

**Cheshire West and Chester Local
Transport Plan 3 - Draft Strategic
Environmental Assessment Report
Volume 1: Main Report**

October 2010



QM

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1 Introduction

1.1 BACKGROUND

1.1.1 LTP3 is a statutory document bringing together all aspects of transport planning and policy in the Borough. Because transport issues are relevant to many aspects of community life on a daily basis, the LTP is a major policy reference setting out the Council's standpoint and forward view in working with the community on service delivery. LTP3 is integrated with the approach of the Council's Corporate Plan, Sustainable Community Strategy (SCS) and the emerging Local Development Framework (LDF).

1.1.2 The final LTP3 document will consist of two elements, the Integrated Transport Strategy (hereafter referred to as the Strategy) and the Implementation Plan:

- The Strategy will set out the long-term objectives and priorities for transport in Cheshire West & Chester for the period 2011 - 2026. This both derives from and supports the vision and objectives of West Cheshire's Sustainable Community Strategy (SCS) and the emerging Local Development Framework (LDF); and
- The Implementation Plan sets out the programme of initiatives and proposed expenditure needed to implement the strategy during the next 3 years.

1.1.3 LTP3 is being prepared in challenging times. Key trends identified in the LTP3 document include:

- Traffic growth is forecast to increase by 12% up to 2026. Higher levels of growth are forecast for the minor roads and motorways;
- High levels of car ownership, relative to the national average - 90% of households now own one or more vehicles, with 50% owning two or more cars;
- Travel to work by car continues to increase in West Cheshire and remains above the national average;
- There is a very high dependence on the car for commuter trips. 91% of inbound and 92% of outbound trips are made by car. Commuter trips by bus and rail are low; and
- The Strategy is being revised at the outset of a period of uncertainty about the future scale and scope of local government spending and the back end of a recession in the development industry.

1.1.4 This report sets out the results of a Strategic Environmental Assessment (SEA) of LTP3. Its purpose is to identify the main environmental effects of the draft document and opportunities for improving the performance of the document. It assesses the Strategy because the Implementation Plan is still under development, this will be assessed at a later date.

1.2 KEY FINDINGS FROM THE SEA

1.2.1 The content of the draft LTP3 is broadly welcomed. The strategy recognises the linkages between transport and wider environmental, social and economic considerations and puts forward policies that are intended to help achieve more sustainable outcomes. The structure of the document, based on a number of cross cutting priorities, is also welcomed. Structuring the Strategy around priorities, rather than a more traditional approach based on modes of transport, allows cross cutting issues like climate change to be addressed in one place.

1.2.2 The Strategy makes appropriate linkages between transport and a range of topics that are relevant to this assessment, i.e. biodiversity, landscape, culture and heritage, population; water, material assets, climatic factors etc.

1.2.3 The key priorities have been identified through extensive consultation and also reflect key national priorities, including climate change adaptation and mitigation.

1.2.4 The SEA has identified the following opportunities to further strengthen LTP3:

- Specific targets relating to modal shift should be included. As an example, Northamptonshire County Council is proposing to adopt a target of achieving 20% shift from single occupancy car trips for new developments and a 5% modal shift in existing areas. These targets will be incorporated in its LTP3. The differential rates recognise the



difficulties associated with achieving modal shift in existing areas (although higher rates have been achieved in other areas). Such targets have a role in helping to drive the rate of change in an area and are important in Cheshire West and Chester given the anticipated growth in traffic over the plan period. The Local Development Framework (or whatever emerges after the Coalition Government's Localism Bill) will be key to achieving modal shift in new developments and appropriate policies for inclusion in the appropriate LDF documents will also be needed. These targets go beyond targets relating to monitoring, they will help drive the pace of change;

- It is not possible to say at this stage if the policies in the LTP3 will be sufficient to help meet longer term targets relating to carbon dioxide emissions. The Climate Change Act 2008 set out a target of an 80% reduction in carbon dioxide emissions from 1990 levels by 2050. LTP3 has a 15 year timescale but has a role in helping to put transport on the right trajectory for helping to achieve this target. LTP3 should commit to understanding and monitoring the carbon footprint of the transport sector;
- A carbon budgeting approach across key sectors in the Council's area is required. This should recognise that the carbon footprint of the transport sector is likely to grow as traffic is forecast to increase. Emissions from other sectors will need to be reduced to reflect this if the area is to move towards making its contribution to national targets on the reduction of emissions. The LTP3 could acknowledge the need for a carbon budgeting approach but it will be for other documents, for example the Climate Change Strategy, to implement this approach;
- The draft Strategy recognises the need for the transport network to be resilient to future climate change that may occur over the life of the network. This is welcomed, however the Strategy could also recognise the role that the network could help play in helping the built and natural environment cope with climate change, for example the soft estate could have a role in the attenuation of water;
- The section on tackling climate change makes reference to the use of biofuels – it is essential that these are sourced sustainably and we recommend use of the term 'sustainable biofuels' throughout;
- Travel centres could be promoted in larger developments to help encourage modal shift; , for example by managing initiatives like car clubs, personal travel planning and site wide travel plans;
- The Strategy will lead to a number of transport related developments (the details of many are not known yet). While these projects will be subjected to Environmental Impact Assessment where appropriate, they may not lead to optimum outcomes. The Strategy should therefore include the following principles that will guide future developments:
 - There should be a net gain in biodiversity value;
 - Scheme specific Biodiversity Action Plans should be developed – with contractors made responsible for developing and implementing these; and
 - LTP3 could make a commitment that schemes should be designed and built using The Civil Engineering Environmental Quality Assessment and Award Scheme (CEEQUAL). This is an assessment and awards scheme for improving sustainability in civil engineering and public realm projects.
- LTP3 should contain a statement to the effect that any proposals that would significantly harm a European site would not be supported by the Strategy. This will help ensure LTP3 is compliant with the Habitats Directive;
- The need for Air Quality Management Areas to be declared near European sites should also be kept under review;
- LTP3 could require all new development to be 'air quality neutral.' Air quality neutral development is a concept being promoted in London through the Mayor's Air Quality Strategy;
- Given the likely impacts of the spending review on all aspects of local authority services the Strategy could make the connection with other potential funding sources, for example the European Regional Development Fund;
- The Quality of Life section could make reference to the use of Construction and Environmental Management Plans for significant projects, e.g. those requiring Environmental Impact Assessment, with the responsibility for producing and adhering to CEMPs placed on contractors;
- The Quality of Life section should recognise the impacts associated with lighting and the need for guidance associated with new schemes;
- The Quality of Life section should recognise the impacts that transport infrastructure can have on water quality and the need to protect and improve this;

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- Contractors should be required to adopt ‘Considerate Construction’ schemes or similar; and
 - The later stages of the SEA need to ensure that LTP3 covers requirements relating to monitoring for significant environmental effects.

1.3 STRATEGIC ENVIRONMENTAL ASSESSMENT

1.3.1 The SEA of the developing LTP3 has been carried out in accordance with the requirements of The Environmental Assessment of Plans and Programmes Regulations 2004 (the SEA Regulations, SI 1633), July 2004, which transposes Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment (the SEA Directive) into UK legislation. Moreover, this assessment has been carried out in line with the following:

- A Practical Guide to the Strategic Environmental Assessment Directive, ODPM et al, September 2006;
- Strategic Environmental Assessment for Transport Plans and Programmes, TAG Unit 2.11, “In draft” Guidance, April 2009, Department for Transport, Transport Analysis Guidance (TAG);
- Strategic Environmental Assessment and climate change: Guidance for practitioners, Environment Agency Revised June 2007, et al;
- Strategic Environmental Assessment, Sustainability Appraisal and The Historic Environment, English Heritage (not dated);
- Countryside Council for Wales guidance on SEA - 2007/2008; and
- Natural England Guidance on Local Transport Plans and the Natural Environment (not dated);

1.3.2 The objective of the SEA Directive is (Article 1):

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

1.3.3 The SEA Directive identifies a range of factors that need to be considered, the Directive makes it clear that this list is not exhaustive. The factors identified are as follows:

- Biodiversity;
- Population;
- Human health;
- Fauna;
- Flora;
- Soil;
- Water;
- Climatic factors;
- Material assets;
- Cultural heritage; and
- Landscape.

1.3.4 The Directive and associated guidance do not define the range of issues that need to be considered under each topic but it is significant that the Directive includes reference to ‘population,’ ‘human health’ and ‘material assets.’ These topics suggest that the Directive takes a wide definition of the term ‘environment’ to include impacts on people and the built environment, as well as the natural environment.

1.3.5 This approach is consistent with the concept of sustainable development. The most widely used and recognised definition of Sustainable Development is that taken from the report ‘Our Common Future’ produced by the World Commission On Environment and Development in 1987 (Brundtland Report):

“Development that meets the needs of the present without compromising the ability of future generations to meet their own needs”

1.3.6 Throughout the report, grey boxes have been included to highlight where the requirements of the SEA Directive, Government guidance or best practice have been addressed. An example can be seen directly underneath heading 1.4 below.

1.4 DRAFT LTP3

The plan's or programme's purpose and objectives are made clear.

Article 5 and Annex A

1.4.1 LTP3 sets out a summary of the Council's objectives, policies and proposals for taking forward transport priorities between 2011 and 2026. It is nested within the Sustainable Community Strategy and links with the Local Development Framework, which provides the spatial planning framework for the area.

1.4.2 The priorities of the LTP3 are:

- To support sustainable economic competitiveness and growth in West Cheshire and the surrounding sub-region by delivering reliable and efficient transport networks;
- To reduce transport's emissions of carbon dioxide and other greenhouse gases, with the desired outcome of tackling climate change;
- To manage to manage a well maintained and efficient transport network;
- To contribute to better safety, security and health and longer life expectancy in West Cheshire reducing the risk of death, injury or illness arising from transport, and by promoting types of transport that are beneficial to health;
- To promote greater equality of opportunity by improving accessibility to jobs and key services, with the desired outcome of achieving a fairer society; and
- To improve quality of life for transport users and non-transport users and to promote a healthy natural environment.

The Strategy also includes indicators for monitoring progress and will be accompanied by a Delivery Plan.

1.5 HOW TO COMMENT ON THE REPORT

The intended period for public consultation on the ER is stated

Article 6.1 and 6.2

1.5.1 The consultation period for the draft Environmental Report runs from Friday 22nd October to Friday 31st December

1.5.2 Please send comments to:

Jamie Matthews,
Cheshire West and Chester Council,
Local Transport Plan Team,
Backford Hall,
Chester,
CH1 6EA.

Tel 01244 973595

Email Jamie.matthews@cheshirewestandchester.gov.uk

The comments on the draft Environmental Report will then be reviewed and, if necessary, elements of the report will be amended and incorporated in the Final Report.

1.6 STRUCTURE OF THIS REPORT

1.6.1 The tasks undertaken in this report and their location are given in Table 1.1.

Table 1.1 – Report Structure

Structure of the Environmental Report	Information to include
Chapter 2 – Appraisal Methodology	<p>Approach adopted to the SEA</p> <p>When the SEA was carried out</p> <p>Who carried out the SEA</p> <p>Uncertainty and risks</p>



	Who was consulted, when and how
Chapter 3 – Environmental Context and Objectives	European, national, regional and local legislation Local environmental data Economic and social status National and local sustainable development policy Key issues identified in the Draft Scoping Report
Chapter 4 – Assessing the Business as Usual Option and the Draft Strategy	Definition of the scenarios Options appraisal Performance against sustainability objectives Mitigation and recommendations
Chapter 5 – Implementation	Links to other tiers of plans and programmes Monitoring

2 Appraisal Methodology

2.1 INTRODUCTION

2.1.1 This Chapter sets out the approach that has been taken to assessing LTP3, including consultation undertaken and difficulties encountered.

2.2 PURPOSE OF THE SEA AND THE ENVIRONMENTAL REPORT

2.2.1 SEA of LTP3 is required under the SEA Directive. This Draft Environmental Report sets out the method used to undertake the work, summarises the baseline information and presents the findings of the assessment.

2.3 THE APPROACH TAKEN TO THE EVALUATION OF EFFECTS

Methods used to evaluate the effects are described, including how significance of effects has been approached.	<i>Practical Guide to the SEA Directive Appendix 9.</i>
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APPRAISAL OF OPTIONS

<i>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”</i>	<i>Article 5.1 and Annex I (h) of the SEA Directive</i>
<i>Alternatives include ‘do minimum’ and/or ‘business as usual’ scenarios wherever relevant.</i>	<i>Practical Guide to the SEA Directive Appendix 9.</i>
<i>The environmental effects (both adverse and beneficial) of each alternative are identified.</i>	<i>Act Regulation 12(2)(b) Act Schedule 2(8)</i>
<i>Inconsistencies between the alternatives and other relevant plans, programmes or policies are identified and explained.</i>	<i>Act Regulation 12(2)(b) Act Schedule 2(8)</i>
<i>Realistic alternatives are considered and the reasons for choosing them are documented.</i>	<i>Act Regulation 12(2)(b) Act Schedule 2(8)</i>

2.3.1 Options have not been developed as part of the LTP3 process; instead the content of the strategy has been informed through extensive consultation on the priorities that should guide LTP3. Typically SEAs give consideration to the ‘do nothing’ option. In this case a do-nothing option is not seen as a reasonable alternative, given that there is a statutory requirement to produce the LTP3 under the Transport Act 2000, as amended by the Local Transport Act 2008.

2.3.2 For the purposes of the SEA, the Business as Usual option has been examined. This assumes that the policies set out in LTP2 continue. The results of this work are set out in Appendix D.

APPRAISAL OF DRAFT LTP3

2.3.3 The Draft LTP3 proposes a range of policies in order to deliver the identified priorities. The priorities and associated policies have been assessed (see paragraph 1.4.2 of this report for a summary of the priorities).

2.3.4 Health considerations have been integrated into the assessment through a specific SEA objective and a more detailed consideration of health issues. The latter has been undertaken to reflect guidance on Health Impact Assessment of LTP3.



2.4 DIFFICULTIES IN UNDERTAKING THE SEA

Difficulties such as deficiencies in information or methods are explained.	<i>Practical Guide to the SEA Directive Appendix 9.</i>
Technical, procedural and other difficulties encountered are discussed; assumptions and uncertainties are made explicit.	<i>Article 5 and Annex I(h)</i>

2.4.1 This Report is required to identify any limitations and assumptions. Assumptions with regards to assumed or 'built-in' mitigation are identified in Chapter 3 of this Report. No limitations beyond those associated with the strategic nature of an SEA have been identified in undertaking the work.

2.4.2 The difficulties encountered related to the strategic nature of the Draft LTP3 and preliminary nature of many of the interventions that would arise from the policies it contains, which made it difficult to identify the potential environmental effects. This simply reflects the strategic nature of the document.

2.5 WHEN THE SEA WAS CARRIED OUT

2.5.1 A Draft Scoping Report was prepared for consultation earlier this year and was consulted on in August. A summary of consultation responses and how they were taken into account in this report is attached as Appendix A. The appraisal of draft LTP3 was undertaken between September and early October 2010.

2.6 WHO CARRIED OUT THE SEA

2.6.1 This Environmental Report and review of comments on the earlier Scoping Report was undertaken by WSP Environmental Ltd. As such the SEA was undertaken by a team that was independent from the team that prepared the Draft LTP3.

2.7 WHO WAS CONSULTED, WHEN AND HOW

Consultation Authorities are consulted in appropriate ways and at appropriate times on the content and scope of the Environmental Report. There is evidence that scoping responses have been reflected in the ER.	<i>Article 5.4</i>
Explains who was consulted, at which stage in the assessment process, and what methods of consultation were used.	<i>Practical Guide to the SEA Directive Appendix 9.</i>

2.7.1 The three English statutory consultees and their Welsh equivalents were consulted on the Draft Scoping Report. The comments received have been taken into account in undertaking this Draft Environmental Report.

3 Environmental Context and Objectives

3.1 INTRODUCTION

3.1.1 This Chapter sets out the key findings from the review of plans and programmes and a review of the baseline data including describing the evolution of the baseline without the plan. A list of key environmental issues is then given, updated following stakeholder consultation on the Draft Scoping Report. This Chapter then sets out the SEA Framework including assumed mitigation. It is important to note that the scoping process did not eliminate any key topics areas.

3.2 KEY FINDINGS FROM THE REVIEW OF POLICIES, PLANS AND PROGRAMMES

Links with other related plans, programmes and policies are identified and explained.	<i>Article 5 and Annex I(a)</i>
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3.2.1 A review of relevant plans and programmes was undertaken as part of the Draft Scoping Report. Following consultation additional plans and programmes have been added. The additional plans and programmes, plus a list of the plans and programmes originally reviewed, are presented in Appendix B.

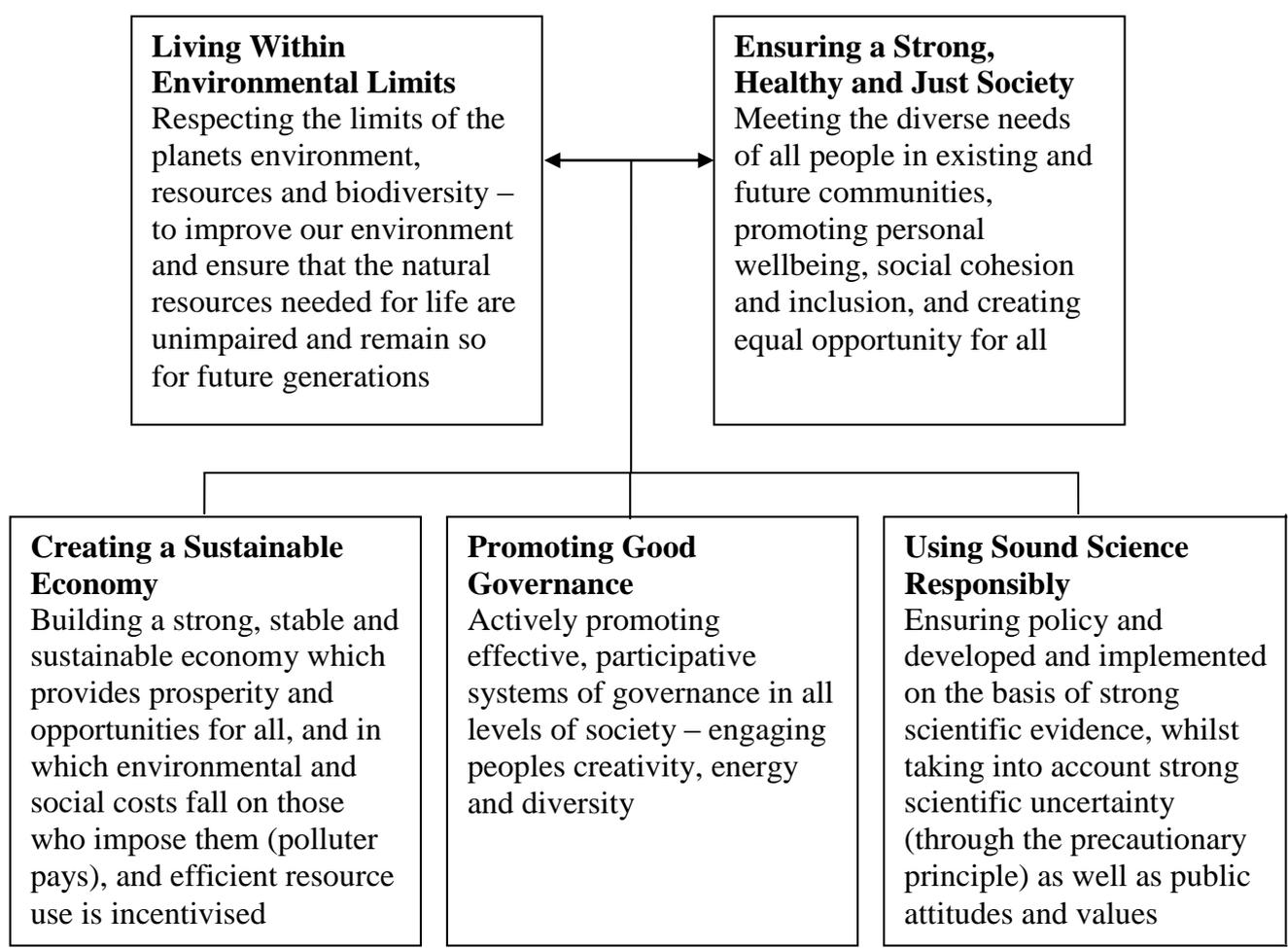
3.2.2 Key findings from the review of plans and programmes are summarised below under a series of key topics.

SUSTAINABLE DEVELOPMENT

3.2.3 The government outlined the United Kingdom’s approach to sustainable development in the ‘UK Government Sustainable Development Strategy’ (March 2005). Within this document the government identifies five guiding principles with which the United Kingdom’s sustainable development strategy would be developed:

- Living within Environmental Limits;
- Ensuring a Strong Healthy and Just Society;
- Achieving a Sustainable Economy;
- Promoting Good Governance; and
- Using Sound Science Responsibly.

3.2.4 The guiding principles are further explained in the diagram below which is taken from the government’s strategy.



3.2.5 The Government has also produced a definition of sustainable communities. Sustainable communities are:

“Places where people want to live and work, now and in the future. They meet the diverse needs of existing and future residents, are sensitive to their environment, and contribute to a high quality of life. They are safe and inclusive, well planned, built and run, and offer equality of opportunity and good services for all.”

3.2.6 Sustainable communities embody the principles of sustainable development, they:

- Balance and integrate the social, economic and environmental components of their community;
- Meet the needs of existing and future generations; and
- Respect the needs of other communities in the wider region or internationally also to make their communities sustainable.



BIODIVERSITY

3.2.7 The main themes coming from the review with regard to biodiversity are:

- Protect biodiversity in particular rare species;
- Conserve and enhance biodiversity by creating additional nature areas;
- Improving access to, naturalness of and connectivity with green spaces;
- Maintain wildlife through identifying and protection of sites of conservation interest; and
- Improve sustainable access to the natural environment.

WATER

3.2.8 Delivery of adequate water supply, sewerage infrastructure, water quality, consumption, water conservation solutions and storm water run-off are key issues.

3.2.9 The efficient use of water resources is a prevailing issue. Water conservation will not only help achieve savings in water consumption but also reduced treatment requirements - with energy efficiency and cost benefits. Threats to water quality include:

- Diffuse pollution from agricultural activities;
- Point source pollution from water industry sewage works;
- Diffuse pollution from urban sources;
- Physical modification of water bodies;
- Point source pollution from industrial discharges; and
- Water abstraction and artificial flow regulation.

AIR QUALITY

3.2.10 One of the Government's key objectives in respect to improving air quality is the promotion of sustainable modes of transport and travel for both people and freight. Promoting a choice in sustainable transport modes, including public transport, walking and cycling are key issues. Reducing the need to travel and the use of sustainable modes of travel will contribute to the protection and enhancement of human health and air quality objectives. The aim should be to reduce travel distances and include policies and initiatives to promote sustainable transport and a modal switch away from the private car.

CLIMATE CHANGE

3.2.11 Addressing the causes of climate change and ensuring new development is climate change proof are key issues. Relevant responses include:

- Promote the use of renewable energy technologies;
- Ensure that transport infrastructure is climate changed proofed; and
- Ensure that a sustainable and environmentally sensitive approach to development is implemented at all stages of design, construction and operation.

3.2.12 LTP3 can further contribute to the reduction of CO₂ emissions by:

- Encouraging modal shift;
- Reducing the need to travel;
- Promoting the use of energy efficient vehicles; and
- Promoting Green Travel initiatives in the workplace.

Good transport links are required for almost all renewable energy sources, particularly sources such as biomass and energy from waste, where the fuel itself requires transportation.



POPULATION

3.2.13 This topic primarily relates to demographics, of which there are few plans, policies or strategies; although, many plans and policies will have secondary impacts on the population for example housing strategy policies on accommodation for the elderly. When taking into account effects on the SEA topic of 'population,' cross reference will be made to policies within plans and programmes relating to social deprivation (particularly relating to accessibility to services, crime (safety) and how people travel.

HUMAN HEALTH

3.2.14 There are a number of priorities which should be considered as a part of the LTP3, especially priorities relating to 'increasing exercise.' Some of the key messages are:

- Provide better prevention services with earlier intervention;
- Give people more choice and a louder voice;
- Do more on tackling inequalities;
- Improve access to community services; and
- Provide more support for people with long term needs.
- Promoting walking and cycling can significantly contribute to the protection and enhancement of human health;
- Modal switch from the car will help reduce air pollution resulting in positive impacts on human health; and
- Provision of quality public open spaces, including greening existing and proposed transport corridors will enhance human health, community cohesion and well-being.

3.2.15 Noise is an important issue that affects human health. EU Directive 2002/49/EC is the latest piece of European legislation relating to the assessment and management of environmental noise. Planning Policy Guidance 24: Planning and Noise outlines the considerations when determining planning. Transport can be a significant source of noise and the Draft Transport Strategy provides an opportunity to address existing issues and ensure that new development does not significantly worsen the baseline situation.

CULTURAL HERITAGE

3.2.16 Existing and potential heritage assets should be protected. Heritage assets are those parts of the historic environment that have significance because of their historic, archaeological, architectural or artistic interest. A key objective relating to heritage is to reconcile the need for economic growth with the need to protect the heritage assets. The historic and distinctive character of Conservation Areas, Listed Buildings and their settings should be protected and enhanced.

3.2.17 Where proposals that are promoted for their contribution to mitigating climate change have a potentially negative effect on heritage assets, local planning authorities should, prior to determination, and ideally during pre-application discussions, help the applicant to identify feasible solutions that deliver similar climate change mitigation but with less or no harm to the significance of the heritage asset and its setting.

LANDSCAPE AND TOWNSCAPE

3.2.18 The key messages arising from the review include:

- Protect and enhance townscape and landscape quality;
- Secure a high quality townscape, urban form and high quality building design;
- Improve sustainable access to the natural environment;
- Promote and facilitate green infrastructure;
- Ensure that new development is located and designed to ensure it does not have a significant adverse impact on designated and sensitive landscapes and townscapes; and
- All new development, including new transport related facilities should be required to achieve a high quality of design.

MATERIAL ASSETS

3.2.19 Material assets include resources such as land, building materials, land fill sites and other resources, many of which are non-renewable (such as oil and coal). The exhaustion of natural resources is a major concern as population rises and standards of living rise. There is a need to conserve our non-renewable resources and encourage the sustainable use of renewable resources.

3.2.20 Good design and efficient use of land are key themes relating to material assets. Good design can help promote sustainable development which has positive knock on effects on the environment, the economy, human health and social issues.

3.3 KEY FINDINGS FROM THE REVIEW OF BASELINE DATA

Relevant aspects of the current state of the environment and their likely evolution without the plan or programme are described.	<i>Article 5 and Annex Ib</i>
Environmental characteristics of areas likely to be significantly affected are described, including areas wider than the physical boundary of the plan area where it is likely to be affected by the plan.	<i>Article 5 and Annex Ic</i> <i>Practical Guide to the SEA Directive Appendix 9.</i>
Description of existing environmental problems relevant to the plan or programme.	<i>Article 5 and Annex Id</i>
Reasons are given for eliminating issues from further consideration (including reference to consultation responses where relevant).	<i>Article 5.2</i> <i>Practical Guide to the SEA Directive Appendix 9.</i>

EVOLUTION OF THE BASELINE WITHOUT THE PLAN

3.3.1 The baseline scenario considered here considers there to be no LTP in place at all. This is because a part of assigning alternatives to the LTP a 'business as usual' scenario has been assessed that is based on the continuation of existing LTP2 policies. Establishing the evolution of the baseline without either plan in place is therefore considered to be the most useful as it provides a common scenario for both the business as usual and preferred option assessments.

3.3.2 Without a LTP in place, the evolution of the base would at this time be subject to some considerable uncertainty. This is due to the fact that Regional Strategies, which had provided the spatial, environmental and economic context for the local area, have now been revoked. At the time of writing (October 2010), the direct or indirect replacement for Regional Strategies has not been established. As such, the policy context for the local area may change substantially. The evolution of the baseline as set out here is based on the current policy context.

3.3.3 The borough has a population of around 330,000, which is expected to increase by 11% to around 366,000 in 2031. The number of households is expected to increase by 13.7% by 2026.

3.3.4 Traffic growth in the borough is forecast to increase by 18% to 2026. Higher levels of growth are forecast for the minor roads and motorways. Traffic congestion is already a problem on parts of the M56, M53, A55 and A49 and in a number of locations across Chester, Ellesmere Port and Northwich.

3.3.5 Car ownership in Cheshire West and Chester (CWaC) is significantly higher than both the national and regional averages, as is the number of residents that travel to work by car (71%). Some 65% of CWaC residents in employment work within the Borough itself, but 28% of residents commute ten or more miles on a daily basis. Of those who commute into the Borough for work, the highest proportion come from north east Wales and the Wirral as well as significant numbers from Cheshire East and Greater Manchester. Residents travel out of the Borough to work in Merseyside, North East Wales, Cheshire East, Manchester, Halton and Warrington.

3.3.6 With high rates of population growth, the associated traffic growth and a high percentage of car ownership the primary characteristic in the evolution of the baseline would be extensive congestion, more specifically:

- Fewer journeys could be made within the peak hour due to network capacity limitations;
- Queues on all major routes are expected;

- Average speeds will reduce; and
- Buses will be slower and less reliable.

3.3.7 The total per capita CO₂ emissions for CWaC are nearly twice as high as the UK average and the CO₂ emissions for road traffic equates to 3.29 kilo-tonnes per head per year, compared to the national average of 2.2 kilo-tonnes. Excessive congestion in the absence of a LTP would serve to exacerbate this issue. In the long term, this may develop into a positive feedback loop as follows. Climate change is expected to increase the number of properties located in flood zones 2 and 3, which could also include significant areas of transport infrastructure, both existing and proposed. Increased storm events, both in frequency and severity, could increase the impact of surface water flooding on the transport infrastructure. The disruption to transport infrastructure as a result of climate change may in turn lead to increase congestion and further emissions.

3.3.8 Additional effects on the baseline environment across a range of sustainability issues stemming from the primary issue of increased congestion are:

- Economy:
 - Town centres will be more difficult to get to so competitors will be more attractive;
 - Businesses will begin to consider moving to places where goods and services can be delivered more effectively; and
 - Those who can, may choose to live elsewhere.
- Place:
 - Busy, congested roads will sever communities more than they do today;
 - Rat-running will impact on the quality of living in residential areas; and
 - The town centre will be less attractive due the amount of traffic using the local roads.
- Choice:
 - Walking or cycling will seem less safe or attractive;
 - Public transport will be unreliable and slow; and
 - People will find it difficult to access services locally, or in the centre of town.
- Environment:
 - Noise disturbance will impinge on peoples’ lives; and
 - Air quality will pose risks to human health and the environment.

ENVIRONMENTAL CHARACTERISTICS AND PROBLEMS OF THE AREAS LIKELY TO BE AFFECTED

Table 3.1 below gives a summary of the environmental characteristics of the area including environmental problems that have been identified.

Table 3.1 Environmental Characteristics of the affected area including problems identified.

SEA topic	Environmental characteristics
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<p>Biodiversity</p>	<p>CWaC has:</p> <ul style="list-style-type: none"> ■ 29 SSSIs; ■ 286 Sites of Biological Importance; ■ 39 Areas of Nature Conservation Value; ■ 215 Sites of Nature Conservation Value; ■ 4 Strategic Wildlife Areas; ■ 3 SACs ■ 2 SPAs ■ 2 Ramsar sites; and ■ 6 Local Nature Reserves. <p>In 2009, 97.9% of the area of Cheshire West and Chester's SSSIs were in a favourable or recovering condition. However, of the remaining area, the greater part of the following SSSIs were in an unfavourable condition: Bar Mere, Beechmill Wood and Pasture, Hatch Mere, Hatton's Hey Wood, Whittle's Corner and Bank Rough, Little Budworth Common, Pettypool Brook Valley, River Dee (England) and Wimboldsley Wood.</p> <p>Green infrastructure is the physical environment within and between urban areas. It comprises a network of open spaces, including formal parks, gardens, woodlands, green corridors, waterways, street trees and open countryside. Green infrastructure is important for maintaining and enhancing biodiversity.</p>
<p>Problems identified</p>	<p>In the absence of a LTP designated wildlife sites would continue to be protected in their own right and therefore the existing trends in the condition of those sites would be expected to continue. Transport interventions that sever existing green links would also be more likely to occur. Climate change also poses a threat but the effect that this may have and the species at risk is not yet clear.</p>
<p>Water</p>	<p>Flood risk in West Cheshire may come from a range of sources, the main ones being fluvial (from rivers) and tidal (from the sea). Other sources may include groundwater, sewage and artificial sources (e.g. Canals). The main rivers in CWaC include the River Dee, the River Dane, River Weaver and River Gowy. The Manchester Ship canal also runs through the area, and the Mersey Estuary lies to the north. The areas particularly vulnerable to flood risk include:</p> <ul style="list-style-type: none"> ■ Northwich; ■ Chester; ■ Winsford; ■ Ince Marshes; ■ Rivacre Brook; and ■ Stanlow
<p>Problems identified</p>	<p>Need for an integrated approach to all aspects of the sustainable management of the water cycle including water demand, water supply, water quality, surface water drainage and river and coastal flooding. This integration is further complicated by the need to take into account both climate change mitigation and adaptation.</p>
<p>Landscape</p>	<p>Cheshire-wide there are 20 different landscape character areas, with adverse range located within CWaC, from coastal to sandstone ridges. There are also 12 Historic Landscape Character groups, consisting of 34 character types, which can be used to assess capacity to accommodate change. The North Cheshire Green Belt is a major designation in the Borough and covers 42% of the land area (39,230 hectares). Green Belt surrounds much of the area around the City of Chester and most of the land between Chester and Ellesmere Port and Chester and Northwich.</p>



	It is important that the character of the landscape is understood when considering how it might change, so that any change will be for the better
Soil	Agricultural land quality across the Cheshire area is generally good, with over 70% being of Grade 3 or above. Data for Cheshire West and Chester is difficult to get directly. There are currently ten active mineral sites in the borough. CWaC contains 24 Regionally Important Geological Sites.
Problems identified	Need to reduce fly tipping and for better prevention and detection and enforcement against fly tipping and other illegal waste activity to reduce the costs of clear up operations
Material assets	<p>CWaC continues to grow and to attract people. In order to satisfy these continuing demands, large releases of land may be required. In turn, this will place demands on both energy production and waste infrastructure. Currently only a limited amount of waste from Cheshire is subject to treatment with energy recovery as the preferred method of disposal, following recycling and composting, is still landfill. Planning authorities have a role to help plan for the facilities to deliver sustainable waste management.</p> <p>The need to reduce the amount of waste being sent to landfill to meet the requirements of the EU Landfill Directive including restrictions on the amount of Biodegradable Municipal waste that can be landfilled (LATS) and the rising cost of landfill as result of the landfill tax. To ensure communities take responsibility for their own waste and for planning authorities to assist in delivering the waste management facilities to meet the waste management needs of their communities including alternatives to landfill.</p> <p>Levels of Gas and Electricity consumption in 2007 in the former districts of Chester and Vale Royal were above the average consumption for the North West. The consumption levels in the former Ellesmere Port district were below the North West average. Levels of gas and electricity consumption have fallen each year since 2006.</p> <p>Another key issue is ensuring every home is adequately and affordably heated. In 2006 there were around 3.5 million households in fuel poverty (where a household spends more than 10% of its income on fuel bills) including 2.75 million in vulnerable households. The Government is seeking an end to fuel poverty in vulnerable households in the UK by the end of 2010 and all household by November 2016.</p>
Problems identified	Bringing an end to fuel poverty in Cheshire West and Chester. Achieving zero carbon in all new homes by 2016. Managing waste in line with the waste management hierarchy, particularly commercial and industrial waste.
Population and human health	<p>Cheshire West and Chester has a population of approximately 328,100, equating to roughly 0.5% of the whole UK population. The population density is comparatively low, reflecting the rural nature of much of the borough. The population structure shows an ageing population and a decreasing death rate as well as a decreasing average household size.</p> <p>Cheshire West and Chester is a comparatively affluent area. Fuel poverty is below the national average and car ownership is above it. Whilst the former district authorities were all rated comparatively well on the Index of Multiple Deprivation, Cheshire West and Chester does have some of the worst areas of deprivation in the country, measured at Lower layer Super Output Area (LSOA) level. 30 LSOA's (14%) in Cheshire West and Chester were within the bottom 20% nationally. The most deprived LSOA was Lache Park L1 in Overleigh ward, with a national ranking of 363. The areas of deprivation identified are predominantly urban, and close to the centres of major urban areas within the Borough (Chester, Ellesmere Port, Northwich, and Winsford)</p>
Cultural Heritage	Heritage Assets and the wider Historic Environment are important for the contribution they make to cultural heritage and helping to provide an understanding of history for present and future generations. Listed Buildings, Scheduled Monuments, and Conservation Areas are the key formally designated built heritage features located within Cheshire West and Chester. There are a total of 2,505 Listed Building Entries, 116 Scheduled Monuments, and 96 Conservation Areas distributed throughout the authority area. Although many of these sites are located within and around Chester City Centre, the whole district has a rich and varied heritage, reflected in the strong value of the areas historic environment. International, national and local programmes

	together provide a framework for the appropriate conservation of these features, recommending that policies and measures are formulated for their protection. Cheshire West and Chester has 32 entries on the Heritage at Risk Register, held by English Heritage. These consist of 11 Listed Buildings Entries and 21 Scheduled Monuments. The Heritage at Risk Register only include Grade i and ii* Listed Building Entries. Chester is an internationally important historic city and is experiencing a number of challenges for the future of its historic environment at present.
Air Quality	<p>There are two Air Quality Management Areas covering a relatively small proportion of Cheshire West and Chester. These are located on the A5032 Whitby Road/Station Road in central Ellesmere Port and Boughton gyratory in Chester city centre. The primary reason for their designation is emissions of nitrogen dioxide (NO₂) from vehicular traffic in these areas.</p> <p>A major cause of air quality problems are the emissions of nitrogen oxides and particulate matter from vehicle exhausts. Serious health problems such as respiratory, cardiovascular illness and even premature death can also be associated with air pollution. The effects are most commonly felt by sensitive and vulnerable groups such as the infirm, people with asthma, children and the elderly. It is also often the case that those living in deprived areas suffer the worst air pollution</p>
Climatic Factors	Climate change is recognised as one of the biggest threats to the environment, society and economy of the UK. Over the past 20 years it has become increasingly agreed upon that the current change in the climate being seen worldwide is a direct result of human activity and the release of greenhouse gases. CO ₂ emissions per capita produced in the three former local authorities incorporated into the Borough are above average when compared with what is seen at the regional level. A below average percentage of the population in the three former authorities also commute to work by car. Currently there is no installed renewable energy capacity within the authority area.

3.4 KEY ISSUES IDENTIFIED BY THE DRAFT SCOPING REPORT

3.4.1 The Scoping Report brought together key issues identified from the review of plans and programmes including explicit links made to other plans and programmes where relevant. The key issues presented here take into account consultation responses to the Scoping Report. Table 3.2 sets out key issues for each topic area. Table 3.3 presents general demographic, transport and land use issues.

3.4.2 It is worth emphasising that in identifying the key issues account has been taken of the nature of the document that is being assessed.

Table 3.2 – Key issues for each SEA topic area

	Key Issues
1	There are a number of significant internationally important sites and a wide variety of other sensitive sites for ecology. Protection of their conservation will be needed through the plan development process.
2	There are air quality problems due to transport in Chester and Ellesmere Port, with exceedence of the NO ₂ annual mean.
3	There are significant noise dispersal problems around the motorway and trunk road network, particularly affecting Ellesmere Port and Chester. Intrusive rail noise is more confined, to a corridor around the west coast main line in Winsford and Northwich.
4	<p>Proportion of the population with a limiting long term illness = 12.4%, lower than the national average, but may be increasing.</p> <p>Proportions of commuters using walk or cycle (healthy) modes is relatively low (15%) although this varies widely, with 20% figure for Chester, 8.8% in the 'rural west' area.</p>
5	The numbers of killed and injured on West Cheshire's roads has fallen consistently since 2000: it is currently forecast that performance is on track to met specific targets for reducing the numbers of people killed and injured and slight injuries by 2010.

6	91.8% of people describe their Quality of Life as Quite Good or Very Good. However 62% residents felt worried or very worried about being a victim of crime. Perception is a major issue for Cheshire West & Chester.
7	Proportions with no access by public transport for work vary from 0% in Ellesmere Port to 7% in the former Vale Royal Borough. Accessibility data demonstrates that in terms of access to services rural areas are disadvantaged compared to urban areas.
8	Quality of Rivers in the North West has improved - 92% are rated as good or fair. Recently the best improvement has been in urban areas. However water quality in CW&C is no better than this, with the former Ellesmere Port scoring lowest.
8	There are 8,246 properties location in Flood Zones 2 and 3, vulnerable to climate change. Infrastructure in these areas will be similarly affected.
9	CW&C produces higher per capita CO2 emissions than national average, both overall and for transport. Reducing our carbon footprint is a key issue. The number of journeys in CW&C is forecast to increase, meaning that transport's contribution to CO ₂ could increase. The need to adapt to unavoidable climate change. The need to optimise the use of infrastructure and the soft estate in climate change adaptation and mitigation. This includes measures like sustainable drainage, carbon storage, energy generation and water conservation.
10	There are number of sensitive rural locations across the Borough, including 20 "landscape character" areas (in Cheshire as a whole). 42% of the CW&C area is designated as Green Belt. Pressures arise from traffic growth and increase in tourism to the area.
11	96 Conservation Areas in Cheshire West & Chester. 25 of these are as recorded as being at risk by English Heritage. Planning action requires transport input.
12	Intended planning targets for new dwellings to meet Code for Sustainable Homes being developed. This does not include transport aspects – further consideration may be needed.

Table 3.3: - General demographic, transport and land use issues

Key Issues
Ageing population (40% increase of 65-84 to 2026)
Gradual decline in 0-15 age group
Population increased by 4.7% over 16 years
Average household size dropping, whilst the total population grows. This increases the demand for houses in the Borough.
30 Lower layer Super Output Areas fall into the 20% most deprived areas in the Index of Multiple Deprivation (2007). Blacon and Overleigh wards ranked in the 1% most deprived in England.
For employment, Central & Westminster ward ranked in the 2% most deprived in England. Blacon ward ranked in the 4% most deprived and Winsford South & West ranked in the 4% most deprived
Despite the areas of deprivation, the local economy is relatively strong and diverse, featuring a number of large employers. Unemployment is below the national average.
Declining Trend in number of houses completed: 2003-04 = 1,062



2007-08 = 707
The identified need for affordable housing (1,244 per year) is approximately 5.5 times the current annual rate of completion.
80% of new housing planned to use brownfield land.
Employment land resource is constrained by a small number of large allocations, land reserved for specialist uses or expansion land. CW&C total in April 2008 = 529.77ha
Car ownership increased by 6.2% between the 1991 and 2001 census
Higher than (national) average reliance on car based mobility
Lower than average use of sustainable modes
High rates of in-and-out commuting
Significant forecast growth in road traffic (> 18%) and network stress to 2026
Significant number of large prospective development concentrations to be taken through the LDF process
The need to achieve modal shift

3.5 THE SEA FRAMEWORK

Environmental issues, problems and constraints, including international and EC environmental protection objectives, are considered in developing SEA objectives and targets.	<i>Practical Guide to the SEA Directive Appendix 9.</i>
SEA objectives, where used, are clearly set out and linked to indicators and targets and/or criteria where appropriate.	<i>Practical Guide to the SEA Directive Appendix 9.</i>
Conflicts that exist between SEA objectives, between SEA and plan objectives and between SEA objectives and other plan objectives are identified and described. Commentary provided on how plan objectives have been changed/influenced by environmental issues (e.g. from compatibility assessment).	<i>Practical Guide to the SEA Directive Appendix 9.</i>

3.5.1 The Draft SEA Framework was presented in the Draft Scoping Report. Table 3.4 presents the version that was used for the assessment and the text below provides more background.

3.5.2 The SEA Framework sets out the ‘scoring’ system used for assessing the measures proposed by the LTP3. The SEA scoring system ranges from ‘significant negative’ to ‘significant positive’. The assessment process takes into account a variety of factors including baseline data and the plan policy context, but ultimately any score awarded is a matter of professional judgement.

3.5.3 It should be noted that when compiling the framework consideration was given to the ‘zone of influence of the assessment’. For example, LTP3 has a specific zone of influence in relation to health issues such as obesity and heart disease, by promoting active travel.

3.5.4 The SEA Framework defines what are considered to be significant positives through to significant negatives for each objective, with the aims of achieving transparency in the assessment process and consistency across the assessment of different elements of LTP3. In setting out the definitions, due regard has been made to the assumed



mitigation. The purpose of the assumed mitigation is to highlight policies and regulations external to LTP3 that any development would need to comply with. As such, issues addressed by the assumed mitigation have been taken as a given when undertaking the assessment.

3.5.5 It must be noted that the assessment cannot take into account individual circumstances that may occur on a measure-by-measure basis. Therefore it would not be appropriate to expect every score given in the assessment of measures to fit perfectly with the approach to scoring set out in the SEA Framework. For example, a measure may have characteristics that fit within more than 1 of the score boxes i.e. a measure may have both a significant positive effect and a minor negative for the same objective. In these circumstances a single score has been awarded that best represents the overall outcome. Awarding scores against each criterion would make the assessment unwieldy. The detail of the various effect types is discussed in the comments box for each Priority.

3.5.6 The criteria that support the objectives are intended as a reference to the sort of effects that a given objective may have. They are not intended to be used as a checklist against which all measures will be judged. Whilst all of the criteria will have been considered when assessing potential effects, not all of the criteria are referred to in the supporting commentary. This is because in the interests of brevity, the commentary seeks to discuss the most relevant issues for each objective. To comment on every issue for every objective (whether relevant or not) would be impractical, unreadable and due to the sheer volume of comments produced would not effectively inform the decision-making process. Ultimately the aim of the SEA is to help identify potential significant effects (both positive and negative) and suggest mitigation and enhancement.

Table 3.4 - The SEA Framework

Proposed Transport Strategy SEA Headline objectives		Sub-Objectives/Criteria	Assumed mitigation	Approach to scoring for LTP3
1	Maintain and enhance biodiversity and avoid irreversible losses	<p>Will LTP3 help avoid a net loss, damage to, or fragmentation of designated wildlife sites and the populations of qualifying habitats and species?</p> <p>Will LTP3 help promote opportunities for people to come into contact with robust wildlife places whilst encouraging respect for and raising awareness of the sensitivity of these sites?</p> <p>Will LTP3 impact on wildlife corridors?</p> <p>Will LTP3 help ensure that new transport infrastructure incorporates ecological enhancements?</p>	<p>The Conservation of Habitats and Species Regulations 2010 protect listed species.</p> <p>It is assumed that there will be on-going monitoring of the condition of statutory designated sites by Natural England.</p>	<p>++ Measures avoid a net loss, damage to, or fragmentation of designated wildlife sites and the populations of qualifying habitats and species?</p> <p>Measures ensure that new transport infrastructure incorporates ecological enhancements.</p> <p>Measures Help promote opportunities for people to come into contact with robust wildlife places.</p> <p>+ Measures avoid net loss, damage to, or fragmentation of designated wildlife sites and the populations of qualifying habitats and species.</p> <p>- Measures potentially harm locally designated habitats</p> <p>-- Potential harm to nationally designated habitats.</p> <p>AND / OR</p> <p>Lead to fragmentation of existing corridors/ spaces</p>
2	Reduce transport's impact on air quality	<p>Will LTP3 cause an increase in motor vehicle trips and increased dependence on car use?</p> <p>Will LTP3 contribute to poor air quality?</p> <p>Will LTP3 support the</p>	<p>It is assumed that the Council will continue to work towards achieving relevant objectives for air quality.</p>	<p>++ Measures actively promote improvements to air quality and reductions in noise and vibration</p> <p>+ Measures improve air quality levels</p>

Proposed Transport Strategy SEA Headline objectives	Sub-Objectives/Criteria	Assumed mitigation	Approach to scoring for LTP3
		<p>objectives of local air quality action plans?</p> <p>Will LTP3 result in worsening of existing traffic congestion hotspots or improvements to the current situation?</p> <p>Will air quality be monitored?</p> <p>Will congestion be monitored?</p>	<p>- Measures do not consider air quality levels</p> <p>-- Measures contribute to a deterioration of air quality</p>
3	<p>Minimise transport noise and vibration impacts</p>	<p>Will LTP3 contribute to high noise levels?</p> <p>Will noise be monitored?</p> <p>Will LTP3 contribute to issues associated with vibration from traffic?</p> <p>Will LTP3 impact on tranquillity?</p>	<p>It is assumed that the Council will continue to work towards achieving relevant objectives relating to noise.</p> <p>It is assumed that planning conditions will be used to limit noise exposure during the construction phase of projects.</p> <p>++ Measures actively promote improvements in both noise and vibration levels</p> <p>+ Measures improve noise and vibration levels indirectly or address one of the problems</p> <p>- Measures do not consider noise and vibration levels</p> <p>-- Measures contribute to a deterioration in noise and vibration levels</p>
4	<p>Encourage healthier lifestyles</p>	<p>Will LTP3 encourage / promote walking and cycling?</p> <p>Will LTP3 help improve</p>	<p>None identified</p> <p>++ Package promotes walking and/or cycling</p> <p>Package promotes access to recreational facilities including leisure centres,</p>

Proposed Transport Strategy SEA Headline objectives	Sub-Objectives/Criteria	Assumed mitigation	Approach to scoring for LTP3	
		<p>accessibility for all to appropriate community, health, social and transport infrastructure (including green infrastructure)?</p> <p>Will LTP3 tackle issues that impact on health (air quality, congestion, severance)</p> <p>Will LTP3 take account of changes in the population (taller, heavier, wider, older people)</p>		<p>health, transport and green infrastructure by foot and/or bicycle</p> <p>Package will help improve air quality by promoting modal shift</p> <p>Package will reduce accidents/improve safety/improve air quality</p> <p>+ Package includes walking and/or cycling provision</p> <p>Package will help improve air quality by promoting modal shift</p> <p>Package will reduce accidents/improve safety</p> <p>- Measures do not improve poor access to existing health facilities including doctors, dentists and pharmacies</p> <p>Measures do not improve poor access to existing recreational facilities including leisure centres and public open space</p> <p>Measures do not improve existing poor access to walking and cycling networks.</p> <p>-- Measures would encourage/require use of the private car</p>
5	Improve road safety	<p>Will LTP3 reduce the number and severity of traffic related accidents?</p>	<p>Schemes will need to be designed to meet relevant standards, including Design Manual for Roads and Bridges, June 2010 and other relevant standards that apply at the national level. Schemes caught include:</p> <ul style="list-style-type: none"> ■ Physical changes of highway layouts to address black spots; ■ Signing and lining 	<p>++ Significant improvement to road safety</p> <p>+ Minor improvement to road safety</p> <p>- Minor decrease in road safety</p> <p>-- Significant decrease in road safety</p>

Proposed Transport Strategy SEA Headline objectives	Sub-Objectives/Criteria	Assumed mitigation	Approach to scoring for LTP3	
			<p>improvements;</p> <ul style="list-style-type: none"> ■ Application of high friction dressing at signals and other safety black spots; ■ Pedestrian crossings; ■ Area-based traffic calming; ■ Speed cameras; ■ Junction control (red light) cameras; and ■ Safer routes to school works. 	
6	Reduce the level of transport related crime and improve perceptions of safety	Does LTP3 encourage new transport infrastructure to incorporate 'Designing out Crime' principles.	No assumptions identified	<p>++ Measures are likely to promote a significant reduction in crime and / or fear of crime</p> <p>+ Measures are likely to promote a minor reduction in crime/fear of crime</p> <p>- Measures do not implement 'Designing out Crime' principles</p> <p>-- The measure could lead to a significant increase in crime</p>
7	Enhance accessibility to key services	Does LTP3 help ensure accessibility to key services in deprived communities? Will LTP3 help ensure new or improved education and	None identified	++ Measures improve accessibility to key services in deprived communities. Measures consider location of new/improved education facilities in relation to walking, cycling and public transport routes and appropriate levels of parking.

Proposed Transport Strategy SEA Headline objectives	Sub-Objectives/Criteria	Assumed mitigation	Approach to scoring for LTP3
		<p>training facilities are well located in relation to walking, cycling and public transport routes and appropriate levels of parking.</p>	<p>+ Measures include consideration of accessibility to key services in deprived communities. Measures consider location of new/improved education facilities in relation to walking, cycling and public transport routes and appropriate levels of parking.</p> <p>- Measures ignore need for accessibility to key services in deprived communities. Measures consider location of new/improved education facilities in relation to walking, cycling and public transport routes and appropriate levels of parking..</p> <p>-- Measures would increase use of the private car to key services</p>
8	<p>Reduce transport's impact on water resources</p> <p>Will LTP3 help locate development where adequate water supply, foul drainage, sewage treatment facilities and surface water drainage is available?</p> <p>Will LTP3 help ensure new transport infrastructure is efficient in design and helps ensure reduced water and energy consumption?</p> <p>Will LTP3 help ensure that development likely to affect the ecological status of groundwater and surface water?</p>	<p>It is assumed that a number of mitigation methods will be implemented as appropriate including:</p> <ul style="list-style-type: none"> ■ vehicles carrying loose aggregate and workings should be sheeted at all times; ■ implementation of design controls for construction equipment and vehicles and use of appropriately designed vehicles for materials handling; ■ completed earthworks should be covered or vegetated as soon as is practicable; ■ regular inspection and, if 	<p>++ The measures have demonstrable potential to enhance water quality/air quality/soil and minerals through remediation/modal shift. Policies are in place to protect soils.</p> <p>+ Measures may be able to enhance water/air/soil quality</p> <p>- Measures would present a potential risk of pollution to water/air that could be mitigated.</p> <p>- Measures would present a known risk of pollution to water/air Measures represent a very inefficient use of water.</p>



Proposed Transport Strategy SEA Headline objectives	Sub-Objectives/Criteria	Assumed mitigation	Approach to scoring for LTP3
		<p>necessary, cleaning of local highways and site boundaries to check for dust deposits (and removal if necessary);</p> <ul style="list-style-type: none"> ■ minimise surface areas of stockpiles (subject to health and safety and visual constraints regarding slope gradients and visual intrusion) to reduce area of surfaces exposed to wind pick-up; ■ use of dust-suppressed tools for all operations; ■ ensuring that all construction plant and equipment is maintained in good working order and not left running when not in use; and ■ no unauthorised burning of any material anywhere on site. <p>It is assumed that schemes will be subjected to Environmental Impact Assessment, where relevant and this will include consideration of impacts on air quality.</p> <p>A programme for noise and vibration monitoring will be prepared as part of the final CEMP and agreed with the Council</p>	

Proposed Transport Strategy SEA Headline objectives	Sub-Objectives/Criteria	Assumed mitigation	Approach to scoring for LTP3	
9	Reduce transport's contribution to greenhouse gas emissions and help ensure that existing and new infrastructure is adapted to the unavoidable effects of climate change	<p>Will LTP3 encourage developments/infrastructure that is energy efficient in design and construction?</p> <p>Will LTP3 encourage an increase in the local renewable energy generating capacity?</p> <p>Will LTP3 ensure that existing and new infrastructure is adapted to the unavoidable effects of climate change?</p>	None identified	<p>++ Measures create opportunities for either renewable energy provision or energy efficiency measures clearly defined. AND/OR Measures promote climate change adaptation for all relevant transport related infrastructure</p> <p>+ Measures create opportunities for either renewable energy provision or energy efficiency measures are considered.</p> <p>- Measures meant that opportunities for either renewable energy provision or energy efficiency measures not considered.</p> <p>-- Measures would constrain a renewable energy scheme coming forward. And/or Major Infrastructure is not climate change proofed</p>
10	Preserve and enhance the natural landscape	<p>Does LTP3 help secure appropriate improvements in access to landscapes of historical and cultural value such as parks and open spaces, and areas with a particular historical or cultural association?</p> <p>Does LTP3 promote accessibility to such facilities by walking, cycling and</p>	Some areas of importance for Geodiversity protected as Sites of Special Scientific Interest.	<p>++ Improvement in access/promotion of access to townscapes and townscapes of historical value such as parks and open spaces.</p> <p>+Potential positive impact on access to townscapes and townscapes of historical value such as parks and open spaces.</p>

Proposed Transport Strategy SEA Headline objectives	Sub-Objectives/Criteria	Assumed mitigation	Approach to scoring for LTP3
	<p>public transport?</p> <p>Does LTP3 promote the protection of designated landscapes?</p> <p>Does LTP3 promote respect for landscape character?</p> <p>Does LTP3 take into account potential effects associated with lighting?</p> <p>Does LTP3 protect geodiversity and soils</p>		<p>- Potential negative impact on access to landscapes of value such as parks and open spaces.</p> <p>-- Measures which would be detrimental to access to landscapes of value such as parks and open spaces.</p>
11	<p>Conserve and enhance the historic environment and heritage assets.</p> <p>Does LTP3 help secure improvements in access to townscapes of historical and cultural value?</p> <p>Does LTP3 promote accessibility to such facilities by walking, cycling and public transport?</p> <p>Does LTP3 promote the re-use of such assets for transport related development?</p> <p>Does LTP3 protect such assets and/or their setting?</p>	<p>The provisions of the Planning (Listed Buildings and Conservation Areas) Act 1990 will apply.</p>	<p>++ Improvement in access/promotion of access to townscapes and assets of historical value.</p> <p>AND/OR</p> <p>Measures protect/enhance assets and/or their setting</p> <p>+Potential positive impact on access to townscapes and assets of historical value.</p> <p>And/or</p> <p>Potential positive impact on assets and/or their settings</p> <p>- Potential negative impact on access to townscapes and townscapes of historical value such as parks and open spaces.</p> <p>-- Measures which would be detrimental to access to townscapes and townscapes of historical value such as parks and open spaces.</p>



Proposed Transport Strategy SEA Headline objectives		Sub-Objectives/Criteria	Assumed mitigation	Approach to scoring for LTP3
12	Creation of places, spaces and buildings that work well, wear well and look well	<p>Does LTP3 promote good design</p> <p>Does LTP3 promote long term stewardship?</p>	None identified	<p>++ Evidence of strong commitment to achieving this objective</p> <p>+ Evidence of some commitment to achieving this objective or part of it</p> <p>- LTP3 will work against achieving part of this objective.</p> <p>-- LTP3 will work against achieving all elements of this objective.</p>



4 Assessing the Business as Usual Option and the Draft Strategy

4.1 INTRODUCTION

4.1.1 This Chapter first sets out how the strategic options were developed and how they were refined into the preferred option. The sustainability effects of the options are described, followed by an assessment of the effects of the key Draft Transport Strategy objectives. Recommended mitigation measures are then put forward where significant negative impacts have been identified.

4.2 THE BUSINESS AS USUAL (BAU) OPTION

4.2.1 LTP2 included a policy section with a transport vision and long-term strategy. The policy section included a vision for transport, a set of key outcomes and overarching objectives.

4.2.2 The key outcomes were:

- Reduce levels of traffic growth and tackle congestion;
- Ensure that our roads and bridges remain well maintained;
- Provide safer roads;
- Support town centre improvements, regeneration and growth in housing;
- Improve Cheshire's public transport networks;
- Improve accessibility and widen travel choice;
- Improve air quality and the environment;
- Support economic growth; and
- Respond to demographic changes.

4.2.3 The 7 overarching objectives were:

- Enhance the quality of life of those who live or work in Cheshire;
- Promote social inclusion and accessibility to everyday services for all, especially those without a car;
- Improve safety for all travellers;
- Promote integration of all forms of transport and land use planning leading to a better, more efficient transport system;
- Contribute to an efficient economy and to support sustainable economic growth and regeneration in appropriate locations;
- Protect and enhance the built and natural environment; and
- Manage a well maintained and efficient network.

4.2.4 An assessment detailing the relationship between LTP2 and the assessment objectives is shown in Appendix D. The key differences between LTP2 and LTP3, which suggest that LTP3 provides a better policy framework, are:

- LTP3 is better integrated with the Sustainable Community Strategy and Local Development Framework. This reflects the fact that LTP2 was prepared in the context of a two tier local authority structure and LTP3 is being prepared in the context of a unitary authority;
- The structure of LTP3 allows a more integrated approach to issues. LTP2s structure (effectively with two sets of objectives) was disjointed in comparison;

- LTP3 better integrates considerations around climate change, particularly in relation to adaptation; and
- LTP3 has greater emphasis on the built and natural environment.

4.3 HOW THE PREFERRED OPTION WAS CHOSEN

Reasons are given for selection or elimination of alternatives, where relevant.	<i>Act Regulation 12(2)(b)</i> <i>Act Schedule 2(8)</i>
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4.3.1 The preparation of the new strategy has involved considerable dialogue with partners and stakeholders alongside an extensive programme of wider community consultation. This has played an important part in helping to shape the overall direction of the new strategy and to gauge support for the emerging LTP3. Section 2 of LTP3 provides more background but key activities include:

- A preliminary round of “soundings” undertaken between October 2009 and January 2010;
- A review of transport issues revealed during recent local community and place surveys and other related consultation exercises; and
- A third stage of consultation will be undertaken during autumn 2010 to seek views and feedback on the draft Strategy and the accompanying delivery proposals set out in the implementation plan.

4.3.2 As a new Authority, the Council has recently published a new Sustainable Community Strategy. It is also working to prepare a new Local Development Framework (LDF). This has provided a timely opportunity to bring together and combine the first round of consultation exercises for all three strategies. By doing so, it is hoped that this will help better integrate transport and land use planning alongside wider community aspirations. With this in mind, all three documents look forward to cover the fifteen year period 2011 to 2026.

4.4 ASSESSING KEY OBJECTIVES OF THE DRAFT LTP3

4.4.1 The Draft LTP3 contains its own objectives. These have been appraised for compatibility against the SEA objectives and the results are presented in Table 4.1 below. A series of recommendations came out of this process and these are shown in bold in the third column of the table.

Table 4.1: Compatibility between the Draft Transport Strategy Objectives and Goals and the SEA Objectives

LTP3 Objective (Bold) and Sub Objectives	Relationship to SEA Objectives	Comments (Recommendations are shown in Bold)
To support sustainable economic competitiveness and growth in West Cheshire and the surrounding sub-region by delivering reliable and efficient transport networks	Relevant to Objective 7 Other LTP3 Objectives should ensure that this LTP3 objective is not pursued at all costs.	
Enhance the capacity and capability of our strategic and local transport networks to reduce congestion and address areas where problems may occur in the future particularly in Chester, Ellesmere Port and Northwich	See comment above.	Optimising the use of existing infrastructure reduces the need for new infrastructure.



<p>and on our main inter-urban road and rail networks;</p>		
<p>Support the economic viability and accessibility of the main centres of Chester, Ellesmere Port, Northwich and Winsford, smaller urban and rural centres and tourism and leisure attractions;</p>	<p>See comment above.</p>	<p>This sub objective could give priority to measures that improve accessibility and connectivity by alternatives to the car and Heavy Goods Vehicles.</p>
<p>Assist the delivery of new housing developments, including Growth Point aspirations, in Chester, Ellesmere Port, Northwich and Winsford, ensuring that this is sited in areas accessible to jobs and local services while limiting the impact of additional traffic; and</p>	<p>See comment above.</p>	<p>This sub-objective recognises the role of mixed use developments and developments that are well located in relation to existing jobs and services (which could help reduce the need to travel –or at least provide choice as to whether or not to do so). New developments also provide an opportunity to achieve greater modal shift because new residents are more amenable to considering alternative forms of transport.</p> <p>The sub-objective could be broadened out to identify the opportunity to embed measures that help to achieve modal shift from the car in new developments backed up by a target for modal shift from single occupancy car trips.</p>
<p>Improve connectivity and accessibility within West Cheshire to Merseyside and Greater Manchester, North East Wales and to international gateways and ports, particularly Manchester and Liverpool John Lennon Airports and the Port of Liverpool for freight movements.</p>	<p>See comment above.</p>	<p>This sub objective could give priority to measures that improve accessibility and connectivity by alternatives to the car and Heavy Goods Vehicles.</p> <p>Surface Access to Airports is a significant generator of car borne journeys.</p>
<p>To reduce transport’s emissions of carbon dioxide and other greenhouse gases, with the desired outcome of tackling climate change</p>	<p>Relevant to Objective 9</p>	<p>This objective needs backing up with a Carbon budgeting approach incorporating different sectors (including transport). Traffic in the Council area is forecast to increase and CO2 emissions associated with transport could also increase.</p> <p>Broaden the objective out to include climate change adaptation – at the moment in just covers mitigation (there is a sub-objective covering adaptation, see below).</p>



Support an overall reduction in levels of greenhouse emissions by proving and encouraging the use of sustainable (low carbon) forms of transport;	Relevant to Objective 9	This sub-objective could be broadened out to recognise the potential for energy efficiency measures and renewable energy technology to be incorporated in transport infrastructure.
Ensure that new development takes place in accessible locations and is designed to reduce the need for car borne travel and minimise carbon emissions; and	Relevant to Objective 4, 7, 9 and 12	See earlier comment above relating to a target for modal shift and new developments
Plan ahead to ensure that local transport networks are resistant and adaptable to the impacts of climate change including adverse weather conditions.	Relevant to Objective 9	This sub-objective could be broadened out to recognise the role that the network could have in helping the wider built environment to be resistant to climate change, for example by ensuring that the network incorporates sustainable drainage measures and that appropriate links with the Surface Water Management Plan are made.
To manage to manage a well maintained and efficient transport network.		The management and maintenance of the transport network provides opportunity to achieve wider environmental benefits – for example through the management of the soft estate and through incorporation of sustainable design and construction techniques. Reference could be made to the use of CEEQUAL where this is appropriate. Lighting is something that can impact on the environment, is a sub-objective warranted on this?
To improve the condition of the highway network		See comment above.
To reduce the maintenance backlog		See comment above.
To maintain the highway network in a safe and serviceable condition for the use of vehicles, cyclists, pedestrian, equestrians and all other road users; and	Relevant to Objective 5.	See comment above.
To ensure that the highway is kept in an acceptable condition environmentally.	Relevant to Objectives 2, 3, 8, 10 and 11.	See comment above.



<p>To contribute to better safety, security and health and longer life expectancy in West Cheshire reducing the risk of death, injury or illness arising from transport, and by promoting types of transport that are beneficial to health</p>	<p>Relevant to Objectives 4 and 5.</p>	<p>Contributes to achieving SEA objectives relating to population and human health.</p>
<p>Reduce the number of people killed or seriously injured on our roads;</p>	<p>Relevant to Objective 5</p>	<p>Contributes to achieving SEA objectives relating to population and human health.</p>
<p>Promote and encourage healthier lifestyles through the development of initiatives that provide opportunities for increased levels of cycling and walking, including maximising the benefits of Chester’s Cycle Demonstration Town status and Connect 2 schemes in Chester and Northwich;</p>	<p>Relevant to Objective 4</p>	<p>Contributes to SEA objectives relating to population and human health.</p>
<p>Work to improve poor air quality in Chester and Ellesmere Port and take appropriate action to prevent transport related air quality problems emerging elsewhere in the Borough;</p>	<p>Relevant to Objective 2</p>	<p>Contributes to SEA objectives relating to population and human health. Air quality problems associated with European sites could be relevant here. The need for Air Quality Management Areas to be declared near European sites should also be kept under review;</p> <p>LTP3 could require all new development to be ‘air quality neutral.’ Air quality neutral development is a concept being promoted in London through the Mayor’s Air Quality Strategy;</p>
<p>Ensure that new developments and transport infrastructure schemes address public safety as a key requirement and make use of “safer by design” initiatives to improve personal safety and reduce fear of crime; and</p>	<p>Relevant to Objectives 5 and 6.</p>	<p>Contributes to SEA objectives relating to population and human health.</p>
<p>Plan for and respond to natural and man made incidents which have the potential to have a significant impact on the transport network.</p>	<p>Relevant to Objective 5.</p>	<p>Contributes to SEA objectives relating to population and human health.</p>
<p>To improve quality of life for transport users and non transport users and to promote a healthy natural environment</p>	<p>Relevant to Objective 1, 8, 10 and 11.</p>	
<p>Ensure that new development and infrastructure is located and designed to minimise noise levels and</p>	<p>Relevant to Objective 3.</p>	<p>This sub-objective could identify the need for considerate contractor schemes</p>



<p>reduce the impact of increased noise from such sites;</p>		<p>during construction. It could also be expanded to include vibration as an issue.</p>
<p>Set high standards for the design and quality of transport schemes which will enhance the built and natural environment and which help to improve the quality of public spaces, encourage social interaction, better manage traffic movements, improve the design of parking facilities, reduce severance and enhance and protect local character and biodiversity; and</p>	<p>Relevant to Objective 12</p>	<p>This sub-objective could commit to achieving a net gain in biodiversity and the use of site Biodiversity Action Plans, e.g. for schemes that require Environmental Assessment.</p> <p>This sub-objective or supporting text could make reference to the use of Construction and Environmental Management Plans for significant projects, e.g. those requiring Environmental Impact Assessment, with the responsibility for producing and adhering to CEMPs placed on contractors</p> <p>LTP3 should contain a statement to the effect that any proposals that would significantly harm a European site would not be supported by the Strategy. This will help ensure LTP3 is compliant with the Habitats Directive. This could be expressed as a sub-objective.</p>
<p>Enhance access to leisure activities by developing and improving pedestrian, cycle and greenway connections and the Public Rights of Way network.</p>	<p>Relevant to Objectives 4 and 7.</p>	<p>Caveat this sub-objective by recognising the need to manage access and the use of sights, particularly European sites.</p>
<p>To promote greater equality of opportunity by improving accessibility to jobs and key services, with the desired outcome of achieving a fairer society</p>	<p>Relevant to Objective 7.</p>	
<p>Ensure that new developments and key local services will be located in places that are fully accessible by a range of transport options;</p>	<p>Relevant to Objectives 7 and 12.</p>	<p>See earlier comment relating to a target for modal shift and new developments.</p>
<p>Support and the priorities set out in the Cheshire West and Chester Accessibility Strategy by working to address increased levels of accessibility to employment and training opportunities, particularly from areas of deprivation, to key services from rural</p>	<p>Relevant to Objectives 4, 7 and 12.</p>	<p>Contributes to SEA objectives relating to population and human health.</p>



areas, and to health services; and		
Improve physical accessibility and remove barriers to mobility with particular emphasis placed on meeting the needs of the disabled, mobility impaired and the elderly.	Relevant to Objectives 4, 7 and 12.	Contributes to SEA objectives relating to population and human health.

4.5 ASSESSING THE PREFERRED OPTION

The assessment focuses on significant issues and the level of detail and commentary reflect this.	<i>Practical Guide to the SEA Directive Appendix 9.</i>
Effects identified include the types listed in the Directive	<i>Act Schedule 2(6)(a)</i>
Both positive and negative effects are considered, and the spatial extent and duration of effects (short, medium or long-term, permanent and temporary) is addressed. Indirect effects identified where relevant (including cumulative).	<i>Act Schedule 1(2)(e) Act Schedule 2(6)</i>
Likely secondary, cumulative and synergistic effects are identified where practicable, including the potential for in-combination effects with other plans and programmes. Commentary on in-combination effects for assessment under Habitats Regulations, where relevant.	<i>Act Schedule 2(6) Good practice</i>
Inter-relationships between effects are considered where practicable.	<i>Act Schedule 2(6)(m)</i>
The prediction and evaluation of effects makes use of relevant accepted standards, regulations, and thresholds.	<i>Practical Guide to the SEA Directive Appendix 9.</i>

4.5.1 The chapters of the LTP3 were assessed individually. Each section contains specific policies and these have been assessed collectively. The main effects are identified in the matrices in Appendix C. The scope of each chapter is briefly set out below followed by a summary of effects. Key recommendations are set out at the end of this section. Some of the recommendations are overarching in nature, others are more topic specific. The LTP3 chapters that have been assessed are (note introductory chapters are not assessed):

- 4. Economic Growth;
- 5 Climate Change;
- 6. Asset Management;
- 7. Safety, Security and Health;
- 8. Equal Opportunities; and
- 9. Quality of Life

4.5.2 The assessment was undertaken by WSP Environmental using expert judgement and the quantified information available.

ECONOMIC GROWTH

4.5.3 This Chapter of LTP3 considers:

- The Council’s Network Management Duty;
- Economic viability, regeneration and development;
- Parking;
- Supporting the delivery of new housing;
- Improving connectivity with neighbouring areas;
- Park and Ride;
- Highway schemes and
- Freight.



4.5.4 Read in isolation this chapter contains policies that could have significant negative effects on the environment, for example measures to improve connectivity with neighbouring areas. Hence a number of uncertainties have been identified and these are set out and discussed in the relevant matrix in the Appendix C. Equally some measures could benefit the environment, for example measures aimed at integrating improvements to the transport network and development and measures to integrate development and services therefore reducing the need to travel.

4.5.5 In assessing this chapter we have had regard to the provisions of other chapters of the LTP3 – since like any policy document it should be read as a whole. Some over-arching recommendations are set out at the end of this Section. These should help ensure that potential significant effects are avoided and also that the contribution of the Strategy to objectives like modal shift are optimised.

CLIMATE CHANGE

4.5.6 This chapter of LTP3 considers issues around climate change mitigation and adaptation. It covers the following aspects:

- Promoting low carbon transport choices;
- Travel Planning;
- Cycling;
- Walking;
- New technologies and fuel;
- Low carbon transport;
- Reducing the need to travel; and
- Climate change adaptation.

4.5.7 This chapter contributes to a number of the SEA objectives. The commitment to climate change adaptation and implications for the transport network is welcomed. The promotion of low carbon transport choices contributes to a range of objectives, as identified in the appraisal matrix.

4.5.8 It is suggested that the section on adaptation could be broadened out to recognise the role that the transport network could have in helping to achieve wider adaptation objectives, e.g. the soft estate could help with attenuation of water.

4.5.9 As noted in the baseline section of this report the total per capita CO₂ emissions for CWaC are nearly twice as high as the UK average and the CO₂ emissions for road traffic equates to 3.29 kilo-tonnes per head per year, compared to the national average of 2.2kilo-tonnes.

4.5.10 This report identifies some key recommendations that should underpin development of policy in the transport sector. These are set out in Table 4.5 but in summary are:

- Develop targets for modal shift associated with new and existing development. Travel centres could be included in larger developments to provide advice and encourage modal shift;
- Adopt a quantified approach to the assessment of the carbon footprint of the transport sector. A carbon budgeting approach may be necessary across different sectors to ensure that the Council makes its contribution to the achievement of an 80 percent reduction in carbon dioxide emissions from 1990 levels by 2050, as set out in the Climate Change Act 2008;
- The Strategy could also recognise the role that the network could help play in helping the built and natural environment cope with climate change, for example the soft estate could have a role in the attenuation of water. Sustainable drainage techniques should be utilised where feasible and appropriate;
- Preferential parking could be given to low CO₂ emission vehicles, for example in town centres.
- References to biofuels should reference sustainable biofuels, given the concerns associated with the impacts of obtaining biofuels from some sources.



ASSET MANAGEMENT

4.5.11 This chapter of the LTP3 considers issues around:

- Routine maintenance;
- Winter maintenance;
- Lighting; and
- Drainage.

4.5.12 The policies set out in this chapter could contribute to a number of SEA objectives. For example, a well maintained network will help improve safety, improve access to facilities and well maintained lighting will help reduce crime and fear of crime. Lighting has the potential to impact on sensitive species and the table of recommendations below has a recommendation relating to new lighting.

SAFETY, SECURITY AND HEALTH

4.5.13 This chapter of the LTP3 considers issues around:

- Safety (education, engineering, speed and research);
- Air quality;
- Tackling Crime. and
- Resilience measures.

4.5.14 The policies set out in this chapter could contribute to a number of SEA objectives. The policies around safety will contribute to the SEA objectives on safety and health. The resilience measures will contribute to the objective relating to climate change adaptation. Other linkages are identified in the relevant appraisal matrix.

EQUALITY OF OPPORTUNITIES

4.5.15 The policies set out in this chapter could contribute to a range of objectives; particularly those relating to modal shift, accessibility to services and places that work well. The policies should help improve accessibility to essential services and provide a choice of alternatives to the car.

QUALITY OF LIFE

4.5.16 From an SEA perspective this is a key chapter within LTP3. It covers:

- Noise;
- Built environment;
- Landscape and biodiversity; and
- Access to leisure (green infrastructure and Public Rights of Way).

4.5.17 As it stands this chapter could contribute to a number of objectives but there are some key recommendations (set out in the relevant matrix in Appendix C and summarised in Table 4.5) that could help ensure that the LTP3 sets the framework for more positive outcomes. As an example, the policy on biodiversity talks about balancing such considerations against the benefits of schemes. LTP3 needs to move beyond the concept of 'balance' to ensuring that a net gain in biodiversity is achieved. Other safeguards are suggested in the matrix and table of recommendations.

4.6 HEALTH IMPACT ASSESSMENT

4.6.1 Carrying out a Health Impact Assessment (HIA) is intended to gauge the total effects of a plan on a population and identify and facilitate appropriate actions to manage those effects.

4.6.2 For the LTP3 it has been judged appropriate not to conduct a full HIA at this stage, as:

- There are practicality issues in undertaking a full HIA in depth at the present time: the LTP contains strategic and detailed implementation levels, and ideally the full HIA would be completed with access to details of both components. This is not possible presently, so consideration of more in-depth work will be given once progress with the implementation plan work is further advanced;
- The high-level nature of the LTP strategy plan makes disaggregating the causal pathways between policy and impact an exercise requiring unsafe assumptions to be made about the main points of focus and which schemes may be undertaken;
- The very closeness of the LTP to the LDF Core Strategy suggests a similar treatment of health matters is adopted. With the Spatial Plan, an approach was adopted of judging the integration of the plan and the PCT's 5-year strategy "Transforming Health and Healthcare, 2010/11 – 2013/14". A related consistency check has been carried out between the LTP and Health Strategy;
- Some general work on LTP health impacts is also underway as part of the LTP Strategic Environmental Assessment, which should not be duplicated;

4.6.3 The present work is titled a "Health Impact Study" to reflect this difference.

4.6.4 The methodology adopted is to (i) evaluate the LTP at high level, using the Healthy Urban Development Unit's "Core Strategy Healthcheck" as the basis for evaluation and then (ii) conduct a consistency check between the LTP and PCT and other relevant strategies with health content. The background, methodology and results of the exercise are presented in Appendix E.

4.6.5 There are four main evaluation categories in the health check:

- Legislation and policies
- The evidence base
- The LTP policy framework
- Implementation and monitoring

The process of developing the LTP has involved a generally effective attempt to achieve two critical elements that are required of a Health Impact Assessment. These are:

- Quantifying the most likely impacts of the plan; and,
- Consulting with the main health stakeholder (the PCT) on the plan's development.

4.6.6 The scope of likely impacts is as one would expect of an LTP and is similar to that seen in previous plans. Having said this, there are a number of points that remain to be addressed before the current health impact work can be truly thought of as complete:

4.6.7 More details of the expenditure plans, monitoring / evaluation and risk assessments are needed. These will follow with work underway on the LTP implementation plan, but its absence means that the present work cannot be called a full HIA. The opportunity to complete this will occur in the future, therefore CW+C are asked to consider doing so when the opportunity arises.

4.6.8 Concerning LTP health objectives, prioritisation and quantification, the final development round for the LTP in early 2011 should give some thought to different plan options, which have not been identified hitherto. If there are no practical alternatives, some consideration of why this is would be worthwhile.

4.6.9 Details of health related monitoring and the way in which they relate back to the objectives are advised, using the SMART principles as far as possible

4.6.10 Joint working with the Spatial Plan team is going to be important as both plans are developed. Strong liaison will ensure that the plans to contribute to each other as far as possible and that synergies are explored (such as in monitoring activities) as far as possible.

4.6.11 There is evidence of working with health stakeholders in the LTP, however with the imminent demise of the PCT, it will be necessary for the authority to (re)construct its relationship with the new health organisations as they are set up. A degree of joint working with this sector is advisable, although this is not going to be a straightforward matter in the immediate future.

4.7 CUMULATIVE EFFECTS ASSESSMENT

4.7.1 The term ‘cumulative effects’ is taken here to include cumulative, indirect, secondary, and synergistic effects. The aim of cumulative effects assessment is to identify, describe and evaluate cumulative effects, and enable them to be avoided, minimised or enhanced as appropriate. The effects of the Draft Strategy can be divided between the construction and operational phases of the Strategy. Construction effects are relatively short term compared to operational effects and as such any cumulative effects resulting from construction will be highly dependent on timing. As the timing is not known at this stage these effects have not been considered.

4.7.2 The assessment of cumulative effects has been based on the environmental media put forward by the SEA Directive such as air quality, material assets, biodiversity and human health. In addition, a separate topic of “promoting sustainable transport” has been included as this is a core overarching principle to the Draft Strategy. Significant effects identified for each intervention type were reviewed and categorised at a relatively strategic level. This enabled affects that were not identical but had similar impacts characteristics to be cross compared. Each affect type was associated with the receptor affected, such as biodiversity, water or air. This allowed for the methodical analysis of whether cumulative effects were expected.

Table 4.4 – Cumulative effects

SEA topic	Cumulative effects identified
Biodiversity	There are several interventions that are expected to have potential negative impact on biodiversity as a result of development on previously undeveloped land. The location and scale of all of the interventions is not yet known, which makes it less clear whether the overall impact of implementing the Draft transport Strategy would be cumulative or synergistic. Synergistic effects typically occur as a result of increasing habitat fragmentation to the point where no remaining habitat is substantial enough to support a particular species, or if developments sever a wildlife corridor. There is potential for such effects to be avoided and for a net gain in biodiversity to be achieved, provided that is recognised as an aim when projects and proposals are developed. A recommendation has therefore been included in the SEA to that effect, i.e. major schemes should aim to have a net gain in biodiversity.
Landscape/townscape	Together, the policies are expected to have a positive synergistic effect on townscape. The policies are expected to contribute to sustainable settlements with less priority given to traffic and more emphasis given to sustainable forms of transport.
Soil	Several interventions will have an impact on soils as a result of built development and the cumulative effects could be negative without appropriate mitigation measures, which are suggested in this Environmental Report.
Air Quality	Beneficial effects on air quality typically result from policies that either promote the use of the public transport or encourage the use of more sustainable forms of transport. Together, these measures will have a cumulative benefit on air quality. However such interventions will be taking place in the context of an expected growth in traffic so the impacts on air quality are uncertain.
Climatic Factors	The interventions that promote sustainable forms of transport will have a cumulative effect on reducing greenhouse gas emissions but the extent to which the interventions will be sufficient to meet longer term targets at the national level is uncertain. Recommendations have been made elsewhere in this Environmental Report.



Human Health	Interventions to promote walking and cycling combined with and improvement in air quality as a result of less private cars will have a cumulative benefit on human health.
Promoting sustainable transport	Increasing the use of public transport is a core aspect of the Strategy. All intervention types contribute to increasing public transport in some way; however it is uncertain what the resultant modal shift will be over the life of the Strategy, or indeed the level of modal shift that the Strategy is aiming for. Recommendations have been made elsewhere in this report.

4.8 RELATIONSHIP WITH THE HABITATS REGULATIONS

The relationship of the plan with the Habitats Regulations and the requirement for Appropriate Assessment (AA) needs to be clearly explained. Where assessment is being undertaken to inform an AA then the status of this work and its influence on the SEA and ER should be made clear.	<i>Annex 1(a) of the SEA Directive</i>
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4.8.1 WSP Environmental Ltd was not commissioned to undertake a separate HRA Screening exercise at this stage. The LDF has been subjected to HRA Screening and it is our understanding that this work will be used to screen LTP3 prior to final adoption. The said the SEA must give consideration to impacts on biodiversity, flora and fauna and potential effects on European sites. This report therefore briefly considers the potential for effects on European sites, using the SEA process to inform HRA screening.

4.8.2 Natura 2000 is the European Union-wide network of protected areas, recognised as ‘sites of Community importance’ under the EC Habitats Directive (Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora). These sites, which are also referred to as European sites, consist of Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and Offshore Marine Site (OMS). There are no OMS designated at present.

4.8.3 The purpose of Appropriate Assessment (AA) of land use plans is to ensure that protection of the integrity of European sites is a part of the planning process at a regional and local level.

4.8.4 AA of plans and projects is required by Articles 6(3) and 6(4) of the European Habitats Directive:

“6(3) Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site’s conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public”

“6(4) If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.

Where the site concerned hosts a priority natural habitat type and/or a priority species the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest”.

4.8.5 In the UK, the Habitats Directive is implemented through the Conservation (Natural Habitats &c) Regulations 1994 (the “Habitats Regulations”)(as amended).

4.8.6 On 20 October 2005, the European Court of Justice (ECJ)¹ ruled that the UK had failed to fully transpose the provisions of Article 6(3) and (4) into the Habitats Regulations because the regulations do not clearly require land use

¹ Para. 51-56 in Case C-6/04, Commission of the European Communities v. United Kingdom of Great Britain and Northern Ireland, <http://curia.eu.int/jurisp/cgi->

plans to be subject to AA. Land use plans in this respect are Regional Spatial Strategies (RSSs), Development Plan Documents (DPDs) and Supplementary Planning Documents (SPDs)².

4.8.7 Following the ruling from the ECJ, the Department for Environment, Food and Rural Affairs (DEFRA) published amended Habitats Regulations in 2007³. The Habitats Regulations – formally known as the Conservation (Natural Habitats, & c.) Regulations 1994 – aim to transpose the requirements of the Habitats Directive into domestic legislation. These amendments to the Regulations apply in England and Wales.

4.8.8 The 2007 amendment to the Regulations now specifically apply the provisions of the Habitats Regulations to land use plans such as the Core Strategy, and the relevant provisions are made in the main by Regulations 85A to 85E. The essential requirement is for the plan making authority to assess the potential effects of the LDD on European Sites in Great Britain. The site affected could be in or outside England.

4.8.9 It has been recognised that the 30 sets of amendments to the Habitats Regulations since their inception made them difficult to follow. A consolidation of these amendments has now been undertaken and has resulted in the production of The Conservation of Habitats and Species Regulations 2010. Consolidation does not introduce any substantive policy or procedural changes.

4.8.10 Potential effects on the Natura 2000 network associated with traffic include:

- Direct land take;
- Severance effects;
- Impacts on water quality associated with surface water run-off;
- Issues around access to sites (leading to damage and disturbance) and
- Increased traffic and associated emissions to air, potentially affecting the habitats of all of the Natura 2000 sites.

4.8.11 As noted above WSP was not instructed to undertake HRA at this stage but note from the HRA for the Regional Spatial Strategy/Integrated Regional Strategy that air quality was contributing to problems at the following locations:

- Midland Meres and Mosses – Phase 1 Ramsar
- Midland Meres and Mosses – Phase 2 Ramsar
- Oak Mere SAC
- River Dee and Bala Lake/ Afon Dyfrdwy a Llyn Tegid SAC

4.8.12 All of these sites are within 200 metres of a major road within the LTP3 area. Emissions from road traffic could therefore be contributing to problems at these sites.

4.8.13 In advance of the HRA for LTP3 being undertaken, this SEA recommends that LTP3 is amended to state that any project that would significantly harm a European site would not be supported by LTP3. The potential need for Air Quality Management Areas adjacent to European sites and air quality neutral development is also flagged up in Section 4.9 below.

4.8.14 The HRA screening report should give detailed consideration to the points raised above.

4.9 UNCERTAINTIES AND RISKS

4.9.1 The Draft Strategy was developed from the outset to be compatible with the Local Development Framework and Sustainable Community Strategy. Therefore in undertaking the assessment it was not considered necessary to identify in combination effects with other plans as an explicit exercise as they were considered to be inherently compatible.

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² Letter from Lisette Simcock (ODPM) to chief planning officers (28 February 2006) “The Application of Appropriate Assessment under Article 6(3) and (4) of the Habitats Directive 92/43/EEC to Development Plans in the Transitional period between now and when the Amending Regulations come into force”

³ Conservation (Natural Habitats, &c.) (Amendment) Regulations 2007 (SI 2007/1843)

4.9.2 There are uncertainties relating to the amount of change that the Strategy can help bring about.

4.10 MITIGATION

Measures envisaged to prevent, reduce and offset any significant adverse effects of implementing the plan or programme are clearly presented.	<i>Act Schedule 2(7)</i>
The effectiveness of mitigation is assessed (i.e. residual significance of effects is evaluated).	<i>Good practice</i>
The strategic approach to mitigation, including any mitigation 'hierarchies' should be discussed. Implementation of mitigation, including roles and responsibilities, should be clear.	<i>Good practice</i>
Issues to be taken into account in project consents are identified.	<i>Practical Guide to the SEA Directive Appendix 9.</i>

4.10.1 Additional mitigation measures that have been suggested in the matrices are summarised below in Table 4.5. These suggestions go beyond the assumed mitigation.

Table 4.5 – Recommended mitigation measures

SEA topic	Suggested Mitigation
Cross-cutting recommendation	<p>Specific targets relating to modal shift should be included in LTP3 for new and existing developments. As an example, Northamptonshire County Council is proposing to adopt a target of achieving 20% shift from single occupancy car trips on new developments and 5% modal shift in existing areas, which will be incorporated in its LTP3. The differential rates recognise the difficulties associated with achieving modal shift in existing areas (although higher rates have been achieved in other areas). Such targets have a role in helping to drive the rate of change in an area and are important in Cheshire West and Chester given the anticipated growth in traffic over the plan period. The Local Development Framework (or whatever emerges after the Coalition Government's Localism Bill) will be key to achieving modal shift in new developments and appropriate policies for inclusion in the LDF will also be needed. These targets go beyond targets relating to monitoring, they will help drive the pace of change;</p> <p>LTP3 could make a commitment that schemes should be designed and built using The Civil Engineering Environmental Quality Assessment and Award Scheme (CEEQUAL). This is an assessment and awards scheme for improving sustainability in civil engineering and public realm projects. The Quality of Life section could do this.</p> <p>The Quality of Life section could also make reference to the use of Construction and Environmental Management Plans for significant projects, e.g. those requiring Environmental Impact Assessment, with the responsibility for producing and adhering to CEMPs placed on contractors.</p> <p>Contractors should also be required to adopt 'Considerate Construction' schemes or similar.</p> <p>The later stages of the SEA need to ensure that LTP3 covers requirements relating to monitoring for significant environmental effects.</p>
Biodiversity	<p>The overall aim should be to achieve a net gain in biodiversity associated with each specific scheme. – using ecological budgeting techniques to inform this.</p> <p>Scheme specific Biodiversity Action Plans should be prepared for major site, i.e. those requiring Environmental Assessment</p> <p>It is also suggested that reference is made to following relevant legislation in relation to protected sites (not just species).</p> <p>General mitigation measures which should be employed are avoiding removal of</p>



	<p>vegetation during the bird breeding season, the replacement of vegetation lost, measures to reduce fragmentation and severance such as species tunnels etc.</p> <p>New lighting associated with transport schemes needs to take account of potential impacts on sensitive species and the Quality of Life Section could highlight this.</p> <p>LTP3 should contain a statement to the effect that any proposals that would significantly harm a European site would not be supported by the Strategy. This will help ensure LTP3 is compliant with the Habitats Directive</p>
Air	<p>The need for Air Quality Management Areas to be declared near European sites should also be kept under review.</p> <p>LTP3 could require all new development to be 'air quality neutral.' Air quality neutral development is a concept being promoted in London through the Mayor's Air Quality Strategy.</p>
Water	<p>Mitigation for operational effects associated with infrastructure should include oil interceptors to avoid pollution to any nearby water courses and drains.</p>
Material assets	<p>Every effort should be made to incorporate the use of recycled aggregate in construction of infrastructure such as realigned footways, expansion of lanes, changes in surfacing etc.</p> <p>Best practice construction techniques should be employed in order to reduce waste arisings. A Site Waste Management Plan will be required in some instances.</p>
Cultural Heritage	<p>It will be important that highways schemes such as junction improvements and changes to signalisation do not clutter the street scene and any new street furniture helps to achieve an improved street scene. Particular consideration should be given to the improving the visual impact of highways infrastructure within Conservation Areas and near historic buildings.</p> <p>There is potential for some schemes to impact on the setting of Scheduled Ancient Monuments and a detailed assessment will be required to ensure that adequate mitigation measures are put in place.</p> <p>Parking policy within the town centre could include reducing the prominence of car parking as a land use and improving the appearance of car parks.</p>
Climatic Factors	<p>It is not possible to say at this stage if the policies in the LTP3 will be sufficient to help meet longer term targets relating to carbon dioxide emissions. The Climate Change Act 2008 set out a target of an 80 percent reduction in carbon dioxide emissions from 1990 levels by 2050. LTP3 has a 15 year timescale but has a role in helping to put transport on the right trajectory for helping to achieve this target. LTP3 should commit to understanding and monitoring the carbon footprint of the transport sector.</p> <p>A carbon budgeting approach across key sectors in the Council's area is required. This should recognise that the carbon footprint of the transport sector is likely to grow as traffic is forecast to increase. Emissions from other sectors will need to be reduced to reflect this if the area is to move towards making its contribution to national targets on the reduction of emissions.</p> <p>The Strategy could also recognise the role that the network could help play in helping the built and natural environment cope with climate change, for example the soft estate could have a role in the attenuation of water;</p> <p>Sustainable Drainage (SUDS) techniques should be utilised to ensure that the creation of impermeable surfaces does not significantly increase the rate of surface water run off and risk of flooding. SUDS should be adopted in all schemes, where possible, including smaller scale intensification.</p> <p>Opportunities to offset the CO2 emissions of construction should be investigated.</p>



	<p>Preferential parking could be given to low CO2 emission vehicles, for example in town centres.</p> <p>References to biofuels should reference sustainable biofuels, given the concerns associated with the impacts of obtaining biofuels from some sources.</p> <p>Travel centres could be promoted in larger developments to help encourage modal shift; e.g. by managing initiatives like car clubs, personal travel planning and site wide travel plans;</p>
Human Health	<p>Appropriate best practice pollution prevention measures should be implemented through a construction environmental management plan for specific projects.</p> <p>See also the detailed recommendations from the Health Impact Study outlined in Appendix E.</p>

5 Implementation

5.1 INTRODUCTION

5.1.1 This section sets out the monitoring strategy and also outlines the content of the SEA Statement.

5.2 LINKS TO OTHER TIERS OF PLANS AND PROGRAMMES

5.2.1 Links to other plans and programmes are set out in Appendix B. Additional plans and programmes were added following consultation on the Draft Scoping Report.

5.3 MONITORING

Measures proposed for monitoring are clear, practicable and linked to the indicators and objectives used in the SEA.	<i>Act Regulation 17</i> <i>Act Schedule 2(9)</i>
Monitoring is used, where appropriate, during implementation of the plan to make good deficiencies in baseline information in the SEA and to ensure effectiveness of mitigation.	<i>Act Regulation 17</i> <i>Act Schedule 3(9)</i>
Monitoring enables unforeseen adverse effects to be identified at an early stage. (These effects may include predictions which prove to be incorrect.)	<i>Act Regulation 17</i> <i>Act Schedule 3(9)</i>
Procedures are stated for the identification of actions required in response to significant adverse effects identified through monitoring.	<i>Practical Guide to the SEA Directive</i> <i>Appendix 9.</i>

5.3.1 The SEA Directive requires monitoring to identify unforeseen adverse effects and to enable appropriate remedial action to be taken (Article 10.1 refers). The factors to be monitored include:

- | | |
|------------------|--------------------|
| Biodiversity; | Population; |
| Human health; | Fauna; |
| Flora; | Soil; |
| Water; | Climatic factors; |
| Material assets; | Cultural heritage; |
| Landscape. | |

5.3.2 LTP3 is closely related to the Local Development Framework and there may be potential to co-ordinate monitoring requirements between these documents. The next stages of the SEA will consider the adequacy of proposed monitoring.

5.4 POST-CONSULTATION ISSUES

The Environmental Report identifies how the information within it has been used to inform the preparation of the plan or programme.	<i>Act Regulation 16(4)(a)</i>
The Environmental Report demonstrates how every consultation response has been taken into account in preparation of the plan or programme.	<i>Act Regulation 16(4)(C and D)</i>

5.4.1 These matters will be addressed in the final version of the Environmental Report and in the SEA Statement.