

Local Transport Plan 2011-2026

Appendix C: Strategic Environmental Assessment

Environmental Report: Revised



Revision Schedule

Environmental Report March 2011

Rev	Date	Details	Prepared by	Reviewed by	Approved by
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Table of Contents

1	Introduction	1
2	East Sussex LTP3	3
3	Methodology	5
4	SEA Context for East Sussex LTP3	11
5	Assessment of LTP3 Objectives	20
6	Appraisal of Strategic Options for East Sussex LTP3.....	30
7	Assessment of the Policy Priorities for Delivering the Preferred Strategy	46
8	SEA of Post-Consultation LTP3	61
9	Monitoring Proposals.....	68
	Appendix 1 – National, regional and local plans and programmes reviewed for SEA	70

1 Introduction

1.1 East Sussex LTP3

1.1.1 As a local transport authority, East Sussex County Council has a statutory obligation to produce a Local Transport Plan (LTP). The purpose of an LTP is to provide a policy framework for the planning and provision of transport services in the county. The County Council is currently preparing their third Local Transport Plan (LTP3) which will set out the direction for travel and transport services in the county over the next 15 years to 2026.

1.1.2 LTPs must undergo Strategic Environmental Assessment and this report is the Environmental Report (ER) that documents these findings.

1.2 Aim and Structure of the Environmental Report

1.2.1 This ER documents the Strategic Environmental Assessment of the LTP3. It has been produced alongside the emerging options and strategies for the LTP3 through an iterative process with the Council. The ER was published alongside the draft LTP3 in September 2010 to assist the public and statutory bodies in better understanding the environmental effects of the LTP3.

1.2.2 The remainder of the ER is structured as follows:

Section 2 – summarises the LTP3 including its objectives and relationship with other plans.

Section 3 – describes the methodology used in undertaking the Strategic Environmental Assessment.

Section 4 – describes the context in which the East Sussex LTP3 has been undertaken through a summary of links to other plans, programmes, policies, strategies and initiatives; baseline environmental data; future baseline without the plan; existing and foreseeable future environmental problems; difficulties in collecting data and any limitations; and the SEA framework.

Section 5 – presents the findings of the compatibility test between the SEA objectives and LTP3 objectives.

Section 6 – presents the findings of the assessment of the three strategic options for the delivery of LTP3 as developed by the Council as well as the preferred option.

Section 7 – presents the findings of the assessment of the policy priorities for delivering the preferred strategy.

Section 8 – presents the findings of the assessment of the amendments to the LTP3 following public consultation

Section 9 – presents monitoring proposals

1.3 Purpose of SEA

- 1.3.1 A Strategic Environmental Assessment (SEA) undertaken in accordance with the regulations¹ implementing European Directive 2001/42/EEC on the assessment of the effects of certain plans and programmes on the environment is required for Local Transport Plans. Its intention is 'to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans [...] with a view to promoting sustainable development' (Article 1). This commitment is addressed through Government policies and is reflected in transport planning and appraisal guidance².

1.4 Scope of the SEA

- 1.4.1 The SEA Directive defines 'environmental assessment' as a procedure comprising:
- Preparing an Environmental Report on the likely significant effects of the draft plan on the environment;
 - Carrying out consultation on the draft plan and the accompanying Environmental Report;
 - Taking into account the Environmental Report and the results of consultation on decision-making; and
 - Providing information when the plan is adopted and showing how the results of the SEA have been taken into account
- 1.4.2 The Directive's definition of 'environment' includes not only the natural environment and historic environment, but also effects such as human health and material assets. It also requires a thorough analysis of a plan's effects including secondary, cumulative and synergistic effects³. Mitigation and monitoring measures are recommended to address significant effects.

¹ *The Environmental Assessment of Plans and Programmes Regulations 2004 (Statutory Instrument 2004, no. 1633).*

² Department for Transport (2004). *Strategic Environmental Assessment for Transport Plans and Programmes – TAG Unit 2.11* [online] available at: <http://www.dft.gov.uk/webtag/documents/project-manager/pdf/unit2.11.pdf> (accessed 4 May 2010).

³ The Directive refers to 'effects' rather than 'impacts', since plans can have beneficial effects as well as negative effects. 'Impacts' are sometimes incorrectly seen as only being adverse.

2 East Sussex LTP3

2.1 Introduction

2.1.1 This section summarises the LTP3 including its objectives and relationship with other plans. A more detailed description can be found in the Scoping Report⁴.

2.2 Local Transport Plans

2.2.1 The Local Transport Plan (LTP) is the mechanism by which transport authorities deliver the Government's transport objectives and seek funding to maintain and improve the local transport network. It provides the framework for the delivery of an integrated transport strategy and is linked to national transport priorities and local objectives through a series of programmes.

2.2.2 East Sussex County Council has previously produced two Local Transport Plans, each covering a period of five years. Regular progress reports are submitted to Government on how well the County Council is performing against the national and local objectives. The second Local Transport Plan (LTP2) runs to March 2011 and the third (LTP3) (2011 to 2026) is the subject of this assessment and is coincident with the timeframe for the East Sussex Sustainable Community Strategy and the emerging Local Development Frameworks for the five districts and boroughs in the county.

Local Transport Plan 2006-2011

2.2.3 The objectives set out in LTP2 are:

- Improve access to services by providing greater travel choices and influencing land use decisions
- Manage demand and reduce the need to travel by private car
- Improve road safety and reduce fear of crime in communities
- Reduce congestion and improve the efficiency of the transport network
- Protect, promote and enhance the environment
- Better maintenance and management of the transport network

2.2.4 A Strategic Environmental Assessment and Sustainability Appraisal accompanied the development of LTP2⁵ and it informed the strategic direction both of the overall strategy and the selection of individual schemes.

⁴ East Sussex County Council (2010). *East Sussex Local Transport Plan 3: Strategic Environmental Assessment Scoping Report* [online] available at: http://www.eastsussex.gov.uk/NR/rdonlyres/3B5307BB-2494-4D64-9054-AA5BB4510C22/0/ltp3_sea.pdf (accessed 19 July 2010).

⁵ East Sussex County Council (2006). *East Sussex Local Transport Plan 2: Sustainability Appraisal / Strategic Environmental Assessment* [online] available at: <http://www.eastsussex.gov.uk/NR/rdonlyres/496656C1-B297-4A83-9907-EF4617EE3A42/0/SASEAAppendixB.pdf> (accessed 19 July 2010).

2.3 National Transport Framework

2.3.1 The objectives for LTP3 nest within those already identified in the Sustainable Community Strategy and the national transport goals which were set in the Government's 'Towards a Sustainable Transport System' (TaSTS) document published in October 2007. The following year 'Delivering a Sustainable Transport System' (DaSTS) identified the challenges to delivering those goals and emphasised the focus on delivering strong economic growth while at the same time reducing greenhouse gas emissions.

2.3.2 The national transport goals are:

- to support national economic competitiveness and growth, 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 contribute to better safety, security and health and longer life expectancy by reducing the risk of death, injury or illness arising from transport, and by promoting travel modes that are beneficial to health;
- to promote greater equality of opportunity for all citizens, 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.

2.3.3 The LTP3 goals have been developed to reflect this context along with the Sustainable Community Strategy and East Sussex Council Plan as well as objectives of wider corporate strategies, e.g. Climate Change Strategy. To help deliver the long term vision for LTP3 in East Sussex, the following high level objectives have been defined which broadly align with the national transport goals:

- Improve economic competitiveness and growth;
- Improve safety, health and security;
- Tackle climate change;
- Improve accessibility and enhance social inclusion; and
- Improve quality of life.

3 Methodology

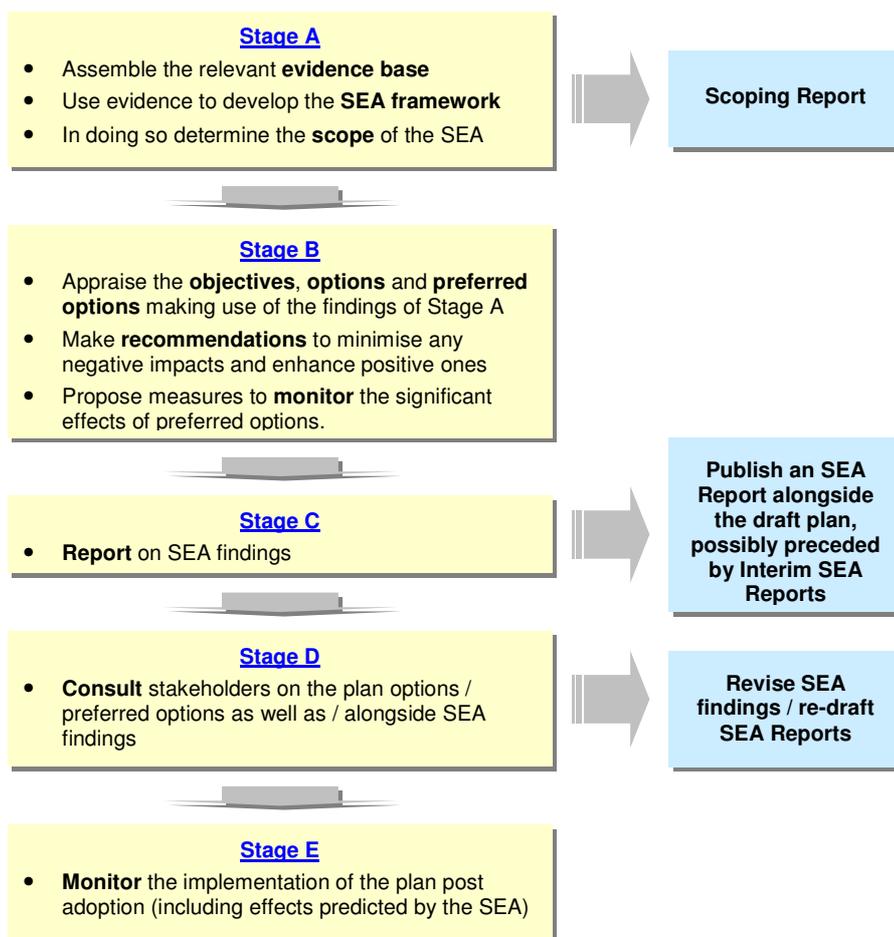
3.1 Introduction

3.1.1 The SEA for the East Sussex LTP3 has been undertaken in line with TAG Unit 2.11 – Strategic Environmental Assessment for Transport Plans and Programmes⁶. Other sources of guidance that have been drawn upon include the following:

- The (former) ODPM's *Practical Guide to the SEA Directive*⁷
- The (former) ODPM's *Sustainability Appraisal (SA) of Regional Spatial Strategies and Local Development Frameworks*⁸.

3.1.2 Figure 3-1 presents a simplified version of the SEA methodology that has been followed.

Figure 3-1: SEA process for the East Sussex LTP3



⁶ Department for Transport (2004). *Strategic Environmental Assessment for Transport Plans and Programmes – TAG Unit 2.11* [online] available at: <http://www.dft.gov.uk/webtag/documents/project-manager/pdf/unit2.11.pdf> (accessed 4 May 2010).

⁷ ODPM (2005). *A Practical Guide to the Strategic Environmental Assessment Directive* [online] available at: <http://www.communities.gov.uk/publications/planningandbuilding/practicalguidesea> (accessed 4 May 2010).

⁸ ODPM (2005). *Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents* [online] available at: <http://www.communities.gov.uk/documents/planningandbuilding/pdf/142520.pdf> (accessed 4 May 2010).

3.2 Stage A – Scoping

3.2.1 Stage A in the SEA process involves developing the SEA evidence base and framework and documenting this in a stand alone Scoping Report for public consultation. The Council produced a Scoping Report in-house and it underwent consultation with statutory bodies between November 2009 and February 2010.

3.2.2 Stage A of the SEA process includes the compilation of the background information needed for an SEA and is comprised of the following key steps:

- **Setting the context and objectives:** The formulation of objectives for the SEA are to take account of:
 - Environmental protection objectives from legislation;
 - Environmental objectives from other relevant plans and programmes;
 - Regional Sustainable Development Frameworks; and
 - The results of baseline data collection and consultation with the statutory environmental bodies and other stakeholders as appropriate.
- **Problems and opportunities:** Expert-led judgement and evidence are the primary mechanisms for identifying current and foreseeable future problems and opportunities based on:
 - Transport and land use planners' and statutory environmental bodies' evidence of environmental problems in the area;
 - Input from other stakeholders;
 - Conflicts and opportunities identified by a preliminary review of other plans, programmes and environmental objectives;
 - Conflicts between the current or future baseline conditions and existing objectives, targets or obligations; and
 - Approaches to delivering the national transport goals.
- **Assembling the environmental baseline:** baseline data provide the basis for forecasting and monitoring of environmental effects, and helps in the identification of environmental problems. For each SEA objective, data is collected to help answer (where possible) a range of questions including:
 - How good or bad is the current situation? Is it getting better or worse? How is the environment likely to change in accordance with or differently from historical trends (e.g. due to human pressure or climate change)?
 - How far is the current situation from thresholds, objectives or targets?
 - Are particularly sensitive or important elements of the environment affected: people, resources, species, habitats?
 - Are the problems of a large or small scale, reversible or irreversible, permanent or temporary, direct or indirect?
 - How difficult would it be to offset or remedy any damage?

- Have there been significant cumulative or synergistic effects over time? Are there expected to be such effects in the future?
- **Relationship with other plans and programmes, and environmental objectives:** A plan will be affected by, and affect, other plans and programmes, and environmental objectives both within and outside an authority's jurisdiction. Identification of conflicts and the integration of objectives across the plans and programmes is a key activity.

3.2.3 This information is then reported in a Scoping Report.

3.3 Stage B – Appraisal

3.3.1 Stage B involves considering the objectives, options and the draft plan against the objectives defined in Stage A as well as identifying measures to avoid, mitigate or enhance direct, indirect, long-term and short-term and cumulative effects. Proposals to monitor significant effects are also to be considered.

3.3.2 The individual tasks with Stage B comprise:

- **B1:** Test Transport Strategy objectives against the SEA Framework;
- **B2:** Develop strategic alternatives;
- **B3:** Predict the effects of the strategy and alternatives;
- **B4:** Evaluate effects of the strategy and alternatives;
- **B5:** Consider mitigation and enhancement;
- **B6:** Propose monitoring measures.

B1 – Test Transport Strategy objectives against the SEA framework

3.3.3 This task looks to identify any potential inconsistencies or synergies between the objectives developed in Stage A and the LTP3 aims and objectives. A simple compatibility matrix supported by a brief narrative is used to illustrate the findings of this task. It is important to consider how these findings are then addressed in the evolution of the plan.

B2 – Develop strategic alternatives

3.3.4 Alternatives comprise different ways of:

- Achieving the aspirations of the local community;
- Dealing with environmental problems;
- Dealing with transport problems (as identified through TAG Unit 2.2).

3.3.5 There is the need to consider a hierarchy of alternatives, from broad strategic approaches/alternatives for the plan (e.g. increasing choice, restricting transport demand through physical measures, restricting it through fiscal measures) to more detailed statements of policy direction and transport management approaches for specific areas in the county.

3.3.6 Alternatives must also be reasonable and deliverable. Some suitable alternatives may be beyond the responsible authority's immediate powers. However, where such alternatives have

been explored and can be shown to be deliverable with partners these may be considered within the plan.⁹ An overarching aim is the achievement of Government transport objectives. The WebTAG SEA Guidance unit 2.11 notes that:

- Alternatives that are more environment-friendly should not be eliminated from consideration at an early stage of the plan making process purely on cost grounds.
- Measures that, of themselves, do not fully deliver the plan objectives should not automatically be disregarded: good strategies are often built up out of many small, coherent "fixes".
- Alternatives should address the issues highlighted through a consideration of the future baseline. However, caution should be exercised in relation to the assumption that specific new strategies will be implemented (even if these appear to be essential in the light of current Government policies or of other plans and programmes).¹⁰

3.3.7 The development of alternatives should be a systematic and auditable process that also describes the reasons for rejecting any alternatives at an early stage. In particular, more detailed analysis should be carried out when developing key alternatives.

3.3.8 The development of alternatives is the responsibility of the plan-making authority (in this case East Sussex County Council), but the assessment is undertaken through the SEA. The Environmental Report documents the reasons for the alternative selected.

B3 / B4 Prediction and evaluation of effects

3.3.9 Predicting the effects of the plan involves examining each strategy/measure in turn and:

- Identifying the changes to conditions in the 'without the plan' scenario which are judged to arise from the strategy/measure;
- Describing these changes in terms of their magnitude, the time period over which they will occur, whether they are permanent or temporary, positive or negative, probable or improbable, frequent or rare, and whether there are cumulative and/or synergistic effects.

3.3.10 Carrying out the assessment involves considering, for each strategy or measure, the following types of questions:

- Is it clear what is proposed?
- Is the strategy likely to have a significant adverse effect in relation to each objective?
- If so, can the effect be avoided or its severity reduced?
- If the effect cannot be avoided, e.g. by conditions or changes to the way it is implemented, can the measure be changed or eliminated?
- If its effect is uncertain, or depends on how the plan is implemented, how can this uncertainty be reduced?
- Will any social group be disproportionately disadvantaged / affected by the alternative?

⁹ Department for Transport (2004). *Strategic Environmental Assessment for Transport Plans and Programmes – TAG Unit 2.11* [online] available at: <http://www.dft.gov.uk/webtag/documents/project-manager/pdf/unit2.11.pdf> (accessed 4 May 2010).

¹⁰ Ibid.

3.3.11 To assist in the identification of significant and non-significant effects a simple traffic-light based scoring system was used. This is illustrated in Table 3-1. Significance was determined as a function of rule-based criteria drawing on instruction provided by the SEA Directive. Additionally, the rule-based criteria could be manually overridden by the assessor if the need arose.

Table 3-1: Scoring and definition

Scoring Symbol	Definition
Maj+ve	Major positive effect
Mod+ve	Moderate positive effect
Min+ve	Minimal positive effect
Neut-	Neutral effect
Min-ve	Minor negative effect
Mod-ve	Moderate negative effect
Maj-ve	Major negative effect

B5: Consider mitigation and enhancement

3.3.12 Annex I of the SEA Directive requires the Environmental Report to include measures to prevent, reduce or offset any significant adverse effects on the environment of implementing the plan or programme. Mitigation, which is also covered in WebTAG SEA Guidance, can take a wide range of forms, including:

- changes to the alternative concerned, specific proposals or to the plan or programme as a whole;
- the identification of issues to be addressed in project EIAs; and
- proposals for changing other plans and programmes.

3.3.13 Mitigation recommendations have been made, where appropriate, for each measure/strategy within LTP3.

B6: Propose monitoring measures

3.3.14 Monitoring allows significant environmental effects of the plan's implementation to be identified and dealt with early on. It allows the actual effects of the plan to be tested against those predicted in the SEA, and can provide baseline information for future plans. It also allows information to be assembled in advance of project EIAs thereby helping to make more informed decisions at that stage.

3.3.15 The regulations require monitoring of the *significant environmental effects* of the plan. Where likely significant effects are identified, and especially where these are adverse effects or where uncertainties are identified, proposals have been designed to keep a 'watching brief' on the affected receptors. This allows an evidence base to be built up for future appraisals and potentially also to eliminate some uncertainty.

3.4 Stage C – SEA Report

- 3.4.1 Stage C involves documenting the process and findings in an Environmental Report (this document) to accompany the draft Local Transport Plan at consultation and to accompany the final LTP3 document. A Non-Technical Summary is also required by the regulations and has been produced as a stand-alone document.

3.5 Stage D – Consultation

- 3.5.1 Stage D involves consultation on the draft LTP3 and the SEA Environmental Report. Publication of these documents for consultation will be undertaken by the County Council. Following the period of public consultation there may be a need to make alterations to the Environmental Report as a result of comments received regarding SEA findings, the evidence base, or as a result of significant changes having been made by to the Plan by the County Council.

3.6 Stage E – Monitoring

- 3.6.1 SEA guidance indicates that the existing monitoring arrangements of the plan and for other plans can be used to obtain the required information. The majority of the monitoring suggested for SEA will already be performed within the Council or by Government bodies and agencies.
- 3.6.2 Monitoring will be undertaken by the County Council.

4 SEA Context for East Sussex LTP3

4.1 Introduction

4.1.1 This section describes the context in which the East Sussex LTP3 SEA has been undertaken. It is primarily derived from the Scoping Report that was produced and consulted on by the County Council in October 2009. Following a review of the Scoping Report by Scott Wilson, the Council produced an updated version of the Scoping Report in April 2010 which took into account the most recent policies, baseline evidence and various technical studies (see <http://www.eastsussex.gov.uk>)

4.1.2 The section summarises the following components of the Scoping Report:

- Links to other plans, programmes, policies, strategies and initiatives, including environmental protection objectives;
- Baseline environmental data;
- Future baseline without the plan;
- Existing and foreseeable future environmental problems;
- Difficulties in collecting data and any limitations;
- SEA Framework.

4.2 Links to other plans, programmes, policies, strategies and initiatives, including environmental protection objectives

4.2.1 An initial stage in the SEA process involves reviewing the overarching policy context within which the LTP3 is prepared. This includes national, regional and local plans, programmes, policies, strategies and initiatives, including environmental protection objectives. The aim is to draw out the implications for both the LTP3 and the SEA. Appendix 1 of this report lists the plans and programmes that were reviewed as part of the SEA scoping.

4.2.2 The findings of the review ensure that all environmental implications for the objectives in both LTP3 and in the SEA are described and interpreted. The full review of the plans, policies, programmes, strategies and initiatives (PPPSIs) is set out in Appendix 1 of the Scoping Report.

4.3 Baseline and Key Issues

4.3.1 In order to understand the issues and challenges that the County Council is confronted with, baseline information has been collated in relation to transport, environmental and social issues. The baseline information is presented in Appendix 2 of the Scoping Report, but has been updated by the Council and used to inform this assessment. Key issues and challenges described within the Scoping Report are summarised under the below.

Sustainable travel (walking, cycling public transport) and access to services

- 4.3.2 The landscape is predominantly rural in character, but three quarters of the population live in the urban areas, mostly on the coastal strip. This, combined with the majority of people living within 5km of their workplace, provides a huge opportunity to encourage the use of more sustainable transport and travel.
- 4.3.3 In conjunction with the above factors, the strategic road network in the county is generally inadequate; the county has no motorway and just 11.9 km of trunk road, which is the responsibility of the Highways Agency, is dual carriageway. The trunk roads which radiate from London to the coast (A21, A22 & A23) and those running east to west across the county (A27 & A259) are unable to support the volume of traffic they carry resulting in traffic congestion, particularly at peak times of the day. There is therefore, a requirement to improve access and provision for more sustainable travel in the county.
- 4.3.4 The rural areas and many market towns have seen a decline in traditional industries that has resulted in a decline in the provision of basic and local services and facilities. This is particularly evident in the often poor quality of the public transport networks in these areas, which for some sectors of the population reduces access to basic services, such as health care. These issues, coupled with bus deregulation (which allows operators to introduce, change or withdraw services at short notice), and the expectation on the County Council to support economically non-viable services result in a public transport network that does not necessarily provide a service where the need is greatest. Therefore the County Council needs to consider alternative or more unique innovative options for rural transport through its Community Transport Strategy.
- 4.3.5 There are 3,500 kilometres of Rights of Way in East Sussex, which can be used by walkers with many routes being accessible to cyclists. There is, therefore, the potential to promote these routes, for increasing sustainable travel by walking and cycling, particularly, within rural areas. LTP3 will need to consider the proposed actions within the County Council's Rights of Way Improvement Plan 2007-2017, and incorporate appropriate considerations to this document in LTP3.

Protection of the natural and built environment, mitigation and adaptation to climate change

- 4.3.6 The East Sussex countryside and landscape falls within two Areas of Outstanding Natural Beauty (AONB), covering 64% of the county. These include the Sussex Downs; the majority of which has been designated as the South Downs National Park. This was confirmed in November 2009 and came into being on 31st March 2010 when the South Downs National Park Authority was established. The High Weald was designated an AONB for its historic character. Along with these designations there are areas with national and international recognition for the countryside and coastline, including Sites of Special Scientific Interest. These areas are strictly protected by European and national policies which intend to conserve and enhance these natural assets.
- 4.3.7 The county also has numerous 'Conservation Areas', a large number of listed buildings of historic value in villages and towns and 341 scheduled ancient monuments.
- 4.3.8 The South East Plan required the building of approximately 30,000 new homes by 2026 across the five districts and boroughs in East Sussex. There will of course be a need to provide appropriate transport infrastructure to support these new developments, and this will need to be

undertaken with consideration for the environmental constraints described above. However, the coalition government has since revoked the South East Plan as part of the abolition of the regional governance framework, which means that local planning authorities are now able to provide the level of additional housing numbers they consider appropriate for their area.

- 4.3.9 The climate is changing and East Sussex has already experienced the devastating effects of this locally when Lewes, Uckfield and their surrounding areas experienced severe flooding in 2000, heatwave in the summer of 2003 and heavy snowfall in the winter of 2009/10.
- 4.3.10 The county will need to adapt to the threats of climate change, which includes flooding and more extreme temperatures. This will be a paramount consideration alongside any proposals for the location of improved or new transport infrastructure and measures. It also requires the County Council to ensure that the transport road network is resilient to the risks and consequences of climate change factors by adaptation of maintenance practices and use of appropriate materials.

Health and wellbeing

- 4.3.11 One of the biggest challenges that the county faces is an increasingly ageing population; the number of very elderly (85+) is predicted to rise by over 60% by 2026. The associated challenges include meeting the changing health and social care requirements, transport and wellbeing needs.
- 4.3.12 Approximately 18,000 older people live in low-income households, the proportion has increased from 11% to 14% between 2004 and 2007. This factor often has direct links to poor housing and access to transport, resulting in poor health and social exclusion.
- 4.3.13 Although the overall health of people in the county is good, there is great disparity within the county between those who are in good health and those that have significant health problems. Health inequalities exist in every district and borough across the county, and there are significant differences in life expectancy across the county. This can be demonstrated by comparing the life expectancy of people living in the Gensing ward in Hastings, which is 72.3 years, compared to 85.6 years in Mayfield, Wealden.
- 4.3.14 Over 17,000 children live in low income households across the county. The level of physical activity among children is lower than the national average and nearly one in twelve of 4 to 5 years olds are classified as obese. In terms of adults, over one in five is obese and just over one in nine take enough physical exercise. East Sussex County Council performs significantly worse than the average for the Strategic Health Authority area across 13 indicators and performs better across 5 of the 32 indicators. The death rates from heart disease, stroke and cancer have declined in the last 10 years and are below the national average.
- 4.3.15 The provision of and promotion of sustainable transport options can be used to improve the physical and mental health and wellbeing of the local population.

Safety and security of people and communities

- 4.3.16 Road Safety improvements and education is of vital importance to the county. Progress has been made to reduce the number of children killed or seriously injured in road accidents and to reduce the number of slight casualties. The County Council hopes to meet the Government targets for these indicators by 2010.

4.3.17 Unfortunately the total number of people killed or seriously injured on the county's roads has risen during the last two years. Appropriate action is being undertaken by the County Council through the establishment of a Casualty Reduction Board to tackle the underlying causes of the fatal and serious collisions that are occurring, and an appropriate programme of measures is being developed with key partners.

4.4 Difficulties in collecting data and any limitations

4.4.1 Data collection as part of the scoping stage was undertaken by the County Council and they have not identified any significant gaps that may affect the assessment.

4.5 SEA Framework

4.5.1 SEA objectives provide a way in which the environmental effects can be described, analysed and compared. Together these objectives form the SEA Framework.

4.5.2 The SEA Framework was developed by the Council and included in the Scoping Report. These objectives are shown in Table 4-1.

Table 4-1: SEA Objectives

LTP3 SEA Objective	Sub-Objective	Related SEA Topic
1. To improve accessibility to services, facilities and jobs for residents, businesses and visitors to East Sussex	1a. To improve access to services and facilities for disadvantaged groups, the elderly, mobility impaired and those without access to a vehicle.	Population Human Health
	1b. To improve integration between different modes of travel and transport. (To improve accessibility and encourage sustainable travel.)	
	1c. To improve access to healthcare.	
2. To protect and improve the health and wellbeing of the population of East Sussex	2a. To reduce health inequalities.	Population Human Health Climatic Factors
	2b. To increase the number of people walking and cycling within the county.	
	2c. To increase the number of children using sustainable modes of travel on the journey to school.	
3. To protect and improve the safety of the population of East Sussex	2d To ensure provision of access to open spaces, countryside and local heritage sites, in order to promote physical activity.	Population Human Health
	3a. To ensure the safety and security of those using public transport systems within East Sussex.	
4. To reduce transport related noise and air pollution and the impact on human health and wellbeing	3b. To reduce the number of people killed or seriously injured on the roads.	Population Human Health Air
	4a. To avoid or minimise any potential impact of noise pollution from future transport infrastructure development.	
	4b. To protect and improve air quality in the interests of human health.	

LTP3 SEA Objective	Sub-Objective	Related SEA Topic
	4c. To continue to develop appropriate measures to reduce the impact from transport on areas designated as AQMAs.	
5. To limit the causes and adapt to the effects of climate change	5a. To reduce traffic congestion at key sites within the county.	Climatic Factors Human Health Population Air Water
	5b. To increase the number of journeys by walking, cycling and using public transport.	
	5c. To encourage and where possible facilitate the use of alternative fuels.	
	5d. To ensure that new transport infrastructure is resilient to climate change effects.	
	5e. To ensure existing transport infrastructure is adapted to manage the potential impact from climate change factors.	
	5f. To promote good environmental practice in the movement of freight within the county.	
6. To maintain and improve the quality of water resources	6a. To avoid transport related water pollution	Water Human Health
7. To reduce the risk of flooding	7a. To avoid or minimise the risks associated with transport infrastructure development and flooding.	Water Human Health Climate Factors
	7b. To reduce the risk of flooding and the potential effect on the county strategic road network.	
8. To improve the efficiency in land use	8a. To optimise the use of previously developed land for future development and associated transport infrastructure.	Landscape Population
	8b. To improve the connectivity of key centres to surrounding towns and villages by sustainable transport and travel.	
9. To maintain resources, including minerals and productive soils	9a. To minimise the loss of productive soils in the implementation of any transport infrastructure development.	Soil Material Assets
	9b. To ensure the use of recycled materials, including aggregates in the construction of transport infrastructure.	
	9c. To ensure that sustainable construction and maintenance methods are utilised.	
10. To conserve and contribute to the enhancement of East Sussex's biodiversity	10a. To conserve and enhance natural/semi natural habitats and networks.	Biodiversity Fauna & Flora
	10b. To ensure the conservation and enhancement of protected designated sites in the county.	
	10c. To conserve and enhance species diversity and avoid harm to protected species.	

LTP3 SEA Objective	Sub-Objective	Related SEA Topic
11. To protect and contribute to the enhancement of the local landscape and built environment	11a. To avoid or minimise any negative impacts from travel or transport on the local landscape and built environment.	Landscape Cultural Heritage Material Assets
	11b. To protect & enhance the character and local distinctiveness of towns and villages in the county from the impact of transport.	

4.6 Future baseline without the plan

4.6.1 The regulations require that information is provided on the relevant aspects of the current state of the environment (section 4.3) and **the likely evolution thereof without implementation of the plan**. The future baseline, or ‘business-as-usual’ scenario, is difficult to describe as trend data are often not available. Nevertheless, this section describes the future environmental baseline as it relates to each SEA topic.

Population

4.6.2 The number of elderly residents is predicted to rise by over 60% by 2026 and a significant number are expected to live in low income households. This suggests that levels of access to services and facilities, particular to GPs and hospitals, may decrease over the plan period because as people get older they require greater access. A higher proportion of those living in relatively isolated communities, particularly in rural parts of the county, could become socially excluded and experience poor health.

4.6.3 Overall access to services for children and young people may improve as spatial planning focuses future development in larger settlements. However, those living in rural areas could experience decreasing accessibility as services and facilities may also become concentrated in urban, particularly coastal, areas.

4.6.4 While the coastal strip is already well served by public transport, in deprived coastal areas the ability to access to jobs is a key issue. Accessibility in some areas is likely to improve without the plan if new road infrastructure is delivered. However, little change can be expected with regard to improvements in access to education and training facilities and some employment centres.

Human health

4.6.5 While overall health in the county is good, there are health inequalities experienced in every district and borough. With an ageing population and increasing rates of obesity, levels of good health may decrease over the plan period. These trends highlight the importance of ensuring that the impacts of increased traffic levels with respect to noise and air quality are minimised.

4.6.6 The number of people killed or seriously injured over the past few years has not met reduction targets set for the county. The County Council performs significantly worse than the average for England in terms of road injuries and deaths. This trend could be expected to continue without interventions through LTP3.

- 4.6.7 There are significant opportunities within the county to promote physical activity (e.g. walking and cycling). Whilst these are likely to be promoted through LDFs, the effectiveness of these policies would be limited without sufficient support from LTP3.

Air quality and noise

- 4.6.8 Air pollution exceeds national quality thresholds only in Lewes and Hastings where AQMAs are declared for NO₂ and PM₁₀, respectively. Whilst technological improvements can be expected to gradually improve NO₂ and PM₁₀ concentrations (e.g. more electric vehicles), this may be offset by increased traffic levels and congestion.
- 4.6.9 The Council is also aware of potential hotspots where air pollution is close to exceeding thresholds. Without the plan there is an expectation that exceedences could occur in some of these locations.
- 4.6.10 Although ozone is not a registered pollutant, it is a considerable concern for East Sussex, particularly in suburban and rural areas where 'summertime smog' is recognised to be worse than in urban parts of the county¹¹. Road transport is the main cause of ozone¹² and the effects of 'summertime smog' can be expected to get worse as climate change leads to warmer summers with longer periods of dry weather.
- 4.6.11 In terms of noise, it is anticipated that higher levels of traffic growth could increase concerns over this type of pollution. Particular concerns would be related to urban areas where the concentration of sensitive receptors and the intensity of traffic is greatest and for more isolated parts of the county where increasing transport could have a disproportionate effect on the tranquillity of the area.

Climatic factors

- 4.6.12 Over the plan period the effects of climate change may become of increasing relevance for transport. These include the following:
- Intense storm events increasing surface water flooding;
 - High temperature events which, in part due to the geology of the county (i.e. shrinking clays), may damage transport infrastructure;
 - Increasing weather variability (e.g. rainfall followed by freezing temperatures) leading to damage to transport infrastructure;
 - Higher rates of coastal erosion that may put transport assets at risk.
- 4.6.13 Transport policy and investment decisions must take these risks into account to ensure a reliable and safe transport system that is fit for purpose. In addition, increasing private car trips can be expected to contribute towards rising CO₂ emissions from transport, particularly in the short to medium term of the plan period.

¹¹ Ozone can be transported over long distances and concentrations are often low in busy urban centres and higher in suburban and adjacent rural areas.

¹² Ozone does not come directly from vehicles, rather it is created by chemical reactions between other nitrogen oxides and hydrocarbons.

Landscape

- 4.6.14 Investment in transport infrastructure, including new roads and demand management systems, is likely to place further pressure on landscape amenity, particularly on townscapes. However, development on previously developed land (PDL) could be expected to improve the visual amenity of many parts of the area. Rising population numbers and the need to cater for recreation is likely to place further stress on the transport network as people seek to access the coast and the South Downs National Park.

Heritage

- 4.6.15 No significant changes are expected to emerge without LTP3 as safeguarding policies can already be found within national, regional and local policy. Additionally, it is not anticipated that the LTP3 will lead to the construction of significant new infrastructure. Small scale schemes may still have a disproportionate impact on particularly sensitive historic sites.

Water

- 4.6.16 An increasing population in combination with climate change is expected to lead to additional pressure on water resources over the plan period. While biological quality of rivers in East Sussex is mostly 'fairly good' to 'good', the growing population will place extra demands on rivers receiving effluent. Pressure is also expected to increase on water resources (including both rivers and underground water sources) over the plan period through greater levels of abstraction.
- 4.6.17 Water quality within East Sussex can be expected to become increasingly sensitive to runoff from roads (hydrocarbons, heavy metals, de-icing chemicals) which can pollute water sources. It is not clear how significant the impacts of climate change and water resources will be as they interact with transport infrastructure. For example, it is known that poor drainage systems can lead to unintentional flooding and water retention, but it is not clear where in East Sussex these risks are greatest.

Material assets

- 4.6.18 Within the county there is a lack of quality road networks, including trunk roads which are unable to support the volume of traffic they carry. In addition, the high volumes of traffic on a relatively small road network increases the maintenance required. Increased pressure can be expected on these assets in light of projected traffic growth.
- 4.6.19 With regard to footpaths and cycle paths in the county, although the overall condition of the Right of Way (RoW) network improved from 2007/08 to 2008/09 there is a pressing need to improve and increase infrastructure which will support a modal shift towards greater walking and cycling. Without the plan it is likely that there would be less impetus towards these improvements.

Biodiversity, flora and fauna

- 4.6.20 The current status of biodiversity in East Sussex demonstrates both positive and negative trends. For example, 97% of SSSIs in East Sussex are in favourable or recovering condition and the number of SNClS in positive management has increased by 7% between 2008/09 and 2009/10. However, some species have seen a significant decline. For example, woodland birds have decreased by approximately 50% since 1994 and woodland butterflies by two thirds

in the last two decades (probably reflecting the neglect and inappropriate management of woodlands).

- 4.6.21 Existing habitat fragmentation is likely to get worse as climate change impacts on ecosystems with species unable to migrate due to transport infrastructure. The relative significance of impacts from noise, air and water pollution are likely to depend on levels of traffic growth over the plan period (increase/decrease) and the extent of climate change.

Soil

- 4.6.22 No significant changes are expected over the plan period.

5 Assessment of LTP3 Objectives

- 5.1.1 Inconsistencies between LTP3 objectives and SEA objectives are bound to arise as the transport plan may not be able to accommodate all of the requirements of other plans, programmes or environmental objectives.
- 5.1.2 This section identifies potential inconsistencies or synergies between the SEA objectives and the LTP3 objectives using a 'compatibility matrix'. This exercise assists in identifying or clarifying where trade-offs may be required and to help explain the emergence of any likely significant effects. The results of the assessment are presented in Tables 5-2 and 5-3 and a brief summary is provided below.
- 5.1.3 East Sussex has adopted five high level objectives which broadly align with the national transport goals set out in DaSTS. These have been supplemented by a range of transport specific objectives which reflect the objectives of the Community Strategy's transport and access theme and the policy guidance for transport and environment set out in the Council's plan.
- 5.1.4 The high level objectives are:
- Improve economic competitiveness and growth;
 - Improve safety, health and security;
 - Tackle climate change;
 - Improve accessibility and enhance social inclusion;
 - Improve quality of life.
- 5.1.5 The supplementary objectives are:
- Improve strategic and local connectivity of communities to facilitate economic and physical growth and renewal through the Local Enterprise partnership and the Local Development Framework process;
 - Reduce congestion by improving the efficiency of the transport network and encouraging greater use of sustainable modes.
 - Improve the maintenance and efficient management of the transport network;
 - Improve road safety for vulnerable road users – pedestrians (including children, the elderly and disabled), cyclists, motorcyclists and horse riders;
 - Reduce the number of people killed and seriously injured in road crashes;
 - Reduce greenhouse gas emissions, local air pollution and noise from transport;
 - Increase the resilience of transport infrastructure and services to the effects of climate change;
 - Contribute to the protection and enhancement of the local natural and built environment¹³;
 - Improve access to jobs, services and leisure;

¹³ Note: following mitigation recommendations from the SEA this objective has been amended in the draft LTP3 as: 'Contribute to the protection and enhancement of the local natural and built environment.'

- Improve personal health and well being by encouraging and enabling increased physical activity through active travel;

Table 5-1: Compatibility matrix scoring

Compatible	Uncertain link	Incompatible	No link
✓	?	✗	≠

Table 5-2: Compatibility matrix – high level LPT3 objectives

	Improve economic competitiveness and growth	Improve safety, health and security	Tackle climate change	Improve accessibility and enhance social inclusion	Improve quality of life
1. To improve accessibility to services, facilities and jobs for residents, businesses and visitors to East Sussex	✓	✓	✓	✓	✓
2. To protect and improve the health and wellbeing of the population of East Sussex	✗	✓	✓	✓	✓
3. To protect and improve the safety of the population of East Sussex	✗	✓	✓	✓	✓
4. To reduce transport related noise and air pollution and the impact on human health and wellbeing	✗	✓	✓	✓	✓
5. To limit the causes and adapt to the effects of climate change	✗	?	✓	✓	?
6. To maintain and improve the quality of water resources	✗	≠	✓	✓	✓
7. To reduce the risk of flooding	?	≠	✓	?	✓
8. To improve the efficiency in land use	✓	≠	✓	✓	✓
9. To maintain resources, including minerals and productive soils	✓	≠	≠	≠	✓
10. To conserve and contribute to the enhancement of East Sussex's biodiversity	✗	✓	✓	✓	✓
11. To protect and contribute to the enhancement of the local landscape and built environment	✗	✓	✓	✓	✓

Table 5-3: Compatibility matrix - LTP3 transport objectives

	Reduce greenhouse gas emissions, local air pollution and noise from transport	Increase the resilience of transport infrastructure and services to the effects of climate change	Contribute to the protection and enhancement of the local natural and built environment	Improve road safety for vulnerable road users – pedestrians (including children, the elderly and disabled), cyclists, motorcyclists and horse riders	Reduce the number of people killed and seriously injured in road crashes
1. To improve accessibility to services, facilities and jobs for residents, businesses and visitors to East Sussex	✓	✓	?	≠	≠
2. To protect and improve the health and wellbeing of the population of East Sussex	✓	✓	≠	✓	✓
3. To protect and improve the safety of the population of East Sussex	?	?	≠	✓	✓
4. To reduce transport related noise and air pollution and the impact on human health and wellbeing	✓	✓	✓	≠	≠
5. To limit the causes and adapt to the effects of climate change	✓	✓	✓	≠	≠
6. To maintain and improve the quality of water resources	✓	✓	✓	≠	≠
7. To reduce the risk of flooding	✓	✓	? / X	≠	≠

	Reduce greenhouse gas emissions, local air pollution and noise from transport	Increase the resilience of transport infrastructure and services to the effects of climate change	Contribute to the protection and enhancement of the local natural and built environment	Improve road safety for vulnerable road users – pedestrians (including children, the elderly and disabled), cyclists, motorcyclists and horse riders	Reduce the number of people killed and seriously injured in road crashes
8. To improve the efficiency in land use	✓	✓	✓	≠	≠
9. To maintain resources, including minerals and productive soils	✓	✓	✓	≠	≠
10. To conserve and contribute to the enhancement of East Sussex's biodiversity	✓	✓	✓	≠	≠
11. To protect and contribute to the enhancement of the local landscape and built environment	✓	✓	✓	≠	≠

	Improve access to jobs, services and leisure	Improve personal health and well being by encouraging and enabling increased physical activity through active travel	Improve the maintenance and efficient management of the transport network	Improve strategic and local connectivity of communities to facilitate economic and physical growth and renewal through the Local Enterprise Partnership and the Local Development Framework process	Reduce congestion by improving the efficiency of the transport network and encouraging greater use of sustainable modes
1. To improve accessibility to services, facilities and jobs for residents, businesses and	✓	✓	✓	✓	✓

	Improve access to jobs, services and leisure	Improve personal health and well being by encouraging and enabling increased physical activity through active travel	Improve the maintenance and efficient management of the transport network	Improve strategic and local connectivity of communities to facilitate economic and physical growth and renewal through the Local Enterprise Partnership and the Local Development Framework process	Reduce congestion by improving the efficiency of the transport network and encouraging greater use of sustainable modes
visitors to East Sussex					
2. To protect and improve the health and wellbeing of the population of East Sussex	✓	✓	✓	?	?
3. To protect and improve the safety of the population of East Sussex	≠	?	✓	?	?
4. To reduce transport related noise and air pollution and the impact on human health and wellbeing	?	✓	✓	×	× / ?
5. To limit the causes and adapt to the effects of climate change	✓	✓	✓	×	×
6. To maintain and improve the quality of water resources	✓	✓	≠	?	?
7. To reduce the risk of flooding	≠	≠	≠	?	?
8. To improve the efficiency in land use	✓	≠	≠	?	≠

	Improve access to jobs, services and leisure	Improve personal health and well being by encouraging and enabling increased physical activity through active travel	Improve the maintenance and efficient management of the transport network	Improve strategic and local connectivity of communities to facilitate economic and physical growth and renewal through the Local Enterprise Partnership and the Local Development Framework process	Reduce congestion by improving the efficiency of the transport network and encouraging greater use of sustainable modes
9. To maintain resources, including minerals and productive soils	≠	≠	✓	≠	≠
10. To conserve and contribute to the enhancement of East Sussex's biodiversity	✓	✓	≠	≠	≠
11. To protect and contribute to the enhancement of the local landscape and built environment	✓	?	✓	×	≠

5.2 Inconsistencies and Synergies

5.2.1 Inconsistencies and synergies between the SEA Objectives and the high level LTP3 objectives and LTP3 transport objectives are discussed below.

High level LTP3 objectives

Inconsistencies

5.2.2 Inconsistencies between the high level LTP3 objectives and SEA objectives have only been identified with respect to the LTP3 objective 'improving economic competitiveness and growth'. This objective is potentially inconsistent with the following SEA objectives:

- 2. To protect and improve the health and wellbeing of the population of East Sussex
- 3. To protect and improve the safety of the population of East Sussex
- 4. To reduce transport related noise and air pollution and the impact on human health and wellbeing
- 5. To limit the causes and adapt to the effects of climate change
- 6. To maintain and improve the quality of water resources
- 10. To conserve and contribute to the enhancement of East Sussex's biodiversity
- 11. To protect and contribute to the enhancement of the local landscape and built environment

5.2.3 The reason for these inconsistencies primarily stem from the direct and indirect effects that are likely to emerge from the realisation of economic competitiveness and growth objective as a result of increased journeys across the county. For example, increased journeys are likely to directly lead to increased noise and air pollution. Indirectly, the emissions from increased journeys may harm vegetation across the district. However, positive synergies were identified for the remaining high level objectives against these SEA objectives. This means that considered as a whole, LTP3 is not likely to be incompatible with the above SEA objectives.

Synergies

5.2.4 The majority of high level LTP3 objectives are likely to be synergistic with SEA objectives. Notably, the following SEA objectives were likely to be compatible with all high level LTP3 objectives with the exception of 'improving economic competitiveness and growth':

- 1. To improve accessibility to services, facilities and jobs for residents, businesses and visitors to East Sussex
- 2. To protect and improve the health and wellbeing of the population of East Sussex
- 3. To protect and improve the safety of the population of East Sussex
- 4. To reduce transport related noise and air pollution and the impact on human health and wellbeing
- 10. To conserve and contribute to the enhancement of East Sussex's biodiversity

- 11. To protect and contribute to the enhancement of the local landscape and built environment

LTP3 Transport Objectives

Inconsistencies

5.2.5 Inconsistencies between LTP3 transport objectives and SEA objectives have been identified with the following LTP3 transport objectives:

- Contribute to the protection and enhancement of the local natural and built environment (also considered as a '?');
- Improve strategic and local connectivity of communities to facilitate economic and physical growth and renewal through the Local Enterprise Partnership and the Local Development Framework process; and
- Reduce congestion by improving the efficiency of the transport network and encouraging greater use of sustainable modes.

5.2.6 The reason for the first inconsistency is because there is the potential that the hard defence measures required to reduce the risk of flooding could have a detrimental effect on the local environment. This uncertainty should be considered in light of the high degree of uncertainty with which the assessment has been made.

5.2.7 The reason for the observed inconsistencies with the latter two LTP3 transport objectives primarily relates to the possibility that these objectives could promote increased travel by private car. This would then account for potential negative effects with respect to noise and air pollution and their impact on human health (SEA objective 4), increased greenhouse gas emissions (5), and with respect to the LTP3 objective to improve strategic and local connectivity, it was determined that this could have a negative effect against SEA objective to protect and enhance the local landscape and built environment (11).

Synergies

5.2.8 The majority of LTP3 objectives are likely to be positively synergistic with SEA objectives. LTP3 objectives with a particularly high degree of synergy with the SEA objectives include:

- Reduce greenhouse gas emissions from transport;
- Mitigate and adapt to the impacts of climate change;
- Support the development and implementation of the Local Development Frameworks; and
- Improve personal health through encouraging and enabling increased physical activity through active travel.

5.2.9 Importantly, synergistic relationships were identified across SEA objectives where inconsistencies were also noted. This means that there is much less likelihood that there are LTP3 objectives which will definitely lead to adverse effects against particular SEA objectives.

5.3 Summary

5.3.1 While it is difficult to draw conclusive findings from the compatibility assessment, the above analysis suggests the following:

- Options and packages of measures which primarily focus on improving economic competitiveness and growth are likely to lead to a large number of significant positive and negative effects against the SEA topics;
- A high number of the uncertain relationships that were identified across both the high level LTP objectives and LTP3 transport objectives have been assessed this way because their ultimate effects against these objectives are dependent upon how they are implemented, but are amenable to design recommendations in the LTP3.
- The high proportion of positive synergistic relationships suggests a strong platform through which specific measures can be developed which will not lead to a large number of negative significant effects;
- Where inconsistencies have been identified in relation to particular SEA objectives, positive synergies have also been identified. This suggests that as a whole the LTP3 objectives are broadly compatible with the SEA objectives.

6 Appraisal of Strategic Options for East Sussex LTP3

6.1 Introduction

6.1.1 Identifying and comparing strategic alternatives is a key aspect of SEA. Examining alternatives contributes to the process of identifying the environmental performance of the plan and explaining to decision-makers and consultees the preferred strategies and measures being put forward. Alternatives (synonymous with 'options') can be different ways of:

- Achieving the objectives of the plan;
- Achieving the aspirations of the local community;
- Dealing with environmental problems; and
- Dealing with transport problems.

6.1.2 This section describes the three strategic options developed for LTP3. It summarises the findings of the assessment, describes how environmental problems were considered in developing the strategy and selecting the preferred alternative, reasons for rejecting the alternatives, and recommends mitigation and enhancement measures.

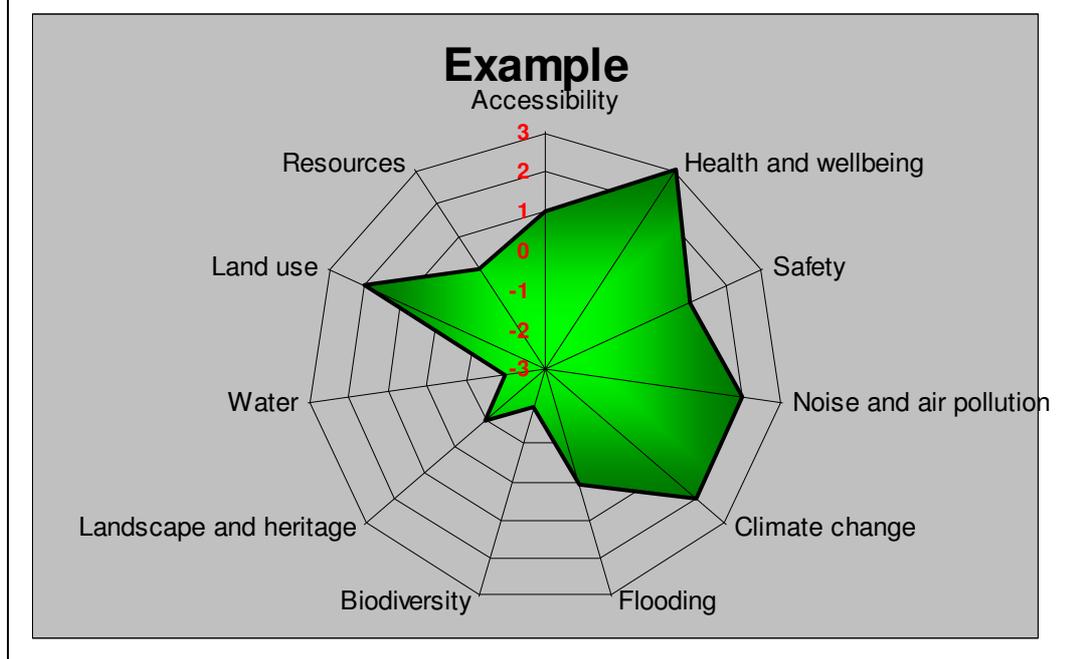
6.1.3 The three options are referred to as:

- Option 1 – Infrastructure;
- Option 2 – Changing travel behaviour; and
- Option 3 – Sustainable growth.

Box 6-1: Explaining the spider diagrams

Spider diagrams have been used to present the assessment findings in a clear manner. **Essentially, the greater the footprint of the shaded area, the better the option or policy performs in sustainability terms.** A scale of 3 to -3 that has been used whereby 3 is a major positive effect, 0 is a neutral effect, and -3 is a major negative effect.

In the example below, the effect of the option / policy is likely to have a major positive effect in terms of health and well being and a moderate negative effect in terms of water and biodiversity. The majority of the remaining effects have been classed as either minor positive or negative, or neutral.



6.2 Option 1 – Infrastructure

6.2.1 This option focuses on providing for increased traffic growth and improved accessibility through road infrastructure investment. In summary, this option would include:

- greater road investment to tackle traffic congestion hotspots on key corridors of movement – this could include the use of urban traffic control (linking of traffic signals) to have greater control on smoothing traffic flow,
- maintain parking controls (but not seek to increase the number of areas with Civil Parking Enforcement – CPE),
- some promotion of sustainable modes of travel: cycling, walking, public transport, car share etc,
- some road safety education activities, and
- integration of highway maintenance with road safety improvement schemes,

- some adaptation to climate change, in terms of infrastructure, but little emphasis on reducing emissions.
- 6.2.2 It contributes to safety through road improvement schemes and as part of maintenance schemes. It will also have a limited impact on adaptation to the effects of climate change. It will have limited emphasis on supporting sustainable travel and on trying to achieve behavioural change.
- 6.2.3 The nature of effects arising from this option are:
- Moderate positive – 3
 - Minor positive – 2
 - Minor negative – 1
 - Moderate negative – 4
 - Major negative - 1
- 6.2.4 These effects are illustrated in Table 6-1 and Figure 6-1 (where a greater the footprint suggests more beneficial likely effects). Moderate and Major effects are considered to be significant and are summarised in Table 6-2.

Table 6-1: Overall performance of Option 1 – Infrastructure

SEA Objectives		Scoring
Access	1. To improve accessibility to services, facilities and jobs for residents, businesses and visitors to East Sussex	Mod+ve
Health and wellbeing	2. To protect and improve the health and wellbeing of the population of East Sussex	Mod-ve
Safety	3. To protect and improve the safety of the population of East Sussex	Mod+ve
Noise and air pollution	4. To reduce transport related noise and air pollution and the impact on human health and wellbeing	Mod+ve
Climate change	5. To limit the causes and adapt to the effects of climate change	Maj-ve
Water	6. To maintain and improve the quality of water resources	Mod-ve
Flooding	7. To reduce the risk of flooding	Min-ve
Land use	8. To improve the efficiency in land use	Min+ve
Resources	9. To maintain resources, including minerals and productive soils	Min+ve
Biodiversity	10. To conserve and contribute to the enhancement of East Sussex's biodiversity	Mod-ve
Landscape and heritage	11. To protect and contribute to the enhancement of the local landscape and built environment	Mod-ve

Figure 6-1: Overall performance of Option 1- Infrastructure

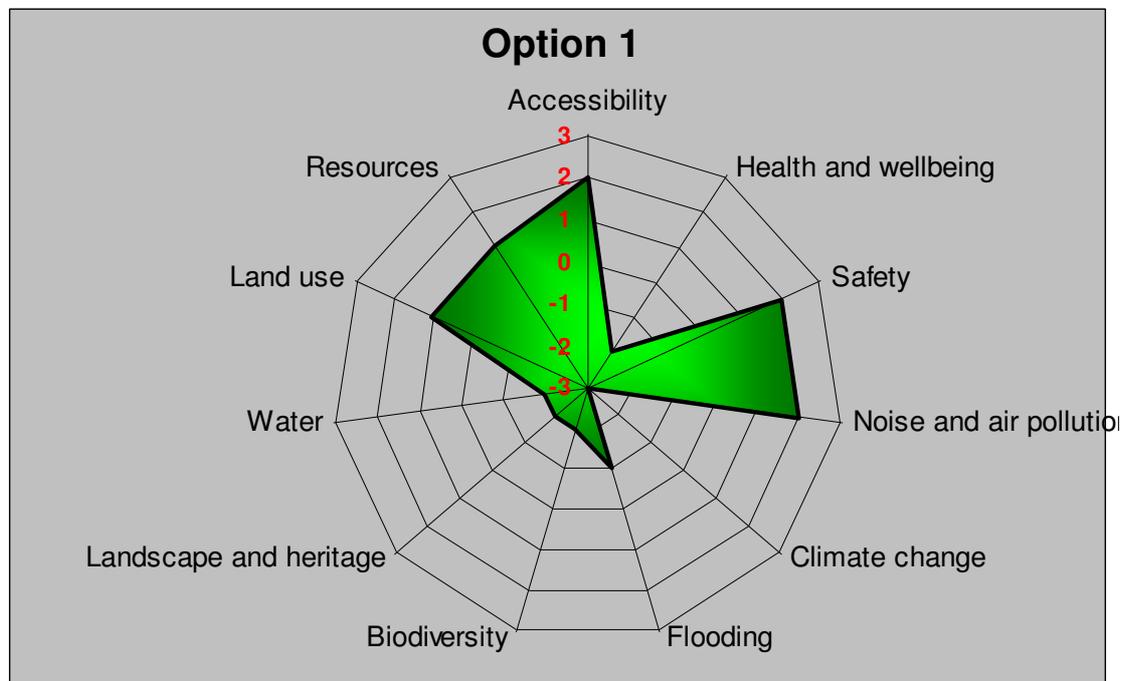


Table 6-2: Likely significant effects of Option 1 – Infrastructure

SEA Objective	Summary of likely significant effect
Access	Positive effects stem from the improvements to overall accessibility however, there is some concern that those without access to a car will not benefit in areas with poor public transport.
Health and Wellbeing	By aiding transport growth increased safety risks to road users, pedestrians and cyclists could result as well as adverse effects upon air quality and community severance.
Safety	While road safety may improve in many areas and current hot spots, there remain concerns over the potential safety impacts other road users and particularly cyclists in urban areas given anticipated increases in traffic.
Noise and air pollution	Investment in road infrastructure in combination with increased housing levels is expected to lead to traffic growth. Although improvements in noise and air quality may occur at particular transport demand and congestion points, deterioration of air quality in AQMAs and in the noise first priority areas may also result.
Climate change	Increased greenhouse gas emissions envisaged with very little recognition for the need to adapt existing infrastructure and deliver network resilience as sought in the LTP3 guidance.
Biodiversity	Negative effects on biodiversity due to road kill and habitat fragmentation may result,

	but opportunities for habitat creation may be available.
Landscape and heritage	The quality of the county's landscape suggests that improved access between the towns and village could adversely affect landscape character and the historic environment.
Water	Increased demand on water resources over the Plan period, particularly on fluvial resources, suggests a higher sensitivity to cumulative effects in the short and long-term as these resources become more sensitive to various sources of pollution. While new highway infrastructure would be designed to meet pluvial flooding, maintenance and improvements to existing drainage system have not been identified thus increasing risk to network resilience.

6.3 Option 2 – Changing travel behaviour

6.3.1 This focuses on measures and initiatives to encourage behavioural change to safe and sustainable modes of travel e.g. walking, cycling, car share and public transport. It will have greater emphasis on reducing carbon emissions and on improving health through physically active travel. In summary, the option would include:

- a greater focus would be on promotion of sustainable modes of travel through travel planning, provision of information and campaigns, supporting Quality Bus Partnerships and Community Transport operations,
- a greater focus on parking control and enforcement with roll out of CPE,
- some investment in infrastructure to support access to integrated sustainable travel e.g. high kerb bus stops, shelters,
- some investment in the integration of highway maintenance with road safety improvement schemes,
- some road safety education, cycling and pedestrian training activities, and
- some investment in the use of technology (Urban Traffic Control, Real Time Bus Information).

6.3.2 The nature of effects arising from this option are:

- Major positive - 1
- Moderate positive – 3
- Minor positive – 2
- Minor negative – 1
- Moderate negative – 1
- Neutral - 2

6.3.3 These effects are illustrated in Table 6-3 and Figure 6-2. Moderate and Major significant effects are then summarised in Table 6-4.

Table 6-3: Likely significant effects of Option 2 – Changing travel behaviour

SEA Objectives		Scoring
Access	1. To improve accessibility to services, facilities and jobs for residents, businesses and visitors to East Sussex	Min+ve
Health and wellbeing	2. To protect and improve the health and wellbeing of the population of East Sussex	Maj+ve
Safety	3. To protect and improve the safety of the population of East Sussex	Min+ve
Noise and air pollution	4. To reduce transport related noise and air pollution and the impact on human health and wellbeing	Mod+ve
Climate change	5. To limit the causes and adapt to the effects of climate change	Mod+ve
Water	6. To maintain and improve the quality of water resources	Mod-ve
Flooding	7. To reduce the risk of flooding	Neut-
Land use	8. To improve the efficiency in land use	Mod+ve
Resources	9. To maintain resources, including minerals and productive soils	Neut-
Biodiversity	10. To conserve and contribute to the enhancement of East Sussex's biodiversity	Mod-ve
Landscape and heritage	11. To protect and contribute to the enhancement of the local landscape and built environment	Min-ve

Figure 6-2: Overall performance of Option 2 – Changing travel behaviour

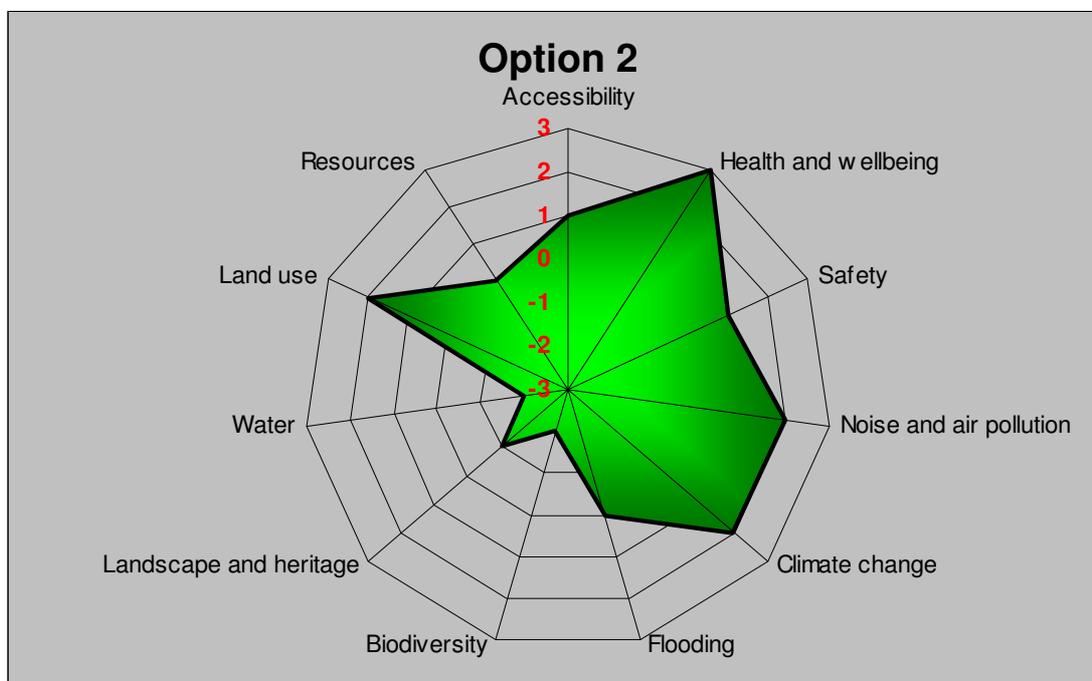


Table 6-4: Likely significant effects of Option 2 – Changing travel behaviour

SEA Objective	Summary of likely significant effect
Health and Wellbeing	Likely to lead to positive significant effects for health and wellbeing, particularly in coastal urban areas where there is greater scope for a step change in a modal shift. The effects in rural areas will be less significant. There is a lack of a strategic response to worsening air quality as a result of climate change and the potential impacts this could have on the elderly and those with respiratory illnesses.
Noise and air pollution	Positive effects are likely due to emphasis on sustainable modes of transport. Benefits from noise reductions are unlikely to be experienced locally. Climate change is expected to worsen air pollution so measures should be explored to minimise effects in AQMAs.
Climate change	Prioritisation of measures to address climate change means that positive effects can be expected. However, no mention made of adaptation or network resilience.
Biodiversity	Cumulative impacts of housing and employment growth and anticipated transport growth with a lack of reference to minimising harm on biodiversity means that negative effects are likely in light of existing trends on biodiversity.
Water	Increased demand on water resources over the Plan period, particularly on fluvial resources, suggests a higher sensitivity to cumulative effects in the short and long-term as these resources become more sensitive to various sources of pollution. Transport growth may increase pollution from this sector.
Land use	While potential positive effects emerging from this option will be tempered because of the relatively limited supply of previously developed land, the emphasis on sustainable transport measures will likely support positive effects against sub-objective to increase connectivity by sustainable modes.

6.4 Option 3 – Sustainable growth

6.4.1 This option focuses on improving accessibility and facilitating sustainable modes of travel by providing the infrastructure to support safe, sustainable journeys and by influencing travel behaviour. It will have the greatest emphasis on reducing carbon emissions and improving health through physically active travel. In summary this option would include:

- localised road improvements to tackle congestion at bottlenecks on the network,
- targeted strategic transport improvements within and outside East Sussex to improve the wider connectivity of the county with the south east, London and beyond,
- promotion and infrastructure for public transport e.g. accessible bus stops, shelters,
- implementation of infrastructure to support integrated sustainable travel - walking, cycling, public transport, car sharing etc. For example – bus priority measures, cycle lanes and facilities, improvements to pedestrian routes to key trip attractors, better rail / bus / cycle interchanges, less street clutter and enhanced public spaces,

- better use of technology to make the best use of the existing transport network e.g. Urban Traffic Control (linking of traffic signals), Real Time Bus Information, charging points for electric vehicles and smart ticketing initiatives,
- parking control and enforcement, and
- road safety through enforcement, education and engineering measures including integration of highway maintenance with safety improvement schemes.

6.4.2 The nature of effects arising from this option are:

- Major positive - 1
- Moderate positive – 3
- Minor positive – 2
- Minor negative – 1
- Moderate negative – 2
- Neutral - 2

6.4.3 These effects are illustrated in Table 6-5 and Figure 6-3. Significant effects are then summarised in Table 6-6.

Table 6-5: Likely significant effects of Option 3 – Sustainable growth

SEA Objectives		Scoring
Access	1. To improve accessibility to services, facilities and jobs for residents, businesses and visitors to East Sussex	Maj+ve
Health and wellbeing	2. To protect and improve the health and wellbeing of the population of East Sussex	Mod+ve
Safety	3. To protect and improve the safety of the population of East Sussex	Min+ve
Noise and air pollution	4. To reduce transport related noise and air pollution and the impact on human health and wellbeing	Min+ve
Climate change	5. To limit the causes and adapt to the effects of climate change	Mod+ve
Water	6. To maintain and improve the quality of water resources	Mod-ve
Flooding	7. To reduce the risk of flooding	Neut-
Land use	8. To improve the efficiency in land use	Mod+ve
Resources	9. To maintain resources, including minerals and productive soils	Neut-
Biodiversity	10. To conserve and contribute to the enhancement of East Sussex's biodiversity	Mod-ve
Landscape and heritage	11. To protect and contribute to the enhancement of the local landscape and built environment	Min-ve

Figure 6-3: Overall performance of Option 3 – Sustainable growth

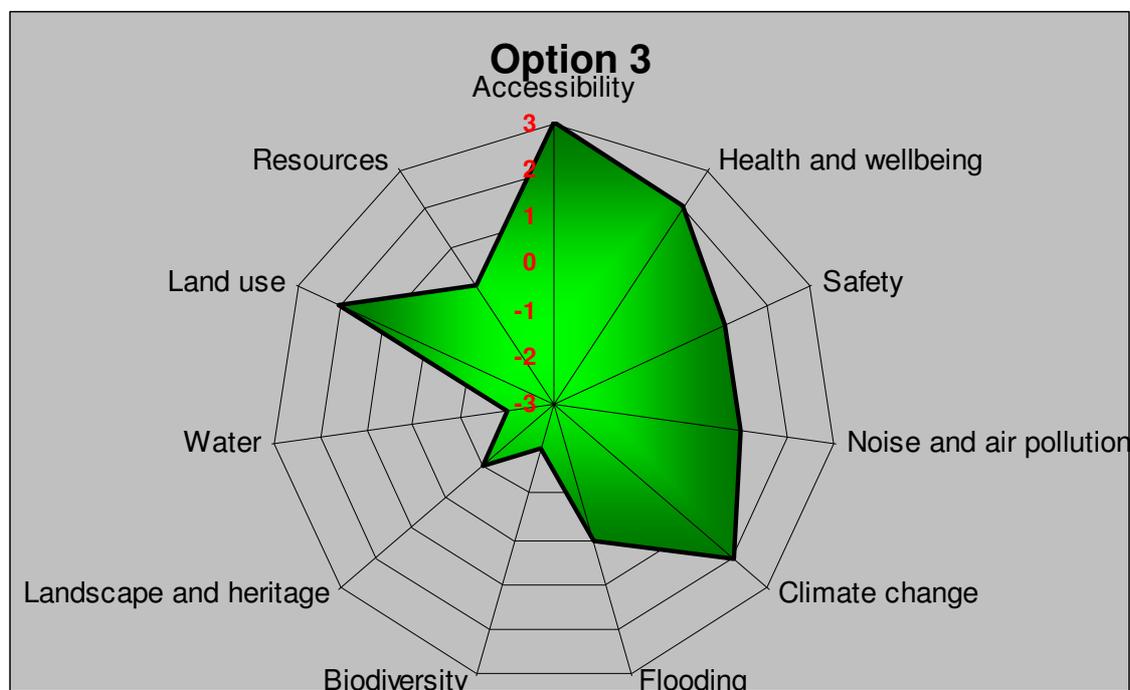


Table 6-6: Likely significant effects of Option 3 – Sustainable growth

SEA Objective	Summary of likely significant effect
Access	Supports access to integrated sustainable travel improving overall access to key services and facilities, particularly for those without access to a vehicle and those living in the periphery of settlements.
Health and Wellbeing	Promotion of sustainable travel could result in positive effects for health and wellbeing. Improved infrastructure (e.g. bike racks at train stations) may facilitate modal shift. Minimising transport growth may minimise air pollution, particularly in urban areas, although a more targeted approach could be adopted to focus on either greatest opportunities or most sensitive populations that would be affected. Increasing the number of people walking and cycling near to high volume transport routes could cause increased exposure to adverse air quality with negative health effects.
Climate change	Promotion of sustainable transport will indirectly help reduce growth in road transport. It is not clear what the contribution towards reducing GHG emissions would be.
Biodiversity	The cumulative impacts of housing growth and anticipated transport growth, when considered in combination with an absence of a strategic response to protecting biodiversity means negative effects may emerge.
Water	Increased pressure on water resources over the Plan period, particularly on fluvial sources, suggests a higher sensitivity to various forms of pollution giving rise to cumulative effects in the short and long-term. Growth in transport may increase

	pollution risk.
Land use	While potential positive effects emerging from this option will be tempered because of the relatively limited supply of previously developed land, the emphasis on sustainable transport measures will likely support positive effects against sub-objective to increase connectivity by sustainable modes.

6.5 Summary of Findings

6.5.1 This section describes the relative performance of the three LTP3 strategic options.

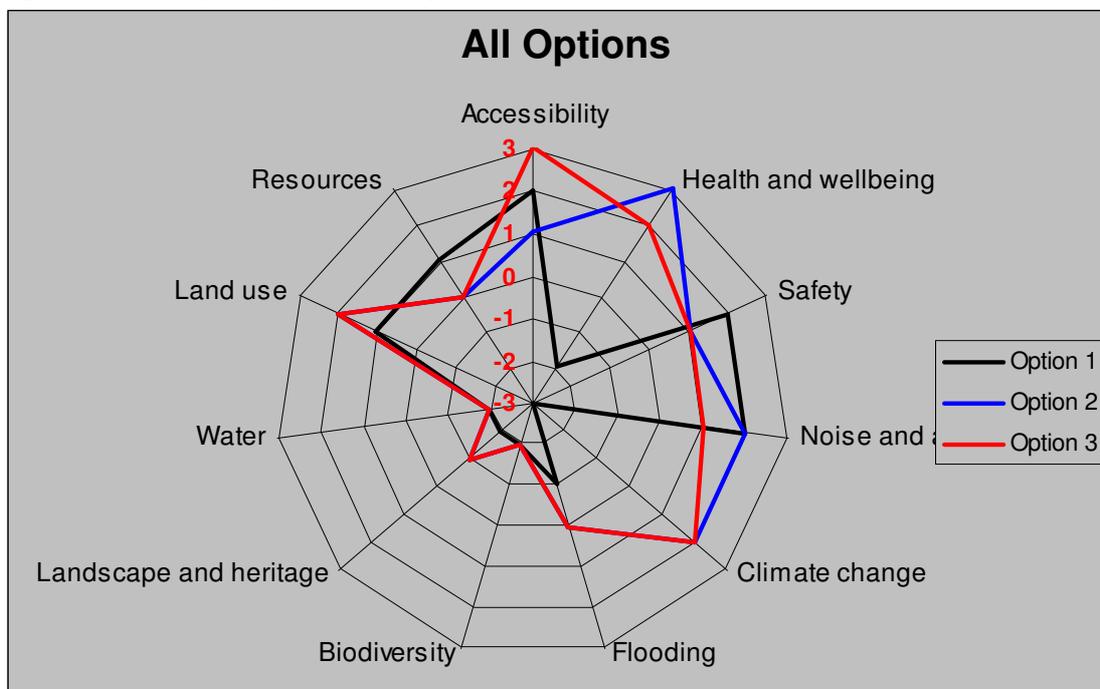
Comparing the options

6.5.2 There are strengths and weaknesses associated with each option and trade-offs will be required when the County Council decides on a preferred approach. The results of the assessment of the three options against each SEA Objective are shown in Table 6-7 and Figure 6-4.

Table 6-7: Comparison between the three options

SA Objectives		Option 1	Option 2	Option 3
Access	1. To improve accessibility to services, facilities and jobs for residents, businesses and visitors to East Sussex	Mod+ve	Min+ve	Maj+ve
Health and wellbeing	2. To protect and improve the health and wellbeing of the population of East Sussex	Mod-ve	Maj+ve	Mod+ve
Safety	3. To protect and improve the safety of the population of East Sussex	Mod+ve	Min+ve	Min+ve
Noise and air pollution	4. To reduce transport related noise and air pollution and the impact on human health and wellbeing	Mod+ve	Mod+ve	Min+ve
Climate change	5. To limit the causes and adapt to the effects of climate change	Maj-ve	Mod+ve	Mod+ve
Water	6. To maintain and improve the quality of water resources	Mod-ve	Mod-ve	Mod-ve
Flooding	7. To reduce the risk of flooding	Min-ve	Neut-	Neut-
Land use	8. To improve the efficiency in land use	Min+ve	Mod+ve	Mod+ve
Resources	9. To maintain resources, including minerals and productive soils	Min+ve	Neut-	Neut-
Biodiversity	10. To conserve and contribute to the enhancement of East Sussex's biodiversity	Mod-ve	Mod-ve	Mod-ve
Landscape and heritage	11. To protect and contribute to the enhancement of the local landscape and built environment	Mod-ve	Min-ve	Min-ve

Figure 6-4: Comparing the three options



- 6.5.3 **Option 1** is likely to result in the greatest number of significant negative effects. This is primarily as it aids the highest rate of transport growth (in relation to the BAU scenario) over the plan period. Direct and indirect negative effects were identified on health and wellbeing, climate change, water resources, biodiversity and landscape and heritage.
- 6.5.4 **Options 2 and 3** are broadly comparable and it is difficult to discern significant differences between them reflecting the level of information currently available. A key missing element was the projected reductions in greenhouse gases while each option is likely to deliver positive effects on accessibility, health and wellbeing, climate change and land use.
- 6.5.5 As illustrated in Figure 6-4, all three options score poorly against biodiversity, landscape and heritage and water resources. This is primarily due to the absence of strategic consideration of these topics and the increasing pressure expected here.
- 6.5.6 South East England is one of the driest regions in the UK and the increasing population and household growth are expected to exacerbate stress on these resources. These factors, in conjunction with the potential impacts of climate change (e.g. more frequent droughts) mean that water resources, particularly rivers, and the ecosystems which rely on them, will become increasingly sensitive to the potential negative effects of discharges from transport-related activities. All three options were assessed as likely to cause moderate negative effects upon water resources due to an absence of measures to respond to these trends.
- 6.5.7 Although the LTP3 does not suggest that designated sites (e.g. Ramsar sites, SACs, SPAs, SSSIs) would be affected, anticipated transport growth could lead to further habitat fragmentation. Hence it is possible that each option could lead to moderate negative effects upon biodiversity. A strategic response would improve the overall sustainability of the LTP3.

6.5.8 With respect to landscape and heritage, increasing accessibility between settlements through additional highway capacity is likely to have negative effects on landscape character. Options 2 and 3 were considered to lead to have the least negative effects.

Difficulties undertaking the assessment / assumptions

6.5.9 The following difficulties were encountered:

- Little indication of the investment available to implement measures over the plan period;
- Little indication of the priority or relative investment associated with each measure;
- The lack of quantification of the performance of the options¹⁴;
- Uncertainty over the focus for the interventions within the county;
- Uncertainty over the distribution and scale of development over the plan period caused by revocation of the draft South East Plan.

6.5.10 As a result the following assumptions were required:

- Housing and employment growth over the plan period would be concentrated in key settlements and not widely distributed throughout the county;
- The projected impacts of climate change as described by UKCP09 are likely to occur;
- The investment available to implement transport measures would be sufficient to achieve the stated LTP3 objectives.

Recommendations for the preferred option

6.5.11 Based on the compatibility assessment undertaken in Section 5 and the assessment of the three options, the recommendations in Table 6-8 were presented to the Council for the preferred option¹⁵. The right hand column is the response the Council has provided to each recommendation.

Table 6-8: Recommendations and County Council Response

SEA Recommendation for the Preferred Option	County Council Response
Focus transport investment away from further road infrastructure and towards support for sustainable modes of travel and indirect support for factors which encourage modal shift e.g. education, facilities, increased safety measures. Priority for preferred option should be to reduce the need to travel; facilitate a modal shift; then increase the efficiency of each individual mode	<i>Investment will still be required in our strategic infrastructure (road and rail) to facilitate economic growth and regeneration in our priorities areas as identified in LTP3. This will be part of an integrated package of measures which also considers non-transport interventions, thereby reducing the need to travel; smarter choices, such as walking, cycling and public transport; making best use of the transport network and enhancing public transport capacity.</i>
Include recognition of the need to ensure current and future flood risk is addressed in the	<i>As part of our Climate Change Strategy and TAMP, we are already considering how we can</i>

¹⁴ Commissioning additional studies or bespoke modelling was not an available as an option that could be undertaken to remedy this constraint.

¹⁵ East Sussex County Council is under no obligation to include our recommendations within the preferred option.

improvement and maintenance of the highway drainage network (taking a whole-life cost approach) and to take steps to improve resilience of the network	<i>adapt our network maintenance and improvement to deal with the increasing risk of flooding. This will be augmented by the development of our Flood Risk Management duties and Surface Water Management Plans for the Bexhill / Hastings and Eastbourne / South Wealden areas.</i>
Provide recognition for the need to conserve and enhance biodiversity across the county either as a priority within the preferred option or by referring specifically to the natural environment as part of the higher level LTP3 objectives	<i>The specific transport objective will be amended to 'Contribute to the protection and enhancement of the local natural and built environment.'</i>
Recognise the need for a strategic response to the transport needs of vulnerable groups such as the elderly or those living in deprived communities	<i>The need to address the transport needs of vulnerable groups, including the elderly and those living in deprived communities, is being considered through the strategic priority areas of the LTP3 and community transport provision.</i>
Provide a clearer description of the priority attached to each measure delivered by each option (e.g. where / when / which measure(s) are the most important)	<i>The level of activity for each measure under each option has been identified in chapter 6 of the LTP3 document.</i>
Comment could be provided on how the management of transport would contribute towards the objectives of the South Downs National Park	<i>The management of transport by encouraging greater access to the area by non-car modes – walking, cycling and public transport, will help to enable the National Park Authority to promote opportunities for the understanding and enjoyment of the area special qualities by residents in the local area as well as visitors.</i>

6.6 Preferred Option

- 6.6.1 Following the County Council's internal appraisal process and drawing on the interim SEA findings of the three options presented to the County Council on 1 June 2010, the County Council determined that Option 3 was likely to best meet their challenges and achieve LTP3's objectives.
- 6.6.2 The County Council concluded that Option 3 is *'one of the options most compatible with the objectives of the Strategic Environmental Assessment and will lead to positive effects with regard to accessibility, health and well being, climate change and land use. Option 3 (along with Option 2) was also found to lead to minimal negative effects on the environment.* For further details on how the County Council took account of SEA recommendations for the LTP3 Strategy Option refer to Table 6-8.
- 6.6.3 In determining a Preferred Strategy for LTP3 the County Council has not modified Option 3. Therefore, the assessment findings from Option 3 remain consistent for the Preferred Strategy.

Reasons for rejecting alternatives (including how environmental problems were considered in developing the strategy and selecting the preferred alternative)

6.6.4 Environmental problems were considered in the development of the strategy and in selecting the preferred alternative by¹⁶:

- Considering strategy options which are particularly focused on one or more of the high level objectives which include tackling climate change which has particular relevance in option 2 and option3;
- The identification of the particular environmental issues and opportunities in the county;
- Identification of a high level LTP3 objective to tackle climate change and the environmental transport objective in relation to reducing greenhouse gas emissions, local air pollution and noise from transport;
- Considering the implications of local and national environmental strategies in the wider context around the development of LTP3; and
- Considered the outcomes of the SEA as part of the overall evaluation in the preferred strategy option.

6.6.5 In addition, a variety of factors influenced the County Council's decision to reject Option 1 and Option 2. The primary reasons for rejected Option 1 are:

...it scored very poorly against the objectives of the strategy. It is very much a traditional road orientated option based on a predicted rise in car journeys, whereas the objectives emphasise the importance of reducing the need to travel and changing behaviour towards using more sustainable modes of transport. Option 1 also scored badly in terms of negative effects on the environment, in particular on health and well being and protecting and enhancing the local landscape and built environment. With regard to deliverability this option is the one that would require the greatest level of investment.

6.6.6 The primary reasons for the rejection of Option 2 are:

Option 2 scored just slightly less than Option 3 against each of the LTP objectives. It is deemed as 'roughly comparable' with Option 2 in terms of environmental impact [council to fill in more text here]. However, while having equal emphasis on achieving behaviour change it is less likely than Option 3 to provide the infrastructure which will facilitate and maintain those changes.

Proposed mitigation and enhancement measures for preferred strategy

6.6.7 Several potential mitigation recommendations were identified for Option 3. These are described in Table 6-9 alongside the County Council's response.

¹⁶ The bulleted factors for the selection of the preferred alternative have been provided by the County Council and were not written by the Consultants.

Table 6-9: Proposed mitigation recommendations for preferred option

Significant effect	Recommendation	County Council Response
Water resources	Due to potentially increased sensitivity of river networks, LTP3 could promote sustainable urban drainage where it would be helpful to attenuate highway runoff to balance flows and mitigate polluted runoff to ecologically important watercourses	<i>This will be considered in relation to new developments and as part of the emerging Surface Water Management Plans for South Wealden / Eastbourne and Hastings.</i>
Biodiversity	Provide recognition for the need to conserve and enhance biodiversity across the county either as a priority within the preferred option or by referring specifically to the natural environment as part of the higher level LTP3 objectives	<i>The specific transport objective will be amended to 'Contribute to the protection and enhancement of the natural and built environment.'</i>
Health and well being	Demonstrate how the transport needs of vulnerable groups such as the elderly or those living in deprived communities to promote accessibility and limit social isolation is to be integrated across other policy areas	<p><i>The transport needs of vulnerable groups e.g. the elderly and those living in deprived communities, to promote accessibility and limit social isolation is incorporated into the:</i></p> <p><i>Community Transport Strategy – the needs of the elderly and young have been identified as high priorities in the identification of CT schemes.</i></p> <p><i>Accessibility Strategy – this looks at accessibility to jobs and services and identifies ways in which accessibility can be improved within the County Council's own business and that of other partners as a mechanism to reduce social exclusion. This has been done for 5 locations across the county over the LTP2 period and these actions are now incorporated into local action plans. Those outstanding actions will be incorporated into the Implementation Plan for LTP3 as well as engaging with our partners to ensure they incorporate their attributable actions into their business practices.</i></p>
Health and well being / Safety	A more targeted approach to sustainable travel interventions within urban areas that provide either the greatest overall benefit or respond to specific needs of certain groups (e.g. the elderly) could improve the sustainability of LTP3.	<i>The strategy for LTP3 will look at targeting specific key corridors of movement in our priority areas and tackling issues on these corridors through sustainable travel interventions for pedestrians, cyclists and public transport users.</i>
Resources	Minimise the use of primary aggregates and develop procurement strategies that promote use of recycled materials. A related challenge is to adopt a whole-life	<i>Our term contractor and our design and maintenance teams are always actively considering ways in which we can recycle materials to reduce costs and increase</i>

	<p>approach to the selection of materials that takes account of the impacts associated with extraction and transport.</p>	<p><i>sustainability. As part of our Transport Asset Management Plan, we looked at the whole life cost of schemes. It considers the cost of transporting materials and looks at local sourcing where possible and at the maintenance implications over the life of a scheme. This will also be considered as part of the scheme prioritisation framework which will consider life costs of a potential scheme to ensure its overall long term value for money is factored into the decision making process by which schemes are developed and delivered.</i></p>
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7 Assessment of the Policy Priorities for Delivering the Preferred Strategy

7.1 Introduction

7.1.1 This section introduces the findings from the assessment of the policy priorities developed by the County Council for delivering the preferred strategy, including any delivery alternatives that have also been considered.

7.2 Delivery of the Preferred Strategy; T&E Portfolio Plan and Supporting Strategies

7.2.1 Delivery of the Preferred Strategy is partially framed by the priorities set by the County Council's Transport and Environment Portfolio Plan 2010 for a four year period to 2013/14. In addition, strategies on specific transport topics such as community transport, road safety and walking, have been developed by the County Council in partnership with various stakeholders.

7.2.2 While these priorities and supporting strategies will play an important role in delivering the Preferred Strategy for the LTP3, they are external to the LTP3 and do not require assessment as part of the LTP3 SEA.

Transport and Environment Portfolio Plan Priorities to 2013/14

7.2.3 Drawing on high level priorities set by the County Council and specifically the Transport & Environment Portfolio Plan (which sets out priorities for the four year period to 2013/14), the transport priorities are:

- Passenger / Community transport;
- Road maintenance;
- Road safety; and
- Provision of infrastructure.

7.2.4 The Council Plan joins together the strands of the departmental service plans and priorities to maximise synergy between the County Council's service areas and ensure that resources are reconciled with plans and policies.

Supporting Strategies

7.2.5 The County Council has developed a collection of strategies on different transport issues which will help guide the delivery of LTP3. These supporting strategies are prepared to various timelines and are refreshed as necessary. While it is not the role of the LTP3 SEA to individually assess each of these supporting strategies, recommendations from this SEA may inform their revision.

7.2.6 The supporting strategies are as follows:

- Walking
- Cycling

- Bus
- Community transport
- Transport information
- Sustainable school travel
- Transport education / behaviour change
- Freight
- Road safety
- Speed management
- Accessibility
- Rail
- Rights of Way (RoW)
- Air Quality
- Intelligent Transport Systems (ITS)
- Parking
- Transport Asset Management Plan (TAMP)

7.3 Spatial Priorities

7.3.1 Within the provision of infrastructure priority set by the County Council's Transport and Environment Portfolio Plan, the County Council has decided that the focus should be centred on four areas where spatial growth is proposed to take place as part of the LTP3 process. These are:

- Development of the Eastbourne / south Wealden
- Regeneration in Bexhill / Hastings;
- Regeneration of Newhaven; and
- Development in Uckfield.

7.4 Summary of Assessment Findings

7.4.1 This section presents a summary of the SEA findings from the identification of the spatial priority areas within the LTP3 including key policies developed for each area. Each spatial priority area has been separately assessed and the findings have kept this structure. Following the presentation of the assessment the likely significant effects are reported along with the rationale / justification for this finding and recommendations included for potential mitigation.

7.4.2 The following three factors affect the assessment:

- The priority areas provide a focus for delivering new infrastructure identified within the Transport and Environment Portfolio Plan. The limited amount of funding anticipated to be made available for infrastructure funding during the early part of LTP3 suggests that the effects from these spatial priorities in the short term will be relatively limited;
- Given funding uncertainties, it is not known if or when particular schemes would be delivered hence all findings should be considered with this in mind;
- The information available at an appropriate spatial resolution to assess the policies was not ideal and where this may affect the assessment this is recorded in the tables supporting this Environmental Report.

7.5 Development of the Eastbourne / south Wealden area

- 7.5.1 This section presents the findings of the identification of Eastbourne / south Wealden as a priority for transport infrastructure investment encompassing consideration of the seven key policies that have been developed for the area (see Box 7-1).
- 7.5.2 The following text has been taken from the LTP3 to introduce the important issues and challenges for this priority area:

The overriding issue is to improve connectivity and capacity both within the Eastbourne / south Wealden area and between that are ad the rest of the South East. The current lack of good strategic connections is seen as inhibiting spatial growth and as a barrier to creating a more diverse economy that is more resilient to economic downturns. We would want to see good integration between housing, employment and social facilities in order to reduce the need to travel and to enable sustainable travel choices to be made.

Box 7-1: Key policies for the Eastbourne / south Wealden priority area

- develop a cycle strategy, and implement a network of routes which focus on:
- the improvement of the National Cycle Network routes, and
- key routes into Eastbourne town centre and along the seafront, and provide links to residential areas in Eastbourne and neighbouring settlements in the South Wealden area,
- continue the promotion of travel plans in businesses and schools, through our Travelchoice brand, to encourage changes in travel behaviour towards sustainable modes of travel,
- continue to manage on-street parking in Eastbourne through civil parking enforcement and controlled parking zones, including appropriate reviews of parking restrictions, and developing and implementing a parking strategy for on and off street parking in the town, and
- work with the National Park Authority, to improve walking, cycling and public transport links into the SDNP.

- 7.5.3 Only one likely significant effect was identified as a result of the identifying Eastbourne / Hailsham / Polegate as a priority area for infrastructure investment. The majority of likely effects would potentially have minor negative effects against the SEA objectives. This assessment reflects the overriding issues that have been identified for the area, i.e. improving connectivity and capacity, in association with the additional housing growth that is forecast.

Table 7-1: Likely significant effects of Eastbourne south Wealden as a priority area for infrastructure investment

SEA Objectives		Scoring
Access	1. To improve accessibility to services, facilities and jobs for residents, businesses and visitors to East Sussex	Mod+ve
Health and wellbeing	2. To protect and improve the health and wellbeing of the population of East Sussex	Min-ve

Safety	3. To protect and improve the safety of the population of East Sussex	Min-ve
Noise and air pollution	4. To reduce transport related noise and air pollution and the impact on human health and wellbeing	Min-ve
Climate change	5. To limit the causes and adapt to the effects of climate change	Min-ve
Water	6. To maintain and improve the quality of water resources	Min-ve
Flooding	7. To reduce the risk of flooding	Min-ve
Land use	8. To improve the efficiency in land use	Min+ve
Resources	9. To maintain resources, including minerals and productive soils	Min-ve
Biodiversity	10. To conserve and contribute to the enhancement of East Sussex's biodiversity	Min-ve
Landscape and heritage	11. To protect and contribute to the enhancement of the local landscape and built environment	Min-ve

Figure 7-1: Overall performance of Eastbourne / south Wealden as a priority area for infrastructure investment

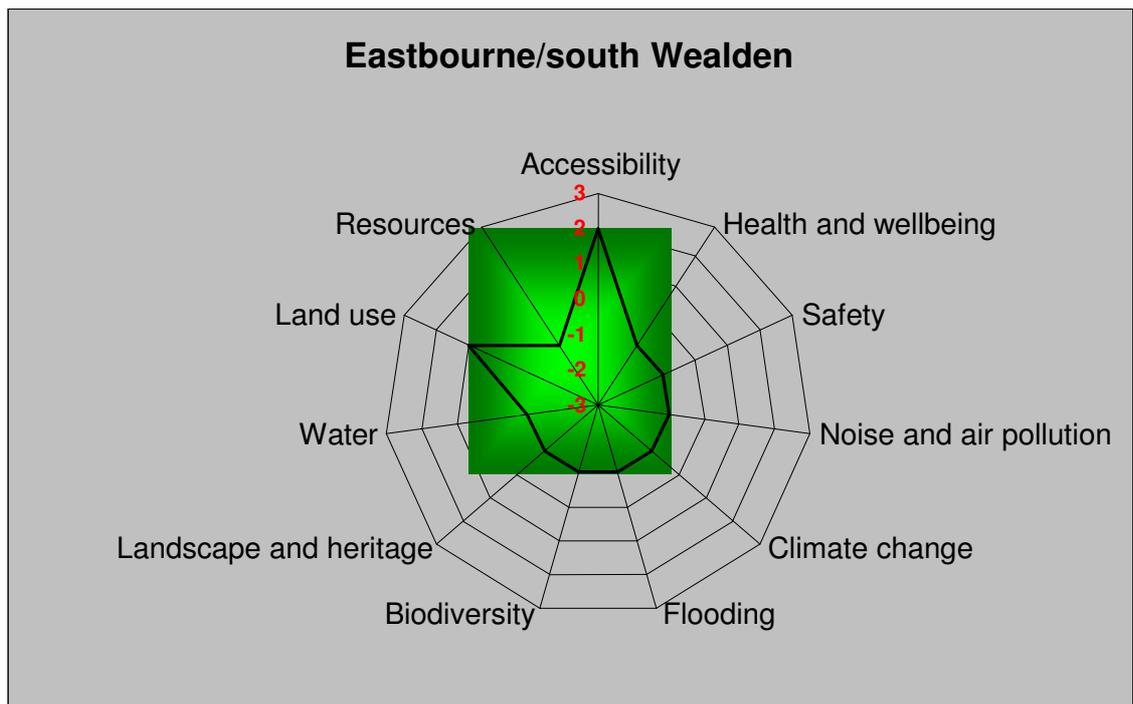


Table 7-2: Likely significant effects from Eastbourne / south Wealden as a priority area for infrastructure investment

SA Objective	Nature of Likely Significant Effects	Rationale	Possible Mitigation
Access	Mod+ve	The primary transport objective for this spatial area is to improve connectivity within and external to this area and the current lack of strategic connections identified as the primary inhibitor of growth and economic development.	n/a

7.6 Regeneration in Bexhill / Hastings

7.6.1 The construction of a link road between Bexhill and Hastings has become a crucial element of the £400m regeneration plan for Hastings and Bexhill¹⁷. At the time of writing the County Council is awaiting a decision from the Secretaries of State for Transport and for Communities and Local Government on whether the road can proceed. This decision will have an important bearing on the effects of the LTP3 and subsequent investment decisions within the Bexhill / Hastings area.

7.6.2 **The findings presented within this sub-section do not reflect a strategic environmental assessment of the proposals for the Bexhill / Hastings link road (BHLR) because they are external to LTP3**, rather they consider potential significant effects associated with the LTP3 nominating it as a priority area. The findings include consideration for the key policies that have been identified for this area assume that the link road proceeds (see Box 7-2).

Box 7-2: Key policies for the Bexhill / Hastings priority area

Our approach to delivering infrastructure to achieve sustainable economic growth in Bexhill and Hastings is to:

- continue to promote and deliver the Bexhill to Hastings Link Road,
- deliver a package of complementary measures to the Link Road to enhance the positive impacts of the scheme and enable access by sustainable modes of transport,
- focus on improvements and safety of key walking routes in both towns,
- develop and implement the cycle route networks for Hastings and Bexhill, focusing on key routes into the town centre, along the seafront and providing links to existing and future residential and employment areas,
- continue development of the Quality Bus Partnership (QBP) for Hastings focused on improving services and infrastructure to deliver improved punctuality on the following key bus corridors:
- A259 Bexhill to Hastings/Ore,

¹⁷ This statement is derived from text within LTP3 written by the County Council, it does not reflect an assessment as part of the SEA by Scott Wilson.

- London Road/Battle Road,
- Core 'Arrows' routes network running east/west across the town and through the town centre, and
- Conquest Hospital and Bexhill & Hastings Colleges,
- developing a QBP for Bexhill focused on improving services and infrastructure in the town and along the Bexhill to Hastings corridor,
- continuing to manage on-street parking in Hastings through civil parking enforcement and controlled parking zones, including appropriate reviews of parking restrictions,
- continue to promote travel plans with businesses and schools through our Travelchoice brand to encourage behaviour change,
- continue to lobby for major strategic infrastructure improvements on the A21 to help deliver economic and housing growth in the Bexhill and Hastings area,
- continue to lobby and influence, in partnership with other stakeholders, Network Rail and the train operating companies to maintain and enhance rail capacity and services to accommodate growth in the area, with new stations at Glyne Gap and Wilting,
- investigate potential improvements across the transport network to facilitate housing and employment growth including:
 - Bexhill Country Avenue Western Extension,
 - Hastings Spur Road Phase 2, and
 - junction improvements across the network to address local bottlenecks, and
 - measures to improve traffic movements and access on foot, by bike or by public transport in Hastings and Bexhill town centres.

Table 7-3: Likely significant effects of regeneration of Bexhill / Hastings

SEA Objectives		Scoring
Access	1. To improve accessibility to services, facilities and jobs for residents, businesses and visitors to East Sussex	Maj+ve
Health and wellbeing	2. To protect and improve the health and wellbeing of the population of East Sussex	Min+ve
Safety	3. To protect and improve the safety of the population of East Sussex	Min+ve
Noise and air pollution	4. To reduce transport related noise and air pollution and the impact on human health and wellbeing	Mod-ve
Climate change	5. To limit the causes and adapt to the effects of climate change	Min-ve
Water	6. To maintain and improve the quality of water resources	Neut-
Flooding	7. To reduce the risk of flooding	Min-ve
Land use	8. To improve the efficiency in land use	Min+ve
Resources	9. To maintain resources, including minerals and productive soils	Neut-

Biodiversity	10. To conserve and contribute to the enhancement of East Sussex's biodiversity	Min-ve
Landscape and heritage	11. To protect and contribute to the enhancement of the local landscape and built environment	Min-ve

Figure 7-2: Overall performance of development of regeneration of Bexhill / Hastings

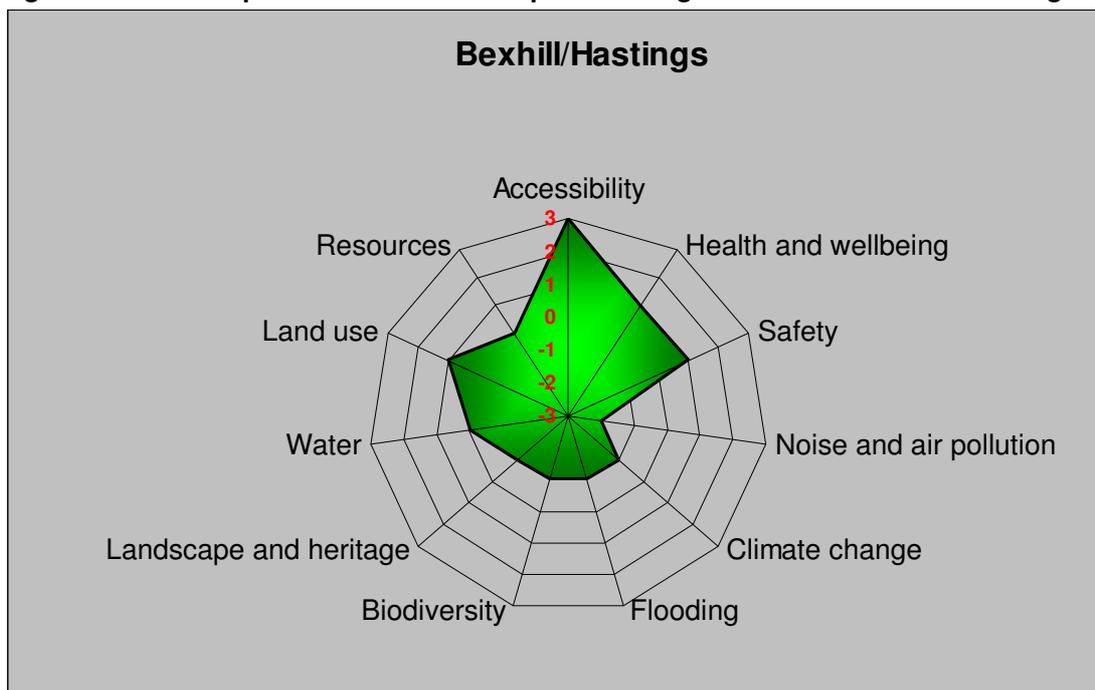


Table 7-4: Likely significant effects from development of regeneration of Bexhill / Hastings

SA Objective	Nature of Likely Significant Effects	Rationale	Possible Mitigation
Accessibility	Maj+ve	Although the degree of positive effects are contingent on BHLR decision. Selection of this area for investment is likely to lead to improvements by increasing access to services, facilities and jobs.	n/a
Noise and air pollution	Mod-ve	The new link road and road capacity improvement works are likely to lead to traffic growth and thus noise and air pollution, particularly in light of forecast housing growth.	Draw on EqIA findings to prioritise environmental enhancement schemes associated with road building to benefit any disadvantaged groups

7.7 Regeneration of Newhaven

- 7.7.1 This section presents the findings of the identification of Newhaven as a priority for transport infrastructure investment encompassing consideration of the six key policies that have been developed for the area (see Box 7-3).
- 7.7.2 The following text has been taken from LTP3 to introduce the constraints for the regeneration of Newhaven:

Newhaven sits at the intersection of a number of important transport links. Although these provide Newhaven with a locational advantage, they are also the source of several of the town's problems and are constrained by the proximity of the South Downs National Park to the north. The River Ouse and the railway line run through the middle of the town and dividing it into a western and eastern half. The A259 further divides the town into northern and southern sectors. It is a single carriageway through Newhaven and it encircles the town centre in the form of a Ring Road, creating severance issues. The A259 through Newhaven is often congested and the operation of the swing bridge compounds this problem. The A26 provides a north south link between Newhaven and the A27 to the north. The A26 is of substandard alignment and offers few overtaking opportunities, although the South Downs. The C7, which links Newhaven and Lewes is narrow and of poor alignment and passes through a number of small villages. The traffic generated from new housing development that is planned in this area will add to the existing problem.

Box 7-3: Key policies for the Newhaven priority area

We will deliver sustainable economic growth in Newhaven by:

- creating a transport interchange facility at Newhaven Town Station to improve integration between rail and bus, along with improved facilities for cyclists, pedestrians and taxis,
- investigating potential improvements at key junctions across the transport network to enable development and regeneration,
- promoting development to fund the construction of the Newhaven Port Access Road as appropriate to enable expansion of the port and the development of the Eastside, facilitating economic growth in the town,
- reviewing the function of the Ring Road and investigate/implement appropriate improvements to reduce severance to the town centre,
- focusing on further improvements to the bus route network into and within Newhaven, in particular the A259 corridor, to improve accessibility to bus stops and journey time reliability,
- focusing on improvements to, and safety of, key walking routes and corridors of movement to reduce community severance and provide access to schools, local shops and facilities, employment, health services and secondary centres as well as the town centre,
- developing and implementing a cycle strategy and route network, focused on key routes providing links from residential areas to the town centre, train station and port, as well as to routes to Seaford, Peacehaven, Lewes and the SDNP, to

- complement the existing NCN2,
- work with our partners including public transport providers, Job Centres and GP consortia to deliver actions which improve accessibility to key facilities in the town, and
 - work with the National Park Authority, to improve access into the South Downs National Park.

7.7.3 The likely significant negative effects are with respect to noise and air pollution and flooding risk objectives.

Table 7-5: Likely significant effects of regeneration of Newhaven

SEA Objectives		Scoring
Access	1. To improve accessibility to services, facilities and jobs for residents, businesses and visitors to East Sussex	Maj+ve
Health and wellbeing	2. To protect and improve the health and wellbeing of the population of East Sussex	Min+ve
Safety	3. To protect and improve the safety of the population of East Sussex	Min-ve
Noise and air pollution	4. To reduce transport related noise and air pollution and the impact on human health and wellbeing	Mod-ve
Climate change	5. To limit the causes and adapt to the effects of climate change	Min-ve
Water	6. To maintain and improve the quality of water resources	Min-ve
Flooding	7. To reduce the risk of flooding	Mod-ve
Land use	8. To improve the efficiency in land use	Min+ve
Resources	9. To maintain resources, including minerals and productive soils	Neut-
Biodiversity	10. To conserve and contribute to the enhancement of East Sussex's biodiversity	Neut-
Landscape and heritage	11. To protect and contribute to the enhancement of the local landscape and built environment	Neut-

Figure 7-3: Overall performance of regeneration of Newhaven

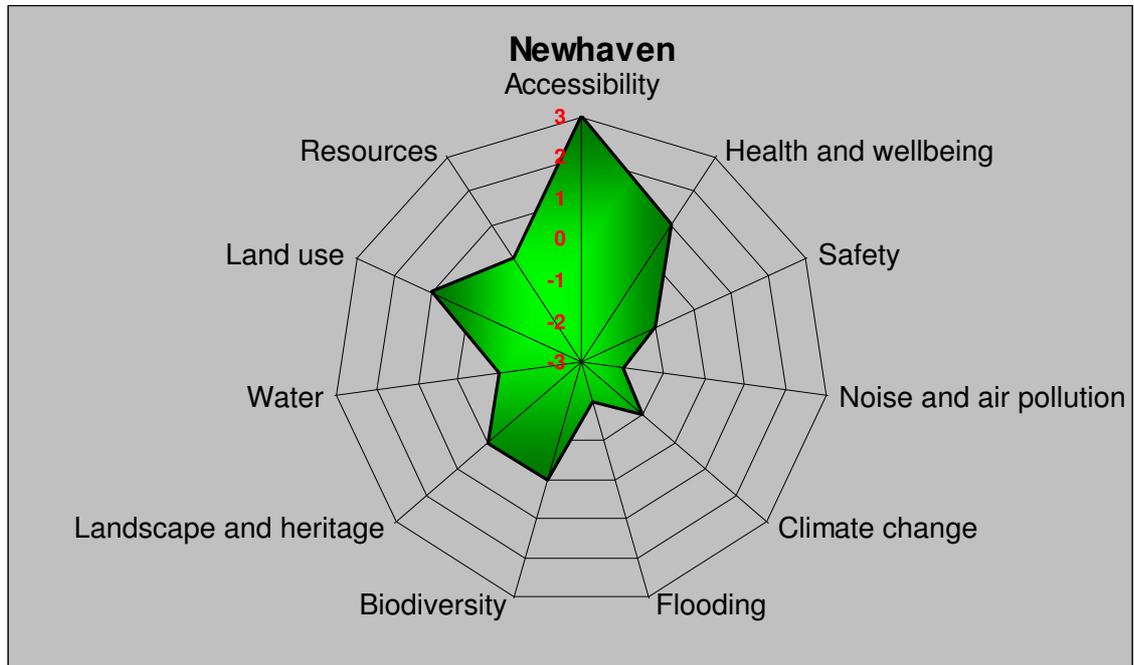


Table 7-6: Likely significant effects from regeneration of Newhaven

SA Objective	Nature of Likely Significant Effects	Rationale	Possible Mitigation
Accessibility	Maj+ve	Despite funding uncertainties for measures supporting port expansion, adoption of Newhaven within LTP3 in conjunction with promotion by Lewes District Council, could lead to significant positive effects.	n/a
Noise and air pollution	Mod-ve	Existing levels of congestion, additional traffic-related constraints and the LTP3 preferred option suggests that expanded port facilities could increase local noise and air pollution	Implement improvements in conjunction with expanded port facilities
Flooding	Mod-ve	A large part of Newhaven is at risk of flooding.	Assess resilience of transport infrastructure to extreme weather events

7.8 Development in Uckfield

7.8.1 This section presents the findings of the identification of Uckfield as a priority for transport infrastructure investment encompassing consideration of the four key policies that have been identified for the area (see Box 7-4).

7.8.2 The following text has been taken from LTP3 to introduce the constraints and objectives for the development of Uckfield:

Traffic in Uckfield has increased in recent years, resulting in congestion in the town centre. Efforts have been made to manage the increasing traffic levels by introducing improvements to the existing traffic signal controlled junctions in the town, particularly at the junctions of Bell Lane and Framfield Road with the High Street. However, the highway network is very near capacity, meaning there is little capacity available to accommodate a further increase in traffic.

The traffic generated by any future housing in and around Uckfield coming forward through the Wealden Local Development Framework (LDF), is likely to exacerbate the situation and so an appropriate traffic management solution in the town centre is required. The County Council, Wealden District Council and Uckfield Town Council are exploring ways to improve the traffic flow in Uckfield, as part of the development of a wider preferred masterplan for the town.

Box 7-4: Key policies for Uckfield priority area

We will deliver sustainable economic growth in Uckfield by:

- investigating and advising on potential town centre traffic improvement

options to accommodate the additional traffic from committed and planned development in Uckfield, without prejudicing the future reinstatement of the Uckfield to Lewes rail line,

- investigating transport measures associated with future development which reduce the levels of background pollution that could be damaging to human and environmental health,
- focusing on improvements to and safety of key walking and cycling routes to reduce community severance and provide access to schools, local facilities, employment, health facilities, open space, train station and the town centre,
- focusing on measures which improve access to bus stops on key routes in the town, in particular the Brighton – Lewes – Uckfield – Tunbridge Wells service, in and around the town centre and to the hospital,
- continuing support and lobbying for electrification, dual tracking, and in the short term, increased capacity on the Uckfield line,
- continuing to support and lobby for the reinstatement of the Uckfield to Lewes railway line, and the Eridge to Tunbridge Wells railway line, as part of wider rail capacity improvements in the county, and

working with our partners including public transport providers, Job Centres and GP consortia to deliver actions which improve accessibility to key facilities in the town

7.8.3 No significant effects were identified as a result of this policy for Uckfield apart from flooding. This largely reflects the emphasis provided by the preferred strategy for LTP3, existing local and county-wide trends, and a lack of available data specific spatial scale.

Table 7-7: Likely significant effects of development in Uckfield

	SEA Objectives	Scoring
Access	1. To improve accessibility to services, facilities and jobs for residents, businesses and visitors to East Sussex	Min-ve
Health and wellbeing	2. To protect and improve the health and wellbeing of the population of East Sussex	Min-ve
Safety	3. To protect and improve the safety of the population of East Sussex	Min-ve
Noise and air pollution	4. To reduce transport related noise and air pollution and the impact on human health and wellbeing	Min-ve
Climate change	5. To limit the causes and adapt to the effects of climate change	Min-ve
Water	6. To maintain and improve the quality of water resources	Min-ve
Flooding	7. To reduce the risk of flooding	Mod-ve
Land use	8. To improve the efficiency in land use	Neut-
Resources	9. To maintain resources, including minerals and productive soils	Neut-
Biodiversity	10. To conserve and contribute to the enhancement of East Sussex's biodiversity	Min-ve
Landscape and heritage	11. To protect and contribute to the enhancement of the local landscape and built environment	Neut-

Table 7-8: Overall performance of development in Uckfield

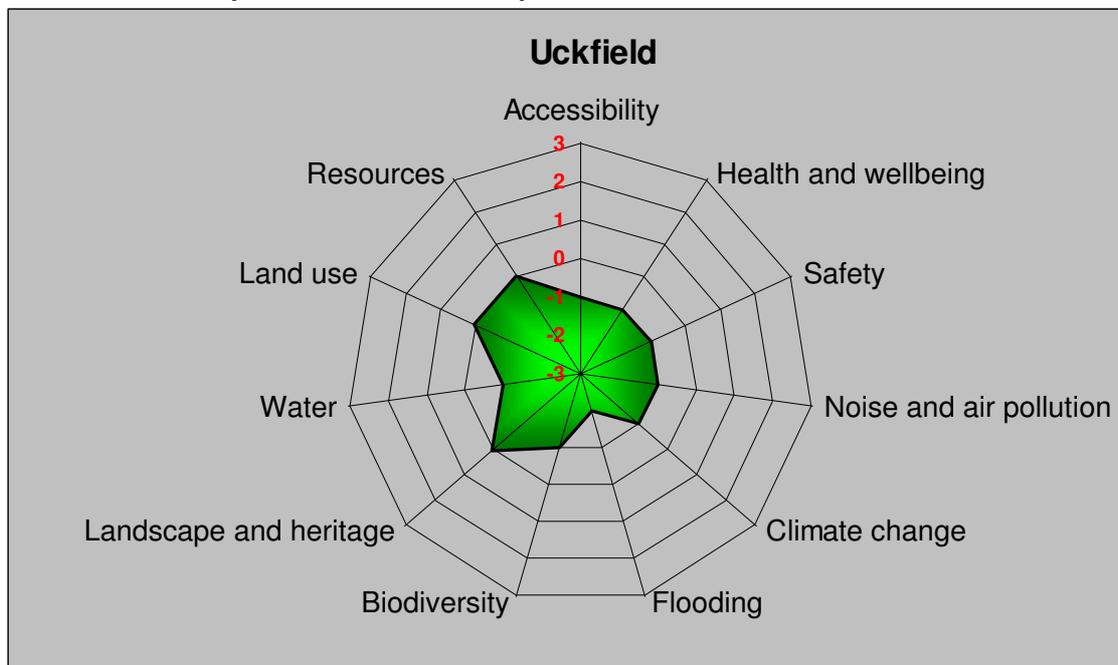


Table 7-9: Likely significant effects from development in Uckfield

SA Objective	Nature of Likely Significant Effects	Rationale	Possible Mitigation
Flooding	Mod-ve	The high profile and destructive flood events in 2000 suggest the area is sensitive to flooding. This assessment is considered cumulatively with the increased risk of flooding as a result of climate change.	<p>Work with district departments to ensure gully clearing operations are undertaken at an appropriate frequency</p> <p>Undertake an assessment of network vulnerability to flooding within this area</p> <p>Ensure that all transport interventions consider potential long-term risks posed by climate change</p>

7.9 Summary

7.9.1 Table 7-18 summarises the mitigation recommendations (both positive and negative) that have been identified in the section above.

Table 7-10: Summary of mitigation recommendations

Spatial Priority / Alternative	SEA Objective	Recommendation	County Council Response
Bexhill / Hastings	Noise and air pollution	Draw on EqlA findings to prioritise environmental enhancement schemes associated with road building to benefit any disadvantaged groups	<i>As part of the complementary measures associated with the Link road, we are promoting the establishment of the Pebsham Countryside Park between Bexhill and Hastings to provide a green open space between the towns with walking , cycling and equestrian routes to provide access into the within the park.</i>
Newhaven	Noise and air pollution	Implement improvements in conjunction with expanded port facilities	<i>Any additional noise/air pollution associated with the expanded port would need to be mitigated to reduce these potential effects.</i>
	Flooding	Assess resilience of transport infrastructure to extreme weather events	<i>This will need to be considered through our responsibilities under the Flood Management Act and through the Transport Asset Management Plan (TAMP) for the county. We would also consider the ESCC Climate Change Strategy as we adapt our network to increase its resilience to extreme weather</i>
Uckfield	Flooding	<p>Work with district departments to ensure gully clearing operations are undertaken at an appropriate frequency</p> <p>Undertake an assessment of network vulnerability to flooding within this area (this could also be extended to a county-wide assessment)</p> <p>Ensure that all transport interventions consider potential long-term risks posed by climate change</p>	<p><i>Gully clearance – this will be taken up with Wealden District Council</i></p> <p><i>Network vulnerability to flooding – this will be considered as part of our obligations under the Flood Management Act and Surface Water Management Strategies.</i></p> <p><i>Potential long term risks posed by climate change – The scheme prioritisation process will consider risks associated with issues including climate change</i></p> <p><i>The TAMP will consider how the transport infrastructure in the county will be adapted to take account of the potential effects of climate change.</i></p>
All	Health and well being	Provide additional text describing in greater detail how and where LTP3 can contribute towards meeting the challenges of an increasingly aging population	<i>This has been incorporated into the document as appropriate.</i>

Cross-cutting opportunities for enhancement

7.9.2 Several cross-cutting opportunities have been identified which could further enhance the environmental performance of LTP3. These are described in Table 7-19.

Table 7-11: Cross-cutting opportunities for enhancement

SEA Objectives	Recommendation	County Council Response
Safety Landscape and heritage Climate change	The Government Response to the Royal Commission on Environmental Pollution (RCEP) Report on Artificial Light in the Environment supports the recommendation that 'the highways authorities and local authorities reassess the lighting of roads against potential road safety and crime reduction benefits.' Guidance will be forthcoming on this point and should be incorporated by the county within their supportive transport strategies.	<i>The level of street lighting should be provided as part of new schemes to ensure that the safety of all road users is not compromised. Initiatives such as using more energy efficient lighting, white light, ensuring that street lighting is diffused downwards, minimising light spill, are already County Council practice and will help address the SEA objectives of safety, landscape and heritage and climate change.</i>
Climate change Noise and air pollution	The LTP3 could provide targeted support for the implementation of Directive 2009/33/EC of the European Parliament on the promotion of clean and energy-efficient road transport vehicles. This could consist of measures to encourage the use of these types of vehicles (e.g. through parking policies).	<i>Noted. This will be incorporated into the final LTP3 document.</i>

8 SEA of Post-Consultation LTP3

8.1.1 The County Council published the draft LTP3 for public consultation between 4 October 2010 and 4 January 2011. Following consideration of all 132 representations the Council made a number of amendments to the draft LTP3. These amendments are described below and have also undergone further assessment to determine whether they could lead to further significant effects. This section presents the findings from this assessment of the changes to the following LTP3 components:

- LTP3 Objectives;
- Strategic Options;
- Policy Priorities.

8.2 Assessment of changes to LTP3 Objectives

8.2.1 While minor changes have been made to:

- The presentation order of the high level objectives and to their wording
- The presentation order of the specific transport objectives and to their wording.

8.2.2 No significant effects are identified.

8.3 Assessment of changes to LTP3 Spatial Priorities

8.3.1 Minor changes have been made to the following LTP3 spatial priorities:

- Development of the Eastbourne & South Wealden (Hailsham / Polegate) area;
- Regeneration in Bexhill / Hastings;
- Regeneration of Newhaven; and
- Development in Uckfield.

8.3.2 All four of the spatial priority areas have been reviewed and the changes made by the Council do not change the previous assessment findings.

8.3.3 In addition to the four priority areas the Council has developed new policy approaches for the following spatial areas in response to the consultation findings

- Lewes, South Coast Towns and South Downs;
- Battle, Rye and Rural Rother;
- North Wealden and North Lewes District.

8.3.4 The approaches to these spatial areas have been individually assessed and are presented below.

Lewes, South Coast Towns and South Downs

8.3.5 This sub-section presents the findings of the assessment for Lewes, South Coast Towns and South Downs (see Box 8-1) with Table 8-1 recording the likely significant effects.

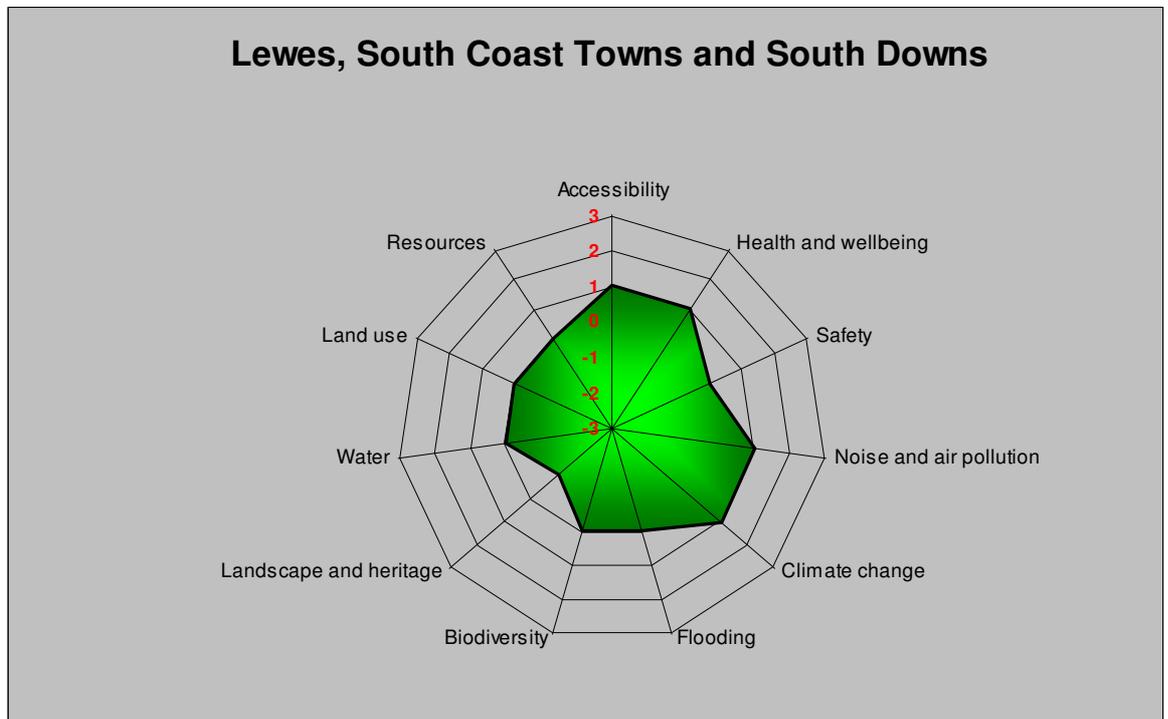
Box 8-1: Approach for Lewes, South Coast Towns and South Downs

- Working with Lewes District Council and the National Park Authority to enhance the status of Lewes as a gateway town for sustainable access by walking, cycling, public transport, community transport and rail into the South Downs National Park.
- Maintaining accessibility for rural communities in the National Park.
- Working with Lewes District Council to identify transport measures to support sustainable development coming forward through the Local Development Framework including the potential development of land at North Street.
- Focusing on improvements for safe, coherent walking and cycling routes on key corridors in Lewes and the south coast towns.
- Focusing on improvements to public transport on key routes and corridors in Lewes and the south coast towns and potential for better interchange facilities.
- Focusing on transport measures to tackle congestion and address the air quality issues in Lewes town centre.
- Work with key partners including public transport providers, Job Centres and GP Consortia to improve accessibility to key facilities in the area.

Table 8-1: Likely significant effects of the approach for Lewes, South Coast Towns and South Downs

SEA Objectives		Scoring
Access	1. To improve accessibility to services, facilities and jobs for residents, businesses and visitors to East Sussex	Min+ve
Health and wellbeing	2. To protect and improve the health and wellbeing of the population of East Sussex	Min+ve
Safety	3. To protect and improve the safety of the population of East Sussex	Neut-
Noise and air pollution	4. To reduce transport related noise and air pollution and the impact on human health and wellbeing	Min+ve
Climate change	5. To limit the causes and adapt to the effects of climate change	Min+ve
Water	6. To maintain and improve the quality of water resources	Neut-
Flooding	7. To reduce the risk of flooding	Neut-
Land use	8. To improve the efficiency in land use	Neut-
Resources	9. To maintain resources, including minerals and productive soils	Neut-
Biodiversity	10. To conserve and contribute to the enhancement of East Sussex's biodiversity	Neut-
Landscape and heritage	11. To protect and contribute to the enhancement of the local landscape and built environment	Min-ve

Figure 8-1: Overall performance of the approach for Lewes, South Coast Towns and South Downs



8.3.6 No likely significant effects were identified. The single minor negative effect against the landscape and heritage objective reflects the cumulative impacts of transport for this area in light of wider housing and employment growth.

Battle, Rye and Rural Rother

8.3.7 This sub-section presents the assessment of the approach for Battle, Rye and Rural Rother (see Box 8-2) with Table 8-2 documenting the likely effects.

Box 8-2: Approach for Battle, Rye and Rural Rother

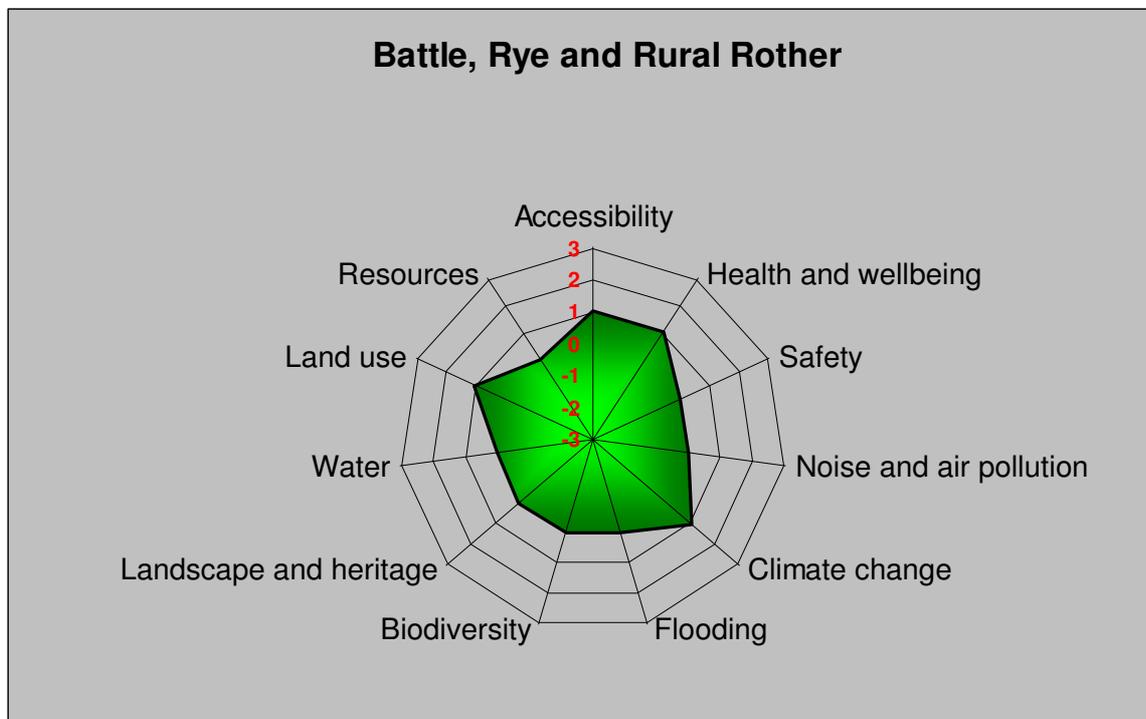
- Working with Rother District Council to identify new or improvements to transport infrastructure to support sustainable development in Battle, Rye and the villages of rural Rother which emerges from the LDF.
- Focusing on improvements on safe, coherent walking and cycling routes on key routes/corridors in Battle and Rye.
- Focusing on improvements to public transport on key routes and corridors in Battle and Rye.
- Focusing on reducing traffic congestion in Battle and Rye town centres; through careful siting of new development through the LDF process, and improving access to the train stations by sustainable transport.

- Improving access to and integration at local rail stations.
- Working with partners, including public transport providers, Job Centres and GP Consortia, to improve access to key services in the area, particularly focusing on the provision of transport and travel information.

Table 8-2: Likely significant effects of the approach for Battle, Rye and Rural Rother

SEA Objectives		Scoring
Access	1. To improve accessibility to services, facilities and jobs for residents, businesses and visitors to East Sussex	Min+ve
Health and wellbeing	2. To protect and improve the health and wellbeing of the population of East Sussex	Min+ve
Safety	3. To protect and improve the safety of the population of East Sussex	Neut-
Noise and air pollution	4. To reduce transport related noise and air pollution and the impact on human health and wellbeing	Neut-
Climate change	5. To limit the causes and adapt to the effects of climate change	Min+ve
Water	6. To maintain and improve the quality of water resources	Neut-
Flooding	7. To reduce the risk of flooding	Neut-
Land use	8. To improve the efficiency in land use	Min+ve
Resources	9. To maintain resources, including minerals and productive soils	Neut-
Biodiversity	10. To conserve and contribute to the enhancement of East Sussex's biodiversity	Neut-
Landscape and heritage	11. To protect and contribute to the enhancement of the local landscape and built environment	Neut-

Figure 8-2: Overall performance of the approach for Battle, Rye and Rural Rother



8.3.8 No significant effects were identified.

North Wealden and North Lewes District

8.3.9 The assessment of the approach for North Wealden and North Lewes District (see Box 8-3) is provided below with Table 8-3 recording the likely significant effects.

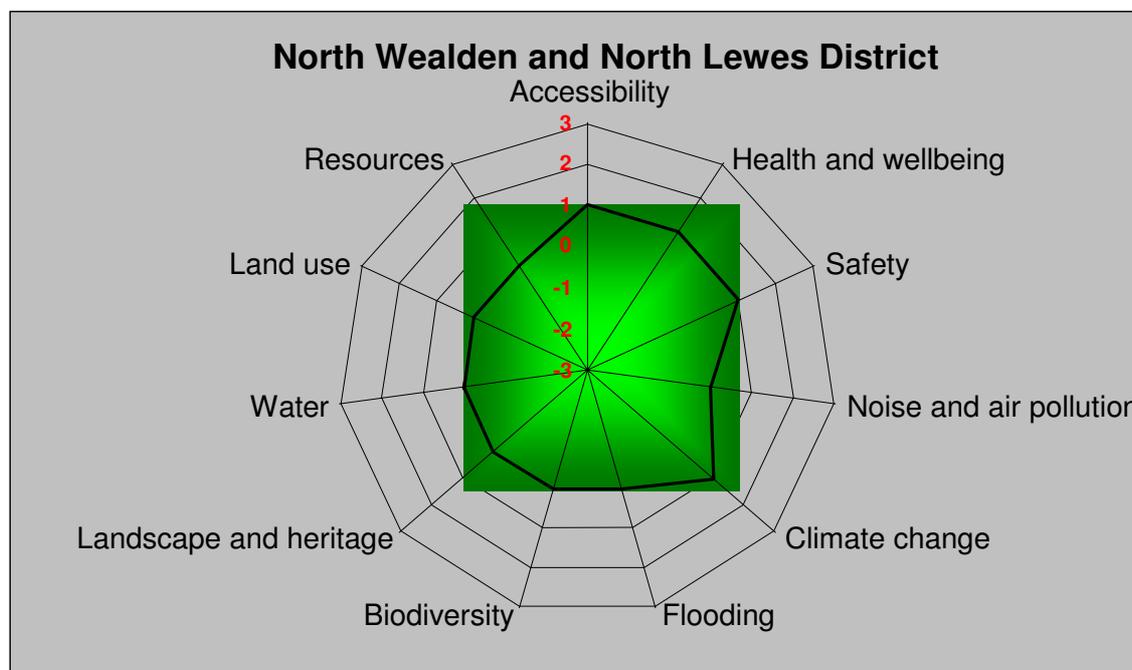
Box 8-3: Approach for North Wealden and North Lewes District

- Retaining and enhancing both Heathfield and Crowborough as service centres for the local community and surrounding settlements thereby reducing the need to travel through the provision of sustainable travel options.
- Focusing on improvements on safe, coherent walking and cycling routes on key routes/corridors in Crowborough and Heathfield particularly focused on access to the town centre.
- Focusing on improvements to public transport on key routes and corridors in and into Crowborough and Heathfield particularly focused on access to the town centre.
- Improving access to and integration at local rail stations
- Identifying potential solutions to improve the current public transport links between towns and settlements within the district to support the local economy and reduce rural isolation.

Table 8-3: Likely significant effects of the approach for North Wealden and North Lewes District

SEA Objectives		Scoring
Access	1. To improve accessibility to services, facilities and jobs for residents, businesses and visitors to East Sussex	Min+ve
Health and wellbeing	2. To protect and improve the health and wellbeing of the population of East Sussex	Min+ve
Safety	3. To protect and improve the safety of the population of East Sussex	Min+ve
Noise and air pollution	4. To reduce transport related noise and air pollution and the impact on human health and wellbeing	Neut-
Climate change	5. To limit the causes and adapt to the effects of climate change	Min+ve
Water	6. To maintain and improve the quality of water resources	Neut-
Flooding	7. To reduce the risk of flooding	Neut-
Land use	8. To improve the efficiency in land use	Neut-
Resources	9. To maintain resources, including minerals and productive soils	Neut-
Biodiversity	10. To conserve and contribute to the enhancement of East Sussex's biodiversity	Neut-
Landscape and heritage	11. To protect and contribute to the enhancement of the local landscape and built environment	Neut-

Figure 8-3: Overall performance of the approach for North Wealden and North Lewes District



8.3.10 No significant effects were identified.

8.4 Summary

- 8.4.1 The amendments to the LTP3 following public consultation are not likely to lead to any significant effects.

9 Monitoring Proposals

9.1.1 The County Council already undertakes a wide range of monitoring activities that contribute to a better understanding of the effects of plans and policies, including those related to transport. The monitoring proposals provided in Table 8-1 are designed to address the likely significant effects of LTP3 as identified through the SEA or to provide a more informed basis for future plan making.

Table 9-1: Monitoring proposals

Related SEA Objective	Summary of significant effects	Monitoring proposal
Access	Housing and employment growth across the county may lead to a decrease in overall accessibility as key routes become more congested.	NI176 Access to employment by public services A monitoring indicator should be developed to help monitor changes in accessibility experienced in deprived communities
Health and wellbeing	The county faces significant challenges in terms of the level of physical activity among children and obesity. The provision and promotion of sustainable transport solutions can be used to improve the physical and mental health and wellbeing of the local population.	NI 55 Obesity of children in reception NI 56 Obesity of children in year 6 Length of cycle routes completed
Noise and air pollution	The potential for negative effects related to decreased noise and air quality have been identified, particularly for disadvantaged groups in Bexhill, Hastings and Newhaven.	Total area within AQMAs NI 167 Congestion Congestion in Bexhill, Hastings and Newhaven Delivery of measures for First Priority Locations in East Sussex for Major Roads and Major Railways outside agglomerations
Climate change (mitigation)	Reductions in greenhouse gas emissions from transport as a result of LTP3 should be carefully monitored to ensure that these are maximised in order to contribute to national obligations.	Person trips Vehicle kilometres Fuel sales Percentage modal split in transport use (per year)
Climate change (adaptation)	There is potential for network resilience to be negatively affected as a result of future extreme weather events.	A monitoring indicator should be developed to help identify the impacts of extreme weather events on the road network. This could relate to the number of road closures due to flooding or fallen trees as a result of high winds, or immediate highway costs from dealing with flooding.

Related SEA Objective	Summary of significant effects	Monitoring proposal
Water	A number of factors (including population growth and climate change) suggest that water resources may become increasingly sensitive through the plan period. There is the potential for negative effects from transport on this receptor.	Annual number of accidental spillages into watercourses on county highways Number of SuDS measures introduced to the highway estate Number of SuDS measures introduced to the highway estate within SPZ Zone 1
Flooding	A number of places across the county are at high risk of flooding with corresponding negative effects to the highway estate and network resilience.	An indicator measuring the economic impacts of flooding events should be developed Days bus services are diverted as a result of flooding events
Landscape and Heritage	Housing growth and associated road infrastructure and traffic could lead to negative effects on the county's landscape.	Traffic flow increase (%) to bus service ratio on key routes in AONBs in order to respond to peaks in seasonal traffic (the purpose of this indicator will be to demonstrate whether bus services increase along with traffic levels).
Resources	Investment in transport infrastructure will provide opportunities to encourage greater recycling of materials and reduce use of raw material.	Monitoring should be undertaken to help determine the use of recycling aggregate targets within physical works

Appendix 1 – National, regional and local plans and programmes reviewed for SEA

Level of Document	Title	Author	Date
National			
	Meeting Targets through Transport	DfT	2008
	Transport Act 2000	Parliament	2000
	Local Transport Act 2008	Parliament	2008
	Guidance on Local Transport Plans	DfT	2009
	Towards a Sustainable Transport System	DfT	2007
	Delivering a Sustainable Transport System	DfT	2008
	Low Carbon Transport; a Greener Future	DfT	2009
	An analysis of urban transport	Cabinet Office	2009
	PPS 1: Delivering Sustainable Development	ODPM	2005
	PPS 7: Sustainable Development in Rural Areas	ODPM	2004
	Thinking About Rural Transport	Commission for Rural Communities	2009
	UK Government Sustainable Development Strategy: Securing the Future	DEFRA	2005
	Planning for a Sustainable Future, White Paper	CLG, DfT, DEFRA, DTI	2007
	PPG 13: Transport	DETR	2001
	Policies and Best Practice Handbook	DfT	2009
	Managing Our Roads	DfT	2009
	Britain's Transport Infrastructure Strategic Rail Freight Network: The Longer Term Vision	DfT	2009
	Government's Motorcycling Strategy: Revised Action Plan	DfT	2009
	National Policy Statement on Ports	DfT	2010
	Community Transport LTP Best Practice Guidance	DfT	2010
	PPG 15: Planning and the Historic Environment	DoE	1994
	Core Accessibility Indicators Guidance	DfT	2009
	PPG 16: Archaeology and Planning	DoE	1990
	The Natural Environment and Rural Communities Act 2006 (Commencement No.2)	Parliament	2006
	Saving Lives: Our Healthier Nation	DoH	1999
	Choosing Health: Making Healthy Choices Easier	DoH	2004
	Draft Guidance on Health in Strategic Environmental Assessment: Consultation Document	DoH	2007
	Choosing Health: A Physical Activity Action Plan	DoH	2005
	Healthier Weight Healthier Lives	DoH	2008

	Promoting and creating built or natural environments that encourage and support physical activity	NICE	2008
	Fair Society, Healthy Lives, Marmot Review on Health Equalities	DoH	2010
	PPG 24: Planning and Noise	DoE	1994
	Planning and Climate Change – Supplement to PPS1	CLG	2007
	The Planning Response to Climate Change: advice on better practice	ODPM	2004
	Climate Change: The UK Programme	Defra	2006
	Climate Change Act	Parliament	2008
	PPS 23 Planning and Pollution Control	ODPM	2004
	PPS 9: Biodiversity and Geological Conservation	ODPM	2005
	Air Quality Strategy for England, Scotland, Wales and Northern Ireland	Defra	2007
	Guidance to Local Authorities on Implementing the Biodiversity Duty	DEFRA	2007
	Safeguarding our Soils: A Strategy for England	Defra	2009
	Transport Guidance: Supporting Access to Positive Activities	DCFS	2009
	Good Practice Guide: Integrated Transport Measures in National Parks	DfT	2005
	Energy White Paper	DTI	2007
	The Energy Challenge – DTI Energy Review: A Report	DTI	2006
	PPS 25: Development and Flood Risk	CLG	2006
	Strategic Framework and Policy Statement on Improving the Resilience of Critical Infrastructure to Disruption from Natural Hazards	Cabinet Office	2009
	Draft Flood & Water Management Bill	Defra	2009
	Roads – Delivering Choice and Reliability	DfT	2008
	Climate Change Adaptation Plan for Transport 2010-2012: Enhancing Resilience to Climate Change	DfT	2010
	Transport Carbon Reduction Delivery Plan	DfT	2010
	A New Approach to Rural Public Transport	Commission for Integrated Transport	2008
	Addressing Rural Issues in Local Transport Plans	Commission for Rural Communities	2006
	Manual for Streets	DfT	2007
	Cycle Infrastructure Design	DfT	2008
	Making Car Sharing and Car Clubs Work: A Good Practice Guide	DfT	2004
Regional			
	South East Regional Sustainability Framework: Towards a Better Quality of Life	SEERA et al	2008
	The South East Plan: Regional Spatial Strategy for the South East of England	GOSE	May 2009

	The South East England Health Strategy	Regional Public Health Group	2008
	Regional Economic Strategy	SEEDA	2006
	Climate Change Mitigation and Adaptation Plan for the draft SE Plan	SEERA, ESPACE	March 2006
	Transport and Local Development Frameworks	SEERA	2008
	Monuments at Risk	EH	2008
	Heritage at Risk South East	EH	2008
county			
	Pride of Place: Working Towards a Better Future for Local People and Local Communities. A Sustainable Community Strategy for East Sussex	ESSP	2008
	All Together Better – The East Sussex Local Area Agreement 2009/10 version	ESSP	June 2008
	Best Value Review of Sustainable Communities Report by Project Board	ESCC	March 2005
	East Sussex Freight Strategy	ESCC	2004
	Local Transport Plan 2006 - 11	ESCC	2006
	High Weald AONB Management Plans 2004 2 nd edition 2009	High Weald JAC	2009
	South Downs Management Plan 2008 - 13	SDJC	2008
	Sussex Biodiversity Action Plan		
	Sussex Coastal Towns Sub-regional Study	ESCC	2004
	Children and Young People's Plan 2008 -11	ESCC	2008
Local			
	Hastings Borough Council Draft AQMA	HBC	2004
	Lewes District Council AQMA	LDC	2005
	Wealden Core Strategy (consultation draft)	WDC	2009
	Rother Core Strategy Preferred Options	RDC	2008
	Lewes Core Strategy Preferred Options	LDC	2006
	Hastings Core Strategy Preferred Options (consultation)	HBC	2008
	Eastbourne Core Strategy Preferred Options	EBC	2003