

Non - Technical Summary



1. Introduction

This is a Non Technical Summary (NTS) of the Draft Environmental Report which has been prepared to report upon the Strategic Environmental Assessment (SEA) of the Revised Regional Transportation Strategy 2011 Public Consultation document (2011 RTS).

This NTS summarises the Environmental report and sets out the approach used to undertake the SEA as well as the recommendations and conclusions emerging from this process. This report follows the publication and consultation of a Scoping Report in February 2009. The Scoping Report explained how the 2011 RTS would be developed and how environmental impacts would be taken into account.

Why has an SEA been undertaken for the 2011 RTS?

The European Directive 2001/42/EC requires a 'Strategic Environmental Assessment' of certain plans and programmes. The objective of the Directive is:

"to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development"

This Environmental Report has been prepared to meet the requirements of the SEA Directive as applied through the Environmental Assessment of Plans and Programmes (Northern Ireland) Regulations; 2004 (EAPP Regulations).

What is the 2011 RTS, what is its vision and aims?

The 2011 RTS will set the strategy for transportation within the region. It will use a Policy Prioritisation Framework to identify the priority transport programmes and projects that most closely align with the Strategic Objectives, bearing in mind affordability and value for money. Those programmes and projects that best deliver the agreed Strategic Objectives and which promote equality with political and public acceptability will be implemented first, subject to the availability of funding. Improvements to the existing transport networks will be considered before developing any new infrastructure. The Policy Prioritisation Framework will set transport interventions within existing and emerging strategic economic, environmental and social contexts so that transport schemes planned for the future can focus on supporting the Executive's aims and objectives. The 2011 RTS vision is:

"to have a modern, sustainable, safe transportation system which benefits society, the economy and the environment and which actively contributes to social inclusion and everyone's quality of life."

This is supported by twelve Strategic Objectives:

Strategic Objectives of the 2011 RTS

1: Improve connectivity within the region	7: Improve Safety
2: Use road space and railways more efficiently	8: Improve Social Inclusion
3: Better maintained transport infrastructure	9: Developed transport programmes focussed upon the user
4: Improve access in our towns and cities	10: Reduced Green House Gas Emissions from transport
5: Improve access in rural areas	11: Protect biodiversity
6: Improve connections to key tourism sites	12: Reduce noise and air pollution

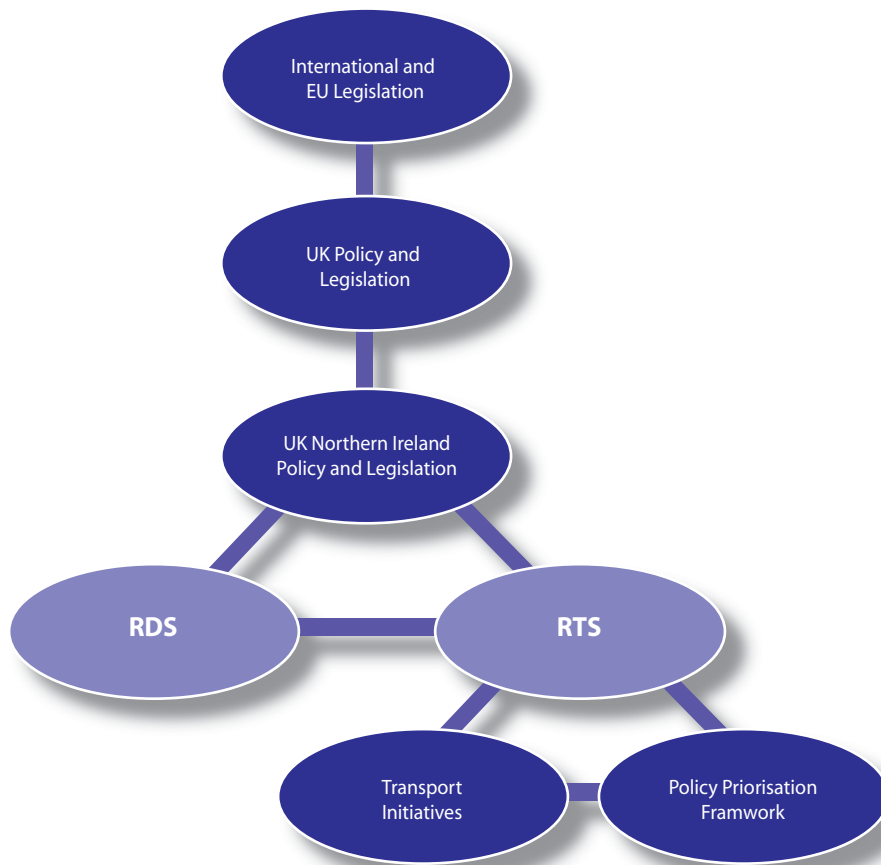
How was the 2011 RTS assessed for its effects upon the environment?

The Strategy was assessed against a number of objectives which have been designed to cover the broad range of environmental issues facing the region. These objectives are brought together within an SEA assessment matrix which seeks to ask questions of the component parts of the 2011 RTS and record the likely significant effects against timescale and geographical areas. Opportunities for improvement and measures to address possible impacts have been identified.

What is the policy context within which the 2011 RTS operates?

The Strategy does not operate in isolation of other plans and programmes. In conjunction with other documents it can contribute to significant positive or negative effects upon the environment. Other plans and programmes include a large number of European Directives which cover issues such as air quality, noise and ecological protection. These directives have been enacted into UK law and require that actions are taken to improve environmental conditions irrespective of the 2011 RTS.

The following figure demonstrates the inter-linkages between the 2011 RTS and other plans, programmes and legislation.



What is the current condition of the region's environment and how is it likely to change without the 2011 RTS?

A number of key issues that currently affect the region have been identified in research undertaken by many environmental bodies and organisations. These have been identified and collated within the Environmental Report and are reproduced within the following tables.



Trend (SEA Indicator)	Trend	Problem
Biodiversity		
	<p>A continuation in the unfavourable status of protected sites (both for habitats and species) together with a decline in some of the priority species and habitat loss.</p> <p>A continued loss of species-rich dry grassland and increase in the rate of increase of woodland/scrub succession. An increased rate of broadleaved tree planting.</p> <p>Rising temperatures and regular storm events influenced by climate change, which is in turn influenced by vehicle emissions, will impact upon the natural environment.</p>	<p>The unfavourable status of some protected sites (both for habitats and species).</p> <p>The direct and indirect effects of climate change upon the habitats and species.</p>
Population		
	<p>There has been an Increase in population at a level greater than rest of UK which will require additional housing and supporting infrastructure which will occupy additional land with potentially consequential environmental effects.</p> <p>Long term unemployment in Northern Ireland likely to remain static given the current economic climate which may reduce demand for additional infrastructure. However this may result in the movement of population to towns and cities increasing pressure for resources in these locations.</p>	<p>Issues of care and service provision relative to an ageing population.</p> <p>Consistent high proportion of long-term unemployed.</p> <p>High levels of in-commuting into Belfast.</p>
Human Health		
	<p>Life expectancy has increased in Northern Ireland to 75.6 years for a man and 80.6 years for a woman however it still remains below that in England but is similar to that in the Republic of Ireland. An older population will place further pressure on the need for more lifetime homes, and for supporting infrastructure including accessible transport systems. This may result in effects upon landscape, biodiversity and energy use.</p> <p>63% of people described their health as 'good' in the previous 12 months, 23% said it was 'fairly good' and 15% described it as 'not good'.</p>	<p>Greater demand for access to health and social services.</p> <p>Comparatively high numbers of Killed Seriously Injured on our roads.</p>
Soil		
	<p>Whilst the rate of brownfield development in Northern Ireland has remained above 60% since 2001, the amount of development on such sites has however decreased as a result of lower levels of availability.</p>	<p>Proportion of development on brownfield is declining and there remains a legacy of contaminated sites.</p>
Water		
	<p>Between 1995 and 2005 there was a 15% decrease in the percentage of river lengths reaching class A standard. Drinking water standards improved between 2004 and 2006 and coastal bathing water quality is improving.</p> <p>The general trends in industrial discharge consent compliance shows a steady increase between 2000 and 2005.</p>	<p>Problems of pollution incidents into watercourses, lakes, loughs and groundwater from run-off.</p>



Air

There has been a long-term decline in the Nitrogen dioxide (NO₂) between 1999 and 2005 and a similar decline in PM₁₀ particulate matter concentrations over the same period (with exceptions in 2003 and 2006). Monitoring trends show a significant reduction in all pollutants across Northern Ireland and the number of days where air quality objectives and EU limit values were exceeded steadily decreased across monitoring sites between 2003 and 2007. The region's AQMAs are influenced predominantly by emissions from road transport.

Transport emissions are increasing as a proportion of total emissions

Climate Factors

There has been a general decline in greenhouse gas emissions from 1990 to 2006 but transport emissions continue to rise. There are an increasing number of vehicles on Northern Ireland's roads; 70% of households owned a car in 2000-2001 rising to 76% in 2005/6. The use of gas as a domestic fuel source has steadily increased however oil remains the preferred fuel for domestic heating.

Emissions of greenhouse gases remain above target levels.

Climatic effects affecting air quality

Flooding events are predicted to become more frequent.

Material Assets

There has been an increase of 25,000 dwellings in Northern Ireland between 2004 and 2006 which represents an accelerating rate of increase on the annual increase recorded between 1996 and 2001. However completions have declined since 2007/8. In addition, there has been a decline in the number of isolated rural dwellings from 114,400 in 2001 to 104,300 in 2006. Continued increase in overall housing numbers and related increase in vehicle ownership leads to a loss of soils, potential landscape and biodiversity impacts through infrastructure development.

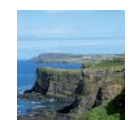
Railways are predominantly in the east of the region.

The region is still heavily dependant upon fossil fuel energy generation both for power and transportation..

The percentage of electricity produced from indigenous renewable energy sources doubled from 3% to 6% between 2004 and 2007. In 2010 capacity stood at 333MW. Encouragement for renewables may have local environmental impacts but potentially outweighed through mitigation of climate change. Slow adaptation of vehicles to run on sustainable fuel sources.

Waste recycling and recovery has increased possibly due to an increase in the number of recycling facilities provided. This reduces pressure for landfill but creates requirements for new waste infrastructure.

Demand for aggregates increased from 2006 -7 however these figures still represent a decline in demand on the 2001 demand figure. A lower level of production reduces pressure for new quarries with consequential benefits to landscape, soils, air, water and biodiversity.



Cultural Heritage		
	An increasing number of buildings and sites are protected for the historic importance. A rise in the number of buildings identified as being at risk is potentially a result of the economic downturn.	There are a number of historic buildings at risk. There is a lack of protection for listed buildings.
Landscape		
	Landscape change will continue as a result both of development pressure, including transportation schemes and changes in agricultural practice. As the effects of climate change begin to be increasing felt erosion and changes in patterns of vegetation may be experienced..	Climatic influences may lead to landscape change. Development pressures can affect the landscape. Pressure include changing agricultural practices and mineral extraction, landfilling of quarries, loss of geological coastal sites to flood prevention.

What are the alternatives for the region?

When preparing the 2011 RTS four strategic alternatives were identified by the DRD. The strategic alternatives selected for consideration represented different approaches to the development of the transport system for the region. The alternatives need not be mutually exclusive, increasing investment in the strategic roads network could be undertaken in conjunction with increased investment in public transport for example. However each alternative does provide a different direction or emphasis and it was this which was considered when the alternatives were assessed. Four alternatives were chosen by the policy authors. These were:

- Alternative 1: Maintain the existing RTS;
- Alternative 2: Increase public transport investment (both bus and rail);
- Alternative 3: Increase strategic roads investment;
- Alternative 4: Introduce other measures such as demand management (e.g. congestion charging or multiple occupancy vehicle/freight only lanes) to influence the usage of the transportation network.

Each alternative was assessed against the SEA Objectives with the first, 'Maintain the Existing RTS', being the subject of a full assessment made possible by having a fully formed document to consider. The remaining alternatives which were not supported by detailed documentation were subject to a higher level assessment. The results of the alternatives assessment are set out within the Environmental Report at Appendix D.

What are the key environmental impacts of the 2011 RTS?

The Revised Regional Transportation Strategy 2011 Public Consultation document has been assessed against the 16 SEA Objectives. Each objective has been designed to ask a question of the Strategy and the answer, in terms of likely significant effect, has informed the conclusion of performance and recommendations. The assessment process has been set within the wider framework of Strategic Environmental Appraisal such that the assessors have developed a prior understanding of baseline environmental conditions within the region and the environment problems which it is facing. Furthermore a review of the wider framework of plans, programmes and strategies within which the 2011 RTS will operate has influenced the development of a monitoring framework and the identification of likely cumulative effects.

The conclusions reached through the SEA process are that the revised approach to transportation at a regional level, which is to concentrate upon improvements in the efficiency of existing networks, has the potential to mitigate certain existing environmental problems. It should have broadly positive benefits. The incorporation of Strategic Outcomes to address climate change, promote social inclusion and protect biodiversity for example recognise the wider impacts that



transportation can have upon the environment and the means by which a change in policy direction can improve current environmental conditions.

A lack of a commitment to significant levels of new infrastructure to serve certain, more isolated parts of the region may restrict economic development, and hence affect environmental receptors classified as material assets and human health. However there are also likely benefits in terms of landscape and biodiversity protection and in the maintenance of existing levels of air quality. The 2011 RTS approach which is to look for lower level intervention measures such as improvements to public and demand responsive transport can still improve accessibility and connectivity within these parts of the region.

What are the Key Recommendations?

Recommendation	Predicted Environmental Effect
General Recommendations	
The 2011 RTS should set out an over-arching intention to reduce the need to travel by referencing integration with the RDS and the suite of policies contained within both documents which seek to promote the provision of local facilities.	Policy support based around reducing the need to travel will lead to reductions in emissions to atmosphere improving air quality and mitigating climate change. This will have indirectly beneficial environmental effects upon biodiversity, cultural heritage, landscape, human health and material assets.
The 2011 RTS should consider the identification of a target related to a change in the future modal split away from private motor vehicles to more sustainable forms of transport.	Greater use of sustainable transport modes will deliver environmental benefits similar to that set out above.
Objectives	
Objective 1 Improved connectivity within the region: Ensure that improvements to connectivity are focussed towards public transport in order to tempt current car drivers onto buses and trains which are more energy efficient.	Greater patronage of public transport at the expense of the private car could reduce congestion along main connecting routes reducing noise and air emissions, indirectly improving human health..
Objective 4: Improve access in our towns and cities: In addition to public transport, reference the importance of walking and cycling as means of improving accessibility.	Better walking and cycling routes will encourage a modal shift from the car thereby reducing congestion and pollution. Indirect improvement to human health.
Objective 5: Improve access in rural areas: Greater encouragement to walking and cycling in rural areas could be given through the creation of a 'Quiet Lanes' initiative.	'Quiet lanes' concept would deliver environmental benefits to landscape, biodiversity and cultural heritage receptors.
Objective 6 Improved connections to key tourism sites: access improvements for public transport and other sustainable transport modes should be prioritised over the use of the car. Reference should be given to the importance of ensuring that the wider environmental impacts upon a key tourism site, as a result of improved connections, are identified and considered prior to the implementation of such as scheme.	Mitigates potentially adverse effects arising from infrastructure improvements to the landscape and biodiversity.
Objective 7 Improved safety: Expand the text to the Objective to include recognition of the importance of safety for the travelling public with regard to well lit and designed transport terminals and interchanges, together with an aim to maintain or improve safety on buses and trains. Explicit reference of safety for cyclists, horse rides and walkers would be positive.	Supports human health and the quality of the built, potentially historic, environment.
Objective 8 Improved Social Inclusion: Reference could be made to a presumption in favour of sustainable modes of transport when improving transport networks. Recommend use of the word 'Enhanced' as opposed to 'Improved'.	Sustainable modes produce fewer emissions thereby benefiting air quality, noise and amenity, supporting human health. Also potential indirect positive effects upon the historic environment where congestion may be adversely affecting the character of historic areas.



Policy	
Introduction of more park and ride facilities: The location of the facilities should be informed by environmental studies whilst the surface water run-off from the potentially sizeable parking areas should be attenuated.	Attenuation protects the water environment.
Promotion of walking and cycling: Consideration should be given to the implementation of a 'Quiet Lanes' initiative.	'Quiet lanes' concept would deliver environmental benefits to landscape, biodiversity and cultural heritage receptors.
Restricting car parking in towns and cities: Initiatives to restrict car parking must be accompanied by high quality sustainable alternatives to access the centres otherwise it may have negative economic and social consequences.	Sustainable alternatives to the car improve air quality, support improvements in human health and can improve townscape quality also.
Maximising the efficient use of all transport assets: Reference to the importance of integrating transport networks with land use planning would be appropriate.	Integration with land-use planning ensures that new development is well served by high quality public transport, walking and cycling provision as well as the private car. This provides opportunities to lower transport emissions with environmental benefits for air quality, human health, biodiversity and cultural heritage.
Undertake selective road improvements to address bottlenecks: Any improvements to address bottlenecks must only be brought forward within a wider suite of sustainable transport initiatives. Furthermore individual schemes must be the subject of environment impact assessment which should include consideration of alternatives.	Addressing bottlenecks by relief roads alone may increase the number of journey by car. Alternative measures such as a public transport could provide greater environmental benefits.
Ensure the use of environmentally sensitive materials and methods in transportation schemes: There are opportunities to broaden this policy to reference sustainable procurement and to promote roads as wildlife corridors. Furthermore explicit reference could be given to the importance of using traditional materials in historic areas although it is recognised that the policy references materials appropriate to surroundings.	Positive environmental effects upon the landscape and biodiversity. Townscape improvements, particularly in historic areas.

But will the 2011 RTS make a difference?

The Environmental Report recognises that there is a need to monitor the impact of the 2011 RTS on the environmental resources of the region. It suggests a number of environmental issues which should be monitored. This will allow the DRD to identify whether the health of the environment is improving or worsening, possibly as a result of the Strategy and in this way it will enable amendments to be made to the document and the policies contained within it. The Environmental Report identifies a number of potential targets with indicators for monitoring, many of which are taken from existing regional strategies. They include a recommendation to support the meeting of objectives for key pollutants in the Air Quality Strategy, an encouragement in the use of recycled aggregates, an increase in the number of journeys made by sustainable modes of transport and a reduction in the number of people killed or seriously injured on Northern Ireland's roads. The full list is contained within the Environmental Report.

How do I provide my comments?

The Strategy and the accompanying Environmental Report are subject to public consultation until 28 June 2011. Any comments that you may wish to make on either document should be sent to:

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