Suffolk County Council

Sustainability Appraisal of the Third Suffolk Local Transport Plan

For Suffolk County Council

January 2011

Prepared by Business Development, Suffolk County Council

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NON-TECHNICAL SUMMARY

1.1 Introduction

The aim of sustainability appraisal is to promote sustainable development by ensuring environmental, social, and economic factors are considered during plan preparation. The European Directive 2001/42/EC, transposed into UK law in July 2004, requires Strategic Environmental Assessment (SEA) to be undertaken to assess the effects of plans and programmes specifically on the environment. Department for Transport (DfT) guidance requires a Strategic Environmental Assessment to be completed for Local Transport Plans. However to ensure that the New Approach to Appraisal (NATA) requirements are properly integrated it is more appropriate to refer to the process as sustainability appraisal, specifically including social and economic issues.

Sustainability appraisal is an iterative process that follows the various stages of plan preparation. The preparation of this report for the third Local Transport Plan is stage C of a 5 stage process and follows the Department for Transport (DfT) Guidance.

This report sets out the results of the sustainability appraisal of the Suffolk Local Transport Plan 2011-2031 Part 1 Transport Strategy and Part 2 Implementation Plan. The Plan develops a longer term vision for transport in Suffolk overt the next two decades and sets out an implementation plan for the first four years. It looks at issues in the seven District Council areas of the County and sets out twenty four policies covering urban areas, rural areas, transport asset management, road safety, transport networks, public rights of way, and public transport networks. It will be a guiding document to District Council core strategy development plan documents.

Baseline information on key aspects of the environment, economy and society was published in a Scoping Report in May 2010. Following comments received the Scoping Report has been updated/amended and republished with this document.

Thirteen sustainability objectives spanning environmental, social and economic factors were used in the appraisal. The compatibility check against the fourteen plan objectives revealed a weakness in the Local Transport Plan objective “Minimise impact of transport on historic and natural environment”. This objective is not effective in countering the potential threat of activities that will increase traffic movements or involve a lot of maintenance work because in only seeking to minimise the impact it does not fully protect biodiversity and certainly does not enhance it. The mitigation for this would be to strengthen the Local Transport Plan objective to make it clear that protection of biodiversity in Suffolk is an objective of the plan.

In addition to appraising the twenty four policies in the plan, an option for each policy was generated by the Sustainability Appraisal team as the Plan itself did not go through a formal process of option generation. These options largely looked at the “do nothing” situation – assuming continuation of existing trends. Comparison of the results of the strategy with the options revealed that the strategy was significantly more sustainable overall although the options were slightly less damaging on biodiversity and geodiversity, only because less new works would be undertaken.

1.2 Likely significant effects of the third Local Transport Plan policies

Overall the proposed plan will have strong beneficial impacts on health, social, community and accessibility for residents and the economy of Suffolk. The most significant effects of the third Local Transport Plan policies will be on reducing carbon emissions, reducing road accidents and encouraging indigenous and inward investment.

However the environmental sustainability of the plan, other than for reducing carbon emissions is poor. The sustainability appraisal suggests the plan will have a damaging

effect on biodiversity and geodiversity because it fails to demonstrate that these aspects will be considered when designing new schemes or in maintenance work. Statutory regulations will need to be met, but there appears to be a missed opportunity to forward plan to avoid loss of habitats, the need to move habitats or to improve habitats when undertaking major works or maintenance activities. There is no vision of seeking to enhance biodiversity, giving the impression that it is subservient to cost and budget restrictions.

The cumulative assessment of the plan policies suggests the plan will have a neutral effect on historic and archaeological assets. However at a policy level there is a concern that the introduction of more signage linked to sustainable transport and variable message signage could have a negative impact on historic areas in market towns. Control of freight movement and congestion in market towns would help protect the fabric of historic buildings.

1.3 Recommendations for mitigation
(a) The objective "Minimise impact of transport on historic and natural environment" be replaced with the following:

"Protect and enhance the historic and natural environment when implementing transport initiatives."
This will ensure that biodiversity and geodiversity are protected and enhanced bringing the Local Transport Plan in line with the objective included in the Suffolk Community Strategy "Retain, enhance and value Suffolk's natural and historic environment".

(b) Policy 2.3 be made more explicit and changed to:

"More sustainable processes and use of materials, managing the impact of construction and maintenance on biodiversity, geodiversity, historic buildings and archaeological assets"
This would ensure that the impact of all new infrastructure works and maintenance activities were considered, prioritising biodiversity and built environment assets for their own sake. This would ensure consideration of appropriate signage in historic environments.

The above changes would mean that the negative impact of the Plan policies on Sustainability Appraisal objective 8 *To protect and enhance biodiversity and geodiversity* would change to a positive impact and the neutral impact of 9 *To protect and enhance historic or archaeological assets* would also change to positive. The negative result for SA12 *To maintain and improve water, soil and mineral quality and resources* is not a concern because the Plan already includes a policy that will ensure that recyclable materials and environmentally friendly processes will be used (Policy 2.3 as amended above). Hence mitigation is not required.

1.4 Difference the process has made
This Sustainability Appraisal has provided an independent assessment of the third Local Transport Plan.

The recommendations made in this report are now available for public consultation following which Suffolk County Council has the opportunity to review the plan content alongside any public comments.

1.5 How to comment on the report
If you would like to comment on this report, please contact:
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2. Introduction

2.1 Purpose of the report

The European Directive 2001/42/EC, transposed into UK law in July 2004, requires Strategic Environmental Assessment (SEA) to be undertaken to assess the effects of plans and programmes specifically on the environment. Department for Transport (DfT) guidance requires a Strategic Environmental Assessment to be completed for Local Transport Plans. However to ensure that the New Approach to Appraisal (NATA) requirements are properly integrated it is more appropriate to refer to the process as sustainability appraisal, specifically including social and economic issues.

Hence a sustainability appraisal (SA), an assessment of the possible environmental, social and economic impacts of the draft Suffolk Local Transport Plan 3 (LTP3) has been undertaken and the results presented in this report. The overall purpose of the SA is to evaluate the likely implications for sustainable development in Suffolk of the proposed LTP and reasonable alternatives to it. The aim of the SA is to inform the plan-making process to enable the LTP to take account of the ways in which transport problems might affect the economy, environment and communities of Suffolk.

There are two sections to this report.

- the non-technical summary of the sustainability appraisal of the key policies in LTP3.
- the main appraisal that sets out the approach taken to SA, method of assessment, background information on the current issues in Suffolk, describes the sustainability objectives and looks at the compatibility between the SA and Plan objectives, sets out the results of the appraisal and mitigation measures required.

2.2 Compliance with SEA directive and regulations

This SA is intended to fully comply with the requirements of the SEA Directive, as set out in "A Practical Guide to the Strategic Environmental Assessment Directive" September 2005. It also has regard to the Department for Transport (DfT) "Strategic Environmental Assessment Guidance for Transport Plans and Programmes" (Web Tag Unit 2.11, see www.webtag.org.uk) (DfT, 2004).

Appendix 4 sets out a quality assurance checklist designed to illustrate how the technical and procedural elements of the SEA process have been handled in this appraisal.

3. METHOD OF APPRAISAL

3.1 Approach to Sustainability Appraisal

The European Directive 2001/42/EC, transposed into UK law in July 2004, requires Strategic Environmental Assessment (SEA) to be undertaken to assess the effects of plans and programmes specifically on the environment. Government Guidance in 2005 required SA to be undertaken together for land use plans as the processes are very similar. Department for Transport (DfT) guidance requires a SEA to be completed for LTPs and refers to the process for SEA, focusing on environmental conditions. However to ensure that the New Approach to Appraisal (NATA) requirements are properly integrated it is more appropriate to refer to the process as SA, specifically including social and economic issues. SA encompasses SEA as the former looks at environmental, social and economic impacts. Hence an SA has been undertaken on Suffolk's LTP 3 and in the following where reference is made to SEA guidance, this will be followed plus social and economic issues included. SA is an iterative process that follows the various stages of plan preparation. The preparation of this Environmental Report for the LTP is stage C of a 5 stage process and follows the Department for Transport (DfT) "Strategic Environmental Assessment Guidance for Transport Plans and Programmes" (Web Tag Unit 2.11, see www.webtag.org.uk) (DfT, 2004) and A Practical guide to the Strategic Environmental Assessment Directive, CLG 2006. Stages for appraisal are set out below.

The following summarises the approach taken at each stage of the appraisal.

Stage A: Setting the context and objectives, establishing the baseline and deciding on the scope

Suffolk County Council published a Scoping report for public consultation in May 2010. (At this time LTP3 was being developed but nothing was in the public domain. No options for strategy were available.) The consultation period ran for 5 weeks until 9th July 2010. In this time comments were received from four organisations: Ipswich Borough Council, Forest Heath Borough, Natural England and Suffolk County Council. These are recorded in Appendix 1 along with the actions taken. The Scoping Report has been updated and is published alongside this report.

Stage B: Developing and refining options and assessing effects

Options for the policies in LTP3 have been devised by the sustainability team. This plan has been devised at a time of unprecedented financial austerity so the options available were thought to be tightly constrained. Hence most of the options appraised are variants of "do nothing", usually meaning do no more than has been done in the past but in some cases do less. The specific meaning of such options are set out to guide the appraisal.

The policies and their options have been appraised and the results are set out in this document. The table used for capturing the results of the assessment is derived from the A Practical guide to the Strategic Environmental Assessment Directive, CLG 2006. as this format better aids identification of synergistic effects than the approach in TAG Unit 2.11.

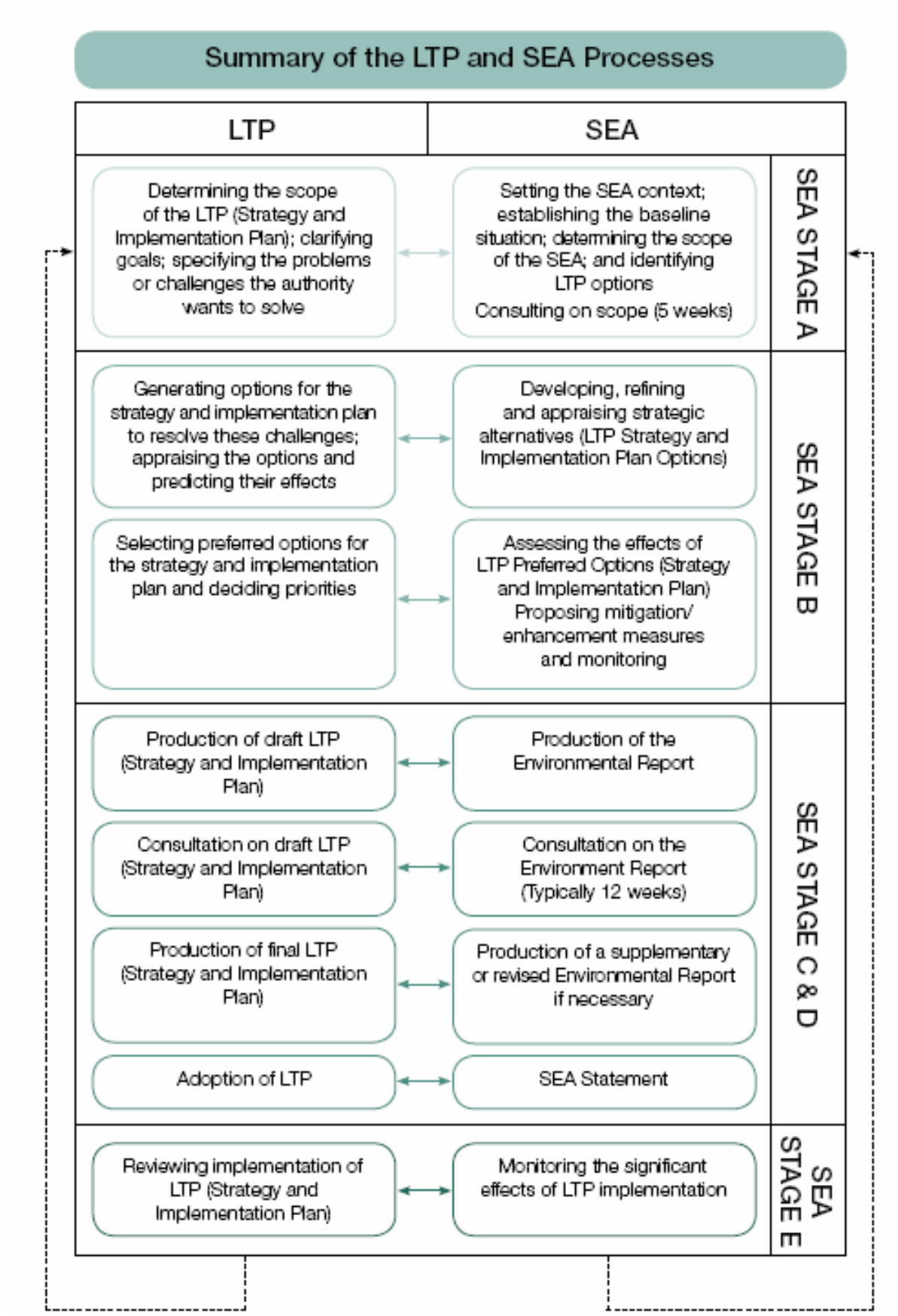
Stage C: Preparing the Sustainability Appraisal Report

This report presents the results of the sustainability appraisal of the LTP3 policies and options. It is the "Environmental Report" (as required by the Guidance on Local Transport Plans 2009) as it includes environmental appraisal in addition to social and economic appraisal.

Stage D: Consulting on the draft LTP and Sustainability Appraisal Report

This SA report will be published for public consultation alongside the draft LTP3 for a period of 12 weeks.

Table 3.1: The stages of a Sustainability Appraisal (incorporating SEA)



Source: DfT [Guidance on Local Transport Plans 2009]

Stage E: Monitoring the significant effects of implementing the plan

Monitoring requirements are set out in the SA report. These identify indicators essential to evaluating the effectiveness of the plan and that are needed to cover areas where the effect is uncertain. This enables negative impacts to be identified and actions to be taken at a later date if necessary.

3.2 Who carried out the Sustainability Appraisal

The sustainability appraisal was carried out by Business Development and SEA officer in the Environment Division Suffolk County Council.

3.3 Who was consulted, when and how

The SA Scoping Report went to consultation in May 2010, and was sent to the statutory bodies, Environment Agency, English Heritage, and English Nature plus all the District Councils in Suffolk as well as Suffolk County Council. It was also published on Suffolk County Council's web pages inviting anyone to comment. In the document responses were particularly requested on the following 3 questions:

1. Have all the relevant issues been included in the baseline assessment of the current social, economic and environmental conditions in Suffolk? If not what is missing?

2. Have appropriate SA objectives, relevant to appraising the environmental, social and economic impacts of the Suffolk LTP been identified? If not what is missing?

3. Are the indicators identified to monitor the SA objectives appropriate measures? If not, how could they be improved?

The consultation period ran for 5 weeks until 9th July 2010.

3.4 Difficulties encountered

The main difficulties have been trying to undertake the appraisal whilst LTP3 has been developing. Overall objectives initially were not clearly articulated in the plan and the Implementation section of the plan was not available. Also the plan did not go through a phase when options were explicitly considered hence the need to devise realistic "do nothing "options.

There have been issues with data availability, particularly around energy use. The time taken for preparation of the plan has extended due to a change in government and major changes to possible available finance. Hence some of the baseline material in the May 2010 Scoping report is now out of date. It has not been updated because this was assumed to be the situation when we undertook the appraisal.

4. Local Transport Plan 3 and Sustainability Appraisal objectives

4.1 Summary of Local Transport Plan 3

The production of a local transport plan is a statutory requirement for the County Council in its role as transport authority stemming from The Local Transport Act 2008. The County Council's third local transport plan (LTP3) will start in April 2011 and sets out long-term strategic transport objectives and priorities for the next 20 years. As a result of the 2008 Local Transport Act there are now separate strategy and implementation documents. It has been prepared at a very challenging time when the County council faces increasing demand for services and reducing funding due to the government's deficit reduction programme. The County Council is embarking on a programme to transform the way it operates, divesting itself of some services but seeking to strengthen local communities.

The key policy objective for the county council is promoting and aiding economic resilience and private sector led growth through the current period of economic downturn and LTP3 seeks to play its part by:

- Improving the quality of transport networks
- Tacking congestion
- Improving access to jobs and markets
- Encouraging a shift to more sustainable travel patterns.

LTP3 supports Suffolk's Sustainable Community Strategy. Table 4.1 sets out the relationship between the Suffolk priorities in the Community Strategy and the transport aims in the plan as presented in the draft plan.

Table 4.1: Relationship between Suffolk Community Strategy and LTP3 aims

Suffolk's Priorities	**Challenges**	**Transport aims**
A prosperous and vibrant economy	Support sustainable economic growth Use Suffolk's unique selling points to capture emerging markets Reduce economic inequalities across the county Transport and infrastructure to support sustainable economic growth	Improve connectivity and accessibility. Maintain core transport networks. Balancing capacity and demand for travel, through increasing the use of sustainable travel and reducing need for travel. Minimise impact of transport on natural and historic environment Improve access to jobs and commercial markets for residents and businesses based n the county.
Creating the greenest county (Be the greenest county)	Reducing CO2 emissions.	Reduced emissions from transport, including road maintenance
	Adapting to climate change	Maintaining reliability of transport networks (e.g. coping with flooding, pot holes, winter damage)
	Improving air quality	Reduced air pollutant emissions

Suffolk's Priorities	Challenges	Transport aims
Safe, healthy and inclusive communities (Protect vulnerable people and reduce inequalities)	Improving health impacts	Facilitating an increase in walking and cycling
	Improving accessibility	Improving the physical accessibility of the transport system, improving information about travel options, improving access to services for those without access to cars.
	Supporting regeneration and tackling deprivation	Supporting wider regeneration
	Improving road safety	Reducing the number of casualties on the transport network
Learning and skills for the future (Transform learning and skills)	Improving access to education.	Improving accessibility to schools, colleges, universities and other places of learning Access to broadband for online learning

The plan recognises a number of key transport issues in the seven District Council areas of the County. Its strategy includes particular approaches for urban areas, rural areas, transport asset management, road safety, transport networks, public rights of way, and public transport networks. These have generated 24 policies (shown in Table 4.2) which have been assessed for their sustainability. An option for each policy was generated by the SA team as the LTP3 itself did not go through a formal process of option generation. These options largely looked at the "do nothing" situation – assuming continuation of existing trends. These options are shown alongside the strategy in Table 4.2.

Table 4.2 Policies and options that have been assessed

	Strategy	Options
1.1	The challenge of maintaining the highway network in good condition	Maintaining the highway network in a lower than current level condition
1.2	Tackling congestion in the larger towns by more efficient management of traffic, reducing the demand for car travel and promoting more sustainable means of travel	Do not tackle congestion in the larger towns by traffic management, reducing the demand for car travel or promoting sustainable travel.
1.3	Improved connectivity and accessibility in rural areas	Maintain current level of connectivity and accessibility in rural areas
1.4	Seeking improvement to the A11,A12 and A14 trunk roads connecting businesses in Suffolk to each other and to their markets	No improvement to the A11,A12 and A14 trunk roads connecting businesses in Suffolk to each other and to their markets
1.5	Seeking improvement to the rail network for freight and passengers	No improvement to the rail network for freight and passengers
1.6	Relief for our market towns suffering from high levels of through traffic	No attempt to relieve market towns suffering from high levels of through traffic.
1.7	Securing high speed broadband throughout Suffolk	Take no action to secure high speed broadband throughout Suffolk.
2.1	Encouraging the use of more sustainable forms of transport	Not encouraging the use of more sustainable forms of transport
2.2	Improving the efficiency of the highway network to reduce delays to journeys	Maintain current level of efficiency of the highway network and journey times
2.3	More sustainable processes and use of	Not encourage more sustainable processes

	materials to reduce impact of construction and maintenance	and use of materials to reduce impact of construction and maintenance
2.4	Supporting developments in alternative fuel types	Not supporting developments in alternative fuel types
2.5	Promoting technological improvements such as teleconferencing	Do not promote technological improvements such as teleconferencing
3.1	Creating pedestrian-friendly environments and support active transport	No change to existing pedestrian-friendly environments or support for active transport
3.2	Promoting road safety through education	Keep promoting road safety through education at the current level with no improvement
3.3	Educating front-line health workers about transport options and the importance of communicating these to patients	Not educating front-line health workers about transport options and the importance of communicating these to patients
3.4	Supporting engineering and enforcement to reduce the number of road crashes	Not supporting engineering and enforcement to reduce the number of road crashes.
4.1	Reduce demand for car travel	Keep demand for car travel at current level
4.2	Making efficient use of transport networks	Not seeking to make efficient use of transport networks
4.3	Improve infrastructure for sustainable transport	Not seeking to improve infrastructure for sustainable transport
5.1	Better accessibility to employment, education and services	Not improve accessibility to employment, education and services
5.2	Encouraging planning policies to reduce the need to travel	Not encourage planning policies to reduce the need to travel
5.3	Maintaining the transport network and improving its connectivity, resilience and reliability	Maintaining the transport network but not improving its connectivity, resilience and reliability
5.4	Reducing impact of transport on communities	Do not seek to reduce the impact of transport on communities
5.5	Support the county council's ambition of improving broadband access throughout Suffolk	Not support the county council's ambition of improving broadband access throughout Suffolk

The implementation plan sets out priorities for the next 3 years, focused on 11 key towns.

4.2 Links to other policies, plans and programmes

Many plans and policies set the context for transport, some directly and some indirectly. These include national and local targets, the Suffolk Community Strategy and the Local Area Agreement. It is vital that the LTP directly helps to deliver the goals of these other strategies, and of specific importance are carbon reduction, accessibility and health targets. As well as these key documents international and national legislation and the plans and policies of other organisations can have an influence on how the LTP should develop and the scope of the sustainability appraisal. Of particular relevance are the latest government documents on transport and carbon reduction. The LTP3 itself has important link to the Local Development Frameworks developed by each District/ Borough Council in Suffolk.

A check of the scope of the documents was undertaken in the LTP3 Scoping report (May 2010). This work helped shape the objectives and measures included in the SA framework.

DfT guidance (Web TAG Unit 2.11) advises that Habitats Regulations Assessment (aimed at protection of habitats of European importance) must be undertaken separately to the SA. As Section 4.3 reveals, there such sites in Suffolk.

4.3 Baseline environmental data and key issues

The LTP3 scoping report looked at the baseline data available for Suffolk and the key issues identified are summarised in Table 4.3. Data about the condition of roads has been added as this was realised to be an oversight when undertaking the appraisal. Information

about employees in the transport industry has been added. A ninth Air Quality management Area was designated in January 2011 in Ipswich at the Bramford Rd/Chevallier St Junction.

Table 4.3: Key Issues in Suffolk

Social issues	
Health	• Childhood obesity is an increasing problem. According to the Suffolk PCT, in 2007/08 8.95% of children in reception are obese, where 15.28% of children in year six are obese. Both these figures are below the regional and national averages. • In 2009 33% of children in Suffolk use active methods to get to school: with the proportion walking increasing 2005-09. • Data is limited for indicators related to healthy lifestyles, i.e. outdoor and children's playing space. • Adult obesity is also an issue for Suffolk, with latest NHS data (2003-2005) suggesting that 26.4% of adults are obese, which is above the national average of 23.6%.
Education and skills	• In 2008, 21.5% of Suffolk's working age population have no qualifications. This is higher than the East of England average (11.8%), as well as the national average. (12.4%) • In 2008, A level students scored an average of 712.7 points, above the regional average of 634.9, but below the national average of 739.8. • At GCSE level, 66.2% of students achieved 5 or more GCSEs at A*-C, higher than both the regional (67.5%) and national (65.3%) averages. • However, the county's performance at Key Stage 2 (age 11) was lower than regional and national averages; only 80.5% of children reached at least level four, compared to 83.5% regionally and 82.6% nationally. • Access to further education establishments is an issue across large parts of southern Suffolk, coastal Suffolk and northern Suffolk.
Crime and anti-social behaviour	• The overall crime rate in Suffolk has dropped in the last year according to the 2009 data. The rate is also lower than regional and national averages. Fear and perception of crime however remain high.
Poverty and social exclusion	• Levels of deprivation are relatively low for Suffolk as a whole, but pockets of high deprivation exist mainly in towns. Areas of Ipswich and Lowestoft rank amongst the most deprived 10% in the country, some worsening according to the 2007 index. • Specifically, the IMD and SCC access maps highlight the northern areas of Suffolk Coastal DC and southern areas of Waveney DC as having a lesser level of access to towns and dentists. Babergh suffers from lower levels of access to further education, whilst hospital provision for southern Waveney and north Suffolk Coastal is a problem.
Access to services	• Large parts of coastal and central areas, notably in Babergh and Mid Suffolk are not within easy reach of further education facilities. North-east Suffolk has very poor access to A & E hospitals.
Employment	• In September 2009 the claimant count rate in Suffolk was

	3.2%; this is a decrease since the annual high in March of 3.9%. This is lower than the national and East of England average. • Port, freight and logistics businesses employed 13,000 people (4.5% of the Suffolk workforce) in 2008, slightly down on previous years but prospects for growth are good, especially with the planned development at Felixstowe.
Housing	• Housing stock is currently growing at a rate faster than required by the RSS (by 66 houses a year). Clearly there will be associated infrastructure requirements in addition to these dwellings, • In 2008/09 36.1% of completed dwellings were classified as 'affordable', a figure which has been increasing since 2006. Affordability is however a problem in Suffolk with a house price-to-income ratio of 6.5 in 2009.
Quality of living environment and community participation	• According to the 2008-9 Suffolk Place survey, 86% of Suffolk residents are very or fairly happy with their local area as a place to live. This is up from 81% in the 2006-7 BVPI Satisfaction survey. • Although the number of pupils visiting museums and galleries in organised school trips has been rising steadily over the past three years, the figure is still well below the regional average.
Environmental issues	
Water and air quality	• Water quality in the Stour estuary worsened between 2000 and 2005, with 2km being downgraded to Grade B. 4km of the Orwell estuary is also classed as Grade B. Although chemical water quality is improving, the percentage of rivers where biological water quality was classed as very good reduced slightly between 2004 and 2005. In 2008 the Stour was graded A for chemical and biological quality, in contrast to the River Deben graded C. • Chemical and biological water quality in the River Gipping remained unchanged between 2005 and 2008, with a rating of very good for biological quality, very good for ammonia content, and good for % saturation. • There are currently eight designated AQMAs in Suffolk, in Ipswich, Woodbridge, Felixstowe, Newmarket, Sudbury and Great Barton. It is expected that in the next decade there could be as many as ten. • Air quality hotspots can be identified as being of most concern in areas such as Felixstowe, Ipswich, Woodbridge, Mildenhall, Great Barton, Bury St Edmunds and Sudbury.
Soil	• Although more houses are being built on PDL, 39% of houses built in 2006/7 were on Greenfield land. In addition, at the end of 2006/7, 37.5% of housing commitments were on Greenfield sites. Data for 2007/08 shows that 65% of all completions were on PDL, which is an improvement on previous years.
Water and mineral resources	• Mineral extraction in Suffolk primarily involves sand and gravel, of which there are adequate supplies. Trend data shows that production of recycled aggregates has increased significantly in the last few years compared to

	pre-1998 levels, and proportion of total mineral sales that they represent continues to rise. • No data for water consumption and supply is available at county level.
Waste	• Although waste levels are decreasing and recycling and composting is increasing, Suffolk has relatively high levels of household waste per person.
Traffic and Travel Trends	• Traffic levels at monitored locations in Suffolk increased steadily between 1999 and 2004. This has implications for many environmental aspects, including air quality and pollution, congestion, road safety, tranquillity and climate change. Over the last three years growth has stabilised and then reduced by 2% in 2008, however is still likely to increase in localised areas depending on the location of new housing development. • The dispersed nature of Suffolk's rural population, combined with a lack of services, regular scheduled public transport and a growing population, could lead to increased demand for private travel. • The condition of Suffolk's A roads (4% in need of repair 2009-10) and B and C roads (9%) are better than the national and regional averages, however unclassified roads are above the national average at 27% in need of repair and pavements are well above the regional and national average at 42%. • The Port of Felixstowe, the largest container port in the country, has a large impact on HGV traffic in Suffolk, particularly on the A14. Proposed port expansion would lead to an increase in HGV traffic in the future. • According to the 2001 census, 21% of Suffolk residents travelled to work by sustainable modes (bus, cycle, walk, taxi); below the regional and national averages although Suffolk figures for walking and cycling were above average. The travel to work survey carried out in 2009 on public sector employees in Suffolk show that 33% people travel to work sustainably using bus, car passenger, cycle, Park and ride, taxi or walk, in more than half of the local authorities. • Just over one third of children are taken to school by car whilst only 17% travel by bus. • Links to London are good by rail, with Ipswich, Stowmarket and Needham Market on the main line to London Liverpool Street. Improved service can be expected between Lowestoft and Ipswich, as well as freight capacity between Felixstowe and Nuneaton. • Bus stop coverage of the county is comprehensive, and travel is discounted or free for children under 5 and older people. • Cycle path provision is good, with travel planners employed by Suffolk County Council to integrate travel plans into both new developments and schools. • According to the 2001 Census, the average resident of Suffolk travels 15km to work. This is further than the national average of 13.4km, but around average for the Eastern region. The majority of working residents (77%) remain in the county for work, so most of these journeys

	are wholly within Suffolk. • The percentage of the workforce who work mainly from home was slightly higher than average at around 10%. • The proportion of containers travelling from the Port of Felixstowe by rail has not grown since 2003/4 and remains at the same levels seen in 1999 but the number of units has increased by 87% since 2001/2 • Extreme weather conditions such as high winds are a risk to local reliability of travel times if Felixstowe port or the Orwell Bridge are closed causing congestion if traffic backs up into Ipswich.
Reduction in green house gas emissions	• Motor vehicles are a major source of carbon dioxide emissions, however emissions have fallen between 2005 and 2007 due to reduced traffic growth and advances in vehicle technology and fuel efficiency. • Domestic consumption of electricity fell from 2003 to 2005 and the amount of renewable energy produced increased. Industrial consumption of electricity has reduced slightly. • Current installed electricity generating capacity from renewables in Suffolk is 658.535MW (Renewables East, 2009)
Vulnerability to flooding	• Environment Agency information suggests that around 12,000 properties in Suffolk are at risk of flooding from rivers or the sea (in the event of a 1 in 100-year fluvial or 1 in 200-year tidal flood). • There were 12 flood warnings in 2009, the highest figure since 2007, • The number of planning applications approved against Environment Agency flood risk advice rose in 2007/8, though the number is still low (11, previously 3).
Biodiversity and geodiversity	• Suffolk contains a range of sites with ecological designations, including 6 RAMSAR sites, 8 Special Protection Areas, 11 Special Areas of Conservation, 145 Sites of Special Scientific Interest and 39 Local Nature Reserves. The number of County Wildlife Sites increased during 2009/10, bringing the total to 922, or 19,640 hectares. The importance of these areas for native and migratory wildlife needs to be considered and respected in transport proposals. • 87% of Suffolk's SSSIs were in favourable condition in 2009, up 1.7% since 2005. This compares to the regional average of 79.4% and national average of 86%. The national target is for 95% of land in SSSIs to be in favourable or recovering by December 2010. • In addition, a number of Biodiversity Action Plans and Habitat Action Plans are in place, which aim to conserve nationally and locally important habitats and species. • Suffolk also contains sites of geological importance, including 29 geological SSSIs covering 21,485 hectares. 3.1% of them are in declining condition.
Historical and archaeological importance	• Visual intrusion and vibration from traffic are concerns in many of the designated Conservation Areas that cover town centres in Suffolk.
Landscapes and	• Around 12% of Suffolk's landscape is designated as an

townscapes	Area of Outstanding Natural Beauty (AONB) which is afforded the highest level of protection at a national level. • Light pollution increased in the county between 1993 and 2000. Overall levels of pollution are lower than the average for England, but Suffolk does contain proportionally less area in the darkest category than the national average. • Siting development on previously developed land where possible should help reduce the amount of derelict and underused land, but figures suggest a lack of brownfield sites in some districts of Suffolk, and this could threaten Greenfield areas.
Economic issues	
Prosperity and economic growth	• Although the number of businesses in Suffolk is increasing, the business formation rate (8) is lower than regional and national averages (9.6 and 10.2) according to 2007 VAT statistics, published by Suffolk Observatory November 2009. • The largest employment sectors are the public sector, wholesale and retail, finance and business and manufacturing. Employment in agriculture is more than double the national average, whilst the number of people working in finance and business is more than 25% lower than the regional and national average.
Town centres	• In 2007/8, 75.7% of net developed floor space in town centres was for A1 uses; this is lower than the regional figure of 98%.
Investment	• Baseline data on investment is currently very limited, making it difficult to identify issues.

4.4 The future without the plan

It is difficult to predict the future without a new LTP because many of the strategies in LTP2 were not planned to be time limited although some will rely on future funding from the LTP3 allocation which is now known to be reducing. A continuation of many of the trends in the table above could be expected. However the following will be important:

- Development of Sizewell C could have major implications for traffic movements in east Suffolk, although improvements to the A12 are a possibility;
- Reduction of funding for the sponsored bus service network could reduce choice and access to employment, services and leisure activities in rural Suffolk.
- Withdrawal of funding for school crossing patrols, cycling proficiency courses, communication of messages about road safety and remedial works at accident blackspot could have impacts on road safety.
- The housing market may be slow to recover from the recession, reducing population and traffic growth so they do not return to growth levels of the mid 2000's.
- Travel to school movements may change as the School Organisation review progresses resulting in the closure of some Middle Schools whilst others may be retained by the community as academies.
- In this time of financial austerity, the plans of other agencies cannot be assumed will go ahead.

When the sustainability appraisal is undertaken it is based on what you consider will be the impact on the existing situation.

4.5 Assumptions and limitations on information

For several indicators there is no data or limited data available, whilst for a few others the data we have is not fully up-to-date. A particular problem concerns indicators that measure climate change. In this appraisal this is covered by objective 11 (Greenhouse gas emissions from energy consumption), which looks at measures of electricity and gas consumption and energy efficiency of homes. Energy consumption by vehicles is not covered because petrol consumption figures are not available. However this should not deter us from commenting on the implications for carbon emission that would occur with actions that result in longer/more car trips.

4.6 The Sustainability Appraisal Framework

The sustainability objectives and key indicators that form the Sustainability framework were developed to be relevant to this particular appraisal, focussing on aspects of relevance to transport and accessibility. They were worked up by the sustainability team and transport planners and were discussed at the East of England Directors for Environment and Transport (EEDET) Travel Research and Monitoring Group (TRAM). They were included in the Scoping report that went out for public consultation in May 2010. As a result of this Geodiversity was added to the Biodiversity objective on the advice of Natural England.

The 13 SA objectives, questions and indicators are set out in Table 4.4.

Table 4.4: SA Framework for the Suffolk LTP

Topic	Locally Derived Objective	Will the LTP?	Indicator
Health	To reduce death and injury	Improve the safety of the transport system?	Number of Killed and seriously injured road casualties. Deaths from respiratory diseases in Suffolk.
	To encourage healthy lifestyles	Increase walking and cycling?	Deaths from circulatory disease. Life expectancy. Percentage cycling and walking to school Percentage cycling and walking to work
	To maintain and improve air quality	Reduce congestion and traffic levels particularly in AQMAs and congestion hot-spots?	Number of AQMAs. NI 167 congestion.
Social, Community and Accessibility	To improve the quality and safety of where people live	Help improve the quality of urban and rural centres?	Percentage travelling sustainably travel to work Satisfaction with local area
	To reduce poverty and social exclusion, improving access to key services for all sectors of the population	Create a more accessible transport system for all?	% Population with access to GP / further education / primary school within 30mins by public transport
Economy	To encourage indigenous and inward investment, fuelling economic growth	Increase connectivity and help alleviate congestion, reducing journey times?	NI 167 congestion. Growth in jobs in tourism sector VAT start-ups. Growth in number of jobs in Suffolk.
	To reduce the impacts of road freight on communities	Provide / encourage alternatives to road freight for transport of goods?	Proportion of port freight carried by rail.
Environment and Natural Resources	To protect and enhance biodiversity and geodiversity	Cause damage to biodiversity, geodiversity or habitats through infrastructure provision or maintenance? Cause a change in traffic flows that affect habitats?	Loss of designated areas. Change in condition of SSSIs. Reduction in BAP species or habitats
	To protect and enhance historic or archaeological assets.	Cause direct impact upon any archaeological sites through infrastructure changes?	Damage/destruction of archaeological sites.
		Cause a change in traffic flows or the nature of traffic that affects historic sites and monuments	Change in traffic flows in conservation areas.

		valued for their cultural heritage?	
	To protect and maintain townscapes and landscapes of visual importance	Cause changes in traffic flows in areas valued for their visual character? Cause direct impacts through development or maintenance on any areas valued for their visual character?	Increase traffic flows in AONBs. Loss of area covered by AONB or Conservation Area designations.
	To reduce carbon emissions	Reduce car trips and encourage a more energy efficient transport system?	Increase in the annual average daily traffic flow. NI186 Reduce per capita CO2 emissions.
	To maintain and improve water, soil and mineral quality and resources	Reduce impacts from road building and maintenance on water, soil and mineral resources.	Change in water quality in rivers and estuaries, Increase in recycled aggregate
	Adapt to the effects of climate change	Plan a transport system which can cope with impacts from climate change?	Change in number of incidences of road flooding.

4.7 Compatibility of SA and Plan objectives

As part of the SA, it is necessary to assess the compatibility of the LTP3 objectives (listed in third column of table 4.1 against the 13 SA objectives listed above in table 4.3.

The result of this assessment can be seen in Table 4.5. Compatibility is represented by a ✓, meaning that both objectives can operate simultaneously and advantage each other; negative compatibility with an X and cases with no apparent effect on each other by a 0. Brief reasons for the scores are given in Table 4.6.

The value of the compatibility check here is in warning that appropriate policies need to be included to minimise possible negative sustainable effects. The overall results are shown in Table 4.6.

Table 4.5: Overall compatibility of the plan objectives with the SA objectives

	✓	**0**	**X**
To reduce death and injury	3	11	0
To encourage healthy lifestyles	3	11	0
To maintain and improve air quality	3	11	0
To improve the quality and safety of where people live	10	4	0
To reduce poverty and social exclusion, improving access to key services for all sectors of the population	9	5	0
To encourage indigenous and inward investment, fuelling economic growth	8	6	0
To reduce the impacts of road freight on communities	6	8	0
To protect and enhance biodiversity and geodiversity	1	10	2
To protect and enhance historic or archaeological assets.	1	13	0
To protect and maintain townscapes and landscapes of visual importance	3	11	0
To reduce carbon emissions	5	7	2
To maintain and improve water, soil and mineral quality and resources	0	14	0
Adapt to the effects of climate change	3	11	0
Total	55	123	4

Most of the Plan objectives have no effect on the sustainability objectives, meaning that they can be pursued without impacting each other. In 55 cases the plan objectives will assist the implementation of the SA objectives. There are only 4 negative compatibilities. Two incompatibilities are with protecting and enhancing biodiversity and geodiversity.

Activities that increase traffic movements or involve a lot of maintenance work can damage verges etc. The LTP objective “Minimise impact of transport on historic and natural environment” is not effective in countering the potential threat because in only seeking to minimise the impact it does not fully protect biodiversity and certainly does not enhance it. There are 2 incompatibilities with the SA objective to reduce carbon emissions. However this is mitigated by the plan having an objective to reduce Co2 emissions from transport. This means that the plan should encourage and consider ways to reducing CO2 emissions from transport as it seeks to improve access to jobs and markets (for example encourage the use of electric vehicles and rail).

4.8 Mitigation

The main concern is with the LTP objective “Minimise impact of transport on historic and natural environment”. The mitigation for this would be to strengthen the wording to make it clear that protection of biodiversity and geodiversity in Suffolk would be sought in the implementation of the plan. Hence the following wording would be more appropriate:

“Protect and enhance the historic and natural environment. “

This does not set a precedent as there is another objective in the plan that does not make direct reference to transport, “Supporting wider regeneration”. However if there was a desire to link it specifically to transport it could say:

“Protect and enhance the historic and natural environment when implementing transport initiatives. “

Table 4.6: Compatibility of SA objectives with LTP Strategy objectives

		A prosperous and vibrant economy					Create the greenest county			Safe, healthy and inclusive communities			Learning & skills		
Topic	Sustainability Objective	Improve connectivity and accessibility	Maintain core transport networks	Increase sustainable travel and reduce need for travel	Minimise impact of transport on historic and natural environment	Improve access to jobs and commercial markets for residents and businesses in the county	Reduce CO2 emissions from transport	Maintain reliability of transport networks	Reduce air pollutant emissions	Facilitate an increase in walking & cycling	Improve physical accessibility of transport system, information & access for those with no car.	Supporting wider regeneration	Reducing the number of casualties on the transport network	Improving accessibility to schools, colleges and other places of learning	Access to broadband for on line learning
Health	To reduce death and injury	0	√ Well managed roads reduce accidents	√ Reduced car use reduces accident risk	0	0	0	0	0	0	0	0	√ Reduction in road casualties	0	0
	To encourage healthy lifestyles	0	0	√ Cycling and walking benefits health	0	0	0	0	√ Good air quality encourages sustainable modes	√ Increase in walking and cycling	0	0	0	0	0
	To maintain and improve air quality	0	0	√ Less car use reduces emissions	0	0	0	0	√ Benefits air quality	√ Increase in walking/cycling will reduce car traffic	0	0	0	0	0
Social, Community and Accessibility	To improve the quality and safety of where people live	√ Improves local accessibility	0	√ Benefits local environment	0	0	0	√ Benefits local environment	√ Benefits local environment	√ Improved walking & cycling facilities	√ Improves local facilities	√ Can improve the local environment	√ Local safety improvements	√ Improved prospects benefits social behaviour	√ Improves local facilities
	To reduce poverty and social exclusion, improving access to key services for all sectors of the population	√ Improves access for all	0	√ Improves facilities for all	0	√ Improves access to jobs for all	0	0	0	√ Provides improved access for all	√ Provides improved access for all	√ Provides improved access for all	√ Provides improved safety for all	√ Improves accessibility to education for all	√ Provides improved access for all
Economy	To encourage indigenous and inward investment, fuelling economic growth	√ Connectivity encourages investment	√ Reliability encourages investment	0	0	√ Improved access to markets will encourage investment	0	√ Reliability encourages investment	√ Improves environment	0	0	√ Aims at improving local investment	√ Safe roads encourage investment	0	√ Access to Broadband will help encourage investment
	To reduce the impacts of road freight on communities	√ Opportunity to manage lorry movements	√ Opportunity to manage lorry movements	0	0	0	0	√ Opportunity to manage lorry movements	√ May result from lorry management	0	0	√ Regeneration will consider freight movements	√ Management of road freight will benefit accident reduction	0	0
Environment and Natural Resources	To protect and enhance biodiversity and geodiversity	X Increased movements or building new roads	X Maintenance activities can damage wildlife	0	0 Minimising impact may protect biodiversity but not enhance	0	0	0	√ Good air quality benefits wildlife	0	0	0	0	0	0
	To protect and enhance historic or archaeological assets.	0	0	0	0	0	0	0	√ Less damage to fabric of historic buildings	0	0	0	0	0	0
	To protect and maintain townscapes and landscapes of visual importance	0	0	0	√ Will minimise impact of transport	0	0	0	0	√ Reduces traffic impact	0	√ Regeneration leads to visual improvement	0	0	0
	To reduce carbon emissions	X Will increase traffic	0	√ Reduces car trips	0	X Increased access will increase traffic	√ Will reduce CO2 emissions	0	√ Likely to also reduce CO2	√ Reduces car travel	0	0	0	0	√ Reduce car travel
	To maintain and improve water, soil and mineral quality and resources	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Adapt to the effects of climate change	√ Opportunity to reduce flood risk	√ Opportunity to reduce flood risk	0	0	0	0	√ Opportunity to reduce flood risk	0	0	0	0	0	0	0

5. Appraisal of Local Transport Plan 3 Policies

5.1 Appraisal results for policies and options

The aim of this appraisal is to set out the main sustainability implications of each policy and to consider the set of policies as a whole. This enables the need for any possible mitigation actions to be identified. The implication of each LTP policy has been considered for each SA objective using the scoring system shown in Table 5.1 below.

Table 5.1 SA scoring system

Symbol	Effect
++	Strong positive
+	Positive
0	Neutral
-	Negative
--	Strong negative
+/-	Both positive and negative

A set of options - one option for each policy has also been considered. The LTP did not go through a formal period of option definition hence the alternatives selected have been largely not taking the action suggested in the strategy and to assume business as usual. The results of the appraisal of the policies are shown in Appendix 2 and of the options in Appendix 3.

Table 5.2 summarises the results of the policy appraisal, showing the 24 policies produced 137 positive impacts (of which 36 were strong positives and 101 were single positives) and 17 negative impacts (of which all were single negatives). In comparison the options (shown in Table 5.3 were less good in every case although in some cases there was not a lot of difference compared to their strategy counterpart. The options produced 104 negative impacts of which 20 were strong negatives. No positive impacts were identified. This reveals that none of the options were better than the strategy policies and are worth considering. The comparison does suggest that policy 1.3 (Improved connectivity and accessibility in rural areas) is problematic – the appraisal below will show that there are a number of positive and negative aspects to it but if you did not do it , it would not have a huge detrimental impact. The benefit of policy 3.2 (Promoting road safety through education) in the safer and healthier communities part of the LTP strategy is deemed to be slightly higher but again no more was done that currently it would not have a huge negative impact – largely because the currently level has been quite effective in bringing road accidents down. In retrospect it might have been more realistic to have assumed a lower level of education than currently.

Table 5.4: Comparison of policies and option scores

	Transport & Economy							Carbon reduction					Safer & healthier				Urban areas			Rural					Total
Policies	1.1	1.2	1.3	1.4	1.5	1.6	1.7	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	3.4	4.1	4.2	4.3	5.1	5.2	5.3	5.4	5.5	
Strategy	+1	+11	+2	+2	+7	+9	+3	+7	+4	+6	+3	+5	+11	+5	+9	+4	+8	+4	+5	+11	+12	+6	+15	+6	+154
Options	-3	-8	0	-3	-4	-4	-2	-5	-3	-5	-3	-4	-9	0	-8	-4	-6	-4	-9	-6	-10	-6	-13	-5	-124

In terms of the impact on social, environmental and economic objectives Table 5.5 highlights that there are some LTP3 policies that do not have a greatly beneficial impact compared with doing nothing/alternative.

Table 5.2 :Summary of Strategy Appraisal results

		Transport & Economy							Carbon reduction					Safer & healthier				Urban Area			Rural					Total
	SA Objective	1.1	1.2	1.3	1.4	1.5	1.6	1.7	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	3.4	4.1	4.2	4.3	5.1	5.2	5.3	5.4	5.5	
Health	1. To reduce death and injury	+	+	0	+	0	+	0	-/+	+	0	0	0	++	++	++	+	++	0	+	++	++	++	+	+	+23
	2. To encourage healthy lifestyles	0	++	+	0	0	0	0	++	0	0	0	0	++	++	+	0	++	0	+	++	++	0	++	0	+19
	3. To maintain and improve air quality	0	+	0	+	+	+	0	+	+	0	+	+	+	0	+	0	+	+	+	+	+	0	+	+	+17
Social community & accessibility	4. To improve the quality and safety of where people live	+	++	+	0	0	++	0	+	0	0	0	0	+	+	+	+	+	+	+	+	+	+	++	0	+19
	5. To reduce poverty and social exclusion, improving access to key services for all sectors of the population	0	0	+	+	+	0	+	+	0	0	0	+	+	0	+	0	0	0	+	++	++	+	+	++	+17
Economy	6. To encourage indigenous and inward investment, fuelling economic growth	+	+	+	+	+	0	+	+	+	0	0	+	+	0	+	+	0	+	+	+	+	++	+	+	+20
	7. To reduce the impacts of road freight on communities	0	+	0	0	++	++	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	++	0	+7
Environment & natural resources	8. To protect and enhance biodiversity and geodiversity	-	0	-	-	0	0	0	0	0	+	0	0	0	0	0	0	0	0	-	0	0	-	0	0	-4
	9. To protect and enhance historic or archaeological assets.	0	+	-	-	0	+	0	0	0	+	0	0	0	0	0	0	0	0	-	0	0	-	+	0	0
	10.To protect and maintain townscapes and landscapes of visual importance	0	+	-	-	0	+	0	0	0	+	0	0	0	0	0	0	0	0	-	0	0	0	+	0	+1
	11. To reduce carbon emissions	0	+	+	+	+	+	+	+	+	0	++	++	++	0	++	0	++	+	++	++	++	+	++	+	+29
	12. To maintain and improve water, soil and mineral quality and resources	-	0	-	-	0	0	0	0	0	++	0	0	0	0	0	0	0	0	-	0	0	-	0	0	-3
	13. Adapt to the effects of climate change	0	0	+	+	+	0	0	0	0	+	0	0	+	0	0	+	0	0	+	0	+	++	+	0	+10
		+1	+11	+2	+2	+7	+9	+3	+7	+4	+6	+3	+5	+11	+5	+9	+4	+8	+4	+5	+11	+12	+6	+15	+6	154

Table 5.3 Summary of Do nothing options results

		Transport & Economy							Carbon reduction					Safer & healthier				Urban Area			Rural					Total
	SA Objective	1.1	1.2	1.3	1.4	1.5	1.6	1.7	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	3.4	4.1	4.2	4.3	5.1	5.2	5.3	5.4	5.5	
Health	1. To reduce death and injury	-	-	0	-	0	-	0	0	0	0	0	0	--	0	-	-	-	0	-	0	--	0	0	0	-12
	2. To encourage healthy lifestyles	0	-	0	0	0	-	0	0	0	0	0	0	--	0	-	0	-	0	-	0	-	0	--	0	-10
	3. To maintain and improve air quality	0	-	0	0	0	0	0	-	-	0	-	-	-	0	-	0	-	-	-	0	-	0	-	-	-13
Social community & accessibility	4. To improve the quality and safety of where people live	-	-	0	0	0	0	0	-	0	0	0	0	-	0	-	-	-	-	-	-	-	-	--	0	-14
	5. To reduce poverty and social exclusion, improving access to key services for all sectors of the population	0	0	0	0	0	0	0	-	0	0	0	-	0	0	-	0	0	0	-	--	--	-	-	--	-12
Economy	6. To encourage indigenous and inward investment, fuelling economic growth	0	-	0	-	-	0	-	-	-	0	0	-	-	0	0	-	0	-	-	-	-	-	-	-	-16
	7. To reduce the impacts of road freight on communities	0	-	0	0	--	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	--	0	-7
Environment & natural resources	8. To protect and enhance biodiversity and geodiversity	-	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-2
	9. To protect and enhance historic or archaeological assets.	0	-	0	0	-	0	0	0	0	-	0	0	0	0	0	0	0	0	0	0	0	0	-	0	-4
	10.To protect and maintain townscapes and landscapes of visual importance	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	0	0	0	-	0	-2
	11. To reduce carbon emissions	0	-	0	-	0	0	-	-	-	0	--	-	--	0	--	0	--	-	--	--	--	-	--	-	-25
	12. To maintain and improve water, soil and mineral quality and resources	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1
	13. Adapt to the effects of climate change	0	0	0	0	0	0	0	0	0	-	0	0	0	0	-	-	0	0	-	0	0	--	0	0	-6
		-3	-8	0	-3	-4	-4	-2	-5	-3	-5	-3	-4	-9	0	-8	-4	-6	-4	-9	-6	-10	-6	-13	-5	-124

Table 5.5 Comparison of strategy with options

	SA Objective	Strategy results	Options
Health	1. To reduce death and injury	+23	-12
	2. To encourage healthy lifestyles	+19	-10
	3. To maintain and improve air quality	+17	-13
Social	4. To improve the quality and safety of where people live	+19	-14
	5. To reduce poverty and social exclusion, improving access to key services for all sectors of the population	+17	-12
Economy	6. To encourage indigenous and inward investment, fuelling economic growth	+20	-16
	7. To reduce the impacts of road freight on communities	+7	-7
Environment	8. To protect and enhance biodiversity and geodiversity	-4	-2
	9. To protect and enhance historic or archaeological assets.	0	-4
	10.To protect and maintain townscapes and landscapes of visual importance	+1	-2
	11. To reduce carbon emissions	+29	-25
	12. To maintain and improve water, soil and mineral quality and resources	-3	-1
	13. Adapt to the effects of climate change	+10	-6
	Cumulative total	*+154*	*-124*

As Table 5.5 shows there is a clear benefit from the strategy on the health, social and economic objectives. However on the environmental objectives the overall impact of the options are less negative on SA objective 8 *To protect and enhance biodiversity and geodiversity(-2)* than the strategy policy (-4). This is due to the weak wording of the strategy objective that does not seek to protect and enhance the environment when undertaking maintenance or new engineering works. Lack of control of congestion and lorries in villages is likely to increase the pressure on the historic built environment (SA objective 9) and hence why the options are thought to be likely to result in a negative impact (-4). Similarly for SA 12 the options are not likely to have such a negative impact (-1) than the LTP3 policies because less new building works will occur requiring the consumption of mineral resources.

In view of the overall negativity of the options there is no purpose in examining them in more detail. The rest of the SA will focus on the results of the strategy as presented in LTP3.

5.2 Significant effects of the preferred strategy policies

5.2.1 Overall results – the cumulative impact of the policies

In terms of the likely impact of the preferred policies on the SA objectives, the highest impact is likely to be on reducing carbon emissions. This is because it is a strategy objective and is reflected in other intended actions in the plan i.e. anything seeking to reduce traffic growth, the number of trips, the use of sustainable transport is going to have a positive impact. The second highest impact is on reducing death and injury reflecting the actions to be taken to more efficiently manages traffic, reducing conflicts with vulnerable road users, providing cycle and pedestrian facilities and promoting road safety through education, engineering and enforcement. It is well integrated into the plan and it is considered that this should be a good long term investment with the ability to have medium term benefits in market towns where new cycle and pedestrian schemes are proposed. The policies are also likely to encourage indigenous and inward investment by reducing journey times and improving traffic management thereby benefiting the reputation of towns. Again due to the improved local ambience of towns through traffic management and the targeted approach in the Implementation Plan, significant benefits are likely to accrue to healthy lifestyles and the quality of place where people live.

In terms of the NATA categories the policies have the greatest benefit to the health agenda (judging by the high individual scores for the three SA objectives under this heading). Social, community and accessibility objectives have the next highest scores followed by the economy. Both objectives score positively under the economy heading, although this is skewed towards encouraging investment as mentioned above, with a less significant impact on the reducing the impacts of freight on communities.

The LTP3 policies score poorly overall on the environment and natural resources set of SA objectives. A high score is noted for reducing carbon emissions and a reasonable positive impact is expected on adapting to the effects of climate change. It is the scores for the physical environment that are woefully poor with two SA objectives 8. *To protect and enhance biodiversity and geodiversity* and 12. *To maintain and improve water, soil and mineral quality and resources* scoring negatively and SA 9 *To protect and enhance historic or archaeological* assets scoring zero. This means there is a real concern that loss of biodiversity and geodiversity is a possible outcome of these policies because they fail to demonstrate that these aspects will be considered when designing new schemes or in maintenance work. Statutory regulations will need to be met, but there is a missed opportunity to forward plan to avoid loss of habitats, to need to move habitats, to select less environmentally damaging materials or practices that could negatively impact wildlife. There is no vision of seeking to enhance biodiversity, giving the impression that it is subservient to cost and budget restrictions. In the past the Highways service had ISO 14001 International environmental management system accreditation. As this is not mentioned in the plan then it must be assumed that it might be subject to a budget cut.

The negative score for SA 12 *To maintain and improve water, soil and mineral quality and resources* is the cumulative result of the LTP3 policies. However policy 2.3 *More sustainable processes and use of materials to reduce impact of construction and maintenance* has a positive score so mitigation is not needed as this policy would be applied in conjunction with others in the plan.

Examination of the 17 negative impacts in Table 5.2 is necessary to determine if mitigation measures are required. Of the 23 LTP3 policies only 5 are likely to have negative impacts on 4 SA objectives and none of these are strongly negative. The following three LTP3 policies have the same pattern of negative impacts:
1.3 *Improved connectivity and accessibility in rural areas;*
1.4 *Seeking improvement to the A11, A12 and A14 etc*
4.3 *Improve infrastructure for sustainable transport*
on
SA 8 *To protect and enhance biodiversity and geodiversity*
SA 9 *To protect and enhance historic or archaeological assets.*
SA10 *To protect and maintain townscapes and landscapes of visual importance*
SA12 *To maintain and improve water, soil and mineral quality and resources*
This is due to the three policies all involving new road/infrastructure building.

The remaining negative scores are on LTP3 policy 1.1 *Maintaining the highway in good condition* which raises concerns for SA 8 biodiversity and SA 10 use of resources and 5.3 *Maintaining the transport network and improving its connectivity, resilience and reliability in rural areas*, where the concerns are for SA8 biodiversity, SA9 archaeological assets and SA12 use of resources.

We have already seen how the impact on SA12 is mitigated by the existence of LTP3 policy 2.3. However there is a need to mitigate for the potential impacts on SA 8 and 10, as set out in section 6.

5.2.2 Summary of the sustainability of individual policies

In Table 5.6 the significant impacts of the individual LTP3 polices are summarised, noting where some impacts are expected to be experienced in the short term (within a year). On the whole the impacts are all assumed to be medium (1 to 3 years) to long term (over 4 years) from the time when action is taken.

Table 5.6 Summary of sustainability of individual LTP3 policies

	LTP3 policy	Sustainability summary	Mitigation required
1.1	The challenge of maintaining the highway network in good condition	This policy benefits road safety in the short, medium and long term, particularly for cyclists and is likely to improve local satisfaction with the quality and safety of where people live. It will also benefit road haulage and distribution, maintaining the reputation of Suffolk for good quality A roads encouraging businesses to locate in the County. Maintenance work could have a negative effect roadside verges and habitats unless carefully managed and consume water, soil and mineral resources or damage their quality on a site specific basis. However this is mitigated by LTP3 policy 2.3. Overall the policy is marginally sustainable (+1)	Yes. See Section 6 Sustainability would be greatly improved if appropriate statement about managing environ-mental impacts in place.
1.2	Tackling congestion in the larger towns by more efficient management of traffic, reducing the demand for car travel and promoting more sustainable means of travel	This policy proposes a number of activities and hence is strongly sustainable, being one of 3 policies scoring +11 (third highest overall). It is likely to encourage walking and cycling particularly encouraging healthy lifestyles and improving the quality of where people live. Good traffic management and reducing the car travel will reduce the likelihood of road accidents, improve air quality in the larger towns, reduce carbon emissions, reduce the risk of damage to historic buildings and improve the attractiveness of town centres to investing businesses. As the activities associated with the policy do not necessarily require physical works (e.g. UTMC and education) the impact on biodiversity is thought likely to be negligible.	No
1.3	Improved connectivity and accessibility in rural areas	Improved rights of way in rural areas will encourage walking and hence healthy lifestyles whilst better accessibility will improve satisfaction with where people live and reduce social exclusion. Assuming the improved accessibility is by providing some form of public transport from rural areas, this will reduce congestion in towns, reducing carbon emissions. However rural areas are likely to be sensitive to any new building works (e.g. new routes) potentially negatively impacting biodiversity, historic buildings, landscapes and use resources. New works do give the opportunity to adapt to the effects of climate change so overall the policy is slightly positive (+2).	Sustainability would be greatly improved if appropriate statement about managing environ-mental impacts in place. See section 6.
1.4	Seeking improvement to the A11,A12 and A14 trunk roads connecting businesses in Suffolk to each other and to their markets	This policy will reduce road accidents, congestion and hence improve air quality, and improve accessibility. It will particularly benefit business by improving journey times, encouraging inward investment and reducing carbon emissions. New works could be substantial and hence there are the same concerns and benefits as in 1.3. The policy is on balance sustainable (+2).	As 1.3
1.5	Seeking improvement to the rail network for freight	Encouraging rail improvements could reduce car use and congestion benefitting air quality, improve access	No

	and passengers	and journey time to services and for business, and strongly encourage more freight to be moved on rail. The indirect impact of encouraging such improvements will be works by the rail industry that will be required to manage environmental impacts. Hence the policy is sustainable, scoring +7.	
1.6	Relief for our market towns suffering from high levels of through traffic	Managing traffic flows through Suffolk's market towns will do much for the local ambience, benefitting road safety, air quality, historic building assets, particularly quality of life. It will seek to reduce freight movements through towns and encourage sustainable travel for local trips hence reducing carbon emissions. A highly sustainable policy overall, scoring +9.	No
1.7	Securing high speed broadband throughout Suffolk	This is a sustainable policy (+3) that will reduce social exclusion and improve access to services particularly in rural areas and benefit business development. It would also reduce the need to travel and hence carbon emissions.	No
2.1	Encouraging the use of more sustainable forms of transport	This policy has strong health, social and community benefits in the short and medium term and by reducing car use will reduce carbon emissions in the long term. This is the only policy that scored -/+ on an SA objective, the problem being that increasing cycling and walking increases the number of more vulnerable road users (pedestrian accidents have been rising in Suffolk) whilst reducing the number of car casualties. Overall a sustainable policy scoring +7.	No
2.2	Improving the efficiency of the highway network to reduce delays to journeys	More efficient traffic management will benefit road safety and by reducing journey delay will improve air quality and reduce carbon emissions. An efficient highways network will encourage businesses to locate in Suffolk. The policy is generally sustainable (+4).	No
2.3	More sustainable processes and use of materials to reduce impact of construction and maintenance	This is an important sustainable policy (+6) that will need to be applied with others in the strategy. It will benefit the environment, particularly biodiversity, historic and archaeological assets, townscapes and landscapes, and reduce flood risk. It encourages the use of recycled materials in construction processes.	No
2.4	Supporting developments in alternative fuel types	This policy will help to reduce carbon emissions and improve air quality. (+3)	No
2.5	Promoting technological improvements such as teleconferencing	Encouraging the use of teleconferencing could improve access to services and facilitate business, reducing the need to travel. Technological improvements also include intelligent lighting systems than reduce energy needs and hence the strong benefit to reducing carbon emissions. (+5)	No
3.1	Creating pedestrian-friendly environments and support active transport	Another of the 3 policies scoring +11 (third highest overall), this policy will be particularly effective at creating safe pedestrian areas, encouraging walking over the use of the car, benefiting health, air quality, the quality and safety of where people live, reducing social severance that can be caused by busy roads. Creating attractive accessible town centres will encourage inward investment and reduce carbon emissions in the longer term. In creating pedestrian friendly environments thought can also be given to providing rain/sun shelters allowing adaptation to climate change.	No
3.2	Promoting road safety through education	This policy has health and social and community benefits, in that education of risks can improve driving standards (reducing road accidents), encourage healthy	No

		lifestyles (e.g. not driving whilst tired) and improve local areas, through greater respect for speed limits etc. Benefits are mainly short term and may need constant repetition, but overall the policy is sustainable (+5).	
3.3	Educating front-line health workers about transport options and the importance of communicating these to patients	This policy also has mainly health and social and community benefits. Promoting cycling and walking will encourage healthy lifestyles and reduce death and injuries and in encouraging modal shift will take cars off the road improving air quality, the quality of areas where people live and reduce carbon emissions. It will promote access to transport for all, reducing inequalities. (+9)	No
3.4	Supporting engineering and enforcement to reduce the number of road crashes	It is considered that this policy will not result in any significant negative impacts on the environment because most of the engineering works would be in established built up areas (+4). It will help reduce the number of road collisions, benefiting health and will improve the safety of residential areas. There is the potential for new schemes to include adaptations to combat climate change concerns, e.g. flood risk. Consistent safety on major roads is important to journey times for business.	No
4.1	Reduce demand for car travel	This policy had no negative impacts, scoring +8 overall. It will significantly benefit road safety and in promoting alternative modes of active travel will benefit healthy life styles. Reducing traffic movements will benefit air quality, improving living environments in towns and reduce carbon emissions.	No
4.2	Making efficient use of transport networks	Efficient transport networks in towns can reduce stop-start car movements, improving air quality local satisfaction with living environments and reduce carbon emissions. Improved journey times will benefit business, encouraging economic growth. (+4)	No
4.3	Improve infrastructure for sustainable transport	This policy has a lot of benefits for health and social and community aspects but these are balanced against the risk of the physical works associated with improved infrastructure, that result in the removal of trees from urban areas etc. One particular concern is the prospect of an increase in signage and variable message signs included in the Implementation Plan. These could damage historic townscapes. (+5)	Yes see 6.1. Strengthen protection of historic environment.
5.1	Better accessibility to employment, education and services	Significantly sustainable policy (+11) that could reduce car use, reducing car accidents, carbon emissions, benefiting health, air quality, quality of life and promote access for all.	No
5.2	Encouraging planning policies to reduce the need to travel	This policy scores the same as 5.1 but with the added benefit that strategic planning of housing, employment and transport can include adaptations to climate change (e.g. related to flood risk, inaccessibility due to snow). Second most sustainable policy (+12).	No
5.3	Maintaining the transport network and improving its connectivity, resilience and reliability	In the rural context this policy will benefit road safety, local living environments, reduce social inclusion and could stimulate local enterprise. However new infrastructure to improve connectivity could be sensitive in the rural environment. (+6)	Sustainability could be improved see section 6.
5.4	Reducing impact of transport on communities	Reducing severance, congestion, and lorry movements in settlements in rural areas can have a big impact on quality of life, air quality, encouraging use of sustainable transport for short trips, thereby encouraging healthy lifestyles. It can make a big difference to historic buildings and townscapes encouraging tourism. This is	No

		the most sustainable policy in the plan at +15.	
5.5	Support the county council's ambition of improving broadband access throughout Suffolk	This is particularly important for rural areas so although the policy is the same at 1.7 it is considered that broadband in rural areas has a greater potential to reduce the need to travel, saving longer trips and improve access to services for all. (+6)	No

5.2.3 Synergistic effects

There are some synergistic effects within the transport strategy:

- Policies to reduce car and freight traffic are more likely to be successful if schemes to provide alternative forms of transport are in place. Hence improving the rail network will help other initiatives to take lorries out of villages.
- Similarly, sustainable modes are more likely to be used if other restrictions are imposed on road travel or parking.
- Integration of sustainable modes will also have a synergistic effect. For example a rail scheme is more likely to be used if people without cars can be effectively transported to the and from the station (e.g. by demand responsive bus).
- The negative effects of building schemes on biodiversity are synergistic. While the damage caused by each scheme may be localised, the combined effect could be to cause such fragmentation or loss of a habitat or wildlife population that it becomes unsustainable.

6. Mitigation

6.1 Recommendations

The sustainability appraisal has shown that the LTP3 policies are generally sustainable but there is one weakness. It stems from a poorly worded objective first picked up in the compatibility check with the SA objectives as seen in section 4.8.

The objective "Minimise impact of transport on historic and natural environment" does not go far enough to ensure that historic building and archaeological assets, biodiversity and geodiversity will be not be negatively impacted by this plan. There is a requirement in planning legislation to protect and enhance biodiversity. The current wording suggests that negative impact is acceptable – it may be minimised, but it is still a negative impact. This is not adequate and may not be a fair reflection of intentions. Hence it is suggested that a much clearer objective is included in the transport plan:

"Protect and enhance the historic and natural environment when implementing transport initiatives. "

It will ensure that biodiversity and geodiversity are protected and enhanced bringing the Local Transport Plan in line with the objective included in the Suffolk Community Strategy "Retain, enhance and value Suffolk's natural and historic environment".

This also needs to be followed up with a policy in the Carbon reduction – Creating the Greenest County section of the plan. Policy 2.3 states that sustainable processes and use of materials to reduce the impact of construction and maintenance will be applied, suggesting that recycled materials and environmentally friendly products will be selected. However this fails to integrate protection of biodiversity and geodiversity in forward planning schemes.

In Policy 4.3 above, the Implementation Plan has also raised the prospect of increased signage linked to improving sustainable transport modes (particularly cycling) and variable message displays usually linked to the bus network. Again the specific protection of the historic built environment (Listed Buildings and Conservation Areas) from negative impact is not reflected in the LTP3 policies. In this case it could be argued that planning requirements will ensure that no detrimental impact to Listed buildings or in Conservation Areas will be allowed, should planning permission be sought.

On balance the sustainability of the plan could be enhanced if LTP policy 2.3 was made more explicit:

"More sustainable processes and use of materials, managing the impact of construction and maintenance on biodiversity, geodiversity, historic buildings and archaeological assets"

This would ensure that the impact of all new infrastructure works and maintenance activities were considered, prioritising biodiversity and built environment assets for their own sake. Such assets can be essential to tourism – an important sector of the Suffolk economy. Furthermore in the absence of any general text in the plan expressing continued support for ISO14001 in this time of financial austerity, this will ensure that early consideration of aspects that can be show stoppers and be costly to remedy takes place.

The above changes will mean that the negative impact of the LTP3 policies on SA objective 8 To protect and enhance biodiversity and geodiversity shown in Table 5.2 will change to a positive impact. The negative result for SA12 *To maintain and improve water, soil and mineral quality and resources* is not a concern because the LTP3 strategy already includes

a policy that will ensure that recyclable materials and environmentally friendly processes will be used (LTP 2.3). Hence mitigation is not required.

6.2 Uncertainties and risks

Only one impact has been identified which could be either positive or negative (see Table 5.5 LTP policy 2.1). Uncertainty about the likely direction of impact is quite low and with the improvements to wording mentioned above is not thought to be a risk.

7. Implementation and monitoring

7.1 Requirements

The SEA guidance identifies two main areas which monitoring should focus on:

- Significant effects that could give rise to irreversible damage, with a view to identifying trends before such damage is caused;
- Where there is uncertainty in the appraisal and monitoring would enable preventive or mitigation measures to be taken.

The concerns about the possible impact on biodiversity and historic and archaeological assets should be mitigated by the actions suggested in section 6. The effect of this will be monitored in other documents, for example Biodiversity Action Plans and Conservation Area Quality reviews. No specific areas of uncertainty have been identified.

LTP3 does not include any indicators for monitoring. Hence the effectiveness of the plan will be judged through other documents. All the SA objectives used in this appraisal are included in the County and District project, Suffolk's Environment … Towards Sustainable Development.

Glossary

AA	Appropriate Assessment
AONB	Area of Outstanding Natural Beauty
AQMA	Air Quality Management Area
BAP	Biodiversity Action Plan
BREEAM	Building Research Establishment Environmental Assessment Method
CA	Conservation Area
CCTV	Closed-Circuit Television
CLG	Communities and Local Government
dB	Decibel
DC	District Council
EU	European Union
JSA	Job Seeker Allowance
LDF	Local Development Framework
mSv	millisieverts, a measure of dose
ODPM	Office of the Deputy Prime Minister
OMS	Offshore Marine Site
PO	Post Office
PDL	Previously Developed Land
PPS	Planning Policy Statement
RSPB	Royal Society for the Protection of Birds
RSS	Regional Spatial Strategy
SA	Sustainability Appraisal
SAC	Special Area of Conservation
SAM	Scheduled Ancient Monument
SCC	Suffolk County Council
SCDC	Suffolk Coastal District Council
SEA	Strategic Environmental Appraisal
SOA	Super Output Area
SPA	Special Protection Area
SPD	Supplementary Planning Document
SSSI	Site of Special Scientific Interest
SUDS	Sustainable Urban Drainage System
UTMC	Urban Traffic Management Control

BIBLIOGRAPHY

Suffolk County Council. Scoping Report for the Sustainability Appraisal of the Suffolk Local transport Plan 3 (May 2010) and republished January 2011.

Suffolk County Council. Scoped documents. May 2010

Suffolk County Council. Local Transport Plan 2011-2031 Part 1 – Transport Strategy

Suffolk County Council. Local Transport Plan 2011-2031 Part 2 – Implementation Plan

Communities and Local Government (CLG). A Practical Guide to the Strategic Environmental Assessment Directive. (September 2005).

Department for Transport (DfT) Strategic Environmental Assessment Guidance for Transport Plans and Programmes (WebTag Tag Unit 2.11, see www.webtag.org.uk) (DfT, In draft April 2009).

Department for Transport Guidance on Local Transport Plans (2009)

Appendices

Appendix 1: Suffolk County Council Local Transport Plan 3 Sustainability Appraisal Scoping Report Responses Summary

Following the consultation on Suffolk County Council Local Transport Plan 3 Sustainability Appraisal in May 2010 a number of comments was received which were given a careful consideration by the County Council Sustainability Appraisal team.

Name	Comments	SCC Responses
Damini Bhan Planner (Planning Policy) Ipswich Borough Council	3.8.7 P25 - Average Traffic Speed by District doesn't show Ipswich?	Noted and included in revised Scoping report.
	P27 - Bacon Factory Curve. Minor point but I would avoid the use of imperial term '2 dozen'	Noted and amended in revised Scoping report.
	3.12 P31 para 2 It states that the highest emissions are in urban areas and this should be balanced with the qualification that the emissions per capita are far lower than for rural areas. Uncorrected, this misleads the reader into thinking that urban living is far less sustainable than rural life whereas in transport terms urban dwellers have greater choices regarding sustainable travel with better access to public transport whilst cycling & walking are realistic options for commuting.	Noted. Emissions per capita are lower in urban areas (Table 3.12.1 shows Ipswich as the lowest per capita emissions) but the cumulative effect of urban areas are higher than rural areas as shown in Figure 3.12.1.
	This section also addresses climate change but principally seems to focus on snow and wet weather. Other impacts on our changing climate are likely to be: • Closure of Felixstowe port due to high winds with knock on effects on congestion on A14 leading to further problems in Ipswich. • Closure /restrictions on Orwell Bridge due to high winds with knock on effects in Ipswich. **(Both of these would have and economic impact and air quality impact in Ipswich)** • Effects of extremely hot weather when combined with road accidents (Emergency Plan officers had to get water to stranded travellers on A14 after road was blocked by an accident). • Air quality issues residents want to open windows in hot weather but this is not advisable in AQMAs. • Concentration of Ozone trapped in urban areas in very hot weather.	Noted. Additional information about climate change impacts will be included in the updated Scoping Report and Key Issues table in order to reflect the specific implications for Suffolk.
	Table 3.16.1 P40 'Reduction in greenhouse gas emissions' – no mention of other domestic fuel consumption (gas,	

	oil, coal) either up or down. 3.17 P41 NI186. How is reduction figure of 1.15% arrived at? LAA target is 12% over 3 years.	Noted. Parts of rural Suffolk do not have main gas supplies. Consumption figures are not available due to commercial sensitivity. The figure 1.15% is an error and this has been amended in the Scoping report to the LAA target of 12% over 3 years i.e. 4% pa.
Magnus Magnus son Forward Planning Officer Forest Heath District Council	Priorities for the District, as we see them at this time, are improvements to the road traffic network in and around the town of Brandon and the dualling of the A11 between Barton Mills and Thetford. The latter is seen as essential, not only in terms of stimulating investment and economic development within the District and Region as a whole, but also as a means of alleviating some of the transport issues that we currently experience within Brandon.	This information will be added to the issues identified for SCC Local Transport Plan.
Pat Williams Planning & Landscape Adviser Norfolk & Suffolk Government Team Natural England	• In table 3.16.1: Key Issues in Suffolk under Environmental Issues, the paragraph on page 40 entitled 'Biodiversity' should be 'Biodiversity and Geodiversity' and the bullet point on page 41 in the section entitled 'Historical and archaeological importance' should be moved to the section above on 'Biodiversity and Geodiversity' • Also in table 3.16.1, the next paragraph is 'Landscapes and townscapes'. The wording in the first bullet point should perhaps be increased to say '…(AONB), which is afforded the highest level of protection at a national level.' • Table 4.1: SA Framework for the Suffolk LTP, under the Environmental and Natural Resources section, the paragraph 'To protect and enhance biodiversity and geodiversity' should include geodiversity in the second column i.e. '…. Biodiversity, geodiversity or habitats…..' The indicator column should include 'reduction in BAP species or habitats'.	Noted. Noted. Error will be corrected in the Key Issues table included in the Scoping report. Noted. Key Issues table in the Scoping report will be amended. Noted. These changes will be made to the SA Framework.
Irina Davis *Strategic Environmental Assessment Officer,Suffolk County Council*	Page 19 Employment Economy Chapter it would be useful to present information re the statistics on employment for Transport Industry specifically as it would be very relevant information for SA Framework formation.	Additional information about employment statistics will be added to Employment Economy Chapter.

Appendix 2: Sustainability Appraisal of Suffolk Local Transport Plan Strategies

SA Objectives	Table 1. Transport and Economy Strategies						
	1.1 The challenge of maintaining the highway network in good condition	**1.2 Tackling congestion in the larger towns by more efficient management of traffic, reducing the demand for car travel and promoting more sustainable means of travel**	**1.3Improved connectivity and accessibility in rural areas**	**1.4Seeking improvement to the A11,A12 and A14 trunk roads connecting businesses in Suffolk to each other and to their markets**	**1.5Seeking improvement to the rail network for freight and passengers**	**1.6 Relief for our market towns suffering from high levels of through traffic**	**1.7 Securing high speed broadband throughout Suffolk**
Health							
1. To reduce death and injury	+ Well maintained highway network will reduce death and injury on the roads	+ This strategy will reduce death and injury with more efficient management of traffic	0	+ This strategy will reduce death and injury with more efficient management of traffic	0	+ Improvements to safety in market towns will reduce injuries on the roads.	0
2. To encourage healthy lifestyles	0	++ Walking and cycling will benefit health	+ Improved rights of way will facilitate walking and cycling.	0	0	0	0
3. To maintain and improve air quality	0	+ More sustainable means of travel is likely to improve air quality	0	+ Reduced congestion will benefit air quality	+ Rail improvements could increase use and reduce traffic thereby benefiting air quality.	+ Reduced congestion will benefit air quality	0
Social Community and Accessibility							
4. To improve the quality and safety of where people live	+ Well maintained highway network will reduce death and	++ Managing congestion and improving walking and cycling facilities	+ Will help to improve the quality of rural areas	0	0	++ Managing congestion will improve the quality	0

	injury on the roads	will improve the quality of places				and safety of market towns	
5. To reduce poverty and social exclusion, improving access to key services for all sectors of the population	0	0	+ Will help to create a more accessible transport system for all	+ Will help to create a more accessible transport system for all	+ Will help to create a more accessible transport system for all	0	0
Economy							
6. To encourage indigenous and inward investment, fuelling economic growth	+ Maintaining roads is vital to businesses and will help to tackle congestion	+ Reducing congestion will positively effect economy	+ Increased connectivity will help alleviate congestion and reduce journey times	+ Increased connectivity will help alleviate congestion and reduce journey times	+ Will help to reduce congestion which positively effects economy	0	+ Equal access to Broadband will help business throughout Suffolk
7. To reduce the impacts of road freight on communities	0	+ Managing congestion will include freight	0	0	++ Encouragement of freight on rail will promote this SA objective	++ Management of freight through market towns addresses this SA objective	0
Environment and Natural Resources							
8. To protect and enhance biodiversity and geodiversity	- Maintenance activities could have negative affects on biodiversity	0	- New routes (roads or rights of way) could negatively affect biodiversity	- Changes to roads could have some negative affect on biodiversity	0	0	0
9. To protect and enhance historic or archaeological assets.	0	+ Congestion management would benefit historic town centres	- New routes (roads or rights of way) could negatively affect historic assets	- Changes to roads could have some negative affect on historic assets	0	+ Traffic management could benefit historic assets	0

10. To protect and maintain townscapes and landscapes of visual importance	0	+ Congestion management would benefit historic townscapes	- New routes (roads or rights of way) could negatively affect landscapes	- Changes to road alignments could have some negative affect on landscapes	0	+ Traffic management could benefit townscape	0
11. To reduce carbon emissions	0	+ Will reduce car trips and encourage a more energy efficient transport system	+ Connectivity and accessibility will help to alleviate congestion, reducing journey times and hence carbon dioxide	+ Will reduce car trips and encourage a more energy efficient transport system	+ Will have positive effect on this SA objective	+ Will have positive effect on this SA objective	+ Will have positive effect on this SA objective
12. To maintain and improve water, soil and mineral quality and resources	- Maintenance work could have some negative affect on water, soil and mineral resources	0	- New build could potentially have some negative affect on water, soil and mineral resources	- Potentially could have some negative affect on water, soil and mineral resources	0	0	0
13. Adapt to the effects of climate change	0	0	+ New build and maintenance can designed to take flooding issues into account.	+ New build and maintenance can designed to take flooding issues into account.	+ Will have positive effect on this SA objective	0	0

Key

++ Very positive effect
+ Positive effect
0 Neutral effect
- Negative effect
-- Very negative effect

SA Objectives	Table 2. Carbon Reduction – Creating the Greenest County				
	2.1 Encouraging the use of more sustainable forms of transport	**2.2 Improving the efficiency of the highway network to reduce delays to journeys**	**2.3 More sustainable processes and use of materials to reduce impact of construction and maintenance**	**2.4 Supporting developments in alternative fuel types**	**2.5 Promoting technological improvements such as teleconferencing**
Health					
1. To reduce death and injury	-/+ Increasing cycling and walking increase the vulnerable road users but reduces car trips and car accidents.	+ This strategy will reduce death and injury with more efficient management of traffic	0	0	0
2. To encourage healthy lifestyles	++ This objective will increase walking and cycling therefore has a positive effect.	0	0	0	0
3. To maintain and improve air quality	+ Will help to reduce congestion	+ Likely to improve air quality by reducing journey delay	0	+ Aims to reduce noxious emissions	+ Could reduce traffic flows thereby improving air quality
Social Community and Accessibility					
4. To improve the quality and safety of where people live	+ Will improve the quality of urban and rural centres	0	0	0	0
5. To reduce poverty and social exclusion, improving access to key services for all sectors of the population	+ Will improve access for cyclists and pedestrians	0	0	0	+ Will improve access to services
Economy					
6. To encourage indigenous and inward investment, fuelling economic growth	+ Will increase connectivity and help alleviate congestion	+ Reducing congestion will positively effect economy	0	0	+ By reducing traffic will help to reduce congestion which positively effects economy

7. To reduce the impacts of road freight on communities	0	0	0	0	0
Environment and Natural Resources					
8. To protect and enhance biodiversity and geodiversity	0	0	+ Helps to reduce damage to biodiversity though use of sustainable processes and materials	0	0
9. To protect and enhance historic or archaeological assets.	0	0	+ Helps to reduce damage to historic assets though use of sustainable processes and materials	0	0
10. To protect and maintain townscapes and landscapes of visual importance	0	0	+ Helps to reduce damage to landscapes though use of sustainable processes and materials	0	0
11. To reduce carbon emissions	+ Will help to reduce car trips and CO2 emissions per capita.	+ Will reduce car trips and encourage a more energy efficient transport system	0	++ Alternative fuels aim to reduce carbon emissions	++ Will help to reduce car trips and CO2 emissions per capita. Intelligent lighting systems reduce energy use.
12. To maintain and improve water, soil and mineral quality and resources	0	0	+ Helps to reduce damage to water and soil though provision of maintenance in a sustainable way.	0	0
13. Adapt to the effects of climate change	0	0	+ Use of sustainable processes and materials could reduce flood risk	0	0

Key: ++ Very positive effect; + Positive effect; 0 Neutral effect; - Negative effect; -- Very negative effect

SA Objectives	Table 3. Safer and Healthier Communities			
	3.1 Creating pedestrian-friendly environments and support active transport	**3.2 Promoting road safety through education**	**3.3 Educating front-line health workers about transport options and the importance of communicating these to patients**	**3.4 Supporting engineering and enforcement to reduce the number of road crashes**
Health				
1. To reduce death and injury	++ Will improve the safety of the transport systems and health of the population.	++ Education of risks can improve driving standards	++ Promotion of cycling, walking and safe modes for individuals will help reduce road accidents	+ This strategy will reduce death and injury with more efficient management of traffic
2. To encourage healthy lifestyles	++ Promotes walking & cycling	++ Education of risks (e.g. driver tiredness, pedestrian safety) can encourage healthy lifestyles	+ Promotion of cycling and walking will contribute to healthy lifestyles	0
3. To maintain and improve air quality	+ Encourages walking and cycling rather than car use	0	+ Encouraging modal shift will reduce traffic flows	0
Social Community and Accessibility				
4. To improve the quality and safety of where people live	+ Will increase a number of people sustainably travelling to work.	+ Education is likely to improve driving standards	+ Encouraging modal shift for short distances will help improve quality of local neighbourhoods	+ Local safety schemes and enforcement can improve local residential environments
5. To reduce poverty and social exclusion, improving access to key services for all sectors of the population	+ Reduces social severance	0	+ Will help to create a more accessible transport system for all	0
Economy				
6. To encourage indigenous and inward investment, fuelling economic growth	+ Will improve ambience of town centres and increase connectivity	0	+ Increased connectivity will help alleviate congestion and reduce journey times	+ Helps to alleviate congestion and reduce journey times.

7. To reduce the impacts of road freight on communities	0	0	0	0
Environment and Natural Resources				
8. To protect and enhance biodiversity and geodiversity	0	0	0	0
9. To protect and enhance historic or archaeological assets.	0	0	0	0
10. To protect and maintain townscapes and landscapes of visual importance	0	0	0	0
11. To reduce carbon emissions	++ Will reduce car trips hence CO2 emissions reduction	0	++ Will reduce car trips hence CO2 emissions reduction	0
12. To maintain and improve water, soil and mineral quality and resources	0	0	0	0
13. Adapt to the effects of climate change	+ Ability to reduce flood risk through good design	0	0	+ Design of safety schemes could reduce flood risk

Irina I don't think road safety engineering schemes aim at reducing car trips as much as managing them

Key

++ Very positive effect
+ Positive effect
0 Neutral effect
- Negative effect
-- Very negative effect

SA Objectives	Table 4. Urban Area Strategy Principles		
	4.1 Reduce demand for car travel	**4.2 Making efficient use of transport networks**	**4.3 Improve infrastructure for sustainable transport**
Health			
1. To reduce death and injury	++ Will improve the safety of the transport systems and reduce risk of injury.	0	+ Good infrastructure for sustainable modes will improve safety of vulnerable road users
2. To encourage healthy lifestyles	++ Promotes alternative physical modes of travel	0	+ Improved infrastructure for sustainable modes will encourage walking and cycling
3. To maintain and improve air quality	+ Reduces traffic	+ Urban traffic management can reduce stop-start car movements	+ Use of sustainable transport will reduce car emissions
Social Community and Accessibility			
4. To improve the quality and safety of where people live	+ Will increase a number of people sustainably travelling to work.	+ Reliable bus services and improved information	+ Will help to improve the quality and safety of urban centres
5. To reduce poverty and social exclusion, improving access to key services for all sectors of the population	0	0	+ Will help to create a more accessible transport system for all
Economy			
6. To encourage indigenous and inward investment, fuelling economic growth	0	+ Improved journey times and reliability	+ Increased connectivity will help alleviate congestion and reduce journey times
7. To reduce the impacts of road freight on communities	0	0	0

Environment and Natural Resources			
8. To protect and enhance biodiversity and geodiversity	0	0	- Provision of new infrastructure could impact biodiversity and geodiversity
9. To protect and enhance historic or archaeological assets.	0	0	- Provision of new infrastructure (e.g. signage) could impact could damage historic or archaeological assets
10. To protect and maintain townscapes and landscapes of visual importance	0	0	- Provision of new infrastructure could impact damage townscapes and landscapes
11. To reduce carbon emissions	++ Will reduce car trips hence CO2 emissions	+ Urban traffic management can reduce stop-start car movements, reducing CO2 emissions	++ Will reduce car trips hence CO2 emissions reduction
12. To maintain and improve water, soil and mineral quality and resources	0	0	- Provision of new infrastructure could require minerals and effect soil and water quality
13. Adapt to the effects of climate change	0	0	+ Provision of new infrastructure should be designed to cope with flood list.

Key

++ Very positive effect
+ Positive effect
0 Neutral effect
- Negative effect
-- Very negative effect

SA Objectives	Table 5. Rural Areas Strategy Principles				
	5.1 Better accessibility to employment, education and services	**5.2 Encouraging planning policies to reduce the need to travel**	**5.3 Maintaining the transport network and improving its connectivity, resilience and reliability**	**5.4 Reducing impact of transport on communities**	**5.5 Support the county council's ambition of improving broadband access throughout Suffolk**
Health					
1. To reduce death and injury	++ Provision of new forms of local transport could reduce car use and improve safety	++ Will encourage use of sustainable modes rather than car.	++ Well managed roads can help reduce road accidents	+ Well managed roads can help reduce road accidents	+ Reduction of need to travel reduces risk
2. To encourage healthy lifestyles	++ Provision of new forms of public transport will encourage walking	++ Provision of walking and cycling facilities will encourage use	0	++ Reduction of traffic impacts could encourage sustainable modes	0
3. To maintain and improve air quality	+ Provision of new forms of rural transport could reduce car flows	+ Provision of cycling and walking facilities will reduce car use	0	+ Traffic management aims to reduce congestion and pollutant emissions	+ Reduction of the need to travel means fewer emissions
Social Community and Accessibility					
4. To improve the quality and safety of where people live	+ Will increase a number of people sustainably travelling to work.	+ Closer location of homes and work	+ Will help to improve the quality of rural centres	++ Aims to reduce impact of transport on rural communities	0
5. To reduce poverty and social exclusion, improving access to key services for all sectors of the population	++ Will create a more accessible transport system for all	++ Will create a more accessible transport system for all	+ Will help to create a more accessible transport system for all	+ Will help to create a more accessible transport system for all	++ Will improve access to services for all

Economy					
6. To encourage indigenous and inward investment, fuelling economic growth	+ Will help to increase connectivity	+ Will help to increase connectivity and reduce congestion	++ Increased connectivity will help alleviate congestion and reduce journey times	+ Helps to alleviate congestion and reduce journey times.	+ Will help to increase connectivity hence positive effect is likely to take place
7. To reduce the impacts of road freight on communities	0	0	0	++ Aims to address lorries in rural communities	0
Environment and Natural Resources					
8. To protect and enhance biodiversity and geodiversity	0	0	- Maintenance activities could have some negative affect on biodiversity	0	0
9. To protect and enhance historic or archaeological assets.	0	0	- Maintenance activities could have some negative affect on historic assets	+ Traffic management could benefit Listed Buildings	0
10. To protect and maintain townscapes and landscapes of visual importance	0	0	0	+ Traffic management could protect townscape	0
11. To reduce carbon emissions	++ Will reduce car trips hence CO2 emissions reduction	++ Will reduce car trips hence CO2 emissions reduction	+ Free flowing traffic generates less carbon	++ Will reduce car trips and encourage a more energy efficient transport system	+ Reduction of the need to travel will reduce emissions
12. To maintain and improve water, soil and mineral quality and resources	0	0	- Maintenance activities could have some negative affect on water, soil and mineral resources	0	0
13. Adapt to the effects of climate change	0	+ Strategic planning of housing and employment can seek to reduce flood risk	++ Management is designed to combat resilience issues	+ Local issues could be considered	0

Key: ++ Very positive effect; + Positive effect; 0 Neutral effect; - Negative effect; -- Very negative effect

Appendix 3: Sustainability Appraisal of Suffolk Local Transport Plan (Do Nothing Scenario)

SA Objectives	Table 1. Transport and Economy Strategies						
	1.1 Maintaining the highway network in a lower than current level condition	**1.2 Do not tackle congestion in the larger towns by traffic management, reducing the demand for car travel or promoting sustainable travel.**	**1.3 Maintain current level of connectivity and accessibility in rural areas**	**1.4 No improvement to the A11,A12 and A14 trunk roads connecting businesses in Suffolk to each other and to their markets**	**1.5 No improvement to the rail network for freight and passengers**	**1.6 No attempt to relieve market towns suffering from high levels of through traffic.**	**1.7 Take no action to secure high speed broadband throughout Suffolk.**
Health							
1. To reduce death and injury	- Lack of funds and maintenance of highway network can cause injury or death on the road.	- Less efficient management of traffic will increase injuries	0	- Lack of funds and maintenance of highway network can cause injury or death on the road.	0	- Lack of funds and maintenance of highway network can cause injury or death on the road.	0
2. To encourage healthy lifestyles	0	- Lack of sustainable means of travel would not encourage healthy lifestyles	0	0	0	- Through traffic will discourage cycling and walking.	0
3. To maintain and improve air quality	0	- Congestion will have negative effect of air quality	0	0	0	0	0
Social Community and Accessibility							
4. To improve the quality and safety of where people live	- Lack of funds and maintenance of highway network can cause injury or death on the road.	- Not managing congestion and not improving walking and cycling facilities will not improve the quality of places	0	0	0	0	0

5. To reduce poverty and social exclusion, improving access to key services for all sectors of the population	0	0	0	0	0	0	0
Economy							
6. To encourage indigenous and inward investment, fuelling economic growth	0	- Not reducing congestion will negatively effect economy	0	- Not reducing congestion or journey times will negatively effect economy	- Lack of modern rail infrastructure will be a disincentive to business	0	- Will not help business throughout Suffolk
7. To reduce the impacts of road freight on communities	0	- Not managing traffic congestion could increase the impact of road freight on communities	0	0	-- No encouragement of freight on rail will increase pressure on roads.	-- No management of freight through market towns	0
Environment and Natural Resources							
8. To protect and enhance biodiversity and geodiversity	- Maintenance work could negatively affect biodiversity	0	0	0	0	0	0
9. To protect and enhance historic or archaeological assets.	0	- Traffic congestion in historic towns could damage assets	0	0	- Will increase road freight pressure in villages	0	0
10. To protect and maintain townscapes and landscapes of visual importance	0	0	0	0	0	0	0
11. To reduce carbon emissions	0	- Will not reduce car trips or encourage a more energy efficient transport system	0	- Will not reduce car trips or encourage a more energy efficient transport system	0	0	- Will not reduce car trips.
12. To maintain and improve water, soil and mineral quality and resources	0	0	0	0	0	0	0
13. Adapt to the effects of climate change	0	0	0	0	0	0	0

Key: ++ Very positive effect; + Positive effect; 0 Neutral effect; - Negative effect; -- Very negative effect

SA Objectives	Table 2. Carbon Reduction – Creating the Greenest County				
	2.1 Not encouraging the use of more sustainable forms of transport	**2.2 Maintain current level of efficiency of the highway network and journey times**	**2.3 Not encourage more sustainable processes and use of materials to reduce impact of construction and maintenance**	**2.4 Not supporting developments in alternative fuel types**	**2.5 Do not promote technological improvements such as teleconferencing**
Health					
1. To reduce death and injury	0	0	0	0	0
2. To encourage healthy lifestyles	0	0	0	0	0
3. To maintain and improve air quality	- Will not help to reduce congestion	- No improvement to air quality likely to result	0	- Will not reduce noxious emissions as quickly	- Will not reduce traffic flows thereby not improving air quality
Social Community and Accessibility					
4. To improve the quality and safety of where people live	- Will not improve the quality of urban and rural centres	0	0	0	0
5. To reduce poverty and social exclusion, improving access to key services for all sectors of the population	- Will not improve access for cyclists and pedestrians	0	0	0	- Will not improve access to services
Economy					
6. To encourage indigenous and inward investment, fuelling economic growth	- Will not increase connectivity and help alleviate congestion	- Not reducing congestion will negatively effect economy	0	0	- Not reducing traffic or having modern technology will be a disincentive to business
7. To reduce the impacts of road freight on communities	0	0	0	0	0

Environment and Natural Resources					
8. To protect and enhance biodiversity and geodiversity	0	0	- Does not reduce damage to biodiversity though use of sustainable processes and materials	0	0
9. To protect and enhance historic or archaeological assets.	0	0	- Does not reduce damage to historic assets though use of sustainable processes and materials	0	0
10. To protect and maintain townscapes and landscapes of visual importance	0	0	- Does not reduce damage to landscapes though use of sustainable processes and materials	0	0
11. To reduce carbon emissions	- Will not help to reduce car trips and CO2 emissions per capita.	- Will not reduce car trips and not encourage a more energy efficient transport system	0	-- Not encouraging alternative fuels will not aim to reduce carbon emissions	- Will not help to reduce car trips and CO2 emissions per capita.
12. To maintain and improve water, soil and mineral quality and resources	0	0	- Does not reduce damage to water and soil though provision of maintenance in a sustainable way.	0	0
13. Adapt to the effects of climate change	0	0	- Lack of use of sustainable processes and materials could not reduce flood risk	0	0

Key: ++ Very positive effect; + Positive effect; 0 Neutral effect; - Negative effect; -- Very negative effect

SA Objectives	Table 3. Safer and Healthier Communities			
	3.1 No change to existing pedestrian-friendly environments or support for active transport	**3.2 Keep promoting road safety through education at the current level with no improvement**	**3.3 Not educating front-line health workers about transport options and the importance of communicating these to patients**	**3.4 Not supporting engineering and enforcement to reduce the number of road crashes.**
Health				
1. To reduce death and injury	-- Lack of pedestrian-friendly environments (i.e. rural areas) could cause death and injury.	0	- Lack of promotion of cycling, walking and safe modes for individuals will not help reduce road accidents	- This strategy will not reduce death and injury with more efficient management of traffic
2. To encourage healthy lifestyles	-- Does not promotes walking & cycling	0	- Lack of promotion of cycling and walking will not contribute to healthy lifestyles	0
3. To maintain and improve air quality	- Does not encourages walking and cycling in place of car use	0	- No encouraging modal shift will reduce traffic flows	0
Social Community and Accessibility				
4. To improve the quality and safety of where people live	- Will not increase a number of people sustainably travelling to work.	0	- Not encouraging modal shift for short distances will help improve quality of local neighbourhoods	- Lack of local safety schemes and enforcement can improve local residential environments
5. To reduce poverty and social exclusion, improving access to key services for all sectors of the population	0	0	- Will not help to create a more accessible transport system for all	0
Economy				
6. To encourage indigenous and inward investment, fuelling economic growth	- Will not improve ambience of town centres or increase connectivity	0	0	- Will not help to alleviate congestion and reduce journey times.
7. To reduce the impacts of road freight on communities	0	0	0	0

Environment and Natural Resources				
8. To protect and enhance biodiversity and geodiversity	0	0	0	0
9. To protect and enhance historic or archaeological assets.	0	0	0	0
10. To protect and maintain townscapes and landscapes of visual importance	0	0	0	0
11. To reduce carbon emissions	-- Will not reduce car trips and CO2 emissions reduction	0	-- Will not reduce car trips and CO2 emissions reduction	0
12. To maintain and improve water, soil and mineral quality and resources	0	0	0	0
13. Adapt to the effects of climate change	0	0	- Lack of education will not promote this SA objective	- Lack of design of safety schemes would not reduce flood risk

Key: ++ Very positive effect; + Positive effect; 0 Neutral effect; - Negative effect; -- Very negative effect

SA Objectives	Table 4. Urban Area Strategy Principles		
	4.1 Keep demand for car travel at current level	**4.2 Not seeking to make efficient use of transport networks**	**4.3 Not seeking to improve infrastructure for sustainable transport**
Health			
1. To reduce death and injury	- Will not improve the safety of the transport systems and not reduce risk of injury.	0	- Lack of good infrastructure for sustainable modes will not improve safety of vulnerable road users
2. To encourage healthy lifestyles	- Will not promote alternative physical modes of travel	0	- Lack of good infrastructure for sustainable modes will not promote healthy lifestyles
3. To maintain and improve air quality	- Will not reduce traffic	- Lack of urban traffic management will not reduce stop-start car movements	- Not using sustainable transport will not reduce car emissions
Social Community and Accessibility			
4. To improve the quality and safety of where people live	- Will not increase a number of people sustainably travelling to work.	- Will not offer reliable bus services and improved information	- Will not help to improve the quality and safety of urban centres
5. To reduce poverty and social exclusion, improving access to key services for all sectors of the population	0	0	- Will not help to create a more accessible transport system for all
Economy			
6. To encourage indigenous and inward investment, fuelling economic growth	0	- Lack of improved journey times and reliability	- Lack of connectivity will not help alleviate congestion and reduce journey times
7. To reduce the impacts of road freight on communities	0	0	0
Environment and Natural Resources			
8. To protect and enhance biodiversity and geodiversity	0	0	0

9. To protect and enhance historic or archaeological assets.	0	0	0
10. To protect and maintain townscapes and landscapes of visual importance	0	0	0
11. To reduce carbon emissions	-- Will not reduce car trips and CO2 emissions	- Lack of urban traffic management will not reduce stop-start car movements, reducing CO2 emissions	-- Will not reduce car trips and CO2 emissions reduction
12. To maintain and improve water, soil and mineral quality and resources	0	0	0
13. Adapt to the effects of climate change	0	0	- Lack of new infrastructure does not promote new design to cope with flood risk.

Key: ++ Very positive effect; + Positive effect; 0 Neutral effect; - Negative effect; -- Very negative effect

SA Objectives	Table 5. Rural Areas Strategy Principles				
	5.1 Not improve accessibility to employment, education and services	**5.2 Not encourage planning policies to reduce the need to travel**	**5.3 Maintaining the transport network but not improving its connectivity, resilience and reliability**	**5.4 Do not seek to reduce the impact of transport on communities**	**5.5 Not support the county council's ambition of improving broadband access throughout Suffolk**
Health					
1. To reduce death and injury	0	-- Will not encourage use of sustainable modes rather than car.	0	0	0
2. To encourage healthy lifestyles	0	- Not enough provision of walking and cycling facilities will not encourage use	0	-- Lack of traffic management could discourage use of sustainable modes	0
3. To maintain and improve air quality	0	- Lack of provision of cycling and walking facilities will not reduce car use	0	- Absence of traffic management will not reduce congestion and pollutant emissions	- Lack of reduction of the need to travel means more emissions
Social Community and Accessibility					
4. To improve the quality and safety of where people live	- Will not increase a number of people sustainably travelling to work.	- Does not promote a closer location of homes and work	- Will not help to improve the quality of rural centres	-- Will not reduce impact of transport on rural communities	0
5. To reduce poverty and social exclusion, improving access to key services for all sectors of the population	-- Will not create a more accessible transport system for all	-- Will not create a more accessible transport system for all	- Will not help to create a more accessible transport system for all	- Will not help to create a more accessible transport system for all	-- Will not improve access to services for all
Economy					
6. To encourage indigenous and inward investment, fuelling economic growth	- Will not help to increase connectivity	- Will not help to increase connectivity and not reduce congestion	- Will not help to increase connectivity will help alleviate congestion and reduce journey	- Will not help to alleviate congestion and reduce journey times.	- Lack of connectivity is a disincentive to business

			times		
7. To reduce the impacts of road freight on communities	0	0	0	-- Will not address lorry in rural communities	0
Environment and Natural Resources					
8. To protect and enhance biodiversity and geodiversity	0	0	0	0	0
9. To protect and enhance historic or archaeological assets.	0	0	0	- Lack of traffic management could damage Listed Buildings	0
10. To protect and maintain townscapes and landscapes of visual importance	0	0	0	- Lack of traffic management can not protect townscape	0
11. To reduce carbon emissions	-- Will not reduce car trips and CO2 emissions reduction	-- Will not reduce car trips and CO2 emissions reduction	- Badly flowing traffic generates more carbon	-- Will not reduce car trips and encourage a more energy efficient transport system	- Lack of reduction of the need to travel will not reduce emissions
12. To maintain and improve water, soil and mineral quality and resources	0	0	0	0	0
13. Adapt to the effects of climate change	0	0	-- Lack of management will not address resilience issues	0	0

Key: ++ Very positive effect; + Positive effect; 0 Neutral effect; - Negative effect; -- Very negative effect

Appendix 4: Quality Assurance Checklist for transport plan SEA

Objectives and context	**Section of SA**
• The plan's purpose and objectives are made clear.	**4.1**
• Environmental issues and constraints, including international and EC environmental protection objectives, are considered in developing objectives and targets.	**4.1**
• SEA objectives, where used, are clearly set out and linked to NATA national objectives/ sub objectives and local objectives.	**3.1**
• Indicators and targets are defined where appropriate.	**4.6 & Table**
• Links with other related plans, programmes and policies are identified and explained.	**4.3** **4.2**
• Conflicts that exist between SEA objectives, between SEA and plan objectives and between SEA objectives and other plan objectives are identified and described.	**4.7**
Scoping	
• Consultation Bodies are consulted in appropriate ways and at appropriate times on the content and scope of the Environmental Report.	**3.3**
• The assessment focuses on the important significant issues.	**Table 4.4**
• Technical, procedural and other difficulties encountered (such as technical deficiencies or lack of know-how) are discussed; assumptions and uncertainties are made explicit.	**3.4**
• Reasons are given for eliminating issues from further consideration.	**Appendix 1**
Alternatives	
• Realistic alternatives are considered for key issues, and the reasons for choosing them are documented.	**4.1 & Table 4.2**
• Alternatives include 'do minimum' and/or 'business as usual' scenarios wherever relevant.	**4.1 & Table 4.2**
• The environmental effects (both adverse and beneficial) of each alternative are identified and compared.	**Tables 5.3, 5.4 & 5.5**
• Inconsistencies between the alternatives and other relevant plans, programmes or policies are identified and explained.	**5.1**
• Reasons are given for selection or elimination of alternatives.	**5.1**
Baseline information	
• Relevant aspects of the current state of the environment and their likely evolution without the plan are described – i.e. the “without the plan” scenario.	**4.4**
• Environmental characteristics of areas likely to be significantly affected are described, including wider areas than the physical boundary of the plan where it is likely to be affected by the plan.	**Table 4.3**
• Difficulties such as deficiencies in data or methods are explained.	**4.5**
Identification and evaluation of likely significant effects	
• Effects identified include the types listed in the Directive (biodiversity, population, human health, fauna, flora, soil, water, air, climate factors, material assets, cultural heritage and landscape), as relevant; other likely effects are also covered drawing on appropriate NATA assessment methods.	**5.2.1 & Appendices 2 & 3**
• Both positive and negative effects are considered, and the duration of effects (short, medium or long-term) is addressed.	**Table 5.6**
• Likely secondary, cumulative and synergistic effects are identified where practicable.	**5.2.4**
• Inter-relationships between effects are considered where practicable.	**5.2.4**
• Where relevant, the prediction and evaluation of effects makes use of accepted standards, regulations, and thresholds.	**Appendices 2 & 3**
• Methods used to evaluate the effects are described.	**5.1**
• Sources and levels of uncertainty in the assessment are identified and reported.	**6.2**
• Wider sustainability issues are considered.	**6.1**
Mitigation measures	
• Measures envisaged to prevent, reduce and offset any significant adverse effects of implementing the plan are indicated alongside consideration of their costs and feasibility.	**6.1**
• Issues to be taken into account in project consents and EIAs are identified.	**6.1**

The Environmental Report • Is clear and concise in its layout and presentation**.** • Uses simple, clear language and avoids or explains technical terms. • Uses maps and other illustrations where appropriate. • Explains the methodology used. • Explains who was consulted and what methods of consultation were used. • Identifies sources of information, including expert judgement and matters of opinion. • Contains a non-technical summary covering the overall approach to the SEA, the objectives of the plan, the main alternatives considered, and any changes to the plan resulting from the SEA. • Integrates the SEA with the wider NATA appraisal and plan making process. TAG Unit 2.11 Strategic Environmental Assessment for Transport Plans and Programmes	**See report** **"** **"** **3.1** **3.3** **3.2** **1.1** **3.1**
Consultation • The SEA consultations are conducted as an integral part of the plan-making process. • Consultation Bodies and the public likely to be affected by, or having an interest in, the plan are consulted in ways and at times which give them an early and effective opportunity within appropriate time frames to express their opinions on the draft plan and Environmental Report.	**3.3** **3.3 & Appendix 1**
Decision-making and information on the decision • The Environmental Report and the opinions of those consulted are taken into account in finalising and adopting the plan. • An explanation is given of how they have been taken into account. • Reasons are given for choosing the plan as adopted, in the light of other reasonable alternatives considered.	**Will be considered after consultation on the Plan and SA**
Monitoring measures • Measures proposed for monitoring are clear, practicable and linked to the indicators and objectives used in the SEA. • During implementation of the plan, monitoring is used where appropriate to make good deficiencies in baseline information in the SEA. • Monitoring enables unforeseen adverse effects to be identified at an early stage. (These effects should include predictions which prove to be incorrect.) • Proposals are made for action in response to significant adverse effects.	**7.1 and to be considered as part of the LTP.**