

Appendix F: SEA Cumulative Impact Assessment

| SEA Theme | Improving Safety | Influencing travel choices and behaviour | Improving access to public transport | Improving sustainable travel opportunities | Decarbonising transport and a just transition | Improving the accessibility and security of our transport networks | Reducing the need to travel by car through the location of development and services | Improving strategic connectivity | Improving network resilience | Comments |
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| Biodiversity | 0 / - | 0 / + | + | 0 / + | + / - | + | ++ | + / - | + | <p>Delivery of the Regional Transport Strategy will have largely positive impacts on biodiversity, although some impacts may be negative.</p> <p>In terms of positive impacts, the Regional Transport Strategy primarily seeks to reduce the number of indiscriminate car trips within the region and an increase in the use of sustainable modes of transport.</p> <p>This should have multiple benefits for biodiversity, including:</p> <ul style="list-style-type: none"> <li data-bbox="1384 1034 2000 1315">i. Reduced land take from transport by reducing the need for construction of large-scale transport infrastructure such as roads etc. to meet growing demand for car trips within the region. This will reduce damage and disruption to protected and vulnerable habitats and species within the region; <li data-bbox="1384 1321 2000 1386">ii. Reduced levels of transport related pollution, noise and artificial light which |

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| | | | | | | | | | | <p>can negatively impact upon vulnerable habitats and species within the region;</p> <p>iii. Water quality improvements resulting from a reduction in contaminated road run-off / diffuse pollution.</p> <p>Other potentially positive impacts include:</p> <p>iv. Protection to habitats and species afforded by maintenance and flood prevention schemes.</p> <p>Impacts identified as potentially negative and which will require mitigation, include:</p> <p>i. Disruption to aquatic species from an increase in freight shipping and harbour activity;</p> <p>ii. Disruption resulting from road construction and maintenance works, including winter maintenance; and</p> <p>iii. Potential disruption to habitats and species through an increase in cycle routes and walking and cycling through such areas.</p> |
| Landscape | -- | 0 / + | + | + | - | ++ | + | + / - | + / - | <p>The impact on the landscape of delivery of the Regional Transport Strategy is mixed, although more positive than negative impacts are anticipated.</p> <p>The Regional Transport Strategy primarily seeks to reduce the number of indiscriminate car trips within the region and an increase in the use of sustainable modes of transport.</p> |

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| | | | | | | | | | | <p>The main long-term positive impact anticipated from this is a reduced need for construction of new roads etc. which may otherwise be inevitable with continually increasing car usage and which could lead to an unsightly urban landscape.</p> <p>A reduction in traffic, coupled with public realm improvements, including reducing the impact of parking, and the implementation of SUDS would contribute towards more attractive streetscapes, townscapes, and landscapes, less impacted by the presence of vehicles and congestion.</p> <p>Flood prevention schemes serve to offer protection to the landscape.</p> <p>In terms of potentially negative impacts, these include:</p> <ul style="list-style-type: none"> i. Flood defence infrastructure impacting on the appeal of streetscapes, townscapes and landscapes; and ii. Unsightly traffic management and speed reduction infrastructure leading to a more and more cluttered (urban) environment. <p>There may also be some more short-term negative impacts on the landscape arising from construction and maintenance works leading to an unsightly environment, although such impacts are temporary.</p> |
| Cultural Heritage | 0 | + | + | + | + / - | ++ | + | + / - | + / - | The impact of the Regional Transport Strategy on cultural heritage is anticipated to be mostly positive, |

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| | | | | | | | | | | <p>although some potentially negative impacts have been identified.</p> <p>In terms of positive impacts, these largely relate to the reduction in indiscriminate car trips outlined in the Regional Transport Strategy. These are, subsequently, long-term positive impacts.</p> <p>Less car dominated public realms around historically and culturally important sites will result in improved setting of such sites, ensuring views are not blighted by parked cars, traffic or congestion. Proposals will also reduce emissions and pollution around such sites, which are known to cause deterioration and damage to ancient buildings and monuments.</p> <p>Noise will also reduce, allowing people to better enjoy the experience of being in and around important buildings and sites.</p> <p>Valuable assets will be protected by an increase in flood defences.</p> <p>Accessibility improvements in accessibility will also have long-term benefits in allowing more people to reach and enjoy such sites.</p> <p>In terms of possible negative impacts, these relate, in the short term, to an unsightly environment around such sites because of transport improvement and maintenance activities, albeit this is a temporary situation. In the longer term, an increase in traffic management infrastructure in conservation areas, could undermine the distinctiveness of such sites,</p> |
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| | | | | | | | | | | while an intensification of maintenance activities around such sites could increase vibrations, potentially resulting in damage to such sites. |
| Climate Change | + / - | ++ | + | + | + / - | + | ++ | + / - | + | <p>Delivery of the Regional Transport Strategy will have a long-term positive impact on climate change, although some potentially negative impacts have been identified.</p> <p>Emissions from transportation, particularly CO₂, are a significant contributor to climate change. Tactran's Regional Transport Strategy seeks to reduce the need to travel, to reduce reliance on the private car, to reduce the indiscriminate use of the car within the region in a shift to sustainable modes of transport. It aims to encourage more responsible car use.</p> <p>Should the Strategy be successful in achieving these aspirations, climate-changing emissions would significantly reduce.</p> <p>In addition, the Regional Transport Strategy contains a specific objective on climate change adaptation and mitigation, which looks to reduce emissions and to develop climate-resilient infrastructure.</p> <p>Those impacts identified as potentially negative and which will require mitigation, include:</p> <ul style="list-style-type: none"> i. An increase in waterborne freight and associated shipping and activity around the harbours within the region which could increase emissions; |

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| | | | | | | | | | | ii. Congestion and traffic displacement resulting from road improvement and maintenance schemes. |
| Air Quality | + | ++ | + | ++ | ++ | ++ | ++ | + / - | + | <p>Delivery of the Regional Transport Strategy will have largely very positive impacts on air quality, although some impacts are potentially negative and could lead to disbenefits.</p> <p>Road transport is currently the main contributor to poor air quality in Crieff, Dundee and Perth. The Regional Transport Strategy seeks to reduce the need to travel, to reduce reliance on the private car, to reduce the indiscriminate use of the car within the region in a shift to sustainable modes of transport. It aims to encourage more responsible car use.</p> <p>The Regional Transport Strategy also sees to reduce congestion.</p> <p>For journeys where the car is the most suitable mode of transport, the Strategy seeks to enable and encourage car sharing and car clubs as well as the use of low emission vehicles, all of which will help to reduce the impact of transport on air quality.</p> <p>Those impacts identified as potentially negative for air quality and which will require mitigation, are:</p> <p>i. An increase in waterborne freight and a respective increase in shipping and subsequent traffic around the Port of Dundee, currently within an AQMA;</p> |

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| | | | | | | | | | | ii. Congestion and traffic displacement resulting from road improvement and maintenance schemes. |
| Noise and Vibration | - | + | + | + | + | + | + | + / - | 0 | <p>The impact of the Regional Transport Strategy on noise and vibration is anticipated to be mostly positive, although some potentially negative impacts have been identified.</p> <p>In terms of positive impacts, these largely relate to the reduction in indiscriminate car trips outlined in the Regional Transport Strategy, with reduced noise levels due to reduced traffic levels. These are, subsequently, long-term positive impacts.</p> <p>Those impacts identified as potentially negative for air quality and which will require mitigation, include:</p> <ul style="list-style-type: none"> i. Increased noise and vibration resulting from an increased number of freight trains on the railway lines within the region. ii. Increased noise and vibration resulting from road improvement and maintenance schemes, albeit these are only temporary. |
| Human Health | + | ++ | + | + | ++ | ++ | ++ | + | ++ | <p>The impact of the Regional Transport Strategy on human health is anticipated to be mostly very positive, although some potentially negative impacts have been identified.</p> <p>Long-term positive impacts will result from the Strategy's aspirations to enable and encourage more active travel and to reduce car use which will facilitate an increase in physical activity, improve air quality and</p> |

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| | | | | | | | | | | <p>reduce noise, thus improving the health and wellbeing of the population.</p> <p>Improving access to key services such as healthcare facilities has obvious health benefits, while proposals to reduce traffic, reduce speeds, prevent accidents and prevent flooding and an increased social surveillance will improve the safety and security of the travelling public, reducing the number of transport-related accidents and injuries and reducing incidences of assault and abuse.</p> <p>Road maintenance can also successfully reduce noise, with resulting mental health benefits.</p> <p>Potentially negative impacts, identified, which will require mitigation, are:</p> <ul style="list-style-type: none"> i. An increase in congestion during road infrastructure maintenance works and the displacement of traffic, with road safety and health implications. |
| Population | + | + | ++ | ++ | + | ++ | ++ | + | ++ | <p>The impact of the Regional Transport Strategy on the population is anticipated to be largely very positive, although some potentially negative impacts have been identified.</p> <p>In terms of the economy, long-term benefits will result from reduced congestion and improved journey time reliability. Benefits will also accrue from proposals to improve the public realm and the appropriate pricing and subsequent more efficient use of the remaining car parking spaces at key destinations. Responsible</p> |

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| | | | | | | | | | | <p>management of blue badge parking spaces will also improve accessibility for those with disabilities.</p> <p>In terms of accessibility and social inclusion, the Regional Transport Strategy will bring long-term benefits by raising awareness of, and facilitating travel by active travel and public transport, complemented by community and demand responsive transport services, car sharing and car clubs to ensure that all people can access the destinations and services and opportunities they need, and that transport is convenient, safe and affordable.</p> <p>Potentially negative impacts identified are:</p> <ul style="list-style-type: none"> i. Delays and congestion resulting from improvement and maintenance schemes, albeit these are temporary. |
| Geology and Soil | 0 / - | + | + | + | + / - | + | + | + / - | ++ | <p>Some positive and negative impacts are anticipated.</p> <p>In terms of the positive impacts, there will be long-term benefits relating to reduced land take resulting from the Regional Transport Strategy supporting consolidated developments and from promoting of non-car modes of transport. This should reduce the need for large-scale transport schemes.</p> <p>Further positive impacts result from a reduction in contaminated road run-off / diffuse water pollution. There is also a commitment to introduce blue-green</p> |

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| | | | | | | | | | | <p>infrastructure as part of any infrastructure required and, improved flood defences.</p> <p>Proposals to improve air quality contained within the Regional Transport Strategy will also positively impact on soil, through reducing the impacts of air pollution.</p> <p>Potentially negative impacts relate to the anticipated increase in ULEVs within the region and the subsequent need for charging infrastructure. 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 %.</p> <p>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> |
| Water | + | + | + | + | + | + | + | + / - | ++ | <p>The impact of the Regional Transport Strategy on water is anticipated to be mostly positive, although some potentially negative impacts have been identified.</p> <p>In terms of the positives, a decrease in motorised traffic as aimed for by the Regional Transport Strategy would reduce the need for new transport infrastructure.</p> <p>Further positive impacts include water quality improvements resulting from a reduction in contaminated road run-off / diffuse pollution. There is also a commitment to introduce blue-green infrastructure as part of any infrastructure required.</p> |

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| | | | | | | | | | | <p>In terms of negative impacts, it is recognised that maintenance, improvement and flood prevention schemes could result in the release of pollutants into watercourses during construction, although this can be overcome by careful mitigation.</p> <p>In addition, increases in shipping and water freight to and from Dundee, Montrose and Perth Harbour could lead to an increase in water pollution.</p> |
| Material Assets | 0 / + | + | + | + | + | + | + | + | + | <p>Delivery of the Regional Transport Strategy is anticipated to have a consistently positive impact on material assets within the region.</p> <p>This is largely due to the proposals to improvements and additions to the regional transport network which will encourage a more efficient use of the assets and will support the development of a fit-for-purpose, safe and sustainable transport network.</p> |