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1 Introduction

1.1 BACKGROUND

- 1.1.1 A draft version of the third Local Transport Plan (LTP3) for the Royal Borough of Windsor and Maidenhead (hereafter referred to as 'the Borough' was produced and consulted on in Spring 2012. A final version of the report has now been produced having regard to consultation responses. The LTP3 comprises a long-term strategy to 2026 covering all forms of transport in the borough.
- 1.1.2 A Strategic Environmental Assessment (SEA) was undertaken to inform the emerging LTP3. A draft Environmental Report setting out the results of the SEA was produced and consulted on alongside the draft LTP3. The purpose of that report was to identify the main environmental effects of the draft LTP3 and any opportunities for improving the performance of the document. Following consultation and revisions to LTP3 this report sets out the final results of the SEA. An assessment under the Habitats Regulations was also required and has been reported separately.
- 1.1.3 The Local Transport Plan sets out a range of policies that will determine how transport is provided within the borough as a whole. It is intended that further detail will be provided by a range of supporting documents covering specific topics, such as air quality, noise and parking, as well as a series of Neighbourhood Plans, which are being developed in partnership with local communities as part of the Localism Act.
- 1.1.4 The Council will also be preparing a series of short-term delivery plans that will identify how funding will be allocated to transport schemes and initiatives across the borough. The intention is to provide one year's firm allocation, with a provisional allocation for the following year. This allows for reserve schemes to be identified and brought forward in the event that the first choice cannot be implemented for whatever reason.

1.2 KEY FINDINGS FROM THE SEA

- 1.2.1 The content of the LTP3 is 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 set of aims and thematic and area strategies, is also welcomed. Structuring the Plan in this way, rather than a more traditional approach based on modes of transport, allows cross cutting issues like climate change to be efficiently addressed.
- 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 change 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 Whilst the results of the assessment were largely positive, the SEA accompanying the draft LTP put forward a number of recommendations to further strengthen the document. The recommendations and the extent to which they were taken on board are discussed in the Post Adoption Statement that accompanies this Report.

1.3 STRATEGIC ENVIRONMENTAL ASSESSMENT

- 1.3.1 The SEA of 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;

Water;

Population;

Climatic factors;

Human health;

Material assets;

Fauna:

Cultural heritage; and

Flora;

Landscape.

■ Soil;

- 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 to 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 LTP3 has five core themes, which reflect both local priorities and central Government's over-arching principles. These are:
- Improving access to everyday services and facilities;
- Improving safety and security;
- Supporting sustainable economic growth;
- Improving quality of life; and

- Mitigating and adapting to climate change.
- 1.4.3 Four borough wide thematic strategies have been developed for the first four of the above, with climate change running through the others as a 'golden thread.'
- 1.4.4 The Strategy also includes indicators for monitoring progress and will be accompanied by Delivery Plans which will out identify how funding will be allocated to transport schemes and initiatives across the borough. The intention is to provide one year's firm allocation, with a provisional allocation for the following year.

1.5 STRUCTURE OF THIS REPORT

1.5.1 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	Approach adopted to the SEA
	When the SEA was carried out
	Who carried out the SEA
	Uncertainty and risks
	Who was consulted, when and how
Chapter 3 – Environmental Context and	European, national, regional and local legislation
Objectives	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 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 and 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		Practical Guide to the SEA Directive
	significance of effects has been approached.	Appendix 9.

APPRAISAL OF OPTIONS

The Environmental Report should consider "reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme" and give "an outline of the reasons for selecting the alternatives dealt with"	Article 5.1 and Annex I (h) of the SEA Directive
Alternatives include 'do minimum' and/or 'business as usual' scenarios wherever relevant.	Practical Guide to the SEA Directive Appendix 9.
The environmental effects (both adverse and beneficial) of each alternative are identified.	Act Regulation 12(2)(b) Act Schedule 2(8)
Inconsistencies between the alternatives and other relevant plans, programmes or policies are identified and explained.	Act Regulation 12(2)(b) Act Schedule 2(8)
Realistic alternatives are considered and the reasons for choosing them are documented.	Act Regulation 12(2)(b) Act Schedule 2(8)

- 2.3.1 The five core themes of LTP3 (see section 1.4 above) are loosely based on the five goals identified within "Delivering a Sustainable Transport System" (DaSTS), which is the previous Transport White Paper on which the LTP Guidance is based. Although DaSTS has been superseded by a more recent White Paper, the goals remain relevant and as such, they are considered to represent a sensible framework for LTP3.
- 2.3.2 In line with government guidance, LTP3 was developed using an evidence based approach, making use of a wide range of data sources such as: traffic counts; journey time surveys; traffic models; accessibility models; casualty statistics; vehicle crime statistics; air quality monitoring results; and traffic noise models.
- 2.3.3 For each of the core themes, a SWOT analysis was carried out to highlight existing and future problems affecting local transport networks and their interface with the area's strategic networks, including motorways and trunk roads, the railways and airports.
- 2.3.4 LTP3 was also informed by the results of the 'Issues and Options Consultation' with residents and key stakeholders. The consultation attracted over 3,000 responses from a wide variety of ages and from communities right across the borough. This helped to identify additional transport issues affecting the borough, as well as highlighting local priorities for investment. It also provided an indication of the types of measures that would be acceptable to local communities.
- 2.3.5 Development of the policies and associated schemes and interventions to address the identified issues was done with reference to previous local experience, national guidance and best practice. This helped the Council to

establish what would be the most effective response to address each of the issues identified, taking account of financial and other constraints.

- 2.3.6 The approach advocated in the SEA guidance, where a number of distinct strategic options are identified and assessed with their potential impacts evaluated, is considered to be somewhat artificial. Instead, the draft LTP evolved in a more organic and iterative fashion, looking at how best to solve individual issues then considering the impacts on other issues and the need for coordination between the various policies and initiatives. This is considered to be a more effective and nuanced approach to strategy development.
- 2.3.7 The process was coordinated by a Programme Board consisting of senior managers, supported by a Project Board of technical officers. In addition, the process benefitted from input from a variety of topic experts covering areas such as: street lighting; traffic management; parking; road safety; public rights of way; accessibility; public transport; highway maintenance; and environmental health.
- 2.3.8 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.
- 2.3.9 Assessing a 'Business as Usual' option was also not considered to add value to the SEA. The SEA has focussed on assessing and looking for any need to stretch the emerging LTP3, rather than looking backwards.

APPRAISAL OF DRAFT LTP3

- 2.3.10 LTP3 includes four borough-wide thematic strategies, (discussed in Section 1.4.2 of this report) with climate change running through them as a 'golden thread.' The Draft LTP3 proposes a range of policies in order to deliver the strategic aims. The priorities and associated policies have been assessed.
- 2.3.11 Health considerations have been integrated into the assessment through a specific SEA objective.

2.4 DIFFICULTIES IN UNDERTAKING THE SEA

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

- 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 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 by the Council and Draft SEA Scoping Report was made available for a five week period of consultation in September/October. 2011. The appraisal of draft LTP3 was undertaken between February and March 2012 and consultation was undertaken in Spring 2012. SEA of the final version of LTP3 was undertaken between May and July 2012.

2.6 WHO CARRIED OUT THE SEA

2.6.1 This Environmental Report has been prepared by WSP Environment and Energy. As such the SEA was undertaken by a team that was independent from the team that prepared LTP3.

2.7 WHO WAS CONSULTED, WHEN AND HOW

Consultation Authorities are consulted in appropriatimes on the content and scope of the Environment evidence that scoping responses have been reflect	al Report. There is	Article 5.4
Explains who was consulted, at which stage in the what methods of consultation were used.	assessment process, and	Practical Guide to the SEA Directive Appendix 9.

2.7.1 The three English statutory consultees were consulted on the Draft Scoping Report through written consultation. The comments received were reported by the Council in November 2011. Consultation on the draft Environmental Report was undertaken in Spring 2012. The results of that consultation have been taken into account in finalising this report. Consultation responses are separately reported in the Statement of Decisions that accompanies this Report.

¹ Consultation Statement Draft Strategic Environmental Assessment Scoping Report Local Transport Plan November 2011

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	Article 5 and Annex I(a)
explained.	

- 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 A**.
- 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 Following preparation of the Draft Environmental Statement, the Government has published the National Planning Policy Framework (NPPF) (March 2012). This key part of the planning policy framework was not reviewed as a part of the Draft Environmental Report. Given the importance of the NPPF as a new part of the planning policy framework, a summary is presented below rather than Appendix A.
- 3.2.6 The Government's National Planning Policy Framework (NPPF) was published on the 27th March 2012 and supersedes the Government's Planning Policy Guidance notes (PPGs) and its more recent Planning Policy Statements (PPSs).
- 3.2.7 Paragraph 1 of the NPPF sets out its purpose, which is that
 - "The National Planning Policy Framework sets out the Government's planning policies for England and how these are expected to be applied".
- 3.2.8 The NPPF states that the purpose of the planning system is to contribute to the achievement of sustainable development (paragraph 6). The policies in paragraph 18 to 219, taken as a whole, constitute the Government's view on what sustainable development in England means in practice for the planning system.
- 3.2.9 Paragraph 4 explains that there are three dimensions to sustainable development. These are an economic role, a social role and an environmental role. These roles are mutually dependent and should be sought jointly and simultaneously through the planning system.

- 3.2.10 At the heart of the NPPF is the presumption in favour of sustainable development (paragraph 14), which is stated to be 'a golden thread running through both plan making and decision taking'. However, paragraph 12 confirms that the NPPF does not change the statutory status of the development plan as the starting point for decision making, but the NPPF is a material consideration in determining applications.
- 3.2.11 Paragraph 17 sets out the twelve core land use principles which should underpin both plan making and development management:
- Be genuinely plan led;
- Be creative in finding ways to enhance and improve places;
- To proactively drive and support sustainable economic development and meet objectively identified development needs;
- To always seek to secure a high quality of design and amenity;
- To take account of the different roles and characters of different areas, promoting the vitality of urban areas, protecting Green Belts, recognising the intrinsic character and beauty of the countryside and supporting rural communities;
- To support the transition to a low carbon future in a changing climate;
- To contribute to conserving and enhancing the natural environment and reducing pollution. Allocations should prefer land of a lesser environmental value;
- To encourage the use of previously developed land;
- To promote mixed use developments;
- To conserve heritage assets in a manner appropriate to their significance;
- To actively manage patterns of growth to focus significant development in locations which are, or can be made, sustainable; and
- To support strategies to improve health, social and cultural wellbeing and deliver sufficient facilities and services to meet local needs.
- 3.2.12 As the national level planning policy guidance, the NPPF sets the framework for a number of important topics, such as protecting the natural and historic environment, and addressing climate change. The NPPF also promotes sustainable transport and encourages local planning authorities to support a pattern of development that facilitates the use of sustainable modes of transport.

Living Within Environmental Limits

Respecting the limits of the planets environment, resources and biodiversity – to improve our environment and ensure that the natural resources needed for life are unimpaired and remain so for future generations

Ensuring a Strong, Healthy and Just Society

Meeting the diverse needs of all people in existing and future communities, promoting personal wellbeing, social cohesion and inclusion, and creating equal opportunity for all

Creating a Sustainable Economy

Building a strong, stable and sustainable economy which provides prosperity and opportunities for all, and in which environmental and social costs fall on those who impose them (polluter pays), and efficient resource use is incentivised

Promoting Good Governance

Actively promoting effective, participative systems of governance in all levels of society – engaging peoples creativity, energy and diversity

Using Sound Science Responsibly

Ensuring policy and developed and implemented on the basis of strong scientific evidence, whilst taking into account strong scientific uncertainty (through the precautionary principle) as well as public attitudes and values

3.2.13 The previous 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."

- 3.2.14 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

- 3.2.15 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

- 3.2.16 Delivery of adequate water supply, sewerage infrastructure, water quality, consumption, water conservation solutions and storm water run-off are key issues.
- 3.2.17 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

3.2.18 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. The preparation of Low Emission Strategies is promoted by the Department for the Environment Food and Rural Affairs (Defra).

CLIMATE CHANGE

- 3.2.19 Addressing the causes of climate change and ensuring new development is climate change proof are key issues. Relevant responses include:
- Promote the use of low and zero carbon 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.
- 3.2.20 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.
- 3.2.21 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

3.2.22 This topic primarily relates to demographics, for 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

- 3.2.23 There are a number of priorities which should be considered as a part of the LTP3, especially priorities relating to active travel, noise, air quality, community severance and access to facilities and services.' Some of the key messages are:
- Give people more choice and a louder voice;
- Do more on tackling inequalities;
- Improve access to community services;
- 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.
- 3.2.24 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. National policy on noise is set out in Defra's Noise Policy Statement, March 2010. Transport can be a significant source of noise and the LTP3 provides an opportunity to address existing issues and ensure that new development does not significantly worsen the baseline situation.

CULTURAL HERITAGE

- 3.2.25 Existing and potential heritage assets (both designated and non-designated) 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 Registered Historic Parks and Gardens and their settings should be protected and enhanced.
- 3.2.26 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 preapplication 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

- 3.2.27 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

3.2.28 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.

3.2.29 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.	Article 5 and Annex Ib
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.	Article 5 and Annex Ic Practical Guide to the SEA Directive Appendix 9.
Description of existing environmental problems relevant to the plan or programme.	Article 5 and Annex Id
Reasons are given for eliminating issues from further consideration (including reference to consultation responses where relevant).	Article 5.2 Practical Guide to the SEA Directive Appendix 9.

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. Establishing the evolution of the baseline without the LTP in place is consistent with Article 5 and Annex 1b of the SEA Directive as shown above.
- 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, are in the process of being revoked. 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 144,000. The number of households is expected to increase by 17,000 between 2006 and 2031.
- 3.3.4 Higher levels of growth are forecast for the minor roads and motorways. The busiest roads in the borough are the A332 Relief Road, the A308 Windsor-Maidenhead and the A4.
- 3.3.5 Car ownership in the borough is significantly higher than both the national and regional averages, as is the number of residents that travel to work by car (62.5%). Over half of the population are employed within the Borough itself, with the average commute length for residents being 14km. Of those who commute into the Borough for work, the highest proportion comes from Slough.
- 3.3.1 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.
- 3.3.2 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
- Town centres will be less attractive due to 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

3.3.3 Table 3.1 below gives a summary of the environmental characteristics of the area including environmental problems that have been identified. The baseline is reviewed at **Appendix B**.

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

SEA topic	Environmental characteristics
Biodiversity	The borough has:
	11 Sites of Special Scientific Interest (SSSIs);
	116 Wildlife Heritage Sites;
	3 Special Areas of Conservation (SACs);
	2 Special Protection Areas (SPAs);
	1 Ramsar sites; and
	8 Local Nature Reserves.
	In 2011, 96% of the area of SSSIs in the borough was in a favourable or recovering condition.
	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.
Problems identified	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 might 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.
Water	Flood risk in the borough may come from a range of sources, the main ones being fluvial (from rivers). Other sources may include groundwater and sewage. The areas particularly vulnerable to flood risk include:
	■ 25.6% of residential and 26.4% of commercial properties in the borough are at risk of flooding.

Problems identified	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 flooding. This integration is further complicated by the need to take into account both climate change mitigation and adaptation.
Landscape	The borough has two Areas of Special Landscape Importance (ASLIs). The River Thames is a significant landscape feature.
	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	There are significant amounts of Grade 1 and Grade 2 farmland within the borough. Approximately 480 sites in the borough are potentially contaminated.
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	Household growth will place demands on both energy production and waste infrastructure.
Problems identified	In 2006 the Ecological footprint of the Borough was 6.49 gha (global hectares) per person. This is above the national average.
Population and human health	The borough has the greatest proportion of older people in Berkshire, this number is expected to rise. Health within the Borough is better than the England average. Death rates from cancer, heart disease and smoking are below average. Residents have a longer life expectancy than the England average.
Problems identified	Approximately one in five adult residents is obese. Noise from aircraft and traffic is a significant concern in parts of the borough.
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 the Borough. There are a total of 900 Listed Building Entries (including 23 Grade 1) and 26 Conservation Areas distributed throughout the authority area. There are 9 historic parks and gardens in the Borough.
Problems identified	The borough has 2 entries on the Heritage at Risk Register, held by English Heritage. These consist of one Grade 11* and one Grade 1 Listed Buildings Entries.
Air Quality	Air quality is generally good overall. There are three AQMAs: Windsor and Maidenhead town centres, and Bray/M4. The main cause of these is the traffic congestion in urban areas and high volumes of traffic on the M4. The Local Air Quality Management Plan proposes measures to reduce nitrogen dioxide levels in the AQMAs.
Problems identified	The main causes of poor air quality in the AQMAs are traffic congestion and high volumes of traffic.
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.
Problems identified	Transport is the main source of CO ₂ emissions in the Borough, accounting for 22.5% of emissions.

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

Biodiversity	Transport impacts on environmentally sensitive sites, species and habitats
Air Quality	Nitrogen dioxide (NO ₂) emissions in the AQMAs
	Traffic congestion (especially when travelling to school and work)
Human Health	Obesity
Human Health	Traffic noise
	Waste
Climate Factors	The impacts of climate change and flood risk
	Greenhouse gas emissions
Accidents	Incidents and severity of road casualties
Accidents	Road maintenance and safety
Security	Crime and the fear of crime.
Accessibility	Transport availability for specific local journeys
	Public transport availability for all groups to provide access to essential services and reduce social exclusion.

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

Key Issues

The borough has the greatest proportion of older people in Berkshire, and this number is expected to increase.

Household sizes are falling and the number of one-person households is increasing. The borough has the highest average property prices in Berkshire, causing affordability issues. The estimates of affordable housing need are several times greater than the total number of dwellings able to be built.

Key workers often have difficulty affording property in the borough.

The local workforce is highly skilled and lower-skilled workers are under-represented. This can create problems when trying to fill lower skilled jobs.

There is a lack of some types of public open space in the borough.

Mineral extraction is an issue in some parts of the borough.

Higher than (national) average reliance on car based mobility

Noise from aircraft and traffic is a significant concern in parts of the borough.

In-commuting is increasing faster than out-commuting.

83% of the borough is Green Belt. This and the presence of particular areas of landscape character, plus land at risk of flooding, heavily constrains opportunities for the location of new development.

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.	Practical Guide to the SEA Directive Appendix 9.
SEA objectives, where used, are clearly set out and linked to indicators and targets and/or criteria where appropriate.	Practical Guide to the SEA Directive Appendix 9.
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).	Practical Guide to the SEA Directive Appendix 9.

- 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 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 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

Trar SEA	oosed nsport Strategy Headline ectives	Sub-Objectives/Criteria	Assumed mitigation	Approach to scoring for LTP3
2	Improve the health and well-being of the population and reduce inequalities in health.	Will LTP3 encourage / promote walking and cycling? Will LTP3 help improve accessibility for all to appropriate community, health, social facilities (including green infrastructure)? Will LTP3 tackle issues that impact on health (air quality, congestion, severance)? Will LTP3 take account of changes in the population (taller, heavier, wider, older people)? Will LTP3 help to improve road safety / reduce the number of people injured in road traffic crashes?	None identified	++ Policy promotes walking and/or cycling Policy promotes access to leisure centres, health services and green infrastructure by foot and/or bicycle Policy will help improve air quality by promoting modal shift Policy will reduce casualties / improve safety + Policy includes walking and/or cycling provision Policy will help improve air quality by promoting modal shift Policy will reduce casualties / improve safety - Measures do not improve access to existing health facilities including doctors, dentists and pharmacies Measures do not improve access to existing recreational facilities including leisure centres and public open space Measures do not improve access to walking and cycling networks. Measures would encourage increased use of the private car
5	Reduce Crime and the fear of Crime	Does LTP3 encourage new transport infrastructure to incorporate 'Designing out Crime' principles and reference other good	No assumptions identified	++ Measures are likely to promote a significant reduction in crime and / or fear of crime + Measures are likely to promote a minor reduction in crime/fear of crime

Trar SEA	oosed nsport Strategy Headline ectives	Sub-Objectives/Criteria	Assumed mitigation	Approach to scoring for LTP3
•		practice?		- Measures do not implement 'Designing out Crime' principles The measure could lead to an increase in crime
7	Improve accessibility to all services and facilities including the countryside and the historic environment	Does LTP3 help ensure accessibility to key services in deprived communities? Will LTP3 help ensure new or improved facilities are accessible by walking, cycling and public transport routes and appropriate levels of parking?	None identified	++ Measures improve accessibility to key services in deprived communities. Measures ensure that new development is accessible by walking, cycling and public transport with appropriate levels of parking. + Measures include consideration of accessibility to key services in deprived communities. Measures consider accessibility of new development by walking, cycling and public transport routes and appropriate levels of parking. - Measures ignore need for accessibility to key services in deprived communities. Measures do not consider location of new development in relation to walking, cycling and public transport routes and appropriate levels of parking. Measures would increase use of the private car for access to key services
14	Reduce the risk of flooding and the resulting detriment to public wellbeing, the economy and the	Will LTP3 adopt a sequential approach to the location of transport infrastructure? Will LTP3 encourage transport infrastructure to adopt sustainable drainage and other relevant mitigation measures?	The Flood & Water Management Act 2010 requires Lead Local Flood Authorities to develop, maintain, apply and monitor a strategy for local flood risk management in its area. The specific requirements are set out at section 9(4) of the Act. There is a requirement to produce a Local Flood Risk Management	++ Policies avoid areas at risk of flooding and mitigate against any increase in flood risk associated with new development + Policies adopt sequential approach to flood risk and mitigate against any increase in flood risk associated with new development - Potential for development within area of high flood risk and failure to mitigate against any increase in flood risk

Trar SEA	posed nsport Strategy a Headline ectives	Sub-Objectives/Criteria	Assumed mitigation	Approach to scoring for LTP3
	environment.		Strategy (LFRMS) which is also subjected to SEA and HRA screening.	Potential for development within area of very high flood risk and failure to mitigate against any increase in flood risk.
15	Reduce air pollution and the proportion of the population subject to noise pollution	Will LTP3 cause an increase in motor vehicle trips and increased dependence on car use? Will LTP3 contribute to poor air quality? Will LTP3 support the objectives of local air quality action plans? Will LTP3 result in worsening of existing traffic congestion hotspots or improvements to the current situation? Will LTP3 increase the number of residents exposed to unacceptable levels of traffic noise?	It is assumed that the Council will continue to work towards achieving relevant objectives for air quality as set out in its Air Quality Action Plan.	++ Measures actively promote improvements to air quality and reductions in noise and vibration + Measures improve air quality levels or the number of residents affected by traffic noise - Measures do not consider air quality levels or the number of residents affected by traffic noise Measures contribute to a deterioration of air quality or increase the number of residents affected by traffic noise
16	Address the causes of climate change through reducing emissions of greenhouse gases and ensure that the	Will LTP3 encourage developments / infrastructure that is energy efficient in design and construction? Will LTP3 promote a switch from fossil fuels to more sustainable / renewable alternatives?	None identified	++ Measures more efficient use of energy in transport, design and construction. Measures encourage a switch from fossil fuels to more sustainable / renewable alternatives. Measures promote climate change adaptation for all relevant transport related infrastructure

Proposed Transport Strate SEA Headline objectives	Sub-Objectives/Criteria gy	Assumed mitigation	Approach to scoring for LTP3
borough is prepared for its impacts	Will LTP3 ensure that existing and new infrastructure is adapted to the unavoidable effects of climate change?		+ Opportunities for encouraging a switch from fossil fuels to more sustainable / renewable alternatives or energy efficiency measures are considered. - Opportunities for encouraging a switch from fossil fuels to more sustainable / renewable alternative or energy efficiency measures are not considered.
			Measures would significant increase use of fossil fuels and carbon emissions. And/or Major Infrastructure is not climate change proofed
17 Conserve a enhance the borough's biodiversity	loss, damage to, or fragmentation of designated	The Conservation of Habitats and Species Regulations 2010 protect listed species. It is assumed that there will be ongoing monitoring of the condition of statutory designated sites by Natural England.	++ Measures avoid a net loss, damage to, or fragmentation of designated wildlife sites and the populations of qualifying habitats and species. Measures ensure that new transport infrastructure incorporates ecological enhancements. Measures help promote opportunities for people to come into contact with flourishing wildlife places. + Measures avoid net loss, damage to, or fragmentation of designated wildlife sites and the populations of qualifying habitats and species. - Measures potentially harm locally designated habitats

Trai	posed nsport Strategy A Headline ectives	Sub-Objectives/Criteria	Assumed mitigation	Approach to scoring for LTP3
18	Protect and enhance the	new transport infrastructure incorporates ecological enhancements? Does LTP3 help secure appropriate improvements in	None identified	Potential harm to nationally designated habitats. AND / OR Lead to fragmentation of existing corridors/ spaces ++ Improvement in access / promotion of access to townscapes and assets
	borough's countryside, natural and historic	access to landscapes of historical and cultural value such as parks and open spaces, and areas with a		of historical and recreation value such as parks and open spaces. AND/OR Measures protect/enhance assets and/or their setting +Potential positive impact on access to townscapes and assets of historical
	environment.	particular historical or cultural association? Does LTP3 promote accessibility to such facilities by walking, cycling and		value and parks and open spaces. And/or Potential positive impact on assets and/or their settings
		public transport? Does LTP3 promote the protection of designated landscapes?		- Potential negative impact on access to townscapes and townscapes of historical value, including parks and open spaces.
		Does LTP3 promote respect for landscape character? Does LTP3 take into account potential effects		Measures which would be detrimental to access to townscapes and townscapes of historical value, including parks and open spaces.
		associated with lighting? Does LTP3 protect geodiversity and soils?		
		Does LTP3 help secure improvements in access to townscapes of historical and		

Proposed Transport Strategy SEA Headline objectives	Sub-Objectives/Criteria	Assumed mitigation	Approach to scoring for LTP3
	cultural value? Does LTP3 promote accessibility to such facilities by walking, cycling and public transport? Does LTP3 promote the reuse of such assets for transport related development? Does LTP3 protect such assets and/or their setting?		
19 Improve the efficiency of transport networks by enhancing the proportion of travel by sustainable modes and promoting policies which reduce the need to travel.	Will the LTP help ensure efficient use of existing transport infrastructure? Will the LTP help reduce the need to travel by car? Will the LTP help ensure good access to facilities and jobs, particularly by public transport, walking and cycling?		++ Policies promote efficient use of existing transport infrastructure helping to reduce the need to travel by car. + Existing facilities are accessible by walking, cycling or public transport - Policies do not promote access to existing facilities by walking, cycling or public transport. Inefficient use of existing transport infrastructure. Policies would encourage additional use of the private car
Reduce the global social and environmental impact of consumption of resources	Does LTP3 encourage sustainable procurement? Does LTP3 encourage the use of sustainable materials? Does LTP3 encourage the		++ Policies encourage the use of sustainably, ethically produced local or low impact products + Policies could indirectly result in the use of sustainably, ethically produced local or low impact products

Tran SEA	oosed sport Strategy Headline ctives	Sub-Objectives/Criteria	Assumed mitigation	Approach to scoring for LTP3
	by using sustainably and ethically produced,	use of sustainable alternative fuels?		- Policies could indirectly result in the use of unsustainable, high impact products.
	local or low impact products.			Policies encourage the use of unsustainable, high impact products.
21	Reduce waste generation and disposal, and achieve the sustainable management	Does LTP3 encourage the recycling and recovery of materials in construction? Does LTP3 encourage the provision of recycling	Construction projects over £300,000 will require a Site Waste Management Plan in line with the Site Waste Management Plan regulations.	++ Policies promote reduction in waste generated/use of recycled materials during infrastructure development <u>and</u> encourage more sustainable management of waste.
	of waste.	facilities in transport related facilities, e.g. bus stops, bus stations etc.?		+ Policies promote reduction in waste generated/use of recycled materials during infrastructure development or encourage more sustainable management of waste. - Measures do not consider waste generation
				Policies actively generate waste without waste management plans etc.
22	Maintain and improve the water quality of the borough's	Will LTP3 help locate development where adequate water supply, foul drainage, sewage treatment facilities and surface water		++ Policies encourage water efficiency <u>and</u> water quality Contamination of local water courses by run-off from transport networks is minimised + Policies encourage water efficiency <u>or</u> improved water quality
	rivers and ground waters, and to achieve sustainable water	drainage is available? Will LTP3 help ensure new transport infrastructure is efficient in design and helps		- Policies might negatively impact on water efficiency or water quality

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Trar SEA	oosed nsport Strategy . Headline ectives	Sub-Objectives/Criteria	Assumed mitigation	Approach to scoring for LTP3
	resources management.	ensure reduced water and energy consumption?		Policies might negatively impact on water efficiency and water quality
		Will LTP3 help ensure that development likely to affect the ecological status of groundwater and surface water?		
23	Improve energy efficiency.	Will LTP3 reduce the demand and need for energy?		++ Policies fulfil all criteria
		Will LTP3 promote and improve energy efficiency (e.g. buildings/vehicles)?		+ Policies fulfil at least one criteria
	Will LTP3 increase the proportion of energy both purchased and generated from renewable and sustainable resources?	- Policies will work against at least one criteria		
		purchased and generated from renewable and		Policies work against all critiera

4 Assessing the LTP3

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. An assessment of the effects of the key Transport Strategy objectives and policies follows. Recommended mitigation measures are then put forward.

4.2 HOW THE PREFERRED OPTION WAS CHOSEN

Reasons are given for selection or elimination of alternatives, where relevant.	Act Regulation 12(2)(b)
	Act Schedule 2(8)

- 4.2.1 Paragraphs 2.3 1 to 2.3.9 of this report describe the development of the LTP3 and how the core themes were arrived at. The core themes of LTP3 (see section 1.4 above) are loosely based on the five goals identified within "Delivering a Sustainable Transport System" (DaSTS), which is the previous Transport White Paper on which the LTP Guidance is based.
- 4.2.2 In line with government guidance, the LTP3 was developed using an evidence based approach. For each of the core themes, a SWOT analysis was carried out to highlight existing and future problems affecting local transport networks and their interface with the area's strategic networks, including motorways and trunk roads, the railways and airports.
- 4.2.3 The LTP3 was also informed by the results of the 'Issues and Options Consultation' with residents and key stakeholders.
- 4.2.4 Development of the policies and associated schemes and interventions to address the identified issues was done with reference to previous local experience, national guidance and best practice.
- 4.2.5 The process was coordinated by a Programme Board consisting of senior managers, supported by a Project Board of technical officers. In addition, the process benefitted from input from a variety of topic experts covering areas such as: street lighting; traffic management; parking; road safety; public rights of way; accessibility; public transport; highway maintenance; and environmental health. The final version of LTP3 is considered by the Council to provide appropriate policy responses to the issues identified having regard to the reach of LTP3 and its geographical scope.
- 4.2.6 The draft version of LTP3 had a separate section relating to climate change but the final version has relevant policies and supporting text woven into the thematic strategies because this was considered more appropriate by the Council.

4.3 ASSESSING KEY AIMS OF LTP3

4.3.1 LTP3 contains five overarching aims. These have been appraised for compatibility against the SEA objectives and the results are presented in **Table 4.1** below.

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

LTP3 Objective	Relationship to SEA Objectives
Improving access to everyday services and	The priorities identified in LTP3 are:
facilities	 To improve access to everyday services and facilities for everyone;
	 To improve the availability, accessibility and affordability of transport; and
	■ To improve integration between different forms of transport.
	These priorities are considered to be compatible with the SEA
	objectives, for example improving access to every day facilities could
	help improve health and reduce health inequalities. Improving the
	integration of transport facilities could help reduce crime and fear of
	crime associated with transport interchange facilities and parking for
	cars and bicycles.
Improving safety and security	The priorities identified in LTP3 are:
, , ,	 To reduce the number and severity of casualties on our roads, particularly amongst motorcyclists, cyclists and young drivers;
	To promote safe behaviours and mutual respect by all road users;
	 To improve security for everyone travelling around the borough; and
	To reduce instances of vehicle crime and cycle theft.
	These priorities are considered to be compatible with the SEA objectives. There are linkages with the SEA objectives around health and crime but addressing these factors could also improve the efficiency of the transport network (objective 19).
Sustainable economic growth	LTP3 identifies its role in helping to secure sustainable economic growth. The priorities identified in LTP3 are:
	 Reduce the need to travel and increase the proportion of trips made by public transport, cycling and walking;
	Improve traffic flow in congested areas and improve journey time reliability for all forms of transport;
	 Ensure that new development is focussed in sustainable locations well served by public transport, walking and cycling networks; and
	■ Improve public transport access to Heathrow Airport.
	These priorities are considered to be compatible with the SEA objectives, for example encouraging active forms of transport links to objective 2 on health and objective 7 on improved accessibility. Reducing the need to travel will help reduce air pollution (SEA objective 15).
Improving quality of life.	The objectives of the Improving Quality of Life Strategy are:
	 Minimise the adverse impacts of transport upon the natural and built environment; and

	Minimise the adverse impacts of transport upon the health and well-being of local residents.
	These priorities are considered to be compatible with the SEA objectives. There is a clear link with SEA objectives around health (2), flood risk (14) air and noise pollution (15) climate change (16), biodiversity (18) and countryside and natural and historic environment (19).
Mitigating and adapting to climate change	No incompatibilities identified. Links to objective 2 on health, 14 on flood risk, objective 16 which relates to climate change, pursuing objective 19 could help reduce transport related emissions and objective 23 seeks to improve energy efficiency.

4.4 ASSESSING THE PREFERRED OPTION

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

- 4.4.1 The thematic strategies and associated policies of LTP3 were assessed individually. 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 in **Table 4.3**. Some of the recommendations are overarching in nature, others are more topic specific. In assessing the thematic strategies we have had regard to the provisions of other parts of LTP3 since like any policy document it should be read as a whole. LTP3 chapters that have been assessed are (note introductory chapters are not assessed):
- 4. Improving Access to Everyday Services and Facilities;
- 5. Improving Safety and Security;
- 6 Supporting Sustainable Economic Growth;
- 7. Improving Quality of Life;
- Note policies on Mitigating and Adapting to Climate Change are included in the other sections
- 4.4.2 The assessment was undertaken by WSP Environment and Energy using expert judgement and the quantified information available.
- 4.4.3 It can be seen from **Appendix C** that no significant negative effects are anticipated from the policies. Where an effect is anticipated it is judged to be a moderate positive effect (+). Where the effect is positive but there is some

uncertainty the following is used (+/?). The positive effects identified are judged to be permanent and of borough level significance.

IMPROVING ACCESS TO EVERYDAY SERVICES AND FACILITIES

- 4.4.4 This chapter of the LTP3 considers issues around:
- The role of partnership working and information and communication technology;
- Measures to encourage walking and cycling, including segregation or priority over motor traffic on busy roads and cycle parking, access to the countryside;
- Provision of a public transport network and interchange facilities; and
- Climate change adaptation.

RESULTS

4.4.5 This chapter and associated policies is welcomed and should result in positive significant outcomes across a number of SEA objectives, as identified in **Appendix C**. There could be significant positive benefits associated with health and health inequalities, through improved access to facilities and promotion of active forms of travel. Measures to encourage walking and cycling will help improve air quality and help reduce transport related noise. There could be associated wider benefits to the built and natural environment.

IMPROVING SAFETY AND SECURITY

- 4.4.6 This chapter of the LTP3 considers issues around:
- The role of partnership working;
- The role of education, training and publicity material;
- Road safety enforcement;
- The role of road engineering to address specific issues;
- Community safety; and
- Street lighting.

RESULTS

4.4.7 The policies set out in this chapter could contribute to a more limited number of SEA objectives relative to other topics covered in LTP3 but this is a reflection of the nature of the policies in this chapter. Some uncertainty was highlighted in relation to engineering works and there potential impacts on the built and natural environment and their impacts in relation to flood risk. Reading the LTP3 as a whole (as it should be) suggests that other policies in the plan provide the basis for safeguards that will ensure that the impacts of projects on the natural and built environment are minimised. However suggestions are made in Table 4.5 for further measures that would strengthen relevant policies and ensure that impacts on the environment are not just minimised but positive outcomes optimised, for example engineering works could achieve a net gain in biodiversity.

SUPPORTING SUSTAINABLE ECONOMIC GROWTH

- 4.4.8 This chapter of LTP3 considers the transport sectors role in helping the economy to function and the role of LTP3 in optimising this, factors considered include:
- Partnership working;
- Promoting smarter choices;
- Climate change mitigation;
- Network management;
- Parking management;
- Rail;
- New development;

30

- Surface access to Heathrow Airport; and
- Visitor travel and the Olympics.

RESULTS

4.4.9 LTP3 places an emphasis on making existing infrastructure work better, reducing and managing demand, rather than trying to build extra capacity. This approach is welcomed and should result in positive significant outcomes across a number of SEA objectives, as identified in **Appendix C**, for example promoting smarter choices will help achieve objectives around health, crime and fear of crime, accessibility, air and noise pollution and the natural and built environment.

IMPROVING QUALITY OF LIFE

- 4.4.10 From an SEA perspective this is a key chapter within LTP3. Inclusion of the chapter and associated policies is welcomed. It covers:
- The role of partnership working;
- Air quality;
- Noise;
- Landscape;
- Health;
- Natural environment; and
- Townscape and heritage.

RESULTS

- 4.4.11 Positive effects are identified against a range of SEA objectives; see the matrix at **Appendix C**. Relevant objectives include health and health inequalities, air quality and noise and other objectives relating to the natural and built natural environment.
- 4.4.12 The assessment identified two gaps that are relevant to this chapter. There is a gap in relation to the reduction of waste, relevant measures include provision of recycling facilities at transport interchanges, e.g. for plastics, paper and possibly food waste. There is also potential to encourage the use of recycled materials in construction.

MITIGATING AND ADAPTING TO CLIMATE CHANGE

- 4.4.13 Policies on climate change are included in the other thematic strategies, from an SEA perspective it is not considered that this approach gives rise to any different effects compared to the previous approach of having a separate chapter. There are policies on:
- Climate change mitigation through the influence of travel choice and behaviour and encouraging of electric vehicles, a Carbon Management Plan for the council and taking carbon emissions into account when placing public transport contracts and energy use associated with street lighting; and
- Climate change adaptation considering issues around flood risk and design.

RESULTS

4.4.14 Inclusion of these policies is welcomed. The assessment demonstrates that there are linkages with a number of SEA objectives. Some over-arching recommendations are set out at the end of this Section. These should help ensure that the contribution of the Strategy to objectives like modal shift and climate change mitigation and adaptation are optimised, for example it was suggested that policies on adaptation could be broadened out to recognise the role that the transport network could have in helping to achieve wider adaptation objectives, for example the soft estate could help with attenuation of water.

4.5 CUMULATIVE EFFECTS ASSESSMENT

- 4.5.1 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 LTP3 can be divided between the construction and operational phases of the Plan. 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.
- 4.5.2 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 of the LTP3. Significant effects identified for each policy 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 effect 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 4.2** below presents the results of the assessment of cumulative effects.

Table 4.2 - Cumulative effects

SEA topic	Cumulative effects identified
Biodiversity	Proposals could have potential negative impact on biodiversity as a result of development on previously undeveloped land and previously developed land and buildings. The location and scale of all of the proposals is not yet known, which makes it less clear whether the overall impact of implementing LTP3 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. Policies in LTP3 provide some safeguards. 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. There is therefore potential for a positive cumulative or synergistic effect across proposals. 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	Proposals could 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.
Human Health	Interventions to promote walking and cycling, combined with an improvement in air quality and noise and improved accessibility to facilities, will have a cumulative benefit on human health.
Promoting sustainable transport	Increasing the use of public transport is a core aspect of LTP3. 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 are made in Table 4.3 of this report.

4.6 RELATIONSHIP WITH THE HABITATS REGULATIONS

	The relationship of the plan with the Habitats Regulations and the	Annex 1(a) of the SEA Directive
	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.	
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- 4.6.1 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.
- 4.6.2 The purpose of assessment under the Habitats Regulations 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.
- 4.6.3 A separate Screening Report under the Habitats Regulations has been undertaken and is separately reported.

4.7 UNCERTAINTIES AND RISKS

- 4.7.1 LTP3 has been 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.
- 4.7.2 There are uncertainties relating to the amount of change that the Strategy can help bring about as reductions in CO_2 and reduced use of motorised forms of transport are down to individuals who live and work in the borough. The scale and nature of the measures that the plan might give rise to, e.g. engineering works are also unknown at this stage.

4.8 MITIGATION

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

4.8.1 Additional mitigation measures that were suggested in the Draft Environmental Report and how they have been taken into account in the final LTP are reported in the Statement of Decisions that accompanies this report.

4.9 CONCLUSIONS

- 4.9.1 The content of LTP3 is welcomed. It 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 set of aims and thematic and area strategies is welcomed. Structuring the Plan in this way, rather than a more traditional approach based on modes of transport, allows cross cutting issues like climate change to be addressed.
- 4.9.2 The Plan 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.

- 4.9.3 The key priorities have been identified through extensive consultation and also reflect key national priorities, including climate change adaptation and mitigation.
- 4.9.4 This Environmental Report sets out a series of suggested recommendations, initially made in the draft Environmental Report, that were intended to enhance the document. The screening of Neighbourhood Plans for both SEA and HRA will also be required.

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 A**. 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.	Act Regulation 17 Act Schedule 2(9)
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.	Act Regulation 17 Act Schedule 3(9)
Monitoring enables unforeseen adverse effects to be identified at an early stage. (These effects may include predictions which prove to be incorrect.)	Act Regulation 17 Act Schedule 3(9)
Procedures are stated for the identification of actions required in response to significant adverse effects identified through monitoring.	Practical Guide to the SEA Directive Appendix 9.

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 Statement of Decisions provides more commentary in relation to 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.	Act Regulation 16(4)(a)
The Environmental Report demonstrates how every consultation response has been taken into account in preparation of the plan or programme.	Act Regulation 16(4)(C and D)

5.4.1 These matters are addressed in the Post Adoption Statement.