Environmental Report

Draft Local Transport Strategy
Strategic Environmental Assessment (SEA)
Environmental Report

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April 2010
7005

the **moray** council

CONTENTS

1.0   INTRODUCTION

The Moray Council is currently preparing its Second Local Transport Strategy to update the First LTS adopted in 2001. The Second Local Transport Strategy will set out the Council's vision, objectives, and action plans to address transport issues going forward.

Moray council have been working in partnership with key stakeholders and the Community in the development of the second Strategy since 2007. The Draft LTS also reflects a process of ongoing consultation with Statutory Consultees including SNH, Historic Scotland and SEPA.

1.1   Draft Local Transport Strategy

The LTS sets out a clear vision and strategic objectives for transport in Moray and will inform the Council's transport investment for the term of the strategy and beyond.

The LTS has to work in harmony with a hierarchy of other Plans, Programmes and Strategies (PPS) including (but not limited to):

- National Planning Framework (NPF2), 2008
- National Transport Strategy, 2006
- Moray Development Plan (Structure Plan, 2007 and Local Plan, 2008)
- Hitrans Regional Transport Strategy 2007

The development of the LTS has had to consider the key planning and policy documents and changes that have arisen since the publication of the 2001 LTS. A more detailed review of linkages to other PPS is provided in Chapter 4 of this report. The LTS comprises a number of components (Vision, Key Objectives, Sub-Objectives and Action Plans) and these have been assessed through the SEA Process to ensure that environmental considerations are taken into account and that adverse impacts on environmental assets are avoided and/or mitigated where required.

1.2   Purpose of this Report

This Environmental Report presents the findings of a Strategic Environmental Assessment (SEA) of the Draft Local Transport Strategy. The SEA aims to integrate environmental considerations into the decision making process for the Strategy. It assesses the environmental effects of the proposed Strategy and identifies opportunities to mitigate any adverse environmental effects.

This report contains the following information:

- Non Technical Summary
- Key facts about the PPS
- Introduction to outline purpose of SEA in relation to the Local Transport Strategy
- Details of the consultation process
- Assessment of Local Transport Strategy in relation to other plans, programmes and strategies
- Environmental Baseline – Current environmental issues and opportunities within the Strategy area
- Details of alternatives to the current Local Transport Strategy
- Proposals for monitoring of environmental impacts following adoption of the Local Transport Strategy

1.3 Study Area

The region of Moray is in the north east of Scotland bordered by Highland to the west and Aberdeenshire to the south and east. The northern boundary is contiguous with the coastline of the North Sea.

The majority of Moray's 86,750 population live in and around the towns of Elgin, Forres, Keith, Buckie and Lossiemouth, each with its own strong local identity.

Moray connects with other parts of Scotland, Europe and beyond through the trunk road and rail networks. The two trunk roads in the area are the A96 (Aberdeen to Inverness) and the A95 (Keith to Aviemore). The Aberdeen to Inverness rail line includes stations at Elgin, Forres and Keith. The two nearest airports are Inverness and Aberdeen. The Study Area is shown in Figure 1.1

Baseline environmental information for Moray is provided in Chapter 5 of the Environmental Report.

The Moray region benefits from high quality physical attributes. The Local Transport Strategy in its current form has considered the environment through its vision, objectives and Action Plans. The environmental baseline provides a benchmark for the current environmental 'capacity' of the Strategy area and will inform any monitoring and future plan updates.

1.4 Key Facts

Table 1: Key Facts

Name of Responsible Authority	The Moray Council
Reason for Strategy	Updating current LTS in accordance with Scottish Government guidance.
Strategy Subject	Transportation
Period Covered by Strategy	2010 and beyond
Frequency of Updates	Annual strategic review and full review as required.
Strategy Area	Moray Council local authority administrative area
Strategy Purpose	The LTS Vision seeks to enhance the transport system within Moray region whilst recognising the need to protect environmental assets: *'Excellent connections and accessibility are achieved for Moray through a safe, integrated, reliable and affordable transport system that is inclusive and supports economic development and the needs of local communities whilst safeguarding the environment'*
Key Contact	Richard Gerring, Senior Engineer (Transport Development) The Moray Council Academy Street Elgin IV30 1LL Tel: 01343 562551

1.5   Strategic Environmental Assessment (SEA)

A Strategic Environmental Assessment is required under the Environmental Assessment (Scotland) Act 2005 to assess the likely significance of environmental effects of public sector Plans, Programmes and Strategies (PPS).

The Environmental Report presents the findings of a Strategic Environmental Assessment (SEA) of the Draft Local Transport Strategy. The SEA of the LTS aims to integrate environmental considerations into the decision making process for the Strategy.

The Environmental Report identifies and addresses potential adverse environmental effects of the vision, objectives and action plans that form the Strategy.

There are a number of stages of SEA as shown in Table 2 below:

Table 2: Summary of SEA Stages

SEA Stage	SEA Process
Screening	Determines whether an Strategic Environmental Assessment is required under the Environmental Assessment (Scotland) Act 2005.
Scoping	Identification of the environmental issues to be addressed, the scope and the level of detail required for presentation within the scoping report. This report includes the proposed SEA and Strategy Objectives for comment and review. The scoping report is submitted to the Consultation Authorities (CA's) – Scottish Natural Heritage (SNH), Historic Scotland (HS) and Scottish Environment Protection Agency (SEPA).
Consultation - Scoping	The Consultation Authorities (CA's) must provide a response on the scoping report via the SEA Gateway within 35 days of receipt. The CA's advice on the scope of the Environmental Report and confirm the timescale for consultation on the Environmental Report.
Environmental Report	The Local Transport Strategy is assessed against the SEA Objectives and Indicators. These objectives and indicators are refined as part of the SEA Scoping report and have been further developed in view of the baseline information gathered. The Environmental Report includes details of any proposed mitigation and monitoring required.
Consultation - Environmental Report	The Consultation Authorities will provide a response on the Environmental Report and Draft LTS via the SEA Gateway within 8 weeks of receipt. The CA's will advise on the content of the Environmental Report and the acceptability of the LTS objectives and actions. This consultation will include public consultation (also an 8 week period).
Review of Consultation responses and Adoption	The Local Transport Strategy and the Environmental Report will be finalised taking into account the consultation responses. The Transport Strategy will be formally adopted.
Post-Adoption SEA Statement	The SEA Statement sets out any changes made to the Transport Strategy as a result of the environmental assessment. The framework for the monitoring/mitigation of the Strategy and the responsibilities for this will be set out in the Statement.

SEA Stage	SEA Process
Mitigation and Monitoring	Following adoption any mitigation/monitoring commitments would be undertaken prior to the next review of the Transport Strategy.

1.6   SEA Activities to Date

The development on the Draft of the Local Transport Strategy has gone through a number of stages to date. The timeline for SEA activities undertaken during this process are provided in Table 3.

Table 3: SEA Timeline

SEA Activity	Date	Comments
Pre-Scoping Discussions Workshop with Statutory Consultees & Moray Council	6th September 2007	Moray Council held a workshop on the 6 September 2007 to discuss and finalise the Transport Strategy and SEA Objectives. The workshop allowed changes to be made to both sets of objectives to ensure environmental issues were fully addressed in accordance with best practice. The Strategy vision and objectives were checked to ensure environmental issues are considered at all tiers within the Strategy.
Scoping Report Produced	2nd October 2007	The SEA Scoping Report was produced by Ironside Farrar on behalf of The Moray Council as the Responsible Authority for the Strategy.
SEA Scoping Report Produced	2nd October 2010	SEA Scoping report submitted to the SEA Gateway for the Statutory 35 day consultation period.
Review of Responses to Scoping	On receipt following 35 day consultation on scoping (November 2007)	The Environmental Report reviewed the comments of the Consultation Authorities and stakeholders and these have been addressed in the Environmental Report.
Review of Amendments to the Draft Transport Strategy	March 2010	Ironside Farrar reviewed the changes made to the Draft Local Transport Strategy.
Production of the Draft Environmental Report (this report)	March – April 2010	The Draft Local Transport Strategy has been assessed against the SEA Objectives and Indicators. Mitigation, environmental enhancement and monitoring are detailed.

1.7   Future SEA Activities

The next stages in the development of the Transport Strategy and the accompanying SEA are set out in Table 4 below. A more detailed timetable on 'next steps' and 'consultation' are provided in Section 8 of this report.

Table 4: Future SEA Activity

SEA Activity	Proposed Dates	Comments
Consultation (Environmental Report)	8 week consultation period 30 April to 25 June 2010	The Consultation Authorities will provide a response on the environmental report and Draft Local Transport Strategy via the SEA Gateway within the 8 week period of consultation agreed at scoping stage. The CA's will advise on the content of the Environmental Report and the acceptability of the PPS and proposals. This consultation will include public consultation.
Adoption	August 2010	The Draft Local Transport Strategy and the Environmental Report will be finalised taking into account the consultation responses. Any amendments to the Environmental Report will be made at this point. A summary of the changes made will be provided in the SEA Statement.
Post-Adoption SEA Statement	August 2010	The SEA Statement sets out how the consultation responses and the conclusions of the environmental assessment have been taken into account during the development of the Strategy, and any mitigation and/or monitoring required. The monitoring framework and mitigation for environmental impacts of Strategy implementation will be included in the Statement.

1.8 Consultation on the Environmental Report

Statutory Consultation – SNH, SEPA, HS

In accordance with Section 15 (3) of the Environmental Assessment (Scotland) Act, The Moray Council wrote to the Scottish Ministers to request an 8 week Statutory Consultation period on the consultation period on the Draft Strategy and accompanying Environmental Report.

Statutory responses (Scottish Ministers/ Historic Scotland/ SEPA and SNH) should be submitted via the SEA Gateway:

SEA Gateway Officer
SEA Gateway
Scottish Executive
Area 1 H Bridge
Victoria Quay
Edinburgh
EH6 6QQ
Email: SEA.gateway@scotland.gsi.gov.uk

This consultation period has been confirmed as acceptable to the Consultation Authorities (CA's) in their responses to the Scoping Report.

Public Consultation

The publication of the Environmental Report will also include a Statutory 8 week period of public consultation when the documents may be inspected at all reasonable hours at the following Moray Council Access Points:

• Buckie Access Point: 13 Cluny Square, Buckie, AB56 1AJ
• Elgin Access Point: Council Offices, High Street, Elgin, Moray, IV30 1BX
• Forres Access Point: Auchernack, High Street, Forres, IV36 1DX
• Keith Access Point: The Institute, 138-140 Mid Street, Keith, AB55 5BJ

The documents and response form can also be accessed on-line at the following address:

www.moray.gov.uk/ltsthirdstage

The public consultation will run from the 30th April 2010 to 25th June 2010.

Any person who wishes to make representations to Moray Council about the Environmental Report or the Draft Local Transport Strategy should make them in writing within the dates above using the online form provided to the Council at:

Email: transport.develop@moray.gov.uk

Completed postal forms and any queries should be directed to:

Richard Gerring, Senior Engineer (Transport Development)
The Moray Council
Academy Street
Elgin IV30 1LL

Tel: 01343 562551

1.9 Consideration of Responses

All responses received from the statutory consultees and the public will be recorded, analysed and considered. The SEA Statement produced for the adopted Strategy will set out how the LTS has taken into account the comments received.

2.0 STRATEGIC ENVIRONMENTAL ASSESSMENT METHODOLOGY

The Environmental Assessment (Scotland) Act 2005 sets out the requirements for the production of the Environmental Report in Section 14 and Schedule 3 but does not set specific methodology for undertaking the assessment. This section of the environmental report describes how the assessment of the Local Transport Strategy has been conducted. The results of the assessment are summarised in Chapter 6 and detailed assessment matrices in Appendix 3.

2.1 Approach to SEA

The SEA needs to positively address and demonstrate an awareness of the balance of protecting, managing and directing change in a way that recognises the dynamic relationship that connect people, place and environment.

Environmental assessment adds value to the Strategy making process through the following:

- Integrating environmental considerations leads to better plan making i.e. can improve the plan making process
- Ensuring environmental impacts are identified early in the plan making process and enabling plan modifications
- Identifying opportunities for promotion of environment through enjoyment of the outdoors and natural places and spaces
- Recognition of the benefits of the plan through assessment against environmental objectives and indicators
- Monitoring of the plan implementation will improve future plan development

2.2 SEA Guidance

The proposed methodology follows the guidance from the Scottish Government on undertaking SEA in addition to other available information sources:

- Environmental Assessment (Scotland) Act 2005
- Scottish Executive SEA Toolkit, September 2006
- Thereivel, R., 'Strategic Environmental Assessment in Action' Earthscan Publications Ltd, 2004.

2.3 Additional Information Reviewed

Additional information reviewed as part of the SEA Environmental Report includes the following:

- Feedback from different stakeholder's following the Stakeholder Workshop – September 2007
- Consultation Authorities responses to the SEA Scoping Report (November 2007)
- Ongoing liaison with LTS team and Consultation Authorities

2.4 Scoping of the Environmental Report

The report will take the form advised in the Scottish Executive SEA Templates. It is recommended within the SEA guidance that the following areas of potential impacts are assessed:

- Biodiversity and Nature Conservation
- Population & Human Health

- Geology, Geomorphology and Soils / Land Use
- Water Quality
- Air Quality;
- Climate
- Material Assets
- Cultural Heritage
- Landscape & Visual

The SEA also needs to consider the potential for secondary, cumulative or synergistic impacts associated with the Strategy and the inter-relationships between factors such as economic issues, landscape quality, and cultural factors.

Following the Stakeholder Workshops, it was suggested that an additional SEA Objective – Quality of Life was added to the assessment to provide an overall view of how the implementation of various components of the Strategy would affect people living in Moray.

2.5   SEA Topics Scoped In/Out

In accordance with Schedule 2 of the Environmental Assessment (Scotland) Act 2005, the Moray Council has considered whether the environmental effects (both positive and adverse) of the Draft Transport Strategy are likely to be significant. Those SEA issues not thought to be affected by the Strategy have been scoped out, whilst those where environmental impacts are likely have been scoped in.

Table 5: Scoping Matrix

SEA Topic	Scoped In or Out?	Are Consultation Authorities in Agreement?
Biodiversity, Flora and Fauna	✓	Yes
Population & Human Health	✓	Yes
Soil	✓	Yes
Water	✓	Yes
Air Quality	✓	Yes
Noise and Vibration	✓	Yes
Climate	✓	Yes
Material Assets	✓	Yes
Cultural, Archaeological and Architectural Heritage and Townscape	✓	Yes
Landscape and Visual	✓	Yes
Quality of Life	✓	Yes

All of the Consultation Authorities were in agreement that the scope proposed for the environmental report was acceptable.

2.6 SEA Objectives

The SEA objectives for those SEA Topics that have been 'scoped-in' are shown in Table 6 below.

Table 6: SEA Objectives

SEA Topic	SEA Objective
Biodiversity & Nature Conservation (Flora & Fauna)	• To protect natural environment with particular emphasis on protected sites and species (Local, National and European) and to conserve the existing environment through enhancement schemes, mitigation and compensatory measures where necessary. • To promote people's enjoyment, understanding and appreciation of the natural heritage need for its protection.
Population & Human Health	• Promote accessibility, health, and prosperity and quality of life benefits through an integrated and enhanced local transport strategy through sustainable development.
Geology & Soils	• To protect and enhance the quality of the ground environment and promote the sustainable use of local materials and Brownfield sites.
Land Use	• Minimise land take and impacts on protected sites and/or changes of land use that may have negative impacts to the environment. Promotion of sustainable transport land use planning.
Water	• To protect and enhance the quality of the water environment within Moray including surface and groundwater features in addition to the North Sea coastline and the protected marine environment of the Moray Firth SAC. Areas designated as floodplains should be maintained to ensure floodwater attenuation is not affected.
Air Quality	• To protect and enhance the quality of local air quality in Moray and to ensure that emissions are below National Air Quality Standards and thus air quality objectives are met.
Noise & Vibration	• To minimise noise and vibration nuisance and protect residential properties and sensitive receptors from excessive noise and vibrations levels in the Moray Region
Climatic Factors	• To contribute to a sustainable transport infrastructure to reduce emissions from road and rail, helping to achieve National Targets for reduction in greenhouse gas emissions. Infrastructure proposals should be mindful of the effects of climate change on the network e.g. flooding, landslides etc.
Material Assets	• To improve, integrate and enhance the local transport network in Moray to benefit the economy of the Moray Region whilst maintaining sustainable principles.
Cultural Heritage	• To protect and, where appropriate, enhance the historic environment
Landscape	• To protect and, where appropriate, enhance the landscape and visual amenity of the Moray Region.
Quality of Life	• To protect and enhance the quality of life of Moray communities and visitors.

2.7   Assessment Methodology

Each of the components of the Strategy (Vision, Objectives, Sub-Objectives and Actions) has been assessed against the SEA Objectives. Chapter 6 summarises the Environmental assessment of the Draft Local Transport Strategy. The detailed assessment matrix is provided as Appendix 3.

Symbol	Description of Impact
✓✓✓	Significant positive Impact
✓✓	Moderate positive environmental impacts
✓	Minor positive environmental impacts
=	Neutral or No Environmental Impact
✗	Minor negative environmental impacts
✗✗	Moderate negative environmental impacts
✗✗✗	Significant Negative Impact
?	Uncertain Environmental Impact
N/A	Not Applicable – no relationship with SEA Objective

The assessment presented (summary and detailed assessment in Appendix 3) represents the overall residual impact for implementation of the Draft Transport Strategy assuming specific mitigation (where required) and generic overall mitigation is applied as necessary.

2.8   Issued Raised by Statutory Consultees - Scoping Report

The Consultation Authorities (CA) were provided with copies of the Scoping report for the Draft Local Transport Strategy which detailed the likely scope of the environmental assessment of the Strategy. Appendix 1 of this report describes how the responses from the CA's have been taken into consideration during the production of the Draft Transport Strategy and the Environmental Report.

3.0 LOCAL TRANSPORT STRATEGY IN CONTEXT

3.1 Current Local Transport Strategy

The Second LTS has been prepared in accordance with the Scottish Government's "Guidance on Local Transport Strategies". The Draft LTS builds on the previous LTS published in 2001.

Since the previous LTS was published, there have been a number of significant changes that determine how transport network and services are planned and delivered.

The LTS has to work in harmony with a hierarchy of Transport Plans including (but not limited to):

- National Planning Framework (NPF2), 2008
- National Transport Strategy, 2006
- Moray Development Plan (Structure Plan, 1999 and Local Plan, 2000)
- Hitrans Regional Transport Strategy 2007

The Draft LTS also has to consider the key planning and policy documents and changes that have arisen since the publication of the 2001 LTS.

3.2 LTS Vision

The LTS Vision seeks to enhance the transport system within Moray region whilst recognising the need to protect environmental assets:

'Excellent connections and accessibility are achieved for Moray through a safe, integrated, reliable and affordable transport system that is inclusive and supports economic development and the needs of local communities whilst safeguarding the environment'

3.3 LTS Key Objectives

The Key Objectives provide a framework for progress at a local level and provide a basis for the LTS. These also include for environmental protection:

No.	Objective
K1	Support and enable economic development through a sustainable transport infrastructure
K2	Promote safer, inclusive and affordable travel for all
K3	Maintain and improve the existing transport infrastructure to enable an effective and reliable transport network;
K4	Improve accessibility to jobs, services and facilities;
K5	Increase sustainable travel choices to promote travel behaviour change and reduce the need for car use and the environmental impact associated with transport and health;
K6	Promote integration across different modes, policies and land-use planning.

3.4   LTS Sub Objectives

No.	Objective
S1	Support the improvement of connections (road, rail, sea and air) to the rest of Scotland, the UK and Europe
S2	Develop solutions to traffic safety and capacity problems within Moray and work with the Scottish Government, developers and others to minimise predicted problems;
S3	Support good quality and affordable public transport systems and where appropriate provide and maintain a network of socially desirable bus services to supplement the commercial network;
S4	Review the role of Moray harbours;
S5	Ensure adequate car parking provision to meet the need of communities;
S6	Support improvements to passenger and freight rail services;
S7	Work with others to reduce additional transport costs related to Moray's location in Scotland, the UK and Europe;
S8	Encourage less car dependent forms of transport and where appropriate encourage road traffic reduction, walking, cycling and other active travel initiatives;
S9	Work with others to improve transport infrastructure related to recreation and tourism;
S10	Support access to the countryside and well being initiatives.

3.5   LTS Actions

The delivery principals of the Draft Local Transport Strategy are set out in a number of Action Plans and Actions:

- Active Travel
- Public Transport
- Ports and Harbours
- Roads
- Freight Transport
- Travel Behaviour
- Traffic Management

3.6   Compatibility of Local Transport Strategy Components with SEA Objectives

The compatibility of the components of the Local Transport Strategy has been checked against the SEA Objectives to ensure that the environment is considered at all tiers within the plan making process.

Element of LTS	Question Asked	Answer & Amendments made
LTS Vision	Does the LTS Vision include environmental protection?	Yes – environment considered.
LTS Key Objectives	Do the LTS Key Objectives include environmental protection?	Yes – environment considered.
LTS Sub Objectives	Do the LTS Sub Objectives include environmental protection?	Yes – environment considered.
LTS Actions	Do the LTS actions themselves minimise impacts whilst incorporating good practice	Yes –Actions have been further assessed by the SEA and mitigation/monitoring and environmental enhancement commitments detailed.

Overall, there is compatibility between the components of the Strategy with the SEA Objectives.

3.7   Modifications to LTS to Date

A number of changes have been made to produce the Local Transport Strategy in response to the initial consultation exercise undertaken during 2007.

3.8   Alternatives to the Current Local Transport Strategy

It is a statutory requirement of SEA to consider alternatives to achieve the strategic vision and objectives of the Moray LTS. Section 14(2) of the Environmental Assessment (Scotland) Act 2005 states that *'the report shall identify, describe and evaluate the likely significant effects on the environment of implementing …b) reasonable alternatives to the plan or programme taking into account the objectives and the geographical scope of the plan or programme'*.

A number of scenarios have been considered during the preparation of the Strategy including a baseline scenario. These Scenarios were developed during stakeholder workshops held in 2007.

The Scenarios include:

- Scenario1 - Maintain current level of commitment (Baseline)
- Scenario 2 - Do minimum
- Scenario 3 - Focus on Road Safety
- Scenario 4 - Focus on Mode Change
- Scenario 5 - Focus on Main Settlements and Strategic Transport Corridors
- Scenario 6 - Road Based
- Scenario 7 - Integrated Transport – Invest to improve access across modes

Strategy Scenario 1 – Maintain current level of commitment (Baseline)
This would essentially represent business as usual and provide a benchmark of the existing infrastructure in Moray and a baseline against which to compare other scenarios. It would be based on maintaining the existing policies of the First Moray Local Transport Strategy and continued support for committed projects without changes to current resources or funding.

Strategy Scenario 2 – Do minimum
This would represent a reduction in existing services and funding to only provide additional transport schemes and investment required to enable Moray Council to meet existing statutory requirements and the minimum level of service provision. The Do-Minimum scenario would inevitably lead to a reduction in services and is therefore unlikely to meet the needs of Moray or receive public support.

Strategy Scenario 3 – Focus on Road Safety
Investment based on accident data and/or police incident reports would lead to enhancements of the road network and walking and cycling environment. However, concentration on road safety is unlikely to allow maximum benefits to be realised across all objectives.

Strategy Scenario 4 – Focus on Mode Change
Investment and service provision would be concentrated on promoting and enhancing sustainable travel modes such as walking, cycling and public transport with investment in road based infrastructure limited to the maintenance of the existing local and trunk road network. There would be increased investment in the provision of facilities for cyclists and pedestrians within settlements, together with the development of the public transport network and improved publicity and provision of information. As well as investment in individual modes, promotion of mode change would also require support through demand management initiatives, for example higher parking charges and extension of restricted parking zones.

Strategy Scenario 5 – Focus on Main Settlements and Strategic Transport Corridors
Policy would focus on the main settlements of Elgin, Keith, Buckie, Forres and Lossiemouth and the key transport corridors in Moray – the A9/A95 to the south; A96 to the east and west and A941 within Moray. Key issues with the strategic road network include poor road safety, congestion on approaches to and through urban areas, poor journey times and reliability and lack of sustainable alternatives to the private car. Under this scenario there would be investment across different modes to improve travel opportunities in the main settlements and address key problems on the strategic road network.

Strategy Scenario 6 – Road based
Policy would be focused on increasing capacity on existing roads and providing sufficient infrastructure to accommodate predicted growth in traffic and vehicle numbers. There would be limited development of demand management measures and investment in other modes such as walking, cycling and public transport would only result following accommodation of private motorised transport.

Strategy Scenario 7 – Integrated Transport – invest to improve across modes
Essentially this scenario would provide a balanced framework and the basis for investment and development across different modes. Investment in walking, cycling and public transport would be complemented by demand management and targeted road investment to address key areas of congestion and provide essential linkages and upgrades to the existing network.

It was agreed that overall, a balanced package of measures would provide the most effective policy framework and therefore Scenario 7 (Integrated Transport – Invest to improve across modes) performs best against the different appraisal criteria., as well as meeting the objectives set for local transport and SEA objectives. A full assessment against the SEA Objectives is provided in Appendix 3.

4.0   RELATIONSHIP WITH OTHER PLANS, PROGRAMMES AND STRATEGIES

Schedule 3 (1) of the Environmental Assessment (Scotland) Act 2005 requires that this Environmental Report includes an outline of the relevant Plans, Programmes and Strategies (PPS) of relevance to the Local Transport Strategy. Key Linkages with PPS are shown in the table below:

Table 7: Relevant Plans, Programmes and Strategies

PPS	Comments
National Planning Framework 2	The second National Planning Framework (NPF2) sets out the long term spatial strategy for Scotland's development to 2030. Includes transport interventions.
Moray Structure Plan (adopted 2nd April 2007) and Moray Local Plan (adopted in December 2008)	Details land use planning policy relative to transport.
Moray Community Planning Partnership Single Outcome Agreement 2009-2010	Details the strategic priorities for the Moray region and identifies the outcomes which will be delivered by the partners either individually or jointly, and shows how those outcomes will contribute to the Scottish Government's relevant national outcomes. Roads / Transport - Addressing the transport infrastructure and encouraging sustainable travel is a key priority for 2009-2010.
National Transport Strategy 2006	The National Transport Strategy was published in December 2006 and seeks to deliver Improved Journey Times and Connections, reduced emissions and Improve Quality, Accessibility and Affordability.
Strategic Transport Projects Review (STPR)	Transport Scotland has undertaken the STPR to define the most appropriate strategic investments in Scotland's national transport network from 2012 to 2022
Regional Transport Strategy for the Highlands and Islands	The Regional Transport Strategy (RTS) is a statutory plan that sets out the objectives and a programme of action to improve transport in the HITRANS area: Moray, Argyll and Bute, Highland, Orkney and the Western Isles. The RTS was approved by the Scottish Government, following modifications, in 2008.
Moray Road Safety Plan	Moray Road Safety Plan 2008-2010 seeks to continue to improve road safety in Moray and contribute to the national road safety targets.
Moray Core Paths Plan	The Core Paths Plan was published in 2009, as a statutory requirement of the introduction of the Land Reform (Scotland) Act (2003) and sets out a framework of objectives with the purpose of giving the public 'reasonable access throughout the local authority area'.

These PPS have informed the development of the Local Transport Strategy. More detailed assessment of the LTS development is provided within Chapter 4 of the Local Transport Strategy Report.

5.0   ENVIRONMENTAL BASELINE INFORMATION

5.1   Environmental Baseline Summary

Schedules 3 (2) and (3) of the Environmental Assessment (Scotland) Act 2005 requires that the aspects of the environment likely to be significantly affected by the Strategy are identified.

5.2   Summary of Environmental Baseline

Table 8 Environmental Baseline
(see Local Transport Strategy (Jacobs, 2010) for additional detail on the transport baseline)

SEA Topic	Issues
Biodiversity (Fauna and Flora)	• The region benefits from a wealth of natural heritage including sites and species designated for their importance including 275 of the nationally listed species of conservation concern (21%) and 45 (73%) of the habitats of conservation concern found in Moray. • There are a wealth of designated sites within Moray including European designated sites (SAC and SPA), Nationally designated sites (SSSI) and locally important sites designated in the Development Plan (SINS)
Population and Human Health	• The population of Moray in 2008 was 87,770[1], a figure that has remained fairly static since 2001. Around 20% of the population is under 16 years of age and 19% is of pensionable age. In 2008, there were 38,815 households in Moray giving an average household size of 2.26 people compared to 2.22 people per household in Scotland. • Moray already has a relatively high level of travel to work trips by cyclists and pedestrians. 4% of trips to work are by cycle and 25% of trips are on foot in Moray. In Elgin, 5% of trips to work are by cycle and over 30% of trips are on foot[2] • There is currently a shortage of recreational facilities in Moray with an increase in popularity of sports and fitness in the region.
Air	• Due to the rural nature of the Moray region there is a high dependency on the use of the private car. This can have a negative impact on the air quality of the Moray area. Moray Council has not declared a Local Air Quality Management Area (LAQM).
Water	• Flooding is a significant issue within the Moray region. 1997, 2002 and 2009 saw severe flooding impact transport links in addition to homes and businesses. Rothes, Lhanbryde, Elgin and Forres were particularly badly affected. Flood Management and Protection schemes have been development and are at various stages from completed schemes to those still in the planning process. • There are six harbours in Moray, two of which are commercial ports while the others are leisure facilities. Dredging is carried out at the commercial ports.
Climate	• The high levels of car use in the region contribute to local air quality issues and increased emissions levels. In 2001, there

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[1] General Register for Scotland
[2] Elgin Active Travel Audit, 2009

SEA Topic	Issues
	was an average of 1.09 cars per household, compared to an average of 0.93 cars per household in Scotland[3]. • Elgin, Keith and Fochabers/Mosstodloch have congestion issues contributing to local emissions concentrations • Flooding also affects parts of Moray – see entry under Water.
Cultural Heritage	• Moray benefits from a significant number of sites of cultural heritage interest. These include Listed Buildings, Conservation Areas and Historic Gardens and Landscapes. There has been an increase in the number of archaeological sites recorded.
Landscape	• The Moray region benefits from high quality landscape. There are a number of development pressures on landscape quality e.g. renewable energy developments. • Landscape designations include the Cairngorms National Park and Cairngorms National Scenic Area, 7 Areas of Great Landscape Value, a Coastal Protection Zone and several Historic Gardens and Landscapes.
Material Assets	• The Moray region has the lowest average wage levels in Scotland and the majority of the population are employed in the public administration/food and drink and defence sector. • Large employers in the region include food and whisky producers and the RAF bases at Lossiemouth and Kinloss. Large areas of Moray are in the ownership of a small number of private landowners • Moray has a high level of rural primary industries, creating additional pressure on the road and bridge infrastructure from heavy goods and farm vehicles

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[3] Scottish Transport Statistics

6.0 ASSESSMENT OF THE ENVIRONMENTAL EFFECTS OF THE DRAFT LOCAL TRANSPORT STRATEGY

6.1 Introduction

The purpose of the SEA assessment is to highlight any parts of the Strategy which have the potential for significant environmental impacts (both positive and negative). The SEA then proposes mitigation to reduce these impacts (See Chapter 7). This process ensures that environment is a key consideration within the plan making process.

6.2 Assessment of the Draft Local Transport Strategy

A summary of the assessment of the Strategy as a whole against the SEA Objectives is provided in Table 10 below. The full assessment matrix for each component of the Strategy (Vision, Key Objectives, Sub Objectives and Actions) is given in Appendix 3.

A Natura Assessment of the Strategy relative to potential impacts on European sites designated for their importance for nature conservation is provided as Appendix 4.

Table 9: Assessment Summary of Local Transport Strategy

SEA Topic	SEA Objective	Likely Significant Impact?	Comments
Biodiversity & Nature Conservation (Flora & Fauna)	• To protect natural environment with particular emphasis on protected sites and species (Local, National and European) and to conserve the existing environment through enhancement schemes, mitigation and compensatory measures where necessary. • To promote people's enjoyment, understanding and appreciation of the natural heritage need for its protection.	?/✓	• There is a commitment within the Strategy to protection of the environment and this is highlighted within the Vision, Objectives and Actions. The assessment of the Strategy has indicated any potential conflicts between the Strategy and the protection and enhancement of biodiversity within Moray – mitigation has been recommended where required. Overall there are no known significant adverse impacts to biodiversity as a result of the Local Transport Strategy. No modifications to the Strategy itself are required. Further assessment of detailed proposals may be required e.g. where there are physical interventions or for large scale infrastructure projects. • An Appropriate Assessment of the Strategy with respect to European protected sites has been undertaken and is presented as Appendix 4 of the Environmental Report. There are no likely significant effects resulting from the implementation of the Strategy. • The Strategy seeks to promote modal shift and enhanced access to footpath, bridleway and cycle networks that should also improve accessibility to and enjoyment of the outdoors within the Moray region.
Population & Human Health	• Promote accessibility, health, and prosperity and quality of life benefits through an integrated and enhanced local transport strategy through sustainable development.	✓	• The Strategy seeks to promote modal shift and enhanced access to footpath, bridleway and cycle networks that should also improve accessibility to/ enjoyment of the outdoors within the Moray region. • The Strategy will increase accessibility within the region for all user groups and seeks to maximise the integration between transport modes to reduce the need to travel by private car.

SEA Topic	SEA Objective	Likely Significant Impact?	Comments
Geology & Soils	• To protect and enhance the quality of the ground environment and promote the sustainable use of local materials and Brownfield sites.	**?** Depending on individual schemes taken forward	• The assessment of the Strategy has not identified any potentially significant impacts. Physical/engineering interventions implemented should seek to reduce land take where possible and route alignment options appraisals should consider impacts on sensitive geological resources use as part of route selection. • Further detailed assessment of individual schemes may be required where these involve significant new infrastructure or upgrades in close proximity to sensitive receptors.
Land Use	• Minimise land take and impacts on protected sites and/or changes of land use that may have negative impacts to the environment. Promotion of sustainable transport and land use planning.	**?** Depending on individual schemes taken forward	• The assessment of the Strategy has not identified any potentially significant impacts. Physical/engineering interventions implemented should seek to reduce land take where possible and route alignment options appraisals should consider impacts on land use as part of route selection. • Further detailed assessment of individual schemes may be required where these involve significant new infrastructure or upgrades in close proximity to sensitive receptors.
Water	• To protect and enhance the quality of the water environment within Moray including surface and groundwater features in addition to the North Sea coastline and the protected marine environment of the Moray Firth SAC. Areas designated as floodplains should be maintained to ensure floodwater attenuation is not affected.	**?** Depending on individual schemes taken forward	• The assessment of the Strategy has not identified any potentially significant impacts on the water environment on the assumption that Regulations/SEPA guidelines and best practice are adhered to. • Further detailed assessment of individual schemes may be required where these involve significant new infrastructure or upgrades in close proximity to sensitive receptors.

SEA Topic	SEA Objective	Likely Significant Impact?	Comments
Air Quality	• To protect and enhance the quality of local air quality in Moray and to ensure that emissions are below National Air Quality Standards and thus air quality objectives are met.	✓	• Whilst recognising the peripheral nature of Moray and the higher reliance on private car ownership, the Strategy highlights the importance of modal shift through a number of objectives, sub objectives and actions. These components/commitments of the Strategy will contribute to the governments target to reduce Greenhouse Gas emissions by 80% by 2050. • The Strategy includes commitments relative to rail freight and improved facilities at ports and harbours to reduce the level of road transportation across the region. • Further detailed assessment of individual schemes may be required where these involve significant new infrastructure or upgrades in close proximity to sensitive receptors.
Noise & Vibration	• To minimise noise and vibration nuisance and protect residential properties and sensitive receptors from excessive noise and vibrations levels in the Moray Region	? Depending on individual schemes taken forward	• The assessment of the Strategy has not identified any potentially significant noise and vibration impacts Further detailed assessment of individual schemes may be required where these involve significant new infrastructure or upgrades in close proximity to sensitive receptors.
Climatic Factors	• To contribute to a sustainable transport infrastructure to reduce emissions from road and rail, helping to achieve National Targets for reduction in greenhouse gas emissions. Infrastructure proposals should be mindful of the effects of climate change on the network e.g. flooding, landslides etc.	✓✓✓	• Whilst recognising the peripheral nature of Moray and the higher reliance on private car ownership, the Strategy highlights the importance of modal shift through a number of objectives, sub objectives and actions. These components/commitments of the Strategy will contribute to the governments target to reduce Greenhouse Gas emissions by 80% by 2050. • The Strategy includes commitments relative to rail freight and improved facilities at ports and harbours to reduce the level of road transportation across the region.

SEA Topic	SEA Objective	Likely Significant Impact?	Comments
Material Assets	• To improve, integrate and enhance the local transport network in Moray to benefit the economy of the Moray Region whilst maintaining sustainable principles.	✓✓✓	• The Strategy has a strong focus on promoting sustainable economic growth through improved connections to the rest of the UK and beyond. Key areas for investment include roads, rail, ports and harbours. • The commitment to environmental protection will ensure that any interventions taken forward during implementation of the Strategy minimise environmental impacts and adhere to environmental best practice.
Cultural Heritage	• To protect and, where appropriate, enhance the historic environment	? Depending on individual schemes taken forward	• The assessment of the Strategy has not identified any potential conflicts between the Strategy and the protection and enhancement of cultural heritage interest within Moray – mitigation has been recommended where this is required at detailed scheme level. Further detailed assessment of individual schemes may be required where these involve significant new infrastructure or upgrades. • General mitigation has been recommended in Chapter 7
Landscape	• To protect and, where appropriate, enhance the landscape and visual amenity of the Moray Region.	**?** Depending on individual schemes taken forward	• The assessment of the Strategy has not identified any potential significant conflicts between the Strategy and the protection and enhancement of landscape quality. • Further detailed assessment of individual schemes may be required where these involve significant new infrastructure or upgrades. • General mitigation has been recommended in Chapter 7
Quality of Life	• To protect and enhance the quality of life of Moray communities and visitors.	✓	• Improved transport infrastructure, access to public transport and support to committed schemes will seek to enhance quality of life within the Moray region. • Benefits likely to include reduced congestion, improved travel times, improved accessibility to rest of Scotland/UK etc • General mitigation for potential local impacts of specific Strategy components has been recommended in Chapter 7

6.3 Appropriate Assessment (Natura Assessment)

The Draft Local Transport Strategy has the potential to impact upon a number of designated sites including the following European Protected Sites:

Special Area of Conservation (SAC)	Special Protection Areas (SPA)
Cairngorms	Cairngorms
Creag Nan Gamhainn	Darnaway And Lethen Forest
Culbin Bar	Loch Spynie
Hill Of Towanreef	Moray And Nairn Coast
Ladder Hills	Tips Of Corsemaul And Tom Mor
Lower Findhorn Woods	
Lower River Spey - Spey Bay	
Moidach More	
Moray Firth	
River Spey	

European Directive 92/43/EEC (The Habitats Directive) requires competent authorities to carry out a Natura Assessment /Appropriate Assessment (AA) of plans and projects that, either alone or in combination with other plans and projects, are likely to have a significant effect on European designated sites.

The Conservation (Natural Habitats &c) Regulations, 2007 will therefore apply to the preparation of the Local Transport Strategy. The regulations require that where an authority concludes that a development proposal is likely to have a significant effect on a European site, even if the development is outwith the European site boundary, an appropriate assessment of the implications for the nature conservation interests of the site must be undertaken.

6.3.1 Assessment Summary

Potential impacts resulting from implementing the Local Transport Strategy are summarised as follows:

Special Area of Conservation – Habitats

- Direct and Indirect impacts if land take is required to implement provision of new or upgraded infrastructure
- Direct and indirect impacts on sensitive habitats resulting from increased recreational pressure and trampling of vegetation.
- Impacts arising from management/maintenance of transport infrastructure e.g. use of herbicides, erosion caused by machinery, removal of vegetation along edges of roads/rail network to maintain accessibility, contamination due to spillages of chemicals, fuel oils used by maintenance contractors.

Special Protection Area – Species

- Direct and Indirect impacts if land take is required to implement provision of new or upgraded infrastructure
- Disturbance of qualifying species of the SPA resulting from increased construction/maintenance e.g. bridge strengthening

- Impacts arising from management/maintenance of paths e.g. use of herbicides, erosion caused by machinery, removal of vegetation along edges of paths to maintain accessibility, contamination due to spillages of chemicals, fuel oils used by maintenance contractors. These factors can all damage the supporting habitats of the qualifying species.

Sites of Special Scientific Interest (SSSI)

Natura 2000 sites are often also designated nationally under the Wildlife and Countryside Act as Sites of Special Scientific Interest or SSSI. Consideration must be given to the impacts on the qualifying interests of the site as a SSSI and thus ensure that impacts are mitigated.

European Protected Species

Many of the Natura sites assessed as part of the Appropriate Assessment are also important for supporting populations of European Protected species (EPS). Impacts on EPS are considered within the AA where appropriate e.g. in relation to the River Spey SAC.

6.3.2   Mitigation required to Protect Natura 2000 Interests

Mitigation recommendations have been provided where a potential likely significant impact on a Natura site has been identified.

Modifications to the Local Transport Strategy

No modifications of the Strategy itself are required.

General Mitigation during Implementation of Strategy

General mitigation to address potential impacts on European designates sites and species is given below. Specific mitigation is presented in Appendix 4.

- SNH should be consulted on works requiring engineering works/physical interventions that could have an adverse impact on a Natura designated site (or nationally designated site).
- SNH should be consulted on the requirement for protected species surveys in certain locations e.g. where bridge strengthening is required, works on the ports and harbours etc.
- The Nature Conservation (Scotland) Act 2004 under which all public bodies have a duty to further the conservation of biodiversity should be a fundamental consideration of all work undertaken under the Strategy by The Moray Council.

6.3.3   Appropriate Assessment Conclusions

The Appropriate Assessment concluded that the Strategy (with mitigation) will not adversely affect the integrity of the Natura 2000 sites in the Strategy area. SNH should be consulted on any proposals connected to the site. Further detailed assessment or code of construction practice/method statement for construction may be required.

6.4   Cumulative Assessment

Under the Environmental Assessment (Scotland) Act, 2005, there is a requirement to consider the cumulative impacts of the Local Transport Strategy. Cumulative impacts

can result from a number of smaller local environmental effects which when combined have the potential to have a wider more significant impact.

The adoption of the Local Transport Strategy alone is unlikely to give rise to significant environmental impacts. As described within the sections above, few individual environmental impacts are likely to arise as a result of implementing the Strategy. When combined these impacts are not anticipated to be significant.

Similarly, since there are no anticipated significant effects arising from adoption and implementation of the Strategy, there are unlikely to be secondary or synergistic impacts of significance.

7.0   MITIGATION

Schedule 3 (8) of the Environmental Assessment (Scotland) Act 2005 requires that mitigation measures are integrated into the plan making process. The basis for mitigation and the Strategic Mitigation proposed in relation to the Draft Local Transport Strategy are detailed below.

Mitigation should be applied based on a common sense approach and within existing regulatory frameworks and cross-compliance to ensure that issues arising from implementation of individual actions have been appropriately identified and mitigated. Mitigation is likely to only be required for those actions involving physical engineering interventions.

7.1   Types of Mitigation

Two main tiers of mitigation have been considered as part of the SEA process:

- Modifications to Strategy – Avoiding impacts of the Strategy through changes to components of the Strategy e.g. action plans
- General Mitigation and Best Practice - general and specific mitigation recommended during Strategy implementation.

General and specific mitigation per SEA Topic is provided in the sections below. No modifications to the Strategy have been recommended.

7.2   Mitigation by SEA Topic

Specific measures to be applied to the implementation of the Local Transport Strategy are considered in the following section under each SEA Topic.

7.2.1   Biodiversity, Flora and Fauna

Upgrading of Local Transport Strategy, changing maintenance regimes and changes to land use could have impacts on protected sites and species. Mitigation should include:

- SNH will be consulted on all proposals to manage or develop infrastructure that may have a significant effect on Natura 2000 sites or SSSI's.
- There is a need for consultation with SNH on some of the action plan schemes to ensure that there are no impacts on protected species. Surveys for protected species and specific mitigation may be required.
- Management of infrastructure should ensure levels of biodiversity are maintained and enhanced.
- Maintenance of infrastructure should adhere to good working practice in relation to use of chemicals, dealing with spillages etc should they occur. SEPA Guidance should be followed for work in and around water courses.
- Moray Council will need to ensure that procedures are in place to identify potential impacts on European Protected Species (EPS). Licences will be required if baseline surveys indicate the presence of EPS on potential route alignments.
- Good level of biodiversity should be maintained and encouraged as far as possible though conservation of existing habitat. Planting schemes should adhere to native seed sources where possible to enhance the natural biodiversity of the area and to ensure that the verges act as a habitat to encourage local species.

- Actions with the potential to impact on the water environment should be mindful of the additional requirements in relation to ecological sensitivity e.g. protection species and sites.
- Bats often use bridges and other built structures as roosts and breeding sites and any maintenance or replacement of these structures will require to be surveyed for the presence of these species.

7.2.2   Population and Human Health

Local communities within Moray will generally experience benefits arising from implementation of the Strategy. Key generic mitigation measures include the following:

- Design of transport infrastructure should ensure that access is maintained to pedestrians, cyclists and other road users during and after construction.
- Changes to pedestrian routes, road layouts and crossings should be clearly signed to ensure accessibility is not compromised.
- Road design should, where viable include segregated cyclepaths and pedestrian footpaths to aid accessibility.

Changes to road layouts, traffic movements and maintenance of the transport network all have potential implications for health and road safety. These impacts can be mitigated through general measures such as:

- Planning road works and road maintenance in liaison with the local community such that disruption and noise impacts are minimised.
- Ensuring safe and well-signed alternative routes and pedestrian crossings etc are provided.
- Diversions due to roadworks and maintenance should be considerately located to ensure that local routes e.g. through settlement/school areas are not adversely affected. Diversions should be clearly signed.
- Noise impacts of all alterations to the transport network should be minimised to reduce disruption.

7.2.3   *Geology, Geomorphology, Soils and Land Use*

The LTS has the potential to impact upon the physical environment in a number of ways, but particularly through the construction and development of new infrastructure and associated land take. Strategic mitigation includes:

- Avoiding land take from statutory and Non-Statutory designated sites of geological/geomorphological interest and balancing where possible amounts of cut and fill.
- Dealing with contaminated land is a sustainable way as per best practice guidance.

Land use impacts can arise from the inappropriate development of land and the impact of transport infrastructure on existing land uses. Impacts can be mitigated via the following:

- Minimising land take impact on land productivity in the area via loss of prime agricultural land (1, 2, and 3_1 as classified by the Soil Survey of Scotland).
- Land use for core paths and rights of way should be maintained where possible and alterations/mitigations implemented where any adverse impact is likely.

7.2.4   Water Quality

The LTS should ensure than impacts to the water environment are minimal. On adoption and at implementation, Moray Council will need to take into account best practice in terms of protection of the water environment and consult with appropriate guidance in relation to the regulations in place.

The following generic mitigation will include the following:

- All actions implemented by the LTS will ensure that surface water quality will not be adversely affected to satisfy the requirements of the Water Framework Directive and the River Basin Management Plans which are part of the implementation for the Water Framework Directive in Scotland under the Water Environment and Water Services Act (Scotland) 2003.
- SEPA Pollution Control Guidance and Best Practice measures implemented for all LTS Actions.
- Actions implemented through the LTS which require SUDS schemes should ensure water attenuation and discharge does not impact on attenuation of floodplains.
- Water crossings should be minimised and culverting avoided where possible as per SEPA Guidance.
- All actions should be compliant with SPP section on Flooding.

7.2.5   Air Quality

Air quality in Moray is of a high standard and there are consequently no Local Air Quality Management Areas in the region. There are however known hotspots for air pollution within Elgin in particular as a result of congestion.

Strategic Mitigation for air quality should include the following:

- Project level EIA for actions where air quality is identified as being of significant adverse impact.
- Appropriate controls for dust during construction and maintenance

7.2.6   Noise and Vibration

Best practical means of controlling noise emissions during the construction phase of any scheme implemented under the LTS should be adopted and activities associated with the use of the site such that the noise impact noise level at the nearest noise sensitive location shall be minimised.

- Project level EIA for actions where noise is identified as being of significant adverse impact.
- Appropriate siting of transport infrastructure and use of acoustic barriers where noise is likely to be an issue.
- Use of low-noise road surfaces could be considered for both new infrastructure and replacement surfacing as part of ongoing maintenance.
- Promotion of lower speed limits in built up areas can reduce noise of passing traffic whilst improving safety.

7.2.7   *Climate*

Infrastructure strategies could both impact and be affected by climatic changes. Transport is the largest contributor of greenhouse gases and therefore climate change.

The Climate Change (Scotland) Act 2009 received Royal Assent on August 4, 2009, following a comprehensive Parliamentary Bill Process. The Act is a key commitment of the Scottish Government and seeks to reduce greenhouse gas emissions by 80% by 2050.

Dependence on the private car could be reduced by an integrated transport system. Any new transport infrastructure should accommodate changing climatic conditions e.g. increased frequency of flooding, higher summer temperatures. Strategic mitigation will include the following:

- LTS will aim to satisfy the requirements of the National and Regional Transport Strategies through a reduction in emissions.
- Promotion of modal shift and integration of public transport to improve accessibility and reduce car use for local journeys.
- Planning for the potential changes to climate and incorporation of climate change awareness within the LTS will ensure that disruption to transport is minimal.
- Areas prone to landslides and landslip prone routes should be addressed at detailed stage.

7.2.8   *Material Assets*

The use of resources in construction and particularly in the construction of road infrastructure have major environmental impacts in terms of raw materials. Mitigation should include the following:

- Project level EIA/assessment for any actions where there is potential for significant adverse impacts on sensitive receptors
- Adherence to best practice construction methods and working practices to ensure that any impacts on residents/visitors to Moray arising from actions implemented as part of the Strategy are minimised
- Commitment where possible to use recycled aggregates in maintenance programme and production of a Moray generic guidance
- Commitment to Sustainable Procurement and ensuring contractors undertaking transport works associated with the LTS are adhering to environmental best practice in line with regulatory and guidance framework.

7.2.9   *Cultural, Archaeological and Architectural Heritage and Townscape*

This report considers both the direct and indirect impacts on the historic environmental and setting. Strategic mitigation includes:

- Design and location of transport infrastructure should be mindful of local and national designations for cultural heritage at the strategic level to minimise impacts at a project level. This includes avoiding impacts on Listed Buildings, protected sites, sites with local historical interest and historical landscapes.
- Care should be taken to ensure that signage and changes to road layouts do not adversely affect the setting of historical sites and or landscapes and are appropriate in location, size, scale and colour.

7.2.10 Landscape and Visual

The LTS considers both the direct and indirect impacts on the Landscape and Visual amenity of Moray. Strategic mitigation should include:

- Design and location of transport infrastructure should be mindful of local and national designations for landscape at strategic level to minimise impacts at a project level. This includes avoiding impacts on Conservation Areas and Areas of Great Landscape Value.
- Landscape and Visual impacts of new transport infrastructure may need to be assessed at EIA level to mitigate for localised and regional impacts.

7.2.11 Quality of Life

Quality of life is currently of a high standard in Moray. The LTS seeks to further enhance the region through the promotion of locally important transport schemes.

- Adherence to best practice construction methods and working practices to ensure that any impacts on residents/visitors to Moray arising from actions implemented as part of the Strategy are minimised
- Encourage ongoing community liaison and consultation on proposals implemented as part of the LTS.

8.0   MONITORING

8.1   Introduction

Section 19 of the Environmental Assessment (Scotland) Act 2005 sets of the requirements for monitoring of the implementation of a qualifying plan, programme or policy.

8.2   Defining the Monitoring Indicators/Objectives

For the purpose of SEA, monitoring involves the use of 'indicators'. An indicator is a measure of how the environmental baseline has changed. Indicators can comprise both quantitative (facts and figures) and qualitative (descriptive) information. It is likely that the SEA Monitoring will include the following main receptors:

- Biodiversity and Nature Conservation
- Population & Human Health/Quality of Life
- Geology and Soils
- Water Quality
- Climatic Factors
- Cultural Heritage
- Landscape & Visual

Monitoring, like mitigation should be applied based on a common sense approach and within existing regulatory frameworks and cross-compliance. The indicators selected will monitor change that results from the physical interventions set out in the Strategy, but will also take account of changes as a result of other external factors. They will therefore provide a mechanism to highlight unforeseen as well as expected changes.

8.3   Monitoring Timescales

Environmental monitoring of the Strategy will be linked to the proposed monitoring for the Strategy itself i.e. annual strategic review and full review as required to ensure resources are available and applied.

The monitoring will focus on achievements of the Strategy following adoption and environmental monitoring in particular will review any actions implemented under the LTS that have required:

- Consultation with Moray Council Environmental Services and/or Statutory consultees (SNH, SEPA, HS) relative to protected sites or species
- Project level EIA and/or Appropriate Assessment
- Project level environmental surveys
- CAR Licensing (under Water Framework Directive)
- Flood risk assessment
- SUDS

Monitoring will be specifically targeted towards aspects of the implementation of the Strategy that could have adverse environmental impacts and therefore much of the monitoring focuses on those components of the Strategy that would involve physical works/engineering requirements.

8.4 Proposed Monitoring Framework and Indicators

The proposed SEA monitoring indicators detailed in Table 10 below. Following consultation on the draft Strategy and this Environmental Report, the monitoring framework will be further refined.

Table 10   Proposed Monitoring Framework

SEA TOPIC	TIMESCALE	SUGGESTED INDICATOR/MONITORING
Biodiversity & Nature Conservation (Flora & Fauna)	As per monitoring for Local Transport Strategy - annual strategic review and full review as required	• Number of interventions taken forward under the Strategy which would potentially have adverse and beneficial impacts on nature conservation and biodiversity. Applications where EIA of Appropriate Assessment has been undertaken. • Survey information from interventions requiring EIA/AA e.g. birds, cetaceans etc should be provided to NESBReC
Population & Human Health & Quality of Life	As per monitoring for Local Transport Strategy - annual strategic review and full review as required	• Number of interventions taken forward under the Strategy where there are positive benefits to local population and communities through local employment creation, increased accessibility, increased availability of facilities etc. • Number of interventions taken forward under the Strategy where there is potential for adverse impacts i.e. through visual impacts, noise and vibration impacts, adverse impacts on local businesses and employment opportunities, impacts on local resources e.g. healthcare, community facilities, housing and tourism . • Road Safety improvements – as reported by Road Safety Plan updates
Geology and Soils	As per monitoring for Local Transport Strategy - annual strategic review and full review as required	• Number of interventions taken forward under the Strategy which would potentially have adverse and/or beneficial impacts on geology soils and/or designated sites.
Water Quality	As per monitoring for Local Transport Strategy - annual strategic review and full review as required	• Number of interventions taken forward under the Strategy which would potentially have adverse and/or beneficial impacts on water quality /status • Number of interventions taken forward under the Strategy that require licensing under the 'The Water Environment (Controlled Activities) (Scotland) Regulations' - CAR Regulations.
Climate	As per monitoring for Local Transport Strategy - annual strategic review and full review as required	• Number of interventions taken forward under the Strategy where a flood assessment has been undertaken and flood prevention measures included. • Incidences of flooding of existing developments

SEA TOPIC	TIMESCALE	SUGGESTED INDICATOR/MONITORING
		during Strategy duration. • Interventions taken forward under the Strategy where climate-proofing has been integrated into design e.g. to prevent landslides, flooding, etc
Cultural Heritage	As per monitoring for Local Transport Strategy - annual strategic review and full review as required	• Number of interventions taken forward under the Strategy where there are potential impacts on a site designates for historical environment • Monitoring/mapping/recording of any new sites of historical importance discovered as part of any interventions taken forward under the Strategy
Landscape & Visual	As per monitoring for Local Transport Strategy - annual strategic review and full review as required	• Numbers of interventions taken forward under the Strategy with potential impacts on landscape designations. • Interventions where SNH/Historic Scotland have indicated that landscape and visual impacts would need to be assessed in greater detail

9.0   CONCLUSIONS & NEXT STEPS

9.1   Overall Environmental Impacts

The Local Transport Strategy includes a wide range of objectives and actions covering all transport modes, under a vision which seeks to ensure that environmental assets in Moray are protected.

The proposed Strategy will have a positive impact, particularly in relation to factors such as accessibility, road safety, health, and promotion of modal shift and associated activities such as walking and cycling. The Strategy also recognises opportunities and threats relative to existing transport infrastructure and policy and seeks to address these to benefit the economy.

Whilst there are some uncertainties over potential environmental impacts arising from schemes taken forward under the Strategy, the commitment to safeguarding the environment will ensure that impacts at the detailed level are identified and mitigated as required. Further detailed consultation and assessment of schemes which require a level of physical works/engineering or are in proximity to sensitive receptors (watercourses, protected sites and species, local community) may be required.

It is concluded that there are no likely significant adverse environmental impacts that arise from the implementation of the Local Transport Strategy.

9.2   Next Steps

The development of the Local Transport Strategy has been an iterative process with amendments made as a result of the advice given through consultation on the Strategy to date and through the SEA process.

The Local Transport Strategy submitted for consultation at this stage has fully taken into account the recommendations made to date and recommendations from the SEA process.

This report is submitted to the SEA Gateway for 8 weeks of consultation (30th April 2010 to 25th June 2010) with Statutory Consultees (Scottish Ministers, SNH, SEPA and Historic Scotland) and has also been submitted for public consultation.

Responses from this consultation will be further used to refine the Strategy and it is anticipated that the resulting final Strategy will be adopted in 2010.

- SEA Environmental Report and LTS submitted to SEA Gateway and for public consultation
- A review will be made on the consultation responses received from the consultation exercise on the LTS and SEA Environmental report
- Modifications to the Local Transport Strategy and Environmental Report will be produced if required.
- The Local Transport Strategy and Environmental Report will be submitted to the Scottish Ministers for approval.
- The Local Transport Strategy will be adopted.
- SEA Post Adoption Statement will be issued and environmental monitoring will be agreed and implemented.
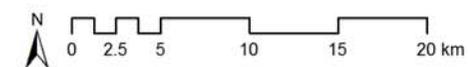
Legend

Moray Administrative Boundary
Cairngorms National Park

0   2.5   5   10   15   20 km

Figure 1.1
MORAY REGION
Study Area

Legend

▭	Moray Administrative Boundary
▭	Cairngorms National Park
▭	SPA
▭	SAC
▭	SSSI
▭	SINS
▭	RAMSAR

N

0   2.5   5   10   15   20 km
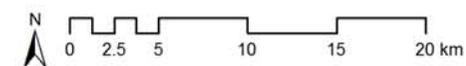
Figure 1.2
M O R A Y   R E G I O N
N a t u r e
C o n s e r v a t i o n   S i t e s

Ironside Farrar   7005 / April 2010

MORAY
Local Transport Strategy

STRATEGIC ENVIRONMENTAL
ASSESSMENT

Legend

- Moray Administrative Boundary
- Cairngorms National Park
- SPA
- SAC
- RAMSAR
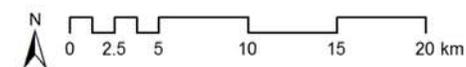
Figure 1.3
MORAY REGION
Natura 2000 Sites
(SNH)

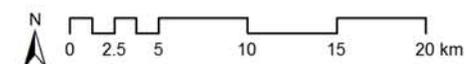Ironside Farrar   7005 / April 2010

the moray council

MORAY
Local Transport Strategy

STRATEGIC ENVIRONMENTAL
ASSESSMENT

Legend

- ▨ Moray Administrative Boundary
- ▨ Cairngorms National Park
- ■ 1 in 200 Year Coastal Flooding
- ■ 1 in 200 year Fluvial Flooding

N

0 2.5 5 10 15 20 km

F i g u r e   1 . 4
M O R A Y   R E G I O N
S E P A   I n d i c a t i v e
F l o o d   M a p
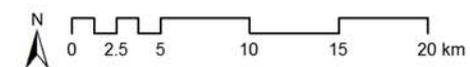
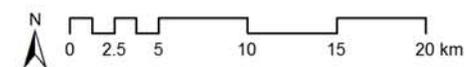Ironside Farrar   7005 / April 2010

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MORAY
Local Transport Strategy

STRATEGIC ENVIRONMENTAL
ASSESSMENT

Legend

▰ Moray Administrative Boundary

▰ Cairngorms National Park

▲ Listed Buildings

● Cultural Heritage Records Moray
(Archaeological Records
in Moray)

N

0 2.5 5 10 15 20 km

Figure 1.5
MORAY REGION
Cultural Heritage
(Historic Scotland & Moray
Council Archaeologist)

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Legend

- Moray Administrative Boundary
- Cairngorms National Park
- Area of Great Landscape Value
- National Scenic Area

0   2.5   5   10   15   20 km

Figure 1.6
MORAY REGION
Landscape
Designations

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MORAY
Local Transport Strategy

STRATEGIC ENVIRONMENTAL ASSESSMENT

Legend

LCA_MORAY
LANDSCAPE

- Agricultural Heartland
- Agricultural Heartlands
- Cairngorm Plateau
- Cairngorm Straths
- Coastal
- Coastal Farmland
- Coastal Island
- Coastal Lowlands
- Farmed Moorland Edge
- Inland Loch
- Loch Island
- Moorland Plateaux
- River Valleys
- Straths and Valleys
- Uplands
- Uplands and Glens
- Urban
- Moray Administrative Boundary

N

0   2.5   5   10   15   20 km
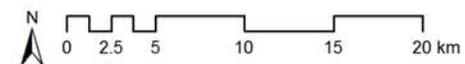
F i g u r e   1 . 7
M O R A Y   R E G I O N
L a n d s c a p e
C h a r a c t e r
A s s e s s m e n t

Ironside Farrar   7005 / April 2010