutants.	-
		Will the proposal protect and enhance the quality and extent of designated and undesignated sites?	New infrastructure is likely to be in the form of new charging points and refuelling stations on the existing road network with limited negative impacts.			
		Will the proposal result in a greener public realm,				

		resulting in a net gain of biodiversity?				
Landscape	To safeguard and enhance the character and diversity of the landscape and areas of valuable landscape	Will the proposal protect and enhance the character and integrity of the distinctive landscapes and areas of valuable landscapes?	<p>ULEVs have a disproportionate negative impact on land use. Both with regards to the materials used in ULEV making and to refuelling.</p> <p>ULEVs will increase land take by approximately 130 %. This is mainly due to the land required for producing the electricity required. With regards to ULEVs the required land take to produce clean fuels increases by a factor of 10 for each kilometre travelled.</p>	--	No positive or significant negative effects on soil have been identified.	0
Cultural Heritage	To protect and enhance historic and archaeological sites and other culturally and historically important features, landscapes and their settings.	<p>Will the proposal protect and enhance sites, features and areas of historical, archaeological and cultural value?</p> <p>Will the proposal help to improve the wider historic environment and sense of place?</p> <p>Will the proposal improve access to sites of historic</p>	<p>Potential negative impacts of EV charging infrastructure on cultural and historical heritage due to the visual impact of charging infrastructure.</p> <p>Potential long-term positive impact on cultural heritage due to reduced emission and subsequent pollution levels.</p>	+ / -	No positive or significant negative effects on soil have been identified.	0

		and/or cultural interest?				
Climate Change	To reduce greenhouse gas emissions from transport	Will the proposal help to reduce emissions of greenhouse gases and, help Scotland meet its emission targets?	An increased uptake of ultra-low emission vehicles has long-term positive impacts on the climate by reducing transport related carbon emissions and pollution. Carbon emissions would reduce at point of use, but overall carbon emissions would only be reduced if the electricity utilised were generated from green sources.	+	Not supporting an increase in the shares of ultra-low emission vehicles means that the number of internal combustion engines will be continuing to increase. This could have a long-term negative impact on climactic factors, resulting from increased emissions.	-
	To adapt the transport network to the predicted effects of climate change	Will the proposal protect the Tactran region from climate change impacts and help the region function during extreme weather events?	No positive or significant negative effects have been identified.			
		Will the proposal improve access to services during severe weather events? Will the proposal help those communities at risk during severe weather to recover?				

Air Quality	To reduce all forms of transport related air pollution and improve air quality, in particularly with regards to the three declared Air Quality Management Areas in Crieff, Dundee and Perth	Will the proposal help to reduce emissions of priority pollutants in line with Scottish and European standards (e.g., PM10, NOX, NO2)?	An increase in the uptake of ultra-low emission vehicles within the region at the expense of the ICE car trips will have a long-term positive impact on air quality through reducing emissions and pollution.	++	Not achieving increased uptake of ultra-low emission vehicles within the region means that ICE car trips will be continuing to increase. This could have a long-term negative impact on air quality, resulting from increased emissions.	-
Noise and Vibration	Reduce noise and vibration associated with the transport network	<p>Will the proposal reduce the levels of noise generated?</p> <p>Will the proposal reduce inequalities in exposure to ambient noise?</p> <p>Will the proposal reduce the number of people exposed to high levels of noise with the potential to cause health problems, particularly those in deprived / vulnerable communities and those groups at risk?</p>	Reduced noise levels due to reduced motor noises.	+	No positive or significant negative effects have been identified.	0
Human Health	To improve quality of life and human health by	Will the proposal promote social inclusion and	Reduced emissions and improve air quality and in turn have a positive effect on health on	++	Not facilitating an increased uptake of ultra low emission vehicles means that usage of	-

	<p>promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and the natural environment</p>	<p>improve access to services, including healthcare, and opportunities, especially for those without a private car?</p>	<p>everyone, particularly of those most at risk of respiratory illness including older people and children (including unborn children).</p> <p>This is the most significant positive impact of the introduction of EV charging infrastructure and will have health and wellbeing benefits</p>		<p>conventional ICE vehicles will continue, potentially resulting in an increase in harmful emissions, with a long-term negative impact on health.</p>	
	<p>To promote, invest in, build and maintain infrastructure to support the development of high-quality places</p>	<p>Will the proposal protect and enhance the character, integrity and liveability of the towns and villages and, rural communities across the region?</p>	<p>Improved air quality within the regional city and town centres makes them a more pleasant places to work particularly for those working outdoors (such as market traders, street cleaners etc) including staff of restaurants/ and cafes with outdoor seating areas.</p>		<p>No positive or significant negative effects have been identified.</p>	
Population	<p>To improve quality of life and human health by promoting active lifestyles and increasing</p>	<p>Will the proposal promote social inclusion and improve access to key services and opportunities,</p>	<p>At present, the cost of an electric vehicle makes it considerably more difficult for those on lower incomes to purchase such a vehicle. Although the Scottish</p>	-	<p>No positive or significant negative effects have been identified.</p>	0

	sustainable access for all to essential services (including healthcare), employment and the natural environment	<p>especially for those without a private car?</p> <p>Will the proposal help to improve access to greenspaces both for recreational and health benefits?</p> <p>Will the proposal help to support an ageing population by providing appropriate transport choices to meet their needs?</p>	<p>Government offers a subsidy to encourage first adopters to purchase an electric vehicle, this presents a financial challenge to those wishing to purchase a vehicle. However, the prevalence of electric vehicles in car showrooms is anticipated to rise and the affordability of such vehicles will increase dramatically as the market grows, enabling a greater number of people to afford them.</p> <p>Similarly, there are challenges for the bus industry in decarbonising their fleet which may put at risk some of the more marginal services.</p> <p>Does not benefit those unable to drive, or those who choose not to drive.</p>			
Geology and Soil	To safeguard and improve soil quality, particularly high value agricultural land and carbon rich soil and peatland habitats	<p>Does the proposal cause soil sealing and compaction?</p> <p>Does the proposal result in the release of substances that could potentially contaminate the soil?</p>	<p>Air quality improvements will have a positive impact on soil resulting from less air pollution, with a long-term positive impact on soil.</p> <p>ULEVs have a disproportionate negative impact on land use. Both with regards to the</p>	-	Continuing poor air quality will result in air pollution with long-term negative impacts on soil.	-

		Does the proposal ensure that possible contamination will be properly remediated and not impact upon on sensitive receptors, such as surface water and groundwater?	materials used in ULEV making and to refuelling. ULEVs will increase land take by approximately 130 %. This is mainly due to the land required for producing the electricity required. With regards to ULEVs the required land take to produce clean fuels increases by a factor of 10 for each kilometre travelled			
	To protect sites designated for their geological interest	Will the proposal protect and enhance sites, designated for their geological interest?				
Water	To protect, maintain and improve the quality of water environment and wetlands that could be directly or indirectly affected by transport infrastructure and protect against the risk of flooding	Does the proposal result in the release of water-borne pollution into watercourses, groundwater or reservoirs? Does the proposal increase the amount of surface water run-off into water environment? Or increase the risk of flooding?	Reducing transport related emissions indirectly has the potential to improve water quality.	+	No positive or significant negative effects have been identified.	0

		Does the proposal physically impact on a watercourse?				
Material assets	To promote and improve the sustainable use and management of the transport network	Will the proposal provide adequate transport choices that meet the needs of the people within the Tactran region?	Low emissions vehicles promote the sustainable use of resources and lead to environmental improvements with long-term benefits for regional material assets.	+	No positive or significant negative effects have been identified.	0
	To reduce the use of natural resources	Does the proposal allow for the sustainable use of natural resources?	There will, however, be increased maintenance requirements of the charging network.			

Delivery Theme: Decarbonising transport and a just transition						
Proposal relevant to the RTS 2024 – 2034: Rail decarbonisation						
SEA Theme	Objectives	Will the delivery theme...?	Assessment – Preferred Option (with RTS)	Score	Assessment – Alternative Option (without RTS)	Score
Biodiversity, Flora and Fauna	To protect, maintain and enhance biodiversity and ecosystem services, avoiding damage to or loss of designated and undesignated	Will the proposal cause disturbance or damage to any protected species or habitat?	Electrification of the rail network across the region facilitates the deployment of electric trains on the network with a reduction in vehicle pollutants. NTS2 commits to replacement of diesel stock with alternative	+	Not supporting the electrification of the rail network across the region means that the number of diesel trains will be continuing to increase. This could have a long-term negative impact on biodiversity due to the	-
		Will the proposal protect and enhance the quality and extent of				

	wildlife sites and protected species	designated and undesignated sites? Will the proposal result in a greener public realm, resulting in a net gain of biodiversity?	fuels including potential shift to hydrogen and if this can be delivered in the medium rather than long term then benefits will increase.		subsequent increase in vehicle pollutants.	
Landscape	To safeguard and enhance the character and diversity of the landscape and areas of valuable landscape	Will the proposal protect and enhance the character and integrity of the distinctive landscapes and areas of valuable landscapes?	No positive or significant negative effects on soil have been identified.	0	No positive or significant negative effects on soil have been identified.	0
Cultural Heritage	To protect and enhance historic and archaeological sites and other culturally and historically important features, landscapes and their settings.	Will the proposal protect and enhance sites, features and areas of historical, archaeological and cultural value? Will the proposal help to improve the wider historic environment and sense of place? Will the proposal improve access to sites of historic	No positive or significant negative effects on soil have been identified.	0	No positive or significant negative effects on soil have been identified.	0

		and/or cultural interest?				
Climate Change	To reduce greenhouse gas emissions from transport	Will the proposal help to reduce emissions of greenhouse gases and, help Scotland meet its emission targets?	<p>An increased deployment of electric trains has long-term positive impacts on the climate by reducing transport related carbon emissions and pollution.</p> <p>Carbon emissions would reduce at point of use, but overall carbon emissions would only be reduced if the electricity utilised were generated from green sources.</p> <p>NTS2 commits to replacement of diesel stock with alternative fuels including potential shift to hydrogen and if this can be delivered in the medium rather than long term then benefits will increase.</p>	+	Not supporting an increase in the deployment of electric trains means that the number of diesel trains will be continuing to increase. This could have a long-term negative impact on climactic factors, resulting from increased emissions.	-
	To adapt the transport network to the predicted effects of climate change	<p>Will the proposal protect the Tactran region from climate change impacts and help the region function during extreme weather events?</p> <p>Will the proposal improve access to services during</p>	No positive or significant negative effects have been identified.		No positive or significant negative effects have been identified.	

		severe weather events? Will the proposal help those communities at risk during severe weather to recover?				
Air Quality	To reduce all forms of transport related air pollution and improve air quality, in particularly with regards to the three declared Air Quality Management Areas in Crieff, Dundee and Perth	Will the proposal help to reduce emissions of priority pollutants in line with Scottish and European standards (e.g., PM10, NOX, NO2)?	An increase in the deployment of electric trains on the rail network across the region at the expense of diesel trains will have a long-term positive impact on air quality through reducing emissions and pollution. NTS2 commits to replacement of diesel stock with alternative fuels including potential shift to hydrogen and if this can be delivered in the medium rather than long term then benefits will increase.	++	Not achieving increased deployment of electric trains within the region means that diesel trains will be continuing to increase. This could have a long-term negative impact on air quality, resulting from increased emissions.	-
Noise and Vibration	Reduce noise and vibration associated with the transport network	Will the proposal reduce the levels of noise generated? Will the proposal reduce inequalities in exposure to ambient noise? Will the proposal reduce the number	Reduced noise levels due to battery electric train engines.	+	No positive or significant negative effects have been identified.	0

		of people exposed to high levels of noise with the potential to cause health problems, particularly those in deprived / vulnerable communities and those groups at risk?				
Human Health	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and the natural environment	Will the proposal promote social inclusion and improve access to services, including healthcare, and opportunities, especially for those without a private car?	Reduced emissions and improve air quality and in turn have a positive effect on health on everyone, particularly of those most at risk of respiratory illness including older people and children (including unborn children). NTS2 commits to replacement of diesel stock with alternative fuels including potential shift to hydrogen and if this can be delivered in the medium rather than long term then benefits will increase.	++	Not facilitating an increased deployment of electric trains means that usage of conventional diesel trains will continue, potentially resulting in an increase in harmful emissions, with a long-term negative impact on health.	-
		Will the proposal reduce the likelihood of transport-related road accidents and casualties?				
	To promote, invest in, build and maintain infrastructure to support the	Will the proposal protect and enhance the character, integrity and liveability of the towns and	Improved air quality within the regional city and town centres makes them a more pleasant places to work particularly for those working outdoors (such as market traders, street cleaners			

	development of high-quality places	villages and, rural communities across the region? Will the proposal improve the public realm by improving the public realm and access?	etc) including staff of restaurants/ and cafes with outdoor seating areas.			
Population	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and the natural environment	Will the proposal promote social inclusion and improve access to key services and opportunities, especially for those without a private car? Will the proposal help to improve access to greenspaces both for recreational and health benefits? Will the proposal help to support an ageing population by providing appropriate transport choices to meet their needs?	Reduced emissions and improve air quality and in turn have a positive effect on health on everyone, particularly of those most at risk of respiratory illness including older people and children (including unborn children). NTS2 commits to replacement of diesel stock with alternative fuels including potential shift to hydrogen and if this can be delivered in the medium rather than long term then benefits will increase.	++	No positive or significant negative effects have been identified.	0
Geology and Soil	To safeguard and improve soil quality, particularly	Does the proposal cause soil sealing and compaction?	Air quality improvements will have a positive impact on soil resulting from less air pollution,	+	Continuing poor air quality will result in air pollution with long-term negative impacts on soil.	-

	high value agricultural land and carbon rich soil and peatland habitats	Does the proposal result in the release of substances that could potentially contaminate the soil?	with a long-term positive impact on soil. NTS2 commits to replacement of diesel stock with alternative fuels including potential shift to hydrogen and if this can be delivered in the medium rather than long term then benefits will increase.			
		Does the proposal ensure that possible contamination will be properly remediated and not impact upon on sensitive receptors, such as surface water and groundwater?				
	To protect sites designated for their geological interest	Will the proposal protect and enhance sites, designated for their geological interest?				
Water	To protect, maintain and improve the quality of water environment and wetlands that could be directly or indirectly affected by transport infrastructure and	Does the proposal result in the release of water-borne pollution into watercourses, groundwater or reservoirs?	Reducing transport related emissions indirectly has the potential to improve water quality. NTS2 commits to replacement of diesel stock with alternative fuels including potential shift to hydrogen and if this can be delivered in the medium rather	+	No positive or significant negative effects have been identified.	0
		Does the proposal increase the amount of surface water run-off into				

	protect against the risk of flooding	water environment? Or increase the risk of flooding?	than long term then benefits will increase.			
		Does the proposal physically impact on a watercourse?				
Material assets	To promote and improve the sustainable use and management of the transport network	Will the proposal provide adequate transport choices that meet the needs of the people within the Tactran region?	Battery electric trains lead to environmental improvements with long-term benefits for regional material assets.	+	No positive or significant negative effects have been identified.	0
	To reduce the use of natural resources	Does the proposal allow for the sustainable use of natural resources?				

Delivery Theme: Decarbonising transport and a just transition						
Proposal relevant to the RTS 2024 – 2034: Behaviour shift and modal shift for freight						
SEA Theme	Objectives	Will the delivery theme...?	Assessment – Preferred Option (with RTS)	Score	Assessment – Alternative Option (without RTS)	Score
Biodiversity, Flora and Fauna	To protect, maintain and enhance biodiversity and ecosystem services, avoiding damage to or loss of designated and undesignated	Will the proposal cause disturbance or damage to any protected species or habitat?	Achieving a transfer of freight from road to rail and water could have benefits for some land-based species through reduced road traffic but negative impacts on water-based species and habitats, especially around the ports of	+ / -	Not achieving a transfer of freight from road to rail and water would see road freight movements within the region continuing to increase with subsequent impacts on biodiversity continue to worsen. Long-term negative impacts.	-
		Will the proposal protect and enhance the quality and extent of				

	wildlife sites and protected species	designated and undesignated sites? Will the proposal result in a greener public realm, resulting in a net gain of biodiversity?	Dundee, Montrose and Perth, through an increase in shipping.			
Landscape	To safeguard and enhance the character and diversity of the landscape and areas of valuable landscape	Will the proposal protect and enhance the character and integrity of the distinctive landscapes and areas of valuable landscapes?	A reduction in the number of HGVs on the road network within the region as well as a reduction in vans could have a long-term positive impact on the landscape. Efficient freight movement is essential to achieving the aims of NTS2 and the RTS. The policy provides the opportunity for engagement and discussion and to better understand the needs of the freight industry.	+	Not achieving a transfer of freight from road to rail and water would see road freight movements within the region continuing to increase, with long-term negative impacts on the landscape.	-
Cultural Heritage	To protect and enhance historic and archaeological sites and other culturally and historically important features, landscapes and their settings.	Will the proposal protect and enhance sites, features and areas of historical, archaeological and cultural value? Will the proposal help to improve the wider historic	A reduction in HGVs around cultural and historical sites and conservation areas could improve the setting of such sites and reduce damage resulting from pollution and emissions. Efficient freight movement is essential to achieving the aims of NTS2 and the RTS. The policy	+	Not achieving a transfer of freight from road to rail and water would see road freight movements within the region continuing to increase, subsequently negatively impacting on the setting of such historic sites and increasing pollution which can be	-

		environment and sense of place? Will the proposal improve access to sites of historic and/or cultural interest?	provides the opportunity for engagement and discussion and to better understand the needs of the freight industry		damaging to buildings and monuments.	
Climate Change	To reduce greenhouse gas emissions from transport	Will the proposal help to reduce emissions of greenhouse gases and, help Scotland meet its emission targets?	Achieving a transfer of freight from road to rail and water could have a long-term positive impact on climate change through reducing the number of high-emitting HGVs on our roads. An increase in shipping, however, could have long-term negative impacts, as harbour traffic is known to be a significant contributor to pollution and emissions, both from ships themselves and from traffic accessing the harbour.	+ / -	Not achieving a transfer of freight from road to rail and water would see road freight movements within the region continuing to increase with subsequent negative impacts on climate change.	-
	To adapt the transport network to the predicted effects of climate change	Will the proposal protect the Tactran region from climate change impacts and help the region function during extreme weather events? Will the proposal improve access to services during	No positive or significant negative effects on soil have been identified.		No positive or significant negative effects on soil have been identified.	

		severe weather events? Will the proposal help those communities at risk during severe weather to recover?				
Air Quality	To reduce all forms of transport related air pollution and improve air quality, in particularly with regards to the three declared Air Quality Management Areas in Crieff, Dundee and Perth	Will the proposal help to reduce emissions of priority pollutants in line with Scottish and European standards (e.g., PM10, NOX, NO2)?	Achieving a transfer of freight from road to rail and water could have a long-term positive impact on climate change through reducing the number of high-emitting HGVs on our roads. An increase in shipping, however, could have long-term negative impacts, as harbour traffic is known to be a significant contributor to pollution and emissions, both from ships themselves and from traffic accessing the harbour.	+ / -	Not achieving a transfer of freight from road to rail and water would see road freight movements within the region continuing to increase with subsequent negative impacts on air quality.	-
Noise and Vibration	Reduce noise and vibration associated with the transport network	Will the proposal reduce the levels of noise generated? Will the proposal reduce inequalities in exposure to ambient noise? Will the proposal reduce the number	Reduced noise levels due to reduced traffic levels. Efficient freight movement is essential to achieving the aims of NTS2 and the RTS. The policy provides the opportunity for engagement and discussion and	+	No positive or significant negative effects have been identified.	0

		of people exposed to high levels of noise with the potential to cause health problems, particularly those in deprived / vulnerable communities and those groups at risk?	to better understand the needs of the freight industry.			
Human Health	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and the natural environment	<p>Will the proposal promote social inclusion and improve access to services, including healthcare, and opportunities, especially for those without a private car?</p> <p>Will the proposal reduce the likelihood of transport-related road accidents and casualties?</p>	<p>Achieving a transfer of freight from road to rail and water would reduce the number of HGVs and LGVs on the roads within the region, resulting in fewer harmful emissions and reducing the likelihood of accidents involving large vehicles of this nature.</p> <p>An increase in shipping, however, could have long-term negative impacts on air quality, as harbour traffic is known to be a significant contributor to poor air quality in the City Centre (currently and AQMA) through emissions from ships themselves and via traffic accessing the harbour. The impact on human health is therefore mixed.</p>	+ / -	Not achieving a transfer of freight from road to rail and water will likely result in an increase in road freight vehicles. As well as causing an increase in harmful emissions, this will result in a less safe travelling environment, especially for pedestrians and cyclists.	-

	To promote, invest in, build and maintain infrastructure to support the development of high-quality places	Will the proposal protect and enhance the character, integrity and liveability of the towns and villages and, rural communities across the region? Will the proposal improve the public realm by improving the public realm and access?	Encouraging a shift away from road freight will reduce the adverse impacts of freight and service vehicles on the street network. Efficient freight movement is essential to achieving the aims of NTS2 and the RTS. The policy provides the opportunity for engagement and discussion and to better understand the needs of the freight industry.		Failing to encourage a shift away from road freight means that the region's roads and streets remain dominated by large numbers of vans and lorries providing similar goods and services to neighbouring businesses, contributing to congestion and making streets less safe and less pleasant for people walking, cycling and using public transport.	
Population	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and the natural environment	Will the proposal promote social inclusion and improve access to key services and opportunities, especially for those without a private car? Will the proposal help to improve access to greenspaces both for recreational and health benefits? Will the proposal help to support an ageing population by providing	An increase in the volume of freight moved by rail and water could reduce congestion and enable the more efficient movement of freight. Efficient freight movement is essential to achieving the aims of NTS2 and the RTS. The policy provides the opportunity for engagement and discussion and to better understand the needs of the freight industry.	+	Not achieving a transfer of freight from road to rail and water will likely result in an increase in road freight vehicles, with a corresponding increase in congestion. Journey times will remain variable. There will therefore be long-term negative impacts on the population.	-

		appropriate transport choices to meet their needs?				
Geology and Soil	To safeguard and improve soil quality, particularly high value agricultural land and carbon rich soil and peatland habitats	Does the proposal cause soil sealing and compaction?	Identified positive impacts on air quality can impact on soil through decreases in air pollution.	+	Identified negative impacts on air quality can impact on soil through increases in air pollution.	-
		Does the proposal result in the release of substances that could potentially contaminate the soil?				
		Does the proposal ensure that possible contamination will be properly remediated and not impact upon on sensitive receptors, such as surface water and groundwater?				
	To protect sites designated for their geological interest	Will the proposal protect and enhance sites, designated for their geological interest?				
Water	To protect, maintain and improve the quality of water environment and	Does the proposal result in the release of water-borne pollution into watercourses,	Reducing transport related emissions indirectly has the potential to improve water quality.	+ /-	Not achieving a transfer of freight from road to rail and water would see road transport's impacts on water continue to worsen (through an	-

	wetlands that could be directly or indirectly affected by transport infrastructure and protect against the risk of flooding	groundwater or reservoirs? Does the proposal increase the amount of surface water run-off into water environment? Or increase the risk of flooding? Does the proposal physically impact on a watercourse?	An increase in shipping, however, could have a long-term negative impact on water quality through an increase in sea pollution resulting from a growth in seagoing vessels. A corresponding decrease in HGV traffic could have positive impacts on the freshwater environment by reducing road runoff.		increase in run-off to water from road transport activities), with long-term negative impacts on water.	
Material assets	To promote and improve the sustainable use and management of the transport network	Will the proposal provide adequate transport choices that meet the needs of the people within the Tactran region?	Achieving a transfer of freight from road to rail and water promotes a more effective use of the transport infrastructure and assets as well as the sustainable use of resources.	+	Not achieving a transfer of freight from road to rail and water will not address the current inefficient use of the region's transport infrastructure and assets, contributing to the medium- to long-term decline of such assets.	-
	To reduce the use of natural resources	Does the proposal allow for the sustainable use of natural resources?	Efficient freight movement is essential to achieving the aims of NTS2 and the RTS. The policy provides the opportunity for engagement and discussion and to better understand the needs of the freight industry.			

Delivery Theme: Improving accessibility and security of our transport networks

Proposal relevant to the RTS 2024 – 2034: Improved accessibility and security of the street environment

SEA Theme	Objectives	Will the delivery theme...?	Assessment – Preferred Option (with RTS)	Score	Assessment – Alternative Option (without RTS)	Score
Biodiversity, Flora and Fauna	To protect, maintain and enhance biodiversity and ecosystem services, avoiding damage to or loss of designated and undesignated wildlife sites and protected species	<p>Will the proposal cause disturbance or damage to any protected species or habitat?</p> <p>Will the proposal protect and enhance the quality and extent of designated and undesignated sites?</p>	As part of improvements to both the public realm there will be opportunities to realise a net gain in biodiversity.	+	No positive or significant negative effects have been identified.	0

		Will the proposal result in a greener public realm, resulting in a net gain of biodiversity?				
Landscape	To safeguard and enhance the character and diversity of the landscape and areas of valuable landscape	Will the proposal protect and enhance the character and integrity of the distinctive landscapes and areas of valuable landscapes?	Public realm improvements would have a long-term positive impact on townscapes and streetscapes within the region through the creation of a more attractive environment.	++	Failing to address the failings of the public realm could have long-term negative impacts on the townscapes and streetscapes.	-
Cultural Heritage	To protect and enhance historic and archaeological sites and other culturally and historically important features, landscapes and their settings.	Will the proposal protect and enhance sites, features and areas of historical, archaeological and cultural value? Will the proposal help to improve the wider historic environment and sense of place? Will the proposal improve access to sites of historic and/or cultural interest?	Improvements to the public realm in the cities, towns and villages within the region could improve the setting and accessibility of areas and buildings of historic and cultural importance, many of which are located in and around the centres, with long-term positive impacts on cultural heritage.	++	Failing to implement public realm improvements could see a decline in the cities, towns and villages as historic places to spend time in. Not implementing accessibility improvements could also make some historical areas and buildings inaccessible to certain groups. This will have a long-term negative impact.	-

Climate Change	To reduce greenhouse gas emissions from transport	Will the proposal help to reduce emissions of greenhouse gases and, help Scotland meet its emission targets?	<p>An improved public realm will have a long-term positive impact on the climate.</p> <p>A more people-focussed experience, and the granting of priority to activities other than motorised traffic, could reduce the number of car trips made into the towns and cities, subsequently reducing vehicle emissions and pollution.</p>	+	Failing to address the failings of the public realm could have long-term negative impacts on the townscapes and streetscapes, resulting in an increase of climate-changing emissions if the impact of the indiscriminate use of the car is not addressed.	-
	To adapt the transport network to the predicted effects of climate change	Will the proposal protect the Tactran region from climate change impacts and help the region function during extreme weather events?	<p>As well as a general warming of the climate, severe weather events such as heatwaves, droughts and heavy rainfall are predicted to increase in frequency and intensity. There will be multiple benefits resulting from blue and green infrastructure embedded in public realm improvements, including improved resilience to severe weather and climate change.</p>		Failing to address the failings of the public realm could have long-term negative impacts on the resilience to severe weather and climate change.	
		Will the proposal improve access to services during severe weather events?				
		Will the proposal help those communities at risk during severe weather to recover?				

Air Quality	To reduce all forms of transport related air pollution and improve air quality, in particularly with regards to the three declared Air Quality Management Areas in Crieff, Dundee and Perth	Will the proposal help to reduce emissions of priority pollutants in line with Scottish and European standards (e.g., PM10, NOX, NO2)?	Improvements to the public realm will have a long-term positive impact on air quality. A more people-focussed experience, and the granting of priority to activities other than motorised traffic, could reduce the number of car trips made to the village, town and city centres within the region - some of which have been declared AQMAs (Crieff, Dundee Perth). Improvements to the public realm will help to reduce vehicle emissions and pollution.	++	Failing to address the failings of the public realm could have long-term negative impacts on the townscapes and streetscapes, resulting in an increase of air pollutants if the impact of the indiscriminate use of the car is not addressed.	-
Noise and Vibration	Reduce noise and vibration associated with the transport network	<p>Will the proposal reduce the levels of noise generated?</p> <p>Will the proposal reduce inequalities in exposure to ambient noise?</p> <p>Will the proposal reduce the number of people exposed to high levels of noise with the potential to cause health problems, particularly those in deprived /</p>	Reduced noise levels due to reduced traffic levels.	+	No positive or significant negative effects have been identified.	0

		vulnerable communities and those groups at risk?				
Human Health	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and the natural environment	Will the proposal promote social inclusion and improve access to services, including healthcare, and opportunities, especially for those without a private car?	An improved public realm that focusses on people and looks to significantly reduce the impacts of motorised traffic could encourage more walking and cycling in the centres, with long-term health benefits. Less motorised traffic in the centres will also reduce levels of harmful emissions and pollution, decrease noise from road transport and reduce the likelihood of transport-related accidents and casualties.	++	Public realms unwelcoming to pedestrians and cyclists will fail to encourage more people to travel more actively more often. If efforts are not made to reduce motorised traffic declared AQMAs within the region, the designations will remain in place and air quality (and noise) could potentially worsen. Increasing car traffic in the centres could also result in more accidents and injuries experienced by the travelling public. There will therefore be long-term negative impacts on health.	--
		Will the proposal reduce the likelihood of transport-related road accidents and casualties?				
	To promote, invest in, build and maintain infrastructure to support the development of high-quality places	Will the proposal protect and enhance the character, integrity and liveability of the towns and villages and, rural communities across the region?	Improving the accessibility of streets will particularly benefit older and disabled people through measures including removing obstacles, widening pavements for wheelchair access, introducing tactile paving, raising sections of roadway to make crossing easier, providing seating, mitigating the impact of street		Failing to address the failings of the public realm is likely to see a further decline in retail and leisure activity in the villages, towns and cities within the region, with economic implications. If improvements are not made to improve the accessibility of the centres, people may be	
		Will the proposal improve the public				

		realm by improving the public realm and access?	works and, where possible, ensuring on-street cycling facilities cater for the wide range of cycles used by disabled people will help to reduce inequalities and issues around social inclusion. Major impact, enabling equality of access to opportunities and public services across a range of disadvantaged groups, enabling more people to travel independently.		discouraged from travelling there. There could subsequently be long-term negative impacts.	
Population	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and the natural environment	Will the proposal promote social inclusion and improve access to key services and opportunities, especially for those without a private car? Will the proposal help to improve access to greenspaces both for recreational and health benefits? Will the proposal help to support an ageing population by providing appropriate	As above.	++	As above.	--

		transport choices to meet their needs?				
Geology and Soil	To safeguard and improve soil quality, particularly high value agricultural land and carbon rich soil and peatland habitats	Does the proposal cause soil sealing and compaction?	As part of improvements to the public realm there will be opportunities to and introduce blue-green infrastructure.	+	No positive or significant negative effects have been identified.	0
		Does the proposal result in the release of substances that could potentially contaminate the soil?				
		Does the proposal ensure that possible contamination will be properly remediated and not impact upon on sensitive receptors, such as surface water and groundwater?				
	To protect sites designated for their geological interest	Will the proposal protect and enhance sites, designated for their geological interest?				
Water	To protect, maintain and improve the quality of water environment and	Does the proposal result in the release of water-borne pollution into watercourses,	Reducing transport related emissions indirectly has the potential to improve water quality.	+	No positive or significant negative effects.	0

	wetlands that could be directly or indirectly affected by transport infrastructure and protect against the risk of flooding	groundwater or reservoirs? Does the proposal increase the amount of surface water run-off into water environment? Or increase the risk of flooding? Does the proposal physically impact on a watercourse?	As part of improvements to the public realm there will be opportunities to and introduce blue-green infrastructure.			
Material assets	To promote and improve the sustainable use and management of the transport network	Will the proposal provide adequate transport choices that meet the needs of the people within the Tactran region?	Improved public realms could become valuable assets for residents within the region to be proud of. Without significant improvements to the public realm, it is likely that a range of improvements would not be delivered. This would jeopardise the region's vision of creating an effective and integrated transport system which meets the needs of all those living in, working in, and visiting the region	+	Failing to address the failings of the public realm and to improve accessibility could contribute towards the long-term decline of material assets.	-
	To reduce the use of natural resources	Does the proposal allow for the sustainable use of natural resources?				

Delivery Theme: Improving accessibility and security of our transport networks						
Proposal relevant to the RTS 2024 – 2034: Improved accessibility and security for all across public transport						
SEA Theme	Objectives	Will the delivery theme...?	Assessment – Preferred Option (with RTS)	Score	Assessment – Alternative Option (without RTS)	Score
Biodiversity, Flora and Fauna	To protect, maintain and enhance biodiversity and ecosystem services, avoiding damage to or loss of designated and undesignated	Will the proposal cause disturbance or damage to any protected species or habitat?	An increase in mode shares for public transport will help to contribute to a decline in car use. This would have a long-term positive impact on biodiversity, particularly for those species and habitats currently suffering from	+	Not achieving increased mode shares for public transport means that car trips will be continuing to increase. This could have a long-term negative impact on biodiversity, particularly for those species and habitats currently suffering	-
		Will the proposal protect and enhance the quality and extent of				

	wildlife sites and protected species	designated and undesignated sites? Will the proposal result in a greener public realm, resulting in a net gain of biodiversity?	disturbance caused by transport. A decline in the number of car trips would also remove the need for construction of new transport infrastructure, such as roads etc. which could also negatively impact on biodiversity through damaging, disrupting and severing species and habitats.		from disturbance from transport. Negative impacts are likely to worsen with an increasing number of car trips. An increasing number of car trips and a subsequent increased traffic volume could also increase the need for construction of new transport infrastructure, such as roads etc. This could also negatively impact on biodiversity through damaging, disrupting and severing species and habitats, with a long-term negative impact on biodiversity.	
Landscape	To safeguard and enhance the character and diversity of the landscape and areas of valuable landscape	Will the proposal protect and enhance the character and integrity of the distinctive landscapes and areas of valuable landscapes?	Increased mode shares public transport at the expense of car trips hold the potential to reduce visual intrusion resulting from road traffic and congestion, with a long-term positive impact on landscape.	+	Not achieving increased mode shares public transport within the region means that car trips will be continuing to increase, with long-term negative impacts on the landscape.	-
Cultural Heritage	To protect and enhance historic and archaeological sites and other culturally and	Will the proposal protect and enhance sites, features and areas of historical,	Fewer cars in conservation areas and around distinctive cultural and historical sites within the region could improve the setting and distinctiveness of these	+	Not achieving increased mode shares for public transport within the region could result in more cars in conservation areas and around cultural and	-

	historically important features, landscapes and their settings.	archaeological and cultural value? Will the proposal help to improve the wider historic environment and sense of place? Will the proposal improve access to sites of historic and/or cultural interest?	sites and areas as well as their preservation. Pollution is known to have damaging effects on cultural heritage. Long-term positive impact on cultural heritage.		historical sites and areas, thus detracting from their setting and contributing to their degradation because of increased pollution, with long-term negative impacts.	
Climate Change	To reduce greenhouse gas emissions from transport	Will the proposal help to reduce emissions of greenhouse gases and, help Scotland meet its emission targets?	An increase in mode shares for public transport within the region at the expense of car trips will have a long-term positive impact on climate change through reducing emissions and pollution.	+	Not achieving increased mode shares for public transport within the region means that car trips will be continuing to increase. This could have a long-term negative impact on climactic factors, resulting from increased emissions.	-
	To adapt the transport network to the predicted effects of climate change	Will the proposal protect the Tactran region from climate change impacts and help the region function during extreme weather events? Will the proposal improve access to services during severe weather events?	No positive or significant negative effects have been identified.		No positive or significant negative effects have been identified.	

		Will the proposal help those communities at risk during severe weather to recover?				
Air Quality	To reduce all forms of transport related air pollution and improve air quality, in particularly with regards to the three declared Air Quality Management Areas in Crieff, Dundee and Perth	Will the proposal help to reduce emissions of priority pollutants in line with Scottish and European standards (e.g., PM10, NOX, NO2)?	An increase in mode shares for public transport within the region at the expense of the car trips will have a long-term positive impact on air quality through reducing emissions and pollution. Low emission and alternative fuels including potential shift to hydrogen would see benefits increase sooner – although the pace at which such developments are brought forward is beyond the scope of the RTS. AQMAs located in Crieff, Dundee and Perth would benefit through reduced private car movements and a shift to public and shared transport.	++	Not achieving increased mode shares for public transport within the region means that car trips will be continuing to increase. This could have a long-term negative impact on air quality, resulting from increased emissions.	-
Noise and Vibration	Reduce noise and vibration associated with the transport network	Will the proposal reduce the levels of noise generated? Will the proposal reduce inequalities	Reduced noise levels due to reduced traffic levels.	+	No positive or significant negative effects have been identified.	0

		in exposure to ambient noise? Will the proposal reduce the number of people exposed to high levels of noise with the potential to cause health problems, particularly those in deprived / vulnerable communities and those groups at risk?				
Human Health	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and the natural environment	Will the proposal promote social inclusion and improve access to services, including healthcare, and opportunities, especially for those without a private car? Will the proposal reduce the likelihood of transport-related road accidents and casualties?	An increased mode share for public transport at the expense of car trips within the region will have significant long-term benefits for human health. It will result in less pollution and emissions, subsequently reducing incidences of respiratory problems, and poor air quality which is known to reduce life expectancy. Low emission and alternative fuels including potential shift to hydrogen would see benefits increase sooner – although the pace at which such developments are brought	++	Not achieving increased mode share for public transport could result in a continued increase in car trips within the region, thus increasing emissions and contributing to poor air quality. Not seeking to improve the accessibility of public transport services could see some locations, including healthcare facilities, remain fairly inaccessible to those without access to a private car, potentially contributing towards social exclusion, especially of the elderly who are typically more reliant on such	--

			<p>forward is beyond the scope of the RTS. AQMAs located in Crieff, Dundee and Perth would benefit through reduced private car movements and a shift to public and shared transport</p> <p>Improved public transport routes and services could also improve access to key services, such as healthcare facilities etc.</p>		<p>services. Long-term negative impacts on health.</p>	
	<p>To promote, invest in, build and maintain infrastructure to support the development of high-quality places</p>	<p>Will the proposal protect and enhance the character, integrity and liveability of the towns and villages and, rural communities across the region?</p>	<p>No positive or significant negative effects have been identified.</p>		<p>No positive or significant negative effects have been identified.</p>	
		<p>Will the proposal improve the public realm by improving the public realm and access?</p>				
<p>Population</p>	<p>To improve quality of life and human health by promoting active lifestyles and increasing sustainable access</p>	<p>Will the proposal promote social inclusion and improve access to key services and opportunities, especially for those</p>	<p>Measures to improve the accessibility of public transport services will have long-term positive impacts on the economy by reducing congestion and improving journey time reliability, enabling</p>	<p>++</p>	<p>Not improving accessibility of public transport services and achieving increased mode shares for bus and rail could lead a continued increase in car trips within the region, thus exacerbating congestion and</p>	<p>--</p>

	for all to essential services (including healthcare), employment and the natural environment	without a private car? Will the proposal help to improve access to greenspaces both for recreational and health benefits? Will the proposal help to support an ageing population by providing appropriate transport choices to meet their needs?	the more efficient movement of people and freight. Improvements to the accessibility of public transport services, serving a range of destinations, will have a long-term positive impact on social inclusion by encouraging and facilitating greater use of public transport to access key services and opportunities. This will be of particular benefit to those without access to a car or who have given up driving, such as the elderly or disabled. Major impact, enabling equality of access to opportunities and public services across a range of disadvantaged groups, enabling more people to travel independently.		contributing to journey time unreliability. Not seeking to improve accessibility of public transport services could see some locations remain fairly inaccessible to those without access to a private car, potentially contributing towards social exclusion, especially of the elderly who are typically more reliant on such services. Long-term negative impacts on the population.	
Geology and Soil	To safeguard and improve soil quality, particularly high value agricultural land and carbon rich soil and peatland habitats	Does the proposal cause soil sealing and compaction? Does the proposal result in the release of substances that could potentially contaminate the soil?	Air quality improvements will have a positive impact on soil resulting from less air pollution, with a long-term positive impact on soil. Low emission and alternative fuels including potential shift to hydrogen would see benefits	+	Not achieving increased mode shares for active travel within the region means that car trips will be continuing to increase. This could also lead to an increase in air pollution, with long-term negative impacts on soil.	-

		Does the proposal ensure that possible contamination will be properly remediated and not impact upon on sensitive receptors, such as surface water and groundwater?	increase sooner – although the pace at which such developments are brought forward is beyond the scope of the RTS.			
	To protect sites designated for their geological interest	Will the proposal protect and enhance sites, designated for their geological interest?				
Water	To protect, maintain and improve the quality of water environment and wetlands that could be directly or indirectly affected by transport infrastructure and protect against the risk of flooding	Does the proposal result in the release of water-borne pollution into watercourses, groundwater or reservoirs? Does the proposal increase the amount of surface water run-off into water environment? Or increase the risk of flooding?	Reducing transport related emissions indirectly has the potential to improve water quality. Opportunity to adopt sustainable drainage options and incorporate blue-green infrastructure.	+	No positive or significant negative effects have been identified.	0

		Does the proposal physically impact on a watercourse?				
Material assets	To promote and improve the sustainable use and management of the transport network	Will the proposal provide adequate transport choices that meet the needs of the people within the Tactran region?	By encouraging a more efficient sustainable use of the regional transport infrastructure, they can bring long-term positive benefits to material assets.	+	Failing to improve the accessibility of public transport services deprives the people of Aberdeen of a useful asset and could lead to the overuse of existing assets, with a long-term negative impact	-
	To reduce the use of natural resources	Does the proposal allow for the sustainable use of natural resources?				

Delivery Theme: Reducing the need to travel by car through the location of development and services						
Proposal relevant to the RTS 2024 – 2034: Reducing the need to travel by car through the location of development and services						
SEA Theme	Objectives	Will the delivery theme...?	Assessment – Preferred Option (with RTS)	Score	Assessment – Alternative Option (without RTS)	Score
Biodiversity, Flora and Fauna	To protect, maintain and enhance	Will the proposal cause disturbance or damage to any	Encouraging sustainable travel to new developments will have long-term positive impacts on	++	Not encouraging and facilitating sustainable travel in new developments could see	--

	biodiversity and ecosystem services, avoiding damage to or loss of designated and undesignated wildlife sites and protected species	protected species or habitat? Will the proposal protect and enhance the quality and extent of designated and undesignated sites? Will the proposal result in a greener public realm, resulting in a net gain of biodiversity?	biodiversity through reducing land take for transport, reducing pollution and minimising disruption to habitats and species resulting from transport. Consolidation of development served by sustainable transport reduces the use of greenfield land, offering opportunities to improve biodiversity, particularly when considering street connectivity and the movement of flora and fauna across landscapes ¹⁵ . Ensuring that transport and land use strategies and planning frameworks complement each other should ensure biodiversity needs play a more prominent role in decision-making than they do at present.		increased land take from transport and increased pollution hence disruption to habitats and species, with long-term negative impacts.	
Landscape	To safeguard and enhance the character and diversity of the landscape and areas of valuable landscape	Will the proposal protect and enhance the character and integrity of the distinctive landscapes and	Positive impact as consolidated developments will take less greenfield land, will make far more efficient use of the land overall.	+	Failure to cater for sustainable travel in the development process could see an increased requirement for new roads and bridges to accompany new development with long-term	

¹⁵ M Brierley and P Cockett: 'Urban biodiversity as strategy for walkability (breakout presentation)'. Journal of Transport & Health, 2017, Vol 7, Dec. (Supplement), S28-S29. <https://doi.org/10.1016/j.jth.2017.11.046>

		areas of valuable landscapes?	Developers will also be encouraged to consider the landscape as an integral part of development plans.		negative impacts on the landscape.	
Cultural Heritage	To protect and enhance historic and archaeological sites and other culturally and historically important features, landscapes and their settings.	Will the proposal protect and enhance sites, features and areas of historical, archaeological and cultural value? Will the proposal help to improve the wider historic environment and sense of place? Will the proposal improve access to sites of historic and/or cultural interest?	Higher density development, with a critical mass of people and more potential for local venues, are more likely to enable participation in cultural activities. Higher density development also important to maintain local heritage.	+	No positive or significant negative effects have been identified.	0
Climate Change	To reduce greenhouse gas emissions from transport	Will the proposal help to reduce emissions of greenhouse gases and, help Scotland meet its emission targets?	Land use planning can bring long-term positive effects. Reducing the need to travel by encouraging people to live and work locally will positively affect the emissions generated by new developments. Supporting the use of active and sustainable transport modes for new developments rather than the use of private cars will further	++	Not encouraging and facilitating sustainable travel to new developments could contribute to climate change as car travel continues to remain the main mode of transport to such sites, with long-term negative impacts.	-

			<p>contribute to reducing respective emissions.</p> <p>The extent of the above will be relatively local to new developments although given the scale of development proposed within the Tactran region this will likely result into a long-term positive impact.</p> <p>Higher density developments also provide a critical mass of population to support local services etc. manifest as taller buildings or terraced housing. This may reduce overall land take on development schemes, allowing for enhanced blue and green infrastructure.</p>		
	To adapt the transport network to the predicted effects of climate change	Will the proposal protect the Tactran region from climate change impacts and help the region function during extreme weather events?	No positive or significant negative effects have been identified.		No positive or significant negative effects have been identified.
		Will the proposal improve access to services during severe weather events?			

		Will the proposal help those communities at risk during severe weather to recover?				
Air Quality	To reduce all forms of transport related air pollution and improve air quality, in particularly with regards to the three declared Air Quality Management Areas in Crieff, Dundee and Perth	Will the proposal help to reduce emissions of priority pollutants in line with Scottish and European standards (e.g., PM10, NOX, NO2)?	<p>Sustainable land use planning can bring long-term positive effects to air quality. It encourages developments to be planned in such a way that the need to travel is reduced and encourages travel by the most sustainable modes by prioritising access to these from the outset.</p> <p>Ensuring that transport and land use strategies and planning frameworks complement each other should ensure air quality play a more prominent role in decision-making than they do at present.</p>	++	Not encouraging and facilitating sustainable travel to new developments could contribute to climate change as car travel continues to remain the main mode of transport to such sites, with long-term negative impacts.	-
Noise and Vibration	Reduce noise and vibration associated with the transport network	<p>Will the proposal reduce the levels of noise generated?</p> <p>Will the proposal reduce inequalities in exposure to ambient noise?</p>	Reduced noise levels due to reduced traffic levels.	+	No positive or significant negative effects have been identified.	0

		Will the proposal reduce the number of people exposed to high levels of noise with the potential to cause health problems, particularly those in deprived / vulnerable communities and those groups at risk?				
Human Health	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and the natural environment	<p>Will the proposal promote social inclusion and improve access to services, including healthcare, and opportunities, especially for those without a private car?</p> <p>Will the proposal reduce the likelihood of transport-related road accidents and casualties?</p>	<p>Research has shown that larger settlements with higher densities can provide a critical mass of population to support local services, improve economic productivity, reduced transport emissions, better public health, and greater social interaction (cp. RTPI (2018): Settlement Patterns, Urban Form and Sustainability).</p> <p>Ensuring that transport and land use strategies and planning frameworks complement each other should ensure health implications play a more prominent role in decision-making than they do at present.</p>	++	Failure to properly consider transport in the land use planning process can result in developments that are focussed around the car and are difficult to access by other modes. This can result in the increase of harmful emissions and reduce the likelihood of people walking and cycling, with long-term negative impacts on health.	-

	To promote, invest in, build and maintain infrastructure to support the development of high-quality places	<p>Will the proposal protect and enhance the character, integrity and liveability of the towns and villages and, rural communities across the region?</p> <p>Will the proposal improve the public realm by improving the public realm and access?</p>	<p>Major positive impact. The role transport plays in facilitating growth presents an opportunity to shape the region into a region that works well for everyone.</p> <p>Using new public transport links and better walking and cycling environments to help areas develop will create a future of reduced car dependency and increased active travel.</p> <p>Planning streets and places around walking, cycling and public transport will increase active, efficient and sustainable travel for short trips around new town centres. Improving public transport connections between existing communities will support a shift away from car dependency.</p>		<p>Failure to properly consider transport in the land use planning process can result in developments that are focussed on the car and are difficult to access by other modes.</p> <p>This can have a long-term negative on the public realm.</p>	
Population	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including	Will the proposal promote social inclusion and improve access to key services and opportunities, especially for those without a private car?	Sustainable land use planning can bring long-term positive effects to the population. It encourages developments to be planned in such a way that the need to travel is reduced by prioritising access by active and sustainable modes sustainable mode.	++	Failure to properly consider transport in the land use planning process can result in developments that are focussed on the car and are difficult to access by other modes. This can have a long-term negative on the population.	-

	healthcare), employment and the natural environment	Will the proposal help to improve access to greenspaces both for recreational and health benefits?	Consolidated developments with a focus on public spaces for people can boost footfall and trading by up to 40% ¹⁶ , and can help to reduce retail vacancy in high streets and town centres ¹⁷ .			
		Will the proposal help to support an ageing population by providing appropriate transport choices to meet their needs?	Consolidated developments with highly connected active and sustainable transport networks are more likely to make a positive contribution to labour productivity ¹⁸ . Keeping investment local through community wealth-building can develop the skills of local people and create stable, well-paying jobs for local people ¹⁹ . Investment in better place-making can boost land values by			

¹⁶ Health Matters: Air Pollution. Guidance. Public Health England, Nov. 2018.

<https://www.gov.uk/government/publications/health-matters-air-pollution/health-matters-air-pollution>

¹⁷ Street Appeal: The Value of Street Improvements. University College London, for Transport for London, 2018. <http://content.tfl.gov.uk/street-appeal.pdf>

¹⁸ M Rohani and G Lawrence: The Relationship between Pedestrian Connectivity and Economic Productivity in Auckland's City Centre. Technical Report 2017/007-2. Auckland Council, Nov. 2017.

<https://static1.squarespace.com/static/58e441d2f7e0abde3be51110/t/5a559d50085229d58dfed85b/1515560335402/TR2017-007-2-Pedestrianconnectivity-economic-productivity-Auckland-city-centre-scenarios.pdf>

¹⁹ How We Built Community Wealth in Preston: Achievements and Lessons. Centre for Local Economic Strategies (CLES), Jul. 2019. <https://cles.org.uk/publications/how-we-built-community-wealth-in-preston-achievements-and-lessons/>

			up to 25%. ²⁰ Environments enabling active and sustainable transport links sustain and increase their value because they are popular places in which to live and do business. This can be beneficial in that it could bring investment and jobs ²¹ .			
Geology and Soil	To safeguard and improve soil quality, particularly high value agricultural land and carbon rich soil and peatland habitats	Does the proposal cause soil sealing and compaction? Does the proposal result in the release of substances that could potentially contaminate the soil? Does the proposal ensure that possible contamination will be properly remediated and not impact upon on sensitive receptors, such as surface water and groundwater?	Supporting consolidated developments has a long-term positive impact on soil quantity and quality. Air quality improvements can reduce the impacts of air pollution on soil.	+	Any deterioration in air quality can have subsequent negative impacts on soil.	-

²⁰ Development: The Value of Placemaking. Savills, 2016. <https://pdf.euro.savills.co.uk/uk/residential--other/spotlight-the-value-of-placemaking-2016.pdf>

²¹ Walkability and Mixed-Use: Making Valuable and Healthy Communities. The Prince's Foundation, Dec. 2020. <https://princes-foundation.org/journal/walkability-report>

	To protect sites designated for their geological interest	Will the proposal protect and enhance sites, designated for their geological interest?				
Water	To protect, maintain and improve the quality of water environment and wetlands that could be directly or indirectly affected by transport infrastructure and protect against the risk of flooding	<p>Does the proposal result in the release of water-borne pollution into watercourses, groundwater or reservoirs?</p> <p>Does the proposal increase the amount of surface water run-off into water environment? Or increase the risk of flooding?</p> <p>Does the proposal physically impact on a watercourse?</p>	<p>Traditional low-density developments will use greenfield land and make less efficient use of land overall. Supporting consolidated developments will minimise the impact of new development on watercourses.</p> <p>Reducing transport related emissions indirectly has the potential to improve water quality.</p> <p>Opportunity to adopt sustainable drainage options and incorporate blue-green infrastructure into new developments.</p>	+	No positive or significant negative effects have been identified.	0
Material assets	To promote and improve the sustainable use and management of the transport network	Will the proposal provide adequate transport choices that meet the needs of the people within the Tactran region?	Consolidated developments can bring long term positive benefits to material assets. Such developments encourage such assets to be planned in the most effective way to give the largest benefit to the and helps ensure	+	Failure to consider transport and land use planning together can result in the development of sub-standard assets.	-

	To reduce the use of natural resources	Does the proposal allow for the sustainable use of natural resources?	that facilities are planned in a joined up and easily accessible way.			
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Delivery Theme: Improving strategic connectivity						
Proposal relevant to the RTS 2024 – 2034: Address pinch points on the strategic road network						
SEA Theme	Objectives	Will the delivery theme...?	Assessment – Preferred Option (with RTS)	Score	Assessment – Alternative Option (without RTS)	Score

Biodiversity, Flora and Fauna	To protect, maintain and enhance biodiversity and ecosystem services, avoiding damage to or loss of designated and undesignated wildlife sites and protected species	<p>Will the proposal cause disturbance or damage to any protected species or habitat?</p> <p>Will the proposal protect and enhance the quality and extent of designated and undesignated sites?</p> <p>Will the proposal result in a greener public realm, resulting in a net gain of biodiversity?</p>	<p>More reliable and safer trunk road network may encourage more car trips. This could subsequently increase car kilometres and respective emissions, impacting on habitats and species.</p> <p>The policy is aimed at safety-led road improvements on roads which are either already in place or for which development including land take will be required. The general effect in the long term will be negative and will need to be mitigated.</p> <p>Use of land for new transport infrastructure may also cause disturbance of habitats and species and result in negative effects because of human activities, such as recreational activities outdoors, noise from transport etc.</p> <p>It may also result in coastal squeeze and pollution of other environmental media, including water, soil and air.</p>	--	No positive or significant negative effects have been identified.	0
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Landscape	To safeguard and enhance the character and diversity of the landscape and areas of valuable landscape	Will the proposal protect and enhance the character and integrity of the distinctive landscapes and areas of valuable landscapes?	<p>Effects can arise within the landscape and/or townscape and visual baseline context.</p> <p>The policy is aimed at safety-led road improvements on roads which are either already in place or for which development including land take will be required. The general effect in the long term will be negative and will need to be mitigated.</p> <p>Considerable potential to cause irreversible harm.</p>	--	No positive or significant negative effects have been identified.	0
Cultural Heritage	To protect and enhance historic and archaeological sites and other culturally and historically important features, landscapes and their settings.	<p>Will the proposal protect and enhance sites, features and areas of historical, archaeological and cultural value?</p> <p>Will the proposal help to improve the wider historic environment and sense of place?</p> <p>Will the proposal improve access to sites of historic and/or cultural interest?</p>	<p>The policy is aimed at safety-led road improvements on roads which are either already in place or for which development including land take will be required. The general effect in the long term will be negative and will need to be mitigated.</p> <p>Use of land for new infrastructure may cause disturbance of heritage assets and their settings because of human activity, such as recreation, transport related noise pollution etc. and more direct pollution of</p>	--	No positive or significant negative effects have been identified.	0

			environmental media, including water, soil, and air.			
Climate Change	To reduce greenhouse gas emissions from transport	Will the proposal help to reduce emissions of greenhouse gases and, help Scotland meet its emission targets?	<p>More reliable and safer trunk road network may encourage more car trips, dependent on the scale of the scheme(s) implemented. This could subsequently increase car kilometres and respective carbon emissions and pollutants.</p> <p>May contradict objectives and policies aimed at encouraging modal shift, although this will be dependent on the provision of attractive and realistic non-car alternatives en route.</p> <p>The policy is aimed at safety-led road improvements on roads which are either already in place or for which development including land take will be required. The general effect in the long term will be negative and will need to be mitigated.</p> <p>Loss of potentially designated lands during construction and operation has the potential for permanent, minor negative or uncertain effects on the climate.</p>	--	<p>Failing to provide attractive infrastructure to realistically enable the use of non-car alternatives en route during trunk road improvements could result in a continued increase in car trips, with long-term negative impacts through increased emissions.</p> <p>Failing to tackle traffic congestion will also increase emissions, with a long-term negative impact.</p>	-

			<p>It is acknowledged that the RTS can play a role in protecting carbon rich soils and peatland habitats when identifying potential locations for new infrastructure or routes.</p> <p>Manufacture of materials and construction activities would release emissions which would add to the atmospheric concentration of greenhouse gases.</p>			
	To adapt the transport network to the predicted effects of climate change	Will the proposal protect the Tactran region from climate change impacts and help the region function during extreme weather events?	Schemes would improve the resilience of the strategic road network to the anticipated impacts of climate change and reduce the need for closures during bad weather, resulting in long-term positive effects after completion.		No positive or significant negative effects have been identified.	
		Will the proposal improve access to services during severe weather events?				
		Will the proposal help those communities at risk during severe weather to recover?				

Air Quality	To reduce all forms of transport related air pollution and improve air quality, in particularly with regards to the three declared Air Quality Management Areas in Crieff, Dundee and Perth	Will the proposal help to reduce emissions of priority pollutants in line with Scottish and European standards (e.g., PM10, NOX, NO2)?	<p>There is potential for a future increase in traffic volumes during operation of the project, because of improved connectivity and resilience, though this is unlikely to have a significant effect on air quality.</p> <p>Measures to tackle traffic congestion will also have a positive impact through decreasing emissions.</p> <p>There are opportunities to explore integration of green infrastructure in project design to remove air pollution, though any effects this would have on air quality would be unlikely to be significant.</p>	+ / -	<p>Failing to provide attractive infrastructure to realistically enable the use of non-car alternatives en route during trunk road improvements could result in a continued increase in car trips, with long-term negative impacts through increased emissions.</p> <p>Failing to tackle traffic congestion will also increase emissions, with a long-term negative impact.</p>	-
Noise and Vibration	Reduce noise and vibration associated with the transport network	<p>Will the proposal reduce the levels of noise generated?</p> <p>Will the proposal reduce inequalities in exposure to ambient noise?</p> <p>Will the proposal reduce the number of people exposed to high levels of noise with the</p>	Reduced noise levels due to reduced congestion levels.	+	No positive or significant negative effects have been identified.	0

		potential to cause health problems, particularly those in deprived / vulnerable communities and those groups at risk?				
Human Health	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and the natural environment	Will the proposal promote social inclusion and improve access to services, including healthcare, and opportunities, especially for those without a private car?	Reduced traffic and therefore emissions in Perth, Dundee and Stirling city centres. Reduced congestion levels. Reduced accidents on trunk roads (A90(S), M8, M9, A85 etc.) and in the city centres due to reduced traffic. Reduced number of accidents and a reduction in the severity of occurring accidents. Reduction in particulate matter emissions both within urban areas and communities on trunk roads will have a positive impact on air quality and subsequently on human health.	+	Failing to address congestion on the strategic road network is likely to see an increase in harmful emissions as traffic grows. infrastructure to realistically enable the use of non-car alternatives en route during trunk road improvements could result in a continued increase in car trips, with long-term negative impacts on human health through increased emissions and pollutants.	-
	To promote, invest in, build and maintain infrastructure to support the	Will the proposal protect and enhance the character, integrity and liveability of the towns and	No positive or significant negative effects have been identified.		No positive or significant negative effects have been identified.	

	development of high-quality places	villages and, rural communities across the region? Will the proposal improve the public realm by improving the public realm and access?				
Population	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and the natural environment	Will the proposal promote social inclusion and improve access to key services and opportunities, especially for those without a private car? Will the proposal help to improve access to greenspaces both for recreational and health benefits? Will the proposal help to support an ageing population by providing appropriate transport choices to meet their needs?	Measures to reduce congestion on the strategic road network will allow for greater journey time reliability and ensure the efficient movement of freight, thus contributing to economic growth. Improved connectivity on the strategic road network could promote social inclusion and improve accessibility to key services and facilities, with long-term positive impacts.	+	Failing to improve the connectivity of the strategic road network within the region could exacerbate congestion and contribute to journey time unreliability.	-
Geology and Soil	To safeguard and improve soil quality, particularly	Does the proposal cause soil sealing and compaction?	The policy is aimed at safety-led road improvements on roads which are either already in	--	No positive or significant negative effects have been identified.	0

	<p>high value agricultural land and carbon rich soil and peatland habitats</p>	<p>Does the proposal result in the release of substances that could potentially contaminate the soil?</p>	<p>place, but development including land take will be required. The general effect in the long term will be negative and will need to be mitigated</p>			
		<p>Does the proposal ensure that possible contamination will be properly remediated and not impact upon on sensitive receptors, such as surface water and groundwater?</p>	<p>The RTS can play a role in protecting carbon rich soils and peatland habitats when identifying potential locations for new infrastructure or routes. Detailed mitigation and enhancement opportunities will be developed as part of the design and consenting process at scheme level</p>			
	<p>To protect sites designated for their geological interest</p>	<p>Will the proposal protect and enhance sites, designated for their geological interest?</p>	<p>Use of land for new transport infrastructure, and an associated increase in impermeable surfaces.</p> <p>Land that is sealed no longer performs many of its former ecological functions. Rain no longer stays where it falls to be used by plants but runs off the impervious surface causing problems of flooding, erosion, and sedimentation.</p> <p>Less soil water available for evaporation means that the</p>			

			impermeable areas get hotter and there is a reduction in the humidity of the area affected.			
Water	To protect, maintain and improve the quality of water environment and wetlands that could be directly or indirectly affected by transport infrastructure and protect against the risk of flooding	<p>Does the proposal result in the release of water-borne pollution into watercourses, groundwater or reservoirs?</p> <p>Does the proposal increase the amount of surface water run-off into water environment? Or increase the risk of flooding?</p> <p>Does the proposal physically impact on a watercourse?</p>	<p>The policy is aimed at safety-led road improvements on roads which are either already in place, but development including land take will be required. The general effect in the long term will be negative and will need to be mitigated</p> <p>Use of land for new transport infrastructure, and an associated increase in impermeable surfaces.</p> <p>Risk of significant flooding events is also likely to increase in the future, particularly because of climate change.</p> <p>Pollution from transport related infrastructure such as roads and rail lines, areas of parking etc.) discharging into waterbodies can result in exceedances of water quality standards.</p>	--	No positive or significant negative effects have been identified.	0
Material assets	To promote and improve the sustainable use and management of the transport network	Will the proposal provide adequate transport choices that meet the needs of the people	Loss of land during construction and operation has the potential for permanent, long-term negative or uncertain effects on natural material assets.	+	No positive or significant negative effects have been identified.	0

		within the Tactran region?	Land-use within the corridors could potentially change as a result of the project.			
	To reduce the use of natural resources	Does the proposal allow for the sustainable use of natural resources?	Construction of the project would consume energy and finite resources, as well as generate demolition and construction waste, resulting in long-term negative or uncertain effects on built material assets.			

Delivery Theme: Improving strategic connectivity
 Proposal relevant to the RTS 2024 – 2034: Improve rail connectivity

SEA Theme	Objectives	Will the delivery theme...?	Assessment – Preferred Option (with RTS)	Score	Assessment – Alternative Option (without RTS)	Score
Biodiversity, Flora and Fauna	To protect, maintain and enhance biodiversity and ecosystem services, avoiding damage to or loss of designated and undesignated wildlife sites and protected species	<p>Will the proposal cause disturbance or damage to any protected species or habitat?</p> <p>Will the proposal protect and enhance the quality and extent of designated and undesignated sites?</p> <p>Will the proposal result in a greener public realm, resulting in a net gain of biodiversity?</p>	<p>An increase in mode share for rail is desired as this could result in less road traffic and therefore lead to a decrease in the negative impacts of road traffic on biodiversity, particularly in terms of pollution and run-off from roads likely to affect aquatic biodiversity.</p> <p>More people travelling by rail rather than road could lead to a decline in the need for construction of new road transport facilities, such as roads etc. to meet for increasing demand, the construction of which could cause disruption to habitats and species and impact on protected sites.</p> <p>Long-term positive impact on biodiversity.</p>	+	Failing to encourage and enable mode shift to rail could see a continued increase in car trips within the region and a subsequent increased land take for facilities for road transport which could cause disruption to and severance of habitats and species.	-
Landscape	To safeguard and enhance the character and diversity of the landscape and areas of valuable landscape	Will the proposal protect and enhance the character and integrity of the distinctive landscapes and	Increasing the mode share for rail could reduce the need for new infrastructure for motorised road transport, such as roads etc. This could subsequently result in a long-term positive impact on the landscape.	+	Failing to enable and encourage mode shift to rail could see a continued increase in car trips within the region, with a corresponding increase in infrastructure to meet demand which may have long-term	-

		areas of valuable landscapes?			negative impacts on the landscape.	
Cultural Heritage	To protect and enhance historic and archaeological sites and other culturally and historically important features, landscapes and their settings.	Will the proposal protect and enhance sites, features and areas of historical, archaeological and cultural value?	Improvements to rail services could improve accessibility to sites of historic and cultural interest. An increase in rail mode share at the expense of car trips could reduce pollution and poor air quality which can have a damaging effect on historic buildings and heritage sites. This will subsequently have a positive impact on cultural heritage.	+	Without improvements to rail services, some destinations may remain inaccessible to those without access to a car. Not enabling and encouraging mode shift from car to rail could see an increase in pollution and poor air quality, with damaging effects on buildings and historic monuments. Long-term negative impact on cultural heritage.	-
		Will the proposal help to improve the wider historic environment and sense of place?				
		Will the proposal improve access to sites of historic and/or cultural interest?				
Climate Change	To reduce greenhouse gas emissions from transport	Will the proposal help to reduce emissions of greenhouse gases and, help Scotland meet its emission targets?	Increasing the mode share for rail could lead to a corresponding decrease in car trips within the region, resulting in fewer emissions and less pollution, with long-term positive impacts on the climate. Schemes would improve the resilience of the strategic rail network to the anticipated impacts of climate change and reduce the need for closures during bad weather, resulting in	+	Failing to enable and encourage mode shift to rail could see a continued increase in car trips within the region and, subsequently, increase carbon emissions, with long-term negative impacts. No positive or significant negative effects have been identified.	-
	To adapt the transport network to the predicted effects of climate change	Will the proposal protect the Tactran region from climate change impacts and help the region function during				

		extreme weather events?	long-term positive effects after completion.			
		Will the proposal improve access to services during severe weather events?				
		Will the proposal help those communities at risk during severe weather to recover?				
Air Quality	To reduce all forms of transport related air pollution and improve air quality, in particularly with regards to the three declared Air Quality Management Areas in Crieff, Dundee and Perth	Will the proposal help to reduce emissions of priority pollutants in line with Scottish and European standards (e.g., PM10, NOX, NO2)?	Increasing the mode share for rail could lead to a corresponding decrease in car trips within the region, resulting in fewer emissions and less pollution, with long-term positive impacts on air quality.	+	Failing to enable and encourage mode shift to rail could see a continued increase in car trips within the region and, subsequently, increase emissions and pollutants, with long-term negative impacts on air quality.	-
Noise and Vibration	Reduce noise and vibration associated with the transport network	Will the proposal reduce the levels of noise generated?	Reduced noise levels due to reduced congestion levels.	+ / -	No positive or significant negative effects have been identified.	0
		Will the proposal reduce inequalities in exposure to ambient noise?	Increased noise and vibration impact from increased number of trains on the lines.			
		Will the proposal reduce the number of people exposed				

		to high levels of noise with the potential to cause health problems, particularly those in deprived / vulnerable communities and those groups at risk?				
Human Health	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and the natural environment	Will the proposal promote social inclusion and improve access to services, including healthcare, and opportunities, especially for those without a private car?	Improved rail connectivity across the region will have a long-term positive impact on health by potentially making healthcare facilities more accessible, especially for those without access to a car. Should rail mode share increase at the expense of car trips, this will lead to a decrease in pollution and in improvement in air quality.	++	Without improvements to rail services, some destinations potentially benefitting health may remain inaccessible to those without access to a car. Not enabling and encouraging mode shift from car to rail could see an increase in pollution and emissions, with long-term negative impacts on health.	-
		Will the proposal reduce the likelihood of transport-related road accidents and casualties?				
	To promote, invest in, build and maintain infrastructure to support the development of high-quality places	Will the proposal protect and enhance the character, integrity and liveability of the towns and villages and, rural	No positive or significant negative effects have been identified.			

		communities across the region?				
		Will the proposal improve the public realm by improving the public realm and access?				
Population	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and the natural environment	Will the proposal promote social inclusion and improve access to key services and opportunities, especially for those without a private car?	Improved rail services and connectivity would have a long-term positive impact on the residents in the region. Increasing the number of destinations and origins in the wider region by rail would, combined with reduced journey times, contribute towards social inclusion by improving access to jobs, education and other key services, particularly for those without access to a car or who are no longer able to drive, such as the elderly. More people travelling by train rather than car could reduce congestion and pollution and result in more reliable journey times for people and freight.	++	No improvement to rail connectivity could lead to a continued increase in car trips within the region, increasing congestion with long-term negative impacts on the economy. Certain destinations could remain inaccessible to those without access to a car, with long-term negative impacts on social inclusion.	-
		Will the proposal help to improve access to greenspaces both for recreational and health benefits?				
		Will the proposal help to support an ageing population by providing appropriate transport choices to meet their needs?				
Geology and Soil	To safeguard and improve soil quality, particularly	Does the proposal cause soil sealing and compaction?	Increasing the mode share for rail could lead to a	+	Failing to enable and encourage mode shift from car to rail could	-

	<p>high value agricultural land and carbon rich soil and peatland habitats</p>	<p>Does the proposal result in the release of substances that could potentially contaminate the soil?</p>	<p>corresponding decline in car trips within the region.</p> <p>Reduced demand for road transport would reduce the need for new traffic infrastructure, such as roads etc. The construction of which could have negative impacts on soil, resulting in contamination and pollution.</p> <p>Air quality improvements could also positively impact on soil.</p> <p>Long-term positive impact on soil.</p>		<p>see a continued increase in car trips within the region.</p> <p>This may lead to the necessity to construct new transport and a subsequent worsening of air quality, resulting in soil pollution and contamination, with long-term negative impacts.</p>	
		<p>Does the proposal ensure that possible contamination will be properly remediated and not impact upon on sensitive receptors, such as surface water and groundwater?</p>				
	<p>To protect sites designated for their geological interest</p>	<p>Will the proposal protect and enhance sites, designated for their geological interest?</p>				
Water	<p>To protect, maintain and improve the quality of water environment and wetlands that could be directly or indirectly affected by transport infrastructure and</p>	<p>Does the proposal result in the release of water-borne pollution into watercourses, groundwater or reservoirs?</p>	<p>Use of land for new transport infrastructure, and an associated increase in impermeable surfaces.</p> <p>Increasing the mode share for rail could lead to a corresponding decline in car trips within the region.</p>	+ / -	<p>Failing to enable and encourage mode shift to rail could see a continued increase in car traffic. This may lead to the necessity of new transport construction, potentially leading to water pollution and contamination, with long-term negative impacts.</p>	-
		<p>Does the proposal increase the amount of surface water run-off into</p>				

	protect against the risk of flooding	water environment? Or increase the risk of flooding?	Reduced demand for road transport would reduce the need for new traffic infrastructure, such as roads etc.			
		Does the proposal physically impact on a watercourse?	The construction of which could have negative impacts on water, resulting in contamination and pollution, potentially resulting in exceedances of water quality standards.			
Material assets	To promote and improve the sustainable use and management of the transport network	Will the proposal provide adequate transport choices that meet the needs of the people within the Tactran region?	Improved rail services would be a valuable resource for the people of the Tactran region, with a long-term positive impact on material assets.	+	Not improving rail services could deprive the people of the region of what could be a significant material asset. It may also lead to the further deterioration of road assets through increased usage.	-
	To reduce the use of natural resources	Does the proposal allow for the sustainable use of natural resources?				

Delivery Theme: Improving strategic connectivity

Proposal relevant to the RTS 2024 – 2034: Improve connectivity to freight destinations

SEA Theme	Objectives	Will the delivery theme...?	Assessment – Preferred Option (with RTS)	Score	Assessment – Alternative Option (without RTS)	Score
Biodiversity, Flora and Fauna	To protect, maintain and enhance biodiversity and ecosystem services, avoiding damage to or loss of designated and undesignated wildlife sites and protected species	<p>Will the proposal cause disturbance or damage to any protected species or habitat?</p> <p>Will the proposal protect and enhance the quality and extent of designated and undesignated sites?</p> <p>Will the proposal result in a greener public realm, resulting in a net gain of biodiversity?</p>	<p>Efficient freight movement is essential to achieving the aims of NTS2 and the RTS. The policy provides the opportunity for engagement and discussion and to better understand the needs of the freight industry.</p> <p>The policy aims to ensure freight vehicles are routed via the most appropriate modes and routes, avoiding city and town centres where possible.</p> <p>Achieving a transfer of freight from road to rail and water could have benefits for some land-based species through reduced road traffic but negative impacts on water-based species and habitats, especially around the ports of Dundee, Montrose and Perth, through an increase in shipping.</p>	+ / -	Not achieving a transfer of freight from road to rail and water would see road freight movements within the region continuing to increase with subsequent impacts on biodiversity continue to worsen. Long-term negative impacts.	-

Landscape	To safeguard and enhance the character and diversity of the landscape and areas of valuable landscape	Will the proposal protect and enhance the character and integrity of the distinctive landscapes and areas of valuable landscapes?	<p>Efficient freight movement is essential to achieving the aims of NTS2 and the RTS. The policy provides the opportunity for engagement and discussion and to better understand the needs of the freight industry.</p> <p>The policy aims to ensure freight vehicles are routed via the most appropriate modes and routes, avoiding city and town centres where possible.</p> <p>A reduction in the number of HGVs on the road network within the region as well as a reduction in vans could have a long-term positive impact on the landscape.</p>	+	Not achieving a transfer of freight from road to rail and water would see road freight movements within the region continuing to increase, with long-term negative impacts on the landscape.	-
Cultural Heritage	To protect and enhance historic and archaeological sites and other culturally and historically important features, landscapes and their settings.	<p>Will the proposal protect and enhance sites, features and areas of historical, archaeological and cultural value?</p> <p>Will the proposal help to improve the wider historic environment and sense of place?</p>	<p>Efficient freight movement is essential to achieving the aims of NTS2 and the RTS. The policy provides the opportunity for engagement and discussion and to better understand the needs of the freight industry.</p> <p>The policy aims to ensure freight vehicles are routed via the most appropriate routes, avoiding</p>	+	Not achieving a transfer of freight from road to rail and water would see road freight movements within the region continuing to increase, subsequently negatively impacting on the setting of such historic sites and increasing pollution which can be damaging to buildings and monuments.	-

		Will the proposal improve access to sites of historic and/or cultural interest?	<p>city and town centres where possible.</p> <p>A reduction in HGVs around cultural and historical sites and conservation areas could improve the setting of such sites and reduce damage resulting from pollution and emissions.</p>			
Climate Change	To reduce greenhouse gas emissions from transport	Will the proposal help to reduce emissions of greenhouse gases and, help Scotland meet its emission targets?	<p>Efficient freight movement is essential to achieving the aims of NTS2 and the RTS. The policy provides the opportunity for engagement and discussion and to better understand the needs of the freight industry.</p> <p>The policy aims to ensure freight vehicles are routed via the most appropriate modes and routes, avoiding city and town centres where possible.</p> <p>Achieving a transfer of freight from road to rail and water could have a long-term positive impact on climate change through reducing the number of high-emitting HGVs on our roads. An increase in shipping, however, could have long-term negative impacts, as harbour traffic is known to be a</p>	+ / -	Not achieving a transfer of freight from road to rail and water would see road freight movements within the region continuing to increase with subsequent negative impacts on climate change.	-

			significant contributor to pollution and emissions, both from ships themselves and from traffic accessing the harbour.			
	To adapt the transport network to the predicted effects of climate change	Will the proposal protect the Tactran region from climate change impacts and help the region function during extreme weather events?	No positive or significant negative effects on soil have been identified.		No positive or significant negative effects on soil have been identified.	
		Will the proposal improve access to services during severe weather events?				
		Will the proposal help those communities at risk during severe weather to recover?				
Air Quality	To reduce all forms of transport related air pollution and improve air quality, in particularly with regards to the three declared Air Quality Management Areas in Crieff, Dundee and Perth	Will the proposal help to reduce emissions of priority pollutants in line with Scottish and European standards (e.g., PM10, NOX, NO2)?	Efficient freight movement is essential to achieving the aims of NTS2 and the RTS. The policy provides the opportunity for engagement and discussion and to better understand the needs of the freight industry. The policy aims to ensure freight vehicles are routed via the most	+ / -	Not achieving a transfer of freight from road to rail and water would see road freight movements within the region continuing to increase with subsequent negative impacts on air quality.	-

			<p>appropriate modes and routes, avoiding city and town centres where possible.</p> <p>Achieving a transfer of freight from road to rail and water could have a long-term positive impact on climate change through reducing the number of high-emitting HGVs on our roads. An increase in shipping, however, could have long-term negative impacts, as harbour traffic is known to be a significant contributor to pollution and emissions, both from ships themselves and from traffic accessing the harbour.</p>			
Noise and Vibration	Reduce noise and vibration associated with the transport network	<p>Will the proposal reduce the levels of noise generated?</p> <p>Will the proposal reduce inequalities in exposure to ambient noise?</p> <p>Will the proposal reduce the number of people exposed to high levels of noise with the potential to cause</p>	Reduced noise levels due to reduced traffic levels.	+	No positive or significant negative effects have been identified.	0

		health problems, particularly those in deprived / vulnerable communities and those groups at risk?				
Human Health	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and the natural environment	<p>Will the proposal promote social inclusion and improve access to services, including healthcare, and opportunities, especially for those without a private car?</p> <p>Will the proposal reduce the likelihood of transport-related road accidents and casualties?</p>	<p>Efficient freight movement is essential to achieving the aims of NTS2 and the RTS. The policy provides the opportunity for engagement and discussion and to better understand the needs of the freight industry.</p> <p>The policy aims to ensure freight vehicles are routed via the most appropriate routes, avoiding city and town centres where possible.</p> <p>Achieving a transfer of freight from road to rail and water would reduce the number of HGVs and LGVs on the roads within the region, resulting in fewer harmful emissions and reducing the likelihood of accidents involving large vehicles of this nature.</p> <p>An increase in shipping, however, could have long-term</p>	+ / -	Not achieving a transfer of freight from road to rail and water will likely result in an increase in road freight vehicles. As well as causing an increase in harmful emissions, this will result in a less safe travelling environment, especially for pedestrians and cyclists.	-

			negative impacts on air quality, as harbour traffic is known to be a significant contributor to poor air quality in the City Centre (currently and AQMA) through emissions from ships themselves and via traffic accessing the harbour. The impact on human health is therefore mixed.			
	To promote, invest in, build and maintain infrastructure to support the development of high-quality places	Will the proposal protect and enhance the character, integrity and liveability of the towns and villages and, rural communities across the region?				
		Will the proposal improve the public realm by improving the public realm and access?				
Population	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including	Will the proposal promote social inclusion and improve access to key services and opportunities, especially for those without a private car?	Efficient freight movement is essential to achieving the aims of NTS2 and the RTS. The policy provides the opportunity for engagement and discussion and to better understand the needs of the freight industry.	+	Not achieving a transfer of freight from road to rail and water will likely result in an increase in road freight vehicles, with a corresponding increase in congestion. Journey times will remain variable. There will therefore be long-term negative impacts on the population.	-

	healthcare), employment and the natural environment	Will the proposal help to improve access to greenspaces both for recreational and health benefits?	The policy aims to ensure freight vehicles are routed via the most appropriate modes and routes, avoiding city and town centres where possible.			
		Will the proposal help to support an ageing population by providing appropriate transport choices to meet their needs?	An increase in the volume of freight moved by rail and water could reduce congestion and enable the more efficient movement of freight.			
Geology and Soil	To safeguard and improve soil quality, particularly high value agricultural land and carbon rich soil and peatland habitats	Does the proposal cause soil sealing and compaction?	Identified positive impacts on air quality can impact on soil through decreases in air pollution.	+	Identified negative impacts on air quality can impact on soil through increases in air pollution.	-
		Does the proposal result in the release of substances that could potentially contaminate the soil?				
		Does the proposal ensure that possible contamination will be properly remediated and not impact upon on sensitive receptors, such as surface water and groundwater?				

	To protect sites designated for their geological interest	Will the proposal protect and enhance sites, designated for their geological interest?				
Water	To protect, maintain and improve the quality of water environment and wetlands that could be directly or indirectly affected by transport infrastructure and protect against the risk of flooding	Does the proposal result in the release of water-borne pollution into watercourses, groundwater or reservoirs?	Reducing transport related emissions indirectly has the potential to improve water quality. An increase in shipping, however, could have a long-term negative impact on water quality through an increase in sea pollution resulting from a growth in seagoing vessels. A corresponding decrease in HGV traffic could have positive impacts on the freshwater environment by reducing road runoff.	+ /-	Not achieving a transfer of freight from road to rail and water would see road transport's impacts on water continue to worsen (through an increase in run-off to water from road transport activities), with long-term negative impacts on water.	-
		Does the proposal increase the amount of surface water run-off into water environment? Or increase the risk of flooding?				
		Does the proposal physically impact on a watercourse?				
Material assets	To promote and improve the sustainable use and management of the transport network	Will the proposal provide adequate transport choices that meet the needs of the people within the Tacran region?	Efficient freight movement is essential to achieving the aims of NTS2 and the RTS. The policy provides the opportunity for engagement and discussion and to better understand the needs of the freight industry. The policy aims to ensure freight vehicles are routed via the most	+	Not achieving a transfer of freight from road to rail and water will not address the current inefficient use of the region's transport infrastructure and assets, contributing to the medium- to long-term decline of such assets.	-
	To reduce the use of natural resources	Does the proposal allow for the				

		sustainable use of natural resources?	appropriate modes and routes, avoiding city and town centres where possible.			
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Delivery Theme: Improving strategic connectivity						
Proposal relevant to the RTS 2024 – 2034: Improve access to airports						
SEA Theme	Objectives	Will the delivery theme...?	Assessment – Preferred Option (with RTS)	Score	Assessment – Alternative Option (without RTS)	Score
Biodiversity, Flora and Fauna	To protect, maintain and enhance biodiversity and ecosystem services, avoiding damage to or loss of designated and undesignated wildlife sites and protected species	Will the proposal cause disturbance or damage to any protected species or habitat?	Proposals merely outline support for improvements to air services so will have no impact on biodiversity. Individual proposals may have impacts. It is acknowledged that each must be assessed on an individual basis. Improving surface access to the airport is unlikely to impact upon biodiversity.	0	No positive or significant negative effects have been identified.	0
		Will the proposal protect and enhance the quality and extent of designated and undesignated sites?				
		Will the proposal result in a greener public realm, resulting in a net gain of biodiversity?				
Landscape	To safeguard and enhance the character and diversity of the landscape and	Will the proposal protect and enhance the character and integrity of the	Proposals merely outline support for improvements to air services so will have no impact on the landscape.	0	No positive or significant negative effects have been identified.	0

	areas of valuable landscape	distinctive landscapes and areas of valuable landscapes?	Improving surface access to the airport may impact upon the landscape to a certain extent as the area around Dundee airport is already not heavily built-up.			
Cultural Heritage	To protect and enhance historic and archaeological sites and other culturally and historically important features, landscapes and their settings.	Will the proposal protect and enhance sites, features and areas of historical, archaeological and cultural value? Will the proposal help to improve the wider historic environment and sense of place? Will the proposal improve access to sites of historic and/or cultural interest?	No positive or significant negative effects have been identified.	0	No positive or significant negative effects have been identified.	0
Climate Change	To reduce greenhouse gas emissions from transport	Will the proposal help to reduce emissions of greenhouse gases and, help Scotland meet its emission targets?	The proposals merely outline support for improvements to air services so will have no impact on climate change. Individual proposals may have impacts. It is acknowledged that they must be subject to their own individual assessments.	+ / -	Failing to improve surface access to the airport for all modes of transport means that access by car will continue to dominate, thus increasing emissions around the airports in the wider region, with long-term negative impacts on the climate.	-

			<p>Promoting increased surface access to the airport by improving public transport connections and active travel infrastructure could have a long-term positive impact on climate change by reducing the need to drive to the airport, hence resulting in fewer emissions from airport traffic.</p> <p>Encouraging additional air travel will have minor negative impacts.</p>			
	<p>To adapt the transport network to the predicted effects of climate change</p>	<p>Will the proposal protect the Tactran region from climate change impacts and help the region function during extreme weather events?</p>	<p>No positive or significant negative effects on soil have been identified.</p>			<p>No positive or significant negative effects on soil have been identified.</p>
		<p>Will the proposal improve access to services during severe weather events?</p>				
		<p>Will the proposal help those communities at risk during severe weather to recover?</p>				

Air Quality	To reduce all forms of transport related air pollution and improve air quality, in particularly with regards to the three declared Air Quality Management Areas in Crieff, Dundee and Perth	Will the proposal help to reduce emissions of priority pollutants in line with Scottish and European standards (e.g., PM10, NOX, NO2)?	<p>The proposals merely outline support for improvements to air services so will have no impact on local air quality.</p> <p>Individual proposals may have impacts. It is acknowledged that they must be subject to their own individual assessments.</p> <p>Improving surface access to the airports within the wider region for sustainable modes of transport could have a long-term positive impact on air quality by reducing the need to drive to the airport, hence resulting in fewer emissions from airport traffic.</p> <p>Encouraging air travel may have a minor negative impact.</p>	+ / -	Failing to improve surface access to the airport for all modes of transport means that access by car will continue to dominate, thus increasing emissions around the airports in the wider region, with long-term negative impacts on air quality.	-
Noise and Vibration	Reduce noise and vibration associated with the transport network	<p>Will the proposal reduce the levels of noise generated?</p> <p>Will the proposal reduce inequalities in exposure to ambient noise?</p> <p>Will the proposal reduce the number of people exposed</p>	Increased noise and vibration impact from an increased frequency of air services.	--	No positive or significant negative effects have been identified.	0

		to high levels of noise with the potential to cause health problems, particularly those in deprived / vulnerable communities and those groups at risk?				
Human Health	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and the natural environment	Will the proposal promote social inclusion and improve access to services, including healthcare, and opportunities, especially for those without a private car?	The proposals merely outline support for improvements to air services so will have no impact on climate change. Individual proposals may have impacts. It is acknowledged that they must be subject to their own individual assessments.	+ / -	No positive or significant negative effects have been identified.	0
		Will the proposal reduce the likelihood of transport-related road accidents and casualties?	Promoting increased surface access to the airport by improving public transport connections and active travel infrastructure could have a long-term positive impact on climate change by reducing the need to drive to the airport, hence resulting in fewer emissions from airport traffic. Encouraging air travel may have minor negative impacts.			

	To promote, invest in, build and maintain infrastructure to support the development of high-quality places	Will the proposal protect and enhance the character, integrity and liveability of the towns and villages and, rural communities across the region?	No positive or significant negative effects have been identified.		No positive or significant negative effects have been identified.	
		Will the proposal improve the public realm by improving the public realm and access?				
Population	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and the natural environment	Will the proposal promote social inclusion and improve access to key services and opportunities, especially for those without a private car?	Improved connectivity between the economic centres of Aberdeen, Dundee, Edinburgh, Inverness, and Perth, enabling agglomeration benefits. The continuation and improvement of air services connecting the region to the rest of the UK and further afield with the ultimate aim of being able to travel between the region and any major city in the world either directly or with, at most, only one stop. Such improvements in international connectivity support regional business and stimulate new markets for inbound tourism.	+	No positive or significant negative effects have been identified.	0
		Will the proposal help to improve access to greenspaces both for recreational and health benefits?				
		Will the proposal help to support an ageing population by providing				

		appropriate transport choices to meet their needs?				
Geology and Soil	To safeguard and improve soil quality, particularly high value agricultural land and carbon rich soil and peatland habitats	Does the proposal cause soil sealing and compaction?	Air quality improvements arising from actions in relation to this proposal can positively impact upon soil.	+	Failing to address air quality issues could have long-term negative impacts on soil.	-
		Does the proposal result in the release of substances that could potentially contaminate the soil?				
		Does the proposal ensure that possible contamination will be properly remediated and not impact upon on sensitive receptors, such as surface water and groundwater?				
	To protect sites designated for their geological interest	Will the proposal protect and enhance sites, designated for their geological interest?				
Water	To protect, maintain and improve the quality of water environment and	Does the proposal result in the release of water-borne pollution into watercourses,	The objectives and actions merely outline support for improvements to air services so will have no impact on water.	+	No positive or significant negative effects have been identified.	0

	wetlands that could be directly or indirectly affected by transport infrastructure and protect against the risk of flooding	groundwater or reservoirs? Does the proposal increase the amount of surface water run-off into water environment? Or increase the risk of flooding? Does the proposal physically impact on a watercourse?	Reducing emissions related to surface access to the airports within the wider region indirectly has the potential to improve water quality.			
Material assets	To promote and improve the sustainable use and management of the transport network	Will the proposal provide adequate transport choices that meet the needs of the people within the Tactran region?	Any improvements to the airports within the wider region, as supported by Tactran, could help to enhance those material assets, with a long-term positive impact.	+	Failing to support airport improvements could result in the deterioration of those material assets.	-
	To reduce the use of natural resources	Does the proposal allow for the sustainable use of natural resources?				

Delivery Theme: Improving network resilience						
Proposal relevant to the RTS 2024 – 2034: Improving network resilience						
SEA Theme	Objectives	Will the delivery theme...?	Assessment – Preferred Option (with RTS)	Score	Assessment – Alternative Option (without RTS)	Score
Biodiversity, Flora and Fauna	To protect, maintain and enhance biodiversity and ecosystem services, avoiding damage to or loss of designated and undesignated wildlife sites and protected species	Will the proposal cause disturbance or damage to any protected species or habitat?	A reduction in the likelihood of disruptive events resulting from the increased risk of extreme weather and flooding leads to long-term benefits to biodiversity, offering protection to habitats and species at risk of flooding.	+	Failing to take action to prevent and reduce disruptive events resulting from the increased risk of extreme weather and flooding could have long-term negative impacts on species and habitats vulnerable to flooding incidents	-
		Will the proposal protect and enhance the quality and extent of designated and undesignated sites?				
		Will the proposal result in a greener public realm, resulting in a net gain of biodiversity?				
Landscape	To safeguard and enhance the character and diversity of the landscape and	Will the proposal protect and enhance the character and integrity of the	Flood defences and other infrastructure can negatively impact upon the landscape settings within the region but do serve to protect important	+ / -	Landscape features will not be protected from the effects of disruptive events resulting from the increased risk of extreme	-

	areas of valuable landscape	distinctive landscapes and areas of valuable landscapes?	features from the effects of disruptive events resulting from the increased risk of extreme weather and flooding. This is preferable to the alternative scenario which offers no such protection.		weather and flooding, with long-term negative impacts.	
Cultural Heritage	To protect and enhance historic and archaeological sites and other culturally and historically important features, landscapes and their settings.	Will the proposal protect and enhance sites, features and areas of historical, archaeological and cultural value? Will the proposal help to improve the wider historic environment and sense of place? Will the proposal improve access to sites of historic and/or cultural interest?	Flood defences and other infrastructure can negatively impact upon the setting of cultural and historical sites within the region but do serve to protect important features from the effects of disruptive events resulting from the increased risk of extreme weather and flooding. This is preferable to the alternative scenario which offers no such protection.	+ / -	Heritage within the region will not be protected from the effects of disruptive events resulting from the increased risk of extreme weather and flooding, with long-term negative impacts.	-
Climate Change	To reduce greenhouse gas emissions from transport	Will the proposal help to reduce emissions of greenhouse gases and, help Scotland meet its emission targets?	Ensuring that the road network is as resilient as possible in the event of disruptive events brings long term positive impacts through reduced emissions resulting from less queuing traffic, more attractive conditions for sustainable transport and less chance of	+	No positive or significant negative effects have been identified.	0

			traffic being displaced to cleaner areas.			
	To adapt the transport network to the predicted effects of climate change	Will the proposal protect the Tactran region from climate change impacts and help the region function during extreme weather events?	Maintaining a transport network within the region which is resilient to disruptive events resulting from the increased risk of extreme weather and flooding will maintain access for people and resources.		No positive or significant negative effects have been identified.	
		Will the proposal improve access to services during severe weather events?				
		Will the proposal help those communities at risk during severe weather to recover?				
Air Quality	To reduce all forms of transport related air pollution and improve air quality, in particularly with regards to the three declared Air Quality Management Areas in Crieff, Dundee and Perth	Will the proposal help to reduce emissions of priority pollutants in line with Scottish and European standards (e.g., PM10, NOX, NO2)?	Ensuring that the road network is as resilient as possible in the event of disruptive events brings long term positive impacts through reduced emissions resulting from less queuing traffic, more attractive conditions for sustainable transport and less chance of	+	No positive or significant negative effects have been identified.	0

			traffic being displaced to cleaner areas.			
Noise and Vibration	Reduce noise and vibration associated with the transport network	Will the proposal reduce the levels of noise generated?	No positive or significant negative effects have been identified.	0	No positive or significant negative effects have been identified.	0
		Will the proposal reduce inequalities in exposure to ambient noise?				
		Will the proposal reduce the number of people exposed to high levels of noise with the potential to cause health problems, particularly those in deprived / vulnerable communities and those groups at risk?				
Human Health	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare),	Will the proposal promote social inclusion and improve access to services, including healthcare, and opportunities, especially for those without a private car?	The purpose of a resilient network is to maintain economic activity and access to key services during disruptive events. There are major benefit for the population within the region, in particular for those living remotely. Lifeline services during severe weather events.	++	No positive or significant negative effects have been identified.	0

	employment and the natural environment	Will the proposal reduce the likelihood of transport-related road accidents and casualties?				
	To promote, invest in, build and maintain infrastructure to support the development of high-quality places	Will the proposal protect and enhance the character, integrity and liveability of the towns and villages and, rural communities across the region?	No positive or significant negative effects have been identified.		No positive or significant negative effects have been identified.	
		Will the proposal improve the public realm by improving the public realm and access?				
Population	To improve quality of life and human health by promoting active lifestyles and increasing sustainable access for all to essential services (including healthcare), employment and the natural environment	Will the proposal promote social inclusion and improve access to key services and opportunities, especially for those without a private car?	Ensuring that the road network is as resilient as possible in case of disruptive events resulting from extreme weather conditions could bring long term positive impacts, ensuring extreme weather events cause minimal disruption to travel within the region. This is preferable to the alternative scenario which offers no such protection.	++	Not protecting from the effects of disruptive events resulting from extreme weather conditions, such as flooding, leaves the population vulnerable to massive disruption from such incidents.	--
		Will the proposal help to improve access to greenspaces both				

		for recreational and health benefits?				
		Will the proposal help to support an ageing population by providing appropriate transport choices to meet their needs?				
Geology and Soil	To safeguard and improve soil quality, particularly high value agricultural land and carbon rich soil and peatland habitats	Does the proposal cause soil sealing and compaction?	In recent years, rainfall intensity and frequency have increased resulting in severe landslide events within the region, affecting the trunk road network and to a lesser degree, the roads which act as diversion routes.	++	Flooding could lead to soil damage and/or contamination, with long-term negative impacts.	-
		Does the proposal result in the release of substances that could potentially contaminate the soil?				
		Does the proposal ensure that possible contamination will be properly remediated and not impact upon on sensitive receptors, such as surface water and groundwater?				
	To protect sites designated for their geological interest	Will the proposal protect and enhance sites,				

		designated for their geological interest?				
Water	To protect, maintain and improve the quality of water environment and wetlands that could be directly or indirectly affected by transport infrastructure and protect against the risk of flooding	Does the proposal result in the release of water-borne pollution into watercourses, groundwater or reservoirs? Does the proposal increase the amount of surface water run-off into water environment? Or increase the risk of flooding? Does the proposal physically impact on a watercourse?	The trunk road network has well documented road resilience issues. Flooding is also an issue across the region, with several watercourses classified by SEPA's flood mapping as having a high likelihood of flooding. The RTS promotes physical and operational improvements to reduce impacts of flooding and other weather events. Measures to improve the resilience of the regional transport network will, therefore have a significant positive impact.	++	No positive or significant negative effects have been identified.	0
Material assets	To promote and improve the sustainable use and management of the transport network To reduce the use of natural resources	Will the proposal provide adequate transport choices that meet the needs of the people within the Tactran region? Does the proposal allow for the sustainable use of natural resources?	Resilient infrastructure will positively contribute towards adapting the road network to climate change impacts, resulting in a permanent positive effect on built material assets.	+	Not protecting material assets from the effects of disruptive vents resulting from the increased risk of extreme weather and flooding could see these assets damaged or destroyed.	--