

**SEA SCOPING TEMPLATE – COVER NOTE**

Cover Page

**PART 1**

<b>To</b>	<u>Sea.gateway@scotland.gsi.gov.uk</u> Or SEA Gateway Scottish Executive Area 1 H (Bridge) Victoria quay Edinburgh EH
-----------	---

**PART 2**

An SEA Scoping Report is attached for the plan entitled

Nestrans Regional Transport Strategy Re-fresh

The Responsible Authority is:

Nestrans

**PART 3**

**Please tick the appropriate box**

The PPS falls under the scope of Section 5(3) of the Act and required an SEA under the Environmental Assessment (Scotland) Act 2005. **Or**

The PPS falls under the scope of Section 5(4) of the Act and required an SEA under the Environmental Assessment (Scotland) Act 2005. **Or**

The PPS does not require an SEA under the Environmental Assessment (Scotland) Act 2005. However, we wish to carry out an SEA on a voluntary basis. We accept that, as this is voluntary, the statutory 5-week timescale for views from the Consultation Authorities cannot be guaranteed.

**SEA SCOPING TEMPLATE –COVER NOTE**

**PART 4**

**Contact Name**

**Job Title**

**Contact Address**

**Contact tel no**

**Contact email**

**PART 5**

**Signature**

**Date**

## Contents of Scoping Report

Cover Page .....	1
<b>Contents of Scoping Report</b> .....	<b>3</b>
<b>1. Introduction</b> .....	<b>4</b>
<b>2. Key Facts</b> .....	<b>4</b>
<b>3. Description of PPS Content</b> .....	<b>5</b>
<b>4. Plan, Programme or Strategy Context</b> .....	<b>7</b>
<i>Relationship with other PPS and environmental protection objectives</i> .....	7
4.2 Relevant aspects of the current state of the environment .....	10
4.3 Environmental problems & likely evolution of the environment without the RTS	10
4.4 Characteristics of Areas likely to be significantly affected .....	15
<b>5 Scope and Level of Detail Proposed for the Assessment</b> .....	<b>15</b>
5.1 Alternatives/Options .....	15
5.2 Scoping in/out of SEA issues .....	15
5.3 Framework for assessing environmental effects .....	16
5.5 Cumulative Effect Assessment .....	18
5.6 Habitats Regulations Assessment .....	19
5.7 Developing mitigation .....	19
<b>6 Next Steps</b> .....	<b>19</b>
6.1 Proposed Consultation Timescale .....	19
<b>7 Appendices: PPS Context, Baseline &amp; Assessments</b> .....	<b>21</b>
Appendix 7.1 - Links to other PPS & Environmental Protection Objectives .....	21
Appendix 7.2: Baseline data, targets & trends for Aberdeen City & Shire .....	27
Appendix 7.2.1: SEA Topic: Air & Climatic Factors .....	27
Appendix 7.2.2: SEA Topic: Water .....	29
Appendix 7.2.3: SEA Topic: Soil .....	32
Appendix 7.2.4: SEA Topic: Biodiversity (natural heritage designations) .....	35
Appendix 7.2.5: Human Health .....	36
Appendix 7.2.6: SEA Topic: Population .....	38
Appendix 7.2.7: SEA Topic: Cultural Heritage .....	41
Appendix 7.2.8: SEA Topic: Landscape .....	42
Appendix 7.2.9: SEA Topic: Material Assets .....	43

## 1. Introduction

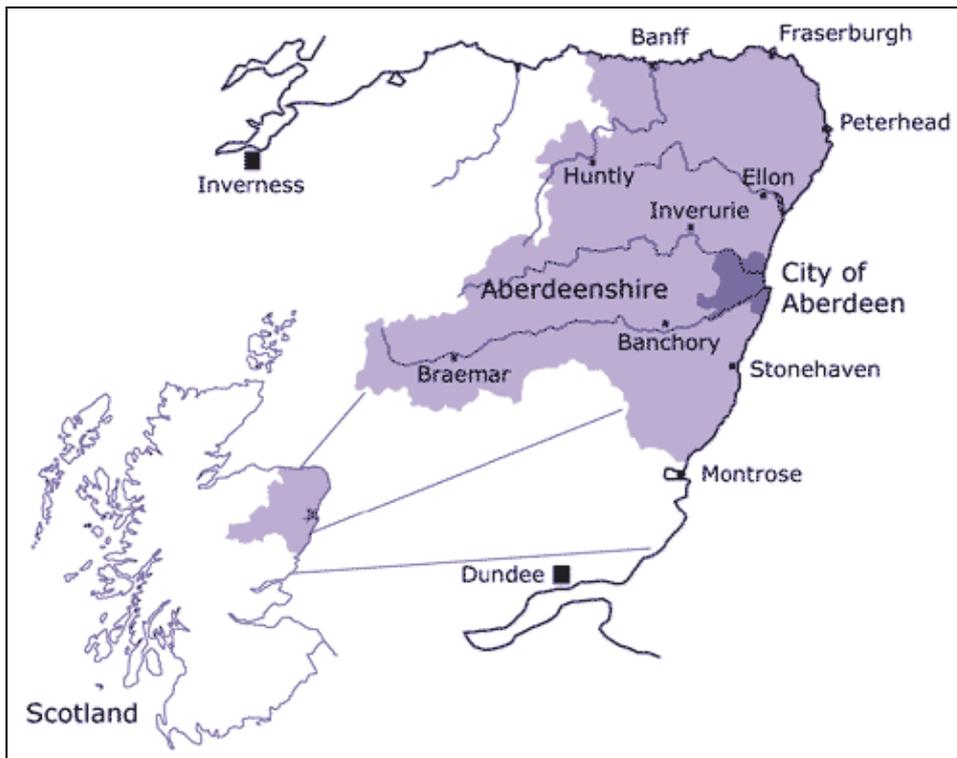
1.1. The purpose of this Strategic Environmental Assessment Scoping Report is to set out sufficient information on the Nestrans Regional Transport Strategy Re-fresh to enable the Consultation Authorities to form a view on the consultation period and scope/level of detail that will be appropriate for the Environmental Report. This report has been prepared in accordance with the Environmental Assessment (Scotland) Act 2005.

## 2. Key Facts

**Table 2.1 Key Facts relating to the Regional Transport Strategy**

Name of Responsible Authority	Nestrans
Title of the PPS	Regional Transport Strategy
What Prompted the PPS	The Regional Transport Strategy was adopted in 2008 under the Transport (Scotland) Act 2005.
Subject	Transport
Period Covered by the PPS	The current RTS covers the period from 2008 to 2021 but is currently being re-freshed to bring it in line with the timescales for the Structure Plan and emerging Strategic Development Plan (SDP) for the North East to 2035.
Frequency of Updates	This is the first update, 4 years since adoption.
Area covered by the PPS	Aberdeen City and Aberdeenshire Council areas
Purpose and/or objectives of the PPS	The vision of the existing RTS is “A transport system for the North East of Scotland which enables a more economically competitive, sustainable and socially inclusive society”. The purpose of the strategy is to set the framework for the development of the transport network in the north east.
Contact Point	Kirsty Morrison Transport Executive (Strategy & Delivery) Nestrans 27-29 King Street Aberdeen AB24 5AA Tel: 01224 625524 Email: <a href="mailto:kirstymorrison@nestrans.org.uk">kirstymorrison@nestrans.org.uk</a>

**Figure 2.1 Nestrans Area**



### 3. Description of PPS Content

3.1. The Transport (Act) 2005 places a duty on Regional Transport Partnerships to draw up a strategy for transport in their region. The Act calls for the strategy to make provision for the following matters:

- The respects in which transport in the region needs to be provided, developed or improved having regard to, among other things:
  - Future needs including those occasioned by demographic and land use changes.
  - What can be done, taking account of cost, funding and practicability.
- Meeting the needs of all inhabited places, in particular, those which the Partnership considers different from the remainder of the region by reason of their remoteness or the sparsity of their populations.
- Meeting the need for efficient transport links between heavily populated places
- How transport in the region will be provided, developed, improved and operated so as:
  - To enhance social and economic well-being.
  - To promote public safety, including road safety and the safety of users of public transport.
  - To be consistent with the principle of sustainable development and to conserve and enhance the environment.

- To promote social inclusion.
  - To encourage equal opportunities and, in particular, the observance of the equal opportunities requirements.
  - To facilitate access to hospitals, clinics, surgeries and other places where a health service is provided.
  - To integrate with transport elsewhere.
- The order of priority in which different elements of the provision, development and improvement of transport should be undertaken.
  - How the Transport Partnership's functions will be exercised so as to fulfil its transport strategy and, if the Partnership considers that the conferring of further functions is necessary for that purpose, what those functions are.
  - How the Transport Partnership, so as to enable it to fulfil its transport strategy, will seek to influence its constituent councils or council in the performance of their functions relating to transport.
  - The measuring and monitoring of the achievement of the strategy.

3.2. The Regional Transport Strategy was submitted to Scottish Ministers in March 2007 and approved in spring of the following year. Although the RTS had been prepared to cover the period 2008-2021, the original guidance from the Scottish Government was that a review be conducted after five years. However, subsequent guidance from the Scottish Government has indicated that they will not be updating the National Transport Strategy and that they (and RTPs) should focus on delivery of the Strategic Transport Projects Review and RTS Delivery Plans respectively. They have, however, indicated that they are happy for RTPs and partner authorities to update or refresh their strategies if they so wish.

3.3. Nestrans and the SDPA held a joint workshop for local Councillors in Aberdeen City and Aberdeenshire on 25 March, at which the question of the need for an RTS refresh was considered. Generally, there seemed to be a view that:

- focus should remain on delivery;
- that the general thrust of policy direction was unchanged since preparation of the existing RTS;
- that an update report should be prepared considering aspects that have changed since the existing RTS was agreed, including delays to the AWPR, different focus in Aberdeen City Centre, new Climate Change obligations and the difficulties with the global economy, impacting on expenditure, affordability of schemes and personal transport; and
- that the RTS should be better-aligned to the Structure Plan/Strategic Development Plan (SDP), both in terms of consistency of message and timeframe for planning.

3.4. A full SEA was undertaken of the Regional Transport Strategy when it was first developed in 2007. The scale of re-fresh that is being considered means that much of the appraisal work that was carried out for the SEA still remains valid. This scoping report therefore outlines a method which focuses on an appraisal of the proposed changes affecting the RTS since its publication in 2008.

#### **4. Plan, Programme or Strategy Context**

##### ***Relationship with other PPS and environmental protection objectives***

4.1. The Environmental Assessment (Scotland) Act 2005 requires that the Environmental Report includes an outline of the relationships with other relevant PPS and how environmental protection objectives have been taken into account in the PPS preparation. This section covers these issues and describes the policy context within which the PPS operates, and the constraints and targets that this context imposes on the PPS. The PPS thought to have an influence on or be influenced by the SDP are identified in Table 4.1 and in more detail in Appendix 7.1.

**Table 4.1: Other relevant PPS & environmental protective objectives of the SDP**

Name of plan, programme, strategy or environmental protection objective
<b>International Level</b>
The Habitats Directive 92/43/EEC
The Birds Directive 2009/147/EC
European Biodiversity Framework
Water Framework Directive 2000/60/EC
<b>National Level</b>
National Planning Framework for Scotland 2 (NPF2) (2009)
Scottish Planning Policy (SPP) (2010)
Scotland's National Transport Strategy (2006)
Strategic Transport Projects Review (2009)
Scottish Government Infrastructure Investment Plan (2011)
Cycling Action Plan for Scotland (2010)
The Government Economic Strategy (2007)
Scotland's Cities: Delivering for Scotland (2011)
Choosing Our Future: Scotland's Sustainable Development Strategy (2005)
Scottish Climate Change Delivery Plan (2009)
Air Quality Strategy for England, Scotland, Wales and Northern Ireland (2007)
Towards a Low Carbon Economy for Scotland: Discussion Paper (2010)
The Scottish Historic Environment Policy (2009)
Designing Places: A Policy Statement for Scotland (2001)
Designing Streets (2010)
Scottish Executive (2006) People and Place: Regeneration Policy Statement
The Scottish Soil Framework (2009)
Scottish Landscape Forum' (2007) Scotland's living landscapes
Wildlife and Countryside Act 1981 (as amended)
The Nature Conservation (Scotland) Act 2004
Scotland's Biodiversity: It's in Your Hands. A strategy for the conservation and enhancement of biodiversity in Scotland (2004)
The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended)
The Conservation (Natural Habitats, &c.) Amendment (Scotland) Regulations 2007
All Our Futures: Planning for a Scotland with an Ageing Population (2007)
Lets Make Scotland More Active: A strategy for physical activity (2003)
Equality Act 2010
'Making the Links: greenspace for a more successful and sustainable Scotland' (2009)
Water Environment (Controlled Activities) (Scotland) Regulations 2005
Water Environment and Water Services (Scotland) Act (WEWS) 2003
The Flood Risk Management (Scotland) Act 2009
SEPA Indicative Flood Map (2006)
Our Seas – a shared resource. High Level Marine Objectives (2009)
Marine (Scotland) Act 2010
Scotland's Zero Waste Plan (2010)
<b>Regional level</b>
Aberdeen City and Shire Structure Plan 2009
Nestrans Regional Transport Strategy 2021 (2008)
'Building on Energy Delivering the Vision for 2025' - The Economic Action Plan for

Name of plan, programme, strategy or environmental protection objective
Aberdeen City and Shire (2008)
Aberdeen City Community Plan and Single Outcome Agreement 2009-10
Aberdeenshire Community Plan 2011-2015 and Single Outcome Agreement (2012/13)
North East Scotland Local Biodiversity Action Plan (2000)
Forest and Woodland Strategy for Aberdeenshire and Aberdeen (2005)
Core Paths and Access Strategies <ul style="list-style-type: none"> <li>• Aberdeen City Council</li> <li>• Aberdeenshire Council</li> </ul>
North East Scotland Area Waste Plan (2003)
River Dee Catchment Management Plan (2007)
North East Scotland Area Management Plan (draft)
Tay Area Management Plan (draft)

1.2. The main issues for the RTS and the SEA, drawn from identifying common themes in the policies above are:

- Reduce the emissions of greenhouse gases.
- Promote mitigation and adaptation to the effects of climate change.
- Focus on the sustainable use of natural resources.
- Promote alternative, sustainable modes of transport and reduce congestion and traffic pollution through walking, cycling and public transport.
- Promote sustainable economic development and regeneration.
- Promote good design, safe environment, clean environment and good quality services.
- Improve the reliability, accessibility and range of modes and choices within the transport network.
- Address issues of access and scheme design to promote local services and retail facilities.
- Avoid adverse effects on biodiversity, including protected sites and species, but also in relation to wider ecological networks.
- Develop policies that maintain and enhance landscape character, including character of the built environment.
- Avoid adverse effects on the water environment or add to or create any significant flood risks.
- Encourage development to locate within transport corridors and near transport modes.
- Seek to optimise economic development.
- Reduce social exclusion and inequalities.
- Promote strategies that reduce road casualties.

## **4.2 Relevant aspects of the current state of the environment**

Schedule 3 of the Environmental Assessment (Scotland) Act 2005 requires the Environmental Report to include a description of “*the relevant aspects of the current state of the environment and the likely evolution thereof without the implementation of the Plan or Programme*”, and “*the environmental characteristics of areas likely to be significantly affected*”. The provision of this information allows a description of the relevant environmental context within which the Nestrans RTS will operate and the constraints and targets that this context imposes on the PPS. The detailed analysis of the baseline data is presented in Appendix 7.2.

## **4.3 Environmental problems & likely evolution of the environment without the RTS**

Environmental problems that affect the PPS were identified through an analysis of baseline data relevant to Aberdeen City and Shire and previous SEAs. Many of the problems emerging from the analysis of baseline data and discussions are being addressed through local transport strategies and other plans including the Strategic Development Plan. The strategic problems relevant to this RTS, as well as the likely evolution of the environment without the plan are summarised in Table 4.2 below.

Without this PPS it is envisaged that current programmes and investment would be ongoing through the Local Transport Strategies for Aberdeen City and Aberdeenshire, however there would be a significantly reduced level of co-ordination between the two areas.

**Table 4.2 Environmental Problems & likely evolution of the environment without the RTS**

Environmental Topic	Issues/Trends	Likely evolution without the RTS	Possible role of RTS
Biodiversity, flora & fauna	<ul style="list-style-type: none"> <li>• Potential disturbance to and loss of biodiversity from development of transport infrastructure.</li> <li>• Continuing need to protect internationally, nationally and locally designated sites, and enhance where possible.</li> <li>• Decrease and/or fragmentation of semi-natural habitats.</li> <li>• Potential impacts on protected and non protected species from development.</li> <li>• Potential loss of green space, green linkages and wildlife corridors to developments.</li> <li>• Proximity of strategic transport routes to protected areas, including the River Dee SAC</li> </ul>	<ul style="list-style-type: none"> <li>• Traffic growth is likely to continue and therefore congestion likely to increase. This can impact on biodiversity through increased disturbance, noise and emissions, particularly in areas that do not currently suffer from high levels of traffic.</li> <li>• Measures would continue to be implemented through the local transport strategies, however a regional approach to the impacts and potential solutions would not be achieved.</li> <li>• Impacts of specific interventions would continue to be fully assessed at the project level.</li> </ul>	<ul style="list-style-type: none"> <li>• The RTS should minimise the impact of the transport network on protected and non-protected designations and species.</li> <li>• The RTS can only indirectly influence the condition of designated and protected sites through partnership working and ensuring appropriate environmental assessment is undertaken at project level.</li> </ul>
Landscape	<ul style="list-style-type: none"> <li>• Potential removal or introduction of new visual elements into the landscape e.g. new carriageway or public transport infrastructure.</li> </ul>	<ul style="list-style-type: none"> <li>• Impacts of specific interventions would continue to be fully assessed at the project level, however there would not be a strategic overview of the cumulative impact.</li> </ul>	<ul style="list-style-type: none"> <li>• The RTS should take landscape setting into consideration when identifying the requirements for changes to the transport network.</li> <li>• The RTS should seek to minimise the impact of the transport network on areas designated for landscape or townscape protection.</li> </ul>
Cultural Heritage	<ul style="list-style-type: none"> <li>• Potential disturbance to and loss or severance of features of cultural heritage importance.</li> <li>• Potential for increased visual intrusion, affecting the setting of a listed building, scheduled monument or conservation area;</li> <li>• Potential for increase in noise, vibration and disturbance which may affect both physical structure and enjoyment of sites</li> </ul>	<ul style="list-style-type: none"> <li>• Traffic growth is likely to continue in the coming years which may result in increased negative impact.</li> <li>• Impacts of specific interventions would be fully assessed at the project level, however there would not be a strategic overview of the cumulative impact.</li> <li>• Actions and interventions will continue to be taken forward by the local authorities through their Local Transport Strategies.</li> </ul>	<ul style="list-style-type: none"> <li>• The RTS should seek to minimise the impact of the transport network on sites of cultural importance, specifically scheduled ancient monuments, listed buildings, designed gardens and landscapes, sites of archaeological importance (including marine archaeology), townscapes, historic landscapes and the wider setting of the above.</li> <li>• The RTS plays a key role in the</li> </ul>

Environmental Topic	Issues/Trends	Likely evolution without the RTS	Possible role of RTS
	by the public.		setting of policy and actions to reduce the reliance on private car, reduce the growth in traffic and reduce emissions.
Climatic Factors	<ul style="list-style-type: none"> <li>• Increases in greenhouse gas emissions from the transport network</li> <li>• The need to adapt to predicted climate change and its potential impacts (e.g. extreme weather events and sea level rises)</li> <li>• Continuing reliance on the private car and increasing travel distances.</li> </ul>	<ul style="list-style-type: none"> <li>• Traffic growth is likely to continue in the coming years which, without significant uptake of alternative fuels, will result in increased carbon emissions.</li> <li>• Without a strong policy framework at a regional level, implementation of new technologies may not happen.</li> <li>• Actions and interventions will continue to be taken forward through local transport strategies, however in recent years a strategic approach to travel behaviour change has proven successful and this would be threatened if it is not backed by strategic policy.</li> <li>• Other PPS will affect climatic factors, particularly the location and spread of development.</li> </ul>	<ul style="list-style-type: none"> <li>• The RTS has a key role to play in the setting of policies and delivery of actions aimed at reducing car use, encouraging more sustainable modes of travel and facilitating the uptake of alternative fuels.</li> <li>• The RTS brings together a wide range of partners to deliver improvements and promote sustainable travel, through the Getabout brand.</li> </ul>
Air Quality	<ul style="list-style-type: none"> <li>• Levels of NO2 and PM10 increasing and resulting in poorer air quality particularly in Aberdeen City, as a result of road transport, increasing traffic flows and congestion.</li> <li>• Increased area emissions of air pollutants in city/ town centres caused by increased development of city/ town centres for retail, business and leisure, without adequate provision of new public transport infrastructure.</li> <li>• Need to encourage more sustainable forms of transport.</li> </ul>	<ul style="list-style-type: none"> <li>• Without the plan air quality may continue to decrease in Aberdeen City.</li> <li>• Other PPS will affect air quality issues, particularly the local transport strategies.</li> </ul>	<ul style="list-style-type: none"> <li>• The RTS should identify means to reduce congestion, encourage alternatives to the private car and encourage the uptake of cleaner fuels, all of which would have a positive impact on air quality.</li> </ul>

<b>Environmental Topic</b>	<b>Issues/Trends</b>	<b>Likely evolution without the RTS</b>	<b>Possible role of RTS</b>
Water	<ul style="list-style-type: none"> <li>• Water bodies in close proximity to main roads are at risk from pollution caused by the impacts of contaminated surface water run-off from roads.</li> <li>• Construction of new transport links adjacent to water bodies has the potential to disrupt water ecosystems or pollute during both the construction and operation stages.</li> </ul>	<ul style="list-style-type: none"> <li>• Adverse effects on water quality from the existing road network would remain the same.</li> <li>• Actions and interventions will continue to be taken forward by the local authorities through their Local Transport Strategies.</li> <li>• Impacts of specific interventions would be fully assessed at the project level.</li> </ul>	<ul style="list-style-type: none"> <li>• The RTS should minimise adverse impact on water quality from the transport network.</li> </ul>
Population	<ul style="list-style-type: none"> <li>• The population is increasing and this trend is projected to continue. This may assist in economic growth and protection of existing services but will impact on the built and natural environment.</li> <li>• Changing demographics – ageing population. This will impact on the provision of transport services as more and more people become eligible for free concessionary travel and also for the provision of more accessible infrastructure.</li> </ul>	<ul style="list-style-type: none"> <li>• Continuing increases in population without investment in transport infrastructure, across all modes will affect the economy of the region as well as quality of life of the population.</li> </ul>	<ul style="list-style-type: none"> <li>• The RTS should be co-ordinated with the Strategic Development Plan for the region which sets the requirements for population and housing and the spatial plan for development.</li> </ul>
Human Health	<ul style="list-style-type: none"> <li>• Improving opportunities for active travel</li> <li>• Improving access to health and other socially necessary services by modes other than the car.</li> <li>• Increases in noise through rising traffic levels</li> <li>• Opportunity to reduce social exclusion.</li> <li>• Road safety.</li> </ul>	<ul style="list-style-type: none"> <li>• Actions and interventions would continue to be taken forward through local transport strategies, however without a regional approach to areas such as access to healthcare across the region, implementation would be less joined up and significant changes to provision would be likely be more difficult.</li> </ul>	<ul style="list-style-type: none"> <li>• The RTS has a key role to play in reducing social exclusion through improving accessibility and improving health through encouraging increases in active travel.</li> <li>• The RTS has a role to play in improving safety and security on the transport network.</li> </ul>
Soil	<ul style="list-style-type: none"> <li>• Loss of land to the development of transport infrastructure.</li> <li>• Contaminated land and its impacts on land use and soil quality. Need to prevent future land contamination.</li> <li>• Soil erosion is a continuing problem in</li> </ul>	<ul style="list-style-type: none"> <li>• Impacts of specific interventions would be fully assessed at the project level.</li> </ul>	<ul style="list-style-type: none"> <li>• The RTS should minimise adverse impact on soil quality and coverage.</li> </ul>

Environmental Topic	Issues/Trends	Likely evolution without the RTS	Possible role of RTS
	<p>Scotland and there are concerns about loss of soil organic matter and soil sealing by impermeable surfaces associated with buildings and roads. Loss of soil organic matter (which acts as a carbon store) will result in increased carbon dioxide emissions.</p>		
Material Assets	<ul style="list-style-type: none"> <li>• Capacity and use of the existing road and rail infrastructure</li> <li>• Quality and maintenance of the existing road and rail infrastructure as well as other types of transport infrastructure including car parks and bus infrastructure.</li> </ul>	<ul style="list-style-type: none"> <li>• Maintenance of the transport network falls under the responsibility of the local authorities and is dealt with through local transport strategies.</li> </ul>	<ul style="list-style-type: none"> <li>• The RTS should be aware of any additional maintenance requirements created as a result of its actions.</li> </ul>

#### 4.4 Characteristics of Areas likely to be significantly affected

The analysis of the baseline information indicates that the strategy is likely to have more significant effects on certain areas than others. This is due to the sensitivity of those areas in terms of international, national and local designation. Although other areas may not be designated the effects on those sites from the strategy could be cumulative. Appendix 7.2.4 contains information relating to the type and number of sites which are likely to be significantly affected.

### 5 Scope and Level of Detail Proposed for the Assessment

#### 5.1 Alternatives/Options

When it was initially developed in 2008, five scenarios were assessed:

- **Do nothing / do minimum:** whereby current programmes and investment would be ongoing, yet there would be no further or targeted intervention in the transport system for the NESTRANS region.
- **Underpin economic growth for focussed development areas:** whereby the focus would be on the key growth areas.
- **Improve accessibility for all:** focussing on access to key services
- **Minimise environmental impact:** by focussing on measures to reduce greenhouse gases, reduce vehicular mileage, increasing walking and cycling, achieving modal shift and minimising aviation requirements.
- **Do all:** addressing the four preceding scenarios. This would constitute a high investment scenario.

These alternative options were fully assessed as part of the SEA of the RTS when it was initially developed in 2008. As the purpose of this review is not to change the direction of the RTS but rather to incorporate developments in the wider policy framework within which the RTS sits and to better align it with the Strategic Development Plan, it is not proposed that the objectives of the RTS or its general direction will change as a result of this re-fresh.

It is proposed that the assessment of the alternative options contained within the original SEA of the RTS remains valid and that the extent of the revisions to the RTS do not necessitate this to be revisited.

#### 5.2 Scoping in/out of SEA issues

As part of the initial SEA carried out alongside the development of the RTS in 2008, the intended scope of the assessment was identified. The table below is an extract from the original SEA scoping report. It is felt that this remains applicable to this re-fresh.

**Table 5.1 Scoping of SEA Issues**

<b>Category of impact</b>	<b>Scope of assessment</b>
Greenhouse gas emissions	Estimation of likely overall change in CO2 emissions from the transport sector during the strategy or plan period.
Local air quality	<p>Identification of any roads or areas where traffic flows are expected to increase by 10% over the strategy period.</p> <p>Changes in flow on trunk roads (due to high traffic flows) or where there are particular sensitivities due to baseline problems (e.g. traffic congestion, change to the speed limit or presence of an Air Quality Management Area).</p>
Water, geology and soils	<p>Examination of likely effects on surface watercourses and on flood prone areas in qualitative terms.</p> <p>Examination, in qualitative terms of the likely effects on areas of contaminated land</p>
Biodiversity	Examination of likely effects on designated areas of protection in qualitative terms.
Landscape and visual amenities	Examination of likely effects on designated areas of protection in qualitative terms.
Cultural heritage	Examination of likely effects on designated heritage resources and areas of protection in qualitative terms
Material assets	Examination of the proportion of the likely impact on maintenance requirements of transport infrastructure in qualitative terms.
Population and human health	<p>Examination of change in levels of pollutants, indicating impact on respiratory health.</p> <p>Estimation of likely change in perception of health.</p>
Noise	<p>Identification of any roads or areas where traffic flows are expected to increase by 25% (or reduce by 20%) over the strategy or plan period.</p> <p>Estimation of the likely impact on noise levels resulting from planned growth of Aberdeen airport.</p> <p>Railway noise has been scoped out as in order to lead to a 'significant' change in noise levels, the number of trains in the region would need to double or halve.</p>

### 5.3 Framework for assessing environmental effects

The initial SEA of the RTS set seven SEA objectives against which the RTS was assessed:

<b>SEA topic</b>	<b>Objective</b>	<b>Indicator</b>
Air quality	To protect and improve local air quality.	<p><b>NO<sub>2</sub></b>: Annual mean</p> <p><b>PM<sub>10</sub></b>: Annual mean</p> <p>Source: Local Authority Air Quality Monitoring Reports</p>

<b>SEA topic</b>	<b>Objective</b>	<b>Indicator</b>
Greenhouse gas emissions	To help tackle climate change by reducing the effects of CO <sub>2</sub> emissions from road, rail and air traffic during the life of the plan, and helping to meet targets to nationally reduce overall emissions of greenhouse gases by 12.5% by 2008-12 in comparison with a 1990 baseline.	Predicted emissions of CO <sub>2</sub> from transport.
Biodiversity	To protect, maintain and enhance biodiversity, avoiding damage to designated wildlife sites, geological sites, protected species and irreversible losses.	Number of designated sites affected in RTS strategies.  Achievement of Biodiversity Action Plan targets.
Cultural heritage	To preserve historic buildings, archaeological sites and other culturally and historically important features.	Number of listed buildings, scheduled monuments, Historic Gardens and Designed Landscapes affected in RTS strategies.
Water	To protect, maintain and improve the quality of all water bodies in the region.	The quality of river, coastal and estuary waters as monitored by SEPA.
Soils	To reduce contamination and safeguard soil quality and quantity.	Presence of contaminated land.  Amounts / loss of greenfield / brownfield land and proportion available for re-use.
Population and human health	To create conditions to improve health and reduce health inequalities  To reduce the number of casualties from road traffic accidents.	Air quality indicators (respiratory health)  The proportion of the population feeling in 'good health'.  Health deprivation, as measured in the Scottish Index of Multiple Deprivation.  Road traffic accidents

As part of the RTS re-refresh, these objectives and indicators will be reviewed to ensure they remain relevant and will be used in the assessment.

The RTS review will consider the actions currently contained within the RTS and whether they need to be updated or new actions added. We will assess the strategic, policy and possible site-specific options of any actions that it is proposed are significantly amended and any proposed new actions. Actions contained within the existing RTS for which there is no change proposed, will not be assessed as the assessment carried out in the SEA of the RTS in 2008 remains valid.

In the assessment of new or amended actions we will predict whether these effects are negative, positive, uncertain, mixed or neutral effects. We will further evaluate the effects to determine their significance on the receptors in relation to reversibility or irreversibility of effects, risks, duration (permanent, temporary, long-term, short-term and medium-term) and cumulative (direct, indirect, secondary and synergistic).

It is felt that this approach is in proportion to the scale of the re-fresh being undertaken and is consistent with the methodology used in the SEA of the original RTS.

Table 5.2 below shows the framework that will be used to assess effects of the new or changed actions within the strategy.

**Table 5.2: Assessment of RTS actions**

RTS amended or new action	SEA objectives				Comments and overall assessment (e.g. assumptions made, further studies needed, how implementation might make a +ive or -ive impact)	Proposed changes to the option / mitigation
	Objective 1	Objective 2	Objective 3,	etc...		
Action 1	+	-	?			
Action 2 etc...						
Key: + positive, - negative, 0 = neutral =? = uncertain						

## 5.5 Cumulative Effect Assessment

Although it is proposed to only assess the new or amended actions of the RTS, it will be important to consider the potential for indirect and cumulative effects of the package of RTS measures as a whole.

The cumulative effects of the RTS would be evaluated in the light of the evolution of the environment without the plan, and the net effects identified and reported in the Environmental Report. A further framework for assessing the potential for cumulative effect of the plan is shown at Table 5.6 below.

**Table 5.6 Assessment of Cumulative and Synergistic effects of the plan options/alternatives**

Policies	Option 1	Option 2	Option 3	etc...	Cumulative impacts
<b>SEA topic</b>					
Biodiversity (Habitat fragmentation)					
Climate (Climate change)					
Water (Flooding)					
Landscape (Tranquillity)					
Key: + positive, - negative, 0 = neutral =? = uncertain					

## 5.6 Habitats Regulations Assessment

In the light of the problems identified as well as the characteristics of the areas likely to be significantly affected, we intend to undertake a Habitats Regulations Assessment where this is appropriate.

## 5.7 Developing mitigation

The SEA Directive requires that through mitigation measures, recommendations will be made to prevent, reduce or compensate for the negative effects of implementing the strategy.

Where actions are predicted to have significant adverse environmental effects, measures must be considered to avoid these, reduce them to acceptable levels (e.g. to meet regulatory standards), or offset them (e.g. by providing a substitute for lost or damaged environmental resources). Such mitigation might include:

- Changes to the alternatives, such as adding, deleting or refining measures;
- Technical measures required for the implementation stage, e.g. buffer zones;
- Application of design principles; and
- Requirements for project environmental impact assessments for certain projects if appropriate.

## 6 Next Steps

### 6.1 Proposed Consultation Timescale

Nestrans has prepared a main issues report which examines the changes in policy and other factors since the publication of the RTS in 2008. It also provides an update on each of the RTS actions and identifies issues for consideration in the re-refresh. This document is currently available to both the public and stakeholders for a 6 week consultation period ending on 30<sup>th</sup> November 2012. The Main Issues Report can be found on the Nestrans website at <http://www.nestrans.org.uk/364/news.html>

Following this consultation period, the proposed changes to the RTS will be assessed against the RTS and SEA objectives as set out above.

The final output of the re-refresh is anticipated to be an addendum to the existing RTS setting out the updated RTS actions.

We will use the framework outlined below to analyse the consultation responses.

**Table 6.2 People Consulted on the main issues report**

Source	List names

**Table 6.3 Analysis of Comments**

<b>Organisation</b>	<b>Issue</b>	<b>Concern/ Comments</b>	<b>How addressed in SEA Process</b>	<b>SEA Report page</b>

## 7 Appendices: PPS Context, Baseline & Assessments

### Appendix 7.1 - Links to other PPS & Environmental Protection Objectives

Name of PPS / Environmental protection objective	Main requirements of the PPS	Relationship with PPS
<b>INTERNATIONAL</b>		
<b>Nature Conservation</b> <ul style="list-style-type: none"> <li>• The Habitats Directive 92/43/EEC</li> <li>• The Birds Directive 2009/147/EC</li> <li>• European Biodiversity Framework</li> </ul>	Protection of habitats and species. Protection of wild birds and their habitats. Promotes the conservation and sustainable use of biological diversity.	Plan should protect identified habitats and species. Strategies and policies should not hinder protection, management and control of species and should support the conservation and sustainable use of biological diversity.
<b>Water</b> <ul style="list-style-type: none"> <li>• Water Framework Directive 2000/60/EC</li> </ul>	Safeguards the sustainable use of water systems; Supports the status of aquatic ecosystems and environments; Addresses groundwater pollution; flooding and droughts; river basin management planning.	The RTS should avoid adverse effects on the water environment or add to or create any significant flood risks.
<b>EU White Paper on Transport</b>	Defines a policy agenda for the next decade with the following four vision statements: <ul style="list-style-type: none"> <li>• Growing transport and supporting mobility whilst reducing emissions;</li> <li>• An efficient core network for multimodal intercity travel.</li> <li>• Global level playing field for long-distance travel and inter-continental freight</li> <li>• Clean urban transport and commuting.</li> </ul>	The RTS should be in line with the wider policies. Carbon reduction in particular is a key issue and will have implications for strategies at national, regional and local level.
<b>NATIONAL</b>		
<b>Planning</b> <ul style="list-style-type: none"> <li>• National Planning Framework for Scotland 2 (NPF2) (2009)</li> <li>• Scottish Planning Policy (SPP) (2010)</li> <li>• Designing Streets</li> </ul>	Guides Scotland's development to 2030, Sets out strategic development priorities to support the Scottish Government's central purpose of sustainable economic growth. Sets out the main purpose and tasks for land use planning, development planning and control for Scotland. Highlights the importance of street design issues to raise the quality of design in urban and rural development.	In relation to transport, the framework recognises that investment will be needed to enhance essential transport infrastructure, support urban expansion, improve access to facilities and services, facilitate sustainable economic growth and strengthen international gateways. There is also significant emphasis on reducing carbon emissions and achieving a shift to more active and sustainable modes. The relationship between transport and land use is central to this agenda. The RTS should support this wider policy framework.
<b>Transport</b>		The RTS has a strong relationship to these national

Name of PPS / Environmental protection objective	Main requirements of the PPS	Relationship with PPS
<ul style="list-style-type: none"> <li>Scotland's National Transport Strategy (2006)</li> <li>Strategic Transport Projects Review (2009)</li> <li>Cycling Action Plan for Scotland</li> <li>Scottish Government Infrastructure Investment Plan</li> </ul>	<p>Sets out a long term vision for transport. Identifies reduction of emissions, improved quality, accessibility and affordability</p> <p>Sets out recommendations for land-based strategic transport interventions in Scotland's national transport network from 2012.</p> <p>Sets out a range of actions to achieve a target of 10% of journeys by cycling by 2020.</p> <p>Scottish Government's plans for infrastructure investment, including transport, over the coming decades. Builds on projects identified in the STPR with renewed commitment to a number of major schemes in the north east.</p>	<p>strategies and should seek to contribute to the delivery of their objectives and targets. The Cycling Action Plan in particular emphasises the step change that is expected in the levels of cycling across Scotland. The IIP contains a number of major schemes relevant to the Nestrans area.</p>
<p><b>Economy &amp; Sustainable development</b></p> <ul style="list-style-type: none"> <li>The Government Economic Strategy (2007)</li> <li>Choosing Our Future: Scotland's Sustainable Development Strategy (2005)</li> <li>Scotland's Cities: Delivering for Scotland</li> </ul>	<p>Identifies strategic priorities critical to achieving sustainable economic growth.</p> <p>Sets out a vision and commitment to build a more sustainable Scotland.</p> <p>Recognises that good connectivity between cities and their regions is the key to widening the reach of cities as well as the importance of international connections. The importance of low carbon transport is also highlighted.</p>	<p>The RTS should seek to integrate with the aims of the strategies and contain actions to reduce the need to use private transport and assist in the reduction of emissions as well as increasing connectivity both to/from and within the region. It should support sustainable economic growth whilst meeting the differing needs of a diverse population. The RTS should take into account the need to reduce impact on, and adapt to, climate change.</p>
<p><b>Air &amp; Climate Change</b></p> <ul style="list-style-type: none"> <li>Scottish Climate Change Delivery Plan (2009)</li> <li>Air Quality Strategy for England, Scotland, Wales and Northern Ireland (2007)</li> <li>Towards a Low Carbon Economy for Scotland: Discussion Paper (2010)</li> </ul>	<p>Sets out high level measures required to meet Scotland's statutory climate change targets, to 2020 and in the long term.</p> <p>Provides a clear, long-term vision for improving air quality in the UK in line with the Environment Act (1995) setting out associated air quality objectives and policy options.</p> <p>Sets out the Scottish Government's plans to move towards a low carbon economy in Scotland.</p>	<p>The RTS should include measures to contribute to the reduction of greenhouse gases. This may include policies that:</p> <ul style="list-style-type: none"> <li>promote sustainable alternatives to car and reduce congestion traffic pollution; and</li> <li>promote the use of alternative fuels.</li> </ul> <p>Transport is a key cause of poor air quality and the RTS should recognise this impact and contain measures to reduce the impact and improve air quality.</p>
<p><b>Cultural Heritage &amp; Built Environment</b></p> <ul style="list-style-type: none"> <li>The Scottish Historic Environment Policy (2009)</li> <li>Designing Places: A Policy Statement for Scotland (2001)</li> </ul>	<p>Provides a framework for more detailed strategic policies and operational policies in managing the historic environment.</p> <p>Sets out the overarching policy on design in order to make successful places.</p> <p>Sets out a forward-looking strategic framework and priorities for</p>	<p>The Plan should seek to reduce and avoid adverse impacts on cultural heritage and the built environment as a result of transport proposals.</p> <p>The plan should take account of changing regeneration priorities.</p>

Name of PPS / Environmental protection objective	Main requirements of the PPS	Relationship with PPS
<ul style="list-style-type: none"> <li>Scottish Executive (2006) People and Place: Regeneration Policy Statement</li> </ul>	regeneration in Scotland encouraging proactive and integrated approaches.	
<b>Landscape &amp; Soil</b> <ul style="list-style-type: none"> <li>The Scottish Soil Framework (2009)</li> </ul>	<p>The main aim of the Framework is to promote the sustainable management and protection of soils consistent with the economic, social and environmental needs of Scotland.</p> <p>A key aspect is the protection of soil as an asset – for the future of the Scottish economy, as well as a contribution to challenges set by climate change.</p>	The RTS should seek to avoid adverse impact on soil and landscape as a result of transport proposals.
<b>Nature Conservation &amp; Biodiversity</b> <ul style="list-style-type: none"> <li>Wildlife and Countryside Act 1981 (as amended)</li> <li>The Nature Conservation (Scotland) Act 2004</li> <li>Scotland's Biodiversity: It's in Your Hands. A strategy for the conservation and enhancement of biodiversity in Scotland (2004)</li> <li>The Conservation (Natural Habitats, &amp;c.) Regulations 1994 (as amended)</li> <li>The Conservation (Natural Habitats, &amp;c.) Amendment (Scotland) Regulations 2007</li> <li>Scottish Landscape Forum' (2007) Scotland's living landscapes</li> </ul>	<p>Gives protection to wildlife and countryside from disturbance, injury intentional destruction or sale.</p> <p>Duties are placed on public bodies to further the conservation of biodiversity and sets out measures to protect and enhance the biological and geological natural heritage of Scotland.</p> <p>Protects individual sites and promotes conservation on a broader scale.</p> <p>Aims to halt loss and reverse decline of species and habitats.</p> <p>Includes measures for designated sites, habitats and species.</p> <p>Promotes good management of landscapes.</p>	The RTS should avoid disturbance to wildlife and the countryside through the implementation of the plan. The RTS should maintain, conserve, promote and protect biodiversity, habitats and species.
<b>Population &amp; Human Health</b> <ul style="list-style-type: none"> <li>All Our Futures: Planning for a Scotland with an Ageing Population (2007)</li> <li>Lets Make Scotland More Active: A strategy for physical activity (2003)</li> <li>Equality Act 2010</li> <li>'Making the Links: greenspace for a more successful and sustainable Scotland' (2009)</li> </ul>	<p>Provides a strategic approach which considers how best to respond to and plan for a Scotland with an ageing population.</p> <p>Aims to increase and maintain the proportion of physically active people in Scotland setting out targets to 2022.</p> <p>Sets a framework which protects individuals from unfair treatment and promotes a fair and more equal society.</p> <p>Sets out the key actions that are needed to ensure that greenspace delivers for people, communities and places across the whole of urban Scotland.</p>	<p>The RTS should consider the needs of an ageing population into its strategic actions.</p> <p>The RTS should increase opportunities for provision of cycling and walking infrastructure to promote active transport and physical activity. The plan will consider the needs of the society in the region.</p> <p>The RTS should take account of its potential role in the delivery of and access to greenspace networks, particularly those that can also act as cycling and walking facilities.</p>
<b>Water</b> <ul style="list-style-type: none"> <li>Water Environment (Controlled Activities) (Scotland) Regulations</li> </ul>	Protects the water environment that integrates the control of pollution, abstractions, dams and engineering activities in the water	The plan should not promote actions that would have adverse impacts on the water environment or risk failure of

Name of PPS / Environmental protection objective	Main requirements of the PPS	Relationship with PPS
<p>2005</p> <ul style="list-style-type: none"> <li>• Water Environment and Water Services (Scotland) Act (WEWS) 2003</li> <li>• The Flood Risk Management (Scotland) Act 2009</li> <li>• River Basin Management Plan for Scotland (2009)</li> <li>• SEPA Indicative Flood Map (2006)</li> <li>• Our Seas – a shared resource. High Level Marine Objectives (2009)</li> <li>• Marine (Scotland) Act 2010</li> </ul>	<p>environment.</p> <p>Ensures that all human activity that can have a harmful impact on water is controlled.</p> <p>Creates a framework in which organisations involved in flood risk managed can coordinate actions to deliver sustainable and modern approaches to flood risk management.</p> <p>Details the strategy for River Basin Management Planning in Scotland.</p> <p>Provides an estimate at the national scale of areas at risk from river and coastal flooding (areas with a 0.5% (1 in 200) or greater probability of being flooded in any given year) and is to be used as a strategic flood management tool.</p> <p>Expresses outcomes for the UK marine area and underpins the development of the joint Marine Policy Statement (MPS) (due for completion by 2011) and will guide development of national and regional marine plans.</p> <p>Provides a framework which will help balance competing demands on Scotland's seas and introduces duties for sustainable development, protection and enhancement of marine areas, mitigation of and adaptation to climate change, marine planning and conservation and measures to encourage economic investment.</p>	<p>water bodies not achieving at least good ecological status by 2015.</p> <p>The RTS should not promote projects that will create flood risks (from the sea or rivers). The RTS should have regard for wider objectives for the marine environment when it comes to actions relating to shipping and harbours.</p>
<p><b>Waste</b></p> <ul style="list-style-type: none"> <li>• Scotland's Zero Waste Plan (2010)</li> </ul>	<p>The plan outlines Scotland's key objectives in relation to waste prevention, recycling and reducing the amount of waste sent to landfill on the journey to a Zero Waste Scotland. The plan proposes targets for Scotland's waste and delivering these targets will be supported by the land-use planning system.</p> <p>Provides a vision for Scotland where all waste is seen as a resource; Waste is minimised; valuable resources are not disposed of in landfills, and most waste is sorted, leaving only limited amounts to be treated.</p>	<p>The RTS should be aware of the implications of transporting waste and should support the Strategic Development Plan in ensuring that these considerations are taken into account in the location and operation of waste management facilities.</p>
<b>REGIONAL &amp; LOCAL</b>		
<p><b>Planning</b></p> <ul style="list-style-type: none"> <li>• Aberdeen City and Shire Structure Plan 2009 and emerging Strategic Development Plan</li> <li>• Local Development Plans for Aberdeen City (2012) and Aberdeenshire (2012)</li> </ul>	<p>Guides the development of the Aberdeen City and Aberdeenshire region for the next 25 years. Sets the strategic context for Aberdeen and Aberdeenshire Councils Local Development Plans which in turn set the framework for land use development.</p> <p>Sets out what needs to happen over the period to 2021 to provide a transport system that ensures continued economic growth, improves</p>	<p>The RTS should be compatible and support the existing structure plan, the emerging Strategic Development Plan and the Cairngorms National Park Plan which covers part of the Nestrans area. The RTS should seek to integrate with and complement the aims of the SDP and CNP in terms of supporting the level of development outlined, the provision of</p>

Name of PPS / Environmental protection objective	Main requirements of the PPS	Relationship with PPS
<ul style="list-style-type: none"> <li>Cairngorms National Park Plan (2012)</li> </ul>	<p>accessibility and protects the environment and our quality of life in Aberdeen City and Shire. Guides the development of the Cairngorms National Park area to 2017</p>	<p>the necessary infrastructure and promotion of alternative modes to reduce the dependence on car and encourage uptake of alternative fuels.</p>
<p><b>Community Planning</b></p> <ul style="list-style-type: none"> <li>Community Plans and Single Outcome Agreements for Aberdeen City and Aberdeenshire</li> </ul>	<p>The Community Plans and Single Outcome Agreements set out the outcomes that partners hope to deliver for local communities. They aim to ensure that people are genuinely engaged in the decisions on public services made that affect them and involve a commitment from organisations to work together, not apart, in providing better public services.</p>	<p>Nestrans is a statutory community planning partner in both Aberdeen City and Aberdeenshire and is signed up to the delivery of the Single Outcome Agreements. The RTS should work towards the outcomes set in these documents, a number of which are directly related to the transport network.</p>
<p><b>Economic development</b></p> <ul style="list-style-type: none"> <li>'Building on Energy Delivering the Vision for 2025' - The Economic Action Plan for Aberdeen City and Shire (2008)</li> </ul>	<p>Sets out a 5 year life plan identifying actions to be undertaken towards the longer term economic ambitions for Aberdeen City and Shire.</p>	<p>The RTS should support sustainable economic growth and provide the policy framework for the necessary transport improvements to support this.</p>
<p><b>Nature Conservation &amp; Biodiversity</b></p> <ul style="list-style-type: none"> <li>North East Scotland Local Biodiversity Action Plan (2000)</li> </ul>	<p>Ensures the protection and enhancement of the biodiversity in the north east through the development of effective, local, working partnerships; Ensure that national targets for species and habitats, as specified in the UK Action Plan, are translated into effective local action.</p>	<p>The RTS should avoid adverse effects on biodiversity, including protected sites and species, but also in relation to wide ecological networks.</p>
<p><b>Population &amp; Human Health</b></p> <ul style="list-style-type: none"> <li>Core Paths and Access Strategies for Aberdeen City Council and Aberdeenshire Council</li> </ul>	<p>Core Paths Plans and Access Strategies look to promote themes of:</p> <ul style="list-style-type: none"> <li>Green spaces</li> <li>Human health and well being</li> <li>Accessibility</li> <li>Inclusion</li> <li>Biodiversity</li> </ul>	<p>The RTS should support the development of Core Paths Networks and the delivery of the Council's Core Paths Plans. It should also support and promote accessibility to the countryside, green spaces and other opportunities for leisure and cultural activities.</p>
<p><b>Waste</b></p> <ul style="list-style-type: none"> <li>North East Scotland Area Waste Plan (2003)</li> </ul>	<p>The key aim is to contribute to the sustainable development of the North East Area by developing waste-management systems that will control waste generation, reduce the environmental impacts of waste production, improve resource efficiency, stimulate investment and maximise the economic opportunities arising from waste.</p>	<p>The RTS should support the aims of the waste strategy, particularly in relation to the transportation of waste which should seek to minimise effects on surrounding communities, the environment and transportation systems.</p>
<p><b>Water</b></p> <ul style="list-style-type: none"> <li>River Dee Catchment Management Plan (2007)</li> <li>North East Scotland Area</li> </ul>	<ul style="list-style-type: none"> <li>Records the current state of the Dee catchment, including water quality, the type and extent of habitats and species in the catchment, and important land management activities.</li> </ul>	<p>The RTS should take account of the actions proposed in the Catchment Management Plans in relation to any actions that may impact on these areas. The RTS should not adversely</p>

Name of PPS / Environmental protection objective	Main requirements of the PPS	Relationship with PPS
Management Plan (draft) <ul style="list-style-type: none"> <li>• Tay Area Management Plan (draft)</li> </ul>	<ul style="list-style-type: none"> <li>• Identifies key issues and puts forward potential solutions through a series of actions.</li> </ul>	impact on the water environment covered by the area management plans.

## Appendix 7.2: Baseline data, targets & trends for Aberdeen City & Shire

### Appendix 7.2.1: SEA Topic: Air & Climatic Factors

SEA Indicator	Quantified information	Comparators and targets	Trends	Issues/constraints	Data source(s)
Carbon dioxide (CO <sub>2</sub> ) emissions	<p>In 2010 road transport accounted for 19% of total carbon dioxide emissions within the scope of local authorities (from road transport, industry and commercial and domestic sources) in Aberdeen City and 30% in Aberdeenshire.</p> <p>This equates to per capita emissions from road transport of 1.4t CO<sub>2</sub> in Aberdeen City and 2.5t CO<sub>2</sub> in Aberdeenshire.</p>	<p>The UK has both international (Kyoto Protocol) and domestic (Climate Change (Scotland) Act 2009) targets to reduce greenhouse gas emissions.</p> <p>Scotland' targets to reduce emissions of greenhouse gases:</p> <ul style="list-style-type: none"> <li>• At least 80 per cent lower than the baseline by 2050</li> <li>• Interim target for 2020 of at least 42 per cent lower than the baseline</li> </ul> <p>The Scottish per capita emissions from road transport in 2010 was 1.7t and accounted for 23% of total emissions within the scope of influence of local authorities</p>	<p>Although total carbon dioxide emissions from road transport have increased since 2005, when looking at emissions per capita there have been reductions (-13% since 2005 for Aberdeen City and Aberdeenshire).</p> <p>The percentage of total carbon emissions from road transport has remained relatively static.</p>	<p>A growth in population will impact on the volume of the number of trips and volume of traffic in the region. Without management of this growth, encouragement of mode shift and take up of alternative fuels, these figures will increase and national targets for emissions reductions will become increasingly challenging.</p>	<p><i>Source:</i> Department of Energy and Climate Change</p> <p>Carbon dioxide emissions within the scope of influence of local authorities (previously NI 186)</p>
Air Quality	<p>Aberdeen City Council has designated 3 Air Quality Management Areas:</p> <ul style="list-style-type: none"> <li>▪ City Centre (originally declared in 2001, last amended in 2005,</li> </ul>	<p>Air quality objectives set at a national level are:</p> <p>40 µgm<sup>-3</sup> for Nitrogen Dioxide and 18 µgm<sup>-3</sup> for Particulates.</p> <p>In 2011 the Scottish annual mean objective for</p>	<p>Nitrogen dioxide emissions at monitoring sites in the city have shown a slight reduction in recent years.</p> <p>There are no air quality management areas in the Shire.</p>	<p>There is an increasing need to increase energy efficiency and reduce our reliance on private transport to improve air quality, greenhouse gas emissions and health.</p> <p>Traffic growth may be a</p>	<p>Scottish Government 'Key Scottish Environmental Statistics' <a href="http://www.scotland.gov.uk/Publications/2012/08/2023">http://www.scotland.gov.uk/Publications/2012/08/2023</a></p> <p>Aberdeen City Council Air Quality Updating and Screening Assessment (2012)</p> <p>Aberdeenshire Council (2005) <i>Local Air</i></p>

SEA Indicator	Quantified information	Comparators and targets	Trends	Issues/constraints	Data source(s)
	<p>including Union St, Market St, Virginia St, Commerce St and parts of Holburn St, Guild St and King St)</p> <ul style="list-style-type: none"> <li>▪ Anderson Drive (declared in 2008, incorporating the whole of Anderson Drive and the Haudagain roundabout)</li> <li>▪ Wellington Rd (declared 2008 from Queen Elizabeth II Bridge to Balnagask Rd)</li> </ul> <p>Annual mean concentrations of NO<sub>2</sub> exceeded national objectives on Market Street, Union Street and Wellington Rd in 2012</p> <p>In 2011 the annual mean standard of NO<sub>2</sub> in Union St was 44 micrograms per cubic metre (<math>\mu\text{gm}^{-3}</math>), in Market St 40 <math>\mu\text{gm}^{-3}</math>, and on Wellington Rd 51 <math>\mu\text{gm}^{-3}</math> principally from HGVs and buses.</p> <p>Monitoring of particulates in 2011 showed that the annual mean standard for PM10s was 22 <math>\mu\text{gm}^{-3}</math> on</p>	<p>particulates was not met at 21 of 53 automatic monitoring sites.</p> <p>The Scottish annual mean objective for Nitrogen Dioxide was not met at 12 of the 58 monitoring sites in Scotland in 2011.</p>		<p>constraining factor in the future.</p>	<p><i>Quality Management Progress Report</i> Aberdeenshire Council (2011)</p>

SEA Indicator	Quantified information	Comparators and targets	Trends	Issues/constraints	Data source(s)
	<p>Union Street, 22 <math>\mu\text{g}\text{m}^{-3}</math> on Market St and 24 <math>\mu\text{g}\text{m}^{-3}</math> on Wellington Rd, exceeding the national objectives.</p> <p>NO2 is the main air quality issue monitored in Westhill, Inverurie, Peterhead, Stonehaven, and Mintlaw, although no air quality management areas are currently designated in Aberdeenshire. The highest annual mean concentration of NO2 were recorded in Inverurie at 33 <math>\mu\text{g}\text{m}^{-3}</math> (2010)</p>				

### Appendix 7.2.2: SEA Topic: Water

SEA Indicator	Quantified information	Comparators and targets	Trends	Issues/constraints	Data source(s)
Ground water and river levels	<p>Scottish Water are currently permitted to abstract up to 145 megalitres per day (MLD) from the River Dee, however, the average amount taken is around 90MLD. It is not anticipated that this license will reduce the permitted abstraction level prior to 2014.</p> <p>Data on ground water in Scotland was not available.</p>	<p>By the 2080s, summer precipitation decreases of 10-20% under the low emissions (Global Sustainability), and 20-30% under the high-emissions World Markets scenario are predicted in the north of Scotland.</p>	<ul style="list-style-type: none"> <li>• Rainfall levels are predicted to decline during the summer months, which may affect a rivers yield rate, but this will be less severe further north.</li> <li>• Rainfall in winter months is predicted to increase.</li> <li>• Increase in water consumption from</li> </ul>	<p>Predicted increases in rainfall may increase the risk of flooding events. It is important that the transport network does not increase this risk and that it is resilient to it.</p>	<p>Aberdeen City (2007) State of the Environment Report  <a href="http://www.aberdeencity.gov.uk/nmsruntime/saveasdialog.asp?IID=15960&amp;SID=883">http://www.aberdeencity.gov.uk/nmsruntime/saveasdialog.asp?IID=15960&amp;SID=883</a></p> <p>Aberdeen City and Shire SDPA (2010) <i>Aberdeen City and Shire Structure Plan Monitoring Report</i></p>

SEA Indicator	Quantified information	Comparators and targets	Trends	Issues/constraints	Data source(s)
			<p>industrial consumers and from increased residential development.</p> <ul style="list-style-type: none"> <li>Increase in leakages from pipe infrastructure as it 'ages' however Scottish Water continue to make progress on leakage reduction.</li> </ul>		
Quality of water bodies (Ground water)	<p>2010: high status – 0  2010: good status – 42  2010: moderate status – 0  2010: poor status – 8  2010: bad status – 0</p>	The Water Framework Directive states that all water bodies are of good ecological status, or similar objective, by 2015.	Currently there are 121 water bodies achieving 'good' or 'high' standards, representing 46% of the total. 34% of water bodies are in the 'moderate' category and 21% are of 'poor' or 'bad' quality.	It is important that RTS interventions do not prevent water bodies in the Nestrans area achieving at least 'good' ecological status in order for the area to reach the targets.	Aberdeen City and Shire SDPA (2010) <i>Aberdeen City and Shire Structure Plan Monitoring Report</i>
Quality of water bodies (Coastal)	<p>2010: high status – 6  2010: good status – 8  2010: moderate status – 1  2010: poor status – 0  2010: bad status – 0</p>	Same as above	Same as above	Same as above	Same as above
Quality of water bodies (Transitional)	<p>2010: high status – 4  2010: good status – 1  2010: moderate status – 1  2010: poor status – 0  2010: bad status – 0</p>	Same as above	Same as above	Same as above	Same as above
Quality of water bodies (Loch)	<p>2010: high status – 0  2010: good status – 1  2010: moderate status – 0  2010: poor status – 2  2010: bad status – 1</p>	Same as above	Same as above	Same as above	Same as above

SEA Indicator	Quantified information	Comparators and targets	Trends	Issues/constraints	Data source(s)
Quality of water bodies (River)	2010: high status – 5 2010: good status – 54 2010: moderate status – 87 2010: poor status – 31 2010: bad status – 12	Same as above	Same as above	Same as above	Same as above

### Appendix 7.2.3: SEA Topic: Soil

SEA Indicator	Quantified information	Comparators and targets	Trends	Issues/constraints	Data source(s)
Land contamination	<p>There are no statutorily identified contaminated sites in Aberdeen, although there are 900 potentially contaminated sites, which are being considered for investigation.</p> <p>There are 4 statutorily identified contaminated sites in Aberdeenshire. Aberdeenshire Council's Contaminated Land Strategy is currently under review.</p> <p>In Aberdeenshire, there are other potentially contaminated sites, including landfill sites, former gasworks, stations and goods yards, petrol stations and garages, distilleries, smithy's and infilled Coastal.</p>	<p>The total number of sites affected by contamination within Scotland is difficult to judge accurately as individual local authorities use a variety of assessment methods. However, it is estimated that approximately 67,000 sites (82,034 hectares) could be affected by land contamination.</p>	<p>Although only 4 contaminated sites are on the public register in the North East, this may increase as many sites are still to be investigated. Legal regime is in place to deal with contaminated sites therefore this position should improve in the future.</p>	<p>Contaminated land places financial and technological constraints on development. These constraints may dictate the type of development: the feasibility of remedial works may determine that a site is only suitable for industrial use; the cost of remedial works may determine that high density development is the only viable economic option. Contaminated land impacts on the water environment, i.e. Coastal surface and coastal waters, and the wider environment including for instance local ecology.</p>	<p>Aberdeen City Council (2001) <i>Contaminated Land Inspection Strategy</i>  <a href="http://www.aberdeencity.gov.uk/web/files/Pollution/ContaminatedLandInspectionStrategy.pdf">http://www.aberdeencity.gov.uk/web/files/Pollution/ContaminatedLandInspectionStrategy.pdf</a></p> <p>Aberdeenshire Council (2009) <i>Public Register of Contaminated Land</i>  <a href="http://www.aberdeenshire.gov.uk/environmental/strategy/PublicRegisterofContaminatedLandAug2009.pdf">http://www.aberdeenshire.gov.uk/environmental/strategy/PublicRegisterofContaminatedLandAug2009.pdf</a></p> <p>SEPA (2009) <i>Dealing with Land Contamination in Scotland: A review of progress 2000-2008</i>  <a href="http://www.sepa.org.uk/land/land_publications.aspx">http://www.sepa.org.uk/land/land_publications.aspx</a></p>
Prime agricultural land (Grades 1 to 3.1)	<p>Aberdeenshires prime agricultural land is concentrated in central and southern Aberdeenshire. Grade 2 near Laurencekirk (approx 950ha)</p> <p>Aberdeen contains very little prime agricultural</p>	<p>Net loss of Scottish agriculture land from roads, housing and industry has doubled from 588ha in 1989 to 1,402ha in 2003.</p>	<p>Climate change could increase the level of prime agricultural land in Scotland, however this may cause conflicts with sites of high biodiversity value, sensitive or designated sites.</p>	<p>Potential impacts of climate may constrain prime agricultural land available in the future.</p> <p>Prime agricultural land may require further protection from development as demand for development rises and as land for food production rises.</p>	<p>Scottish Executive Statistics (2005): Economic Report on Scottish Agriculture  <a href="http://www.scotland.gov.uk/Publications/2005/06/2290402/05121">http://www.scotland.gov.uk/Publications/2005/06/2290402/05121</a></p> <p>Scottish Government (2009): The Scottish Soil Framework  <a href="http://www.scotland.gov.uk/Publications/2009/05/20145602/6">http://www.scotland.gov.uk/Publications/2009/05/20145602/6</a></p>

SEA Indicator	Quantified information	Comparators and targets	Trends	Issues/constraints	Data source(s)
	land (300ha).				
Total municipal waste arising (tonnes):	Aberdeen City: 2005/06 – 140,064 2006/07 – 141,296 2007/08 – 138,459 2008/09 – 132,078  Aberdeenshire: 2005/06 – 155,123 2006/07 – 143,342 2007/08 – 153,731 2008/09 – 150,372		There has not been a substantial fall in municipal waste sent to landfill in Aberdeen City compared with Aberdeenshire.  Municipal Waste recycling is falling in Aberdeen City in contrast with Aberdeenshire.	The location and number of sites for municipal waste, recycling and composting and the volume of waste produced will have an impact on the number of heavy goods vehicle movements on the region's road network and the distance that they are required to travel. Increasing populations and increasing volumes of waste will therefore impact on the transport network and emissions.	Aberdeen City and Shire SDPA (2010) <i>Aberdeen City and Shire Structure Plan Monitoring Report</i>  Scotland's Zero Waste Plan (2010)  SEPA (2008) Waste Data Digest 10  SEPA (2007) Waste Data Digest 9  SEPA (2006) Waste Data Digest 8  SEPA (2005) Waste Data Digest 7
Industrial waste arisings (tonnes):	North East Scotland  2005 – 300,000 2006 – 420,000 2007 – 430,000 2008 - 315,525	Scotland  2005 – 2,350,000 2006 – 2,720,000 2007 - 2,760,000 2008 - 2,206,017	There has been an improvement in the amount of waste composted in both districts.		
Construction and demolition waste arisings (tonnes):	2005 – 621,254 2006 – 493,590 2007 - 526,013 2008 - 437,146	2005 – 6,412,378 2006 – 6,010,193 2007 - 6,212,857 2008 - 5,492,158	At both regional and national level there have been reductions in the amount of C&D waste and Commercial waste but there has been an increase in industrial waste.		
Commercial waste arisings (tonnes):	2005 – 710,000 2006 – 580,000 2007 – 650,000 2008 - 672,986	2005 – 6,060,000 2006 – 4,920,000 2007 - 5,330,000 2008 - 5,600,647			
Soil Erosion	From Berwick to Aberdeen, the coastline is eroding, but is stable where there are rocky coasts or coastal defences. From Aberdeen to Inverness the coastline is largely eroding, but parts are being replenished	The north of Scotland is mostly stable with little erosion, but south of Mallaig, towards Carlisle, the coastline is predominantly eroding but stable where there are rocky coasts or coastal defences.	The coastline is predominantly eroding along the east. Autumn/Winter rainfall is predicted to increase, giving rise to winter storms and affecting runoff and (wind and water) erosion.	Coastal erosion mostly where there are no rocks or coastal defences Increase silting of rivers from fluvial flooding. Increase in soil erosion from wind and water, which may also be exacerbated by bad land use practices, such as locating tracks/access roads on steep/	Aberdeen City (2007) State of the Environment Report <a href="http://www.aberdeencity.gov.uk/nms/runtime/saveasdialog.asp?IID=15960&amp;slD=883">http://www.aberdeencity.gov.uk/nms/runtime/saveasdialog.asp?IID=15960&amp;slD=883</a>  SEPA (2006) State of Scotland's Environment Report 2006 <a href="http://www.sepa.org.uk/science_and">http://www.sepa.org.uk/science_and</a>

SEA Indicator	Quantified information	Comparators and targets	Trends	Issues/constraints	Data source(s)
	with sand and gravel from larger rivers.	Precipitation will be greater in the west due to the west-east precipitation gradient.		upland Coastal. RTS interventions should not exacerbate coastal soil erosion.	_research/data_and_reports/state_of_the_environment.aspx

### Appendix 7.2.4: SEA Topic: Biodiversity (natural heritage designations)

International, National and local natural heritage designations			<b>Aberdeenshire*</b>		<b>Aberdeen City</b>	
			<b>Number of sites</b>	<b>Area (hectares)</b>	<b>Number of sites</b>	<b>Area (hectares)</b>
	International	Ramsar	3	1,051	0	n/a
		Special Areas of Conservation (SAC)	8	5,545	1	155
		Special Protection Areas (SPA)	7	2,227	0	n/a
	National	Sites of Special Scientific Interest (SSCI)	69	15,655	4	47
		National Nature Reserve (NNR)	2	1,072	0	n/a
	Local	Sites of Interest of Natural Science (SINCS)	79	n/a	16	n/a
		Local Nature Reserve (LNR)	2	28	4	126
		Scottish Wildlife Trust Reserves	4	n/a	0	n/a
		District Wildlife Site	0	n/a	70	n/a
		RSPB Reserves	3	n/a	0	n/a
		Ancient Woodland	2,584	45,000	140	n/a
<p>Source: SNH 2009            * Excluding Cairngorms national park</p> <p>The environment of the north east is an important resource and is recognised internationally for its value. However, biodiversity and habitats can be vulnerable to the potentially harmful effects of development and so the policies and allocations that result from the Regional Transport Strategy must focus on maintaining and improving natural, built and cultural assets.            There are many nature designations of international, national and local importance throughout the region that must be protected and improved.</p> <p>New development has the potential to put pressure on built, natural and cultural sites, consequently development must be appropriately planned to ensure that there is no loss or damage to these important assets. It is important to note that a designated site may be protected by more than one designation.</p>						

### Appendix 7.2.5: Human Health

SEA Indicator	Quantified information	Comparators and targets	Trends	Issues/ constraints	Data source(s)
Quality and availability of public open space in urban and rural areas	<p>The Aberdeen City audit identified 3,471 hectares of open space (not including private gardens or sites under 0.2 hectares). The quality of open space varies across the city with public parks and gardens rating the highest and allotments and business amenity open space scoring the lowest rating.</p> <p>Data for Aberdeenshire Councils Open Space Audit was not available.</p>		<p>The poorest quality parks and open spaces tend to be found within the regeneration priority areas. It is more difficult to provide open space within densely populated areas.</p>	<p>Open space networks can also be used as transport corridors for walking and cycling which should be encouraged through the RTS. The detail of these networks lies with the two local authorities, however the RTS should encourage measures that increase opportunities for walking and cycling.</p>	<p>Aberdeen City Council (2010) Open Space Audit</p>
Quality of life in currently deprived areas	<p>The 2009 Scottish Index of Multiple Deprivation (SIMD) found that the strategic development plan area has 42 datazones classified as the 20% most deprived by the Scottish government, representing 7.5% of the total.</p> <p>Deprivation is concentrated in Aberdeen City with 13% of all datazones being classified as in the most deprived 20%, while although only 2% of Aberdeenshire is in this group, these are concentrated in the coastal towns of Fraserburgh and Peterhead. In Aberdeen the zones are situated in the North and</p>	<p>Aberdeenshire has most of its datazones in the least deprived in terms of SIMD ranks. Aberdeenshire has Scotland's least deprived datazone in Banchory.</p> <p>The 25% most deprived datazones in Aberdeen City all rank in the 30% most deprived nationally.</p>		<p>Poor access to services in rural areas. Centralisation of service provision has and will continue to affect marginalised areas. Pockets of deprivation through low job opportunities and income could be adversely affecting people's mental health. Transport provision has a key role to play in addressing some of these inequalities.</p>	<p>Aberdeen City and Shire SDPA (2010) <i>Aberdeen City and Shire Structure Plan Monitoring Report</i></p>

SEA Indicator	Quantified information	Comparators and targets	Trends	Issues/ constraints	Data source(s)
	South of the city.				
Physical activity	Only 39% of adults in the NHS Grampian region are meeting recommended levels of physical activity in 2011	38% of Scottish adults are meeting recommended levels of physical activity in 2011.	Due to differences in reporting of figures it is not possible to compare with figures before 2008. There has however been no significant change in this trend since 2008.	Low levels of physical activity and the resulting health impacts have significant implications for the overall health of the population. Active modes of travel (walking and cycling) have a significant role to play in encouraging more active lifestyles.	Scottish Health Survey Annual Report 2011.
Road safety	<p>The 2006-2010 average annual road traffic casualties are shown below:</p> <p>Aberdeen Fatal: 5 Serious: 82 Slight: 398 All: 485</p> <p>Aberdeenshire Fatal: 29 Serious: 189 Slight: 621 All: 839</p>	<p>There are five national targets for casualty reductions in Scotland by 2020:</p> <p><b>186</b> people were killed in 2011, <b>36 per cent</b> below the 2004-08 baseline average level (target of 40%).</p> <p><b>1,873</b> people were seriously injured in 2011, <b>28 per cent</b> below the 2004-08 baseline average level (target of 55%)</p> <p><b>On average 5</b> children were killed between 2009 and 2011: <b>65 per cent</b> below the 2004-08 average (target of 50%).</p> <p><b>203</b> children were seriously injured in 2011: <b>38 per cent</b> below the 2004-08 average (target of 65%)</p>	When compared to the 2005-09 annual average for Aberdeen City and Shire, this is a 6% reduction in fatal casualties, 3% increase in serious and 18% reduction in slight across the north east.	Increasing levels of traffic across the region may increase the risk of road traffic collisions and casualties. In some areas however, increasing traffic volumes which slow the speed of traffic could actually help reduce the severity of accidents. The RTS should actively aim to reduce the number and severity of road accidents.	<p>Nestrans annual monitoring report 2012</p> <p>Key Reported Road Casualties Scotland 2011</p> <p><a href="http://www.transportscotland.gov.uk/strategy-and-research/publications-and-consultations/j230656-01.htm">http://www.transportscotland.gov.uk/strategy-and-research/publications-and-consultations/j230656-01.htm</a></p>

SEA Indicator	Quantified information	Comparators and targets	Trends	Issues/ constraints	Data source(s)
Noise	<p>Aberdeen Airport noise indicators (2006)  Number of air traffic movements: 116, 971  Area/Pop in 57dB IAeq: 9.4km<sup>2</sup> / 6450  Night movements: N/A  Number of noise related enquiries: 82  Number of noise related enquirers: 34</p> <p>The Scottish Government undertakes noise mapping for the main transportation road and rail links in Scotland.</p>		Road traffic noise is the most prevalent source of ambient noise, alongside railways and Aberdeen Airport. Noise emissions from road traffic vehicles are not expected to reduce significantly in the near future.	A Strategic Noise Action Plan has been prepared for Aberdeen Airport under the European Directive on Environmental Noise (2002/49/EC)	<p>Scottish Government noise mapping <a href="http://www.scottishnoisemapping.org/default.aspx">http://www.scottishnoisemapping.org/default.aspx</a></p> <p>Aberdeen Airport Noise Action Plan 2008-2013 <a href="http://www.aberdeenaairport.com/about-us/community-matters/noise-action-plan">http://www.aberdeenaairport.com/about-us/community-matters/noise-action-plan</a></p>

### Appendix 7.2.6: SEA Topic: Population

SEA Indicator	Quantified information	Comparators and targets	Trends	Issues/constraints	Data source(s)
Life expectancy at birth	<p>Aberdeen:  Men 75.4 years Women 80.4 years</p> <p>Aberdeenshire:  Men 77.5 years Women 81.1 years</p>	Scotland: 75.0 years for men and 79.9 years for women	<p>Compared with 10 years ago in 1996-1998: Life expectancy at birth for Scotland has increased by 2.6 years for men (from 72.4 years to 75.0 years) and 1.9 years for women (from 78.1 years to 79.9 years); The gap between men and women continues to close, dropping from 5.6 years to 4.9 years over the period;</p> <p>There are no areas that have experienced a drop in life expectancy</p>	Aging population will create demand for provision of transport services including accessible vehicles and ability to drive.	<p>General Register Office for Scotland (2009)  <i>Life Expectancy for Administrative Areas within Scotland, 2006-2008</i></p>

SEA Indicator	Quantified information	Comparators and targets	Trends	Issues/constraints	Data source(s)
			The gap between men and women is closing in relation to life expectancy at birth.		
Healthy life expectancy at birth	Aberdeen Men 67.8 years Women 72.1  Aberdeenshire Men 70.8 years Women 74.5	Scotland Men 66.3 years Females 70.2 years	The gap between men and women is closing in relation to healthy life expectancy at birth.	A population that lives longer but lives healthier will not require as much assistance as a population that lives longer but lives unhealthily.	Scottish Public Health Observatory <a href="http://www.scotpho.org.uk/home/PopulationDynamics/hle/hle_data/hle_scotland.asp">http://www.scotpho.org.uk/home/PopulationDynamics/hle/hle_data/hle_scotland.asp</a>
Population Change	Aberdeen City 1998 – 215,650 2004 – 205,490 2008 - 210,400  Aberdeenshire 1998 – 226,220 2004 – 231,570 2008 - 241,460  Region: 1998 - 438,689 2004 - 434,160 2008 - 448,693	Scotland  1998 – 5,077,070 2004 – 5,078,400 2008 - 5,168,500  The population change in the Nestrans area has increased at a rate (3.35%) double to that of the Scottish average (1.77%) in the last ten years.	The population of Aberdeen City declined between 1998 and 2004, but over the first half of the period, however this trend has reversed, and since 2004 both the City and the Shire populations have been increasing.		General Register Office for Scotland <a href="http://www.gro-scotland.gov.uk/statistics/publications-and-data/population-estimates/index.html">http://www.gro-scotland.gov.uk/statistics/publications-and-data/population-estimates/index.html</a>  Aberdeen City and Shire SDPA (2010) <i>Aberdeen City and Shire Structure Plan Monitoring Report</i>
Population Structure	As at June 2008, the average age was: Aberdeen – 38 (m) 40 (f) Aberdeenshire – 39 (m) 41(f)	In line with much of Scotland the population structure of Aberdeen City and Shire has aged over the last ten years.	The 2008 based projections (probable) suggest that by 2033 the population of the region area will increase by 14%. The number of people of pensionable age will increase by 32% much in line with Scottish figures. The population of working age is projected to rise by 11.4%, well above the Scottish figure of 2.2%. Additionally, while at a Scottish level the number	A rapidly aging population has significant implications for both service provision and the economic performance of the region, and results in the need to attract and retain people of working age to the region.  Aberdeenshire has the largest projected rise in the pensionable age group in Scotland and this will have major implications for the region.	General Register Office for Scotland <a href="http://www.gro-scotland.gov.uk/statistics/publications-and-data/population-estimates/index.html">http://www.gro-scotland.gov.uk/statistics/publications-and-data/population-estimates/index.html</a>  Aberdeen City and Shire SDPA (2010) <i>Aberdeen City and Shire Structure Plan Monitoring Report</i>

SEA Indicator	Quantified information	Comparators and targets	Trends	Issues/constraints	Data source(s)
			of under 15's is projected to decline by 1.5% over the period, in Aberdeen City and Shire this age group could increase by 4.1%.	Transport services will likely have to become more accessible to cater for the needs of an ageing population.	
Change in households  <b>Household growth</b>	Aberdeen City  1991 - 89,949 2001 - 95,265 2003 - 96,944 2008 - 97,424  2001 – 2008 – 2,159 % change – 2.3%  Aberdeenshire (inc Cairngorms National Park)  1991 - 80,473 2001 - 87,077 2003 - 90,902 2008 - 92,317  2001 – 2008 – 5,240 % change – 6.0%  Aberdeen City and Shire (inc Cairngorms National Park)  1991 - 170,422 2001 - 182,342 2003 - 187,846 2008 - 189,741  2001-2008 – 7,399 % change – 4.1%	Scotland  1991 – 2,042,809 2001 – 2,125,577 2003 – 2,195,033 2008 – 2,211,025  2001-2008 – 85,448 % change – 4.0%	During the last decade there has been a sustained increase in numbers of households and a significant fall in average household size. This is a trend that is expected to continue, with average household size dropping to under two in the Nestrans area by 2021.	Decreasing household size and increasing number of households will result in constraints in the level of houses that can be built to demand. If this trend continues there may be serious issues in relation to infrastructure requirements. This trend is also likely to have an impact on the number of cars in the region and therefore traffic volumes.  The location of new development will have a significant impact on the way in which people travel and the distances they travel.	General Register Office for Scotland <a href="http://www.gro-scotland.gov.uk/statistics/publications-and-data/population-estimates/index.html">http://www.gro-scotland.gov.uk/statistics/publications-and-data/population-estimates/index.html</a>  Aberdeen City and Shire SDPA (2010) <i>Aberdeen City and Shire Structure Plan Monitoring Report</i>
<b>Forecast household size</b>	Aberdeen City forecast household size:				

SEA Indicator	Quantified information	Comparators and targets	Trends	Issues/constraints	Data source(s)
	2006 – 2.00 2011 – 1.93 2016 – 1.86 2021 – 1.82 2026 – 1.78 2031 – 1.74  Aberdeenshire forecast household size:  2006 – 2.36 2011 – 2.30 2016 – 2.23 2021 – 2.16 2026 – 2.09 2031 – 2.03  Aberdeen City and Shire forecast household size:  2006 – 2.18 2011 – 2.12 2016 – 2.04 2021 – 1.99 2026 – 1.94 2031 – 1.89				

### Appendix 7.2.7: SEA Topic: Cultural Heritage

SEA Indicator	Quantified information	Comparators and targets	Trends	Issues/constraints	Data source(s)
Built and Cultural Heritage Designations	Aberdeen City  Listed buildings – 1,212 Listed buildings at risk – 26 Conservation Areas – 11 Scheduled Ancient Monuments – 44 Archaeological Sites and Monuments Record – 699			Development is putting pressure on these features. There is also a threat of adverse impacts to and the loss of unknown or locally known (and not formally designated) architectural and archaeological remains from	Aberdeen City and Shire SDPA (2009) <i>Aberdeen City and Shire Structure Plan Monitoring Report</i>

SEA Indicator	Quantified information	Comparators and targets	Trends	Issues/constraints	Data source(s)
	<p>Gardens and designed landscapes - 1</p> <p>Aberdeenshire</p> <p>Listed buildings – 3,715 Listed buildings at risk – 228 Conservation Areas – 49 Scheduled Ancient Monuments – 581 Archaeological Sites and Monuments Record – 17,631 Gardens and designed landscapes - 27</p> <p>Aberdeen City and Shire</p> <p>Listed buildings – 4,927 Listed buildings at risk – 254 Conservation Areas – 60 Scheduled Ancient Monuments – 625 Archaeological Sites and Monuments Record – 18,330 Gardens and designed landscapes - 28</p>			<p>new development, including transport infrastructure.</p> <p>New development has the potential to put pressure on, or be constrained by, built and cultural sites. Consequently development must be appropriately planned to ensure that there is no loss or damage to these important assets.</p>	

#### Appendix 7.2.8: SEA Topic: Landscape

SEA Indicator	Quantified information	Comparators and targets	Trends	Issues/constraints	Data source(s)
Landscape character	<p>There are 42 landscape character areas in Aberdeenshire, including 9 within the CNP.</p> <p>In Aberdeen there are 27 landscape character areas.</p>	<p>The four Landscape Character Assessments that cover the North East provides a brief overview of past land use practices and discusses potential land uses for existing landscapes.</p>	No trend	<p>The inappropriate scale and insensitive siting of future new development may adversely affect landscape characteristics (e.g. changing its landscape character type, not respecting local topography/contours). New development not fitting in with the landscape's capacity to absorb further</p>	<p>Scottish Natural Heritage (1997) <i>National programme of landscape character assessment: Banff and Buchan</i>, Review No 37. Scottish Natural Heritage (1996) <i>Cairngorms landscape assessment</i>, Review No 75. Scottish Natural Heritage (1996) <i>Landscape character assessment of Aberdeen</i>, Review No 80 Scottish Natural Heritage (1998)</p>

SEA Indicator	Quantified information	Comparators and targets	Trends	Issues/constraints	Data source(s)
				developments (e.g. design, layout and sense of place) – need to promote suitable development capacity.	<i>South and Central Aberdeenshire: landscape character assessment, Review No 102.</i>

### Appendix 7.2.9: SEA Topic: Material Assets

SEA Indicator	Quantified information	Comparators and targets	Trends	Issues/constraints	Data source(s)
Road network and condition	<p>Road lengths 2010</p> <p>Aberdeen City: Trunk Roads Motorway – 0km A Roads – 29km Local Authority Roads A Roads – 58km B Roads – 42km C Roads – 93km Unclassified – 714km Total 936km</p> <p>Aberdeenshire Trunk Roads Motorway – 0km A Roads – 177km Local Authority Roads A roads – 687km B roads – 800km C roads – 1,536km Unclassified – 2,406km Total – 5,606</p> <p>Road condition: In 2010/11, 35% of local authority roads in Aberdeen City were classed as Red or Amber in the Road Condition Survey and require some kind of</p>	Across Scotland as a whole, 38% of the local authority road network is classed as amber or red in the Scottish Road Condition Survey and requires some form of maintenance.	A number of harsh winters in recent years have accelerated the deterioration of roads infrastructure and significantly increased the funding requirements for maintenance. This combined with public spending cuts and restricted Council budgets has led to an overall deterioration of roads infrastructure which will likely continue if severe winters become more common.	Although road maintenance is an issue for the local authorities and their Local Transport Strategies, the RTS should have cognisance to the ongoing maintenance implications of any new infrastructure.	Scottish Transport Statistics

SEA Indicator	Quantified information	Comparators and targets	Trends	Issues/constraints	Data source(s)
	maintenance. In Aberdeenshire, this figure was 28%.				

