



# Strategic Environmental Assessment of the Isle of Wight LTP3

Environmental Report to accompany the Consultation Draft Island Transport Plan Strategy 2011-2038

November 2010





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# **Abbreviations**

AONB Area of Outstanding Natural Beauty

AQMA Air Quality Management Area

BAP Biodiversity Action Plan

BOA Biodiversity Opportunity Area

CO<sub>2</sub> Carbon dioxide

DCLG Department of Communities and Local Government

Defra Department of the Environment, Food and Rural Affairs

EC European Commission

EIA Environmental Impact Assessment

EU European Union

HRA Habitats Regulations Assessment

loWC Isle of Wight Council

LDF Local Development Framework

LTP1 Isle of Wight Local Transport Plan 2001-06
LTP2 Isle of Wight Local Transport Plan 2006-11
LTP3 Isle of Wight Local Transport Plan 2011-2038
ODPM Office of the Deputy Prime Minister (now DCLG)

PAS Planning Advisory Service

PPPs Policies, plans and programmes
SAC Special Area of Conservation

SEA Strategic Environmental Assessment

SPA Special Protection Area

SSSI Site of Special Scientific Interest

WFD Water Framework Directive

# **Non-Technical Summary**

#### What is SEA?

A Strategic Environmental Assessment (SEA) has been carried out to inform the third Local Transport Plan for the Isle of Wight, the Island Transport Plan (LTP3). Local Transport Authorities such as Isle of Wight Council (IoWC) use SEA to assess Local Transport Plans against a set of environmental objectives developed in consultation with interested parties and the public. The purpose of the assessment is to avoid adverse environmental effects and identify opportunities to improve the environmental quality of the Isle of Wight through the Local Transport Plan.

#### What is the Island Transport Plan?

The LTP3 will:

- Set out the Island's transport policies and their relation with national, regional and local policy objectives;
- Identify local transport issues, challenges and opportunities;
- Outline the background to the Island's highway maintenance Private Finance Initiative (PFI);
- Provide guidance on transport issues for the emerging Island Plan Local Development Framework; and
- Leave open the opportunity of an early 'refresh' should funding allocations and opportunities change significantly from expected levels.

The LTP3 will start in 2011 and end in 2038. As part of the LTP3's development process, a Consultation Draft Island Transport Plan has been prepared for the Isle of Wight.

#### Purpose and content of this Environmental Report

This Environmental Report is the third document to be produced as part of the SEA process. The first document was the SEA Scoping Report, which includes information about Isle of Wight's environment and the proposed process to be carried out for the SEA. The second document was a report which looked at a number of different types of interventions that could be delivered through the LTP3.

The purpose of this Environmental Report is to:

- Identify, describe and evaluate the likely significant effects of the LTP3; and
- Provide an opportunity for statutory consultees, interested parties and the public to offer views on any aspect of the SEA process which has been carried out to date.

#### The Environmental Report contains:

- An outline of the contents and main objectives of the LTP3 and its relationship with other relevant policies, plans and programmes;
- Relevant aspects of the current state of the environment and key sustainability issues;
- ▶ The SEA Framework of objectives and indicators against which the LTP3 has been assessed;
- ▶ The assessment of LTP3 interventions for the Isle of Wight;
- The likely significant effects of the LTP3 in environmental terms;
- The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects as a result of the LTP3;
- A description of the measures envisaged concerning monitoring; and
- The next steps for the SEA.

#### Assessment findings of the proposed interventions included in the Consultation Draft of the LTP3

The Consultation Draft of the LTP3 includes a series of potential transport interventions and measures for delivering the LTP3. These interventions have been assessed using a SEA Framework of objectives and indicators using a range of techniques. A summary of the assessment of the LTP3 interventions and policies for the Draft Strategy, presented by environmental theme, is as follows:

## Potential positive environmental effects of the Draft Strategy for the LTP3

#### **Air Quality**

Reduction of emissions of key pollutants (including nitrogen dioxide) through encouraging modal shift, integrating transport and planning, reducing the need to travel, and promoting a limitation of congestion.

#### **Biodiversity and Geodiversity**

Sensitive biodiversity sites on the Island have the potential to benefit from enhancements in air quality and improved highways drainage.

The LTP3 seeks to promote the appropriate phasing of infrastructure works to reflect the needs of species present locally.

The LTP3 promotes biodiversity through seeking to ensure that habitats are supported on the Island.

#### **Climate Change**

Limiting of greenhouse gas emissions from transport through promoting a reduction of congestion, encouraging modal shift, integrating transport and planning, reducing the need to travel, and promoting accessibility by non-car modes.

The LTP3 encourages an increase in the use of electric vehicles on the Island through the provision of electric charging points.

The resilience of transport infrastructure to the effects of climate change is supported by the LTP3's consideration of future flood risk, the development of a climate change report to highlight vulnerabilities and actions required for transport infrastructure and the promotion of the use of sustainable drainage systems. Likewise, improved maintenance of the Island's highways network through the Highways Private Finance Initiative will help improve the adaptability of the road, cycle and pedestrian networks to the likely effects of climate change.

#### Potential positive environmental effects of the Draft Strategy for the LTP3

#### Health

Promotion of healthier modes of travel, including walking and cycling.

Improved accessibility to health services and leisure and recreational facilities.

Contribution to an improvement in the quality of local neighbourhoods through enhancements to the public realm and built environment and appropriate design and layout of transport infrastructure.

Improved air quality and a reduction of noise pollution.

#### **Historic Environment**

Protection and enhancement of key cultural heritage features and areas of historic environment significance.

Improvements to the setting of cultural heritage features from enhancements to townscape and landscape quality.

Protection of local distinctiveness and a sense of place.

Reduction in the effects of traffic on the historic environment.

#### Landscape

Reduction in the effects of traffic on landscape and townscape quality.

Enhancements to the Island's townscape, built environment and landscape through encouraging the appropriate design and layout of transport infrastructure.

Removal of clutter and inappropriate signage.

Reduction of noise pollution through Noise Action Plans, low noise surfacing and landscape screening.

#### **Material Assets**

Promotion of the reuse of construction materials and encouragement of the use of local materials.

Improved management of resources and construction waste through the programme of works initiated by the Highways Private Finance Initiative.

#### **Population and Quality of Life**

Promotion of enhancements to public transport and cycling/walking networks.

Improved accessibility to services, facilities and amenities.

Enhancements to the quality of neighbourhoods.

Reduction in crime and the fear of crime associated with the transport network.

#### Soil

Improvements in soil quality from enhanced highways drainage.

#### Water

Limitation of water pollution through the use of sustainable drainage systems. The LTP3 also seeks to minimise the risk of pollution of groundwater and surface water during the construction of new infrastructure.

The Highways Private Finance Initiative is likely to facilitate the sustainable use of water resources through the introduction of improved water management regimes in highways maintenance and improvement works.

The LTP3 seeks to limit flood risk and support adaptation to future flood risk on the Island.

#### Potential adverse environmental effects of the Draft Strategy for the LTP3

## **Air Quality**

Through stimulating traffic growth over the longer term, junction improvements in Newport may lead to an increase in nitrogen dioxide emissions at existing air quality hotspots such as at Coppins Bridge.

#### **Biodiversity and Geodiversity**

The Island's rich geodiversity resource has not been acknowledged through the LTP3.

There is further potential for the LTP3 to acknowledge Biodiversity Action Plan targets and the presence of Biodiversity Opportunity Areas on the Island.

#### **Climate Change**

Junction improvements in Newport may undermine climate change mitigation through stimulating traffic growth, with associated increases in greenhouse gas emissions.

#### Health

None highlighted by SA process.

#### **Historic Environment**

Potential effects on cultural heritage assets and their settings from proposed transport junction improvements in Newport.

#### Landscape

Potential effects on landscape quality from a stimulation of traffic flows from junction improvements and traffic and highways management measures.

Potential effects on tranquillity and 'night blight' from enhanced lighting.

Increased maintenance programme initiated by the PFI has the potential to have short term and localised effects on landscape and townscape quality though visual effects and impacts on noise levels.

#### **Material Assets**

Due to the programme of works required to reverse historic underinvestment in the Island's highways network, the implementation and delivery of the Highways Private Finance Initiative is likely to lead to inevitable increases in the generation of construction waste and the use of raw materials.

#### **Population and Quality of Life**

None highlighted by SA process.

#### Soil

None highlighted by SA process.

#### Water

None highlighted by SA process.

#### **Recommendations**

A number of recommendations have been proposed to help the LTP3 further improve its environmental performance. These include the following:

- The LTP3 should seek to promote the development of high quality and multi-functional green infrastructure networks in conjunction with the developing Isle of Wight Green Infrastructure Strategy. This includes through facilitating non-motorised routes which also deliver landscape, biodiversity and climate change adaptation benefits;
- The development of new transport infrastructure on the Island should seek to promote the hierarchy of avoidance of impacts on biodiversity, namely necessary mitigation, consideration of alternatives and finally compensatory measures at project level;
- The LTP3 should seek to promote net gains in relation to Biodiversity Action Plan targets and contribute to the enhancements afforded by the Biodiversity Opportunity Areas present on the Island;
- The value of the Island's geodiversity assets should be fully acknowledged through the LTP3;
- ▶ Electric charging points should source electricity from renewable sources to support climate change mitigation;
- Improved and enhanced highways and street lighting should seek to minimise light pollution and "night blight" on the Island; and
- The LTP3 should seek to ensure that the benefits of junction improvements in Newport are 'locked in' through relevant localised measures to help restrain traffic growth (e.g. through the provision of highway space to promote the use of non-car modes of transport).

#### Monitoring

Appendix F provides preliminary proposals for a monitoring programme for measuring the LTP3's implementation in relation to the areas where the SEA process has identified significant effects, and where opportunities for an improvement in environmental performance may arise. The SEA guidance suggests that SEA monitoring and reporting activities can be integrated into the regular planning cycle. As part of a Island-wide monitoring programme for the Isle of Wight, IoWC will collect data relevant to the LTP3. It is anticipated that elements of the SEA monitoring programme for the LTP3 will be incorporated into this process.

## **Next Steps**

This Environmental Report is due to be published alongside the Consultation Draft of the LTP3. The public consultation period is between 12<sup>th</sup> November 2010 and 4<sup>th</sup> February 2011. All responses to the consultation should be sent to:

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# 1 Introduction

#### 1.1 Purpose of this Environmental Report

This Environmental Report has been prepared for Isle of Wight Council as part of the Strategic Environmental Assessment (SEA) of the Isle of Wight Local Transport Plan 3 (LTP3).

It has been produced in compliance with the Environmental Assessment of Plans and Programmes Regulations 2004 SI No. 1633 and as required by the SEA Directive 2001/42/EC. It accompanies the following document, which has been released for consultation for a period of twelve weeks:

Consultation Draft Island Transport Plan, Strategy 2011-2038 (Isle of Wight Council, November 2010).

#### 1.2 The Isle of Wight LTP3

Isle of Wight Council (IoWC), as the local transport authority for the Isle of Wight, is currently preparing the third Local Transport Plan (LTP3) for the Island. This will replace the Isle of Wight's second Local Transport Plan (LTP2), which was adopted in April 2006, and covers the five year period between 2006-11.

The LTP3 will:

- Set out the Island's transport policies and their relation with national, regional and local policy objectives;
- Identify local transport issues, challenges and opportunities;
- Outline the background to the Island's highway maintenance Private Finance Initiative (PFI);
- Provide guidance on transport issues for the emerging Island Plan Local Development Framework; and
- Leave open the opportunity of an early 'refresh' should funding allocations and opportunities change significantly from expected levels.

The lifespan of the LTP3 will be from 2011 to 2038. This time period aligns with that of the Highways Maintenance Private Finance Initiative (PFI) for the Island, which is due to begin in April 2013, and covers a period of 25 years.<sup>1</sup> The longer timeframe will also enable IoWC to set, and help deliver, longer term strategic priorities.

<sup>&</sup>lt;sup>1</sup> The Department for Transport has approved PFI Credits for the Isle of Wight Council to rehabilitate the Island's roads, footways, street lighting and most other aspects that are related to the highway network. The PFI will begin in April 2013 and cover a 25 year period to 2038.

#### 1.2.1 The LTP3 strategy and Implementation Plan

The LTP3 will include a longer term strategy. Presenting the longer term aspirations for the LTP3, the strategy will set out transport policies covering the period to 2038.

In line with LTP3 guidance, the longer term strategy will be delivered through a series of Implementation Plans. The first Implementation Plan will focus on delivery of strategy for the LTP3 in the period 2011-13, and will:

- Set out the types of projects to be pursued;
- ▶ The projected funding and budget source;
- Acknowledge programme and project risks; and
- Consider possible remedial and mitigation measures if those risks materialise.

The first Implementation Plan is designed to align with the start of the Public Finance Initiative. For this reason it will be shorter term than the strategy for the LTP3, and will cover a two year period.

Table 1.1 sets out the key facts relating to the LTP3.

Table 1.1: Key facts relating to the Isle of Wight LTP3

Name of Responsible Authority	Isle of Wight Council	
Title of plan	The Island Transport Plan (LTP3)	
What prompted the plan (e.g. legislative, regulatory or administrative provision)	The LTP3 will be the third Local Transport Plan to be developed for the Isle of Wight. It follows the LTP1, which covered the period 2001-06, and the LTP2, which covered the period from 2006-11.  The LTP3 is being developed following the implementation of the Local Transport Act 2008. The Act retains the statutory requirement to produce and review Local Transport Plans and policies, and requires local transport authorities to produce an LTP3 by April 2011.	
Subject (e.g. transport)	Transport Plan.	
Period covered by the plan	2011 to 2038. An Implementation Plan will cover the period between 2011 and 2013.	
Frequency of updates	When required.	
Area covered by the plan	The area covered by the local transport authority of Isle of Wight Council.	
Purpose and/or objectives of the plan	<ul> <li>The LTP3 will:</li> <li>Set out the Island's transport policies and their relation with national, regional and local policy objectives;</li> <li>Identify local transport issues, challenges and opportunities;</li> <li>Outline the background to the Island's highway maintenance Private Finance Initiative (PFI);</li> <li>Provide guidance on transport issues for the emerging Island Plan Local Development Framework; and</li> <li>Leave open the opportunity of an early 'refresh' should funding allocations and opportunities change significantly from expected levels.</li> <li>The LTP3 will be presented through a long term strategy and an implementation plan.</li> </ul>	
Plan contact point	Mrs Rachel Mills, Local Transport Planner, Highways and Transport Service, Isle of Wight Council Telephone number: 01983 821000 Email: rachel.mills@iow.gov.uk	

## 1.3 Overview of the LTP3 area

The Isle of Wight lies off the south coast of England and is separated from Hampshire by the Solent. The largest Island in England, the Isle of Wight is diamond-shaped, covers an area of approximately 382 km<sup>2</sup> and extends 37 km from west to east and 21 km from north to south.

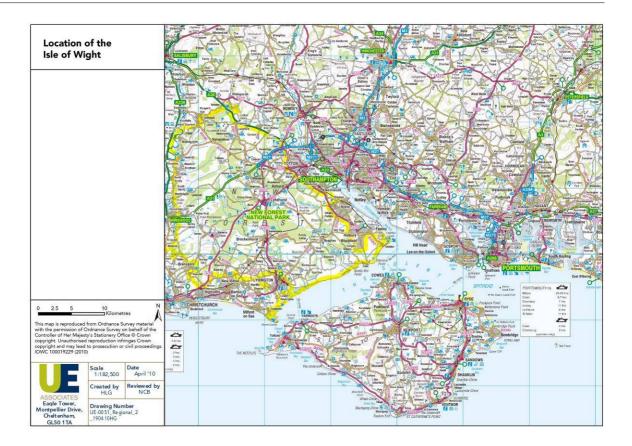


Figure 1.1: Location of the Isle of Wight.

The two largest settlements on the Island are Newport, which is the Island's principal administrative and retail centre, and home to approximately 24,100 people, and Ryde, a seaside town with a population of 23,900 people<sup>2</sup>. The other main settlements on the Island include Cowes, East Cowes, Sandown, Shanklin, Ventnor and Freshwater. Overall, the population of the Island is concentrated in the centre, north and east of the Island. In November 2009, the population of the Isle of Wight was approximately 142,500<sup>3</sup>. This is projected to increase to 172,500 by 2030<sup>4</sup>.

The Isle of Wight is characterised by a high quality natural and historic environment. The high quality landscape of the Island is reflected by the designation of half the Island as the Isle of Wight Area of Outstanding Natural Beauty and the designation of 55km of the Island's 96km coastline as Heritage Coast. The Isle of Wight's biodiversity resource is reflected by the significant number of international and national nature conservation designations on and around the Island. Many of these designations are centred on the Isle of Wight's maritime cliffs and slopes, its estuaries, and its chalk grasslands. The Island also has a rich historic environment which includes well known and important features such as Carisbrooke Castle, Osborne House, Yarmouth Castle and Appuldurcombe House, as well as a wide range of other designated and non designated features and areas.

<sup>&</sup>lt;sup>2</sup> ONS 2007 Mid Year Estimates as quoted in IOWC (2009) Isle of Wight Town Centre Health Check Study

<sup>&</sup>lt;sup>3</sup> IOWC (November 2009) Equality and Diversity document:

 $http://www.iwight.com/equality\_and\_diversity/documents/Diversity\_on\_the\_lsle\_of\_Wight\_Nov09.pdf$ 

<sup>&</sup>lt;sup>4</sup> Source: ONS 2006-based sub-national population projections, published June 2008, <u>www.statistics.gov.uk</u>

Whilst for most of the 20th century the Isle of Wight's economy was based on seaside tourism, manufacturing and farming, financial and business services are currently of growing importance, and the public sector is now the largest employer on Island. The Island's rich natural and historic environment attracts large numbers of tourists, and the Island's population more than doubles during the summer holiday season. The high quality environment and lifestyle have also drawn many retirees and second home owners<sup>5</sup>.

In May 2009, the final version of the South East Plan was published by the Government. Setting out the vision for the future of the South East region to 2026, the Plan outlines how the South East should respond to challenges facing the region such as housing, the economy, transport and protecting the environment. Central to the South East Plan is the allocation of 32,700 new homes a year in the region in the period to 2026 to meet housing needs. On this basis, the Plan has allocated a total of 10,400 net additional dwellings in the Isle of Wight between 2006 and 2026, or 520 new dwellings a year. Whilst the Government has made clear its intention to replace Regional Spatial Strategies with a new national policy framework complemented by plans at a local level, housing and employment needs on the Island suggest that the Island will experience growth in the next 15-20 years. This is an issue that will need to be taken into close consideration by the LTP3.



Figure 1.2: The Isle of Wight.

<sup>&</sup>lt;sup>5</sup> Isle of Wight Strategic Partnership (2008): Ecoisland: The Isle of Wight's Sustainable Community Strategy 2008-2020

#### 1.4 Strategic Environmental Assessment of the Isle of Wight LTP3

Strategic Environmental Assessment (SEA) is a systematic process for evaluating the environmental consequences of proposed plans or programmes to ensure environmental issues are fully integrated and addressed at the earliest appropriate stage of decision making.

SEA was introduced to the UK through the EU Directive 2001/42/EC. In England this Directive has been transposed via the Environmental Assessment of Plans and Programmes Regulations 2004. SEA applies to Local Transport Plans produced by local transport authorities in England. The Isle of Wight LTP3 has therefore been screened as a plan that requires an SEA under the Directive.

To accompany the SEA process, a Health Impact Assessment has been carried out on the LTP3. Health Impact Assessment (HIA) is a developing non-statutory process that uses a range of methods and approaches to help identify and consider the likely health and equity impacts of a proposal on a given population. There is no statutory remit to produce HIAs nor is there a prescribed formal guidance document.

The HIA has been incorporated within the SEA process through the SEA Framework of objectives and indicators discussed in **Section 3.2**.

A Habitats Regulation Assessment process is also being carried out for the LTP3. Whilst the HRA will support the findings of the SEA, the Habitats Regulations Assessment is being carried out independently of the SEA process and has been reported on separately.

The approach for carrying out the SEA of the LTP3 is based on current best practice. Primarily the approach applied to this SEA process draws on guidance from:

- Office of the Deputy Prime Minister (September 2005): A Practical Guide to the SEA Directive<sup>6</sup>; and
- ▶ Department for Transport (April 2009): TAG Unit 2.11, Strategic Environmental Assessment for Transport Plans and Programmes ('In draft' Guidance).<sup>7</sup>

TAG Unit 2.11 presents a methodology for carrying out SEA of transport plans and programmes. Whilst it sets out a broadly similar approach as the ODPM and PAS guidance, it takes more of a transport focus, and also suggests how SEA can complement and take further many of the aspects promoted through the New Approach to Appraisal (NATA).<sup>8</sup>

In terms of best practice and added value, it is worth citing other useful guidance which has influenced the approach to SEA for the assessment of the Isle of Wight LTP3, including the following document:

<sup>&</sup>lt;sup>6</sup> The SEA guidance can be found on: <a href="http://www.communities.gov.uk/publications/planningandbuilding/practicalguide">http://www.communities.gov.uk/publications/planningandbuilding/practicalguide</a>

<sup>&</sup>lt;sup>7</sup> TAG Unit 2.11 can be found on: http://www.dft.gov.uk/webtag/documents/project-manager/pdf/unit2.11d.pdf

<sup>&</sup>lt;sup>8</sup> NATA is an approach for improving the consistency and transparency with which transport decisions are made. It seeks to presents the key economic, environmental and social impacts of decisions in a clear, consistent and balanced way using an Appraisal Summary Table and associated worksheets. NATA is the basis for appraising multi-modal studies, Highways Agency road schemes, Local Transport Plans major road and public transport schemes, Strategic Rail Authority schemes, seaports, and the Government's airports strategy.

Planning Advisory Service (September 2009): CLG Plan Making Manual: Sustainability Appraisal<sup>9</sup>.

## 1.5 Stages of SEA

TAG Unit 2.11, in common with other SEA and Sustainability Appraisal guidance documents, sets out a five stage process for carrying out SEA.

**Table 1.2** provides a summary of the key stages of the SEA process for LTP3 presented in TAG Unit 2.11. Those shaded in green indicate the stages covered in this Environmental Report. The second column indicates where information about each respective stage can be found in this document.

**Table 1.2:** SEA stages, and stages covered in this Environmental Report.

<b>Stage A:</b> Setting the context and objectives, establishing the baseline and deciding on the scope	Location in report
A1: Identify other relevant plans, programmes and environmental protection objectives	Scoping Report (see Section 2.1)
A2: Collecting baseline information	Scoping Report (see Section 2.1)
A3: Identifying environmental problems	Scoping Report (see Section 2.1)
A4: Developing the SEA framework	Scoping Report (see Section 2.1)
A5: Consulting on the scope of the SEA	Scoping Report (see Section 2.1)
Stage B: Developing and refining alternatives and assessing effects	
B1: Testing the plan objectives against the SEA objectives	Chapter 4
B2: Developing strategic alternatives	Chapter 4
B3: Predicting the effects the draft plan, including alternatives	Chapter 6
B4: Evaluating the effects of the draft plan, including alternatives	Chapter 6
B5: Considering ways of mitigating adverse effects	Chapter 6
B6: Proposing measures to monitor the environmental effects of plan implementation,	Chapter 8 and Appendix F
Stage C: Preparing the Environmental Report	
C1: Preparing an Environmental Report	All Chapters
Stage D: Consulting on the draft plan and Environmental Report	
D1: Consultation on the draft plan and Environmental Report	N/A
D2: Assessing significant changes	N/A
D3: Decision making and providing information	N/A
Stage E: Monitoring the implementation of the plan	
E1: Developing aims and methods for monitoring	N/A
E2: Responding to adverse effects	N/A

<sup>&</sup>lt;sup>9</sup> The PAS Guidance can be found on: <a href="http://www.pas.gov.uk/pas/core/page.do?pageId=152450">http://www.pas.gov.uk/pas/core/page.do?pageId=152450</a>

#### 1.6 Presenting the SEA information

Where appropriate, this Environmental Report has presented the SEA information through a series of environmental information themes.

The selected environmental information themes incorporate the SEA 'topics' derived from Annex I(f) of the SEA Directive (see **Appendix A**): biodiversity flora and fauna, population, human health, soil, water, air, climatic factors, material assets, cultural heritage (including architectural and archaeological heritage), landscape and the inter-relationship between these factors. These have been updated and expanded for clarity, and to mirror the purpose and likely outcomes of the SEA process.

The environmental information themes are presented in Table 1.3.

**Table 1.3:** Environmental information themes.

Environmental information theme	SEA topic included in Directive 2001/42/EC	What is considered through the environmental information theme?
Accessibility and Transport	Population	Transportation infrastructure Traffic flows Travel to work Public transport accessibility
Air Quality	Air	Air quality management Air pollution sources Air quality hotspots
Biodiversity and Geodiversity	Biodiversity Fauna Flora	Nature conservation designations Landscape features Key species Geological features
Climate Change	Climatic factors	Greenhouse gas emissions by source Greenhouse gas emission trends Climate change adaptation
Health	Human health	Health indicators Health inequalities Road safety Open space and green infrastructure
Historic Environment	Cultural heritage, including architectural and archaeological heritage	Historic development of the area Designated and non designated sites and areas Townscape Archaeological assets
Landscape	Landscape	Landscape character Townscape character Noise and light pollution Tranquillity

Environmental information theme	SEA topic included in Directive 2001/42/EC	What is considered through the environmental information theme?
Material Assets	Material assets	Minerals
		Waste and recycling
		Previously developed land
		Energy production
Population and	Population	Population size and migration
Quality of Life		Population density
		Age structure
		Ethnicity
		Social inclusion
		Deprivation
		Unemployment
		Crime
Soil	Soil	Soil type and quality
		Agricultural land quality
Water	Water	Water resources
		Water quality
		Flooding

It is anticipated that presenting the information through this approach will help enable the reader to easily locate the SEA information representing their specific areas of interest.

The following chapters present an overview of the stages of the SEA carried out to date, the appraisal findings, and the next steps for the development of the LTP3 and accompanying SEA process.

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# 2 Scoping

## 2.1 Scoping Report

Scoping is the process of deciding the scope and level of detail of an SEA, including the sustainability effects and alternatives to be considered, the assessment methods to be used, and the structure and contents of the Environmental Report.

The purpose of the Scoping Report is to set the criteria for assessment (including the SEA objectives), and establish the baseline data and other information, including a review of relevant policies, programmes and plans. The scoping process involves an overview of key issues, highlighting areas of potential conflict.

The Scoping Report covers the early stages of the SEA process and includes information about:

- Identifying other relevant policies, plans and programmes, and environmental objectives;
- Collecting baseline information;
- Identifying environmental issues and problems; and
- Developing the SEA Framework.

The Scoping Report was published for consultation for a period of five weeks between 28<sup>th</sup> April 2010 and 2<sup>nd</sup> June 2010. Responses were received from three organisations. Following the receipt of responses, the information included in the Scoping Report was updated to take into account these comments.

The Scoping Report can be viewed at:

http://www.iow.gov.uk/living here/environment/Transport strategies/LTP3/.

#### 2.2 Scoping Responses

Consultee responses on the April 2010 Scoping Report were received from the following organisations:

- Environment Agency;
- Natural England; and
- RSPB.

**Appendix B** summarises the comments raised during the scoping consultation and details how they have been taken into account through the subsequent SEA process for the LTP3.

#### 2.3 Policy, Plan and Programme Review

A plan or programme may be influenced in various ways by other plans or programmes, or by external environmental protection objectives such as those laid down in policies or legislation. The SEA process takes advantage of potential synergies and addresses any inconsistencies and constraints.

**Appendix G** represents an analysis of the objectives of the key policies, plans and programmes (including legislation) that are relevant to LTP3 and the SEA appraisal process. These have been presented by their geographic relevance, from international to local level, and include additional policies, plans and programmes that have been introduced since the Scoping Report was released for consultation in April 2010.

The policy, plan and programme review has been presented by the environmental information themes outlined in **Section 1.6**, and assessed in relation to the main objectives and sustainability requirements of the programme, and how it affects, or is affected by the LTP3.

**Table 2.1** provides a summary of the PPP Review completed and updated as part of the Scoping process.

**Summary of Objectives and Sustainability Requirements** 

### Implications for the Isle of Wight LTP3

#### **Accessibility and Transport**

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European and UK transport policies and plans place emphasis on the modernisation and sustainability of the transport network. Specific objectives include reducing pollution and road congestion through improvements to public transport, walking and cycling networks and reducing the need to travel. National policy also focuses on the need for the transport network to support sustainable economic growth.

The PPPs highlight that congestion and poor air quality resulting from transport are key national and regional issues. The plans therefore focus on appropriate design. location and layout of development, increasing investment in infrastructure, improving the quality and accessibility of public transport, supporting walking and cycling, and enhancing road safety.

The LTP3 should seek to promote modal shift from the private car, through encouraging an increase in public transport and rail usage, supporting walking and cycling and improving intermodality. It should seek to reduce congestion and support more efficient movement of freight to and from and around the Island.

The LTP3 should also support forward planning in the Isle of Wight and promote the integration of new development with high quality sustainable transport infrastructure. The LTP3 should seek to minimise transport's effect on the environment and support climate change mitigation and adaptation.

#### Air Quality

A number of objectives have been established in relation to air quality at both the European and the UK level (emanating from the 1996 EC Directive). This includes the setting of targets for reducing emissions of specific pollutants to minimise negative impacts on health and the environment. At the Island level emphasis is placed on reducing emissions of nitrogen dioxide, particularly from the transport sector.

The LTP3 should aim to reduce emissions from transport by seeking to reduce traffic flows and congestion and encouraging alternatives to car use. It should also have a close focus on improving air quality in the areas of poorer air quality.

### **Biodiversity and Geodiversity**

The objectives of policies and plans at all levels focus on the conservation of biological diversity (including a reduction in the current rate of biodiversity loss), and the protection and monitoring of endangered and vulnerable species and habitats. Emphasis is also placed on the ecological importance of brownfield sites. geodiversity, and enhancing areas of woodland. The integration of biodiversity considerations into all environmental and socio-economic planning is strongly advocated.

At a regional level, the now withdrawn South East Plan<sup>10</sup> sought to encourage local authorities to: '...actively pursue opportunities to achieve a net gain (of biodiversity) across the region', '...give the highest level of protection to sites of international nature'; and 'avoid damage to nationally important sites of special scientific interest and seek to ensure that damage to county wildlife sites and locally important wildlife and geological sites is avoided' (policy NRM5).

Biodiversity considerations should be fully considered by the LTP3. In particular development of transport infrastructure should avoid and mitigate effects against sensitive areas and support the provision of green infrastructure and biodiversityfriendly design and layout to promote and enhance biological and landscape diversity. The value of local geodiversity assets should also be recognised by the LTP3.

Protected species are present across the Island, so the LTP3 should ensure that where transport schemes are necessary in areas containing these species, adequate mitigation is carried out before development commences.

The LTP3 should seek to encourage an approach to transport infrastructure which supports a holistic approach to biodiversity requirements on the Island, incorporating green infrastructure, landscape protection and habitat provision.

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<sup>&</sup>lt;sup>10</sup> Government Office for the South East (May 2009): South East Plan, Regional Spatial Strategy for the South East of England

Summary of Objectives and Sustainability Requirements	Implications for the Isle of Wight LTP3
At a local level the Isle of Wight Biodiversity Action Plan sets the local priorities for biodiversity on the Island, and the Isle of Wight Local Geodiversity Action Plan seeks to promote the Isle of Wight through the conservation and sustainable development of its Earth Heritage.  Biodiversity is also a key consideration of the PPPs promoting an improvement in green infrastructure networks.	
Climate Change	
Climate-related PPPs focus on both mitigating the causes of climate change and adapting to the effects of climate change. Commitments reducing greenhouse gas emissions range from the international level to the regional level. The PPPs address policy development across all sectors and at all levels, combining both demand management (reduced energy consumption and increased efficiency of use) and supply side measures (low carbon options including fuel mix and renewables). A number of the PPPs state specific targets to reduce emissions of greenhouse gases. This is led at the national level by the Climate Change Act, which sets a legally binding target of at least a 34 percent cut in greenhouse gas emissions by 2020 and at least an 80 percent cut by 2050 against a 1990 baseline.  Adaptation measures proposed by the PPPs include a presumption against development in flood risk areas, appropriate design of new development, the promotion of new infrastructure such as sustainable urban drainage systems and improved maintenance to help address the changes that are likely to occur as a result of climate change. Through this approach PPS25 (Development and Flood Risk) seeks to ensure that flood risk is taken into account at all stages in the planning process to avoid inappropriate development in areas at risk of flooding, and to direct development away from areas of highest risk.  The Sustainable Community Strategy for the Island, EcoIsland, also has a strong focus on climate change mitigation, promoting renewable energy and reducing the Island's carbon footprint.	The LTP3 should promote a package of measures to support climate change mitigation, including public transport investment, demand management, the promotion of smarter travel choices and integration of land use and transport planning to reduce the need to travel. It should also seek to encourage the use of new technologies and consider the use of mechanisms such as carbon budgeting. The LTP3 should also facilitate climate change adaptation on the Island, through supporting the sustainable management of flood risk areas, facilitating a growth in green infrastructure and promoting the use of sustainable urban drainage systems.

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#### **Summary of Objectives and Sustainability Requirements** Implications for the Isle of Wight LTP3 Health National and regional health related PPPs focus on improving rates of infant mortality The LTP3 should seek to improve accessibility to health, sporting, leisure and and life expectancy; reducing work related illness and accidents; significantly recreational facilities, promote healthier modes of travel such as walking and cycling improving levels of sport and physical activity, particularly among disadvantaged and support the provision of open space and enhanced Island-wide green groups; promoting healthier modes of travel; supporting the public to make healthier infrastructure networks and more informed choices in regards to their health; improving accessibility to healthcare and leisure/recreational facilities; and reducing health inequalities. particularly for children and older people. Four areas have been highlighted by the Sustainable Community Strategy as potentially key health priorities for the Island11. These include: reducing obesity: improve health, emotional wellbeing and life expectancy across the Island; supporting vulnerable people to live independent lives; and ensuring people of all ages have places to live and things to do in their local area. Historic Environment Historic environment priorities from international to local level include protecting The LTP3 should seek to support the integrity of the Island's historic environment designated resources and their settings (such as listed buildings, conservation areas, through facilitating the protection of assets, enhancing their settings and encouraging scheduled monuments, and registered parks and gardens); recognising the cultural walking, cycling and improvements to the public realm. The LTP3 should also seek to aspects of landscape and establishing mechanisms for their protection against protect and enhance historic transport features such as railway arches and their inappropriate development; recognising the potential value of unknown and surroundings. undesignated resources; and preserving/enhancing sites and landscapes of Archaeological assets, both potential and realised should be provided with full archaeological and historic interest so that they may be enjoyed by both present and consideration by the LTP3. future generations. Landscape At the EU, national, regional and local level emphasis is placed on the protection of The LTP3 should support the development of infrastructure which protects, and landscape as an essential component of people's surroundings and sense of place. where possible improves the landscape character of the Island. This should include The PPPs seek to increase recognition of the linkages and interplay between the augmenting historic landscapes and promoting landscape scale environmental different aspects and roles of landscape, including: local distinctiveness; the historic protection. Similarly it should seek to reduce the impact of traffic and transport environment: natural resources: farming, forestry and food: educational, leisure and infrastructure on landscape quality, including from noise and light pollution, and a loss recreation opportunities; transport and infrastructure; settlements and nature of tranquillity. conservation. The link between landscapes and a range of other aspects is provided with a close focus by the PPPs' focus on green infrastructure provision. In this respect policies advocate the provision of open space, green networks and woodland as opportunities

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<sup>&</sup>lt;sup>11</sup> Island Strategic Partnership (2008) Eco Island: the Isle of Wight's Sustainable Community Strategy 2008-2020: <a href="http://www.eco-island.org.uk/documents/eco%20island%20booklet.pdf">http://www.eco-island.org.uk/documents/eco%20island%20booklet.pdf</a>

Summary of Objectives and Sustainability Requirements	Implications for the Isle of Wight LTP3
for sport and recreation, creating healthier communities, supporting and enhancing biodiversity, reducing temperatures in built up areas in summer, reducing the impact of noise and air pollution, and limiting the risk of flooding.  The Isle of Wight AONB Management Plan was published in 2009.	
Material assets	
The material assets environmental information theme covers a range of policy areas, including waste management, minerals, energy production and previously developed land.  National level PPPs seek to the protect minerals resources and promote appropriate after uses for minerals workings. PPPs at all levels seek to promote the 'waste hierarchy'. This seeks to prioritise waste management in the following order: reduction; reuse; recycling and composting; energy recovery; and disposal. National and regional PPPs also support the use of previously developed land. At the Island level, the Isle of Wight Core Strategy will, when adopted, set out the strategic approach to minerals and waste issues on the Island.  An expansion of renewable energy production is strongly promoted by European and national PPPs. Under EU Directive 2001/77/EC, member states are overall required to achieve 22% of electricity production from renewable energies by 2010, with the UK-specific target 10%. This has been reinforced by the UK's recent Renewable Energy Strategy which seeks to produce 15% of electricity from renewable sources by 2020.	The LTP3 should promote resource efficiency, encourage the reuse of materials used in transport schemes, and seek to utilise recycled materials where appropriate. It should also, where relevant, aim to safeguard against the sterilisation of certain minerals resources.  The LTP3 should seek to promote the use of renewable energy within transport infrastructure, and support the growth of low carbon technologies.
Population and Quality of Life	
PPPs on population include a range of different objectives, including tackling social exclusion, improving human rights and public participation, improving health, and ensuring every child has the chance to fulfil their potential by reducing levels of education failure, ill health, substance misuse, crime and anti-social behaviour. At the regional and local levels, support for cultural diversity and young people are key aims. The Equality Act 2006 sets out that people should not be disadvantage on the basis of age; disability; gender; proposed, commenced or completed gender reassignment; race; religion or belief and sexual orientation.	The LTP3 should seek to; improve public transport and walking and cycling networks; promote new infrastructure which improves accessibility to services, facilities and amenities; enhance the local environment through appropriate design and layout of transport infrastructure; and support sub regional green infrastructure networks. This will support community cohesion and help facilitate social inclusion. It should also seek to ensure than land use planning and transport infrastructure provision is integrated on the Island to ensure that new areas of housing are accessible to services, facilities and amenities by the full range of sustainable transport modes.

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November 2007.

Summary of Objectives and Sustainability Requirements	Implications for the Isle of Wight LTP3
Soil	
National and regional policies and strategies on soil seek to: prevent soil pollution; reduce soil erosion from wind and water; maintain soil diversity; improve the quality of soil, including through the remediation of contaminated land and through promoting an increase in organic matter in soil; protect and enhance stores of soil carbon and water; recognise soils' role for natural systems; and increase the resilience of soils to a changing climate.  The PPPs also have a focus on protecting the quality of agricultural land, through reducing soil degradation, maintaining soil productivity, limiting compaction and range of other approaches.	The LTP3 should seek to limit the loss of the highest quality agricultural land, support a reduction of soil loss and erosion, promote an improvement of soil quality, including a reduction of land contamination, and promote soil protection during the construction and development of transport infrastructure.
Water	
National water policies are primarily driven by the aims of the EC Water Framework Directive, as translated into national law by the Water Framework Regulations 2003. Key objectives include improving the quality of rivers and other water bodies to 'good ecological status' by 2015; considering flood risk at all stages of the plan and development process in order to reduce future damage to property and loss of life; and incorporating water efficiency measures into new developments. PPS23 sets out how issues of pollution should be addressed in accordance with the <i>Pollution Prevention and Control Act 1999</i> and the <i>PPC Regulations</i> 2000.  National and regional strategies also have a strong focus on maintaining and protecting the availability of water in the South East. Southern Water's Water Resource Management Plan also provides the means of enabling water to be supplied and treated on the Island. Water supply and use is guided by Environment Agency's Catchment Abstraction Management Strategies. The Island is covered by the Isle of Wight CAMS.  PPS25 (Development and Flood Risk) seeks to ensure that flood risk is taken into account at all stages in the planning process to avoid inappropriate development in areas at risk of flooding, and to direct development away from areas of highest risk. The Strategic Flood Risk Assessment for the Isle of Wight was completed in November 2007	The LTP3 should avoid the promotion of infrastructure which increases flood risk in existing or potential (due to climate change) flood risk areas. It should also seek to utilise the Strategic Flood Risk Assessment which has been carried out on the Island, including the sequential/exception test where appropriate. The LTP3 should also seek to limit the risk of flooding from surface run off through the incorporation of sustainable drainage systems and other measures.  The LTP3 should seek to ensure that water quality is not negatively affected by planned transport infrastructure development, particularly regarding surface run-off during and after construction. It should also seek to incorporate water efficiency measures where appropriate. The LTP3 should treat potential pollution from the development of transport infrastructure as a material consideration, help reduce land contamination and promote the precautionary principle where uncertainties occur.

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#### 2.4 Baseline Data

A key part of the scoping process is the collection of baseline data. The purpose of this exercise is to help identify key issues and opportunities facing the area which might be addressed by the LTP3, and to provide an evidence base for the assessment.

The baseline section in the Scoping Report provided a review of current social, economic and environmental conditions on the Isle of Wight. The purpose of the baseline data was to help identify the key issues and opportunities facing different parts of the Island, which might be addressed by the LTP3.

One of the purposes of consultation on the Scoping Report was to seek views on whether the data selected was appropriate. Helpful comments were received from a range of stakeholders and in some cases new baseline information was provided.

The baseline data included in the Scoping Report has therefore been updated to reflect consultation comments and new data sources. The updated baseline data has been included in **Appendix H**.

#### 2.5 Key Sustainability Issues for the Isle of Wight

The policy and plan review and the baseline data (Sections 2.3 and 2.4 and Appendices G and H) revealed a number of key environmental and socio-economic issues and challenges for the Isle of Wight.

**Boxes 2.1** to **2.11** below set out the key issues linked to the environmental information themes (**Table 1.3**). These issues present the LTP3 with a wide number of opportunities for achieving environmental gain on the Island:

#### Box 2.1: Key Issues, Accessibility and Transport

- Congestion issues in and around Newport.
- Impact of tourism traffic, particularly during peak times such as school holidays, 'changeover day' summer weekends and during major events.
- Mitigation of the adverse impacts of traffic on smaller settlements.
- Reducing car dependency through the development of high-quality public transport alternatives, to encourage behavioural change.
- The need to provide appropriate transport infrastructure to meet the local housing targets.
- Issues linked to accessibility to and from the mainland, including relating to cost.
- Addressing access issues for those without access to a car, including through tackling problems of poor accessibility for disadvantaged people.
- The need to maintain the existing highway network to a high standard, particularly in light of the potential impact of climate change, coastal erosion and the increased frequency of severe weather events.

#### Box 2.2: Key Issues, Air Quality

- Whilst air quality in most of the Isle of Wight is very good, there are a number of areas
  of some concern in the Island.
- As highlighted by the ongoing Air Quality Review and Assessment process, nitrogen dioxide from road traffic has the potential to be a continuing issue in parts of the Island. This includes linked to the Coppins Bridge junction in Newport, and on the Sandown, Lake and Shanklin road corridor.
- Sulphur dioxide emissions linked to the Island's ferry ports have also been a concern in the last decade.
- New housing and employment development areas on the Island have the potential to lead to impacts on air quality from increased traffic flows.
- Increasing visitor and tourist numbers also have the potential to have impacts on air quality from increased traffic flows.

#### Box 2.3: Key Issues, Biodiversity and Geodiversity

- Growth earmarked for the Isle of Wight will place pressures on biodiversity in some areas of the Island.
- A substantial number of international, national and locally designated nature conservation sites exist on and near the Island.
- Sea-level rise, erosion and coastal squeeze are posing a major threat to the Isle of Wight's internationally important coastal habitats.
- A significant number of protected species are present on the Island.
- Potential impacts from habitat fragmentation resulting from new and improved transport infrastructure.
- Effects on designated sites from air quality issues.
- Road and rail corridors provide important corridors for wildlife and are vital biodiversity linkages within a fragmented and intensively managed landscape. These have the potential to come under threat from transport improvements.
- Recreational pressures on wildlife sites.
- ▶ Effects on biodiversity from increased noise and light pollution, resulting from an increase in traffic flows.

#### **Box 2.4: Key Issues, Climate Change**

- Potential effects on transport infrastructure from climate change, including flooding of roads and railways, damage from landslips or erosion, and damage to road surfaces and rail from high temperatures.
- A number of areas of the Island are susceptible to coastal and tidal flooding.
- A number of more built up areas on the island have a sensitivity to increased risk of flooding from surface run off. Transport infrastructure will have a key influence on this risk.
- Increased occurrence of drought as a result of climate change is likely to reduce water availability on the Island.
- High quality landscapes on the Island have the potential to be affected by changes in rainfall, invasive species, changes in farming practices, soil erosion and renewable energy provision.

#### **Box 2.4: Key Issues, Climate Change**

- Whilst the Island has significantly lower per capita greenhouse gas emissions than regional or national averages, the proportion of emissions from originating from transport has been increasing.
- Traffic growth on the Island has the potential to undermine the realisation of the government target of a 34 percent cut in greenhouse gas emissions by 2020.

#### Box 2.5: Key Issues, Health

- Health inequalities exist between the most and least deprived areas of the Island.
- The Isle of Wight has both lower levels of 'good' health and higher levels of 'not good' health in comparison to regional and national averages.
- Child health indicators are mixed on the Island.
- Levels of physical activity and obesity are increasing health issues for the Island, including amongst children.
- ▶ The Isle of Wight, in common with many other areas, is experiencing an ageing population. This will have implications for health service provision and accessibility to other services, facilities and amenities.

#### **Box 2.6: Key Issues, Historic Environment**

- Increasing traffic flows and congestion on the Island have been affecting the integrity of historic environment assets and their settings. This has led to pressures on historic landscape quality and the loss of character and integrity of the historic built environment and its setting.
- Distinctive historic environment assets are at risk from neglect or decay. This is particularly relevant for non-designated assets which are not afforded the same degree of protection as designated sites and areas.
- Effects on the historic environment from poor design of transport infrastructure, including insensitively designed layouts, inappropriate signage or excessive clutter.
- New and improved transport infrastructure has the potential to lead to effects on historic landscapes and cause direct damage to archaeological sites, monuments and buildings.
- Archaeological remains, both seen and unseen have the potential to be affected by new transport infrastructure.

#### Box 2.7: Key Issues, Landscape

- Potential effects on the integrity of areas with landscapes designated as part of the Isle of Wight AONB.
- Effects on landscape and townscape quality from new transport infrastructure and increasing traffic flows and congestion. This has for example affected Newport, the centre of the Island's road network.
- Further loss of tranquillity from increasing traffic flows and new transport infrastructure.
- Effects on landscape quality from poor design of transport infrastructure, including insensitively designed layouts, inappropriate signage or excessive clutter.
- Pressures on non-designated sites and landscapes: These sites and areas play an

#### Box 2.7: Key Issues, Landscape

important role in the cultural identity of the Island and enable a wider understanding of the area's historic development.

- Loss of key landscape features such as woodland or hedgerows.
- Noise and light pollution issues from increases in traffic flows.
- Green Infrastructure: There are significant opportunities to improve linkages between areas of open space, parks and the open countryside.

### **Box 2.8: Key Issues, Material Assets**

- Loss of greenfield land due to new transport infrastructure, including through the development of areas provided with enhanced access by new transport routes.
- Recycling rates are less than regional or national averages. They also have not been improving since 2006/7. A key challenge will be to ensure improvements in recycling and reuse rates.
- The LTP3 has the potential to support the use of recycled materials in new transport infrastructure.
- The transport of waste and minerals on the Island has the potential to affect those living near routes used for this purpose.
- Demand for materials from new areas of growth on the Island and the future Highways Private Finance Initiative will place additional pressures on the Island's transport networks.
- Opportunities exist across the Island for renewable energy generation.

#### Box 2.9: Key Issues, Population and Quality of Life

- The population of the Island is expected to increase significantly to 2030. Projections suggest that this could lead to a population increase of 30,000 from 2010 to 2030.
- Housing affordability and availability is a major issue for the Island, with an annual shortfall of new housing units.
- An ageing population and an increased dependency ratio on the Island has the potential to lead to implications for service provision and accessibility.
- Youth unemployment is high on the Island.
- Overall, wages are low, and work is seasonal across the Island.
- ▶ Higher levels of deprivation exist in some parts of the Island.

### Box 2.10: Key Issues, Soil

- Some areas of higher grade quality agricultural land may be threat from new growth areas on the Island and associated infrastructure.
- The development of new and improved transport infrastructure has the potential to lead to an increase in soil erosion and soil loss.

#### Box 2.11: Key Issues, Water

- Increased occurrence of drought as a result of climate change is likely to limit water availability on the Island through reducing groundwater levels.
- A significant area of southern half of the Island is covered by Source Protection Zones, indicating the risk to groundwater supplies from potentially polluting activities and accidental releases of pollutants. Groundwater is particularly vulnerable from diffuse pollution.
- Coastal areas of the Island are susceptible to flooding, and tidal flooding is a risk on the tidal reaches of the Island's rivers. This risk is likely to increase as the effects of climate change become more apparent.
- Surface water run off is a significant issue for the more built up areas of the Island.
- Fluvial flooding is a risk for a number of the Island's settlements, including Ryde and Newport.
- Water quality on the Island has seen overall improvements since 1990, with some fluctuations in quality. Further improvements on the Island are required to meet the target of all watercourses to reach 'good' biological and chemical water quality status by 2015, as required by the Water Framework Directive.

# 3 SEA Framework

#### 3.1 The SEA Framework

The Isle of Wight LTP3 has been assessed through an SEA Framework of objectives, decision making criteria, indicators and targets. The purpose of the SEA Framework is to provide a way of ensuring that the LTP3 considers the needs of the Island in terms of its environmental effects. It also enables the environmental effects of the LTP3 to be described, analysed and compared.

One of the main purposes of the Scoping Report was to seek views on an initial version of the SEA Framework. A number of suggestions for additional and revised indicators were provided through the consultation exercise (**Appendix B**). Following the receipt of responses on the Scoping Report, the SEA Framework was updated to address the comments received.

**Appendix C** presents the updated SEA Framework for the LTP3.

#### 3.2 SEA Objectives

The SEA Framework consists of environmental objectives which, where practicable, have been expressed in the form of targets, the achievement of which is measurable using indicators. There is no statutory basis for setting objectives but they are a recognised way of considering the environmental effects of a plan and comparing alternatives. In this context the SEA Objectives provide the basis from which effects of the LTP3 can be tested.

The SEA Objectives have been developed through the PPP review, the baseline data collection and the identification of key issues (**Chapter 2**). Alongside, the SEA topics identified in Annex I (f) of the SEA Directive (**Appendix A**) were one of the key determinants when considering which SEA Objectives should be used for appraisal purposes. The SEA Objectives seek to reflect each of these topic areas and influences to ensure the assessment process is robust and thorough.

The SEA Objectives included within the SEA Framework, and the environmental information themes to which they relate (**Section 1.6**) are presented in **Table 3.1**:

Table 3.1: SEA Objectives.

SEA	\ Objective	Relevance to environmental information theme <sup>12</sup>
1	Protect, enhance and manage sites, features and areas of archaeological, historical and cultural heritage importance.	Historic environment.
2	Protect, enhance and manage the character and appearance of the landscape and townscape, maintaining and strengthening distinctiveness and its special qualities.	Landscape, historic environment.
3	Protect, enhance and manage biodiversity and geodiversity.	Biodiversity and geodiversity.
4	Maintain and improve the water quality of the Isle of Wight's rivers, coasts and groundwater.	Water.
5	Conserve the Island's natural resources.	Material assets, soil, water.
6	Protect and enhance the Island's soils resource.	Soil.
7	Reduce air pollution and ensure continued improvements to air quality.	Air quality.
8	Minimise the Island's contribution to climate change.	Climate change.
9	Plan for the anticipated effects of climate change.	Climate change, water.
10	Reduce poverty and social exclusion and close the gap between the most deprived areas on the Isle of Wight and the rest of the Island.	Accessibility and transport, population.
11	Safeguard and improve community health, safety and well being.	Health.

#### 3.3 The SEA Objectives and Health Impact Assessment

As highlighted in **Section 1.4**, a Health Impact Assessment process has been incorporated within the SEA process through the SEA Objectives presented in **Table 3.1**.

Whilst SEA Objective 11 most explicitly concerns potential impacts on health, the majority of the SEA Objectives are either directly or indirectly relevant to the consideration of health issues on the Island. In this context the SEA process has fully considered the implications of the developing Island Transport Plan for health through the consideration of these objectives.

<sup>&</sup>lt;sup>12</sup> A discussion of the environmental information themes is included in **Section 1.6.** 

## 4 Assessment of Alternative Options

#### 4.1 Assessment of Alternative Options for the LTP3

The SEA Directive requires that the Environmental Report should consider:

'Reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme' and give 'an outline of the reasons for selecting the alternatives dealt with' (Article 5.1 and Annex I (h)).

Following the conclusion of the scoping stage of the SEA, the SEA team contributed to the development of early versions of the LTP3. This included an appraisal of a set of alternative interventions and measures to be potentially included in the LTP3. As a result of this process, a preliminary Alternatives SEA Report, which set out the findings of this appraisal process, was provided to IoWC in June 2010<sup>13</sup>.

#### 4.2 SEA Alternatives Report

The SEA Alternatives Report presented an assessment of 44 potential LTP3 interventions and measures, or 'initiatives' grouped under a series of LTP3 Objectives. The purpose of this exercise was to ensure proper iteration with plan-making and to provide comprehensive and auditable assessment findings.

The assessment of the potential interventions and measures engaged a 'high-level' assessment technique which utilised the SEA Framework, the baseline and the review of plans, programmes and policies to assess each alternative set of initiatives. This was presented through a series of assessment matrices and an accompanying commentary which compared the sustainability performance of each of the sets of measures. To supplement the appraisal and the commentary, the SEA Alternatives Report also presented a set of recommendations which it suggested should be taken forward through the ongoing development of the draft LTP3.

The SEA Alternatives Report can be accessed at the strategic environmental assessment link on the LTP3 website:

http://www.iow.gov.uk/living here/environment/Transport strategies/LTP3/.

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<sup>&</sup>lt;sup>13</sup> Alliance Planning (June 2010) Strategic Environmental Assessment of the Isle of Wight Local Transport Plan, Internal SEA Alternatives Report

#### 4.3 Assessment of alternative interventions and the development of the LTP3

The SEA Alternatives Report presented an appraisal of a series of potential interventions and measures which could potentially be included in the LTP3. Through this approach the assessment highlighted the potential beneficial and adverse effects likely to arise as a result of taking forward different interventions and approaches through the LTP3.

Whilst not being a requisite part of the SEA Regulations or DfT SEA Guidance (TAG Unit 2.11)<sup>14</sup> the preparation of the SEA Alternatives Report followed the 'spirit' of SEA through seeking to inform and influence the development of the LTP3 at an early stage to help maximise the plan's environmental value.

In this context, the results of the assessment of the potential measures and interventions helped the LTP3 development team identify a "preferred strategy" for the plan.

<sup>&</sup>lt;sup>14</sup> Department for Transport (April 2009): TAG Unit 2.11, Strategic Environmental Assessment for Transport Plans and Programmes ('In draft' Guidance).

# 5 Approach to the Assessment of the Consultation Version of the LTP3

#### 5.1 The Consultation Draft of the LTP3

The Consultation Draft of the LTP3 (or Draft Strategy) sets out the long term transport vision for the Island to 2038, and outlines a series of objectives, goals and possible interventions. It was developed through the consideration of:

- Locally adopted and emerging plans;
- Previous LTPs (including successes and lessons learnt);
- Statutory assessments (including the SEA process);
- Local consultation and feedback;
- National transport legislation; and
- ▶ Government guidance.

The Draft Strategy is undergoing consultation for a period of twelve weeks from November 2010 to February 2011.

#### 5.2 Transport vision and goals for the LTP3

The overall vision for the LTP3 is:

"To improve & maintain our highway assets, enhancing accessibility and safety to support a thriving economy, improve quality of life and respect the local environment."

To help implement this vision, the LTP3 sets out six transport goals for the Island. These are as follows:

- Improve and maintain our highway assets;
- Increase accessibility;
- Improve road safety and health;
- Support economic growth;
- Improve quality of life; and
- Respect the local environment.

#### 5.3 Proposed interventions included in the Consultation Draft of the LTP3

As highlighted above, the Draft Strategy sets out a proposed approach to transport within the Isle of Wight through presenting a series of potential interventions. These comprise a broad range of transport measures containing a series of interventions for delivery. These interventions have been presented through the six key 'transport goals' of the LTP3, which are designed to implement the vision for the LTP3 (Section 5.2).

The following table sets out the proposed packages of interventions for the Isle of Wight.

**Table 5.1:** Proposed interventions included in the Consultation Draft of the LTP3.

lab	le 5.1: Proposed interventions included in the Consultation Draft of the LTP3.					
Pro	posed transport interventions for the Isle of Wight					
Goal: Enhance and maintain our highway assets						
1	Short term – prioritise limited funding available					
2	Long term - develop Highway PFI to secure major funding to upgrade and maintain network					
Goa	Goal: Increase accessibility					
3	Improve highway condition (PFI)					
4	Best use of highway space					
5	Network management					
6	Traffic management techniques					
7	Reduce reliance on car by increasing travel choice (walking, cycling, public transport)					
8	Travel plans					
9	Parking strategy					
10	Parking enforcement					
11	Highway and traffic management (ports)					
12	Work with operators & stakeholders					
13	Work with neighbouring authorities					
14	Ensure residents and visitors have good access to services, employment and countryside					
Goa	l: Improve road safety and health					
15	Compilation and delivery of Road Safety Plan					
16	Take a data led approach to monitor accident and casualty trends and identify appropriate action					
17	Work in partnership with others on road safety training, awareness and travel initiatives					
18	Treat any problem locations, routes and areas with appropriate engineering measures.					
19	Provide safer walking and cycling routes and facilities					
20	Introduce speed management measures where considered appropriate					
21	Continue to undertake safety audits on all new and improved schemes					
22	Work in partnership with others to promote health and lifestyle benefits of active travel					
23	Encourage children to walk or cycle to school as part of School Travel Plans and Healthy Schools initiatives					
24	Work in partnership with others to identify crime (and fear of crime) on transport network					
25	Consider crime and fear of crime when designing new highways infrastructure including lighting and CCTV					
Goal: Support economic growth						
26	Work with Planning colleagues on development and implementation of Local Development Framework					
27	Ensure infrastructure to support development (eg secure Section 106, Community Infrastructure Fund, accessibility contributions)					
28	Located close to workforce					
29	Travel plans					
30	Consider additional pressure on transport network and possible mitigation (eg network improvements, accessibility contributions).					

31	posed transport interventions for the Isle of Wight
)	Located close to employment, schools, shopping and services  Ensure good access to transport links (eg walking & cycling routes, public transport links &
32	infrastructure)
3	Network management
4	Improve highways and associated areas as part of PFI
5	Encourage car free tourism
6	Access to ports
7	Encourage walking, cycling, public transport to accommodation, attractions and events
ioa	l: Improve quality of life
8	Work with in partnership with operators in service and infrastructure provision
9	Work with operators to encourage discounted travel rates for young people and students
0	Support of over 60 bus scheme
1	Work with operators to increase access to key locations and promote national and local initiative (e.g. Wight Wheels)
2	Seek to ensure travel information is widely available in a range of languages and formats
3	Support operators with introduction of suitable vehicles (e.g. installation of 'kassel' kerbing at bu stops).
4	Installation of dropped crossings at appropriate locations
5	Installation of appropriate infrastructure (e.g. 'tactile cones' on controlled crossings)
6	Consideration of transport barriers to those living in areas of multiple deprivation
7	Ensure residents and visitors have good access to services, employment and countryside
8	Consider noise reducing surfacing and landscaping as part of highway schemes (including PFI)
9	Consider development of a Noise Action Plan including management of transport noise.
ioa	l: Respect the local environment
0	Ensure developments in keeping with environment including design and materials including visual screening and landscaping where appropriate
1	Appropriate location of new signs and street furniture to avoid street clutter
2	Respect settings of listed buildings, scheduled monuments and conservation areas
3	Ensure sensitively placed to strike balance between safety and townscape preservation
4	Ensure respect habitats with mitigation where necessary
5	Vulnerability of habitats considered during scheme/site selection
5	Vulnerability of habitats considered during scheme/site selection Timing of delivery
5 6 7	Vulnerability of habitats considered during scheme/site selection Timing of delivery Re-use of construction materials in Highway schemes where possible
5 6 7 8	Vulnerability of habitats considered during scheme/site selection Timing of delivery Re-use of construction materials in Highway schemes where possible Consider use of local materials where possible
5 6 7 8	Vulnerability of habitats considered during scheme/site selection  Timing of delivery  Re-use of construction materials in Highway schemes where possible  Consider use of local materials where possible  Minimise risk of pollution of groundwater and surface water during construction  Work with others on the development of local climate change report including likelihood of
5 6 7 8 9	Vulnerability of habitats considered during scheme/site selection  Timing of delivery  Re-use of construction materials in Highway schemes where possible  Consider use of local materials where possible  Minimise risk of pollution of groundwater and surface water during construction
5 6 7 8 9 0	Vulnerability of habitats considered during scheme/site selection  Timing of delivery  Re-use of construction materials in Highway schemes where possible  Consider use of local materials where possible  Minimise risk of pollution of groundwater and surface water during construction  Work with others on the development of local climate change report including likelihood of occurrence, severity, risk, threats and actions.  Consider impact of sea level rises, storm surges, flooding and increased temperatures when designing highways infrastructure.
5 6 7 8 9 0	Vulnerability of habitats considered during scheme/site selection  Timing of delivery  Re-use of construction materials in Highway schemes where possible  Consider use of local materials where possible  Minimise risk of pollution of groundwater and surface water during construction  Work with others on the development of local climate change report including likelihood of occurrence, severity, risk, threats and actions.  Consider impact of sea level rises, storm surges, flooding and increased temperatures when designing highways infrastructure.  Incorporate SUDS and balancing ponds into new infrastructure where appropriate
5 6 7 8 9 0	Vulnerability of habitats considered during scheme/site selection  Timing of delivery  Re-use of construction materials in Highway schemes where possible  Consider use of local materials where possible  Minimise risk of pollution of groundwater and surface water during construction  Work with others on the development of local climate change report including likelihood of occurrence, severity, risk, threats and actions.  Consider impact of sea level rises, storm surges, flooding and increased temperatures when designing highways infrastructure.
5 6 7 8 9 0 1 2 3	Vulnerability of habitats considered during scheme/site selection  Timing of delivery  Re-use of construction materials in Highway schemes where possible  Consider use of local materials where possible  Minimise risk of pollution of groundwater and surface water during construction  Work with others on the development of local climate change report including likelihood of occurrence, severity, risk, threats and actions.  Consider impact of sea level rises, storm surges, flooding and increased temperatures when designing highways infrastructure.  Incorporate SUDS and balancing ponds into new infrastructure where appropriate  Work on emergency travel plans.  Increased mean temperatures may result in an increase in tourism and therefore seasonal congestion (see above)
5 6 7 8 9 0 1 2 3 4	Vulnerability of habitats considered during scheme/site selection  Timing of delivery  Re-use of construction materials in Highway schemes where possible  Consider use of local materials where possible  Minimise risk of pollution of groundwater and surface water during construction  Work with others on the development of local climate change report including likelihood of occurrence, severity, risk, threats and actions.  Consider impact of sea level rises, storm surges, flooding and increased temperatures when designing highways infrastructure.  Incorporate SUDS and balancing ponds into new infrastructure where appropriate  Work on emergency travel plans.  Increased mean temperatures may result in an increase in tourism and therefore seasonal congestion (see above)  Improve highway network (PFI)
5 6 7 8 9 0 1 2 3 4	Vulnerability of habitats considered during scheme/site selection  Timing of delivery  Re-use of construction materials in Highway schemes where possible  Consider use of local materials where possible  Minimise risk of pollution of groundwater and surface water during construction  Work with others on the development of local climate change report including likelihood of occurrence, severity, risk, threats and actions.  Consider impact of sea level rises, storm surges, flooding and increased temperatures when designing highways infrastructure.  Incorporate SUDS and balancing ponds into new infrastructure where appropriate  Work on emergency travel plans.  Increased mean temperatures may result in an increase in tourism and therefore seasonal congestion (see above)  Improve highway network (PFI)  Offer travel choice – walking, cycling, public transport, car sharing
5 6 7 8 9 0 1 2 3 4 5 6	Vulnerability of habitats considered during scheme/site selection  Timing of delivery  Re-use of construction materials in Highway schemes where possible  Consider use of local materials where possible  Minimise risk of pollution of groundwater and surface water during construction  Work with others on the development of local climate change report including likelihood of occurrence, severity, risk, threats and actions.  Consider impact of sea level rises, storm surges, flooding and increased temperatures when designing highways infrastructure.  Incorporate SUDS and balancing ponds into new infrastructure where appropriate  Work on emergency travel plans.  Increased mean temperatures may result in an increase in tourism and therefore seasonal congestion (see above)  Improve highway network (PFI)  Offer travel choice – walking, cycling, public transport, car sharing  Promote travel plans and home working
555 555 556 557 558 559 551 551 552 553 555 557 558 557	Vulnerability of habitats considered during scheme/site selection  Timing of delivery  Re-use of construction materials in Highway schemes where possible  Consider use of local materials where possible  Minimise risk of pollution of groundwater and surface water during construction  Work with others on the development of local climate change report including likelihood of occurrence, severity, risk, threats and actions.  Consider impact of sea level rises, storm surges, flooding and increased temperatures when designing highways infrastructure.  Incorporate SUDS and balancing ponds into new infrastructure where appropriate  Work on emergency travel plans.  Increased mean temperatures may result in an increase in tourism and therefore seasonal congestion (see above)  Improve highway network (PFI)  Offer travel choice – walking, cycling, public transport, car sharing  Promote travel plans and home working  Work with planners and service providers on reducing the need to travel
5 6 7 8 9 0 1 1 2 3 4 5 6 7 8	Vulnerability of habitats considered during scheme/site selection  Timing of delivery  Re-use of construction materials in Highway schemes where possible  Consider use of local materials where possible  Minimise risk of pollution of groundwater and surface water during construction  Work with others on the development of local climate change report including likelihood of occurrence, severity, risk, threats and actions.  Consider impact of sea level rises, storm surges, flooding and increased temperatures when designing highways infrastructure.  Incorporate SUDS and balancing ponds into new infrastructure where appropriate  Work on emergency travel plans.  Increased mean temperatures may result in an increase in tourism and therefore seasonal congestion (see above)  Improve highway network (PFI)  Offer travel choice – walking, cycling, public transport, car sharing  Promote travel plans and home working

#### 5.4 Assessment of the Consultation Draft Strategy

The LTP3 interventions presented in **Table 5.1** have been assessed against the SEA Framework of objectives and indicators developed through the Scoping stage of the SEA (**Section 3.1** and **Appendix C**). This has engaged a two-step process; a high level assessment and a detailed assessment.

#### 5.4.1 High level assessment

The first step of the appraisal process, the high level assessment, has used the SEA Framework, the baseline and the review of plans, programmes and policies to assess each intervention. Findings are presented in matrix format.

The high level assessment matrix is not a conclusive tool or model. Its main function is to identify whether or not the Draft Strategy interventions are likely to bring positive, negative or uncertain effects in relation to the SEA Objectives. A benefit of this approach is that a range of policies may be assessed, which can then be scrutinised in further detail if a significant number of uncertainties or potential adverse effects arise.

#### 5.4.2 Detailed assessment

Whilst the high level assessment of the Draft Strategy interventions provide a broad indication of some of the issues surrounding the proposed measures' environmental performance, to gain a closer understanding of these issues, a more detailed assessment process has been carried out. The second step of the appraisal process uses Detailed Assessment Matrices to scrutinize potential adverse or uncertain effects which have been identified by the high level assessment.

Detailed Assessment Matrices address the range of criteria identified in Annex II of the SEA Directive<sup>15</sup> when determining the likely (positive or negative) significance of effects (see **Box 5.1** below).

#### Box 5.1: Criteria for the assessment of significant effects

Criteria for determining the likely significance of effects referred to in Article 3(5) of the SEA Directive

The characteristics of plans and programmes, having regard, in particular, to

- a. the degree to which the plan or programme sets a framework for projects and other activities, either with regard to the location, nature, size and operating conditions or by allocating resources;
- b. the degree to which the plan or programme influences other plans and programmes including those in a hierarchy;
- c. the relevance of the plan or programme for the integration of environmental considerations in particular with a view to promoting sustainable development;
- d. environmental problems relevant to the plan or programme;
- e. the relevance of the plan or programme for the implementation of Community legislation on the environment (e.g. plans and programmes linked to waste-management or water protection).

<sup>&</sup>lt;sup>15</sup> This SEA is being carried out in accordance with the requirements of the Directive 2001/42/EC, the SEA Directive.

#### Box 5.1: Criteria for the assessment of significant effects

Characteristics of the effects and of the area likely to be affected, having regard, in particular, to

- f. the probability, duration, frequency and reversibility of the effects;
- g. the cumulative nature of the effects;
- h. the transboundary nature of the effects;
- i. the risks to human health or the environment (e.g. due to accidents);
- the magnitude and spatial extent of the effects (geographical area and size of the population likely to be affected);
- k. the value and vulnerability of the area likely to be affected due to:
- I. special natural characteristics or cultural heritage;
- m. exceeded environmental quality standards or limit values;
- n. intensive land-use;
- o. the effects on areas or landscapes which have a recognised national, Community or international protection status.

The Detailed Assessment Matrices assess each of the Draft Strategy interventions where potential adverse or uncertain effects have arisen (as established through the high level assessment process) by considering the effects of their associated proposals on each of the SEA Objectives in terms of, and by setting out:

- A description of the predicted effect;
- ▶ The duration of the effect: whether the effect is long, medium or short term;
- The frequency of the effect: will it be ongoing?;
- Whether the effect is temporary or permanent;
- ▶ The geographic significance: whether the effect is of localised, regional, national or international significance;
- ▶ The magnitude of effect;
- The severity of significance;
- Whether mitigation is required/possible to reduce the effect; and
- Suggestions for mitigating the effect, or potential improvements to the proposals.

The Detailed Assessment Matrices also include a summary of the assessment for each intervention and, where appropriate, potential mitigation measures to limit potential adverse effects where they arise.

At a strategic level it is usually difficult to assess significant effects in the absence of widespread data. Instead, orders of magnitude are used based on geographic significance and impact magnitude. **Table 5.2** illustrates this order of magnitude for positive and adverse effects.

Table 5.2: Significance Matrix.

		Impact magnitude								
		Adverse				Neutral	Positive			
		High	Medium	Low	Negligible	Neutrai	Negligible	Low	Medium	High
Geographical significance	International	Severe	Severe	 Major	Moderate		Moderate	Major	Severe	Severe
	National	Severe	Major	Moderate	Minor		Minor	Moderate	Major	Severe
	Regional	Major	Moderate	Minor	Negligible		Negligible	Minor	Moderate	Major
Geog	Local	Moderate	Minor	Negligible	Negligible		Negligible	Negligible	Minor	Moderate

Limitations in terms of the level of detail and confidence of assessment are cited in the Detailed Assessment Matrices; where uncertainty exists, the worse case scenario has been assumed in accordance with the precautionary principle<sup>16</sup>.

#### 5.5 Assessment of Cumulative Effects

As required by the SEA Regulations, cumulative, synergistic and indirect effects have been identified, assessed and evaluated during the assessment. An explanation of these is as follows:

- Indirect effects are effects that are not a direct result of the plan, but occur away from the original effect or as a result of a complex pathway;
- Cumulative effects arise where several developments each have insignificant effects but together have a significant effect, or where several individual effects of the plan have a combined effect; and
- > Synergistic effects interact to produce a total effect greater than the sum of the individual effects.

Whilst a number of these effects have been established and recorded through the assessment of the Draft Strategy interventions, a number of these effects can only be established through examining two or more of the proposed interventions together.

The appraisal has therefore summarised the cumulative, synergistic and indirect effects that are likely to come about from the interaction of the interventions proposed by the Draft Strategy. These are presented in association with the SEA Objectives.

<sup>&</sup>lt;sup>16</sup> Where there is scientific uncertainty, and the consequences of an action, especially concerning the use of technology, are unknown but are judged by some scientists to have a high risk of being negative from an ethical point of view, then it is better not to carry out the action rather than risk the uncertain, but possibly very negative, consequences.

#### 5.6 Summarising the assessment of the Draft Strategy

A summary of the high level assessment, the detailed assessment and the cumulative effects assessment is presented in **Sections 6.1**, **6.2** and **6.3**. This should be read alongside the appraisal matrices included in **Appendices D** and **E**.

The summary is accompanied in **Section 6.4** by an overall interpretation of the appraisal findings, arranged according to the environmental information themes<sup>17</sup>. In association with the findings of the integrated HIA, incorporated within the section is a summary of the assessment findings relating to health.

#### 5.7 Limitations of assessment

It is important to acknowledge the limitations of the approach taken to the assessment. These limitations relate to both the scope and coverage of the plan and the nature of the SEA process.

The following considerations should therefore be acknowledged in regard to the assessment:

- Many of the proposed interventions are not specific to particular locations and are, from a geographic perspective, not explicit. This in some instances reduces the degree of certainty relating to potential environmental effects that may arise as result of the interventions.
- In some cases it has not been possible to carry out a meaningful assessment due to the level of detail within the proposed interventions, for example related to design, layout or size. For this reason the assessment has in a number of cases needed to make wider assumptions as to the detail of proposed interventions.
- ▶ SEA seeks to make judgements based on limits beyond which irreversible effects can arise. It is however sometimes difficult to do this when such limits are not properly understood, for example due to a lack of baseline data, or where only limited levels of information are currently available on certain proposed interventions. Where this has occurred, the precautionary principle has been applied¹8.
- At a strategic level, such as at the Local Transport Plan strategy level, it is difficult to assess significant effects. It is therefore likely that a meaningful assessment can only occur when interventions have been developed further through implementation.

Where appropriate, the SEA process has acknowledged these limitations.

<sup>&</sup>lt;sup>17</sup> See **Section 1.6**.

<sup>&</sup>lt;sup>18</sup> Where there is scientific uncertainty, and the consequences of an action, especially concerning the use of technology, are unknown but are judged by some scientists to have a high risk of being negative from an ethical point of view, then it is better not to carry out the action rather than risk the uncertain, but possibly very negative, consequences.

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# 6 Assessment of the LTP3 Draft Strategy interventions

#### 6.1 Results of the High Level Assessment for the Draft Strategy interventions

**Appendix D** presents the high level assessment matrix for the 70 interventions included in the Draft Strategy.

As the high level assessment highlights, the proposed interventions for the Island are likely to bring a range of positive environmental effects related to the full range of SEA Objectives. These include through limiting traffic growth, facilitating modal shift, improving accessibility to services and facilities, supporting enhancements to the public realm, promoting social inclusion and encouraging the use of healthier modes of travel.

Whilst the majority of the proposed interventions support the SEA Objectives, nine have raised potential negative and uncertain effects against the SEA Objectives. These interventions are as follows:

- Intervention 2: Develop Highway PFI to secure major funding to upgrade and maintain network;
- Intervention 3: Improve highway condition (PFI)
- Intervention 4: Best use of highway space
- Interventions 5 and 33: Network management
- Intervention 6: Traffic management techniques
- Intervention 27: Ensure infrastructure to support development (e.g. secure Section 106, Community Infrastructure Fund, accessibility contributions);
- Intervention 34: Improve highways and associated areas as part of PFI; and
- Intervention 65: Improve highway network (PFI).

Whilst the high level assessment of the interventions provides a broad indication of some of the issues surrounding their likely environmental performance, to gain a closer understanding of these issues, a more in depth assessment has been carried out on these nine interventions utilising Detailed Assessment Matrices (Section 5.4.2). This enables a clearer understanding of the potential negative or uncertain effects which have been raised by the high level assessment.

#### 6.2 Results of the Detailed Assessment

A summary of the main assessment outcomes for each of the Draft Strategy interventions which have highlighted potential uncertain or adverse effects is presented below. A number

of the interventions have been grouped due to their similar aims and outcomes, including those interventions related to the PFI and network management.

These summaries should be read alongside the Detailed Assessment Matrices included in **Appendix E** where full assessment findings, including mitigation, are presented.

Intervention 2: develop Highway PFI to secure major funding to upgrade and maintain network; Intervention 3: Improve highway condition (PFI); Intervention 34: Improve highways and associated areas as part of PFI; and Intervention 65: Improve highway network (PFI).

Whilst the development and delivery of the 25 year Highways Maintenance Private Finance Initiative on the Island has the potential to support a range of medium and long term positive effects in relation to the SEA Objectives, a number of potential shorter term adverse effects have the potential to arise.

The PFI will support social inclusion by providing an increase in the availability of employment and training opportunities on the Island for local people from the likely programme of maintenance and improvement works. The PFI is also likely to support health and wellbeing by improving the quality of walking and cycling routes and the quality of the public realm, promoting healthier modes of travel, and supporting accessibility to health, leisure and recreational facilities. Enhanced lighting maintenance has the potential to improve perceptions of security.

Improved maintenance stimulated by the PFI provides the opportunity to support biodiversity assets on the island through improved management of verges, enhanced pollution control, ecological management techniques, habitat creation and a range of other actions. Similarly opportunities to increase the resilience of the highways network to the effects of climate change, including through improved drainage, the use of new materials and other aspects will be supported by the PFI. Enhancements to landscape and townscape quality, and the quality of the public realm have the potential be promoted by a reduction in noise pollution from improved road surfacing, enhancements to street furniture and appropriate design and layout of highways networks.

The PFI, through initiating maintenance and improvement works to reverse a significant period of underinvestment in the highways network, is likely to have a number of shorter term, and temporary adverse effects. This includes through the effect of construction activities on: noise and air quality; the quality of the public ream; biodiversity assets; congestion issues; and on local residents' quality of life. Increased maintenance activities also have the potential to lead to an increase in resource use and the production of construction waste materials, although it should be noted that in the longer term resource use and construction waste may be limited by the use of longer lasting and high quality materials.

# Intervention 4: Best use of highway space; Interventions 5, 30 and 33: Network management; and Intervention 6: Traffic management techniques

Through enhancing the effectiveness of the existing network and improving traffic flows, the proposed interventions will support a reduction in congestion at hotspots on the island in the short term, with benefits for journey times, accessibility for car users, and for air and noise quality. Bus routes will also be supported by improved traffic flows and management. This will support journey times and reliability, promoting accessibility by public transport.

In the longer term however, through improving capacity at the Island's bottlenecks and optimising management of the highway network, the measures have the potential to lead to traffic growth as journey times and reliability improve. This has the potential to have some implications for longer term air and noise quality, the quality of landscape, townscape and the public realm, and have effects on the integrity of the historic environment. Potential effects are however likely to be limited due to the nature and scope of the proposed measures.

# Intervention 27: Ensure infrastructure to support development (eg secure Section 106, Community Infrastructure Fund, accessibility contributions)

The intervention seeks to encourage the delivery of new infrastructure through Section 106 agreements and other mechanisms. This has the potential to promote the provision of new and improved walking, cycling and public transport links, promoting non car use and modal shift. It also has the potential to facilitate improvements to the quality of the built environment, contribute to enhanced green infrastructure provision and support a range of other benefits if appropriate planning obligations are introduced. Through facilitating these mechanisms, the intervention will help promote accessibility to services, facilities and amenities, support social inclusion and improve the quality of residents' neighbourhoods as places to live.

The intervention puts forward four strategic junction improvements in Newport to mitigate the impact of new developments on traffic flows, including at Coppins Bridge, River Way, St Mary's Roundabout and Hunnyhill/Vicarage Walk. Whilst in the short term these junction improvements will support enhanced network functionality and a reduction of the adverse effects linked with congestion, in the longer term the measures have the potential to stimulate an increase in traffic flows. Without the 'locking in' of the benefits of the junction improvements, this will have implications for greenhouse gas emissions, air and noise quality, and the quality of the public realm. Increased traffic flows in the longer term may also have wider adverse effects on biodiversity assets, the historic environment and landscape and townscape quality.

#### 6.3 Assessment of Cumulative Effects

As required by the SEA Regulations, cumulative, synergistic and indirect effects have been identified and evaluated during the assessment (Section 5.5).

Whilst a number of these effects have been established and recorded through the assessment of the Draft Strategy interventions, a number of these effects can only be established through

examining two or more of the proposed interventions together. The table below therefore summarises the cumulative, synergistic and indirect effects that are likely to come about from the interaction of the interventions proposed by the Draft Strategy. These are presented in relation to the eleven SEA Objectives.

Table 6.1: Cumulative, Synergistic and Indirect Effects: Draft Strategy interventions

SEA Objective	Interventions which combine to bring cumulative/ synergistic/ indirect effects	Significance
1. Protect, enhance and manage sites, features and areas of archaeological, historical and cultural heritage importance	Interventions 7, 8, 10, 11, 19, 20, 22, 23, 25, 28, 29, 31, 32, 35-41, 46-53, 58, and 66-69 have the potential to have cumulative, synergistic and indirect effects on the setting of cultural heritage assets on the Island through helping to improve the quality of the built environment and townscape.	Significant positive effects over the short, medium and long term.
	Interventions 2, 3, 7, 8, 10, 11, 14, 19, 20, 23, 26, 28, 29, 31, 32, 35-41, 47-49, 52, 65-69 will have cumulative, synergistic and indirect effects on the setting of cultural heritage assets through reducing the effect of traffic on the built and natural environment, including from noise and visual intrusion.	Significant positive effects over the medium and long term.
	Interventions 4, 5, 6, 27, 30 and 33 have the potential to have effects on the historic environment through synergistic effects on encouraging an increase in traffic flows on the Island.	Potential adverse effects over the medium and long term.
2. Protect, enhance and manage the character and appearance of the landscape and townscape, maintaining and strengthening distinctiveness and its	Interventions 2, 3, 7, 8, 10, 11, 14, 19, 20, 23, 26, 28, 29, 31, 32, 35-41, 47-49, 52, 65-69 will have cumulative, synergistic and indirect effects on landscape and townscape quality through reducing the effect of traffic on the built and natural environment, including from noise and visual intrusion.	Significant positive effects over the short, medium and long term
special qualities.	Interventions 7, 8, 10, 11, 19, 20, 22, 23, 25, 28, 29, 31, 32, 35-41, 46-53, 58, and 66-69 have the potential to have cumulative, synergistic and indirect effects on landscape and townscape quality on the Island through improving the quality of the built environment and townscape.	Significant positive effects over the short, medium and long term.
	Interventions 4, 5, 6, 27, 30 and 33 have the potential to have effects on the quality of landscape and townscape through synergistic effects on encouraging an increase in traffic flows on the Island.	Potential adverse effects over the medium and long term.
3. Protect, enhance and manage biodiversity and geodiversity.	Interventions 54, 55, and 56 will have cumulative, synergistic and indirect effects on support biodiversity networks on the Island by protecting assets and improving habitats	Significant positive effects over the short, medium and long term.
4. Maintain and improve the water quality of the Isle of Wight's rivers, coasts and groundwater.	Interventions 2, 3, 26, 27, 34, 59, 61, 62 and 65 will have cumulative effects on supporting the quality of the Island's watercourses through promoting sustainable drainage.	Significant positive effects over the short, medium and long term.

SEA Objective	Interventions which combine to bring cumulative/ synergistic/ indirect effects	Significance	
5. Conserve the Island's natural resources.	Interventions 2, 3, 34, 57, 58 and 65 will have cumulative and indirect effects on limiting resource use in new maintenance programmes.	Significant positive effects over the short, medium and longer term.	
6. Protect and enhance the Island's soils resource.	No cumulative, synergistic or indirect effects have been highlighted for this SEA Objective.		
7. Reduce air pollution and ensure continued improvements to air quality.	Interventions 7, 8, 10, 14, 19, 22, 23, 26, 28, 29, 31, 32, 35, 37-41, 47, and 66-68 will have cumulative, synergistic and indirect effects for air quality through supporting a reduction in traffic flows on the Island.  Interventions 4, 5, 6, 27, 30 and 33 have the potential to have cumulative and synergistic effects on air quality on the Island through encouraging a growth of traffic in the longer term.	Significant positive effects in the short, medium and long term.  Adverse effects in the medium and long term, depending on the performance of other measures on supporting modal shift.	
8. Minimise the Island's contribution to climate change.	Interventions 7, 8, 10, 14, 19, 22, 23, 26, 28, 29, 31, 32, 35, 37-41, 47 and 66-68 will have cumulative, synergistic and indirect effects on limiting greenhouse gas emissions from transport through supporting a limitation of traffic flows.	Significant positive effects over the short, medium and long term.	
	Interventions 4, 5, 6, 30 and 33 will have cumulative, synergistic and indirect effects on limiting greenhouse gas emissions through supporting more efficient traffic flows on the Island.	Positive effects over the short and medium term.	
	Interventions 2, 3, 34, 57, 58, 65 will support a reduction of greenhouse gas emissions by encouraging energy and resource efficiency in the functioning of transport infrastructure.	Positive effects over the short and medium term.	
	Interventions 4, 5, 6, 27, 30 and 33 have the potential to have cumulative and synergistic effects on increasing greenhouse gas emissions on the Island through encouraging car-based travel.	Adverse effects over the medium and long term.	
9. Plan for the anticipated effects of climate change.	Interventions 2, 3, 26, 34, 60, 61, 62, 63 and 65 will have cumulative, synergistic and indirect effects on helping the Isle of Wight adapt to the potential effects of climate change.	Significant positive effects over the short, medium and long term.	

SEA Objective	Interventions which combine to bring cumulative/ synergistic/ indirect effects	Significance
10. Reduce poverty and social exclusion and close the gap between the most deprived areas on the Isle of Wight and the rest of the	Interventions 7, 8, 15, 16, 17, 19-29, 31, 32, 35, 37-47, 66, 67 and 68 will have cumulative, synergistic and indirect effects on encouraging walking, cycling and the use of public transport. This will support accessibility for all.	Significant positive effects over the short, medium and long term.
Island.	Interventions 7, 8, 10, 11, 19, 20, 22, 23, 25, 28, 29, 31, 32, 35-41, 46-53, 58, and 66-69 will have cumulative, synergistic and indirect effects on limiting the effects of traffic on the quality of neighbourhoods.	Significant positive effects over the short, medium and long term.
	Interventions 2, 3, 25, 26, 34, 48, 49, 50, 51, 52, 53 and 58 will have cumulative and synergistic effects on improving the quality of neighbourhoods through supporting physical enhancements to the quality of the public realm and the built environment.	Significant positive effects over the short, medium and long term.
11. Safeguard and improve community health, safety and well being.	Interventions 7, 8, 15, 16, 17, 19-29, 31, 32, 35, 37-47, 66, 67 and 68 will have cumulative, synergistic and indirect effects on improving health and wellbeing through improving accessibility to leisure and recreational activities.	Significant positive effects over the medium and long term.
	Interventions 7, 8, 15, 16, 17, 19-29, 31, 32, 35, 37, 44, 45, 46, 66, 67 and 68 will have cumulative, synergistic and indirect effects on improving health and wellbeing through promoting healthier modes of travel including walking and cycling.	Significant positive effects over the medium and long term.
	Interventions 2, 3, 25, 26, 34, 48, 49, 50, 51, 52, 53 and 58 will have cumulative, synergistic and indirect effects on improving health and wellbeing through supporting physical improvements to the quality of the public realm and local neighbourhoods.	Significant positive effects over the medium and long term.  Significant positive effects over
	Interventions 15-20, 44 and 45 will have cumulative, synergistic and indirect effects on improving road safety on the Island.	the medium and long term.

In summary, this assessment exercise has shown that the interaction of the interventions proposed for the Isle of Wight area will bring a wide range of positive cumulative, synergistic and indirect effects in relation to the SEA Objectives. A number of potential effects have however been highlighted by the assessment, including relating to the cumulative and synergistic effects on traffic growth from network and traffic management improvements and the proposed junction improvements in Newport. This has the potential to have implications for greenhouse gas emissions, air quality, the historic environment and landscape and townscape quality, particularly over the longer term.

#### 6.4 Summary of the assessment of the Draft Strategy

This section summarises the results of the assessment of the interventions included in the Draft Strategy. This summary is presented by the environmental information themes discussed in **Section 1.6**<sup>19</sup>.

#### 6.4.1 Air Quality

The air quality issues which are present on the Isle of Wight are closely related to nitrogen dioxide (NO<sub>2</sub>) emissions from transport. Whilst no Air Quality Management Areas exist on the Island, there are a number of air quality hotspots, including linked to the Coppins Bridge junction in Newport, and on the Sandown, Lake and Shanklin road corridor. These are based on recent levels of NO<sub>2</sub> from traffic.

In general, the interventions proposed by the Draft Strategy will support improvements towards meeting air quality objectives on the Island. Through the Draft Strategy's focus on promoting a reduction in congestion, encouraging modal shift, reducing the need to travel, and promoting accessibility by non-car modes, the Draft Strategy interventions have the potential to support continued air quality improvements.

A number of the junction improvement schemes have the potential to lead to longer term air quality issues linked to the road network through stimulating an increase in traffic on key routes in and around Newport. It should be noted though that a number of the junction improvement schemes will support immediate air quality improvements locally in the shorter term; for example improvements at Coppins Bridge will support air quality enhancements at this NO<sub>2</sub> 'hotspot'. The other LTP3 interventions will also help 'lock in' benefits to air quality from the junction improvements through promoting modal shift and helping to limit increases in traffic flows.

Further work will however be required for the junction improvement schemes promoted through the LTP3 to examine effects on air quality and seek to mitigate effects through the relevant project level Environmental Impact Assessments.

#### 6.4.2 Biodiversity and Geodiversity

The Isle of Wight supports a wide range of important habitats and species, as reflected by the presence of a significant number of internationally and nationally designated nature conservation sites and BAP Priority Habitats and Species. A number of Biodiversity Opportunity Areas, which are regional priority areas of great opportunity for the restoration and creation of BAP habitats are also present on the Island.

Biodiversity assets on the Island will benefit from the proposed interventions through supporting a limitation of traffic growth and promoting overall improvements to air and water quality. The integrity of some biodiversity habitats are also likely to benefit from the Draft

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<sup>&</sup>lt;sup>19</sup> The summary of the appraisal has not included the Accessibility and Transportation environmental information theme as this theme is the focus of the LTP3.

Strategy's focus on improvements to highways drainage, and associated benefits for water quality. The Draft Strategy also explicitly promotes biodiversity on the Island through seeking to ensure that biodiversity habitats are supported, and through the phasing of infrastructure works to reflect the needs of species present locally.

There is however some potential for the Draft Strategy to further outline how the LTP3 will seek to avoid effects on biodiversity assets on the Island through promoting the established hierarchy of avoidance of impacts, namely necessary mitigation, consideration of alternatives and finally compensatory measures at project level. There is also further potential for the LTP3 to highlight that new transport infrastructure should support the development and improvement of Island-wide green infrastructure networks, promote net gains in relation to Biodiversity Action Plan targets and contribute to the enhancements highlighted by Biodiversity Opportunity Areas present on the Island. The Island's geodiversity resource also has not been acknowledged through the Draft Strategy. This is significant due to the international and national importance of the Isle of Wight's rich and varied geological resource.

Effects on biodiversity from the proposed junction improvements will depend on the mitigation and avoidance measures proposed to accompany the schemes. Further work will be required to examine and mitigate effects on biodiversity assets at the relevant project level Environmental Impact Assessments.

The HRA being carried out alongside the LTP3 has examined potential effects on European designated nature conservation sites in more detail.

#### 6.4.3 Climate Change

The Draft Strategy will support climate change mitigation. Through promoting a reduction in congestion, supporting modal shift from the private car, facilitating a reduction in the need to travel, and helping to limit traffic flows the interventions will support climate change mitigation by limiting greenhouse gas emissions from transport. This however has the potential to be undermined by the proposed junction improvements in Newport, which have the potential to stimulate increases in traffic flows over the longer term.

The Draft Strategy will also support climate change mitigation by encouraging an increase in the use of electric vehicles on the Island through the provision of electric charging points. It should be noted however that the provision of electric charging points will only support a significant reduction in greenhouse gas emissions if electricity provided from these points is sourced from renewable sources.

Climate change on the Island has the potential to lead to a range of impacts. In particular, parts of the Island have a high susceptibility from an increased risk of flooding (including fluvial and coastal/tidal flooding). Adapting to the effect of climate change on the Island will involve forward planning which considers future trends in the climate, including more extreme weather events, increased winter rainfall and increased occurrences of summer drought. Effects on transport infrastructure from climate change include flooding of roads and railways,

damage from landslips or erosion, and damage to road surfaces from high temperatures and changes in sub soil moisture content.

In this context, the proposed interventions for the Island will support climate change adaptation. This includes through the Draft Strategy's statement that future change relating to flood risk should be considered in the design of highways infrastructure, improved delivery of maintenance programmes through the PFI programme and the encouraging of improved drainage on the Island through the promotion of SUDS and other measures. The Draft Strategy also facilitates the development of a climate change report to highlight vulnerabilities and actions required for transport infrastructure. This will be a proactive and appropriate means of planning for the changes likely to be brought about by the likely effects of climate change.

#### 6.4.4 Health

As discussed in **Section 1.4**, the SEA has incorporated a Health Impact Assessment process. This has examined aspects relevant to health and wellbeing through the relevant SEA Objectives.

Whilst in many respects health in the Isle of Wight is favourable, there are a number of aspects relating to health which have the potential to be improved. This includes low levels of physical activity and high levels of obesity for children, inequalities between the most and least deprived areas of the Island, and suggested higher rates of mental health problems on the Island than England averages.

Health and wellbeing on the Island will be supported by the Draft Strategy's encouragement of healthier modes of travel such as walking and cycling. This includes through the Draft Strategy's facilitation of increased travel choice, the provision of safer walking and cycling routes, a promotion of the health and lifestyle benefits of walking and cycling, an improvement in opportunities for children to walk and cycle to school and the promotion of travel plans. This will be supported by the Draft Strategy's strong focus on improving road safety, including through the compilation and delivery of a Road Safety Plan, improved monitoring of accident rates, road safety training, awareness and travel initiatives, speed and traffic management measures, and safety audits.

Neighbourhoods adversely affected by traffic issues and a poor quality public realm have negative effects on residents' health and wellbeing. The health and wellbeing of local residents will therefore be promoted by the Draft Strategy's support for improvements to the built environment and public realm, including through the appropriate location of new signage and street furniture to avoid street clutter, and the sensitive design of in streetscapes to reflect local distinctiveness. In the context, the delivery of the PFI also has the potential to improve the quality of neighbourhoods. This will be further supported by the development of a Noise Action Plan and the use of low noise surfacing and landscaping.

Health and wellbeing will also be promoted by the Draft Strategy's support for an improvement of accessibility to services, facilities and amenities by non-car modes. This will be supported by the Draft Strategy's promotion of modal shift and a reduction of traffic flows,

which will also lead to further improvements to the quality of local neighbourhoods. Localised air quality improvements supported by the interventions will also support health and wellbeing.

In this context the Draft Strategy will bring a range of benefits for health and wellbeing and addressing highlighted health issues for the Island. Other aspects relevant to the Health Impact Assessment, including social inclusion and community cohesion have been discussed under the other themes, including Population and Quality of Life theme.

#### 6.4.5 Historic Environment

The historic environment of the Isle of Wight is defined by individual heritage assets, both designated and non-designated, and the setting of these assets through the areas built environment and townscape and landscape. The Island's historic environment extends beyond individual sites and features, and townscape and landscape quality and character has a close link to the historic environment.

In this context, the proposed LTP3 interventions will support the protection and enhancement of the historic environment. The Draft Strategy seeks to ensure that the new development of infrastructure is in keeping with the built and natural environment through appropriate design and use of materials, the minimisation of clutter through appropriate signage and street furniture, and respecting the settings of listed buildings, scheduled monuments and conservation areas. This will support the setting of cultural heritage assets and the wider historic environment. The integrity of the historic environment will be further supported by the Draft Strategy's promotion of modal shift and a reduction of traffic flows. Localised air and noise quality improvements supported by the interventions will also support the fabric and setting of the historic environment.

The proposed transport junction improvements in Newport to be delivered through Section 106 agreements and other mechanisms however have the potential to have impacts on cultural heritage assets and their settings. This is both through direct effects on areas of historic environment interest (such as the Coppins Bridge junction improvements' potential effect on the Historic Town Centre Conservation Area) and through a longer term stimulation of traffic flows (which will also be stimulated by improved network management). Effects on the historic environment from these interventions will depend on design, layout and scale of the schemes, and mitigation and avoidance measures proposed to accompany the schemes. Whilst the other interventions promoted by the Draft Strategy will help limit some of these effects, further work will be required to examine and mitigate effects on the historic environment at the relevant project level Environmental Impact Assessments.

#### 6.4.6 Landscape

Transport infrastructure and traffic flows have a strong influence on townscape and landscape character and quality, and effects on landscape quality can occur from poor design of transport infrastructure, including insensitively designed layouts, inappropriate signage or excessive clutter. In this context the Draft Strategy's focus on the appropriate design and use of materials, the minimisation of clutter through appropriate signage and street furniture and

respecting the settings of listed buildings, scheduled monuments and conservation areas will help reduce effects on landscape quality from transport infrastructure. This will be supported by the Draft Strategy's focus on enhancing streetscape quality.

Landscape and townscape quality will further be supported by the Draft Strategy's promotion of modal shift and a reduction of traffic flows and associated benefits for noise quality and visual quality. Tranquillity and noise quality improvements will also be supported by the proposed implementation of a Noise Action Plan and the use of low noise surfacing and landscaping on the Island.

A number of the proposed interventions have the potential to lead to a stimulation of traffic flows over the longer term, including the proposed junction improvements in Newport, network and traffic management and improved efficiency in the use of highways space. This may to lead to effects on landscape quality adjoining certain routes, including main routes to and from Newport. Alongside, the increased maintenance programme initiated by the PFI has the potential to have short term and localised impacts on landscape and townscape quality though visual effects and impacts on noise levels. There is also the potential for the improved and enhanced lighting promoted by the Draft Strategy to have impacts on tranquillity and 'night blight' without careful lighting design and siting.

#### 6.4.7 Material Assets

Materials assets address resource and waste issues, the use of previously developed land and energy provision. In this context, the interventions will support the sustainable management of resources and waste on the Island through supporting the reuse of construction materials in highways schemes and the promotion of the use of local materials.

Due to the programme of works required to reverse historic underinvestment in the Island's highways network, the implementation and delivery of the PFI has the potential to lead to inevitable increases in the generation of construction waste and the use of raw materials. Resource use and construction waste is however likely to be better managed through the programme of works initiated by the PFI. This will help limit the effects of the proposed maintenance and improvement programme on resource use and construction waste.

#### 6.4.8 Population and Quality of life

Residents' accessibility to services, facilities and amenities have a close influence on the quality of life and social inclusion. In this context the Draft Strategy has strong focus on enhancing accessibility to services, facilities and opportunities by non car modes, promoting improvements to existing transport links, and reducing the need to travel.

Transport infrastructure and traffic flows shape the quality of life of residents through impacting on noise and air quality, affecting neighbourhood quality and influencing the satisfaction of residents with their neighbourhoods as a place to live. From this perspective the Draft Strategy's focus on improvements to the built environment and public realm, including through the appropriate location of new signage and street furniture, sensitive design of in streetscapes to reflect local distinctiveness, and the delivery of improvements

through the PFI will support residents' quality of life. This will be further supported by the development of a Noise Action Plan and the use of low noise surfacing and landscaping on the Island, which will help reduce the impact of the road network on local neighbourhoods.

Residents' quality of life will also be supported by the Draft Strategy's encouragement of healthier modes of travel such as walking and cycling. This includes through the Draft Strategy's promotion of increased travel choice, the provision of safer walking and cycling routes, a promotion of the health and lifestyle benefits of walking and cycling, improving opportunities for children to walk and cycle and the promotion of travel plans. This will improve accessibility, promote healthier lifestyles, support public realm improvements and contribute to modal shift.

By improving accessibility, promoting social inclusion and community cohesion, and supporting the health and wellbeing of residents, the Draft Strategy therefore has the potential to bring a wide range of benefits for quality of life on the Island.

#### 6.4.9 Soil

Due to the limited number of proposed capacity improvements to the highway network to be delivered through the LTP3, potential effects on the Island's soils resource from new transport infrastructure are likely to be insignificant. For example, the proposed junction improvements in Newport to be delivered through Section 106 agreements and other mechanisms will not lead to loss of the best and most versatile agricultural land. At the scheme level however, the project level EIAs will consider issues related to soil in more detail.

Improved highways drainage as promoted by the Draft Strategy will support soil quality through limiting diffuse source pollution from the highways network.

#### 6.4.10 Water

The interventions proposed by the Draft Strategy seek to minimise the risk of pollution of groundwater and surface water during the construction of new infrastructure, improve drainage through the incorporation of SUDS and other measures, and limit the effects of climate change in the Island. This will promote the management of flood risk, and help protect water quality on the Island. This will be further supported by the delivery of the maintenance programmes delivered through the PFI, which is also likely to facilitate the sustainable use of water resources through the introduction of water management regimes in highway maintenance and improvement works.

Whilst the proposed junction improvements in Newport have the potential to lead to effects on water quality and flood risk (through for example surface water run off), it is likely that sustainable drainage systems and other associated water management measures will be incorporated within scheme design. In this respect the junction improvement schemes to delivered through the LTP3 via Section 106 agreements or similar measures are unlikely to have any significant effects on water quality, flood risk or the other aspects covered under the water environmental information theme.

## 7 Recommendations for the next stages of development for the LTP3

#### 7.1 Recommendations

This chapter provides recommendations for addressing the identified environmental issues raised through the SEA process. Consideration of these recommendations will help enable subsequent versions of the LTP3 to place further added value on its environmental performance.

The recommendations include as follows:

- ▶ The LTP3 should seek to promote the development of high quality and multifunctional green infrastructure networks in conjunction with the developing Isle of Wight Green Infrastructure Strategy<sup>20</sup>. This includes through facilitating nonmotorised routes which also deliver landscape, biodiversity and climate change adaptation benefits;
- ▶ The development of new transport infrastructure on the Island should seek to promote the hierarchy of avoidance of impacts on biodiversity, namely necessary mitigation, consideration of alternatives and finally compensatory measures at project level;
- ▶ The LTP3 should seek to promote net gains in relation to Biodiversity Action Plan targets and contribute to the enhancements afforded by the Biodiversity Opportunity Areas present on the Island;
- ▶ The value of the Island's geodiversity assets should be fully acknowledged through the LTP3;
- ▶ Electric charging points should source electricity from renewable sources to support climate change mitigation;
- Improved and enhanced highways and street lighting should seek to minimise light pollution and "night blight" on the Island; and
- ▶ The LTP3 should seek to ensure that the benefits of junction improvements in Newport are 'locked in' through relevant localised measures to help restrain traffic growth (e.g. through the provision of highway space to promote the use of non-car modes of transport).

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<sup>&</sup>lt;sup>20</sup> The Isle of Wight Green Infrastructure Strategy Supplementary Planning Document is due to be adopted in Summer 2012. A Green Infrastructure Mapping Study for the Island was released in July 2010 and can be accessed at: <a href="http://www.iwight.com/living\_here/planning/Planning\_policy/island\_plan/Background\_Documents/">http://www.iwight.com/living\_here/planning/Planning\_policy/island\_plan/Background\_Documents/</a>

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## 8 Monitoring

#### 8.1 Monitoring Proposals

The SEA Directive states that 'member states shall monitor the significant environmental effects of the implementation of plans and programmes.....in order, inter alia, to identify at an early stage unforeseen adverse effects, and to be able to undertake appropriate remedial action' (Article 10.1). In addition, the Environmental Report should provide information on a 'description of the measures envisaged concerning monitoring' (Annex I (i)).

The monitoring requirements typically associated with the SEA process are recognised as placing heavy demands on authorities with SEA responsibilities. For this reason, the proposed monitoring framework should focus on those aspects of the environment that are likely to be negatively impacted upon, where the impact is uncertain or where particular opportunities for improvement might arise.

**Appendix F** provides preliminary proposals for a monitoring programme for measuring the LTP3's implementation in relation to the SEA Objectives against which the SEA process has identified potential significant effects, and where significant opportunities for an improvement in sustainability performance may arise (see **Chapter 6** and **Appendices D** and **E**).

Monitoring is particularly useful in answering the following questions:

- Were the assessment's predictions of environmental effects accurate?
- Is the LTP3 contributing to the achievement of desired sustainability objectives?
- Are mitigation measures performing as well as expected?
- Are there any unforeseen adverse effects? Are these within acceptable limits, or is remedial action required?

The purpose of monitoring is to measure the environmental effects of a plan, as well as to measure success against the plan's objectives. It is therefore beneficial if the monitoring strategy builds on monitoring systems which are already in place. To this end, many of the indicators of progress chosen for the SEA require data that is already being routinely collected at a local levels by IoWC and its partner organisations. It should also be noted that monitoring can provide useful information for future plans and programmes.

#### 8.2 Links with the LTP3 Annual Progress Report

The SEA guidance suggests that SEA monitoring and reporting activities can be integrated into the regular planning cycle. A Island-wide monitoring programme has been set up by IoWC to measure the national indicators including several transport targets. This process will continue to form the primary mechanism for monitoring of the LTP3. At scheme delivery level, SEA monitoring takes place at the business case stage for schemes, where potential impacts

are actively considered and suitable mitigation measures are identified. It is anticipated that elements of the SEA monitoring programme for the LTP3 will be incorporated into this process.

The monitoring programme is, at this stage, preliminary and may evolve over time based on the results of consultation and the identification of additional data sources (as in some cases information will be provided by outside bodies). The monitoring of individual schemes/proposals should also be addressed at project level.

Consultees are invited to suggest any further indicators, or propose amendments to this monitoring programme.

## 9 Next Steps

#### 9.1 Consultation on the Draft Strategy

This Environmental Report has been published alongside and at the same time as the Consultation Draft Island Transport Plan document. Consultation will take place for a period of twelve weeks.

Following the consultation period, comments will be reviewed and analysed. The final LTP3 will then be developed in the period to April 2011. Any changes arising to the LTP3 following consultation will need to be assessed as part of the SEA process.

SEA Regulations 16.3c)(iii) and 16.4 require that a 'statement' be made available to accompany the plan, as soon as possible after the adoption of the plan or programme. The purpose of the SEA Statement is to outline how the SEA process has influenced and informed the LTP3 development process and demonstrate how consultation on the SEA has been taken into account.

As the regulations outline, the statement should contain the following information:

- ▶ The reasons for choosing the preferred strategy for the LTP3 as adopted in the light of other reasonable alternatives dealt with;
- ▶ How environmental considerations have been integrated into the LTP3;
- How consultation responses have been taken into account; and
- Measures that are to be taken to monitor the significant environmental effects of the LTP3.

To meet these requirements, a Post Adoption Statement will be published with the adopted version of the LTP3.

#### 9.2 Commenting on the Environmental Report

The Consultation Draft Island Transport Plan and this Environmental Report (including accompanying appendices) are available to download at:

http://www.iow.gov.uk/living here/environment/Transport strategies/LTP3/

Alternatively, hard copies can be viewed at:

Isle of Wight Council

Enterprise House

Monks Brook

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PO30 5WB

The SEA team would welcome any comments on the SEA process carried out to date. All comments should be sent to the following email address:

nick.chisholm-batten@ue-a.co.uk

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