Wiltshire Local Transport Plan 2011 – 2026

Strategic Environmental Assessment – Environmental Report Consultation Draft

Wiltshire Council

Where everybody matters

Wiltshire Local Transport Plan

2011-2026

Strategic Environmental Assessment

Environmental Report

Consultation Draft

March 2013

Non-technical summary

Introduction

This is the non-technical summary of the Environmental Report for Wiltshire's third Local Transport Plan. This report provides a summary in non-technical language of the Environmental Report. The Environmental Report sets out the results of the Strategic Environmental Assessment (SEA) of the Wiltshire Local Transport Plan 2011 - 2026 (LTP3). The purpose of the Environmental Report is to give consultees information on the potential environmental and sustainability effects of the draft LTP3 and to assist Wiltshire Council in improving the final LTP3.

What is a Strategic Environmental Assessment?

Wiltshire Council is required to carry out a Strategic Environmental Assessment (SEA) of the LTP3 in accordance with the requirements of Statutory Instrument 2004 No. 1633: The Environmental Assessment of Plans and Programmes Regulations 2004 (otherwise known as SEA Regulations). The Regulations apply to all plans in certain sectors (including transport) that have the potential to cause significant environmental effects and which also set the framework for environmental impact assessments (EIA) of individual projects.

SEA extends the assessment of environmental impacts from individual development projects to the broader perspective of county and local level plans. The main purpose of the SEA is to evaluate whether LTP3 will result in any significant environmental effects, both positive and negative. Should significant effects be forecast, then recommendations will be made as to how these can be avoided, offset or reduced. A programme to monitor all significant effects during the lifetime of the plan must be prepared as part of the SEA. In this way, SEA is a systematic process that helps plan makers in identifying, and therefore reducing, the environmental impacts of a plan. The SEA process also considers certain social economic issues.

What is an Environmental Report?

This Environmental Report represents the results of the SEA process that has been undertaken in parallel with the production of LTP3 and its daughter documents. It has been drafted to coincide with the LTP3 consultation process, when stakeholders and the public will be given an opportunity to comment on the results of the SEA.

Consultation with the statutory environmental bodies, Natural England, English Heritage, and the Environment Agency, as well as other local groups will take place during the consultation period from Friday 1st March to Friday 24th May 2013.

Wiltshire's LTP3

In March 2011 Wiltshire Council published its third Local Transport Plan (LTP3) 2011-2026 which set out the council's approach to tackling the current problems and future challenges for the transport system in Wiltshire.

LTP3 sets out the strategy, vision and implementation programme for all forms of transport in Wiltshire. It aims to meet national, regional and local priorities, including the government's national goals for delivering a sustainable transport system, which are:

- to support national economic competitiveness and growth, by delivering reliable and efficient transport networks.
- to reduce transport emissions of carbon dioxide and other greenhouse gases, with the desired outcome of tackling climate change.

- to contribute to better safety, security and health and longer life expectancy through reducing the risk of death, injury or illness arising from transport, and promoting travel modes that are beneficial to health.
- to promote greater equality of opportunity for all citizens, with the desired outcome of achieving a fairer society.
- to improve quality of life for transport users and non-transport users, and to promote a healthy natural environment.

The LTP3 (strategy document) covers the period 2011/12 - 2025/26 to tie in with the emerging Wiltshire Local Development Framework (LDF) Core Strategy. Reviews of the LTP strategy will be undertaken to coincide with reviews of the LDF core strategy.

The draft LTP3 contains 18 strategic objectives, which were developed following Department for Transport (DfT) guidance and which reflect local circumstances. These are as follows:

Table NTS1: Wiltshire Local Transport Plan (2011-2026) strategic objectives

Ref.	Strategic objective
SO1	To support and help improve the vitality, viability and resilience of Wiltshire's economy and market towns.
SO2	To provide, support and/or promote a choice of sustainable transport alternatives including walking, cycling, buses and rail.
SO3	To reduce the impact of traffic on people's quality of life and Wiltshire's built and natural environment.
SO4	To minimise traffic delays and disruption and improve journey time reliability on key routes.
SO5	To improve sustainable access to a full range of opportunities particularly for those people without access to a car.
SO6	To make the best use of the existing infrastructure through effective design, management and maintenance.
SO7	To enhance Wiltshire's public realm and streetscape.
SO8	To improve safety for all road users and to reduce the number of casualties on Wiltshire's roads.
SO9	To reduce the impact of traffic speeds in towns and villages.
SO10	To encourage the efficient and sustainable distribution of freight around Wiltshire.
SO11	To reduce the level of air pollutant and climate change emissions from transport.
SO12	To support planned growth in Wiltshire and ensure that new developments adequately provide for their sustainable transport requirements and mitigate their traffic impacts.
SO13	To reduce the need to travel, particularly by private car.
SO14	To promote travel modes that are beneficial to health.
SO15	To reduce barriers to transport and access for people with disabilities and mobility impairment.
SO16	To improve the resilience of the transport system to impacts such as adverse weather, climate change and peak oil.
SO17	To improve access to Wiltshire's countryside and provide a more usable public rights of way network.
SO18	To enhance the journey experience of transport users.

Remaining strategies

As outlined in the main LTP3 strategy document, Wiltshire Council was faced with a number of financial uncertainties. Changes made by the coalition government contributed to a period of significant financial uncertainty particularly with regard to future housing growth and funding levels. Given this, the council took the pragmatic decision to reduce the scale and scope of this LTP3 by:

- only producing a one-year implementation plan
- not including any area transport strategies
- just producing four theme strategies (i.e. parking, freight, public transport and road safety).

The council is now in the process of producing some of the remaining strategies ready for publication in early 2013. It is anticipated that a new Implementation Plan and the remaining themed and area strategies will be published later in 2013 with a further SEA accompanying these remaining documents.

Relationship with other plans and programmes

The Regulations (see schedule 2) state that an Environmental Report should outline:

- the plan's relationship with other relevant plans and programmes
- the environmental protection objectives, established at international, community or member state level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation.

To fulfil this requirement, a review of relevant plans, policies and programmes has been carried out to identify environmental objectives which may provide constraints or synergies with the plan being formulated. This review has covered international conventions to EU policies through to local plans and strategies.

National transport goals

The national transport goals are used as the main strategy framework for LTP3. These goals are as follows:

- To support national economic competitiveness and growth, by delivering reliable and efficient transport networks
- To reduce transport's emissions of carbon dioxide and other greenhouse gases, with the desired outcome of tackling climate change
- To contribute to better safety security and health and longer life-expectancy by reducing the risk of death, injury or illness arising from transport and by promoting travel modes that are beneficial to health
- To promote greater equality of opportunity for all citizens, with the desired outcome of achieving a fairer society
- To improve quality of life for transport users and non-transport users, and to promote a healthy natural environment.

Sustainable community strategy

The government sees the community strategy as the 'strategy of strategies' for an area. Wiltshire's vision is for 'strong and sustainable communities in Wiltshire' and it suggests that strongand sustainable communities are communities where current life styles do not threaten future ones.

Local Development Framework - Core Strategy

At a county level, the Wiltshire Core Strategy (WCS) provides the strategic policy framework to guide development. There are also a large number of environmentally focused plans and programmes such as biodiversity action plans and landscape character assessments that a LTP has an indirect relationship with, which include international and national legislation down to local action plans. SEAs are based upon relevant objectives contained in these plans as this helps to highlight where issues of conformity arise.

Relevant environmental objectives

Table NTS2 provides a summary of the relevant environmental objectives arising from the review of plans and programmes, with the full review appearing in the relevant topic paper at the end of the Environmental Report.

Table NTS2 Relevant environmental objectives

Summary of relevant environmental objectives
Biodiversity
The objectives of policies and plans at all levels focus on conservation of biological diversity with an emphasis on designated areas and the protection and monitoring of endangered and vulnerable species and habitats.
Land, soil and water resources
The plans and programmes focus on the protection of high quality agricultural land, the prevention of soil pollution and erosion; and the impact the transport system can have on water quality and resources.
Air quality and environmental pollution
A number of objectives have been established in relation to air quality at both the European and UK level. At the county level emphasis is placed on reducing emissions of nitrogen dioxide, particularly from the transport sector.
Climatic factors
Climate-related plans and programmes focus on both mitigating the causes of climate change and adapting to the effects of climate change. Commitments for reducing greenhouse gas emissions range from the international level to the local level with a number of the plans and programmes stating specific targets to reduce emissions of greenhouse gases. This is led at the national level by the Climate Change Act, which sets a legally binding target of at least a 34% cut in greenhouse gas emissions by 2020 and at least an 80% cut by 2050 against a 1990 baseline. Adaptation measures proposed by the plans and programmes include the promotion of new infrastructure such as sustainable urban drainage systems (SUDS).
Historic environment
Historic environment priorities from international to local level include protecting designated resources and their settings such as listed buildings, conservation areas, scheduled monuments, and registered parks and gardens so that they may be enjoyed in years to come. Examples include the Strategy for the Historic Environment in the South West and Stonehenge and Avebury Heritage Site Management Plans.

Summary of relevant environmental objectives
Landscapes and townscapes
At the EU, national, regional and local level emphasis is placed on the protection of landscape as an essential component of people's surroundings and sense of place. A number of plans and programmes encourage urban and rural regeneration and focus on aspects including the provision of open space, green networks and woodland as opportunities for sport and recreation, creating healthier communities, supporting and enhancing biodiversity, reducing temperatures in built up areas in summer, and reducing the impact of noise and air pollution.
Population
Plans and programmes for population include a range of different objectives, related to an ageing population, improving human rights and public participation in a society where everyone is treated fairly and appropriately.
Healthy communities
A number of plans and programmes focus on improving the health of communities by reducing levels of accidents, improving safety of transport system and improving levels of support for physical activity, promoting healthier modes of travel and improving accessibility to healthcare and leisure/recreational facilities.
Inclusive communities
Improving accessibility to a range of services and facilities is the focus of many of the plans and programmes, and include objectives which focus on the provision of sustainable transport modes with encouragement to reduce travel by the private motor car.
Transport
European and UK transport policies have specific objectives including reducing pollution and road congestion through improvements to public transport, walking and cycling networks as well as reducing the need to travel.
Economy and enterprise
The plans and programmes focus on the need for the transport network to support sustainable economic development.

Environmental baseline information

The SEA Regulations require that the Environmental Report includes an examination of the current state of the environment and its likely evolution without implementation of the plan. It is recognised that forecasting the future without the plan can be difficult due to the absence of data or information.

The baseline data collected during the scoping phase has since been updated as the process has progressed. The SEA should focus on how the LTP can influence environmental and sustainability conditions. Therefore, each SEA topic considers the effect that transport can have and this is used to provide a sound basis for the SEA framework. A summary of main issues effecting Wiltshire are shown in Table NTS3. Comprehensive and detailed information is provided in the relevant topic paper at the end of the Environmental Report.

Table NTS3 Main baseline issues

Summary of main baseline issues
Biodiversity
• Wiltshire contains a significant wide range of sites protected for their biodiversity value. All contribute to the character and appearance of Wiltshire and some contribute to biodiversity on a national basis. Many of these sites are habitats which are situated next to highways, cycle routes, green lanes and other transport corridors. • Transport networks and traffic in general can have can have significant adverse impacts on wildlife and the associated habitats.

Summary of main baseline issues
Land, soil and water resources
• There is a significant amount of land in Wiltshire which is valued at grade 3 or higher which compares favourably to both the South West and national figures. • The environmental impact of transport on soil consists of soil erosion and contamination. • Most of the minerals extracted within Wiltshire are transported by road with potential adverse impacts on the environment. Government policy seeks to promote the sustainable transportation of minerals and therefore those transporting minerals should do so by rail and water. • Large improvements have been made in chemical water quality in Wiltshire, between 1995 and 2005, although it is still someway short of the South West and national figures. • There has also been a regression in the length of rivers in Wiltshire that are in the top overall national percentage in terms of phosphate levels, however both biological quality and nitrate levels have improved in Wiltshire. • The risk of flooding is likely to increase with climate change.
Air quality and environmental pollution
• Overall air quality in the county is improving and it is anticipated that continuing improvements can be made through improved traffic management. Data on other forms of environmental pollution is poor. • Wiltshire has seven Air Quality Management Areas. Traffic counts in each of the areas has shown no real year on year improvements.
Climatic factors
• The county is likely to see a number of changes as a result of climate change, including drier and hotter summers, warmer and wetter winters and increased flooding. • The amount of renewable energy installed in Wiltshire at present is amongst the lowest for any authority in the South West. The amount of existing renewable heat and the use of transport fuels in Wiltshire are even lower than for renewable energy, • North Wiltshire is the largest emitter of transport related CO_2 emissions, followed by Salisbury, this reflects the road network and traffic densities.
Historic environment
• Wiltshire has a wealth of historic sites, monuments, listed buildings, conservation areas and parks and gardens. • Transport can have a serious adverse impact upon areas or buildings of historical or cultural value. • Wiltshire contains one World Heritage Site, Stonehenge and Avebury, with roads and traffic having a serious adverse impact at both sites.
Landscapes
• Landscape character in Wiltshire provides a considerable contribution to local distinctiveness and is landscape of local and national importance. There are three areas of outstanding natural beauty which cover 44% of the county.

Summary of main baseline issues
• Wiltshire now forms part of the New Forest National Park. • Transport can have a negative effect on landscapes and can have a detrimental effect on landscape and townscapes in a number of ways, such as visually and in terms of tranquillity.
Population
• Wiltshire's population continues to grow and is ageing all the time. This has real implications for the provision of essential services and facilities and the need to ensure all of these elements are made as accessible as possible.
Healthy communities
• Wiltshire's population is relatively healthy compared with the national picture. • 14.2% of Wiltshire's adult population are physically active compared to the national average of 11.2% and 59.5% of children are active compared to 49.6% of England. • Adult obesity in Wiltshire is on a par with the national average, whereas child obesity in Wiltshire is below the national average. • Only 4% of journeys to work are by bicycle in Wiltshire; however there is enormous potential to increases this number. • Numbers of people killed or seriously injured (KSI) and the numbers of children killed or seriously injured are both decreasing. This is also evident in the number of cycling and pedestrian casualties which are also decreasing.
Inclusive communities
• Wiltshire is a predominately rural county, which makes affordable accessibility to services challenging. • Car ownership and use is high in Wiltshire. • The average commute to work has increased steadily since 1991 and out-commuting is now common place for some of Wiltshire's residents.
Transport
• Some of the main highway routes in Wiltshire are unsuited to the volume and type of traffic carried which has given rise to a number of issues, such as local congestion and journey time reliability. • Car ownership is high and in 2001 there was a 92% increase in the number of cars in Wiltshire. • Wiltshire has large rural areas where cycling may be less practical; however 49% of live in urban settlements where there is much potential to increase cycling in these areas. • Future increases in tender prices pose a real threat to the maintenance of existing bus services in the county. • Road based freight has a noticeable impact on the road network, particularly in historic towns and areas where roads and streets weren't designed for large freight vehicles.

Summary of main baseline issues
Economy and enterprise
• In recent years the population of parts of Wiltshire has grown substantially, although this has generally not been matched by increases in employment opportunities. Consequently out commuting has increased. • There is a definite opportunity for Wiltshire to capitalise further on its tourism potential, however this will require consideration where increased transport and travel occurs.

The SEA framework

In order to focus the assessment on the most important topics, a series of SEA objectives have been developed by:

- Reviewing the environmental objectives of a series of other international, national, regional and local plans and programmes
- Analysing the baseline information to identify environmental problems and opportunities which need to be addressed
- Consultation with environmental bodies and local stakeholders.

The SEA objectives represent important sustainability issues that the LTP should be helping to achieve, and elements of LTP3 will measures against the SEA objectives. The SEA appraisal questions act as detailed reminders to the assessment team of issues that the appraisal needs to cover.

The SEA objectives are shown in Table NTS4.

Table NTS4 SEA objectives

LTP SEA objective	Decision making criteria - appraisal questions	Potential indicators
Biodiversity		
To protect and enhance biodiversity and geological features and avoid irreversible losses of habitats and species at all levels.	• Will it include actions that cause changes in habitat fragmentation or habitat loss? • Will it include actions that affect an area in a way that could have long term effects in relation to species lifestyles or irreversible affects where there are no known mitigation techniques? • Will it include actions that help reach targets or compromise targets of the local BAPs? • Will it include actions that affect Natura 2000 sites, SSSIs or other designated sites?	• Condition of SSSIs • No. of schemes/projects to reduce soil and water pollution.
Land, soil and water resources		
To reduce soil contamination and safeguard soil quality and quantity and minimise the impact of the transport system on water resources.	• Will it cause changes in existing soil erosion problems, including the effects of road maintenance? • Will it cause the loss or pollution of soils and watercourses which support valued habitats and species?	• River quality
Ensure that Greenfield sites and quality agricultural land is avoided.	• Will it reduce the need to develop areas of agricultural land and Greenfield sites?	
Air quality and environmental pollution		
To reduce the negative impacts of the transportation system on air quality.	• Will it cause any changes in traffic that affect an air quality management area? • Will it affect areas which are likely to experience a 10% change in traffic flow/nature? • Will it cause air pollution adjacent to species and habitats known to be susceptible to deterioration in air quality?	• Proportion of bus fleet operating in Wiltshire meeting the Euro 4 engine regulations or higher.

LTP SEA objective	Decision making criteria - appraisal questions	Potential indicators
Climatic factors		
To reduce the contribution of the transport system to CO_2 emissions.	• Will it cause a change in traffic flow/volumes or a change in the nature of traffic that would cause changes in fuel use and CO_2 which would assist in meeting the target of reducing the amount of carbon dioxide produced?	• No of schemes/projects introducing electric vehicle charging infrastructure
To ensure that the transport system can cope with the unavoidable effects of climate change.	• Will it reduce the unavoidable effects of climate change, such as excess flooding and storm damage to transport networks?	
Historic environment		
To conserve and enhance features and areas of historical and cultural value.	• Will it cause direct impacts on sites or monuments through the provision of new transport infrastructure?	• Number of listed buildings lost through transport development.
To conserve and enhance archaeological sites and features.	• Will it cause a change in traffic flows or the nature of traffic that affects townscape, sites and monuments valued for cultural and historic significance?	
Landscapes		
To protect and enhance the quality of Wiltshire's landscapes.	• Will it cause changes in traffic flows and the nature of traffic in areas valued for their landscape character and tranquillity?	• No. of schemes that have a pro-active approach to protecting and enhancing Wiltshire's landscapes.
To help reduce the impact of transport and improve the quality of urban and rural centres.	• Will it reduce traffic levels, congestion, or the nature of traffic in residential areas/town and village centres. • Will it cause changes that reduce the impact of transport on the townscape, which may include changes to highway signage, lighting, street furniture, or introduce features that enhance the character of towns.	

LTP SEA objective	Decision making criteria - appraisal questions	Potential indicators
Population		
To provide everyone with the opportunity to access key services.	• Will it improve provision of public and community transport that make key services more accessible? • Will it improve access for certain equality groups (race, gender, disability, age, religion and sexual orientation) and contribute to the DfT goal of promoting greater equality of opportunity for all citizens. This includes changes to physical infrastructures and services.	• Access to key services and facilities by means other than the motor car.
Healthy communities		
To reduce the need/desire to travel by car and encourage physical modes of transport.	• Will it lead to an increase in walking and cycling numbers?	• No. of people walking and cycling instead of using the car • Accessibility to GP surgery • No of people/children killed or seriously injured.
To reduce the noise impact of the transport system.	• Will it reduce the amount of traffic in tranquil areas? • Will it affect sensitive receptors within 200m of a noise change? • Will it affect areas adjacent to habitats where sensitive species breed? • Will it affect areas where noise is likely to change in nature as a result of an increase in HGVs or change to the time of traffic?	
To reduce the adverse effects of transport on safety.	• Will it lead to a decrease in traffic accidents/accident severity and help meet KSI targets?	
Inclusive communities		
To increase accessibility to key services, facilities, and retail without the need for a car.	• Will it provide opportunities to travel without the need for a car?	• Access to services and facilities by public transport, walking and cycling. • Working people with access to employment by public transport (and other specified modes)
To ensure that where employment opportunities are to be found there is appropriate accessibility that doesn't involve the use of a car.	• Will it lead to alternatives ways of travel to employment hubs?	
To reduce the community severance effects of transport.	• Will it result in a reduction in community severance (i.e. improved crossing facilities, reduced traffic speeds and reduced traffic levels)?	

LTP SEA objective	Decision making criteria - appraisal questions	Potential indicators
Transport		
To reduce the need to travel, and promote sustainable travel modes of transport.	• Will it increase the range, availability and affordability of sustainable travel choices (i.e. public transport, walking, cycling)?	• Number of households with two or more cars • Train ticket sales • Number of bus stops • Number of received travel plans
Economy and enterprise		
To help to manage and maintain the existing transport system efficiently in all areas of Wiltshire.	• Will it help to manage routes effectively in order to maintain journey times?	• The number of new tourism enterprises • Journey time reliability
To invest in sustainable transport improvements that help the economy of Wiltshire.	• Will it include schemes that decrease journey times and congestion, improve journey time reliability and help to meet congestion targets in the LTP? • Will it enhance the quality of Wiltshire's green infrastructure assets? • Will it include areas where tourism has a foothold?	
To reduce the impact of road freight on communities.	• Will it include schemes that decrease journey times and congestion, improve journey time reliability and help to meet congestion targets in the LTP? • Will it include areas where tourism has a foothold?	

Evaluation of the draft strategies/plans

Evaluating the effects of the draft strategies/plans has entailed the following:

- Identifying the effects of the strategies/plan against the SEA objectives, including identifying changes in the future baseline, which are predicted to arise from implementation of the strategies/plans.
- Assessing the significance of these effects. This means describing these changes in terms of the nature and the magnitude of the impact and the sensitivity of the receiving environment.
- An assessment of the likely changes to the future baseline which may have been caused by secondary, cumulative and synergistic impacts.

Identifying the effects of the strategies/plans

There are several ways of providing a quantitative assessment for a transport project, for example the amount of carbon dioxide generated in a particular area. However, these types of figures are not necessarily available to a team when assessing the effects of a local transport plan. This is primarily because SEA is used to assess relatively broad strategies rather than site specific locations/proposals. As a consequence, the main tool used to assess the effects of this plan against the SEA and its objectives is 'expert judgement' and where possible this is supported by documented evidence.

Evaluating the effects of the strategies/plans

Once the effects have been identified, it is necessary to indicate the level of significance, i.e., whether minor or major significance. The SEA Regulations specify the criteria that should be taken into account when determining the likely significant effects. These criteria essentially relate to the nature of the effects arising from the plan and the value and vulnerability of the receptors as follows:

- How valuable and vulnerable is the receptor that is being impacted?
- How probable, frequent, long lasting and reversible are the effects?
- What is the magnitude and spatial scale of the effect?
- Are the effects positive or negative?

Evaluation involves judging whether or not a predicted effect is likely to be significant. The results of the evaluation are categorised by the nature of the effect using the key as shown in Table NTS5.The assessment of significance should involve the assessor considering the above criteria for each potential impact along with a consideration of the how the plan will help to achieve (or not) the SEA objectives.

Table NTS5: SEA significance scores and criteria

Score	Description	Symbol/Key
Significant positive effect	The plan addresses all the elements that are required to protect the environment and address the relevant sustainability issues in Wiltshire and would help achieve all of the applicable SEA objectives. The plan also sets out how, where and when these policies will be implemented. They will have a positive impact in relation to characteristics of the effect and the sensitivity of the receptors.	++
Minor positive effect	The plan addresses all the elements that are required to protect the environment and address the sustainabilty issues in Wiltshire and would help achieve all of the SEA objectives.	+
Partial positive/partial negative effect	The plan addresses some of the elements that are required to protect the environment and address the sustainability issues in Wiltshire and would help achieve or partially achieve the SEA objectives. There is also an element of the plan that conflicts with some of the SEA objectives.	+/-
No significant effects	The plan does not have an effect on the achievement of the SEA objectives	O
Significant negative effect	The plan conflicts with some of the SEA objectives. The plan also sets out, how, where and when these policies will be implemented and these will have a negative effect in relation to characteristics of the effect and the sensitivity of the receptors.	--
Minor negative effect	The plan conflicts with some of the SEA objectives	-
Uncertain	It is unclear whether there is the potential for a negative or positive effect on the SEA objective.	?

Assessment topic summaries

The assessment process was carried out on a topic by topic basis, with the full findings of the assessment documented in the relevant topic paper. The following is a summary of the assessment which focuses on the identification and assessment of significant effects.

Biodiversity

On the whole the strategies perform will against the SEA objectives, both individually and collectively. They largely seek to reduce the impact of transport on the natural environment through change in travel behaviour and ,modal shift. However, temporary construction sites can affect local biodiversity and more permanent changes or construction of transport infrastructure can result in more lasting habitat fragmentation and loss. For example this may occur where new cycle routes and cycle parking are proposed.

Reducing the need to travel and modal shift both help to improve air quality and can have a positive secondary effect on biodiversity. Modal shift is most likely to occur where a range pf measures are implemented. Improvements to cycling, walking and powered two-wheeler infrastructure as well other 'softer' measures will help to reduce the need to travel by car and encourage sustainable travel. Reduced traffic levels also help to reduce wildlife casualties.

Land, soil and water resources

The strategies have no significant positive or negative effects on land, soil and water resources. Temporary and permanent construction has the potential to have some impact on soil and water resources, for example during the construction of new cycle routes. If this was to occur or is likely mitigation measures would be proposed. Reducing the need to travel by car and encouraging sustainable travel can have a secondary effect on soil and water quality as a result of reduced acidification.

Air quality and environmental pollution

The strategies in conjunction with one another could potentially have a positive effect on air quality and environmental pollution. The strategies all seek to reduce the need to travel by car and encourage sustainable travel therefore helping to improve air quality and reduce environmental pollution. However, the accessibility strategy seeks to improve accessibility via improvements to the public transport network and, there is some uncertainty regarding the use of older vehicles and the impact this may have on air quality.

Encouraging modal shift could potentially create a more attractive transport network for car drivers and thus increase traffic levels, which would negate the positive benefits of any modal shift.

Climatic factors

The strategies have no significant positive or negative effects, however overall they perform well against the SEA objectives and should have a positive effect. All the strategies seek to encourage a change in travel behaviour and reduce the need to travel by car. However, reducing congestion on the road network may encourage further car travel as motorists start to recognise the freer flowing traffic which may undo the benefits created during the initial modal shift. The Accessibility Strategy and its connection with the already published Public Transport Strategy also leads to some uncertainty and some possible negative impacts.

Whilst there is uncertainty regarding the ability of the transport system to cope during climate change, improving accessibility and providing a greater range of sustainable transport modes will mean that there will be more transport choices on offer.

Historic environment

Overall there is potential to improve and enhance historical towns and settlements through measures to reduce unsustainable travel and encourage modal shift. Reductions is traffic can benefit the historic character of many towns and settlements and may result in secondary effects on heritage sites and assets as a result of improved air quality and reduced vibrations caused by traffic and heavy vehicles. However, this must be offset against the introduction of "out of place" infrastructure, where this is the case mitigation measures will be required.

Landscape and townscape

Overall the strategies have no significant positive or negative effects on landscape and townscapes, however there is some potential for them to encourage modal shift and sustainable travel, and increase accessibility opportunities which will help to reduce the impact of transport and improve the quality of urban centres.

Reducing the need to travel and encouraging modal shift is likely to result in landscapes and particularly townscapes being relieved of higher levels of traffic to some extent. This may provide opportunities for enhancing the public realm and enhancing townscapes which is particularly pertinent given SO7. However, careful planning of infrastructure improvements is required so that they do not prove detrimental to the areas within which they are situated.

Population

Overall the strategies perform well against the SEA objectives. The strategies have the potential to radically improve accessibility and encourage sustainable travel and will therefore have an overall positive effect.

The strategies in combination with each other will have a positive effect and will provide increased opportunities to access key services as well non-essential services, such as leisure facilities and tourism. They particularly take account of SO5, and seek to reduce the need to travel by car and encourage modal shift. Improved public transport provision will help to take account of the DfT goal of promoting equality of opportunity, especially for the elderly.

Healthy communities

Overall the strategies should make a positive contribution to healthy communities, with each of the strategies contributing to the strategic transport objectives.

The cumulative effects of the strategies have the potential to be positive but this is dependant to some extent on the amount of modal shift that takes place. Stand alone measures are unlikely to yield any significant positive effects, however, where measures are planned and thoroughly integrated there are opportunities to increase significant amounts of physical mode travel. Similarly, reductions in car travel will result in reduced noise levels in towns and built up areas. Reductions in car travel will also likely result in improvements to air quality which may also encourage further take up of walking and cycling.

Inclusive communities

The strategies contribute to a positive effect for inclusive communities. They seek to encourage a change in travel behaviour and modal shift and reduce people's reliance on the private motor car. Reducing car travel can potentially improve community severance, through less moving motorised vehicles and on-street parking and invasive road markings and street furniture.

Working together in conjunction with one another the strategies will provide much greater access opportunities without the need to travel by car. This includes access to employment hubs. There is further opportunity to increase access to all services through the effective integration of spatial and transport planning.

Transport

The strategies increase the range and availability of sustainable travel choices and contribute to a positive effect for transport. They all promote the use of sustainable travel, encourage a change in travel behaviour and reducing the need to travel by car.

Effective spatial planning should reduce the need to travel to key services and facilities as settlements and communities contain all the necessary requirements to live a contented life.

Economy and enterprise

On the whole the strategies will have a positive effect on economy and enterprise in Wiltshire and overall they perform well against the SEA objectives. These strategies will have little effect on reducing the impact of freight on communities.

Encouragement of modal switch and sustainable travel will help reduce congestion, free up road capacity and produce a freer flowing road network system. This will help to improve and maintain journey time reliability.

Mitigation and enhancement measures

Mitigation and enhancement measures identified to address potential negative or uncertain effects and enhance positive effects include:

- Landscape planting to replace lost habitat following verge removal during infrastructure improvements.
- Potential to increase cycling in those areas with high levels of carbon emissions.
- Cycling parking policies should also consider the effects of climate change and extreme weather conditions.
- Cycling infrastructure will require careful site location planning and should be where possible in keeping the local surrounding environment.
- Infrastructure to be in keeping with local environment by using wherever possible local materials.
- Grants and financial incentives could be offered to transport operators to invest in newer vehicles.
- More specific location of employment hubs and access opportunities would be useful.

Monitoring measures

Under the SEA Directive, there is a statutory requirement to monitor the environmental impacts of the implementation of the plan.

The purpose of monitoring is to measure the environmental effects of a plan, as well as to measure success against the plan's objectives. A series of monitoring indicators in relation to the SEA topics have been proposed which will be further developed as part of the SEA Statement.

Next steps

The publication Environmental Report allows statutory consultees, the public and others the opportunity to comment of the contents of both the LTP and the Environmental Report. The results of this consultation will be used to guide the development of the LTP3 strategies.

This Environmental Report will be available on the relevant Wiltshire Council consultation page: http://consult.wiltshire.gov.uk/portal

Consultation will occur from Friday 1st March to Friday 24th May 2013 .

Any comments relating to the content of the Environmental Report should be sent to:

Transport Policy Team
Sustainable Transport Group
Wiltshire Council
County Hall
Trowbridge
BA14 8JD

Email: transportplanning@wiltshire.gov.uk

1 Introduction

Background and purpose of the report

1.1 The third Wiltshire Local Transport Plan (LTP3) 2011-2026 is the document which sets out the council's approach to tackling the current problems and future challenges of the transport system in Wiltshire. LTP3 sets out the strategy, vision and implementation programme for all forms of transport, and is designed to meet national, regional and local priorities.

1.2 In accordance with the Department for Transport's (DfT's) guidance, LTP3 was submitted to government in April 2011. However, because of significant funding uncertainties around the time LTP3 was being prepared, the council took the pragmatic decision to reduce the scale and scope of LTP3 by:

- only producing a one-year implementation plan for 2011/12
- not including the area transport strategies for Chippenham, Devizes, Salisbury and Trowbridge
- reducing the number of themed strategies to four (car parking, freight, public transport and road safety)

1.3 Following clarity on funding the council is now preparing and producing the following strategies, accessibility, cycling, powered two-wheeler and smarter choices. A three Implementation Plan is also being produced. This Strategic Environmental Assessment Environmental Report is an assessment of these draft strategies for LTP3. It appraises the proposals for delivery put forward within the strategies.

Strategic Environmental Assessment

1.4 This Environmental Report has been prepared in accordance with the Environmental Assessment of Plans and Programmes Regulations 2004. The Regulations require that the Environmental Reports should accompany 'draft' Local Transport Plans, including accompanying documents, so that they are available for consultation by the public and other stakeholders. The Environmental Report and its assessment activities were based on the following guidance: Department for Transport (April, 2009): Strategic Environmental Assessment for Transport Plans and Programmes. TAG Unit 2.11. "In draft" Guidance and Office for Deputy Prime Minster (ODPM, 2005): A Practical Guide to the Strategic Environmental Assessment Directive.

1.5 It is a systematic process that assists authorities in the identification and assessment of the significant environmental impacts of a plan. The five key stages of the SEA are:

- The production of a Scoping Report so that the statutory environmental bodies and other key stakeholders can be given an opportunity to comment on the scope of the assessment process.
- The production of an Environmental Report identifying the likely significant environmental effects of the draft plan or strategy.
- The carrying out of consultation on the draft plan (including sub documents) and the accompanying Environmental Report.

- Taking into account the Environmental Report and the results of consultation in decision-making.

- Providing information when the plan is adopted and showing how the results of the SEA and consultation have been taken into account. This will be in the form of an SEA Statement.

As a Scoping Report was produced and consulted on during the consultation stages of the LTP3 Strategy document, (including the freight, public transport, car parking and road safety strategies), a decision was taken not to produce another scoping report at this stage, but instead to include updated data, such as baseline and review of plans and programmes, within this Environmental Report. This will enable consultation of the scoping data to take place with the overall consultation of the Environmental Report.

The Local Transport Plan process

1.6 The Transport Act 2000 requires most local authorities in England to produce and maintain a Local Transport Plan (LTP). LTP's sets out the authority's local transport strategies, policies, and Implementation Plan. The Local Transport Act 2008, which amends the Local Transport Act 2000, sets out the requirements for LTP3. Whilst LTP's are still mandatory there have been some slight changes to their role. The main differences between LTP2 and LTP3 are shown below:

- LTP's will no longer be formally assessed by DfT.

- DfT will no longer impose mandatory targets or require submission of formal transport monitoring reports.

- LTPs must include separate strategies and implementations plans.

- LTP3 will not necessarily have a five year timescale. Local transport authorities may replace their plans as they see fit but LTPs must be kept up to date.

Structure of the Environmental Report

1.7 Section 2 of this Environmental Report presents information about Wiltshire's LTP3 and the remaining strategies. Section 3 provides information on the environmental and planning context of the plan and the scope of the assessment. Section 4 provide details on the evaluation process and section 5 provides assessment summaries for each of the topics. Sections 6 and 7 provide information about monitoring and the next steps in the SEA process. At the end of the document are the detailed Topic Papers which provides a review of relevant plans and programmes, baseline information, environmental problems and issues , SEA objectives and the impact of the strategies for on each topic subject/area.

1.8 The Environmental Report presents the results of stages, A, B and C of the SEA process, see below for an outline for all stages of the SEA process:

Stages of SEA process

Stage A	Setting the context and objectives, establishing the baseline and deciding on the scope
Stage B	Developing and refining alternatives and assessing effects
Stage C	Preparing the Environmental Report
Stage D	Consulting on draft programme and the Environmental Report
Stage E	Monitor the significance effects of implementing the plan or programme on the environment

1.9 This Environmental Report is published with the remaining strategies which provides information to the LTP adoption processes on the environmental effects of the strategies. The Regulations also require that the consultation bodies, of the Environment Agency, Natural England and English Heritage, and the public must be provided with an early and effective opportunity to express their opinions on the content of the Environmental Report.

The SEA methodology

1.10 The SEA is being carried out by the Transport Policy team at Wiltshire Council. The guidance used during the SEA process is: Department for Transport (2010); *Strategic Environmental Assessment for Transport Plans and Programmes*. TAG Unit 2.11 "*in draft*" Guidance and Office of the Deputy Prime Minister (2005) A Practical Guide to the Strategic Environmental Assessment Directive.

Stage A - Scoping Report

1.11 Stage A of the SEA, the Scoping Report (i.e. setting the context and objectives, establishing the baseline and deciding on the scope of assessment), is a non-mandatory process. A draft Scoping Report (which accompanied the draft LTP3 Strategy document and the separate strategies of car parking, freight, public transport and road safety) was produced in 2009 and was consulted on between December 2009 and January 2010. The three statutory environmental bodies of Natural England, English Heritage and the Environment Agency, along with other nominated bodies were invited to make comments and provide feedback on the content and quality of the scoping. Following this consultation period and in order to keep the data contained within the report as up-to-date as possible the report has been updated where necessary and will continue to be updated as deemed appropriate.

1.12 For the remaining strategies the decision was taken not to have a separate Scoping Report and consultation period. Instead, the information which would be contained within the Scoping Report is contained within this Environmental Report. Comments and feedback are welcome during the consultation period Friday 22nd February to Friday 17th May 2013.

Habitats Regulation Assessment

1.13 The strategies has been screened for potential Likely Significant Effects on sites of international nature conservation importance (European designated sites or Natura 2000 sites) through a separate Habitats Regulations Assessment (HRA) screening assessment. European designated sites, which are Special Areas of Conservation and Special Protection Areas (in the UK Ramsar sites are also given the same level of protection), have been considered which fall within Wiltshire and within the surrounding counties. The HRA screening assessment has been carried out in parallel with this SEA by consultants ENVIRON UK Ltd.

The HRA is required under the EU Habitats Directive (EU Council Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Fauna and Flora) and the transposing UK Regulations (The Conservation of Habitats and Species Regulations, SI 2010 No. 490). The results of the HRA screening assessment are published within a separate HRA screening report and will inform the final LTP3 and the SEA.

Equalities Impact Assessment

1.14 Local authorities have a duty under race, disability and gender legislation to carry out an Equality Impact Assessment (EqIA) of their LTP. EqIA can help determine how a LTP affects different groups of people. DfT guidance on LTPs advises that an EqIA encompass race, gender, disability, age, religion/belief and sexual orientation. The EqIA and SEA processes are separate but in order to make the EqIA easier equalities issues have been built in the SEA framework. Wiltshire Council will be producing an EqIA before the plan is complete.

Link with the New Approach to Appraisal (NATA)

1.15 The New Approach to Appraisal (NATA) is the process which the government recommends is used by transport authorities to formulate and test transport options, both scheme options and options for plans and programmes. Appraisal is made in relation to the Government's five objectives for transport although these are being reviewed in light of the new national objectives for transport. Government guidance on SEA for transport plans makes it clear that SEA should use the NATA framework as a basis and utilise its methodologies where possible.

2 Wiltshire Local Transport Plan

Introduction

2.1 In March 2011 Wiltshire Council published its third Local Transport Plan (LTP3) 2011-2026 which set out the council's approach to tackling the current problems and future challenges for the transport system in Wiltshire.

2.2 LTP3 sets out the strategy, vision and implementation programme for all forms of transport in Wiltshire. It aims to meet national, regional and local priorities, including the government's national goals for delivering a sustainable transport system, which are:

- to support national economic competitiveness and growth, by delivering reliable and efficient transport networks.
- to reduce transport emissions of carbon dioxide and other greenhouse gases, with the desired outcome of tackling climate change.
- to contribute to better safety, security and health and longer life expectancy through reducing the risk of death, injury or illness arising from transport, and promoting travel modes that are beneficial to health.
- to promote greater equality of opportunity for all citizens, with the desired outcome of achieving a fairer society.
- to improve quality of life for transport users and non-transport users, and to promote a healthy natural environment.

2.3 The strategy part of the LTP3 covers the period 2011/12 - 2025/26 to tie in with the emerging Wiltshire Local Development Framework Core Strategy. Reviews of the LTP strategy would be undertaken to coincide with reviews of the Local Development Framework and the Wiltshire Core Strategy.

Remaining strategies

2.4 As outlined in the main LTP3 strategy document, Wiltshire Council was faced with a number of uncertainties, financial and otherwise. Changes made by the coalition government contributed to a period of significant uncertainty particularly future housing growth and funding levels. Given this, the council took the pragmatic decision to reduce the scale and scope of this LTP3 by:

- only producing a one-year implementation plan
- not including any area transport strategies
- just producing four themed strategies (i.e. parking, freight, public transport and road safety).

2.5 The council is now in the process of producing the some of the remaining strategies i.e. the accessibility, cycling, powered two-wheeler and smarter choices strategies which will be consulted at the same time as this SEA Environmental Report from Friday 1st March to Friday 24th May 2013.

LTP3 objectives

2.6 LTP3 contains 18 strategic objectives, which were developed following DfT guidance and which reflect local circumstances. These are as follows:

Table 2.1 LTP3 strategic objectives

Ref.	Strategic objective
SO1	To support and help improve the vitality, viability and resilience of Wiltshire's economy and market towns.
SO2	To provide, support and/or promote a choice of sustainable transport alternatives including walking, cycling, buses and rail.
SO3	To reduce the impact of traffic on people's quality of life and Wiltshire's built and natural environment.
SO4	To minimise traffic delays and disruption and improve journey time reliability on key routes.
SO5	To improve sustainable access to a full range of opportunities particularly for those people without access to a car.
SO6	To make the best use of the existing infrastructure through effective design, management and maintenance.
SO7	To enhance Wiltshire's public realm and streetscape.
SO8	To improve safety for all road users and to reduce the number of casualties on Wiltshire's roads.
SO9	To reduce the impact of traffic speeds in towns and villages.
SO10	To encourage the efficient and sustainable distribution of freight around Wiltshire.
SO11	To reduce the level of air pollutant and climate change emissions from transport.
SO12	To support planned growth in Wiltshire and ensure that new developments adequately provide for their sustainable transport requirements and mitigate their traffic impacts.
SO13	To reduce the need to travel, particularly by private car.
SO14	To promote travel modes that are beneficial to health.
SO15	To reduce barriers to transport and access for people with disabilities and mobility impairment.
SO16	To improve the resilience of the transport system to impacts such as adverse weather, climate change and peak oil.
SO17	To improve access to Wiltshire's countryside and provide a more usable public rights of way network.
SO18	To enhance the journey experience of transport users.

3 Environmental and planning context

Introduction

3.1 This stage involves:

- Examining the relationship of LTP3 and the strategies with other plans and programmes to ensure that environmental objectives within these plans are identified and that potential conflicts are identified early so that they can be addressed within the plan making process.
- Assembling data on the current and future state of the environment (baseline) related to all environmental topics which may be affected by the plan.
- Identifying present and future environmental problems and opportunities to help ensure that the LTP and its strategies addresses these issues where possible or at least does not contribute to making these problems worse.

Relationship with other plans and programmes

3.2 The Regulations (see schedule 2) state that an Environmental Report should outline:

- The plan's relationship with other relevant plans and programmes.
- The environmental protection objectives, established at international, community or member state level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation.

3.3 To fulfil this requirement, a review of relevant plans, policies and programmes has been carried out to identify environmental objectives which may provide constraints or synergies with the plan being formulated. This review has covered international conventions to EU policies through to local plans and strategies.

National transport goals

3.4 The national transport goals are used as the main strategy framework for LTP3. These goals are as follows:

- To support national economic competitiveness and growth, by delivering reliable and efficient transport networks.
- To reduce transport's emissions of carbon dioxide and other greenhouse gases, with the desired outcome of tackling climate change.
- To contribute to better safety security and health and longer life-expectancy by reducing the risk of death, injury or illness arising from transport and by promoting travel modes that are beneficial to health.

- To promote greater equality of opportunity for all citizens, with the desired outcome of achieving a fairer society.
- To improve quality of life for transport users and non-transport users, and to promote a healthy natural environment.

Sustainable community strategy

3.5 The government sees the community strategy as the "strategy of strategies" for an area. Wiltshire's vision is for 'strong and sustainable communities in Wiltshire' and it suggests that strong and sustainable communities are communities where current life styles do not threaten future ones. In these communities, people and businesses will:

- actively minimise their household and commercial waste.
- make travel decisions which minimise CO_2 emissions, and the need to travel.
- make purchasing decisions that reflect the actual human and environmental costs of purchasing, using, and eventually disposing of goods and products, including purchasing local goods and services where this makes sense.
- adopt sustainable construction standards for new buildings, and to seek to improve the energy efficiency of existing buildings.
- protect and enhance land that has a high environmental or wildlife value.
- use water, and energy, wisely and sparingly.

3.6 The transport aspects of life in Wiltshire that are currently not sustainable include:

- financial pressures to reduce rail service, despite increased usage.
- projected increases in out-commuting.
- social trends making it more difficult to find volunteers to maintain and expand community and voluntary transport service.
- lack of resources to significantly invest in sustainable transport solutions, and little evidence of the widespread acceptance of the need for behaviour change in the way Wiltshire people travel.
- bus services operating costs are increasing significantly, and this may lead to reductions in service and higher fares on both subsidised and commercial services.
- increased access issues, and the associated need to travel , due to closures of village shops and post offices, and community hospitals.
- the increased pressure imposed on existing transport infrastructure by population growth and new development.
- the increasing and more widespread impact of heavy goods vehicles partly as a result of the greater use of satellite navigation systems.

Local Development Framework - Core Strategy

3.7 At a county level the Wiltshire Core Strategy provides the strategic policy framework to guide development. There are also a large number of environmentally focused plans and programmes such as Biodiversity Action Plans and Landscape Character Assessments that a LTP has an indirect relationship with, which include international and national legislation down to local action plans. SEAs are based upon relevant objectives contained in these plans as this helps to highlight where issues of conformity arise.

Relevant environmental objectives

3.8 Table 3.1 provides a summary of the relevant environmental objectives arising from the review of plans and programmes, with the full review appearing in the relevant topic paper at the end of this document.

Table 3.1 Summary of review of other plans an programmes

Summary of relevant environmental objectives
Biodiversity
The objectives of policies and plans at all levels focus on conservation of biological diversity with an emphasis on designated areas and the protection and monitoring of endangered and vulnerable species and habitats.
Land, soil and water resources
The plans and programmes focus on the protection of high quality agricultural land, the prevention of soil pollution and erosion; and the impact the transport system can have on water quality and resources.
Air quality and environmental pollution
A number of objectives have been established in relation to air quality at both the European and UK level. At the county level emphasis is placed on reducing emissions of nitrogen dioxide, particularly from the transport sector.
Climatic factors
Climate-related plans and programmes focus on both mitigating the causes of climate change and adapting to the effects of climate change. Commitments for reducing greenhouse gas emissions range from the international level to the local level with a number of the plans and programmes stating specific targets to reduce emissions of greenhouse gases. This is led at the national level by the Climate Change Act, which sets a legally binding target of at least a 34% cut in greenhouse gas emissions by 2020 and at least an 80% cut by 2050 against a 1990 baseline. Adaptation measures proposed by the plans and programmes include the promotion of new infrastructure such as sustainable urban drainage systems (SUDS).
Historic environment
Historic environment priorities from international to local level include protecting designated resources and their settings such as listed buildings, conservation areas, scheduled monuments, and registered parks and gardens so that they may be enjoyed in years to come. Examples include the Strategy for the Historic Environment in the South West and Stonehenge and Avebury Heritage Site Management Plans.
Landscapes and townscapes
At the EU, national, regional and local level emphasis is placed on the protection of landscape as an essential component of people's surroundings and sense of place. A number of plans and programmes encourage urban and rural regeneration and focus on aspects including the provision of open space, green networks and woodland as opportunities for sport and recreation, creating healthier communities, supporting and enhancing biodiversity, reducing temperatures in built up areas in summer, and reducing the impact of noise and air pollution.

Summary of relevant environmental objectives
Population
Plans and programmes for population include a range of different objectives, related to an ageing population, improving human rights and public participation in a society where everyone is treated fairly and appropriately.
Healthy communities
A number of plans and programmes focus on improving the health of communities by reducing levels of accidents, improving safety of transport system and improving levels of support for physical activity, promoting healthier modes of travel and improving accessibility to healthcare and leisure/recreational facilities.
Inclusive communities
Improving accessibility to a range of services and facilities is the focus of many of the plans and programmes, and include objectives which focus on the provision of sustainable transport modes with encouragement to reduce travel by the private motor car.
Transport
European and UK transport policies have specific objectives including reducing pollution and road congestion through improvements to public transport, walking and cycling networks as well as reducing the need to travel.
Economy and enterprise
The plans and programmes focus on the need for the transport network to support sustainable economic development.

Environmental baseline information

3.9 The SEA Regulations require that the Environmental Report includes an examination of the current state of the environment and its likely evolution without implementation of the plan. It is recognised that forecasting the future without the plan can be difficult due to the absence of data or information.

3.10 The baseline data collected during the scoping phase (carried out during 2009) has since been updated as the process has progressed. The SEA should focus on how the LTP can influence environmental and sustainability conditions. Therefore, each SEA topic considers the effect that transport can have and this is used to provide a sound basis for the SEA framework. A summary of main issues effecting Wiltshire are shown in Table 3.2 with full and detailed information provided in the relevant topic paper at the end of this document.

Table 3.2 Summary of the main sustainability issues

Summary of main baseline issues
Biodiversity
• Wiltshire contains a significant wide range of sites protected for their biodiversity value. All contribute to the character and appearance of Wiltshire and some contribute to biodiversity on a national basis. Many of these sites are habitats which are situated next to highways, cycle routes, green lanes and other transport corridors. • Transport networks and traffic in general can have can have significant adverse impacts on wildlife and the associated habitats.
Land, soil and water resources
• There is a significant amount of land in Wiltshire which is valued at grade 3 or higher which compares favourably to both the South West and national figures.

Summary of main baseline issues
• The environmental impact of transport on soil consists of soil erosion and contamination. • Most of the minerals extracted within Wiltshire are transported by road with potential adverse impacts on the environment. Government policy seeks to promote the sustainable transportation of minerals and therefore those transporting minerals should do so by rail and water. • Large improvements have been made in chemical water quality in Wiltshire, between 1995 and 2005, although it is still someway short of the South West and national figures. • There has also been a regression in the length of rivers in Wiltshire that are in the top overall national percentage in terms of phosphate levels, however both biological quality and nitrate levels have improved in Wiltshire. • The risk of flooding is likely to increase with climate change.
Air quality and environmental pollution
• Overall air quality in the county is improving and it is anticipated that continuing improvements can be made through improved traffic management. Data on other forms of environmental pollution is poor. • Wiltshire has seven Air Quality Management Areas. Traffic counts in each of the areas has shown no real year on year improvements.
Climatic factors
• The county is likely to see a number of changes as a result of climate change, including drier and hotter summers, warmer and wetter winters and increased flooding. • The amount of renewable energy installed in Wiltshire at present is amongst the lowest for any authority in the South West. The amount of existing renewable heat and the use of transport fuels in Wiltshire are even lower than for renewable energy, • North Wiltshire is the largest emitter of transport related CO_2 emissions, followed by Salisbury, this reflects the road network and traffic densities.
Historic environment
• Wiltshire has a wealth of historic sites, monuments, listed buildings, conservation areas and parks and gardens. • Transport can have a serious adverse impact upon areas or buildings of historical or cultural value. • Wiltshire contains one World Heritage Site, Stonehenge and Avebury, with roads and traffic having a serious adverse impact at both sites.
Landscapes
• Landscape character in Wiltshire provides a considerable contribution to local distinctiveness and is landscape of local and national importance. There are three areas of outstanding natural beauty which cover 44% of the county. • Wiltshire now forms part of the New Forest National Park. • Transport can have a negative effect on landscapes and can have a detrimental effect on landscape and townscapes in a number of ways, such as visually and in terms of tranquillity.

Summary of main baseline issues
Population
• Wiltshire's population continues to grow and is ageing all the time. This has implications for the provision of essential services and facilities and the need to ensure all of these elements are made as accessible as possible.
Healthy communities
• Wiltshire's population is relatively healthy compared with the national picture. • 14.2% of Wiltshire's adult population are physically active compared to the national average of 11.2% and 59.5% of children are active compared to 49.6% of England. • Adult obesity in Wiltshire is on a par with the national average, whereas child obesity in Wiltshire is below the national average. • Only 4% of journeys to work are by bicycle in Wiltshire; however there is enormous potential to increases this number. • Numbers of people killed or seriously injured (KSI) and the numbers of children killed or seriously injured are both decreasing. This is also evident in the number of cycling and pedestrian casualties which are also decreasing.
Inclusive communities
• Wiltshire is a predominately rural county, which makes affordable accessibility to services challenging. • Car ownership and use is high in Wiltshire. • The average commute to work has increased steadily since 1991 and out-commuting is now common place for some of Wiltshire's residents.
Transport
• Some of the main highway routes in Wiltshire are unsuited to the volume and type of traffic carried which has given rise to a number of issues, such as local congestion and journey time reliability. • Car ownership is high and in 2001 there was a 92% increase in the number of cars in Wiltshire. • Wiltshire has large rural areas where cycling may be less practical; however 49% of live in urban settlements where there is much potential to increase cycling in these areas. • Future increases in tender prices pose a real threat to the maintenance of existing bus services in the county. • Road based freight has a noticeable impact on the road network, particularly in historic towns and areas where roads and streets weren't designed for large freight vehicles.
Economy and enterprise
• In recent years the population of parts of Wiltshire has grown substantially, although this has generally not been matched by increases in employment opportunities. Consequently out commuting has increased. • There is a definite opportunity for Wiltshire to capitalise further on its tourism potential, however this will require consideration where increased transport and travel occurs.

Environmental problems and opportunities

3.11 The identification of environmental problems and opportunities of relevance to the transport plan is an important part of the definition of key transport problems for the plan. It also allows the plan to avoid or help solve these problems. Table 3.3 provides details of the problems and opportunities in Wiltshire.

3.12 The review of plans and programmes effecting the county and the collation of the environmental baseline data informed the identification of a series of environmental problems and opportunities that could be addressed by, or affect the strategies and measures developed in the LTP. Such issues have been confirmed through:

- Discussions with Wiltshire Council officers
- Information received during the scoping report consultation
- Review of baseline data, especially where targets are not track to be met or trends are negative
- Tensions/inconsistencies with other plans, programmes and sustainability objectives
- Review of climate change implications.

Table 3.3 Environmental problems and opportunities

Issues/problems	Likely future environmental baseline and climate change impacts without some intervention	Implications for transport/Opportunities offered by LTP3
Biodiversity		
The ongoing break up of wildlife habitats into smaller, isolated areas, caused by new and existing development and increases in traffic growth, seriously reduces the scope for wildlife to move and adapt to new conditions and causes habitat fragmentation. There is a large number of European designated sites within and surrounding Wiltshire. Road verges continue to be subjected to a range of stresses imposed by passing traffic including salt spray, oil and other petrochemicals, lead and other air pollutants. Parking and over-running on verges can cause a complete loss of vegetation. Road widening can potentially result in the loss of roadside verges. Increased sedimentation of waterways can and does significantly threaten the survival of freshwater ecosystems and habitats.	There will be a continued decline in certain habitats and species without active management. Climate change impacts include changes to length and timing of seasons which can cause upsets to breeding patterns and wild plants may find it more difficult to suitable colonising conditions.	• Habitat creation in existing and new transport corridors. • Monitoring of wildlife numbers and casualties. • Reducing traffic and miles driven • Ensure that new road developments crossing waterways have structures in place to reduce casualties. • Install road drainage so that sediment run-off is directed into filter zones or streamside reserves.
Land, soil and water resources		
Road surfaces often exacerbate run off which can lead to pollution of watercourses and increase soil erosion. Roads can be long term sources of sedimentation if not properly maintained.	Climate change is likely to see rises in soil erosion as wind speeds increase. Some of the worst problems are likely to be on clay soils, which will crack and shrink, reducing the soil's ability to hold moisture and nutrients.	• Increased soil erosion and drying could be an issue for new infrastructure schemes and drainage on existing roads could struggle to cope if drainage capacity is reduced by soil erosion. • Measures to reduce traffic growth, which will indirectly lead to less run-off • Install road drainage so that sediment run-off is directed into filter zones or streamside reserves.
New development continues to threaten the quantity of high quality agricultural land that Wiltshire has.	A reduction in productive agricultural land could threaten and damage the economy of Wiltshire.	Transport infrastructure (and new development) should avoid Greenfield sites where at all possible.

Issues/problems	Likely future environmental baseline and climate change impacts without some intervention	Implications for transport/Opportunities offered by LTP3
Air quality and environmental pollution		
There are currently seven AQMAs in Wiltshire, primarily in town centre locations.	If traffic growth is left unchecked these areas may expand and new areas may be identified.	Actively reduce the number of vehicles on the road through demand management and travel behaviour change techniques.
Climatic factors		
Traffic continues to be a major source of CO_2 emissions one of the main components of greenhouse gases, a major factor in climate change.	Evidence of climate change is becoming more widespread and certain, and it is likely it will have an even greater significant negative impact on Wiltshire's water supply, flood risk, food production, energy use, and transportation. However, the greatest impact is probably to human health. With increasing traffic levels the risk and implications becomes far greater.	Climate change is a high priority issue in LTP3, and is a strong requirement to ensure that the transport system becomes adapted to the unavoidable effects of climate change. It must also consider ways in which traffic growth can be effectively reduced and to trial alternative fuelled vehicles.
Historic environment		
Wiltshire's rich historic and cultural heritage comes under continued threat from new development and continued traffic growth.	Climate change will likely result in increasing winds, which can significantly damage buildings. If new development is left unchecked and without active management and mitigation measures, Wiltshire's historic environment will likely suffer with air pollution and vibration damage as well a general decline in the quality of historic areas, which in turn could impact upon tourism and the economy of Wiltshire.	• LTP3 needs to actively reduce traffic growth. • The historic environment needs to be protected from the adverse effects of transport and development including air pollution and vibration damage. • High quality design and improvements to enhance the public realm particularly in heritage areas (e.g. street furniture and road and pavement materials to be in context with the local historic area).
Landscapes		
UK housing targets and the overall general trend for increasing transport is likely to create pressures on landscapes through visual intrusion such as traffic flow, traffic management and new infrastructure.	Wiltshire's landscape is of national importance and provides local distinctiveness. There is a close inter-relationship between landscape quality and its value as a wildlife habitat. The ecological and visual value of the landscapes may be lost which could be catastrophic for certain species of flora and fauna as well as tourism and the economy.	• LTP3 needs to actively reduce traffic growth. • The appropriate use of traffic management measures and use of building materials. • The implementation of pedestrianisation schemes where feasible. • Habitat creation in existing and new transport corridors. • Recording of wildlife casualties.

Issues/problems	Likely future environmental baseline and climate change impacts without some intervention	Implications for transport/Opportunities offered by LTP3
	Climate change will alter the landscape, soils will dry out much more rapidly in summer, whilst winter flooding and wind damage becomes more prominent, all of these can and will significantly change the landscape.	
The transportation of minerals and waste by road can cause problems to local communities such as air quality and congestion.	Future growth particularly in the SSCTS will mean that more strategic waste management facilities will be required, which in turn could have an impact on already congested road networks.	Careful consideration of the location of waste management facilities could reduce the amount of CO_2 emissions.
Population		
Wiltshire's growing and ageing population may have implications for the provision of services, housing, and employment and recreation facilities, including an increasing demand for transport.	Without the correct balance of uses there will be a requirement to travel beyond the district for employment, retail and other opportunities.	Ensure adequate public transport services are available in all areas. Provide adequate walking and cycling measures to encourage participation in these physical modes of transport. Ensure that there is appropriate publication to highlight the increased provision.
Healthy communities		
The number of overweight and obese people has tripled over the last two decades and is still rising. Obesity rates are indicative of lifestyle and health inequalities.	Obesity rates will continue to rise, creating more pressure on the health system both locally and nationally.	To provide accessible services which encourage modes of travel that require some form of physical activity, such as walking and cycling.
Noise impacts created by the transport system can cause mental and physical distress to both human and animal life.	The noise effects of the transport will continue to be felt and many lead to a decline in some wildlife species as well as causing sleep and rest deficiencies in individuals which may result in a drop in work productivity, with a knock on effect on the economy.	To reduce the effects and impact of the transport system, through the introduction of softer measures and transport demand techniques.
There is a pattern of decreasing road casualties and road deaths on Wiltshire's roads.	If traffic growth is left un-curbed this downward trend may falter and there may be a rise in the number of road traffic accidents.	Implement measures that will reduce the numbers of vehicles using the road network system, such as soft measures.
Inclusive communities		
Access to services in some parts of Wiltshire is poor for people without the use of a car.	Accessibility levels will continue to decline, and social exclusion will become more prevalent.	Increased provision of public transport services.

Issues/problems	Likely future environmental baseline and climate change impacts without some intervention	Implications for transport/Opportunities offered by LTP3
A lack of employment opportunities has led to a substantial amount of out-commuting.	It is likely that without action out-commuting will become worse.	There is a need to correct the balance between housing and employment, once this is achieved sustainable transport provision is required to encourage people to remain within the county.
Community severance caused by high traffic volumes.	If traffic growth left unchecked severance will worsen which may affect the visual quality in many areas as well as the physical accessibility of some areas.	To introduce measures to curb traffic growth especially in the SSCTs of Trowbridge, Chippenham and Salisbury and other larger towns in Wiltshire.
Transport		
There is a general lack of resources to significantly invest in sustainable transport solutions.	It is likely there will be rises in traffic growth and infrastructure which in turn will have significant negative effects on a multitude of environmental factors such as on wildlife habitats, landscape value, soils and cause other negative externalities such as congestion, community severance, and noise impacts. Climate change will likely result in a greater risk of widespread flooding and increased wind speeds which will result in direct consequences for the transport network.	• Employ relatively low cost softer measures. • LTP3 must consider ways in which the transport network can be be kept operational in the event of extreme weather conditions.
The operating costs of bus services are increasing and this may lead to reductions in service use.	Increases in private motor vehicles on the road network and lack of accessibility to essential services and employment.	There is potential to increase subsidised services where most required and encourage take up of walking and cycling.
Economy and enterprise		
The future expansion of the SSCTs for business, retail and residential purposes could pose a potential risk to other settlements where there is little prospect of substantial investment.	SSCTS may suffer with increased congestion and pollution whilst other settlements may suffer with lack of services and facilities leading to an increased need to travel to other area's communities to seek employment, and satisfy retail and leisure pursuits.	• Ensure adequate sustainable transport provision is made for the SSCTS and other major towns in Wiltshire so that there is a reduced need to use the private motor vehicle. • Potential to enhance the green infrastructure network linking communities and employment hubs.
In parts of Wiltshire tourism contributes significantly to the local economy and there are opportunities to develop tourism potential elsewhere.	Increases in tourism will benefit the local economy but the increases in traffic generated could have many implications for the local community.	To ensure adequate sustainable transport provision is made available at the known tourist locations.

Definition of the SEA framework

3.13 The SEA Regulations do not specifically require the use of objectives or indicators in the SEA; however, they are a recognised way in which environmental effects can be described, analysed and compared. Each SEA objective should be a statement of what is intended, specifying a desired direction of environmental change.

3.14 During the scoping stage in 2009, the SEA objectives, appraisal questions and potential indicators were formulated to help focus the environmental assessment on the most important issues. It must be noted that the potential indicators used at this stage are contextual and do not constitute the final monitoring indicators. The SEA objectives were developed by reviewing the environmental objectives of plans and programmes affecting Wiltshire, such as the national transport goals, and by analysing the baseline information to identify environmental problems and opportunities. The objectives were refined having taken account of comments received during the consultation on the contents of the Scoping Report. DfT guidance on SEA states that the performance of the plan against the SEA framework is normally measured using indicators or in this instance appraisal questions. A number of appraisal questions have been developed which are specific to the potential effects of the LTP. The SEA framework is shown in Table 3.4.

Table 3.4 SEA objectives and appraisal questions

LTP SEA objective	Decision making criteria - appraisal questions	Potential indicators
Biodiversity		
To protect and enhance biodiversity and geological features and avoid irreversible losses of habitats and species at all levels.	• Will it include actions that cause changes in habitat fragmentation or habitat loss? • Will it include actions that affect an area in a way that could have long term effects in relation to species lifestyles or irreversible affects where there are no known mitigation techniques? • Will it include actions that help reach targets or compromise targets of the local BAPs? • Will it include actions that affect Natura 2000 sites, SSSIs or other designated sites?	• Condition of SSSIs • No. of schemes/projects to reduce soil and water pollution.
Land, soil and water resources		
To reduce soil contamination and safeguard soil quality and quantity and minimise the impact of the transport system on water resources.	• Will it cause changes in existing soil erosion problems, including the effects of road maintenance? • Will it cause the loss or pollution of soils and watercourses which support valued habitats and species?	• River quality
Ensure that Greenfield sites and quality agricultural land is avoided.	• Will it reduce the need to develop areas of agricultural land and Greenfield sites?	
Air quality and environmental pollution		
To reduce the negative impacts of the transportation system on air quality.	• Will it cause any changes in traffic that affect an air quality management area? • Will it affect areas which are likely to experience a 10% change in traffic flow/nature? • Will it cause air pollution adjacent to species and habitats known to be susceptible to deterioration in air quality?	• Proportion of bus fleet operating in Wiltshire meeting the Euro 4 engine regulations or higher.

LTP SEA objective	Decision making criteria - appraisal questions	Potential indicators
Climatic factors		
To reduce the contribution of the transport system to CO_2 emissions.	• Will it cause a change in traffic flow/volumes or a change in the nature of traffic that would cause changes in fuel use and CO_2 which would assist in meeting the target of reducing the amount of carbon dioxide produced?	• No of schemes/projects introducing electric vehicle charging infrastructure
To ensure that the transport system can cope with the unavoidable effects of climate change.	• Will it reduce the unavoidable effects of climate change, such as excess flooding and storm damage to transport networks?	
Historic environment		
To conserve and enhance features and areas of historical and cultural value.	• Will it cause direct impacts on sites or monuments through the provision of new transport infrastructure?	• Number of listed buildings lost through transport development.
To conserve and enhance archaeological sites and features.	• Will it cause a change in traffic flows or the nature of traffic that affects townscape, sites and monuments valued for cultural and historic significance?	
Landscapes		
To protect and enhance the quality of Wiltshire's landscapes.	• Will it cause changes in traffic flows and the nature of traffic in areas valued for their landscape character and tranquillity?	• No. of schemes that have a pro-active approach to protecting and enhancing Wiltshire's landscapes.
To help reduce the impact of transport and improve the quality of urban and rural centres.	• Will it reduce traffic levels, congestion, or the nature of traffic in residential areas/town and village centres. • Will it cause changes that reduce the impact of transport on the townscape, which may include changes to highway signage, lighting, street furniture, or introduce features that enhance the character of towns.	

LTP SEA objective	Decision making criteria - appraisal questions	Potential indicators
Population		
To provide everyone with the opportunity to access key services.	• Will it improve provision of public and community transport that make key services more accessible? • Will it improve access for certain equality groups (race, gender, disability, age, religion and sexual orientation) and contribute to the DfT goal of promoting greater equality of opportunity for all citizens. This includes changes to physical infrastructures and services.	• Access to key services and facilities by means other than the motor car.
Healthy communities		
To reduce the need/desire to travel by car and encourage physical modes of transport.	• Will it lead to an increase in walking and cycling numbers?	• No. of people walking and cycling instead of using the car • Accessibility to GP surgery • No of people/children killed or seriously injured.
To reduce the noise impact of the transport system.	• Will it reduce the amount of traffic in tranquil areas? • Will it affect sensitive receptors within 200m of a noise change? • Will it affect areas adjacent to habitats where sensitive species breed? • Will it affect areas where noise is likely to change in nature as a result of an increase in HGVs or change to the time of traffic?	
To reduce the adverse effects of transport on safety.	• Will it lead to a decrease in traffic accidents/accident severity and help meet KSI targets?	
Inclusive communities		
To increase accessibility to key services, facilities, and retail without the need for a car.	• Will it provide opportunities to travel without the need for a car?	• Access to services and facilities by public transport, walking and cycling. • Working people with access to employment by public transport (and other specified modes)
To ensure that where employment opportunities are to be found there is appropriate accessibility that doesn't involve the use of a car.	• Will it lead to alternatives ways of travel to employment hubs?	
To reduce the community severance effects of transport.	• Will it result in a reduction in community severance (i.e improved crossing facilities, reduced traffic speeds and reduced traffic levels)?	

LTP SEA objective	Decision making criteria - appraisal questions	Potential indicators
Transport		
To reduce the need to travel, and promote sustainable travel modes of transport.	• Will it increase the range, availability and affordability of sustainable travel choices (i.e public transport, walking, cycling)?	• Number of households with two or more cars • Train ticket sales • Number of bus stops • Number of received travel plans
Economy and enterprise		
To help to manage and maintain the existing transport system efficiently in all areas of Wiltshire.	• Will it help to manage routes effectively in order to maintain journey times?	• The number of new tourism enterprises • Journey time reliability
To invest in sustainable transport improvements that help the economy of Wiltshire.	• Will it include schemes that decrease journey times and congestion, improve journey time reliability and help to meet congestion targets in the LTP? • Will it enhance the quality of Wiltshire's green infrastructure assets? • Will it include areas where tourism has a foothold?	
To reduce the impact of road freight on communities.	• Will it include schemes that decrease journey times and congestion, improve journey time reliability and help to meet congestion targets in the LTP? • Will it include areas where tourism has a foothold?	

4 Evaluation of the draft strategies

Evaluation of the draft strategies

4.1 Evaluating the effects of the draft strategies has entailed the following:

- Identifying the effects of the strategies against the SEA objectives, including identifying changes in the future baseline, which are predicted to arise from implementation of the strategies.
- Assessing the significance of these effects. This means describing these changes in terms of the nature and the magnitude of the impact and the sensitivity of the receiving environment.
- An assessment of the likely changes to the future baseline which may have been caused by secondary, cumulative and synergistic impacts.

Identifying the effects of the draft strategies

4.2 There are several ways of providing a quantitative assessment for a transport project, for example the amount of carbon dioxide generated. However, these types of figures are not necessarily available to a team when assessing the effects of a local transport plan. This is primarily because SEA is used to assess relatively broad strategies rather than site specific locations/proposals. As a consequence, the main tool used to assess the effects of these strategies against the SEA and its objectives is 'expert judgement' and where possible this is supported by documented evidence.

Evaluating the effects of the draft strategies

4.3 Once the effects have been identified, it is necessary to indicate the level of significance, i.e., whether minor or major significance. The SEA Regulations specify the criteria that should be taken into account when determining the likely significant effects. These criteria essentially relate to the nature of the effects arising from the strategies and the value and vulnerability of the receptors as follows:

- How valuable and vulnerable is the receptor that is being impacted?
- How probable, frequent, long lasting and reversible are the effects?
- What is the magnitude and spatial scale of the effect?
- Are the effects positive or negative?

4.4 Evaluation involves judging whether or not a predicted effect is likely to be significant. The results of the evaluation are categorised by the nature of the effect using the key as shown in Table 4.1.The assessment of significance should involve the assessor considering the above criteria for each potential impact along with a consideration of the how the strategies will help to achieve (or not) the SEA objectives.

4.5 The lack of certainty regarding the available funding for LTP3 and the delivery of future transport services and schemes resulted in a very broad overall strategy, themed strategies and one year Implementation Plan. This made the SEA assessment and evaluation more

challenging. The first Implementation Plan was particularly strategic and did not provide any real detail regarding schemes and the location of measures and services. The remaining draft strategies will also be somewhat broad in their approach.

Table 4.1 SEA significance scores and criteria

Score	Description	Symbol/Key
Significant positive effect	The plan addresses all the elements that are required to protect the environment and address the relevant sustainability issues in Wiltshire and would help achieve all of the applicable SEA objectives. The plan also sets out how, where and when these policies will be implemented and these will have a positive impact in relation to characteristics of the effect and the sensitivity of the receptors.	++
Minor positive effect	The plan addresses all the elements that are required to protect the environment and address the sustainability issues in Wiltshire and would help achieve all of the SEA objectives.	+
Partial positive/partial negative effect	The plan addresses some of the elements that are required to protect the environment and address the sustainability issues in Wiltshire and would help achieve or partially achieve the SEA objectives. There is also an element of the plan that conflicts with some of the SEA objectives.	+/-
No significant effects	The plan does not have an effect on the achievement of the SEA objectives	O
Significant negative effect	The plan conflicts with some of the SEA objectives. The plan also sets out, how, where, and when these policies will be implemented and these will have a negative effect with relation to characteristics of the effect and the sensitivity of the receptors.	--
Minor negative effect	The plan conflicts with some of the SEA objectives.	-
Uncertain	It is unclear whether there is the potential for a negative or positive effect on the SEA objective.	?

5 Topic Summaries

Assessment topic summaries

5.1 The assessment process was carried out on a topic by topic basis, with the full findings of the assessment documented in the relevant topic paper. The following is a summary of the assessment which focuses on the identification and assessment of significant effects.

Biodiversity

5.2 On the whole the strategies perform will against the SEA objectives, both individually and collectively. They largely seek to reduce the impact of transport on the natural environment through change in travel behaviour and ,modal shift. However, temporary construction sites can affect local biodiversity and more permanent changes or construction of transport infrastructure can result in more lasting habitat fragmentation and loss. For example this may occur where new cycle routes and cycle parking are proposed.

5.3 Reducing the need to travel and modal shift both help to improve air quality and can have a positive secondary effect on biodiversity. Modal shift is most likely to occur where a range pf measures are implemented. Improvements to cycling, walking and powered two-wheeler infrastructure as well other 'softer' measures will help to reduce the need to travel by car and encourage sustainable travel. Reduced traffic levels also help to reduce wildlife casualties.

Land, soil and water resources

5.4 The strategies have no significant positive or negative effects on land, soil and water resources. Temporary and permanent construction has the potential to have some impact on soil and water resources, for example during the construction of new cycle routes. If this was to occur or is likely mitigation measures would be proposed. Reducing the need to travel by car and encouraging sustainable travel can have a secondary effect on soil and water quality as a result of reduced acidification.

Air quality and environmental pollution

5.5 The strategies in conjunction with one another could potentially have a positive effect on air quality and environmental pollution. The strategies all seek to reduce the need to travel by car and encourage sustainable travel therefore helping to improve air quality and reduce environmental pollution. However, the accessibility strategy seeks to improve accessibility via improvements to the public transport network and, there is some uncertainty regarding the use of older vehicles and the impact this may have on air quality.

5.6 Encouraging modal shift could potentially create a more attractive transport network for car drivers and thus increase traffic levels, which would negate the positive benefits of any modal shift.

Climatic factors

5.7 The strategies have no significant positive or negative effects, however overall they perform well against the SEA objectives and should have a positive effect. All the strategies seek to encourage a change in travel behaviour and reduce the need to travel by car. However, reducing congestion on the road network may encourage further car travel as motorists start to recognise the freer flowing traffic which may undo the benefits created during the initial modal shift. The Accessibility Strategy and its connection with the already published Public Transport Strategy also leads to some uncertainty and some possible negative impacts.

5.8 Whilst there is uncertainty regarding the ability of the transport system to cope during climate change, improving accessibility and providing a greater range of sustainable transport modes will mean that there will be more transport choices on offer.

Historic environment

5.9 Overall there is potential to improve and enhance historical towns and settlements through measures to reduce unsustainable travel and encourage modal shift. Reductions is traffic can benefit the historic character of many towns and settlements and may result in secondary effects on heritage sites and assets as a result of improved air quality and reduced vibrations caused by traffic and heavy vehicles. However, this must be offset against the introduction of "out of place" infrastructure, where this is the case mitigation measures will be required.

Landscape and townscape

5.10 Overall the strategies have no significant positive or negative effects on landscape and townscapes, however there is some potential for them to encourage modal shift and sustainable travel, and increase accessibility opportunities which will help to reduce the impact of transport and improve the quality of urban centres.

5.11 Reducing the need to travel and encouraging modal shift is likely to result in landscapes and particularly townscapes being relieved of higher levels of traffic to some extent. This may provide opportunities for enhancing the public realm and enhancing townscapes which is particularly pertinent given SO7. However, careful planning of infrastructure improvements is required so that they do not prove detrimental to the areas within which they are situated.

Population

5.12 Overall the strategies perform well against the SEA objectives. The strategies have the potential to radically improve accessibility and encourage sustainable travel and will therefore have an overall positive effect.

5.13 The strategies in combination with each other will have a positive effect and will provide increased opportunities to access key services as well non-essential services, such as leisure facilities and tourism. They particularly take account of SO5, and seek to reduce the need to travel by car and encourage modal shift. Improved public transport provision will help to take account of the DfT goal of promoting equality of opportunity, especially for the elderly.

Healthy communities

5.14 Overall the strategies should make a positive contribution to healthy communities, with each of the strategies contributing to the strategic transport objectives.

5.15 The cumulative effects of the strategies have the potential to be positive but this is dependant to some extent on the amount of modal shift that takes place. Stand alone measures are unlikely to yield any significant positive effects, however, where measures are planned and thoroughly integrated there are opportunities to increase significant amounts of physical mode travel. Similarly, reductions in car travel will result in reduced noise levels in towns and built up areas. Reductions in car travel will also likely result in improvements to air quality which may also encourage further take up of walking and cycling.

Inclusive communities

5.16 The strategies contribute to a positive effect for inclusive communities. They seek to encourage a change in travel behaviour and modal shift and reduce people's reliance on the private motor car. Reducing car travel can potentially improve community severance, through less moving motorised vehicles and on-street parking and invasive road markings and street furniture.

5.17 Working together in conjunction with one another the strategies will provide much greater access opportunities without the need to travel by car. This includes access to employment hubs. There is further opportunity to increase access to all services through the effective integration of spatial and transport planning.

Transport

5.18 The strategies increase the range and availability of sustainable travel choices and contribute to a positive effect for transport. They all promote the use of sustainable travel, encourage a change in travel behaviour and reducing the need to travel by car.

5.19 Effective spatial planning should reduce the need to travel to key services and facilities as settlements and communities contain all the necessary requirements to live a contented life.

Economy and enterprise

5.20 On the whole the strategies will have a positive effect on economy and enterprise in Wiltshire and overall they perform well against the SEA objectives. These strategies will have little effect on reducing the impact of freight on communities.

5.21 Encouragement of modal switch and sustainable travel will help reduce congestion, free up road capacity and produce a freer flowing road network system. This will help to improve and maintain journey time reliability.

Mitigation and enhancement measures

5.22 Mitigation and enhancement measures, identified to address potential negative or uncertain effects, are shown in Table 5.1 below.

Table 5.1 Mitigation and enhancement measures

Effect	Proposed mitigation/enhancement
Biodiversity	
The creation of new cycling (and walking) routes may involve engineering works which could result in the loss of habitat.	Landscape planting would replace lost habitat. may include reinstatement of verges with stored topsoil.
Air quality and environmental pollution	
It is expected that there will be increases in cycling levels.	The cycling strategy could target those areas with an air quality management problem.
Climatic factors	
Consider providing a high standard of changing facilities for those experiencing the worst weather conditions of climate change.	Cycling parking policies should also consider the effects of climate change and extreme weather conditions.

Effect	Proposed mitigation/enhancement
Historic environment	
Cycling infrastructure may have some negative impact on historical environments.	Cycling infrastructure will require careful site location planning and should be in keeping the local surrounding environment.
Landscapes/Townscapes	
As historic environment	As above
Healthy communities	
The use of older vehicles could bring unwanted noise to towns and tranquil areas.	Measures required to upgrade older buses. Older vehicles tend not to be as efficient as new vehicles on the market such as those with Euro 5 or 6 engines. Wiltshire Council to consider grants to transport operator to help them upgrade.
Inclusive communities	
Improve access to employment hubs.	More specific location of new employment hubs and access opportunities would be useful.

6 Monitoring measures

Monitoring

6.1 Under the SEA Directive, there is a statutory requirement to monitor the environmental impacts of the implementation of relevant plans.

6.2 SEA monitoring often requires considerable effort on behalf of those authorities with SEA responsibilities and consequently the proposed monitoring framework focuses on those aspects of the environment that are most likely to suffer with some form of adverse impact, or where the impact is uncertain or where particular problems may arise.

6.3 Monitoring is particularly useful in answering the following questions:

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

6.4 Monitoring plays an important role in the performance management of the LTP process, and where relevant, use will be made of this in monitoring the SEA. In the meantime, the draft SEA has hi-lighted two main potential negative areas which will require further assessment at the time of implementation. These areas are identified in Table 6.1 below.

Table 6.1 Proposed SEA monitoring framework

Potential negative strategy/area for improvement	Potential indicator	Data source	Action
There is potential for some disturbance to wildlife through increased uptake of sustainable modes and the need to increase infrastructure	Wildlife monitoring/counts	• Wiltshire Council • Natural England	TBC
More polluting and noisier older vehicles could used as services increase and transport operators cannot afford to upgrade their fleets.	Levels of relevant pollutants in AQMA's	• Wiltshire Council	TBC

7 Next steps

Consultation

7.1 The SEA Regulations set specific requirements for consultation with statutory environmental bodies, the public and other interested parties (these could include non-governmental organisations and community groups). The Environmental Report produced alongside the other strategies will be made available for all parties so that they can provide a response to the contents of the provisional LTP and accompanying Environmental Report.

7.2 This Environmental Report including a non-technical summary will be available on the relevant Wiltshire Council consultation page: http://consult.wiltshire.gov.uk/portal

Consultation on the remaining strategies and the Environmental Report will be carried out from Friday 1st March to Friday 24th May 2013.

Any comments relating to the content of the Environmental Report should be sent to:

Transport Policy Team
Wiltshire Council
County Hall
Trowbridge
BA14 8JD

Email: transportplanning@wiltshire.gov.uk

7.3 Comments received on the contents of the remaining strategies and the Environmental Report will be taken into consideration as the strategies and plan is developed for publication during summer 2013. The SEA Statement will document how the comments have been taken on board.

SEA Statement

7.4 When the strategies are adopted it will be accompanied by a SEA Statement. In line with the SEA Regulations, the SEA Statement will provide the following information:

- How environmental considerations have been integrated into the plan;
- How the Environmental Report has been taken into account;
- How opinions expressed in relation to the consultation on the plan/programme and Environmental Report have been taken into account;
- The reasons for choosing the plan or programme as adopted, in the light of the other reasonable alternatives dealt with; and
- The measures that are to be taken to monitor the significant environmental effects of the implementation plan or programme.

Biodiversity

1. Introduction

1.1 "Biological diversity" or "biodiversity" can have many interpretations. It is most commonly used to replace the more clearly defined and long established terms, species diversity and species richness. Biologists most often define biodiversity as the "totality of genes, species, and ecosystems of a region".

2. Review of plans/programmes

2.1 One of the requirements of the SEA process is to consider and take account of any other policies, plans, programmes and environmental objectives which may be relevant to LTP3. This is a key element of the SEA process, since it ensures the work is consistent with up-to-date policy, is informed by reliable information whilst at the same time identifying environmental issues.

2.2 The SEA Directive specifically requires environmental protection objectives established at international, European Community and national levels to be taken into account during the development of the LTP.

2.3 LTP3 will be influenced by other external environmental objectives such as those laid out in policies and legislation. These relationships will be acknowledged to enable potential synergies to be identified and exploited.

2.4 Table 2.1 lists the documents reviewed for biodiversity, with Tables 2.2-2.5 providing brief summaries for each plan/programme.

Table 2.1 Documents reviewed for Biodiversity

International
The Convention on Biological Diversity, Rio de Janeiro (1992)
EU Habitats Directive (Directive 92/43/EC)
The EC Directive on the Conservation of Wild Birds (79/409/EEC)
Ramsar Convention on Wetlands of International Importance (1971)
National
Draft National Planning Policy Framework (2011)
Biodiversity 2020: A strategy for England's wildlife and ecosystem services (2011)
The Natural Choice: securing the value of nature (2011)
UK Biodiversity Action Plan (1994)
Working with the grain of nature: A Biodiversity Strategy for England (2002)
Countryside and Rights of Way Act (2000)
Wildlife and Countryside Act (1981)
National Parks and Access to the Countryside Act (1949) & Environment Act 1995
Natural Environment and Rural Communities Act 2006

PPS 9 – Biodiversity and Geological Conservation (2005)
Regional
South West River Basin Management Plan (2009)
South West Biodiversity Action Plan (1997)
South West Biodiversity Implementation Plan (2004)
South West Regional Nature Map (2006)
Local
Cotswold AONB Management Plan (2008-2013)
North Wessex Downs AONB Management Plan (2004-2009)
Cranborne Chase and West Wiltshire Downs AONB Management Plan (2009-2014)
New Forest National Park Management Plan (2010)
New Forest National Park Core Strategy - (submitted Feb 2010)
Wiltshire Biodiversity Action Plan (2008)
Swindon Biodiversity Action Plan(2005)
River Avon SAC Conservation Strategy (2003)

Table 2.2 International plans/programmes summaries for biodiversity

International plan/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
The Convention on Biological Diversity, Rio de Janeiro (1992)	The main driver of the SEA Directive Article 6A of the Convention requires each contracting party to develop national strategies, plans or programmes for the conservation and sustainable use of biological diversity. To achieve this by 2010 a significant reduction of the current rate of biodiversity loss at the global, regional and national level as a contribution to poverty alleviation and to the benefit of all life on earth.	LTP will be consistent with the objectives of national conservation strategies and their local implementation mechanisms, e.g. the national and Wiltshire biodiversity action plans. The SEA will include biodiversity objectives which seek to protect and enhance habitats and species at all levels. It will take a holistic approach when considering ecosystems rather than focusing on 'islands' of protected sites and species.
EU Habitats Directive (Directive 92/43/EC)	Maintain or restore in a favourable condition designated natural habit types and habitats of designated species listed in Annexes I and II respectively of the Directive. If a project compromising one of these habitats must proceed in spite of negative conservation impacts due to it being in the public interest, compensatory measures must be provided for.	The SEA will screen for any appropriate assessment required. Its objectives should include awareness of 'favourable' conservation status of species by improving existing conditions linked to Wiltshire's highways. Requires compensatory measures for negative conservation impacts if development has to proceed on the grounds of human health and safety. This should be reflected in the mitigation strategies.

International plan/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
		Mitigation should be pro-active through site selection, alternatives and timing.
The EC Directive on the Conservation of Wild Birds (79/409/EEC)	Imposes duty on member states to sustain populations of naturally occurring wild birds by sustaining areas of habitats in order to maintain populations at ecologically and scientifically sound levels.	The SEA will consider the effects of LTP3 on European protected bird species as part of the scoping process (if the relevant data is available). Regard will be given to avoiding habitat loss from new and existing operations and other factors such as interruption to migratory routes.
Ramsar Convention on Wetlands of International Importance (1971)	The Convention on Wetlands is an intergovernmental treaty which provides the framework for national action and international co-operation for the conservation and wise use of wetlands and their resources. **Article 3**: Under the convention there is a general obligation for the contracting parties to include wetland conservation considerations in their national land-use planning. They have undertaken to formulate and implement this planning so as to promote, as far as possible, 'the wise use of wetlands in their territory'. **Article 4**: Contracting parties have also undertaken to establish nature reserves in wetlands, whether or not they are included in the Ramsar List, and they are also expected to promote training in the fields of wetland research, management and stewardship.	LTP3 and the SEA must account for the designated wetland sites in the district. Wetlands must be included in land use planning, and their wider use promoted.

Table 2.3 National plan/programme summaries for biodiversity

National plans/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
Draft National Planning Policy Framework (2011)	For biodiversity planning policies should: • take account of the need to plan for biodiversity at a landscape-scale across local authority boundaries • identify and map components of the local ecological networks, including: international, national and local sites	LTP3 and the SEA accordingly will ensure that biodiversity at all levels is taken into consideration and wherever possible it preserved and restored.

National plans/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
	of importance for biodiversity, and areas identified by local partnerships for habitat restoration or creation • promote the preservation, restoration and re-creation of priority habitats, ecological networks and the recovery of priority species populations, linked to national and local targets and identify suitable indicators for monitoring biodiversity in the plan.	
Biodiversity 2020: A strategy for England's wildlife and ecosystem services (2011)	This biodiversity strategy builds on the Natural Environment White Paper and provides a comprehensive picture of how government intends to implement their international and EU commitments. Overall objective is: to halt overall biodiversity loss, support healthy well-functioning ecosystems and establish coherent ecological networks , with more and better places for nature for the benefit of wildlife and people. Four high-level outcomes have been developed to achieve this overall strategy as follows: - a more integrated large-scale approach to conservation on land and at sea - putting people at the heart of biodiversity policy - reducing environmental pressures - improving our knowledge	Specific to the SEA and LTP3 is the need to reduce environmental pressure. Transport planning has a key role in securing a sustainable future. Both will need to consider the effects of transport in particular new infrastructure and the effect this has on biodiversity and ecosystems.
The Natural Choice: securing the value of nature (2011)	The proposals set out a detailed programme of action to repair damage done to the environment in the past, and urges everyone to get involved in helping nature to flourish at all levels – from neighbourhoods to national parks. The plans are contained in 'The Natural Choice', the first White Paper on the natural environment in 20 years, and are directly linked to the research in the National Ecosystem Assessment that showed the strong economic arguments for safeguarding and enhancing the natural environment.	LTP3 should recognise the importance that the natural environment has on the economy by reflecting the need to protect and enhance biodiversity within its policies.

National plans/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
	The government wants this to be the first generation to leave the natural environment of England in a better state than it inherited. To achieve so much means taking action across sectors rather than treating environmental concerns in isolation. It requires us all to put the value of nature at the heart of our decision-making – in government, local communities and businesses. We will mainstream the value of nature across our society by: • facilitating greater local action to protect and improve nature • creating a green economy, in which economic growth and the health of our natural resources sustain each other, and markets, business and Government better reflect the value of nature • strengthening the connections between people and nature to the benefit of both • showing leadership in the European Union and internationally, to protect and enhance natural assets globally.	
UK Biodiversity Action Plan (1994)	To conserve and enhance biological diversity within the UK and to contribute to the conservation of biodiversity through all appropriate mechanisms.	There are opportunities to contribute to the creation of and maintenance of BAP habitats and conservation of species within the highway network of Wiltshire. The SEA will include objectives which seek to protect and enhance biodiversity and avoid irreversible losses of habitats and species at all levels.
Working with the grain of nature: A Biodiversity Strategy for England (2002)	The strategy seeks to ensure biodiversity considerations become embedded in all main sectors of public policy and sets out a series of actions that will be taken by government to make biodiversity a fundamental consideration in these areas: agriculture, water, woodland, marine and urban areas.	The SEA will integrate biodiversity into LTP3 activity by highlighting the interaction between wildlife and transport, and will take account of objectives stated in national and local BAPs.
Countryside and Rights of Way Act (2000)	Extends the public's ability to enjoy the countryside whilst also providing safeguards for landowners and occupiers. Emphasises the public's	LTP3 needs to have regard for designated areas for scientific interest, scenic quality and wildlife conservation.

National plans/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
	right of access to open country and common land and provides additional protection for Sites of Special Scientific Interest (SSSI).	The SEA will ensure that wider biodiversity in relation to transport is included.
Wildlife and Countryside Act (1981)	Addresses the problem of species protection and habitat loss by setting out the protection that is afforded to wild animals and plants in Britain.	There is significant interaction between wildlife and transport. The SEA considers the affects of the transport system on wildlife.
National Parks and Access to the Countryside Act (1949) & Environment Act 1995	National Park authorities shall seek to foster the economic and social-well being of local communities within the National Park without incurring significant expenditure and shall co-operate with other local authorities whose functions include the promotion of economic and social development within an area of the national park.	LTP3 and the SEA will take proper consideration of the economic and social development of the New Forest National Park.
Natural Environment and Rural Communities Act 2006	Stipulates that every public authority must have regard for the purpose of conserving biodiversity.	The SEA will consider any potential impacts on biodiversity and will accordingly advise action required to avoid a situation arising.
PPS 9 – Biodiversity and Geological Conservation	Three objectives: • Promote more sustainable transport choice for both people and for moving freight. • Promote accessibility to jobs, shopping, leisure facilities and service by public transport, walking and cycling. • Reduce the need to travel especially by car.	LTP3 will give full recognition of this, which will be reflected in its objectives.

Table 2.4 Regional plan/programme summaries for biodiversity

Regional plan/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
South West River Basin Management Plan (2009)	Poorly planned or designed urban transport infrastructure can adversely impact on water quality and resources. The Environment Agency wants to work with the transport sector to achieve an urban water environment rich in wildlife that local communities can benefit from and enjoy.	LTP3 should aim to reduce surface water run-off; protect and restore habitats; improve the quality of rivers and groundwater, which will protect drinking water supplies and bathing areas.
South West Biodiversity Action Plan (1997)	These action plans were prepared in order to make it easier for the UK biodiversity plans to be implemented at the local level; to enable organisations that function at a	The South West Biodiversity Action Plan is not intended to replace local action. It will be essential that local action plans are created for habitats and species, as well as areas and

Regional plan/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
	regional (or similar administrative boundaries) to recognise those conservation priorities relevant to their boundaries; to inform regional planning of the main biodiversity issues within the south west; to ensure the best possible information base on which decisions can be made; to provide consistent information so that confusion over different data and priorities can be avoided.	issues. It is anticipated that local delivery will take place via a wide range of initiatives, some already in place, others existing only as an idea. Local biodiversity partnerships will clearly have a role, especially where an area is complex and encompasses a range of biodiversity priorities.
South West Biodiversity Implementation Plan (2004)	• Protect native woodland from unnecessary damage • Enhance, extend and restore the existing native woodland resource • Manage non-native woodland to improve biodiversity in the wider landscape • Realise the broader social and economic benefits of woodland biodiversity • Ensure that planning decisions take full account of biodiversity and avoid negative outcomes.	Take an integrated approach to land and water management • Nature conservation to be fully incorporated in the new, more spatially oriented, land-use planning system • Protect and enhance woodlands • Ensure planning decisions take full account of biodiversity • Ensure sustainable use of water • Maintain and retain biodiversity of arable and improved grassland • Maximise contribution greenspace makes to biodiversity.
South West Regional Nature Map (2006)	Re-establishing biodiversity in the areas identified by Nature Map will require: • excellent support from nature conservation organisations to enable land owners and managers to take up the Nature Map challenge • a shift in emphasis from a site based approach towards the wider landscape scale • a strategic approach to forward planning and development control, in order to link, buffer and recreate wildlife habitats • a focus on biodiversity outcomes, rather than detailed prescriptions for how these are delivered	A number of the SNAs identified cover Wiltshire and the re-establishing of these wildlife and habitats will form an important part of countryside policies. The SEA and LTP3 will take account of these policies.

Regional plan/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
	• blending the assets, skills, and imagination of different sectors to create effective local delivery partnerships • sustained resources from government, the private sector and voluntary bodies.	

Table 2.5 Local plan/programme summaries for biodiversity

Local plan/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
Cotswold AONB Management Plan (2008-2013)	• The implications of climate change to be addressed. • To conserve and enhance the landscape within the AONB. • A sustainable approach to be adopted for issues, particularly the development and management of the rural economy. • Increase people's awareness, knowledge and understanding and the qualities and opportunities within the AONB.	LTP3 should ensure that future transport development proposals within the AONB are only permitted for cases of overriding national need.
North Wessex Downs AONB Management Plan (2004-2009)	• Conserve and enhance landscape character, heritage and biodiversity within the AONB. • Sustain natural resources and promote low carbon energy.	Ensure that future transport development proposals within the AONB are only permitted for cases of overriding national need.
Cranborne Chase and West Wiltshire Downs AONB Management Plan (2009-2014)	Transport objectives include: A) A strategic approach to transport planning recognises and takes full account of AONB landscape character. B) An integrated sustainable transport network takes account of local community needs and provides travel choices that reduce dependency on the car. C) The impact of traffic on local settlements and the wider countryside is minimised.	Following the recent formal adoption of the management by Wiltshire Council, these management plan policies should be reflected in LTP3: 1) Develop an integrated network of roads, public transport and rights of way that take into account the special qualities and landscape character of the AONB. 2) Investigate initiatives to minimise the current impact of traffic on settlements and the wider countryside. 3) When new development is proposed, minimise the impact of associated traffic on settlements and the wide countryside through travel plans.

Local plan/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
	D) A balance is sought between maximising social and economic interests whilst minimising the impact of traffic on the landscape and communities	4) Develop and promote the benefits of traffic management initiatives that encourage safe and attractive walking, cycling and riding routes around the AONB. 5) Develop a consistent approach to transport infrastructure (laybys, signing, furniture) that takes account of and are sympathetic to the landscape character of the AONB.
New Forest National Park Management Plan (2010)	Reduce the impacts of traffic on special qualities of the National Park and provide a range of sustainable transport alternatives within the park by: - Influencing regional and national transport policies in order to minimise impacts on the National Park and, where possible, achieve benefits for the area. - Helping to reduce the number of animal accidents on the roads within the National Park. - Developing a distinctive and different experience for those travelling within the National Park which clearly indicates its special and protected status. - Promoting measures to reduce the negative impacts of road traffic on the quality of life of local communities and the environmental quality of the National Park. - Supporting an integrated network of public and community transport, footpaths and cycling and riding routes designed to meet the needs of both residents and visitors.	LTP3 will take account of these transport objectives and ensure that all transport development in and around the National Park is sustainable, integrated and where possible includes walking and cycling. Freight routing strategies will take account of weight restrictions and where possible re-route vehicles away from the National Park.
New Forest National Park Core Strategy - submitted Feb 2010	The Core Strategy and Development Management Policies Development Plan Document (DPD) Submission Document provides the overall vision, strategic aims and objectives and spatial planning policies for the whole of the administrative area of the New Forest National Park for the period to 2026. The document, when adopted, will set out the overarching planning framework for the National Park, and subsequent development plan	

Local plan/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
	documents prepared by the Authority will need to be in conformity with the Core Strategy. It includes a number of strategic objectives including: Reduce the impacts of traffic on the special qualities of the National Park and provide a range of sustainable transport alternatives within the Park.	
Wiltshire Biodiversity Action plan (2008)	7 broad habitat action plans: • Arable and horticulture • Broadleaved, mixed and yew woodland • Built up areas and gardens • Calcareous grassland • Neutral grassland • Rivers and streams • Standing open water and canals 2 priority habitat action plans: • Ancient and/or species rich hedgerows • Lowland wood pasture and parkland 1 species action plan: Bats: 5 species • Barbastelle • Bechstein's • Pipistrelle • Greater Horseshoe • Lesser Horseshoe	LTP3 should: • Take care to avoid the habitats listed when considering new developments. • Check the impacts of existing transport developments on any habitat type listed in the action plan, and where possible, and where necessary and possible introduce mitigation measures. • Provide where possible enhancement or creation of listed habitats. The SEA will include objectives which seek to protect and enhance biodiversity and geological features and avoid irreversible losses of habitats and species at all levels.
Swindon Biodiversity Action Plan (2010)	14 habitat action plans: • Arable • Hedgerow • Standing open water	• Take care to avoid the habitats listed when considering new developments. • Check the impacts of existing transport developments on any habitat type listed in the action plan,

Local plan/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
	• Urban ponds • Rivers and streams • Wetlands • Amenity grassland • Neutral grassland • Downland • Built up areas and gardens • Development sites • Woodland • Scrub • Parkland 1 species action plan: Bats 7 species: • Brown Long-eared • Daubeton's • Lesser Horseshoe • Natterer's • Noctule • Pipistrelle • Serotine	and where possible, and where necessary and possible introduce mitigation measures. • Provide where possible enhancement or creation of listed habitats. The SEA will include objectives which seek to protect and enhance biodiversity and geological features and avoid irreversible losses of habitats and species at all levels.
River Avon SAC Conservation Strategy (2003)	The importance of the River Avon and its major tributaries is recognised by its designation as a Special Area of Conservation (SAC) for the following internationally rare or vulnerable species: the river habitat as characterised by flowing water vegetation including Ranunculus species; the river and particular adjoining areas as habitat for populations of Desmoulin's. The habitats directive requires member states to maintain or restore individual sites such as the River Avon SAC to 'favourable condition'. Favourable condition is a range of conditions within which the various influences on a designated habitat or	Ensure LTP3 and the SEA protect the habitats of the River Avon SAC.

Local plan/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
	species do not adversely affect its distribution, abundance, structure or function throughout the SAC in the long term. The objectives of the conservation strategy are: • to identify issues affecting the SAC • to assess existing measures to address these issues • to identify and prioritise further measures required.	

3. Baseline data

3.1 Wiltshire (including Swindon) is the largest inland county in southern England and is an important area for biodiversity with a relatively large area of protected sites. However, whilst Wiltshire is comparatively rich in terms of its biodiversity, its wildlife has declined rapidly since World War II, primarily as a result of intensive farming methods, climate change and urban growth. For example, lowland unimproved grassland, an important habitat type in Wiltshire, is now the single most threatened type of grassland habitat in the UK; between 1934 -1984 it is thought to have declined in extent by 97%. Certain species have also shown sharp declines, farmland birds, for example, have declined by about 50% since the 1970s. The ongoing break up of wildlife habitats into smaller, isolated areas seriously reduces the scope for wildlife to relocate and adapt to new living conditions and habitat fragmentation.

Roads and their ecological effects

3.2 Roads can have major adverse effects on biodiversity. Roadsides contain few regionally rare-species but have relatively high plant species richness. Disturbance-tolerant species predominate. Numerous seeds are carried and deposited along roads by vehicles. Plants may also be spread along roads due to vehicle-caused air turbulence or favourable roadside conditions. Roadside management sometimes creates habitat diversity to maintain native ecosystems or species.

3.3 Road vehicles are prolific killers of all sorts animals. Nevertheless, except for a small number of rare species, road kills have minimal effect on population size. The ecological effect of road avoidance caused by traffic disturbance is probably much greater than that of road kills seen splattered along the road. Traffic noise seems most important, although visual disturbance, pollutants and predators moving along a road could also cause road avoidance. The impacts of traffic noise amongst wildlife are various, including hearing loss, increases in stress hormones, altered behaviours and interference during breeding activities.

3.4 All roads serve as barriers or filters to some animal movement. Road width and traffic density are major determinants of the barrier effect, whereas road surface is generally a minor factor, however road salt appears to be significant deterrent to amphibian crossing. The barrier effect also tends to create metapopulations, e.g. where roads divide a large continuous population into smaller, partially isolated local populations. Making roads more permeable reduced the demographic threat but at the probable cost of more roadkills. In contrast, increasing the barrier effect reduces roadkills but accentuates the problems of small

populations. On the whole the barrier effect tends to affect more species and extends over a much wider land area, than the effects of roadkills or road avoidance and it is the barrier effect which emerges as the greatest ecological impact of roads and vehicles.

International designations - Natura 2000 Network

3.5 Wiltshire has 14 Natura 2000 sites which are either wholly or partially contained within the county. These are of outstanding importance in respect of rare, endangered or vulnerable habitats and species and therefore benefit from a high level of protection. They include three Special Protection Areas, 10 Special Areas of Conservation and one Ramsar site.

Special Protection Areas

3.6 Special Protection Areas (SPAs) are areas which have been identified as being of national and international importance for the breeding, feeding, wintering or the migration of rare and vulnerable species of birds found within European Union countries. They are European designated sites, classified under the 'Birds Directive 1979' which provides enhanced protection given by the Site of Special Scientific interest (SSSI) status all SPAs also hold.

3.7 Member states have a duty to protect SPAs from deterioration and significant disturbance. Wiltshire has three SPAs:

- Porton Down
- Salisbury Plain
- New Forest

3.8 The New Forest SPA which lies close to Wiltshire's south east boundary raises the possibility of cross boundary issues such as the extraction of minerals and impact of waste development within the locality of the New Forest SPA.

Special Areas of Conservation

3.9 Special Areas of Conservation (SACs) are areas which have been given special protection under the European Union's Habitats Directive. They provide increased protection to a variety of wild animals, plants and habitats and are a vital part of global efforts to conserve the world's biodiversity. The Habitats Directive (94/43/EEC) requires measures to maintain or restore natural habitats and wild species at a favourable conservation status.

3.10 Ten SACs have been approved within or partially within Wiltshire:

- Salisbury Plain
- New Forest
- Kennet and Lambourn Flood Plain
- North Meadow and Clattinger Farm
- Chilmark Quarries
- Bath and Bradford on Avon Bats
- Great Yews

- Boscombe Down
- Pewsey Downs
- Prescombe Down

Ramsar sites

3.11 A 'Ramsar site' is land listed as a 'wetland of international importance' Wiltshire has one Ramsar site, the River Avon system.

National designations

3.12 There are many sites within Wiltshire that have been designated for their national biodiversity, these are as follows.

Sites of Special Scientific Interest

3.13 Sites of Special Scientific Interest (SSSIs) and are designated under the Wildlife and Countryside Act 1981 and the Countryside and Rights of Way Act 2000. They are the country's very best wildlife and geographical sites and they include some of the most spectacular and beautiful habitats. There are currently 135 SSSIs in Wiltshire and Swindon, covering 29,000ha of calcareous grassland, lowland meadows, broadleaved woodland, streams, rivers, standing waters and wide variety of other habitat types which also support important populations of British wildlife.

3.14 It is essential to preserve our remaining natural heritage for future generations. Wildlife and geological features are under pressure from development, pollution, climate change and unsustainable land management. SSSIs are important as they support plants and animals that find it more difficult to survive in the wider countryside. Protecting and managing SSSIs is a shared responsibility, and an investment for the benefit of future generations.

3.15 Natural England reports on the condition of SSSIs and grades them into five categories:

- Favourable
- Unfavourable - recovering condition
- Unfavourable - no change
- Unfavourable - declining condition
- Part destroyed or destroyed

3.16 The government has set a public service agreement for 95% of all SSSIs to be in the top two categories of 'favourable' or unfavourable by 2010; with Natural England being charged with this task through advice and grant funding to land managers. Table 3.1 shows that Wiltshire has 23% of the area covered by SSSI's is in a favourable condition, and 0% of the area has not been destroyed or part destroyed.

Table 3.1 Summary of SSSI condition

Indicator	Wiltshire	South West	England
SSSI in favourable condition (%)	22.68	41.15	36.58
SSSI in recovering unfavourable condition (%)	75.31	54.19	60.09
SSSI in unfavourable declining condition (%)	0.52	1.76	1.10
SSSI in unfavourable no change (%)	1.48	2.87	2.19
SSSI area destroyed/part destroyed (%)	0	0.02	0.03

Source: Natural England, July 2011

3.17 Within the South West, Wiltshire had the highest proportion in target condition (98%), closely followed by Devon (97%). Although still relatively high, Dorset had the lowest proportion (85%) as shown in Table 3.2.

Table 3.2 % of county/area meeting PSA target

County/region	%
Avon	94.31
Cornwall	95.86
Devon	97.36
Dorset	85.29
Gloucestershire	94.86
Somerset	96.17
Wiltshire	**97.99**
South West	95.34

Source: Natural England, July 2011

Nature Map

3.18 Biodiversity South West has produced the South West Nature Map; this goes beyond the protection of special sites and identifies opportunities for habitat restoration and creation to withstand the challenges of climate change and species loss. Crucially it provides a scientifically robust methodology for defining a set of ecologically functional tracts of land which are large enough, close enough together, and of the right quality to provide for the needs of our native species and the habitats they occupy, in the long term.

3.19 This was completed by making use of available research, accepted ecological concepts and professional opinion to quantify Strategic Nature Areas (SNAs) for priority habitats in the South West; in Wiltshire this highlights opportunities to restore major areas of broadleaved woodland, neutral grassland, limestone grassland, chalk downland, river networks and wetland habitats. This information is being used as a basis for several landscape scale conservation projects across the region, particularly the emerging Biodiversity Delivery Areas.

This approach of opportunity mapping is well established as an important tool for landscape scale conservation and spatial planning is also recognised as an important delivery mechanism.

County Wildlife Sites

3.20 There are approximately 1,550 County Wildlife Sites (CWSs) in Wiltshire covering approximately 21,000ha of semi-natural habitats including most of our main rivers, ancient woodlands, our best wildflower meadows and the wetlands of the Cotswold Water Park. Although our CWSs are recognised for being of county significance for wildlife, many of them are as rich in wildlife and as valuable as SSSIs; the CWS network is intended to be a comprehensive collection of our best wildlife sites, whereas the SSSI network is only a representative sample of the best examples of certain habitats and species. The CWS network therefore represents an incredibly important resource for Wiltshire's wildlife; however it does not receive any statutory protection and is vulnerable as a result.

3.21 The Wiltshire and Swindon Wildlife Sites Project undertakes monitoring of the CWS network and offers advice to private landowners about the special value of their land and how to manage this favourably; despite this work there is estimated to be only 54% of the CWS network under favourable management. The network is also regularly updated as sites are de-notified as they become damaged, destroyed or degraded, but new sites are also added as they are discovered. Five sites were denotified in 2008-09, four in 2009-10 and 11 in 2010-2011 as a result of degradation and development.

3.22 CWSs are currently afforded protection in the planning system under PPS9 and local plan policies. These policies aim to protect the CWS network from the adverse effects of development unless the reasons for the proposal outweigh the value of the site, in which case they allow mitigation /compensation measures to be conditioned as part of any permission granted. While these policies tend to protect CWSs from direct damage or loss, Wiltshire Council officers have identified a number of weaknesses associated with their implementation which have led to the damage or degradation of CWSs:

- Indirect and offsite effects such as trampling, fly-tipping, fires, isolation, pollution and disturbance are not recognised, making it difficult to control such impacts through conditions or obligations.
- Restoration potential is not recognised. Some CWSs have become degraded through lack of appropriate management but could be restored through favourable management. These areas are undervalued and as such are often lost to development and with it any restoration potential. Development can represent an opportunity to restore CWSs to favourable condition; however there is currently no driver to do so.
- Lack of commitment to manage a CWS appropriately can lead to long-term neglect, degradation and damage. The presence of a CWS in or next to a development should be seen as a community asset, and a commitment should be made maintain such areas responsibly.

3.23 A review of the current local policies also reveals that they do not reflect the requirements of PPS9, particularly the sequential mitigation hierarchy of avoidance (including consideration of alternative sites and layouts), mitigation measures, only then considering compensation measures, and finally *'if significant harm cannot be prevented, adequately mitigated against, or compensated for, then planning permission should be refused.'* Any significant harm would need to be weighed against the reasons for the proposal by the planning officer / committee, however the current policies do not require that such reasons should be in the public rather

than private interest i.e. Wiltshire's communities must benefit in some way from the degradation of their natural environment in order to ensure that permissions are environmentally just.

3.24 Wiltshire Council has adopted NI197 as an indicator to measure its performance against the government's national priorities. The indicator is intended to measure the active management of local sites as a measure of movement towards the target of improving biodiversity. Wiltshire Council has achieved its target of increasing the number of sites in favourable management for the past three years; development could provide opportunities to bring further sites into favourable management to deliver these targets.

Protected road verges

3.25 Wiltshire's Protected Road Verges (PRVs) scheme also identifies road verges which are of important nature conservation value due to the presence of rare or notable species, the presence of valuable habitats, functions as a wildlife corridor linking other wildlife sites, geological features or areas of community value. Given their proximity to the local road network, PRVs can be impacted by development where this requires new or upgraded road junctions or any widening of the carriageway.

3.26 There are approximately 50 PRVs in Wiltshire and they are monitored by volunteers. The road verge monitors keep a check on the condition of their verges and are responsible for monitoring the botanical / biological interest. Reports from all the monitors are collated annually and used as a basis for ongoing management.

Disturbance

3.27 Development has the potential to cause disturbance of the natural environment within the site itself, however such effects can also occur at significant distances from the development site. Such disturbances can range from short-term or one-off events to long-term, permanent effects. Examples include:

- Damage to habitats through trampling, mountain biking, fires, fly-tipping, litter, dog fouling etc
- Disturbance of wildlife during construction through noise and vibration
- Predation of domestic cats upon wildlife such as nesting birds and water vole
- Recreational disturbance of sensitive fauna, particularly by dog walkers
- Pollution and siltation of waterbodies / courses from run-off
- Disturbance of nocturnal fauna through the use of artificial lighting
- Visual disturbance and mortality from wild farms
- Mortality caused by increased traffic or new roads.

3.28 Although such effects can be significant especially in combination, they are often overlooked in environmental assessments, and can often be reduced through the use of method statements, design/landscape schemes and planning obligations. Some disturbance impacts are an inherent part of the proposed change of use and cannot be fully overcome, however such impacts should be made clear in the proposals, in order that they can be weighed against the benefits of development during the decision-making process.

3.29 Recreational disturbance has also been confirmed as having a significant effect upon the breeding success of the Dartford Warbler and Nightjar, and development in the south of the county could potentially increase recreational disturbance on these species in the New Forest. Potential mitigation measures have been identified to reduce and offset this recreational pressure through:

- Habitat mitigation/enhancement measures to increase the number of suitable nest sites;
- Provision of Suitable Alternative Natural Green Spaces (SANGS); and
- Securing management measures including access control.

3.30 Delivery of these measures would need to be secured through partnership working with organisations such as the New Forest National Park Authority, Defence Infrastructure Organisation and the Wessex Stone Curlew Project, and funded by developer contributions.

National Nature Reserves

3.31 SSSIs which are owned by Natural England are known as National Nature Reserves (NNRs). These are established to protect the most important areas of wildlife habitat and geological formations in Britain, and places for scientific research. There are seven NNRs in Wiltshire:

- Fyfield Down
- Langley Wood
- North Meadow, Cricklade
- Parsonage Down
- Pewsey Downs
- Prescombe Down
- Wylye Down

Ancient Woodland

3.32 Land that has been continually wooded since AD1600 or earlier is classed as ancient woodland. Although not protected by legislation, ancient woodland is recognised and awarded protection in national planning policy (PPS9). Ancient woodland is particularly valuable for biodiversity as a rich wildlife habitat, and is home to more species of conservation concern than any other habitat. It supports some 232 species as outlined in the UK Biodiversity Action Plan, 1994. These ecosystems cannot be recreated and therefore the loss of ancient woodland should be avoided.

3.33 Important woodland sites in Wiltshire include Savernake and Chute Forest, Bentley Wood, Langley Wood, Great Ridge, Grovely Wood, Cranbourne Chase, Maiden Bradley, Longleat, Stourhead and Braydon Forest. 1350 ha of woodland is designated as SSSI and 11,795 ha are identified as county wildlife sites (CWS). Table 3.3 provides an indication of the apportionment of ancient woodland in Wiltshire.

3.34 Possible mitigation measures to avoid adverse impacts upon ancient woodland include:

- Exclusion zones
- The creation of buffer strips of new native woodland or other semi-natural habitats
- Working with local communities.

Table 3.3 Ancient woodland in Wiltshire

Indicator	Kennet	North Wilts	Salisbury	West Wilts	Wiltshire
Area of ancient semi-natural woodland (%)	3.55	2.61	5.37	3.55	3.89
Area of ancient semi-natural woodland (ha)	3435	2000	5394	1834	12663

Local designations in Wiltshire

3.35 Local Geological Sites (LGSs) are currently the most important places for geology and geomorphology outside of geological SSSIs. LGSs (formerly Regional Sites of Geological Importance or RIGS) are selected in a different way to Earth science SSSIs, which are chosen by Natural England on a national basis, while LGSs are selected on a local or regional basis using four nationally agreed criteria:

- The value of the site for educational purposes in lifelong learning
- The value of the site for study by both professional and amateur Earth scientists
- The historical value of the site in terms of important advances in Earth science knowledge, events or human exploitation
- The aesthetic value of a site in the landscape, particularly in relation to promoting public awareness and appreciation of Earth sciences.

3.36 The concept of RIGS was first initiated by the Nature Conservancy Councils (NCC) in 1990. RIGS sites started life as SSSIs which were denotified after the Geological Conservation Review (1997-1990), however the statutory agencies wished to secure their conservation in another form. RIGS sites are those which, whilst not benefiting from national statutory protection, are nevertheless regionally or locally representative sites where ".... consideration of their importance becomes integral to the planning process".

3.37 There are currently 58 LGSs in Wiltshire which include exposures of limestone, chalk, sand, gravel, sandstone and clay. Wiltshire Geology Group is currently undertaking a project to monitor the condition of all of these sites, which has revealed that almost all of them are in declining condition, and indeed five sites were lost and denotified during the period 2009-10. LGSs are likely to be significantly under recorded, and there are likely to be many more important sites within Wiltshire which have not yet been discovered.

3.38 LGSs can be affected by a wide range of development through covering or damaging exposures or contributing to the encroachment of vegetation through landscape management practises, however the greatest threats tend to be posed by mineral and waste developments. At the same time, development can provide opportunities to re-expose sites in poor condition, identifying previously unknown but significant features during environmental assessments, and making a contribution to accessibility and long-term management of such sites.

Table 3.4 Local designations in Wiltshire

Indicator	Kennet	North Wilts	Salisbury	West Wilts	Wiltshire
Area designated as LNR (%)	0.02	0.00	0.03	0.10	0.03
Area designated as county wildlife site(ha)	337	259	443	162	1168
Area of RIGS (%)	0.07	0.03	0.02	0.15	0.05
Area of RIGS (ha)	68	20	16	75	180

Local Biodiversity Action Plans

3.39 Local Biodiversity Action Plans (BAPs) such as Wiltshire, Swindon and Cotswold Water Park, give greater priority to habitat action plans. This is because, in the majority of cases, the main threats to wildlife are associated with the loss and fragmentation of the places in which it lives.

3.40 Published in 2008, the Wiltshire BAP includes 10 habitat action plans, one habitat information note and one species action plan (bats) and 260 local BAP listed species. Priority will be given to conserving and enhancing those habitats and species that have been identified in the Wiltshire BAP:

- Woodland
- Wood pasture, parkland and ancient trees
- Rivers, streams and associated habitats
- Standing open water
- Farmland habitats
- Orchards
- Calcareous grassland
- Unimproved neutral grassland
- Built environment
- Ancient and species rich hedgerows
- Heathland information note
- Bats (species)

4. Environmental problems and issues

4.1 These are key environmental problems and issues for biodiversity in Wiltshire, they have been used to develop the SEA objectives.

Table 4.1 Environmental problems/issues and opportunities

Issues/problems	Likely future environmental baseline and climate change impacts without some intervention	Implications for transport/Opportunities offered by LTP3
The ongoing break up of wildlife habitats into smaller, isolated areas, caused by new and existing development and increases in traffic growth, seriously reduces the scope for wildlife to move and adapt to new conditions and causes habitat fragmentation. There is a large number of European designated sites within and surrounding Wiltshire. Road verges continue to be subjected to a range of stresses imposed by passing traffic including salt spray, oil and other petrochemicals, lead and other air pollutants. Parking and over-running on verges can cause a complete loss of vegetation. Road widening can potentially result in the loss of roadside verges.	There will be a continued decline in certain habitats and species without active management. Climate change impacts include changes to length and timing of seasons which can cause upsets to breeding patterns and wild plants may find it more difficult to suitable colonising conditions.	• Habitat creation in existing and new transport corridors. • Monitoring of wildlife numbers and casualties. • Reducing traffic and miles driven • Ensure that new road developments crossing waterways have structures in place to reduce casualties. • Install road drainage so that sediment run-off is directed into filter zones or streamside reserves.

Issues/problems	Likely future environmental baseline and climate change impacts without some intervention	Implications for transport/Opportunities offered by LTP3
Increased sedimentation of waterways can significantly threaten the survival of freshwater ecosystems and habitats.		

5. Suggested SEA objectives

5.1 These are the suggested SEA objectives and potential monitoring indicators for biodiversity:

Table 5.1 Biodiversity objectives

LTP SEA objective	Decision making criteria	Potential indicators
To protect and enhance biodiversity and geological features and avoid irreversible losses of habitats and species at all levels.	• Will it include actions that cause changes in habitat fragmentation or habitat loss? • Will it include actions that affect an area in a way that could have long term effects in relation to species lifestyles or irreversible affects where there are no known mitigation techniques? • Will it include actions that help reach targets or compromise targets of the local BAPs? • Will it include actions that affect Natura 2000 sites, SSSIs or other designated sites?	• Condition of SSSIs • No. of schemes/projects to reduce soil and water pollution.

6. Evaluation of draft strategies

6.1 Evaluating the effects of the draft strategies entailed the following:

- Identifying the effects of the strategies against the SEA objectives, including identifying changes in the future baseline, which are predicted to arise from implementation of the plan.
- Assessing the significance of these effects. This means describing these changes in terms of the nature and the magnitude of the impact and the sensitivity of the receiving environment.
- An assessment of the likely changes to the future baseline which may have been caused by secondary, cumulative and synergistic impacts.

6.2 Evaluation involves judging whether or not a predicted effect is likely to be significant. The results of the evaluation are categorised by the nature of the effect using the key as shown in Table 6.1.

Table 6.1 SEA significance scores and criteria

Score	Description	Symbol/Key
Significant positive effect	The plan addresses all the elements that are required to protect the environment and address the relevant sustainability issues in Wiltshire and would help achieve all of the applicable SEA objectives. The plan also sets out how, where and when these policies will be implemented and these will have a positive impact in relation to characteristics of the effect and the sensitivity of the receptors.	++
Minor positive effect	The plan addresses all the elements that are required to protect the environment and address the sustainability issues in Wiltshire and would help achieve all of the SEA objectives.	+
Partial positive/partial negative effect	The plan addresses some of the elements that are required to protect the environment and address the sustainability issues in Wiltshire and would help achieve or partially achieve the SEA objectives. There is also an element of the plan that conflicts with some of the SEA objectives.	+/-
No significant effects	The plan does not have an effect on the achievement of the SEA objectives	O
Significant negative effect	The plan conflicts with some of the SEA objectives. The plan also sets out, how, where, and when these policies will be implemented and these will have a negative effect with relation to characteristics of the effect and the sensitivity of the receptors.	--
Minor negative effect	The plan conflicts with some of the SEA objectives.	-
Uncertain	It is unclear whether there is the potential for a negative or positive effect on the SEA objective.	?

6.3 The impact of the draft strategy/plan and the significance on biodiversity is as follows:

Accessibility Strategy		
Impact of the draft Accessibility Strategy (including nature and spatial extent of the impact, probability, duration, frequency and reversibility)	**Significance of the effect**	**Suggested mitigation and enhancement measures**
The strategy seeks to improve accessibility across the county. It encourages travel using more sustainable modes and seeks to reduce the need to travel by car. There is a possibility that new cycling and walking routes could be introduced which may have some effect on wildlife habitats, however this is expected to be minimal. Likewise increased bus services could have some impact on wildlife and habitats but again this expected to be minimal because most routes will be in urbanised areas .	+/-	**Mitigation**: Before creating cycling and walking routes an environmental assessment maybe required. Where verge removal is necessary landscape planting may be required to replace lost wildlife habitat.

Cycling Strategy		
Impact of the draft Cycling Strategy (including nature and spatial extent of the impact, probability, duration, frequency and reversibility)	**Significance of the effect**	**Suggested mitigation and enhancement measures**
The strategy seeks to encourage and increase cycling in Wiltshire by providing high quality and well maintained cycle networks in the SSCTs, market towns as well as providing links to national routes. It also seeks to provide high quality cycle parking at key destinations and transport interchanges	+/-	**Mitigation:** Before creating cycling and walking routes an environmental assessment maybe required. Where verge removal is necessary landscape planting may

as well as adequate levels in new development and higher levels in market towns. New cycle routes and new cycle parking may have some impact on wildlife habitats, however this expected to be minimal, because most routes will be located in already urbanised areas.		be required to replace lost wildlife habitat.

Powered Two-Wheeler Strategy		
Impact of the draft Powered Two-Wheeler Strategy (including nature and spatial extent of the impact, probability, duration, frequency and reversibility)	**Significance of the effect**	**Suggested mitigation and enhancement measures**
The strategy seeks to encourage use of powered two-wheelers, reducing the need to travel by car, this should have a positive impact on wildlife and habitats through reduced CO_2 emissions and improvements to air quality, however, new infrastructure may cause some wildlife disturbance, see mitigation.	**+/-**	**Mitigation**: Monitoring powered two-wheeler and car use following implementation of the strategy and its policies may give a better indication of its effect on biodiversity.

Smarter Choices Strategy		
Impact of the draft Smarter Choices Strategy (including nature and spatial extent of the impact, probability, duration, frequency and reversibility)	**Significance of the effect**	**Suggested mitigation and enhancement measures**
The strategy seeks to reduce travel by less sustainable modes of travel such as the private motor car using a number of soft measure techniques and initiatives to encourage sustainable travel. More sustainable travel will reduce CO_2 emissions and improve air quality both of which are beneficiary to wildlife. There is possible potential for some disturbance to wildlife through increased uptake of sustainable modes and the need to increase infrastructure,	**+/-**	**Mitigation:** Before creating cycling and walking routes an environmental assessment maybe required. Where verge removal is necessary landscape planting may be required to replace lost wildlife habitat.

Assessment conclusions

Cumulative effects, synergistic or secondary effects:

On the whole the strategies perform will against the SEA objectives, both individually and collectively. They largely seek to reduce the impact of transport on the natural environment through change in travel behaviour and ,modal shift. However, temporary construction sites can affect local biodiversity and more permanent changes or construction of transport infrastructure can result in more lasting habitat fragmentation and loss. For example this may occur where new cycle routes and cycle parking are proposed. Where this is the case mitigation will be proposed.

Reducing the need to travel and modal shift both help to improve air quality and can have a positive secondary effect on biodiversity. Modal shift is most likely to occur where a range pf measures are implemented. Improvements to cycling, walking and powered two-wheeler infrastructure as well other 'softer' measures will help to reduce the need to travel by car and encourage sustainable travel. Reduced traffic levels also help to reduce wildlife casualties.

Cumulative effects with other plans:

At the current time it is not practicable to provide a full and detailed cumulative effects assessment with other transport plans. The greatest potential on biodiversity will occur where LTP3 supports the development proposed as part of the forthcoming Wiltshire Core Strategy.

Summary of performance and performance of the plan as a whole:

Assessment conclusions
On the whole the strategies perform will against the SEA objectives, both individually and collectively. They largely seek to reduce the impact of transport on the natural environment through change in travel behaviour and ,modal shift. Each of the strategies records a partial minor negative where there is a possibility that increased use of sustainable transport could involve further infrastructure being implemented, this could include new cycle routes and the removal of natural habitats to accommodate this.

Land, soil, and water resources

1. Introduction

1.1 Land, soil and water resources covers a wide range of environmental topics. Healthy soils are vital to a sustainable environment, with both land and soil being finite resources and therefore require careful management to ensure their long-term availability in the years ahead.

1.2 The Wiltshire authority area forms part of five main river catchments - the River Thames, the River Kennet, the Bristol Avon, the Hampshire Avon and the River Test.

2. Review of plans/programmes

2.1 One of the requirements of the SEA process is to consider and take account of any other policies, plans, programmes and environmental objectives which may be relevant to LTP3. This is a key element of the SEA process, since it ensures the work is consistent with up-to-date policy, is informed by reliable information whilst at the same time identifying environmental issues.

2.2 The SEA Directive specifically requires environmental protection objectives established at international, European Community or national levels to be taken into account during the development of the LTP.

2.3 LTP3 will be influenced by other external environmental objectives such as those laid out in policies and legislation. These relationships will be acknowledged to enable potential synergies to be identified and exploited.

2.4 Table 2.1 lists the documents reviewed for biodiversity, with Tables 2.2-2.4 providing brief summaries for each plan/programme.

Table 2.1 Documents reviewed for land, soil and water resources.

International
European Nitrates Directive 91/676/EC (1991)
EC Council Directive 2000/60/EC Water Framework Directive (2000)
National
Soil: a precious resource (2007)
PPS25 - Development and Flood Risk (2006)
The State of Soils in England and Wales (2004)
Local
Wiltshire and Swindon Minerals Local Plan 2001
Hampshire Avon Catchment Flood Management Plan (2008)

Table 2.2 International plan/programme summaries for land, soil and water resources

International plan/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
European Nitrates Directive 91/676/EC (1991)	Deals with the reduction of water pollution by nitrates from agricultural sources and the prevention of such pollution occurring in the future. Objectives are: • Reduce water pollution caused or induced by nitrates from agricultural sources • Prevent further such pollution.	LTP3 and the SEA should acknowledge Nitrate Vulnerable Zones.
EC Council Directive 2000/60/EC Water Framework Directive (2000)	The purpose of this directive is to introduce legislation that protects and enhances the status of aquatic ecosystems, promotes sustainable consumption of water, provides for the reduction and cessation of discharges and emissions and reduces pollution of groundwater. • Prevent deterioration of the status of all bodies of water, • Protect, enhance and restore all bodies of water (including artificial bodies) to achieve good ecological potential and good water quality status; • Reduce pollution and phasing out unwanted discharges to surface water and groundwater; Measures to be implemented to reverse upward trends in pollutant concentrations.	Plan policies should seek to prevent deterioration of the status of all bodies of water within the county. Consideration should be given to the use of water as a natural resource and to controlling the location of activities and land-uses that may adversely impact on water quality, including unwanted discharges to surface and ground water. Regard should be given to PPS25 and possible liaison with the Environment Agency.

Table 2.3 National plan/programme summaries for land, soil and water resources

National plans/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
Soil: a precious resource (2007)	This strategy highlights the importance of soil and sets out a number of ways to protect, manage and restore soil. It also sets how the strategy will deliver its outcomes by: • Working with government • Working with other organisations and individuals • Improve the work that we do • Review progress and measure success	The strategy specially details protecting soil in the built environment and highlights the use of SUDs. LTP3 and the SEA will take into account these points.

National plans/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
PPS25 - Development and Flood Risk (2006)	The aims of planning policy on development and flood risk are to ensure that flood risk is taken into account at all stages in the planning process. Local planning authorities should prepare and implement planning strategies that help deliver sustainable development by: • identifying land at risk and the degree of risk of flooding • preparing strategic flood risk assessments • framing policies for the location of development that avoids flood risk • assessing all alternative sites of lower flood risk before permitting development • safeguarding land from development that is required for flood management • reducing flood risk through location, layout and design of development • reducing the causes and impacts of flooding • working effectively with the Environment Agency and authorities and stakeholders • ensuring spatial planning supports flood risk management policies and plans.	LTP3 will need to consider the effect that transport development may have on flood risk and mitigate accordingly. The SEA will need to be aware of this.
The State of Soils in England and Wales (2004)	This report does not identify detailed responsibilities and actions but has helped inform the Environment Agency's own priorities for action. The policy challenges are identified as: • Improving the knowledge base • Tackling the impacts of intensive agriculture • Understanding soil biodiversity	Land use within the county is primarily agricultural, and the protection and enhancement of soil quality is important for agricultural productivity. However, the main area of influence for the LTP is in the built environment. Many flooding problems are made worse by ignoring the water retention function of soils. Sustainable drainage practises are needed that work with natural soil hydrology. Better planning controls can ensure that development minimises the permanent loss of valuable soil functions.

National plans/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
	• Soils in the built environment • Integrated management of soil, water and air.	

Table 2.4 Review of local plans and programmes

Local plan/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
Minerals Core Strategy DPD (2009)	1. **Managing Mineral Resources** To make a sustainable contribution to meeting the need for minerals. The reliance on primary mineral resources in Wiltshire and Swindon will be reduced, firstly through more efficient use of the primary resource and reducing the amount of mineral waste; then the use of recycled and secondary aggregates. Proven mineral deposits which are, or may become, of economic importance will be safeguarded from non-mineral development. **2. Economy** To support opportunities that assist in the economic growth of Wiltshire and Swindon, recognising the important contribution that minerals development can make to the local economy. 3. **Communities and Local Amenity** To provide clear guidance to the communities of Wiltshire and Swindon on minerals planning policy and proposals through the pursuit of a collaborative public involvement approach, which contributes to maintaining and/or enhancing the quality of life of people living in proximity to minerals development. The restoration of mineral workings will deliver tangible benefits to the communities of Wiltshire and Swindon. 4**. Environment** To protect and enhance the diverse and highly valued natural and historical environment of Wiltshire and Swindon, incorporating the landscape character, the setting of local settlements, biodiversity and	LTP3 should take into account any potential works traffic resulting from minerals developments. Particular attention should be given to the impacts of dust, noise, and vibration on the surrounding environment. The SEA will include objectives to reduce the impact of road freight on communities.

Local plan/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
	geological conservation interests, the water environment including flood-risk, and cultural heritage. To reduce and buffer the impacts of climate change, particularly on vulnerable habitats and species. A restoration-led approach to mineral workings will make a positive contribution to Biodiversity Action Plan targets and the implementation of the South West Nature Map. This approach will need to address the potential for open water restoration to increase the risk of bird strike within Aerodrome Safeguarding Areas and the threat to military and civilian aircraft. Options for sustainable transportation will be encouraged and pursued in order to reduce the environmental impacts of transporting minerals by road across Wiltshire and Swindon. 5. **Collaborative Working** To identify, develop and implement opportunities to work with all those with an interest in sustainable minerals planning in Wiltshire, Swindon and the surrounding areas. To address long-term supply issues and environmental concerns, the preparation of joint Local Development Documents will be advocated, where necessary, particularly in the Cotswold Water Park / Upper Thames Valley.	

3. Baseline data

Agricultural Land Classification

3.1 Productive agricultural land which can consistently provide good crop yields is a valuable resource, which is likely to become increasing important in the future as demand for food increases and lower quality soils fail to yield crops as the effects of climate change are experienced. The importance of high quality agricultural land has long been recognised; hence the UK has been mapped using the Agricultural Land Classification (ALC), which grades land on a scale 1-5. Grades 1-3a are termed Best and Most Versatile (BMV) agricultural land as the land which is most flexible, productive and efficient in response to inputs and which can best deliver future crops for food and non-food uses such as biomass and fibres.

3.2 Land quality varies from place to place. A significant amount of agricultural land in Wiltshire is (over 75%) at grade 3 or higher, this compares favourably to figures for the South West and nationally, as shown in Table 3.1.

Table 3.1 Agricultural land quality in Wiltshire

Indicator (%)	Wiltshire	SW	England
Area of grade 1 agricultural land	1.96	1.5	2.7
Area of grade 2 agricultural land	14.29	7.6	14.2
Area of grade 3 agricultural land	58.92	58.90	48.2

3.3 Development has the potential to remove BMV land from production, and such losses can be a material consideration in planning. Natural England requires consultation for applications involving the loss of 20ha or more BMV land.

3.4 The Draft National Planning Policy Framework, published in July 2011, states that local planning authorities should 'take into account the economic and other benefits of the best and most versatile agricultural land. Where significant development of agricultural land is demonstrated to be necessary, local planning authorities should seek to use areas of poorer quality land in preference to that of a higher quality, except where this would be inconsistent with other sustainability considerations or the Local Plan's growth strategy and where poorer quality land is unavailable or unsuitable'.

Soils

3.5 Soils are an essential component of our environment. They not only provide our food but, as they store water they can filter out potential pollutants and reduce the risk of flooding. Healthy soils are vital to a sustainable environment but human activity is altering their character and quality. Soils play an important role in urban areas in supporting eco-systems, improving drainage and providing green space for communities.

3.6 However, there are increasing signs that their condition has been neglected:

- Contamination and poor soil management are causing problems in England and Wales.
- There has been a steady loss of soil and there are increasing signs of damage, degradation and erosion.
- Pollutants that have damaged land and soil may enter surface or groundwater, affecting our ability to meet water quality standards.

3.7 The environmental impact of transportation on soil consists of soil erosion and soil contamination. The removal of earth's surface for highway construction or lessening surface grades for port and airport developments have led to important lost of fertile and productive soils. Soil contamination can occur through the use of toxic materials by the transport industry. Fuel and oil spills from motor vehicles are washed on road sides and enter the soil. Hazardous materials and heavy metals have been found in areas contiguous to railways, ports and airports.

3.8 Soils share an interdependent relationship with the air and water environments, which can sometimes lead to contamination of watercourses from soil through surface runoff. Conversely soils can be damaged by deposition from the air and water.

3.9 Consequently there is a need to ensure that soil eco-systems are fully evaluated before and during the planning process, and that appropriate consideration is given to the protection of good quality agricultural soils through all stages of the construction process.

Mineral extraction

3.10 The distribution of mineral resources throughout Wiltshire is determined by geology. This same geology often creates important landscapes and valued habitats, so mineral resources and their extraction often occur in areas with important environmental designations. The principle mineral types worked today are - sand, gravel, chalk, clay, limestone and sandstone, with the bulk of the minerals being extracted for use as aggregates. Historically there have been numerous mineral workings in Wiltshire, with the number of active working sites shown in Table 3.2 below.

Table 3.2 Mineral workings in Wiltshire

Mineral extracted	Number of active sites - April 2007
Sand and gravel	10
Building stone	7
Clay	4
Chalk	3
Total	**24**

3.11 These active quarries and mineral working sites can be found at various locations, such as east of Calne, Whiteparish, Corsham and Gastard, and in the Vale of Wardour, with the most extensive chalk working taking place in Westbury. There is also a chalk quarry at Quidhampton.

3.12 In terms of transportation, most of the mineral extracted in the Cotswold Water Park/Upper Thames Valley is distributed by road to the local construction markets of Swindon, Cheltenham/Gloucester and Bath/Bristol. Since much of the mineral extracted in the plan area is used locally, few mineral workings have rail links as it is considered uneconomic to haul low value products over relatively short distances by rail. Only Westbury Cement Works and Quidhampton Quarry have the capacity to export minerals (or mineral derived products) by rail. However, the existing Rail Aggregate Depot at Wootton Bassett does import crushed limestone from the Mendips for local construction markets in the Swindon area.

3.13 The transportation of minerals can potentially lead to substantial adverse impacts on the local environment. Once extracted it is necessary to move minerals either to other sites for processing, or to the customers who require them. Therefore, mines and quarries are often generators of HGVs which generally leads to noise, vibration, air pollution, dust and road safety hazards.

3.14 Government policy seeks to promote the sustainable transportation of minerals (PPG13) and therefore mineral planning authorities should seek to encourage and, where practicable, enable the carrying of material by water and rail wherever possible.

3.15 In identifying sites and appraising proposals for mineral workings, regard should be paid to the benefits of reducing the distance minerals need to be transported, particularly by road. In the Wiltshire and Swindon Minerals Core Strategy, 2009, it is stated that all new mineral developments will be required to undertake a Transport Assessment which will outline the potential impacts of the development on the relevant transport networks. At a local level, the council will seek to ensure that proposals for new development reflect the objectives of the Wiltshire and Swindon Local Transport Plans and in particular the strategies for freight

(including minerals and minerals derived products). To this end, the Wiltshire HGV Route Network will be utilised in conjunction with national and regional policies to help inform the processes of identifying and appraising proposals for new sites.

Water

3.16 The Environment Agency, under the General Quality Assessment (GQA) programme, assesses the quality of watercourses in England and Wales. Watercourses and their catchment areas often cross local authorities boundaries and therefore the quality of water within a local authority area may be affected by factors outside the area.

3.17 Chemical water quality is an indicator of general organic pollution. In Wiltshire large improvements have been made in terms of chemical river quality between 1995 and 2005, see Table 3.3. However the overall percentage of rivers in Wiltshire that attained good chemical quality is still some way short of the South West and national figures and has actually regressed since the year 2000. Biological quality is an indicator of the 'health' of rivers. There has also been a regression in the length of rivers in Wiltshire that are in the top overall national percentage in terms of phosphate levels, however both biological quality and nitrate levels have improved in Wiltshire.

Table 3.3 River quality in Wiltshire

Indicator (%)	Year	Wiltshire	South West
River length assessed as good Bio Q	1995	84.3	85.8
	2000	86.1	86.4
	2005	88.7	N/A
River length assessed as good Chem Q	1995	60.9	74.0
	2000	75.7	81.0
	2005	71.0	N/A
River water with high phosphate levels	1995	N/A	46.4
	2000	79.5	44.3
	2005	73.2	46.6
River water with high nitrate levels	1995	N/A	50.1
	2000	83.1	51.3
	2005	83.5	48.3

3.18 The Wiltshire authority area forms part of five main river catchments - the River Thames, the River Kennet, the Bristol Avon, the Hampshire Avon and the River Test. These river catchments contain a number of tributary sub-catchments that drain the area. The settlement pattern in Wiltshire is partly shaped by these watercourses, and many of the county's main towns, Chippenham, Salisbury and Trowbridge are located on or nearby a river.

3.19 With a growing population in Wiltshire and drier summers predicated as a result of climate change, pressures on the authority's water resources will increase and need to be carefully managed. Analysis by the Environment Agency has shown that overall future levels of growth

can be accommodated in the South West region in terms of water supply, providing measures are put in place to improve the efficiency of homes, by increasing metering and reducing leakage.

Flooding

3.20 Wiltshire is largely rural with a number of dispersed urban areas and smaller villages some of which are at risk from river flooding. The risk is partially reduced by either natural or man-made defences. Other risks of flooding derive from surface water, groundwater and sewer flooding. It is expected that these types of flood risks will generally increase with climate change. In light of this it is important that transport planning considers the expected effects of flooding and the potential it has for disruption to the transport network.

3.21 Water is a major mechanism for contaminant transfer in the environment. Approximately 1 million ha (or 8% of the total area) of the land in England is at risk from river flooding, including tidal rivers and estuaries. In addition, 250,000 ha of land is also at risk from flooding by the sea. Hence about 1.3 million ha of agricultural land (12% of total agricultural land area and 61% of Grade 1 agricultural land) is potentially of contaminant delivery or loss associated with flood waters.

3.22 There are five main types of flooding:

- Fluvial - occurs when a river breaks or overtops its banks
- Localised surface or 'muddy' flooding: generated via surface runoff and flow through ephemeral channels
- Coastal/tidal flooding: produced by high tides or storm surges
- Urban flooding: generated when urban drainage systems are overwhelmed by flow or blocked by debris
- Groundwater flooding: additional water from fully recharged aquifers emerges from hillslopes overwhelming local drainage systems.

3.23 Altering flows can have a major physical or chemical effects on aquatic ecosystems. The external forces of gravity and resistance cause streams to carve channels, transport materials and chemicals, and change the landscape. Thus water runoff and sediment yield are the key physical processes whereby roads have an impact on streams and other aquatic systems. Increased runoff associated with roads may increase the rates and extent of erosion, reduce percolation and aquifer recharge rates, alter channel morphology, and increase stream discharge rates.

3.24 The council has prepared a county-wide Strategic Flood Risk Assessment (SFRA) and this is being used as a tool to inform strategic and local planning decisions when allocating land for development or determining applications. The SFRA makes a series of policy recommendations to ensure a consistent approach to flood risk throughout the Wiltshire Council administrative area. Those relating to specific strategies are as follows:

- In Chippenham, where deep and fast flood water flows can occur, opportunities to direct water away from areas of high social impact should be identified;

- In rural areas upstream of Malmesbury, Melksham and Chippenham opportunities should be sought to increase flood storage areas capacity, including an additional storage allowance for increases in flow accounting for climate change;
- Opportunities should be sought for strategic flood storage areas in close proximity to future development areas to be maintained by developer contribution for the lifetime of the development;
- In Bradford on Avon, where fluvial and surface water flooding can occur, opportunities to direct water away from areas of high social impact should be identified;
- In Warminster, opportunities should be sought to open culverted watercourses, where possible, to return them to a natural system. When opening up culverted watercourses consideration should be given to ensure flood risk is not exacerbated downstream;
- In the application of SuDS techniques it is recommended that priority is given to the use of surface water drainage techniques due to the generally permeable soils throughout Salisbury. Prior to implementing these techniques, each site should confirm that the use of infiltration drainage will not increase the risks of groundwater flooding.

4. Environmental problems and issues

4.1 These are key environmental problems and issues for land, soil and water resources in Wiltshire, they have been used to develop the SEA objectives:

Table 4.1 Environmental problems/issues and opportunities

Issues/problems	Likely future environmental baseline and climate change impacts without some intervention	Implications for transport/Opportunities offered by LTP3
Road surfaces often exacerbate run off which can lead to pollution of watercourses and increase soil erosion. Roads can be long term sources of sedimentation if not properly maintained.	Climate change is likely to see rises in soil erosion as wind speeds increase. Some of the worst problems are likely to be on clay soils, which will crack and shrink, reducing the soil's ability to hold moisture and nutrients.	• Increased soil erosion and drying could be an issue for new infrastructure schemes and drainage on existing roads could struggle to cope if drainage capacity is reduced by soil erosion. • Measures to reduce traffic growth, which will indirectly lead to less run-off • Install road drainage so that sediment run-off is directed into filter zones or streamside reserves.
New development continues to threaten the quantity of high quality agricultural land that Wiltshire has.	A reduction in productive agricultural land could threaten and damage the economy of Wiltshire.	Transport infrastructure (and new development) should avoid Greenfield sites where at all possible.

5. Suggested SEA objectives

5.1 These are the suggested SEA objectives and potential monitoring indicators for land, soil and water resources:

Table 5.1 Land, soil and water resources objectives

LTP SEA objective	Decision making criteria	Potential indicators
(A) To reduce soil contamination and safeguard soil quality and quantity and minimise the impact of the transport system on water resources.	• Will it cause changes in existing soil erosion problems, including the effects of road maintenance? • Will it cause the loss or pollution of soils and watercourses which support valued habitats and species?	• River quality
(B) Ensure that Greenfield sites and quality agricultural land is avoided.	• Will it reduce the need to develop areas of agricultural land and Greenfield sites?	

6. Evaluation of the draft plan

6.1 Evaluating the effects of the draft plan entailed the following:

- Identifying the effects of the plan against the SEA objectives, including identifying changes in the future baseline, which are predicted to arise from implementation of the plan.
- Assessing the significance of these effects. This means describing these changes in terms of the nature and the magnitude of the impact and the sensitivity of the receiving environment.
- An assessment of the likely changes to the future baseline which may have been caused by secondary, cumulative and synergistic impacts.

6.2 Evaluation involves judging whether or not a predicted effect is likely to be significant. The results of the evaluation are categorised by the nature of the effect using the key as shown in Table 6.1.

Table 6.1 SEA significance scores and criteria

Score	Description	Symbol/Key
Significant positive effect	The plan addresses all the elements that are required to protect the environment and address the relevant sustainability issues in Wiltshire and would help achieve all of the applicable SEA objectives. The plan also sets out how, where and when these policies will be implemented and these will have a positive impact in relation to characteristics of the effect and the sensitivity of the receptors.	++
Minor positive effect	The plan addresses all the elements that are required to protect the environment and address the sustainability issues in Wiltshire and would help achieve all of the SEA objectives.	+
Partial positive/partial negative effect	The plan addresses some of the elements that are required to protect the environment and address the sustainability issues in Wiltshire and would help achieve or partially achieve the SEA objectives. There is also an element of the plan that conflicts with some of the SEA objectives.	+/-
No significant effects	The plan does not have an effect on the achievement of the SEA objectives	O

Score	Description	Symbol/Key
Significant negative effect	The plan conflicts with some of the SEA objectives. The plan also sets out, how, where, and when these policies will be implemented and these will have a negative effect with relation to characteristics of the effect and the sensitivity of the receptors.	--
Minor negative effect	The plan conflicts with some of the SEA objectives.	-
Uncertain	It is unclear whether there is the potential for a negative or positive effect on the SEA objective.	?

6.3 The impact of the draft strategy/plan and the significance on land, soil and water resources is as follows:

Accessibility Strategy		
Impact of the draft Accessibility Strategy plan (including nature and spatial extent of the impact, probability, duration, frequency and reversibility) Where there is more than one objective these will be addressed individually.	**Significance of the effect**	**Suggested mitigation and enhancement measures**
(A) Increases to bus services could potentially increase road maintenance which can sometimes have a negative effect on watercourse as a result of road road-off, however, the effects are likely to be minimal and therefore there is no significant impact.	**O**	
(B) In order to increase and improve accessibility there is some potential to create cycling and walking routes and networks, however, this will not effect greenbelt or high quality agricultural land. No significant impact	**O**	

Cycling Strategy		
Impact of the Cycling Strategy plan (including nature and spatial extent of the impact, probability, duration, frequency and reversibility) Where there is more than one objective these will be addressed individually.	**Significance of the effect**	**Suggested mitigation and enhancement measures**
(A)The creation of new cycle routes could potentially have some impact on soils however, the effect on valued wildlife habitats will be minimal mainly because most new and existing routes will be in already urbanised areas.	**O**	
(B) There will be no significant effect on high quality agricultural land or greenbelt.	**O**	

Powered Two-Wheeler Strategy		
Impact of the draft Powered Two-Wheeler Strategy plan (including nature and spatial extent of the impact, probability, duration, frequency and reversibility) Where there is more than one objective these will be addressed individually.	**Significance of the effect**	**Suggested mitigation and enhancement measures**

Powered Two-Wheeler Strategy		
(A) Improvements to infrastructure for powered-two wheelers could potentially have some negative impact on soils, and watercourses however this is expected to be minimal and therefore no significant effect.	O	
(B) There will be no significant effect on high quality agricultural land or greenbelt.	O	

Smarter Choices Strategy		
Impact of the draft Smarter Choices plan (including nature and spatial extent of the impact, probability, duration, frequency and reversibility) Where there is more than one objective these will be addressed individually.	**Significance of the effect**	**Suggested mitigation and enhancement measures**
(A) No significant effect	O	
(B) No significant effect	O	

Assessment conclusions
Cumulative, synergistic and secondary effects: Temporary and permanent construction has the potential to have some impact on soil and water resources, for example during the construction of new cycle routes. If this was to occur or is likely mitigation measures would be proposed. Reducing the need to travel by car and encouraging sustainable travel can have a secondary effect on soil and water quality as a result of reduced acidification.
Cumulative effects with other plans: At the current time it is not practicable to provide a full and detailed cumulative effects assessment with other transport plans. The greatest potential on land, soil and water resources will occur where LTP3 supports the development proposed as part of the forthcoming Wiltshire Core Strategy.
Summary of performance and performance of the strategies as a whole: The strategies have no significant positive or negative effects on land, soil and water resources.

Air quality and environmental pollution

1. Introduction

1.1 Air quality in Wiltshire and the UK is generally good, however, more needs to be done, especially in cities to reduce the harmful effects of air pollution. Air pollution is both damaging to human health and the natural environment.

2. Review of plans/programmes

2.1 One of the requirements of the SEA process is to consider and take account of any other policies, plans, programmes and environmental objectives which may be relevant to LTP3. This is a key element of the SEA process, since it ensures the work is consistent with up-to-date policy, is informed by reliable information whilst at the same time identifying environmental issues.

2.2 The SEA Directive specifically requires environmental protection objectives established at international, European Community or national levels to be taken into account during the development of the LTP.

2.3 LTP3 will be influenced by other external environmental objectives such as those laid out in policies and legislation. These relationships will be acknowledged to enable potential synergies to be identified and exploited.

2.4 Table 2.1 lists the documents reviewed for biodiversity, with Tables 2.2-2.4 providing brief summaries for each plan/programme.

Table 2.1 Documents reviewed for air quality and environmental pollution

International
EC Council Directive 2002/49/EC Environmental Noise (2002)
EC Council Directive 96/62/EC Ambient Air Quality (1996)
EC Council Directive 91/676/EC Nitrates (1991)
National
Air Quality Strategy for England, Scotland, Wales and Northern Ireland: Working Together for Clean Air (2007)
PPG23 - Planning and Pollution Control (1994)
PPG24 – Planning and Noise (1994)
Local
Air Quality Progress Report (2011)
Air Quality Strategy for Wiltshire (2010)
Salisbury Air Quality Action Plan (2006)
West Wiltshire Air Quality Action Plan (2005)

Table 2.2 International plan/programme summaries for air quality and environmental pollution

International plan/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
EC Council Directive 2002/49/EC Environmental Noise (2002)	The main objectives include: • Monitoring the environmental problem - competent authorities draw up 'strategic noise maps. • Informing and consulting the public about noise exposure, its effects, and the measures considered to address noise.	Local planning authorities should have regard to PPG24 when developing policies, particularly policies regarding new residential developments, employment sites and proposed traffic schemes.
EC Council Directive 96/62/EC Ambient Air Quality (1996)	Establishes mandatory standards for air quality and sets limits and guides values for sulphur and nitrogen dioxide, suspended particulates and lead in air.	The location of new developments should take into account any emissions caused by transportation. The SEA will include objectives to improve air quality.
EC Council Directive 91/676/EC Nitrates (1991)	Objectives: • Reduce water pollution caused or induced by nitrates from agricultural sources. • Prevent further such pollution.	SEA should acknowledge nitrate vulnerable zones.

Table 2.3 National plan/programme summaries for air quality and environmental pollution

National plans/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
Air Quality Strategy for England, Scotland, Wales and Northern Ireland: Working Together for Clean Air (2007)	Overview and outline of UK government ambient (outdoor) air quality policy.	Transport is a major contributor to air quality in Wiltshire. The SEA will include objectives for improving air quality.
PPG23 - Planning and Pollution Control (1994)	The planning system needs to implement effective pollution control to identify developments, or land use, that may give rise to pollution. It should ensure that other uses are not affected by existing or potential sources of pollution. The PPS states that the presence of contamination in land can present risks to human health and the environment, which adversely affect or restrict the beneficial use of land. Development presents an opportunity to deal with these risks successfully.	The local authority's inspection strategy for identifying contaminated land should inform the LTP regarding land contamination issues and future development.

National plans/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
PPG24 – Planning and Noise (1994)	Noise-sensitive developments should be located away from existing sources of significant noise and that potentially noisy developments are located in areas where noise will not be such an important consideration or where the impact can be minimised. Special consideration is required where noisy development is proposed in or near sites of SSSI. Proposals likely to affects SSSIs designated as internationally important under the EC Habitats or Birds Directive or the RAMSAR require extra scrutiny.	The plan should have regard to PPG24 particularly with regard to site selection, design, site management and monitoring. The SEA will include an objective to reduce the impact of noise from the transport system.

Table 2.4 Local plan/programme summaries for air quality and environmental pollution

Local plan/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
Air Quality Progress Report (2011)	The air quality objectives applicable to Local Air Quality Management (LAQM) in England include benzene, 1,3-butadiene, carbon monoxide, lead, nitrogen dioxide, particles and sulphur dioxide. Monitoring undertaken in 2010 has showed that all AQMAs in Wiltshire should remain as results are above the air quality objective. Detailed Assessment will be required for New Road and Curzon Street in Calne and Melbourne Place, The Nursery, Wadworth's, Northgate Street, Roses Ironmongers, Estcourt Street, Chantry Court, New Park Street and St James Place. Devizes (not within the current AQMA).	LTP3 and the SEA will need to carefully consider the aims and objectives of the strategies and reports.
Air Quality Strategy for Wiltshire (2010)	The strategy will seek to: • Promote greater consistency across a range of policy areas for the achievement of improved local air quality, including local spatial planning, transport planning, health, industry, housing and environmental protection, and to ensure air quality is addressed in a multi-disciplinary way within the different departments of Wiltshire Council. • Provide the framework for a consistent approach to addressing local air quality	

Local plan/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
	considerations in spatial planning and development control processes. • Provide a baseline framework for developing a coherent air quality policy across Wiltshire with particular reference to spatial and transport planning, and the proposed Local Development Framework, Core Strategy and third Local Transport Plan. • Provide a link to wider initiatives across the authority (for example climate change programmes, community initiatives and energy efficiency programmes). • Build on existing practice.	
Salisbury Air Quality Action Plan (2006)	To improve air quality in the four AQMAs. It must also detail and consider the options available. To reduce the annual mean nitrogen dioxide levels within these four areas.	LTP3 should consider these measures and seek to deliver them where possible. The SEA will include objectives to reduce the negative impacts of the transportation system on local air quality.
West Wiltshire Air Quality Action Plan (2005)	Implement a package of measures focused on transport, requiring input from businesses, the public and the highway authority to: • Promote cleaner fuels • Reduce traffic levels and manage the road network • Promote walking, cycling the use pf public transport	

3. Baseline data

3.1 Clean air is essential for our health and quality of life. Although air quality in the UK is generally good and is better in overall general terms than at any other time since the time of the industrial revolution, unacceptable levels of pollution are known to exist in some areas. Wiltshire Council has a statutory duty under the 1995 Environment Act to review and assess air quality within the county.

3.2 Generally, air pollution in Wiltshire has been improving across all indicators, however this data is only available at local levels and therefore comparisons are difficult. However, it does suggest that with these improvements and the rural nature of Wiltshire it would seem that performance of the indicators is good.

3.3 There are no automatic air monitoring sites in Wiltshire, the nearest being in Bristol and Bournemouth. These sites report on the number of days air quality is poor comparing both rural and urban areas.

3.4 The Environment Act 1995 introduced the system of local air quality management. Since then, local authorities have had to periodically review and assess the current, and likely future air quality in the areas against national air quality objectives for seven air pollutants. Where any objective is unlikely to be met by the relevant deadline, local authorities must designate those areas as air quality management areas (AQMAs) and take action towards meeting the objectives.

Air Quality Management Areas

3.5 Wiltshire has seven AQMAs, two in west Wiltshire, three in Salisbury, one in Devizes and one yet to be confirmed in Marlborough, see Table 3.1.

3.6 The Salisbury and Westbury AQMAs have been declared on the basis of high $NO_{2,}$ however the Bradford on Avon AQMA has also been notified for particulates (PM_{10}). This is largely due to the canyon effect caused by the presence of tall buildings at the bottom of a valley which trap the pollution caused by heavy traffic passing through the town.

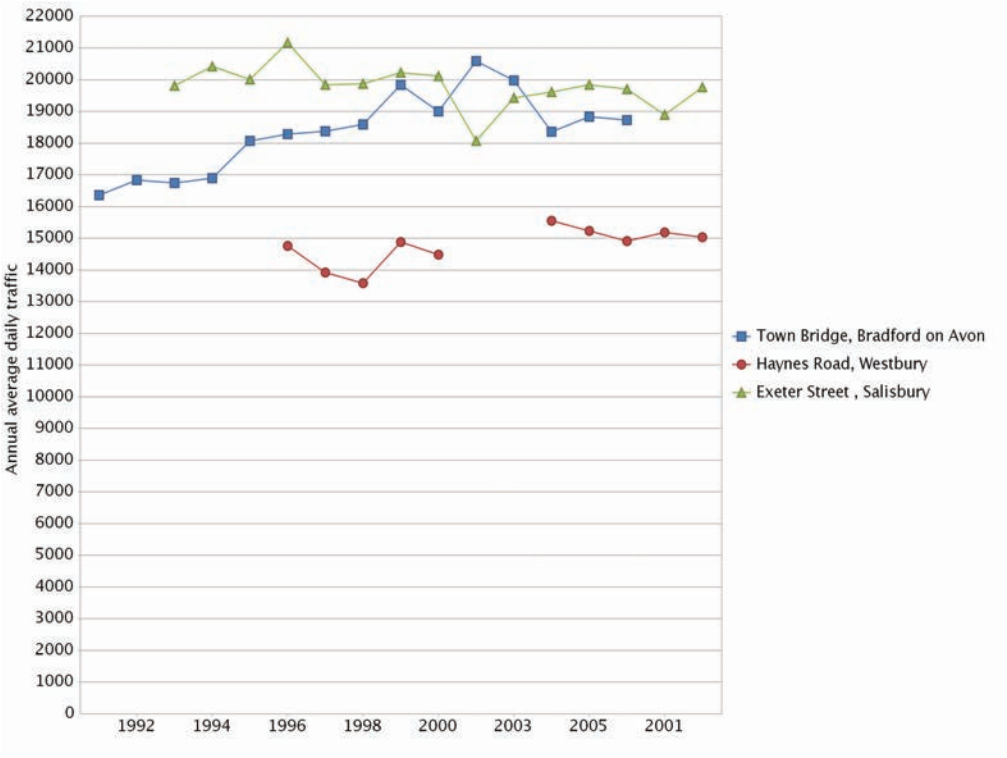
Table 3.1 Air quality management areas in Wiltshire

Air quality management areas in Wiltshire	Reason
Westbury AQMA	
The following roads and buildings with facades on the roads: Haynes road from no. 23 up to the junction with Warminster road and Warminster road from the junction with Haynes road to the junction with Leigh road.	Nitrogen dioxide (NO_2)
Bradford on Avon AQMA	
The following roads and buildings with facades on the roads: Masons lane, Market street, Silver street and St Margaret's Street.	Nitrogen dioxide (NO_2), Particulate Matter <10µm (PM_{10})
Salisbury city centre AQMA	
An area encompassing the entire Salisbury city centre (amalgamating the previous 5 smaller AQMAs in the city centre)	Nitrogen dioxide (NO_2)
Wilton Road AQMA (A36)	
An area encompassing properties either side of Wilton road , just to the west of the roundabout with Devizes road.	Nitrogen dioxide (NO_2)
London Road AQMA (A30)	
An area encompassing properties on London road (A30) between the railway bridge and St Marks Avenue and Bourne Avenue.	Nitrogen dioxide (NO_2)
Devizes AQMA	
Declared in March 2010 in the immediate area around Shanes Castle at the junction of A361 and A342.	Nitrogen dioxide (NO_2)
Marlborough AQMA	
Declared in February 2011 in the areas around Herd Street and Barn Street, extent of AQMA to be confirmed.	Nitrogen dioxide ($NO_{2)}$

3.7 The former Wiltshire County Council, in collaboration with the four former Wiltshire district councils of Kennet, North Wilts, Salisbury and West Wiltshire, initiated the development of an air quality strategy (AQS) framework in 2006 in response to the need for a coherent and unified way forward in the management of air quality across the county. This was commissioned in 2009. More recently a new Air Quality Strategy for Wiltshire was published in January 2010 with a follow up progress report in April 2011.

3.8 As Figure 3.1 shows below, traffic levels in the three towns/cities where AQMAs are present have fluctuated and there have been no clear or distinctive changes in traffic levels in any of the areas. Traffic levels have decreased one year but have then risen again the following year. NB: Where counts appear to dip suddenly no data was available for that year.

Figure 3.1 Traffic counts in AQMA areas



Air quality and transport

3.9 Road transport is a key source of many air pollutants, especially in urban areas. Consequently and in response to European emission standards legislation, new vehicles are becoming individually cleaner; however, total vehicle kilometres are increasing. Overall emissions of key air pollutants from road transport have fallen by about 50% over the last decade, despite considerable traffic growth, and are expected to reduce by a further 25% or so over the next decade. This is mainly as a result of progressively tighter vehicle emission and fuel standards at European level and set in UK regulations.

3.10 Traffic management can make a significant contribution to help reduce emissions of pollutants from road vehicles. LTPs are the main mechanism for implementing transport policies at a local level. One of the key criteria against which these plans are judged for central funding is the extent these take account of air quality considerations.

3.11 The planning systems across the UK for land use and transport planning are also an important part of an integrated approach to air quality improvements, particularly for new developments and they emphasise accessibility for public transport, park and ride schemes, walking and cycling.

3.12 Air quality and climate change have become synonymous over recent years. Local planning polices need to be developed with a consideration of impact on climate change and greenhouse gas emissions. Synergistic policies, beneficial to both air quality and climate change, should be pursued.

4. Environmental problems and issues

4.1 These are key environmental problems and issues for Air quality and environmental pollution in Wiltshire, they have been used to develop the SEA objectives:

Table 4.1 Environmental problems/issues and opportunities

Issues/problems	Likely future environmental baseline and climate change impacts without some intervention	Implications for transport/Opportunities offered by LTP3
There are currently seven AQMAs in Wiltshire, primarily in town centre locations.	If traffic growth is left unchecked these areas may expand and new areas may be identified.	Actively reduce the number of vehicles on the road through demand management and travel behaviour change techniques.

5. Suggested SEA objectives

5.1 There are the suggested SEA objectives and potential monitoring indicators for air quality and environmental pollution:

Table 5.1 Suggested SEA objectives

LTP SEA objective	Decision making criteria	Potential indicators
To reduce the negative impacts of the transportation system on air quality.	• Will it cause any changes in traffic that affect an air quality management area? • Will it affect areas which are likely to experience a 10% change in traffic flow/nature? • Will it cause air pollution adjacent to species and habitats known to be susceptible to deterioration in air quality?	• Proportion of bus fleet operating in Wiltshire meeting the Euro 4 engine regulations or higher.

6. Evaluation of the draft plan

6.1 Evaluating the effects of the draft plan entailed the following:

- Identifying the effects of the plan against the SEA objectives, including identifying changes in the future baseline, which are predicted to arise from implementation of the plan.
- Assessing the significance of these effects. This means describing these changes in terms of the nature and the magnitude of the impact and the sensitivity of the receiving environment.
- An assessment of the likely changes to the future baseline which may have been caused by secondary, cumulative and synergistic impacts.

6.2 Evaluation involves judging whether or not a predicted effect is likely to be significant. The results of the evaluation are categorised by the nature of the effect using the key as shown in Table 6.1.

Table 6.1 SEA significance scores and criteria

Score	Description	Symbol/Key
Significant positive effect	The plan addresses all the elements that are required to protect the environment and address the relevant sustainability issues in Wiltshire and would help achieve all of the applicable SEA objectives. The plan also sets out how, where and when these policies will be implemented and these will have a positive impact in relation to characteristics of the effect and the sensitivity of the receptors.	++
Minor positive effect	The plan addresses all the elements that are required to protect the environment and address the sustainability issues in Wiltshire and would help achieve all of the SEA objectives.	+
Partial positive/partial negative effect	The plan addresses some of the elements that are required to protect the environment and address the sustainability issues in Wiltshire and would help achieve or partially achieve the SEA objectives. There is also an element of the plan that conflicts with some of the SEA objectives.	+/-
No significant effects	The plan does not have an effect on the achievement of the SEA objectives	O
Significant negative effect	The plan conflicts with some of the SEA objectives. The plan also sets out, how, where, and when these policies will be implemented and these will have a negative effect with relation to characteristics of the effect and the sensitivity of the receptors.	--
Minor negative effect	The plan conflicts with some of the SEA objectives.	-
Uncertain	It is unclear whether there is the potential for a negative or positive effect on the SEA objective.	?

6.3 The impact of the strategy/plan and the significance on air quality and environmental pollution is as follows:

Accessibility Strategy		
Impact of the draft Accessibility Strategy (including nature and spatial extent of the impact, probability, duration, frequency and reversibility)	**Significance of the effect**	**Suggested mitigation and enhancement measures**
The overall strategy seeks to improve accessibility and encourage sustainable travel and where possible reduce the need to travel by car. This has the potential to reduce carbon emissions and improve air quality. However, funding restraints could mean that older buses are not replaced as often as would be liked and therefore there is a possibility that the older more polluting vehicles will continue to be used.	**+/-**	Grants may be available to upgrade the older vehicles.

Cycling Strategy		
Impact of the draft Cycling Strategy (including nature and spatial extent of the impact, probability, duration, frequency and reversibility)	**Significance of the effect**	**Suggested mitigation and enhancement measures**
The strategy seeks to encourage and increase cycling which has the potential to reduce CO_2 emitting travel modes,therefore there is potential for improving air quality.	**+**	**Enhancement**: Potential to increase cycling in those areas with high levels of carbon emissions.

Powered Two-Wheeler Strategy		
Impact of the draft Powered Two-Wheeler Strategy (including nature and spatial extent of the impact, probability, duration, frequency and reversibility)	**Significance of the effect**	**Suggested mitigation and enhancement measures**
Encouraging travel by powered two-wheelers has the potential to reduce travel by modes which emit more CO_2 emissions thus improving air quality.	**+**	

Smarter Choices Strategy		
Impact of the draft Smarter Choices Strategy (including nature and spatial extent of the impact, probability, duration, frequency and reversibility)	**Significance of the effect**	**Suggested mitigation and enhancement measures**
The strategy seeks to encourage and increase sustainable travel, and reduce the need to travel by car. This has the potential to improve air quality.	**+**	

Assessment conclusions - Air quality and environmental pollution
Cumulative, synergistic and secondary effects: The strategies all seek to reduce the need to travel by car and encourage sustainable travel therefore helping to improve air quality and reduce environmental pollution. Reducing vehicles on the network will help to reduce congestion and allow for freer flowing traffic, reducing harmful vehicle outputs. However, encouraging modal shift could potentially create a more attractive transport network to car drivers and thus increase traffic levels, which would negate the positive benefits of any modal shift.
Cumulative effects with other plans: At the current time it is not practicable to provide a full and detailed cumulative effects assessment with other transport plans. The greatest potential on air quality and environmental pollution will occur where LTP3 supports the development proposed as part of the forthcoming Wiltshire Core Strategy.

Assessment conclusions - Air quality and environmental pollution
Summary of performance and performance of the strategies as a whole: The strategies in conjunction with one another could potentially have a positive effect on air quality and environmental pollution. However, the accessibility strategy seeks to improve accessibility via improvements to the public transport network, there is some uncertainty regarding the use of older vehicles and the impact this may have on air quality.

Climate change

1. Introduction

1.1 Climate change is a long-term shift in the climate of a specific location, region or planet. Government has put much emphasis and energy into tackling both the cause and consequences of climate change, with much ongoing research being carried out there is a constant need to ensure that both UK and global reflects the most contemporary of thinking.

2. Review of plans/programmes

2.1 One of the requirements of the SEA process is to consider and take account of any other policies, plans, programmes and environmental objectives which may be relevant to LTP3. This is a key element of the SEA process, since it ensures the work is consistent with up-to-date policy, is informed by reliable information whilst at the same time identifying environmental issues.

2.2 The SEA Directive specifically requires environmental protection objectives established at international, European Community or national levels to be taken into account during the development of the LTP.

2.3 LTP3 will be influenced by other external environmental objectives such as those laid out in policies and legislation. These relationships will be acknowledged to enable potential synergies to be identified and exploited.

2.4 Table 2.1 lists the documents reviewed for biodiversity, with Tables 2.2-2.5 providing brief summaries for each plan/programme.

Table 2.1 Documents reviews for climatic factors

International
Kyoto Protocol (1997)
The Road to Copenhagen (UK, 2009)
National
UK Climate Change Act (2009)
Low Carbon Transport: A Greener Future (2009)
Renewable Energy Strategy (2009)
The Stern Review of the Economics of Climate Change (2007)
Climate Change The UK Programme (2006)
Regional
A Climate Change Action Plan for the South West 2008-2010
Local
ECO Strategy (2011)

Table 2.2 International plans/programmes summaries for climatic factors

International plan/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
Kyoto Protocol on Climate Change (1992) The Road to Copenhagen (UK, 2009)	Under Kyoto, the UK has a legal requirement to reduce emissions by 12.5% below 1990 levels by the year 2012. The Road to Copenhagen hopes to build on the Kyoto commitments by working with EU partners at negotiations in Copenhagen in December 2009.	Ensure all reasonable opportunities are taken forward to encourage development which is energy efficient and reduces reliance on private cars and reduces kms travelled. LTP3 should place priority on reducing the need to travel and developing alternatives means of transport.

Table 2.3 National plan/programme summaries for climatic factors

National plans/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
UK Climate Change Act (2009)	Main objective is to cut emissions by 80% by 2050, and reductions of at least 26% by 2020, against a 1990 baseline.	Carbon Dioxide (CO_2) is one emission contributing to greenhouse gases emitted from vehicle exhausts. LTP3 will seek to reduce emissions and provide support for electric vehicles. The SEA will include objectives to reduce the contribution of the transport system to CO_2 emissions.
Low Carbon Transport: A Greener Future (2009)	Reiterates the 10% target in UK Renewable Energy Strategy. National transport measures will need to contribute to a reduction of 17.7 million tonnes of CO_2 in 2020.	
Renewable Energy Strategy (2009)	10% of transport energy from renewable energy.	
The Stern Review of the Economics of Climate Change (2007)	Developed countries must cut carbon emissions by at least 60% by 2050 on 1990 levels.	
Planning and Climate Change – Supplement to PPS1	Key objectives of relevance include: • Make a full contribution to delivering the government's climate change programme and energy polices and contribute to global sustainability. • Deliver patterns of growth that help secure the fullest possible use of sustainable transport and reduce the need to travel especially by car. • Secure new development and shape places resilient to the effects of climate change in ways consistent with social cohesion and inclusion. • Sustain biodiversity and recognise that habitat distribution and species will be affected by climate change.	The LTP3 will reflect these objectives and seek measures to reduce climate change. The SEA will include objectives to reduce the contribution of the transport system to CO_2 emissions.

National plans/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
Climate Change The UK Programme (2006)	The primary elements of the programme are numerous, but include: Internationally - work to build consensus on the scale of action needed to stabilise the climate and avoid dangerous climate change; Domestically - report annually to parliament on emissions, our future plans and progress on domestic climate change; Energy supply sector - spend £80m in the next three years to support microgeneration technologies; Business sector - continue to use the climate change levy and associated climate change agreements to encourage businesses to improve the efficiency with which they use energy; Transport sector - introduce the Renewable Transport Fuel Obligation from 2008; Domestic sector - update building regulations to raise energy standards of new build and refurbished buildings; Public sector and local government - introduce a package of measures to drive additional action for local authorities to include appropriate focus on climate change; Personal action - set out a plan for action on sustainable consumption by the end of 2006.	Significant impacts can be achieved through location of developments, mixed-use developments, building design and transport infrastructure.

Table 2.4 Regional plan/programme summaries for climatic factors

Regional plan/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
South West Climate Change Action Plan 2008-2010	Action points of relevance include: Develop evidence base, monitoring and evaluation for sustainable, low carbon transport and travel. Undertake regional activity to support regional and local multi-modal carbon reduction and demand management.	LTP3 should suggest sustainable travel choices that can be promoted and achieved within local communities. The SEA will include objectives to reduce the contribution of the transport system to CO_2 emissions.

Table 2.5 Local plan/programme summaries for climatic factors

Local plan/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
ECO Strategy (2011)	The scope of the draft strategy includes services and those aspects of Wiltshire life that the council can influence, for example planning,	LTP3 will need to work alongside this strategy.

Local plan/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
	transport, flood management and community engagement. This strategy sets out where we are now, where we want to get to and the general approach for how we are going to get there. The following four action plans will be produced during 2011/2012: • Carbon Management Plan for the council's emissions • Climate Change Adaptation Plan for Wiltshire • Low Carbon Transition Plan for Wiltshire • Renewable Energy Action Plan for Wiltshire. The council's climate change board will be responsible for monitoring the implementation of the strategy and its action plans.	

3. Baseline data

Climate change

3.1 Evidence for the existence of climate change is growing and there is little doubt that rises in global temperatures is the result of increased human greenhouse gas emissions. According to the UK Climate Impacts Programme, the UK will experience higher sea levels, hotter drier summers, wetter milder winters with the possibility of temperature extremes and increased frequency of storms as a result of climate change, see Table 3.1.

3.2 Changes as small as a 2°C global temperature rise will have serious impacts: rising sea levels, extreme events like droughts and heavy rainfall, leading to disruption to natural and man-made habitats. Communities across the UK may struggle to cope with the effects of warmer summers and wetter winters. That is why so much effort is being made to reduce greenhouse gas emissions to stop the most damaging climate change.

3.3 Under the Climate Change Act 2008 the UK must reduce its greenhouse gas emissions by 80% by 2050, with a reduction in emissions of 34% by 2020. Wiltshire Council has begun the process of identifying potential threats and opportunities across its services and across Wiltshire relating to climate change.

Table 3.1 Predicted changes in weather events for the UK in the 2080s

Variable	Predicted changes
Temperature	An annual warming by the 2080s of between 1 and 5°C Greater summer warming in the south east than the north west Greater warming in summer and autumn than in winter and spring Increased thermal discomfort in enclosed spaces/areas

Variable	Predicted changes
Precipitation	Wetter winters, by up to 30% Drier summers, by up to 50% - summer water shortages Increase risk of flooding and erosion with increased pressure on sewage systems
Seasonality	Precipitation: greater contrast between summer (drier) and winter (wetter) seasons
Cloud cover	Reduction in summer and autumn cloud, especially in the south, and an increase radiation
Snowfall	Total decreases significantly everywhere Large parts of the country experience long runs of snowless winters
Storm	Increases in storm damage

Likely changes in temperature and precipitation in Wiltshire during the 2080s

Temperature

- Increase in annual mean temperature likely to be between 3.1°C and 4.1°C
- Increase in summer mean temperature likely to be between 3.3°C and 4.9°C
- Increase in winter mean temperature likely to be between 2.4°C and 3.5°C
- Increase in temperature of warmest summer likely to be between 1.2°C and 5.8°C

Precipitation

- Annual precipitation stays roughly the same
- Decrease in summer mean precipitation likely to be between 13% and 34%
- Increase in winter precipitation likely to be between 12% and 29%
- Increase in precipitation on the wettest day likely to be between 11% and 29%

Climate change impacts

3.4 The climate change impacts could be far reaching across a range of different sectors, including transport. This could include such things as infrastructure damage, service disruptions and accident risk and rise in maintenance costs. The extent of the impact will cover a wide range of transport routes, such as bridges, rail, and highways. Rural areas are likely to become more isolated as a result of increased flooding. Much research has been carried out on how climate change will impact the transport system. This is summarised below.

3.5 One of the most significant impacts of climate change, particularly where transport is concerned, is the likely increase of flooding, both severity and frequency. A Strategic Flood Risk Assessment was carried out for Wiltshire in 2008, it states where flooding has occurred most recently in the county and policy recommendations.

3.6 The Water Management Bill will ensure that county authorities should publish a flood risk action plan This will need to address how to manage flooding from highways.

The impact of climate change on the transport system

Wetter winters and increased summer storms

- Groundwater, fluvial, flash flooding incidents
- Changes to groundwater levels and drainage systems
- Increased likelihood of driving in heavy rain and flooded roads, leading to issues of road safety
- Increases in rain will result in increased vegetation which can cause poor visibility and obscure road signs

Increased wind speeds

- Bridges, overhead cables, tall trees and other tall/large structure are vulnerable to high winds

Higher peak temperatures

- Increased thermal discomfort on transport
- Greater thermal expansion of bridges and flyovers and buckling of train tracks
- Increased use of external spaces, further cycling and walking and greater demand for rivers and coasts
- Concrete deterioration may increase from higher summer temperatures and summer rain
- Asphalt and concrete will behave in different ways. Black surfaces may melt and rut in summer

Increasing subsidence/heave

- Broken water mains
- Embankments are at risk of both subsidence and heave, as a result of wetter winters, drier summers and changing vegetation

Increasing fluvial/ tidal flow

- Increased scouring of bridge footings

Changes to the management of landscape and biodiversity

- Climate change is likely to change the plant species that will thrive, and increase overall growth rate.
- There is also likely to be some soil erosion

Climate change mitigation

3.7 Climate change mitigation measures can be targeted at every sector in the economy. Where transport is concerned, the following measures should be applied:

- reduce the need to travel by motor vehicles and the length of journeys
- promote the use of more sustainable modes of travel

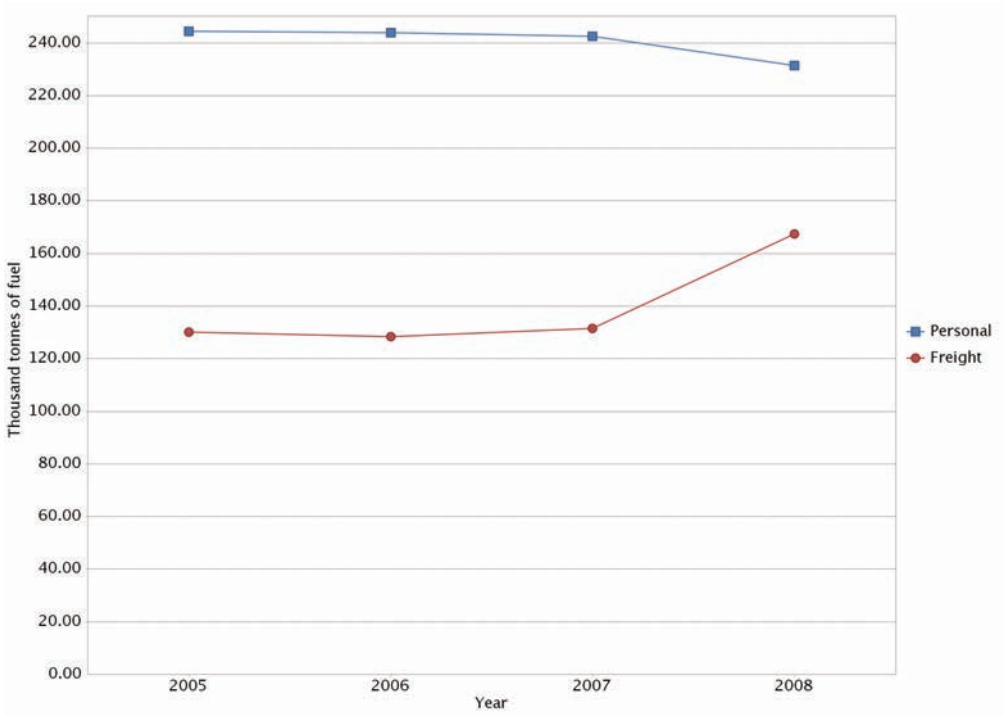
- increased fuel efficiency through driver behaviour and vehicle type
- encourage the uptake of alternative fuels, e.g. biofuels, electric and hybrid

The use of fuel

3.8 In addition to the challenge of climate change, the UK will soon have to contend with rapidly depleting stocks of fuels for transport. This issue is usually referred to as peak oil and whilst it is rarely acknowledged by national governments it is gaining credibility amongst many local authorities. Forecasters differ about the expected date of the peak, but there growing consensus that it will happen in the next ten years.

3.9 The Department of Energy and Climate Change (DECC) publishes data on fuel use for transport. Figure 3.1 shows the data for 2005-2008 inclusive for the whole of Wiltshire. Fuel use remained fairly static in Wiltshire until 2008 when personal fuel use decreased and freight fuel use increased somewhat.

Figure 3.1 Transport fuel use



3.10 The policies suggested to mitigate peak oil are usually complementary to those required to combat global warming, and a review of peak oil initiatives across America, Canada and Britain suggest local authorities should consider the following transport actions:

- Encourage a major shift from private to public transport, cycling and walking
- Expand existing programmes such as cycle lanes and road pricing
- Promote the use of locally produced, non-fossil transport fuels such as biofuel and renewable energy in both council operations and public transport
- Set up a joint peak oil task force with other councils and partner closely with existing community-led initiatives
- Coordinate policy on peak oil and climate change

Renewable energy

3.11 The UK Renewable Energy Strategy 2009 outlines the governments targets for renewable energy, stating that 15% of total energy should be derived from renewable sources by 2020. It recommends this could be best achieved with the following proportion of energy consumption in each sector from renewable sources:

- 30% of electricity demand
- 12% of heat demand
- 10% of transport demand.

3.12 The amount of renewable energy installed in Wiltshire at present is amongst the lowest for any authority in the South West and consequently targets set will be challenging. The amount of existing renewable heat and the use of transport fuels in Wiltshire are even lower than for renewable energy, and therefore the use of 10% of transport fuels to be derived from renewable sources by 2020 will be a very challenging target indeed.

3.13 The overall vision for the transport sector is set out in the Department for Transport's strategy for low-carbon transport, Low Carbon Transport: A Greener Future (DfT, 2009). The strategy is based on the following themes:

- Supporting a shift to new technologies and fuels
- Promoting lower carbon transport choices
- Using market-based measures to encourage a shift to lower carbon transport

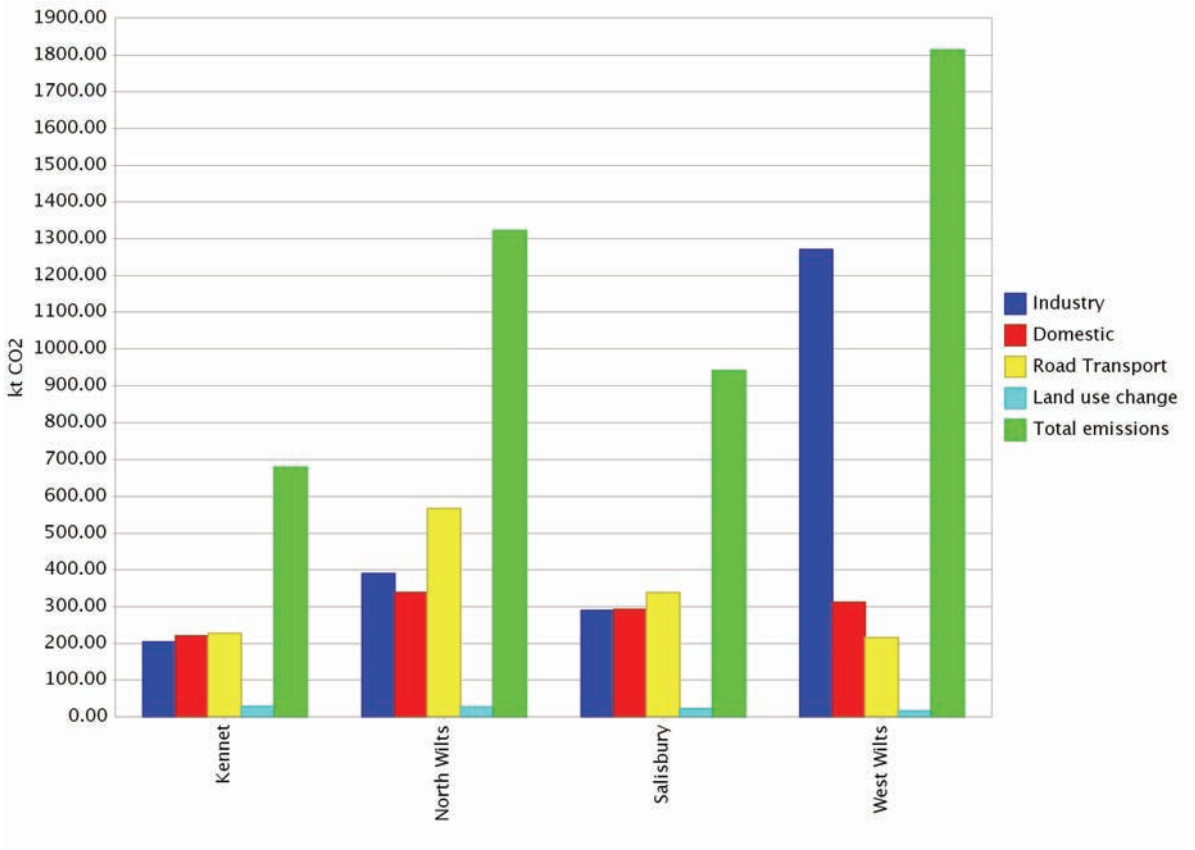
3.14 Some of the actions that will assist in meeting the transport target are cleaner fuels and cleaner technology and a shift to renewable sources of energy such as sustainable biofuels, electricity and hydrogen. The strategy assumes that the short term 10% target will predominantly be met through biofuels. Other innovations, such as the potential increased electrification of rail and road transport, could play a more auxiliary role approaching 2020, becoming more significant in the longer term.

CO_2 emissions

3.15 Currently CO_2 emissions for Wiltshire, based on data measures in 2007 from the Department of Energy and Climate Change (DECC), range from 8.1 to 14.4 tonnes per capita across the four former district councils. The average value for Wiltshire is 10.27 tonnes CO_2 per capita.

3.16 Statistics from (DECC) also show that overall in Wiltshire the "industry" category produces the largest proportion of CO_2 emissions, as per Figure 3.2 below, which is particularly evident in West Wiltshire. The largest emitter of CO_2 in regards to transport is the former North Wiltshire District, followed by Salisbury, these reflect road networks and traffic density throughout the county.

Figure 3.2 CO2 emissions in Wiltshire



Ecological footprint

3.17 The ecological footprint measurement is a technique for calculating global sustainability. A 'sustainable' ecological footprint has been calculated at 1.9 global hectares per person; which is described as the maximum footprint allowance without depriving future generations, anything above this is therefore unsustainable.

3.18 The ecological footprint for Wiltshire is 5.2; this value is slightly lower than the value for UK of 5.4, however, it is substantially greater than the average global ecological footprint. Any future effort direct at climate change adaptation and mitigation, such as reducing vehicle journeys will help reduce the ecological footprint for Wiltshire.

4. Environmental problems and issues

4.1 These are key environmental problems and issues for climatic factors in Wiltshire:

Issues/problems	Likely future environmental baseline and climate change impacts without some intervention	Implications for transport/Opportunities offered by LTP3
Traffic continues to be a major source of CO_2 emissions one of the main components of greenhouse gases, a major factor in climate change.	Evidence of climate change is becoming more widespread and certain, and it is likely it will have an even greater significant negative impact on Wiltshire's water supply, flood risk, food production, energy use, and transportation. However, the greatest impact is probably to	Climate change is a high priority issue in LTP3, and is a strong requirement to ensure that the transport system becomes adapted to the unavoidable effects of climate change. It must also consider ways in which traffic growth can be effectively reduced and to trial alternative fuelled vehicles.

Issues/problems	Likely future environmental baseline and climate change impacts without some intervention	Implications for transport/Opportunities offered by LTP3
	human health. With increasing traffic levels the risk and implications becomes far greater.	

5. Suggested SEA objectives

5.1 There are the suggested SEA objectives and potential monitoring indicators for climatic factors:

LTP SEA objective	Decision making criteria	Potential indicators
To reduce the contribution of the transport system to CO_2 emissions.	• Will it cause a change in traffic flow or a change in the nature of traffic that would cause changes in fuel use and CO_2 which would assist in meeting the target of reducing the amount of carbon dioxide produced?	• CO_2 from local authority operations.
To ensure that the transport system can cope with the unavoidable effects of climate change.	• Will it reduce the unavoidable effects of climate change?	

6. Evaluation of the draft plan

6.1 Evaluating the effects of the draft plan entailed the following:

- Identifying the effects of the plan against the SEA objectives, including identifying changes in the future baseline, which are predicted to arise from implementation of the plan.
- Assessing the significance of these effects. This means describing these changes in terms of the nature and the magnitude of the impact and the sensitivity of the receiving environment.
- An assessment of the likely changes to the future baseline which may have been caused by secondary, cumulative and synergistic impacts.

6.2 Evaluation involves judging whether or not a predicted effect is likely to be significant. The results of the evaluation are categorised by the nature of the effect using the key as shown in Table 6.1.

Table 6.1 SEA significance scores and criteria

Score	Description	Symbol/Key
Significant positive effect	The plan addresses all the elements that are required to protect the environment and address the relevant sustainability issues in Wiltshire and would help achieve all of the applicable SEA objectives. The plan also sets out how, where and when these policies will be implemented and these will have a positive impact in relation to characteristics of the effect and the sensitivity of the receptors.	++

Score	Description	Symbol/Key
Minor positive effect	The plan addresses all the elements that are required to protect the environment and address the sustainability issues in Wiltshire and would help achieve all of the SEA objectives.	+
Partial positive/partial negative effect	The plan addresses some of the elements that are required to protect the environment and address the sustainability issues in Wiltshire and would help achieve or partially achieve the SEA objectives. There is also an element of the plan that conflicts with some of the SEA objectives.	+/-
No significant effects	The plan does not have an effect on the achievement of the SEA objectives	O
Significant negative effect	The plan conflicts with some of the SEA objectives. The plan also sets out, how, where, and when these policies will be implemented and these will have a negative effect with relation to characteristics of the effect and the sensitivity of the receptors.	--
Minor negative effect	The plan conflicts with some of the SEA objectives.	-
Uncertain	It is unclear whether there is the potential for a negative or positive effect on the SEA objective.	?

6.3 The impact of the draft strategy/plan and the significance on climatic factors is as follows:

Accessibility Strategy		
Impact of the draft Accessibility Strategy (including nature and spatial extent of the impact, probability, duration, frequency and reversibility) Where there is more than one objective these will be addressed individually.	**Significance of the effect**	**Suggested mitigation and enhancement measures**
(A) The overall strategy seeks to improve accessibility across the county through sustainable travel modes and where possible reduce car travel. This has the potential to reduce carbon emissions. In connection with the public transport strategy there is some uncertainty reqarding the use of older public transport vehicles	+/-	**Mitigation:** May be necessary to upgrade older vehicles more often. Grants could be made available to operators to purchase Euro 5 or 6 vehicles. Bus lanes also allow for the more efficient operation of vehicles.
(B) Climate change may make it important to provide shade to people waiting for buses. However, the strategy does not tackle this issue.	?	

Cycling Strategy		
Impact of the draft Cycling Strategy (including nature and spatial extent of the impact, probability, duration, frequency and reversibility) Where there is more than one objective these will be addressed individually.	**Significance of the effect**	**Suggested mitigation and enhancement measures**
(A) The strategy seeks to encourage and increase cycling levels and reduce the need to travel by CO_2 producing travel modes, therefore there is some potential to reduce CO_2 emissions.	+	
(B) Cyclists and potential cyclists could endure extreme weather conditions as a result of climate change, it therefore maybe necessary to provide a high standard of changing/shower facilities at transport interchanges.	?	Cycling parking policies should also consider the effects of climate change and extreme weather conditions.

Powered Two-Wheeler Strategy		
Impact of the draft Powered Two-Wheeler Strategy (including nature and spatial extent of the impact, probability, duration, frequency and reversibility) Where there is more than one objective these will be addressed individually.	**Significance of the effect**	**Suggested mitigation and enhancement measures**
(A) The strategy seeks to encourage and increase motor-cycling reducing the need to travel by car, therefore reducing CO_2 emissions.	+	
(B) Motorcyclists and potential motor cyclists could endure extreme weather conditions as a result of climate change, it therefore maybe necessary to provide a high standard of changing/shower facilities at transport interchanges.	?	

Smarter Choices Strategy		
Impact of the draft Smarter Choices Strategy (including nature and spatial extent of the impact, probability, duration, frequency and reversibility) Where there is more than one objective these will be addressed individually.	Significance of the effect	Suggested mitigation and enhancement measures
(A) The strategy seeks to encourage modal shift and reduce the need to travel by car, helping to reduce CO_2 emissions.	+	
(B) Travelling in extreme weather conditions may require more changing room/drying rooms.	?	

Assessment conclusions - Climatic factors
Cumulative, synergistic and secondary effects: Overall the cumulative effects of the strategies on a reduction in CO_2 emissions is positive, however, the extent of this is dependent on the amount of modal shift. However, reducing congestion on the road network may encourage further car travel as motorists start to recognise the freer flowing traffic which may undo the benefits created during initial modal shift. Whilst there is uncertainty regarding the ability of the transport system to cope during climate change, improving accessibility and providing a greater range of sustainable transport modes will mean that there will be more transport choices on offer.
Cumulative effects with other plans: Local development framework policies should also seek to reduce the need to travel by car through the integration of spatial and transport planning. This should further reduce carbon emissions.
Summary of performance and performance of the strategies as a whole: Overall the strategies have the potential to have a positive effect on the reduction of CO_2 emissions from the transport system. Further research and development is required where the effects of climate change are concerned.

Historic environment

1. Introduction

1.1 Wiltshire's historic environment comprises of cultural, architectural and archaeological heritage, and includes its buildings, monuments and landscapes. It is fundamental to the identity of the county and provides Wiltshire with a local and unique distinctiveness. It provides many benefits to individuals, communities, businesses and visitors alike, particularly contributing to tourism, leisure and recreation and the economy. It is important, therefore, that the local transport plan helps to protect and enhance Wiltshire's historic environment.

2. Review of plans/programmes

2.1 One of the requirements of the SEA process is to consider and take account of any other policies, plans, programmes and environmental objectives which may be relevant to LTP3. This is a key element of the SEA process, since it ensures the work is consistent with up-to-date policy, is informed by reliable information whilst at the same time identifying environmental issues.

2.2 The SEA Directive specifically requires environmental protection objectives established at international, European Community or national levels to be taken into account during the development of the LTP.

2.3 LTP3 will be influenced by other external environmental objectives such as those laid out in policies and legislation. These relationships will be acknowledged to enable potential synergies to be identified and exploited.

2.4 Table 2.1 lists the documents reviewed for the historic environment, with Tables 2.2-2.5 providing brief summaries for each plan/programme.

Table 2.1 Documents reviewed for historic environment

International
UNESCO World Heritage Convention (1972)
European Convention on the Protection of the Archaeological Heritage (Revised) (1992)
National
The Historic Environment: A Force for our Future
PPS5 - Planning for the Historic Environment (2010)
PPG16 – Archaeology and Planning (1990)
PPS7 - Sustainable Development in rural areas (2004)
Circular 07/09: Protection of World Heritage Sites (2009)
Regional
Strategy for the Historic Environment in the South West (2004)
Streets for All South West (2005)
Local
Avebury World Heritage Site Management Plan (2005)

International
Stonehenge World Heritage Site Management Plan (2009)

Table 2.2 International plan/programme summaries for historic environment

International plan/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
Convention Concerning the Protection of the World Cultural and Natural Heritage UNESCO (1972)	The UK as a signatory to the Convention Concerning the Protection of the World Cultural and Natural Heritage (UNESCO, 1972 obliged to protect and conserve the site and ensure its outstanding universal value (OUV) is appropriately presented and transmitted to future generations.	LTP will be consistent with the aims of the convention and transport and traffic management objectives set out in the 2 World Heritage Site Management Plans (Stonehenge (2009) and Avebury (2005))
European Convention on the Protection of the Archaeological Heritage (Revised) (1992)	Each member state should: • provide a legal protection system for heritage • preserve, protect and guarantee scientific significance of its heritage • collect/disseminate scientific information freely • promote public awareness.	Both the SEA and LTP3 should ensure that archaeological sites and their setttings are given full consideration during the planning stages.

Table 2.3 National plan/programme summaries for historic environment

National plans/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
The Historic Environment: A Force for our Future	The historic environment should be protected and sustained for the benefit of our own and future generations.	LTP3 could influence the historic environment in several ways, including impacts upon townscape, historic structures and features. The SEA will include objectives: • which seek to conserve and enhance features and areas of historical and cultural value; and • which help to reduce the impact of transport and improve the quality of urban and rural centres.
PPS5 - Planning for the Historic Environment (2010)	The principle objectives for planning for the historic environment are: • To deliver sustainable development by ensuring that policies and decisions concerning the historic environment: • Recognise that heritage assets are a non-renewable resource	Both LTP3 and the SEA will reflect these objectives and will seek appropriate measures which seek to reduce the impact of transport on the historic environment.

National plans/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
	• Take account of the wider social, cultural, economic and environmental benefits of heritage conservation; and • Recognise that intelligently managed change may sometimes be necessary if heritage assets are to be maintained for the long term • To conserve England's heritage assets in a manner appropriate to their significance by ensuring that:: • Decisions are based on the nature, extent and level of significance, investigated to a degree proportionate to the importance of the heritage asset • Wherever possible, heritage assets are put to an appropriate and viable use that is consistent with their conservation • The positive contribution of such heritage assets to local character and sense of place is recognised and valued; and • Consideration of the historic environment is integrated into planning policies, promoting place-shaping • To contribute to our knowledge and understanding of our past by ensuring that opportunities are taken to capture evidence from historic environment and to make this publicly available, particularly where a heritage asset is to be lost.	

National plans/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
PPG16 – Archaeology and Planning (1990)	Archaeological remains are finite, non-renewable, fragile and vulnerable. Care must be taken that they are not needlessly or thoughtlessly destroyed. There should be a presumption in favour of the physical preservation of nationally important archaeological remains, whether scheduled or not.	LTP3 must consider the archaeological priority areas. The SEA will include a specific objective to protect, enhance and preserve sites of archaeological interest and their settings.
PPS7: Sustainable Development in rural areas (2004)	The objectives in brief are as follows: • To raise the quality of life and the environment in rural areas. • To promote more sustainable patterns of development. • Promoting the the development of the English regions by improving their economic performance so that all are able to reach their full potential. • To promote sustainable, diverse, and adaptable agricultural sectors.	LTP3 must ensure it takes into consideration all development in rural areas.
Circular 07/09: Protection of World Heritage Sites (2009)	The outstanding universal value of a World Heritage Site indicates its importance as a key material consideration to be taken into account by the relevant authorities in determining planning and related applications and by the Secretary of State in determining cases on appeal or following call in.	The most appropriate way of meeting the UK's obligations to protect, manage, present and transmit to future generations the World Heritage Sites on its territory is through the inclusion of appropriate policies in planning documents including LTP's (and SEA's) and through the development of management plans.

Table 2.4 Regional plan/programmes summaries for historic environment

Regional plan/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
Strategy for the Historic Environment (HE) in the South West (English Heritage, 2004)	Key objectives of relevance include: • Informed conservation of the historical environment; • Sustainable management of the historic environment in rural areas; • Conservation of coastal, and maritime environments and wetland landscapes; • Promote design of buildings and landscapes sensitive to their locations;	The SEA will include objectives which seek to conserve and enhance features and areas of historical interest and value.

Regional plan/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
	• Promote the use of traditional conservation and management skills; and • Remove barriers to the access of the historic environment.	
Streets for All South West (2005)	This manual offers guidance on the way in which our streets and public open spaces are managed. These spaces, sometimes known as the 'public realm', range from city squares to country lanes. Their appearance is often the product of several different agencies each with its own priorities. A co-ordinated approach can help provide an environment that is safe, enjoyable and appropriate to its surroundings	LTP3 should ensure its takes into consideration the guidance in thei manual when planning changes to outdoor spaces.

Table 2.5 Local plan/programmes summaries for historic environment

Local plan/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
Stonehenge World Heritage Site Management Plan (2009)	Sustainable Traffic and Transportation objectives: • Measures should be identified which will provide comprehensive treatment of important road links within the WHS in order to reduce traffic movements and congestion, improve safety and enhance the historic environment. • A policy should be implemented to reduce parking congestion on peak days. • The use of more sustainable methods of transport to the site and to move around within it should be encouraged to reduce the reliance on the private car by visitors to the WHS.	LTP3 and SEA will take account of these objectives and will where possible ensure that there are adhered to.
Avebury World Heritage Site Management Plan (2005)	Traffic and parking management objectives: • Develop radical highway improvements measures which will be implemented as long-term solutions to the problem of reducing the volume and speed of traffic through the WHS.	LTP3 and SEA will take account of these objectives and will where possible ensure that there are adhered to.

Local plan/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
	• Implement speed control and other measures in the short term which will provide comprehensive treatment of all important road links within the WHS, in order to improve safety and the quality of the historic environment. • Implement a strategic policy to reduce parking congestion in the henge/village area on peak days, dispersing the pressure away from the centre of the site. • Reduce the reliance of the private car by visitors to Avebury WHS, by encouraging the uses of more sustainable methods of transport to get to the site and to move around within it. • Implement measures to improve the safety of pedestrians within the WHS.	

3. Baseline data

3.1 Wiltshire contains a wealth of important sites and buildings and in total, within Wiltshire's Council administrative boundary there are 244 Conservation Areas, and 12,206 Listed Buildings. At present this information can only be broken down into what was district level:

Table 3.1 Listed buildings and conservation areas in Wiltshire

Designation	East Wilts/Kennet	North Wilts	South Wilts/Salisbury	West Wilts
Listed buildings	2880	3782	2988	2556
Conservation areas	75	65	69	35

Wiltshire Council's administrative area includes 19 market towns and 1 city, all of which contain at least 1 conservation area, which means that the conservation area designations cover some of the most built up areas within Wiltshire.

There were around 250 Scheduled Monuments at risk in Wiltshire in 2010. Damage from cultivation is still the greatest cause of risk, with degradation and decay as a result of natural processes, such as scrub and tree growth, erosion and burrowing animals, a close second. Transport is also a well known risk to historic areas/buildings and monuments.

World Heritage Sites

There are 851 World Heritage Sites in total, 27 of which are in the UK. Wiltshire has one World Heritage Site, Stonehenge/Avebury and other associated sites which cover two landscapes around 40 km apart. The site was inscribed on the World Heritage list in 1986 for outstanding prehistoric monuments.

3.5 Stonehenge is probably the most important historical site located in Wiltshire. It lies within Salisbury Plain at the heart of the extensive chalklands that give structure to the landscape of much of southern England. It enjoys a particular place in modern culture and the monument is one of the principle archaeological tourist attractions in the UK, drawing large numbers both from Britain and abroad. Visitors have grown sharply, from around 500,000 paying visitors per annum in the late 1970's to 800,000 in 1998.

3.6 Current public awareness of and access to heritage assets is generally quite low, and Stonehenge is no different with attention firmly focused on the Stones themselves and with little appreciation of the surrounding archaeological landscape. This is due to a number of key factors:

- The direct vehicular access to the core of the Stones is provided by both the A303 and the A344
- The location of the car park and visitor facilities immediately adjacent to the Stones
- The seemingly less significant and less dramatic nature of other archaeological components
- The constraints imposed by the current pattern of land ownership and public access opportunities on foot.

3.7 Roads and traffic have long had a serious impact on Stonehenge. In particular the A303 trunk road and the A344 county road are highly visible routes that cut through the heart of the surrounding landscape and adversely impact the character of the immediate setting and the people's enjoyment of the Stones. At present, the majority of visitors arrive by car. A key issue is to work with local transport operators to explore the possibility of reliable and sustainable modes of transport to the site. Current arrangements for cycle and pedestrian access to the site are considered inadequate, and with regard to the large numbers of visitors and speed of passing vehicles, dedicated routes are probably necessary.

3.8 Many of the traffic problems at Stonehenge are exacerbated by the location of the visitor centre and car park and the subsequent pattern of visitor access to the Stones. There are long term plans to tunnel the A303, making visitor access both easier and safe, but in the short term, traffic calming and other safety measures may help improve highway safety.

3.9 There are a number of other transport related concerns at the site which include:

- There is distinctive commuter and leisure movement of vehicles through the site, particularly the A303
- Facilities for coach parking and car parking are inadequate, especially at peak times
- Road safety is a significant issue
- Bus service provision to the site is limited

- There is a need for improvements at the Countess roundabout to mitigate current congestion from the A303

- The removal of existing car parking close to the Stones may encourage illegal parking on nearby roadside verges.

3.10 Avebury also suffers with a number of traffic related problems, the 2005 Avebury World Heritage Management Plan notes that there is particular concern over the erosion caused by vehicles (especially wide vehicles) along narrow parts of the B4003, Avenue Road. The erosion of verges may affect archaeological deposits, as well as the development of unofficial parking areas within the Avenue monument. Vehicle erosion of the grass triangle or "green" at the top end of the High Street is another cause for concern. This erosion has caused significant damage to the roots of trees in this location.

3.11 For many years there has been concern about the impact of traffic, vehicle speeds and roads on Avebury and its historic environment and include:

- There has been a modest growth in the volume of traffic, both commuter and leisure related, which is predicted to continue, in line with national trends.

- There is a distinctive commuter movement of vehicles through Avebury, especially along the A4361.

- The instigation of a 30 mph zone on the A4361 through Avebury has had mixed success.

- Facilities for pedestrians and cyclists are considered inadequate for the number of visitors and local residents having regard to the alignment of critical road links and the speed of passing vehicles.

- A number of changes made to parking provision in Avebury do not appear to have a major knock-on effect on congestion and on-street parking.

- Recent research has indicated that 50-60 additional spaces are required to fully meet demand in the Southern Car Park at peak periods. However, there should be no significant increase in the number of parking spaces provided in Avebury.

- A feasibility study has highlighted the constraints of the construction of a car park on the northern side of Avebury.

- Road safety is a major cause for concern to both visitors and residents, although this is not always supported by the recorded injury collision rates.

- There is a need to improve the provision of safe road crossings for pedestrians in and around Avebury.

- Despite recent improvements, public transport provision is relatively limited on Sundays and bank holidays, and does not enable key monuments in the WHS, other than the Henge, to be visited.

- Public transport provision is relatively limited on Sundays and bank holidays.

4. Environmental problems and issues

4.1 These are key environmental problems and issues for the historic environment in Wiltshire:

Table 4.1 Environmental problems/issues and opportunities

Issues/problems	Likely future environmental baseline and climate change impacts without some intervention	Implications for transport/Opportunities offered by LTP3
Wiltshire's rich historic and cultural heritage comes under continued threat from new development and continued traffic growth.	Climate change will likely result in increasing winds, which can significantly damage buildings. If new development is left unchecked and without active management and mitigation measures, Wiltshire's historic environment will likely suffer with air pollution and vibration damage as well a general decline in the quality of historic areas, which in turn could impact upon tourism and the economy of Wiltshire.	• LTP3 needs to actively reduce traffic growth. • The historic environment needs to be protected from the adverse effects of transport and development including air pollution and vibration damage. • High quality design and improvements to enhance the public realm particularly in heritage areas (e.g. street furniture and road and pavement materials to be in context with the local historic area).

5. Suggested SEA objectives

5.1 These are the suggested SEA objectives and potential monitoring indicators for the historic environment:

Table 5.1 SEA objectives

LTP SEA objective	Decision making criteria	Potential indicators
To conserve and enhance features and areas of historical and cultural value.	• Will it cause direct impacts on sites or monuments through the provision of new transport infrastructure?	• Number of listed buildings lost through transport development.
To conserve and enhance archaeological sites and features.	• Will it cause a change in traffic flows or the nature of traffic that affects townscape, sites and monuments valued for cultural and historic heritage?	

6. Evaluation of the draft plan

6.1 Evaluating the effects of the draft plan entailed the following:

- Identifying the effects of the plan against the SEA objectives, including identifying changes in the future baseline, which are predicted to arise from implementation of the plan.
- Assessing the significance of these effects. This means describing these changes in terms of the nature and the magnitude of the impact and the sensitivity of the receiving environment.
- An assessment of the likely changes to the future baseline which may have been caused by secondary, cumulative and synergistic impacts.

6.2 Evaluation involves judging whether or not a predicted effect is likely to be significant. The results of the evaluation are categorised by the nature of the effect using the key as shown in Table 6.1.

Table 6.1 SEA significance scores and criteria

Score	Description	Symbol/Key
Significant positive effect	The plan addresses all the elements that are required to protect the environment and address the relevant sustainability issues in Wiltshire and would help achieve all of the applicable SEA objectives. The plan also sets out how, where and when these policies will be implemented and these will have a positive impact in relation to characteristics of the effect and the sensitivity of the receptors.	++
Minor positive effect	The plan addresses all the elements that are required to protect the environment and address the sustainability issues in Wiltshire and would help achieve all of the SEA objectives.	+
Partial positive/partial negative effect	The plan addresses some of the elements that are required to protect the environment and address the sustainability issues in Wiltshire and would help achieve or partially achieve the SEA objectives. There is also an element of the plan that conflicts with some of the SEA objectives.	+/-
No significant effects	The plan does not have an effect on the achievement of the SEA objectives	O
Significant negative effect	The plan conflicts with some of the SEA objectives. The plan also sets out, how, where, and when these policies will be implemented and these will have a negative effect with relation to characteristics of the effect and the sensitivity of the receptors.	--
Minor negative effect	The plan conflicts with some of the SEA objectives.	-
Uncertain	It is unclear whether there is the potential for a negative or positive effect on the SEA objective.	?

6.3 The impact of the draft strategy/plan and the significance on the historic environment as follows:

Accessibility Strategy		
Impact of the draft Accessibility Strategy (including nature and spatial extent of the impact, probability, duration, frequency and reversibility) Where there is more than one objective these will be addressed individually for each strategy.	**Significance of the effect**	**Suggested mitigation and enhancement measures**
(A & B) Encouraging more sustainable travel and reductions in car use should reduce harmful carbon emissions and improve air quality. This should have a positive effect on the historic environment, by reducing vehicles in historic towns/cities and improving ambience and streetscene, Required infrastructure could potentially have a negative impact on streetscene, although, funding constraints may mean that new infrastructure will be kept to a minimum.	+/-	**Mitigation**: • Operators may need some financial assistance or incentive to purchase newer less polluting vehicles**.** • Infrastructure should be in keeping with the local environment where possible.

Cycling Strategy		
Impact of the draft Cycling Strategy (including nature and spatial extent of the impact, probability, duration, frequency and reversibility) Where there is more than one objective these will be addressed individually for each strategy.	**Significance of the effect**	**Suggested mitigation and enhancement measures**

Cycling Strategy		
(A & B) Increasing cycling may help to reduce to car use in towns and cities, therefore helping to improve overall ambience and the streetscene in historical areas. Cycling infrastructure may have some negative impact on historical environments, see mitigation.	**+/-**	**Mitigation**: Cycling infrastructure will require careful site location planning and should be where possible in keeping the local surrounding environment.

Powered Two-Wheeler Strategy		
Impact of the draft Powered Two-Wheeler Strategy (including nature and spatial extent of the impact, probability, duration, frequency and reversibility) Where there is more than one objective these will be addressed individually for each strategy.	**Significance of the effect**	**Suggested mitigation and enhancement measures**
(A&B) There is potential for some new motor-cycle road infrastructure/signage, this could have a slight negative impact on the historic environment, however this will be off-set by reducing the need to travel by car.	**+/-**	

Smarter Choices Strategy		
Impact of the draft Smarter Choices Strategy (including nature and spatial extent of the impact, probability, duration, frequency and reversibility) Where there is more than one objective these will be addressed individually for each strategy.	**Significance of the effect**	**Suggested mitigation and enhancement measures**
(A&B) Encouraging sustainable travel and reducing the need to travel by car should help to improve air quality in urban areas and help improve ambience and streetscene. New infrastructure may cause some potential for a negative impact.	**+/-**	

Assessment conclusions
Cumulative, synergistic and secondary effects: The strategies seek to encourage modal shift and reduce traffic levels which will benefit historical towns and settlements and therefore there is some positive impact. Reductions is traffic can benefit the historic character of many towns and settlements and may result in secondary effects on heritage sites and assets as a result of improved air quality and reduced vibrations caused by traffic and heavy vehicles. However, towns and settlements could be affected by the introduction of unsympathetic infrastructure and temporary constructions sites, where this is the case mitigation will be required.
Cumulative effects with other plans: At the current time it is not practicable to provide a full and detailed cumulative effects assessment with other transport plans. The greatest potential on historic environments will occur where LTP3 supports the development proposed as part of the forthcoming Wiltshire Core Strategy.
Summary of performance and performance of the strategies as a whole:

Assessment conclusions
Overall there is potential to improve and enhance historical towns and settlements through measures to encourage modal shift and the associated reductions in car travel. However, this must be offset against the introduction of "out of place" infrastructure, where this this case mitigation measures will be required.

Landscapes

1. Introduction

1.1 The European Landscape Convention describes landscape as "an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors." This SEA topic covers Wiltshire's built and natural landscapes both rural and urban, regardless of condition and quality.

2. Review of plans/programmes

2.1 One of the requirements of the SEA process is to consider and take account of any other policies, plans, programmes and environmental objectives which may be relevant to LTP3. This is a key element of the SEA process, since it ensures the work is consistent with up-to-date policy, is informed by reliable information whilst at the same time identifying environmental issues.

2.2 The SEA Directive specifically requires environmental protection objectives established at international, European Community or national levels to be taken into account during the development of the LTP.

2.3 LTP3 will be influenced by other external environmental objectives such as those laid out in policies and legislation. These relationships will be acknowledged to enable potential synergies to be identified and exploited.

2.4 Table 2.1 lists the documents reviewed for landscapes, with Tables 2.2-2.5 providing brief summaries for each plan/programme.

Table 2.1 Documents reviewed for landscapes

International
The European Landscape Convention (2004)
National
Consultation paper on a new Planning Policy Statement: Planning for a Natural and Healthy Environment (2010)
Countryside and Rights of Way Act (CroW) (2000)
Wildlife and Countryside Act (1981)
National Parks and Access to the Countryside Act (1949) & Environment Act 1995
Natural Environment and Rural Communities Act 2006
PPS1: Delivering sustainable development (2005)
PPS7: Sustainable development in rural areas (2004)
PPG2 – Green Belts (1995)
The State of the Countryside (2007)
Regional
South West Regional Woodland and Forestry Framework (2005)
Local

International
Cotswold AONB Management Plan 2008-2013
Cranborne Chase and West Wiltshire Downs AONB Management Plan 2004-09
North Wessex Downs AONB Management Plan (2004)
New Forest National Park Management Plan (2009)

Table 2.2 International plan/programmes summaries for landscapes

International plan/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
The European Landscape Convention (2004)	The first international treaty to be exclusively concerned with the protection, management and planning of European landscapes. General measures : • Recognition of landscapes in law as an essential component of people's surroundings, an expression of the diversity of their shared cultural and natural heritage, and a foundation of their identity. • Establishment and implementation of landscape policies aimed at landscape protection, management and planning. • Establishment of procedures for participation by the general public, local and regional authorities and other parties with an interest in the definition and implementation of landscape priorities. • Integration of landscape into regional and town planning policies, and its cultural, environmental, agricultural, social and economic policies, as well as in any other policies with possible direct or indirect impact on landscapes.	The SEA includes objectives which take into consideration the effect of transport on the landscape and the wider implications.

Table 2.3 National plan/programmes summaries for landscapes

National plans/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
Countryside and Rights of Way Act (2000)	Extends the public's ability to enjoy the countryside whilst also providing safeguards for landowners and occupiers. Emphasises the public's	LTP3 needs to have regard for designated areas for scientific interest, scenic quality and wildlife conservation.

National plans/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
	right of access to open country and common land and provides additional protection for Sites of Special Scientific Interest (SSSI).	The SEA will ensure that wider biodiversity in relation to transport is included.
Wildlife and Countryside Act (1981)	Addresses the problem of species protection and habitat loss by setting out the protection that is afforded to wild animals and plants in Britain.	There is significant interaction between wildlife and transport. The SEA considers the affects of the transport system on wildlife.
National Parks and Access to the Countryside Act (1949) & Environment Act 1995	National Park authorities shall seek to foster the economic and social-well being of local communities within the National Park without incurring significant expenditure and shall co-operate with other local authorities whose functions include the promotion of economic and social development within an area of the national park.	LTP3 and the SEA will take proper consideration of the economic and social development of the New Forest National Park.
Natural Environment and Rural Communities Act 2006	Stipulates that every public authority must have regard for the purpose of conserving biodiversity.	The SEA will consider any potential impacts on biodiversity and will accordingly advise action required to avoid a situation arising.
PPS1: Delivering sustainable development (2005)	PPS1 sets out the Government's overarching planning policies on the delivery of sustainable development through the planning system. When preparing development plans local authorities should (in regard to landscapes): • place a high level of protection on our most valued landscapes • take account of the impact of development on landscape • protect and enhance landscape character	LTP3 and SEA will take into consideration this PPS, particularly as Wiltshire has landscapes which are highly valued.
PPS7: Sustainable development in rural areas (2004)	The objectives in brief are as follows: • To raise the quality of life and the environment in rural areas. • To promote more sustainable patterns of development. • Promoting the the development of the English regions by improving their economic performance so that all are able to reach their full potential. • To promote sustainable, diverse, and adaptable agricultural sectors.	LTP3 must ensure it takes into consideration all development in rural areas.
PPG2 – Green Belts (1995)	Details policy of preventing urban sprawl by controlling development in the open	Wiltshire includes part of the Avon Green Belt which surrounds the wider Bath and Bristol areas. Those parts of Wiltshire included in the Avon

National plans/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
	countryside around major settlements; identifies inappropriate development. Objectives: • To provide opportunities for access to the open countryside for the urban population • To provide opportunities for outdoor sport and outdoor recreation near urban areas • To retain attractive landscapes, and enhance landscapes, near to where people live • To improve damaged and derelict land around towns • To secure nature conservation interest • To retain land in agricultural, forestry and related uses.	Green Belt include land surrounding Bradford on Avon, Trowbridge and west of Corsham. The particular objectives of this 'Western Wiltshire Green Belt' are to maintain the open character of undeveloped land adjacent to Bath, Trowbridge and Bradford on Avon, to limit the spread of development along the A4 between Batheaston and Corsham and to protect the historic character and setting of Bradford upon Avon. LTP3 needs to ensure it includes a policy to protect and enhance the Green Belt areas in Wiltshire. Similarly the SEA must reflect the need to protect these Green Belt areas.
The State of the Countryside (2007)	This is the ninth State of the Countryside report, which aims to provide a comprehensive economic, social, and environmental profile of the state of the English countryside. The report focuses on the following issues, without listing specific objectives: • population and migration • access to services • housing and homelessness • health and healthcare • education rural community and governance • income, wealth and consumption • work and employment • enterprise and entrepreneurs • land use • land value • environmental quality • climate change	Many of the rural issues contained and discussed within this report will require consideration in LTP3.

Table 2.4 Regional plan/programme summaries for landscapes

Regional plan/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
South West Regional Woodland and Forestry Framework (2005)	This is a key regional document driving woodland and forestry strategies in the south	Policies and objectives contained within this document have the potential to achieve

Regional plan/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
	west region. This framework aims to be the first point of focus on the future of the region's woods and forests – identifying how the region can benefit more from woods and become a better custodian of its woods and forests. It sets out the priorities for activity across the private, public and voluntary sectors. The framework contains a number of objectives under the following aims: Climate change, woodland management, communication, environmental economy, increase volume of wood consumed in south west, Increased woodfuel installations, woodlands and leisure/tourism, knowledge and skills, sustainable communities, more people enjoying woodland, protect natural resources and biodiversity, landscape culture and Heritage.	positive impacts on a number of sustainability issues facing the county, including climate change, landscape, culture and recreation, and biodiversity.

Table 2.5 Local plan/programme summaries for landscapes

Local plan/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
Cotswold AONB Management Plan (2008-2013)	• The implications of climate change to be addressed. • To conserve and enhance the landscape within the AONB. • A sustainable approach to be adopted for issues, particularly the development and management of the rural economy. • Increase people's awareness, knowledge and understanding and the qualities and opportunities within the AONB.	LTP3 should ensure that future transport development proposals within the AONB are only permitted for cases of overriding national need.

Local plan/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
North Wessex Downs AONB Management Plan (2004-2009)	• Conserve and enhance landscape character, heritage and biodiversity within the AONB. • Sustain natural resources and promote low carbon energy.	Ensure that future transport development proposals within the AONB are only permitted for cases of overriding national need.
Cranborne Chase and West Wiltshire Downs AONB Management Plan (2009-2014)	Transport objectives include: A) A strategic approach to transport planning recognises and takes full account of AONB landscape character. B) An integrated sustainable transport network takes account of local community needs and provides travel choices that reduce dependency on the car. C) The impact of traffic on local settlements and the wider countryside is minimised. D) A balance is sought between maximising social and economic interests whilst minimising the impact of traffic on the landscape and communities	Following the recent formal adoption of the management by Wiltshire Council, these management plan policies should be reflected in LTP3: 1) Develop an integrated network of roads, public transport and rights of way that take into account the special qualities and landscape character of the AONB. 2) Investigate initiatives to minimise the current impact of traffic on settlements and the wider countryside. 3) When new development is proposed, minimise the impact of associated traffic on settlements and the wide countryside through travel plans. 4) Develop and promote the benefits of traffic management initiatives that encourage safe and attractive walking, cycling and riding routes around the AONB. 5) Develop a consistent approach to transport infrastructure (laybys, signing, furniture) that takes account of and are sympathetic to the landscape character of the AONB.
New Forest National Park Management Plan (2010)	Reduce the impacts of traffic on special qualities of the National Park and provide a range of sustainable transport alternatives within the park by: - Influencing regional and national transport policies in order to minimise impacts on the National Park and, where possible, achieve benefits for the area. - Helping to reduce the number of animal accidents on the roads within the National Park.	LTP3 will take account of these transport objectives and ensure that all transport development in and around the National Park is sustainable, integrated and where possible includes walking and cycling. Freight routing strategies will take account of weight restrictions and where possible re-route vehicles away from the National Park.

Local plan/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
	- Developing a distinctive and different experience for those travelling within the National Park which clearly indicates its special and protected status. - Promoting measures to reduce the negative impacts of road traffic on the quality of life of local communities and the environmental quality of the National Park. - Supporting an integrated network of public and community transport, footpaths and cycling and riding routes designed to meet the needs of both residents and visitors.	
New Forest National Park Core Strategy - submitted Feb 2010	The Core Strategy and Development Management Policies Development Plan Document (DPD) Submission Document provides the overall vision, strategic aims and objectives and spatial planning policies for the whole of the administrative area of the New Forest National Park for the period to 2026. The document, when adopted, will set out the overarching planning framework for the National Park, and subsequent development plan documents prepared by the Authority will need to be in conformity with the Core Strategy. It includes a number of strategic objectives including: Reduce the impacts of traffic on the special qualities of the National Park and provide a range of sustainable transport alternatives within the Park.	

3. Baseline data

3.1 The South West is England's largest and most rural region, with most districts classified as rural. The region has a high proportion of protected landscapes; approximately 40% of the landscape has special protection.

3.2 The Wiltshire landscape mainly comprises of two geological forms; areas of rolling downland which include the Marlborough Downs, Salisbury Plain and Cranborne Chase and areas of flatter pasture land, which consist of beds of Oxford and Kellaways clays surrounded by a ridge of Corallian limestone.

3.3 Salisbury Plain supports the largest known expanse of unimproved chalk downland in North West Europe, at 12,933 ha, it represents 41% of the British total of this significant habitat, and divides the county from north to south.

3.4 The chalks areas represent more than half of Wiltshire's land mass and dominate the eastern and central parts of the county. The two largest Sites of Special Scientific Interest (SSSI) in Britain are found on the chalk grasslands of Salisbury Plain training area, 38,000 ha, and Porton Down, 1562 ha. Chalk streams run through the downs with the Salisbury Avon and its tributaries in the south and the tributaries of the Thames in the Marlborough Downs. The Salisbury Avon is a special area of conservation, designated for its wide variety of fish and invertebrates.

3.5 The flatter pasture lands of north west Wiltshire are drained by streams that flow slowly though steep banks of alluvial slit into the Semington Brook, the Marden and the Biss before water reaches the Bristol Avon.

3.6 Transport can have a negative effect on landscapes in the following ways:

- Through inappropriate volume and traffic speed
- Through inappropriate use of rural routes for freight
- Through inappropriate highways improvements, excessive signage, lighting and other street furniture that can have a detrimental effect on the landscape.

Areas of Outstanding Natural Beauty

3.7 Approximately 44% of the area administered by Wiltshire Council is designated as Areas of Outstanding Natural Beauty (AONB), which comprises 38% of the North Wessex Downs AONB, 61% Cranborne Chase and West Wiltshire Downs AONB and 6% of the Cotswolds ANOB. The primary purpose of AONB designation is to "*conserve and enhance natural beauty*". The Countryside and Rights of Way Act 2000 gave AONBs a legally equivalent status to that of a national park.

North Wessex Downs AONB

3.8 The North Wessex Downs AONB is the third largest in the country at 1730km2, stretching from the east of Devizes to Reading, comprising a predominantly a chalkland landscape of dramatic scarp slopes and moulded dip slopes that reflect the underlying chalk geology; this is made up of eight landscape types

- Open Downland
- Downs Plain and Scarp
- Downland with Woodland
- Vales
- Wooded Plateau
- River Valleys
- High Chalk Plain
- Lowland Mosaic

3.9 The management plan for the AONB identifies a number of threats to the landscape including development pressure but also identifies opportunities to manage change and enhance its character. It recognises that there is a need to manage development pressures with sensitivity within the AONB and its setting in order to maintain a balance in promoting economic and social viability whilst retaining its landscape character. Key issues identified in relation to development include:

- Remoteness and tranquillity – at risk from intrusion, artificial lighting and noise

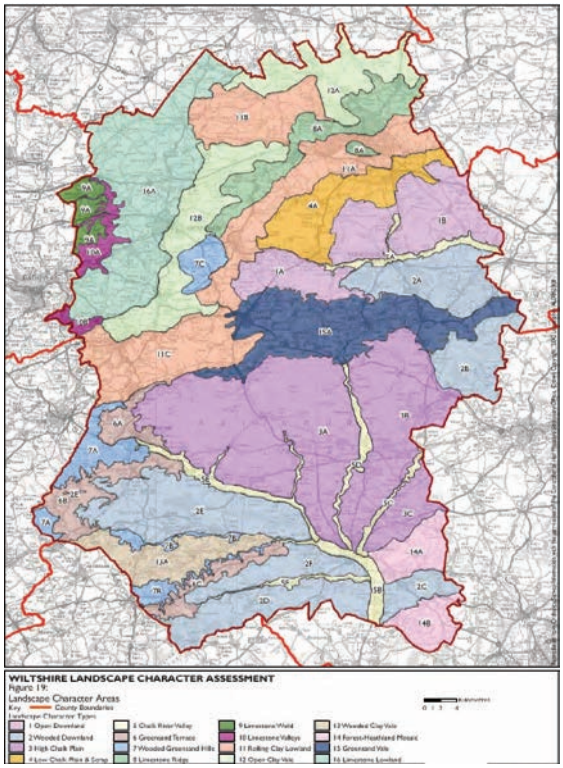
- Sensitivities to wind turbines – all of the landscapes within the AONB are constrained to a degree
- Green infrastructure – an opportunity for development to secure and enhance the green infrastructure of the AONB and deliver multiple benefits
- Urban fringe – expansion of urban areas (although this relates predominately to Swindon)
- Equine related activities – impacts of gallops and associated facilities
- Noise – impacts of increased noise upon tranquillity
- Built environment - appropriate and sympathetic design and sitting of development, including brownfield sites especially MoD land, should be guided by local landscape character

3.10 In relation to biodiversity it also highlights potential threats including the fragmentation of habitats and loss of wildlife corridors, particularly in relation to the effects of climate change, and the effects of increased recreational pressure through erosion and disturbance, especially from dog walkers.

Special landscape areas and landscape character

3.11 The rich and diverse landscape within Wiltshire has meant that much of the county has been given the non-statutory designation of special landscape area; these are landscapes of county importance. In total the diversity of landscape variations and differences in Wiltshire are represented by 16 landscape types as shown in Map 3.1.

Map 3.1 Landscape types of Wiltshire



3.12 The national landscape character assessment is carried out by Natural England, and identifies 159 different and distinct landscape character's in England. For each of these areas there is a factsheet, which outline the actions required to maintain the character of each landscape. Map 3.2 and Table 3.1 provide a description of the landscape character assessment for Wiltshire.

Map 3.2 Landscape character assessment

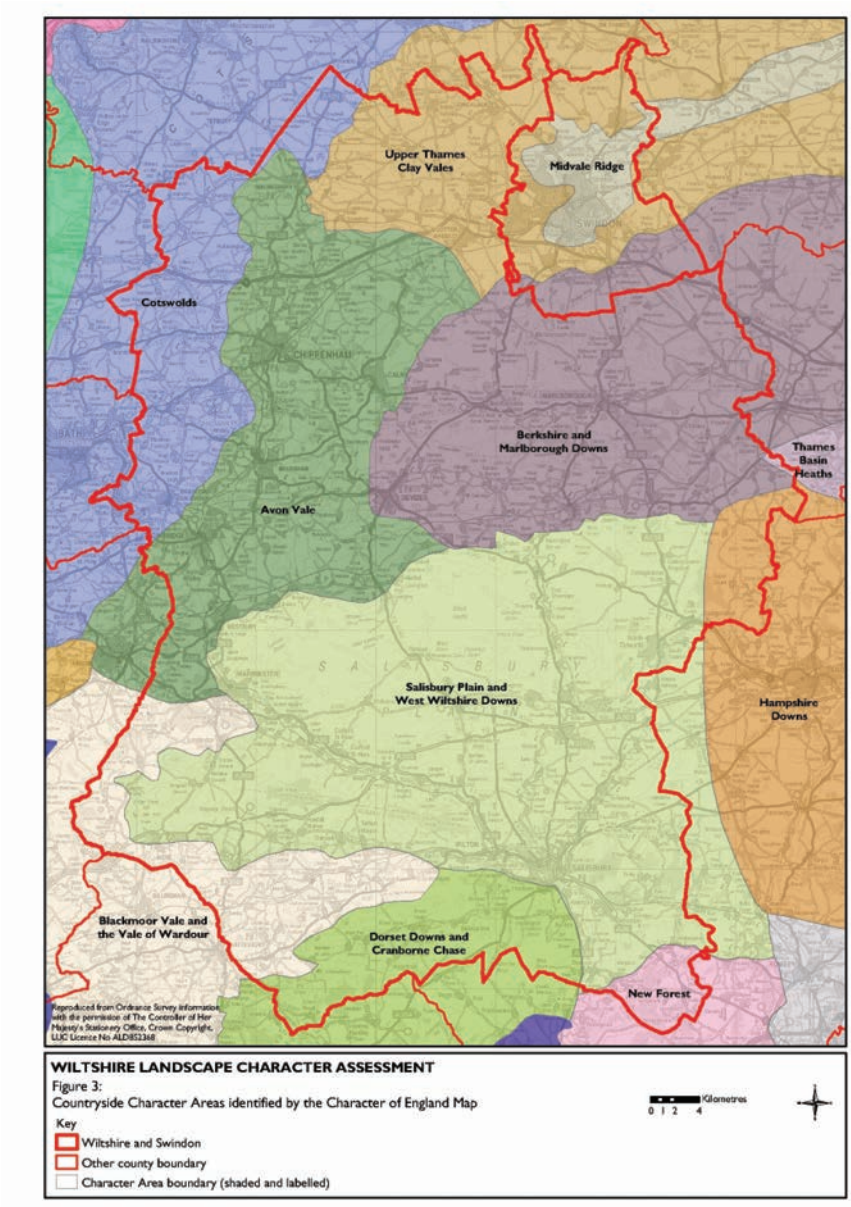


Table 3.1 Landscape character assessment transport related issues.

Character area	Transport related issues
107: Cotswolds	• There is pressure for expansion of villages and for the creation of new rural settlements, particularly those within easy reach of major towns and cities. Much new building has been infilling and unsympathetic in design and materials. Many farm buildings have been converted to residential use. • Tourism and through-traffic have brought a requirement for upgraded roads, bypasses and through-routes with associated upgrading and an increased number of signs for minor routes. • There is pressure for facilities at tourist honeypots, with associated congestion, erosion of footpaths, bridleways and viewing points.
108: Upper Thames Clay Vales: Wiltshire	• None identified
116: Berkshire and Malborough Downs	• Pressure for new roads and improvements to existing roads.

Character area	Transport related issues
	• Pressure for new motorway services, petrol stations and other associated developments along major routes. • Recreational pressures from conflicting interest between walkers, motor-cyclists and off-road vehicles on downland tracks.
117: Avon Vales	• Several major roads cut through the area and there is pressure for roadside development. Infill between settlements and bypasses or realigned roads is widespread. New roads need to take account of the subtleties in the landform.
130: Hampshire Downs	• Development of major new roads and improvements has significantly diminished the character of the landscape, such as the M3 cutting at Twyford Down.
131: New Forest	• There have been continuous development pressures, in particular for housing, to meet the demand from commuters to the Southampton area. This has meant that some settlements, particularly on the Forest fringe, have grown and lost their dispersed character, whilst the towns on the coast have expanded. • In recent decades the area has grown enormously in popularity as a place to visit for recreation. Volumes of traffic and numbers of visitors have steadily increased, as have the facilities provided for them. This has resulted in minor but widespread changes, for instance through signs, waymarking, gates and car parks which tend to clutter the area. • The widening and fencing of the A31 road has allowed more people to gain access to the area but it also effectively divides the northern part of the Forest from the southern. •
132: Salisbury Plain and West Wiltshire Downs	• There are several trunk roads across the Plain and the A303 runs directly past Stonehenge. There are strong pressures to upgrade the road to dual carriageway at this point and other road improvements could have significant impacts.
133: Blackmore Vale and the Vale of Wardour	• Improvements to the A303 and A30 could have a significant effect on the landscape.
134: Dorset Downs and Cranborne Chase	• Several major roads pass through the area. The associated earthworks, lighting and signs are likely to be particularly prominent in such an open landscape.

3.13 The landscape character assessment of Wiltshire reports that approximately one third of Wiltshire's landscape is in moderate condition, with none in poor condition; in fact most of Wiltshire's landscape is in good condition. On the whole the actions stated in the factsheets are for land owners and countryside managers, however there are some transport related issues and actions which require some attention.

New Forest National Park

3.14 An area to the South East of Wiltshire now forms part of the New Forest National Park. This designation seeks to conserve the wildlife, physical characteristics, cultural heritage, landscape qualities and amenity interest of the New Forest. The New Forest National Park Authority acquired its full statutory powers, functions and responsibilities in April 2006.

Green Belt

3.15 Green Belts have been an essential element of planning policy for over forty years in the UK and the fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open. Approximately 6,980 ha in Wiltshire are designated as Green Belt, which is part of the Bath and Bristol Green Belt. The majority of land is in West Wiltshire (5,180 ha) with the remainder in North Wiltshire (1,800 ha).

4. Environmental problems and issues

4.1 These are key environmental problems and issues for landscapes in Wiltshire:

Table 4.1 Environmental problems/issues and opportunities

Issues/problems	Likely future environmental baseline and climate change impacts without some intervention	Implications for transport/Opportunities offered by LTP3
UK housing targets and the overall general trend for increasing transport is likely to create pressures on landscapes through visual intrusion such as traffic flow, traffic management and new infrastructure.	Wiltshire's landscape is of national importance and provides local distinctiveness. There is a close inter-relationship between landscape quality and its value as a wildlife habitat. The ecological and visual value of the landscapes may be lost which could be catastrophic for certain species of flora and fauna as well as tourism and the economy. Climate change will alter the landscape, soils will dry out much more rapidly in summer, whilst winter flooding and wind damage becomes more prominent, all of these can and will significantly change the landscape.	• LTP3 needs to actively reduce traffic growth. • The appropriate use of traffic management measures and use of building materials. • The implementation of pedestrianisation schemes where feasible. • Habitat creation in existing and new transport corridors. • Recording of wildlife casualties.
The transportation of minerals and waste by road can cause problems to local communities such as air quality and congestion.	Future growth particularly in the SSCTS will mean that more strategic waste management facilities will be required, which in turn could have an impact on already congested road networks.	Careful consideration of the location of waste management facilities could reduce the amount of CO_2 emissions.

5. Suggested SEA objectives

5.1 These are the suggested SEA objectives and potential monitoring indicators for landscapes:

Table 5.1

To protect and enhance the quality of Wiltshire's landscapes.	• Will it cause changes in traffic flows and the nature of traffic in areas valued for their landscape character? • Will it include the introduction of traffic to tranquil areas?	No. of schemes that have a pro-active approach to protecting and enhancing Wiltshire's landscapes.
To help reduce the impact of transport and improve the quality of urban and rural centres.	• Will it reduce traffic levels, congestion, or the nature of traffic in residential areas/town and village centres. • Will it cause changes that reduce the impact of transport on the townscape, which many include changes to highway signage, lighting, street furniture, or introduce features that enhance the character of towns.	

6. Evaluation of the draft plan

6.1 Evaluating the effects of the draft plan entailed the following:

- Identifying the effects of the plan against the SEA objectives, including identifying changes in the future baseline, which are predicted to arise from implementation of the plan.
- Assessing the significance of these effects. This means describing these changes in terms of the nature and the magnitude of the impact and the sensitivity of the receiving environment.
- An assessment of the likely changes to the future baseline which may have been caused by secondary, cumulative and synergistic impacts.

6.2 Evaluation involves judging whether or not a predicted effect is likely to be significant. The results of the evaluation are categorised by the nature of the effect using the key as shown in Table 6.1.

Table 6.1 SEA significance scores and criteria

Score	Description	Symbol/Key
Significant positive effect	The plan addresses all the elements that are required to protect the environment and address the relevant sustainability issues in Wiltshire and would help achieve all of the applicable SEA objectives. The plan also sets out how, where and when these policies will be implemented and these will have a positive impact in relation to characteristics of the effect and the sensitivity of the receptors.	++
Minor positive effect	The plan addresses all the elements that are required to protect the environment and address the sustainability issues in Wiltshire and would help achieve all of the SEA objectives.	+
Partial positive/partial negative effect	The plan addresses some of the elements that are required to protect the environment and address the sustainability issues in Wiltshire and would help achieve or partially achieve the SEA objectives. There is also an element of the plan that conflicts with some of the SEA objectives.	+/-
No significant effects	The plan does not have an effect on the achievement of the SEA objectives	O
Significant negative effect	The plan conflicts with some of the SEA objectives. The plan also sets out, how, where, and when these policies will be implemented and these will have a negative effect with relation to characteristics of the effect and the sensitivity of the receptors.	--
Minor negative effect	The plan conflicts with some of the SEA objectives.	-
Uncertain	It is unclear whether there is the potential for a negative or positive effect on the SEA objective.	?

6.3 The impact of the draft strategy/plan and the significance on landscapes is as follows:

Accessibility Strategy		
Impact of the draft Accessibility Strategy (including nature and spatial extent of the impact, probability, duration, frequency and reversibility)	**Significance of the effect**	**Suggested mitigation and enhancement measures**

Accessibility Strategy		
Where there is more than one objective these will be addressed individually for each strategy.		
(A&B) Some potential reductions in overall traffic levels could benefit urban townscapes. Increased signage and lighting could be detrimental to streetscene, see mitigation.	**+/-**	**Mitigation**: Infrastructure to be in keeping with local environment by using wherever possible local materials.

Cycling Strategy		
Impact of the draft Cycling Strategy (including nature and spatial extent of the impact, probability, duration, frequency and reversibility) Where there is more than one objective these will be addressed individually for each strategy.	**Significance of the effect**	**Suggested mitigation and enhancement measures**
(A&B) Increased cycling and a reduced need to travel by car could help to reduce the impact of traffic particularly in urban areas. Increased cycling infrastructure and signage may be detrimental, see mitigation.	**+/-**	**Mitigation:** Infrastructure will need careful consideration and should be in keeping with local environment.

Powered Two-Wheeler Strategy		
Impact of the draft Powered Two-Wheeler Strategy (including nature and spatial extent of the impact, probability, duration, frequency and reversibility) Where there is more than one objective these will be addressed individually for each strategy.	**Significance of the effect**	**Suggested mitigation and enhancement measures**
(A&B) Increased motorcycling and a reduced need to travel by car could help to reduce the impact of traffic particularly in urban areas. Increased infrastructure and signage may be detrimental, see mitigation.	**+/-**	**Mitigation:** Infrastructure will need careful consideration and should be in keeping with local environment.

Smarter Choices Strategy		
Impact of the draft Smarter Choices Strategy (including nature and spatial extent of the impact, probability, duration, frequency and reversibility) Where there is more than one objective these will be addressed individually for each strategy.	**Significance of the effect**	**Suggested mitigation and enhancement measures**
(A&B) Increased sustainable travel and reduced car travel could help to reduce the impact of traffic particularly in urban areas. It is possible that new infrastructure is required which could have some impact on the immediate surrounding area.	**+/-**	

Assessment conclusions - Landscape
Cumulative, synergistic and secondary effects: Reducing the need to travel and encouraging modal shift is likely to result in landscapes and particularly townscapes being relieved of higher levels of traffic to some extent. This may provide opportunities for enhancing the public realm and enhancing townscapes which is particularly pertinent given SO7. However, careful planning of infrastructure improvements is required so that they do not prove detrimental to the areas within which they are situated.

Assessment conclusions - Landscape
Cumulative effects with other plans: At the current time it is not practicable to provide a full and detailed cumulative effects assessment with other transport plans. The greatest potential on landscapes will occur where LTP3 supports the development proposed as part of the forthcoming Wiltshire Core Strategy.
Summary of performance and performance of the strategies as a whole: Overall the strategies have no significant positive or negative effects on landscape and townscapes, however there is some potential for them to encourage modal shift and sustainable travel, and increase accessibility opportunities which will help to reduce the impact of transport and improve the quality of urban centres.

Population

1. Introduction

1.1 As with the majority of the UK, Wiltshire's population is changing bringing with it many implications for policy and plan makers, in particular improved access to services and facilities, which LTP3 should help to address.

2. Review of plans/programmes

2.1 One of the requirements of the SEA process is to consider and take account of any other policies, plans, programmes and environmental objectives which may be relevant to LTP3. This is a key element of the SEA process, since it ensures the work is consistent with up-to-date policy, is informed by reliable information whilst at the same time identifying environmental issues.

2.2 The SEA Directive specifically requires environmental protection objectives established at international, European Community or national levels to be taken into account during the development of the LTP.

2.3 LTP3 will be influenced by other external environmental objectives such as those laid out in policies and legislation. These relationships will be acknowledged to enable potential synergies to be identified and exploited.

2.4 Table 2.1 lists the documents reviewed for the historic environment, with Table 2.2 providing brief summaries for each plan/programme.

Table 2.1 Documents reviewed for population

National
Sustainable Communities: Building for the future (2003)

Table 2.2 National plan and programme summaries for population

National plan/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
Sustainable Communities: Building for the future (2003)	The plan sets out a long-term programme of action for delivering sustainable communities in both urban and rural areas. It aims to tackle housing supply issues in the south east, low demand in other parts of the country, and the quality of our public spaces. The plan includes an increase in resources and major reforms of housing and planning, and a new approach to how we build and what we build. The plan consists of several key elements: • Addressing housing shortage/provision, affordable housing and homelessness	LTP3 will focus efforts to improve community environments through measures to reduce severance, congestion and pollution. The SEA will need to ensure it considers efforts made by LTP3 to improve the local environment of all communities.

National plan/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
	• Addressing low demand and abandonment • Providing a decent standard of social housing • Intensifying efforts to improve the local environment of all communities • Protecting the countryside.	

3. Baseline data

3.1 The South West region covers the largest territory of any of the regions in England at 23,837 square kilometres and is home to a modest population of approximately five million. The estimated population for Wiltshire (excluding Swindon) at mid-year in 2009 was 456,100 (based on mid 2008 figures), see Table 3.1, making it the fifth largest authority in the South West. Over the period 2001-2009, Wiltshire population growth was 5.3%, only just below England's at 5.4%. Population growth was higher for the South West region was higher at 6.1%.

3.2 Wiltshire is predominantly rural, covering 325,500 hectares with an average population density of 1.4 persons per hectare. Population densities across the county vary markedly between the community areas. Salisbury shows the highest density at 21.5 persons per hectare. The community areas with the next highest population densities are Trowbridge, Bradford on Avon, Melksham, Chippenham, Westbury and Corsham. Excluding the city of Salisbury, the southern area of the county is generally more rural than much of the northern and western areas, with Mere, Pewsey, Wilton and Tisbury all having around only 0.5 persons per hectare.

3.3 However, the low population densities in some areas does not take into consideration the various constraining environmental characteristics of Wiltshire that has steered development towards particular places creating dense clusters of development.

Table 3.1 2009 Mid-year population estimates (in thousands)

		Children 0-15		Working age 16-64m/59F		Retirement age 65+M/60+F	
	Total population	Persons	%	Persons	%	Persons	%
UK	61,792,000	11,549,000	18.7	38,236,000	61.9	12,006,900	19.4
England	51,809,700	9,704,400	18.7	32,083,000	61.9	10,022,000	19.3
South West	5,231,200	922,400	17.6	3,113,500	59.5	1,195,300	22.8
Wiltshire	456,100	89,200	19.6	268,500	58.9	98,400	21.6

Source: Office for National Statistics (ONS)

Future population

3.4 As with many other parts of England, the population of Wiltshire (including Swindon) has been steadily increasing and is set to increase by 54,800 persons to 511,100 persons between 2009 and 2026, an increase of just over 12% which is below the South West average of 14.7%, see Table 3.2.

Table 3.2 Total projected population at mid-year 2009 and 2026, total projected population increase and percentage change 2009 to 2026

	2009	2026	Increase (no.) 2009-2026	Change (%) 2009-2026
England	51,817,100	58,334,100	6,517,000	12.6
Wales	5,252,600	6,023,100	770,500	14.7
Wiltshire	456,700	511,500	54,800	12.0

Source: Office for National Statistics (ONS)

3.5 The distribution of growth provides an indication of the likely location of the key areas of demand and this will affect the strategic approach to development. An increasing population suggests an increasing number of homes, jobs, services and facilities will be needed. In order to ensure the continued development of sustainable communities, these uses must be balanced therefore reducing the need to travel beyond the district for employment, retail and other opportunities.

Population structure

3.6 Wiltshire's population is changing and the projected 12% total population increase over the next two decades will be almost entirely (94.4%) accounted for by our retirement age population. The under 16 years of age population is projected to increase from 83,000 to 84,400 persons whilst the working age population aged 16 to 64 for males and 16 to 59 for females, is projected to increase slightly from 274,900 persons to 277,200 persons. With only a 3,700 person increase in the sub-retirement age population.

Table 3.3 Total projected population at mid-year 2009 and 2026 by broad age group, including total percentage change 2009-2026

Total population			Change (%) 2009-2026
Age	**2009**	**2026**	
0-15	83,000	84,400	1.7
16-64M/59F	274,900	277,200	0.8
65+M/60+F	98,700	149,800	51.8

Source: Office for National Statistics (ONS)

3.7 These population structure changes will have many implications, for the elderly there are important accessibility issues to essential services and facilities. At the other end of the age spectrum, the number of school children and young adults in the region will almost be static. Although the total population will rise by up to 12% the number of five to 16 year olds will rise by less than 2%. Clearly this will have implications for employers, for education and for transport.

4. Environmental problems and issues

4.1 These are key environmental problems and issues for population in Wiltshire:

Table 4.1 Environmental problems/issues and opportunities

Issues/problems	Likely future environmental baseline and climate change impacts without some intervention	Implications for transport/Opportunities offered by LTP3
Wiltshire's growing and ageing population may have implications for the provision of services, housing, and employment and recreation facilities, including an increasing demand for transport.	Without the correct balance of uses there will be a requirement to travel beyond the district for employment, retail and other opportunities.	Ensure adequate public transport services are available in all areas. Provide adequate walking and cycling measures to encourage participation in these physical modes of transport. Ensure that there is appropriate publication to highlight the increased provision.

5. Suggested SEA objectives

5.1 Following a review of plans and programmes and the key baseline data issues the SEA objective for population is:

Table 5.1 SEA objective

LTP SEA objective	Decision making criteria	Potential indicators
To provide everyone with the opportunity to access key services.	• Will it improve provision of public and community transport that make key services more accessible? • Will it improve access for certain equality groups (race, gender, disability, age, religion and sexual orientation) and contribute to the DfT goal of promoting greater equality of opportunity for all citizens. This includes changes to physical infrastructures and services.	Access to key services and facilities by means other than the motor car.

6. Evaluation of the draft plan

6.1 Evaluating the effects of the draft plan entailed the following:

- Identifying the effects of the plan against the SEA objectives, including identifying changes in the future baseline, which are predicted to arise from implementation of the plan.
- Assessing the significance of these effects. This means describing these changes in terms of the nature and the magnitude of the impact and the sensitivity of the receiving environment.
- An assessment of the likely changes to the future baseline which may have been caused by secondary, cumulative and synergistic impacts.

6.2 Evaluation involves judging whether or not a predicted effect is likely to be significant. The results of the evaluation are categorised by the nature of the effect using the key as shown in Table 6.1.

Table 6.1 SEA significance scores and criteria

Score	Description	Symbol/Key
Significant positive effect	The plan addresses all the elements that are required to protect the environment and address the relevant sustainability issues in Wiltshire and would help achieve all of the applicable SEA objectives. The plan also sets out how, where and when these policies will be implemented and these will have a positive impact in relation to characteristics of the effect and the sensitivity of the receptors.	++
Minor positive effect	The plan addresses all the elements that are required to protect the environment and address the sustainability issues in Wiltshire and would help achieve all of the SEA objectives.	+
Partial positive/partial negative effect	The plan addresses some of the elements that are required to protect the environment and address the sustainability issues in Wiltshire and would help achieve or partially achieve the SEA objectives. There is also an element of the plan that conflicts with some of the SEA objectives.	+/-
No significant effects	The plan does not have an effect on the achievement of the SEA objectives	O
Significant negative effect	The plan conflicts with some of the SEA objectives. The plan also sets out, how, where, and when these policies will be implemented and these will have a negative effect with relation to characteristics of the effect and the sensitivity of the receptors.	--
Minor negative effect	The plan conflicts with some of the SEA objectives.	-
Uncertain	It is unclear whether there is the potential for a negative or positive effect on the SEA objective.	?

6.3 The impact of the draft strategy/plan and the significance on population is as follows:

Accessibility Strategy		
Impact of the draft Accessibility Strategy (including nature and spatial extent of the impact, probability, duration, frequency and reversibility)	**Significance of the effect**	**Suggested mitigation and enhancement measures**
The strategy seeks to improve access opportunities to key services and facilities. However, whilst there is lack of detail of transport delivery it is still likely there will be a positive impact.	+	

Cycling Strategy		
Impact of the draft Cycling Strategy (including nature and spatial extent of the impact, probability, duration, frequency and reversibility)	**Significance of the effect**	**Suggested mitigation and enhancement measures**
The strategy seeks to improve access opportunities through improved and increased cycling infrastructure, parking and training.	+	

Powered Two-Wheeler Strategy		
Impact of the draft Powered Two-Wheeler Strategy (including nature and spatial extent of the impact, probability, duration, frequency and reversibility)	**Significance of the effect**	**Suggested mitigation and enhancement measures**
The strategy will help increase the range and choice of sustainable travel modes to keys services. The added infrastructure also provides added incentive to use a relatively low cost mode of travel.	+	

Smarter Choices Strategy		
Impact of the draft Smarter Choices Strategy (including nature and spatial extent of the impact, probability, duration, frequency and reversibility)	**Significance of the effect**	**Suggested mitigation and enhancement measures**
The strategy seeks to change travel behaviour and encourage sustainable travel in doing so it will improve access to a range of services and facilities.	+	

Assessment conclusions
Cumulative, synergistic and secondary effects: The strategies in combination with each other will have a positive effect and will provide increased opportunities to access key services as well non-essential services, such as leisure facilities and tourism. They particularly take account of SO5, and seek to reduce the need to travel by car and encourage modal shift. Improved public transport provision will help to take account of the DfT goal of promoting equality of opportunity, especially for the elderly.
Cumulative effects with other plans: At the current time it is not practicable to provide a full and detailed cumulative effects assessment with other transport plans. The greatest potential on population will occur where LTP3 supports the development proposed as part of the forthcoming Wiltshire Core Strategy.
Summary of performance and performance of the strategies as a whole: The strategies have the potential to radically improve accessibility and encourage sustainable travel and therefore will have an overall positive effect.

Healthy communities

1. Introduction

1.1 The Healthy communities topic encompasses many different elements such as health, sport and recreation and access to open space. Transport can have a major role to play when it comes to influencing these matters, and therefore should be important considerations during the SEA process.

2. Review of plans/programmes

2.1 One of the requirements of the SEA process is to consider and take account of any other policies, plans, programmes and environmental objectives which may be relevant to LTP3. This is a key element of the SEA process, since it ensures the work is consistent with up-to-date policy, is informed by reliable information whilst at the same time identifying environmental issues.

2.2 The SEA Directive specifically requires environmental protection objectives established at international, European Community or national levels to be taken into account during the development of the LTP.

2.3 LTP3 will be influenced by other external environmental objectives such as those laid out in policies and legislation. These relationships will be acknowledged to enable potential synergies to be identified and exploited.

2.4 Table 2.1 lists the documents reviewed for the healthy communities, with Table 2.2 providing brief summaries for each plan/programme.

Table 2.1 Documents reviewed for Healthy Communities

National
Choosing Health: Making healthy choices easier - White Paper (2004)
Our health, our care, our say: a new direction for community services (2006)
PPG17 – Planning for Open Space, Sport and Recreation (2002)
Safer Places – The Planning System and Crime Prevention (2004)

Table 2.2 National plan/programme summaries for Healthy Communities

National plans/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
Choosing Health: Making healthy choices easier - White Paper (2004)	This government white paper sets out the key principles for supporting the public to make healthier and more informed choices in regards to their health. It provides information and practical support to get people motivated and improve emotional wellbeing and access to services so that healthy choices are easier to make. This white paper establishes three core principles of a new public health approach:	In line with environmental, anti-congestion and accessibility policies and health policies and targets LTP3 will include policies to encourage cycling and walking.

National plans/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
	1. Informed choice 2. Personalisation 3. Working together. It also establishes a shared set of priorities for action: reducing obesity and improving diet and nutrition; improving mental health; increasing exercise; reducing the numbers of people who smoke; encouraging and supporting sensible drinking; improving sexual health.	
Our health, our care, our say: a new direction for community services (2006)	This white paper sets a new direction for the whole health and social care system. It confirms the vision set out in the Department of Health Green Paper, 'Independence, Well-being and Choice'. There will be a radical and sustained shift in the way in which services are delivered, ensuring that they are more personalised and that they fit into people's busy lives and give people a stronger voice, so that they are the major drivers of service improvement. There will be a radical and sustained shift in the way in which services are delivered - ensuring that they are more personalised and that they fit into people's busy lives. People will be given a stronger voice so that they are the major drivers of service improvement. The White Paper aims to achieve four main goals: • Better prevention services with earlier intervention • Giving people more choice and a louder voice • Tackling inequalities and improving access to community services • More support for people with long-term needs.	In line with environmental, anti-congestion and accessibility policies as well as health policies and targets LTP3 will include policies to encourage cycling and walking. This should help increase levels of exercise and allow people to travel without using a car.
PPG17 – Planning for Open Space, Sport and Recreation (2002)	Open spaces, sport and recreation all underpin people's quality of life. Well designed and implemented planning policies for open space, sport and recreation are, therefore,	LTP3 must ensure it takes this planning guidance into consideration during its preparation.

National plans/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
	fundamental to delivering broader government objectives in areas including urban renaissance, rural renewal, social inclusion and community cohesion, health and well being and in the promotion of sustainable development. Key objectives: 1. Maintain an adequate supply and protect existing open space 2. Support an urban renaissance – local networks of high quality open spaces, sports and recreational facilities 3. Promotion of social inclusion and community cohesion 4. Health and well being – open spaces, sports and recreational facilities play a vital role.	
PPG24 - Planning and Noise (1994)	This PPG gives guidance to local authorities in England on the use of their planning powers to minimise the adverse impact of noise and builds on the advice previously contained in DOE Circular 10/73. It: - outlines the considerations to be taken into account in determining planning applications both for noise-sensitive developments and for those activities which will generate noise; - introduces the concept of noise exposure categories for residential development, encourages their use and recommends appropriate levels for exposure to different sources of noise; and - advises on the use of conditions to minimise the impact of noise.	LTP3 to ensure it takes this planning guidance into consideration during its preparation.
Safer Places – The Planning System and Crime Prevention (2004)	This publication focuses on seven attributes of sustainable communities that are particularly relevant to crime prevention. These are: • Access and movement: places with well defined routes, spaces and entrances that provide for convenient movement without compromising security.	LTP3 will need to consider each of the seven attributes during its preparation and and any subsequent implementation plans.

National plans/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
	• Structure: places that are structured so that different uses do not cause conflict. • Surveillance: places where all publicly accessible spaces are overlooked. • Ownership: places that promote a sense of ownership, respect, territorial responsibility and community. • Physical protection: places that include necessary, well designed security features. • Activity: places where the level of human activity is appropriate to the location and creates a reduced risk of crime and a sense of safety at all times. • Management and maintenance: places that are designed with management and maintenance in mind, to discourage crime in the present and the future.	

3. Baseline data

3.1 Wiltshire's population is relatively healthy compared to the average for England. In 2008, 77% of Wiltshire's residents reported that their health was good or very good, (although this did vary with age). Approximately a third of the population reported that they have a long-standing illness, infirmity or disability, and this increases with age.

3.2 Currently life expectancy for people in Wiltshire is higher than in England and the South West; in Wiltshire it is 79.4 years for men and 83.3 years for women.

3.3 Mortality from all causes in the under-75 age group has been declining in Wiltshire, the South West and England. The two major causes of death of premature death nationally and in Wiltshire, cardiovascular disease (including coronary heart disease and stroke) and cancers. These accounted for over 65% of premature deaths in Wiltshire in 2008.

3.4 Infant mortality rates In Wiltshire declined between 2000/02 and 2005/07 and are lower than those of the South West and England at 3.2 per 1,000 live births in 2005/07

3.5 One of the aims of the Wiltshire Community Strategy is for Wiltshire "to become the healthiest county in which to live by 2012". Over 60% of the Wiltshire population appears in the best quartile in the 'index of multiple deprivation in the health domain' survey which is significantly higher than both the South West and England.

Physical fitness and health

3.6 The 2010 Health Profile for Wiltshire compares the health of the county with the rest of England. Table 3.1 summarises some of the health indicators for Wiltshire. The indicators currently show that approximately 14% of Wiltshire's population participate in physical activity on a regular basis to keep fit, compared to the national average of just over 11%. The indicators also reveal that Wiltshire's children are considerably more physically active, at 59.5% compared to the national average of 49.6%.

3.7 Additional research is required to consider the role of sport and recreation across Wiltshire for improving health, along with a better understanding of the current level of provision.

Obesity

3.8 Nationally the number of overweight and obese people has tripled over the last two decades and this number is still rising. This trend is likely to continue if people are not stimulated to keep active and provided with facilities and services to do so. Obesity rates are indicative of lifestyle and health inequalities. Providing accessible facilities can encourage healthier lifestyles through increased participation in physical activities. Table 3.1 shows that 25% of Wiltshire's adult population and 7.8% of its child population are considered obese.

Table 3.1 Health Indicators for Wiltshire

Health indicators for Wiltshire		
Indicator	**Wiltshire**	**England**
Physically active adults[1]	14.2	11.2
Obese adults[2]	25.0	24.2
Physically active children[3]	59.5	49.6
Obese children[4]	7.8	9.6

1 = % aged 16+ 2007/08

2 = % modelled estimated from Health survey for England 2003-2005

3 = % 5-16 year olds who spend at least 2 hours per week on high quality PE and school sport 2007/08

4 = % children in reception year 2008/09

Walking and cycling

3.9 Across the UK cycling accounts for 1% of all trips and 2% of all trips under 2 miles. Other European countries with similar weather and topography have much higher rates of cycling. Wiltshire has slightly higher than average levels with 4% of people cycling to work in 2001 compared to 3% across England.

3.10 The number of cycling trips in Wiltshire has remained fairly stable since 2001, similar to national trends. There is great potential to increase cycling in Wiltshire, particularly through replacing short car journeys. 40% of commuters in Wiltshire live within cycling distance of work, yet only 3% cycle. Only 10% walk and 2% take the bus to work. Cycling is more popular in higher income households. Wiltshire's relative affluence and high levels of cycle ownership offer a good opportunity to increase levels of cycling. 43% of people in the UK own a bike yet only 15% of people say they use a bike at least once a week. Ownership levels are highest amongst under-16s and higher income quartiles which generally correlates with higher usage levels.

3.11 Cycling and walking needs to play an important role as part of an integrated transport strategy that seeks to promote more sustainable modes of travel whilst reducing reliance on the car.

Rights of way and access to greenspace

3.12 The Countryside and Rights of Way Act 2000 provides for public access on foot to certain types of land, amends the law relating to public rights of way, increases protection for SSSIs, strengthens wildlife enforcement legislation, and provides for better management of AONBs. Wiltshire's network of public rights of way is over 6,100km (3,790 miles) long and together with 27,000 hectares (66,700 acres) of land; provide access to a wide range of landscapes and communities.

3.13 There is little data on access to greenspace in Wiltshire at the present time, however, the Wiltshire biodiversity action plan made some assessment of greenspace within urban areas. It concludes that, currently there are isolated pockets which are of varying standard. Urban greenspace can provide excellent habitat for wildlife while also providing corridors and greenway links to habitats.

3.14 There is also a strong and well documented relationship between health and access to the countryside. There is are many diverse opportunities for physical activity provided by a well-maintained countryside access network. Access to the countryside also makes a direct and positive contribution to a person's well being and mental state.

Road safety and accidents

3.15 Road safety is monitored by looking at the number of people killed or seriously injured (KSI) and the number of children killed or seriously injured. In 2009, there were a total of 235 people killed or seriously injured on Wiltshire's roads and overall there is currently a pattern of decreasing road casualties and road deaths on Wiltshire's roads, see Figures 3.1 and 3.2. However, Figure 3.2 reveals that in 2007 child KSI casualties decreased by a rather unusual amount, which would not normally be expected and this has meant that the following two years have seen a rise on this amount, although both of last two years are still somewhat lower than 2006.

3.16 Progress on improving network safety continues with cluster reviews of accident sites and safety audits of all new schemes and maintenance scheme ongoing.

Figure 3.1 Total KSI casualties

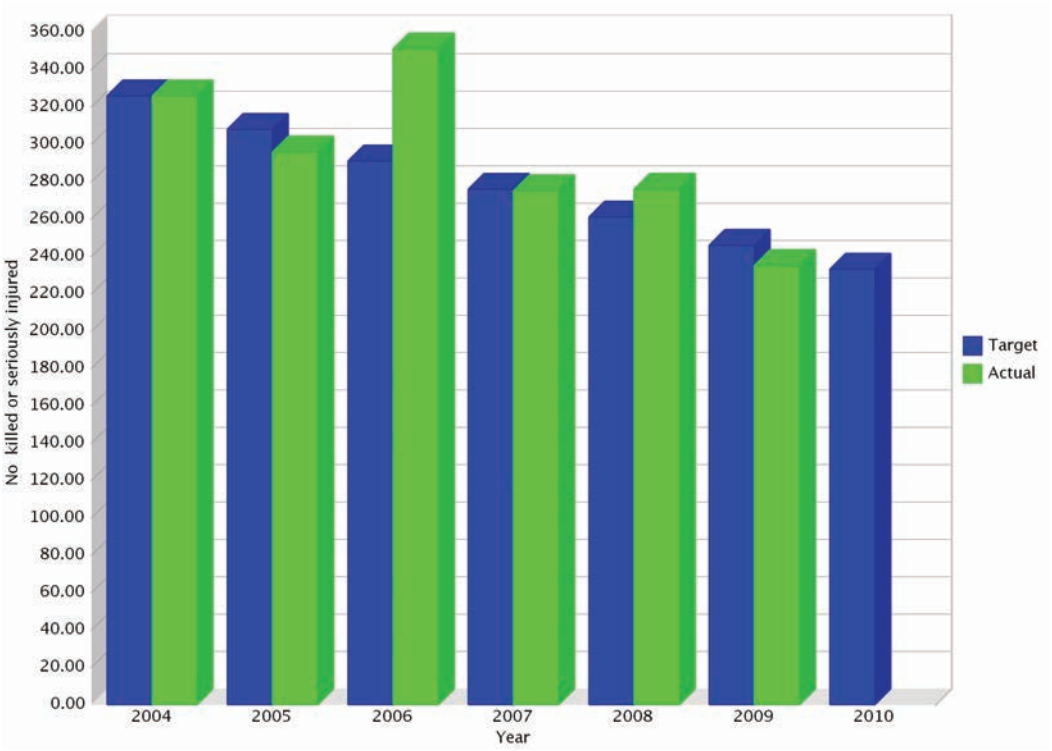
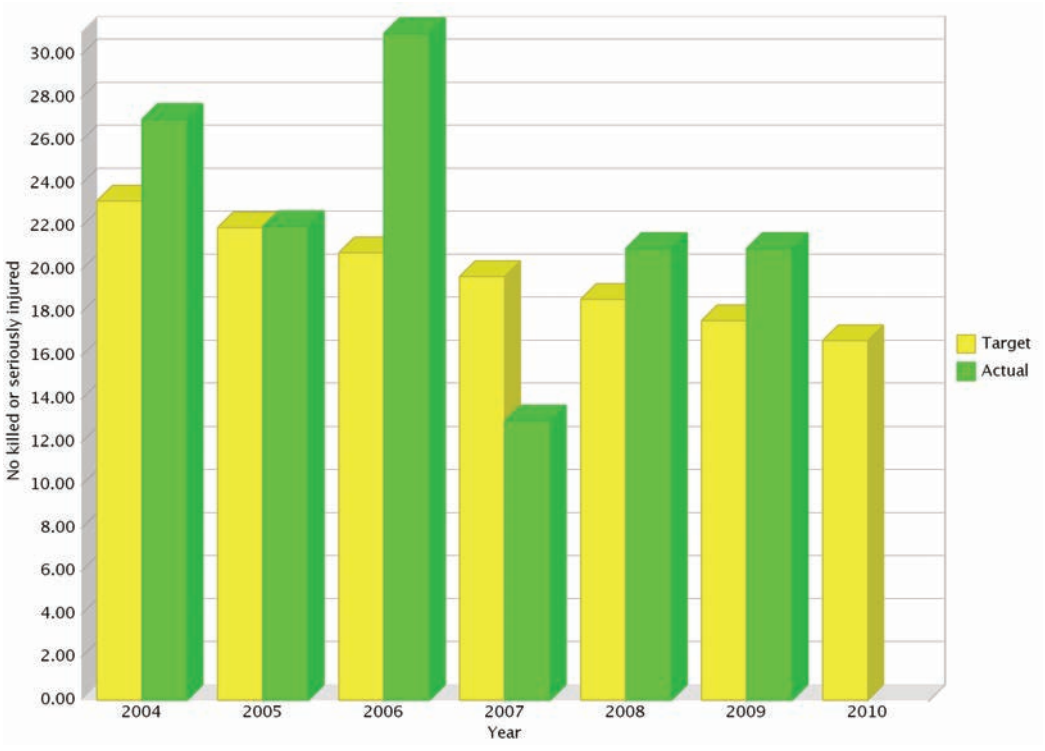
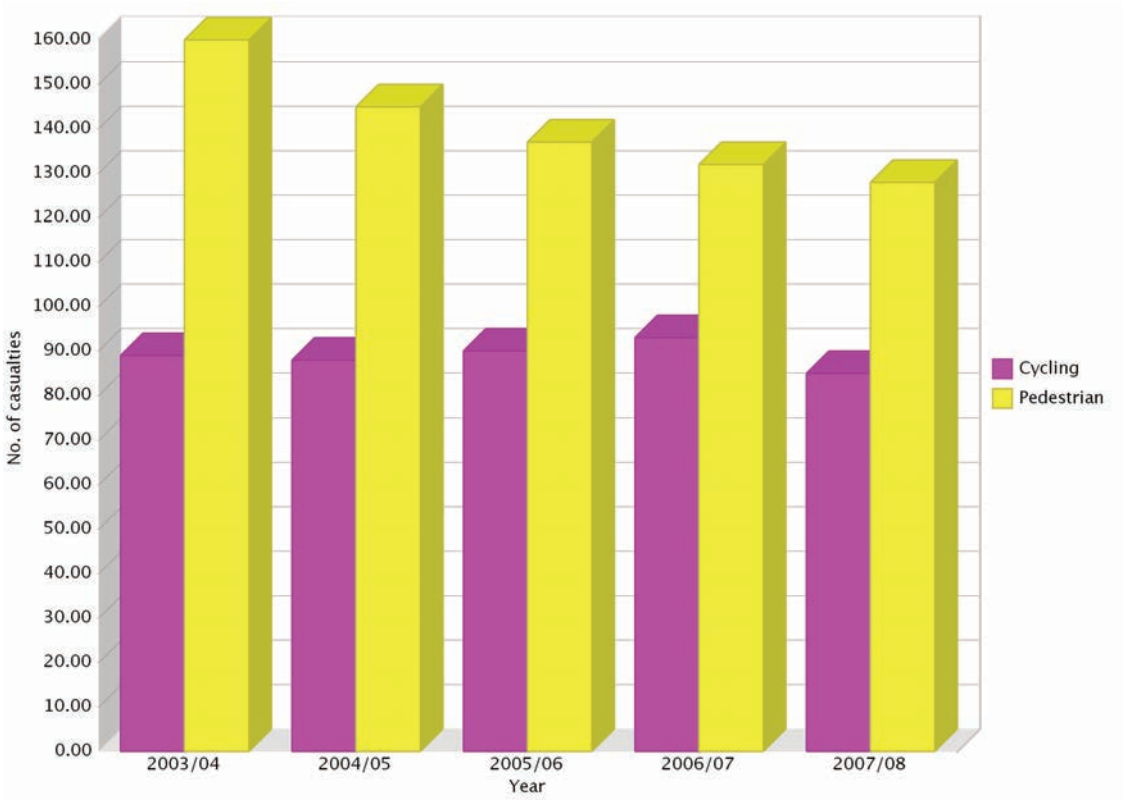


Figure 3.2 Total child KSI casualties



3.17 The figures for pedestrian casualties show a positive downward trend as per Figure 3.3, the figures for cyclist casualties also show a general downward trend, although this hasn't not been as consistent as the pedestrian casualties.

Figure 3.3 Cycling and pedestrian casualties



Noise

3.18 Noise can have a significant effect on the environment and on the quality of life enjoyed by individuals and communities. Some of the main sources of noise across Wiltshire are likely to include impacts from increasing levels of traffic on roads and various noise generating activities of the Ministry of Defence. The European Environmental Noise Directive requires European Member States to establish through the process of noise mapping, the number of people exposed to noise above certain levels from major roads, major railways, major airports and large urban areas. Once these areas are mapped the Directive requires member states to adopt action plans to manage noise issues and effects, including noise reduction if necessary.

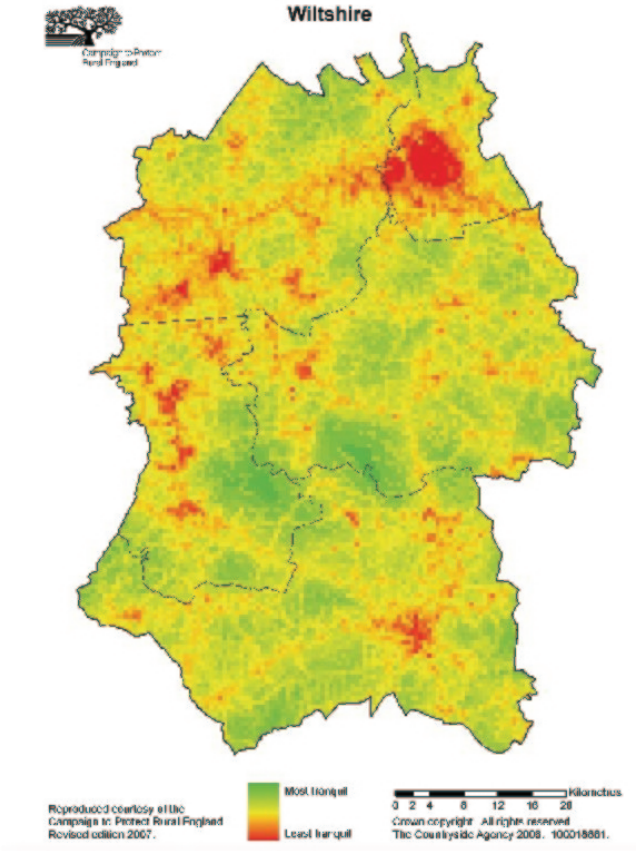
3.19 The Department for Environment, Food and Rural Affairs (DEFRA) is currently in the process of mapping areas of the country that are most significantly affected by noise. Planning Policy Guidance 24 guides local authorities in England on the use of their planning powers to minimise the adverse impacts of noise. It outlines the considerations to be taken into account in determining planning applications for those activities which generate noise, such has traffic.

Tranquillity

3.20 Tranquillity is important for everyone and over the years it has become increasingly harder to experience. It is threatened by the steadily rising urban areas and the development of the road network and growth in road and air traffic. Tranquillity has many benefits, rural areas rely on tranquil areas to attract visitors, e.g. exposure to rural areas and wildlife is known to be good for our health and there is evidence of the importance of the natural environment in helping people to recover from stress.

3.21 The Campaign to Protect Rural England (CPRE) has produced tranquillity maps for each county in England as shown in Map 3.1. The maps are made up of many different layers of information. Each 500m by 500m square of England has been given a tranquillity score, based on 44 different factors which add to or detract from people's feelings of tranquillity. These scores have been colour coded – darkest green for those places most likely to make people feel tranquil, brightest red for those least likely. But squares that are the same colour and have the same score may differ markedly in the different 'components' of tranquillity – both positive and negative – which determine their overall score.

Map 3.1 Tranquil areas in Wiltshire

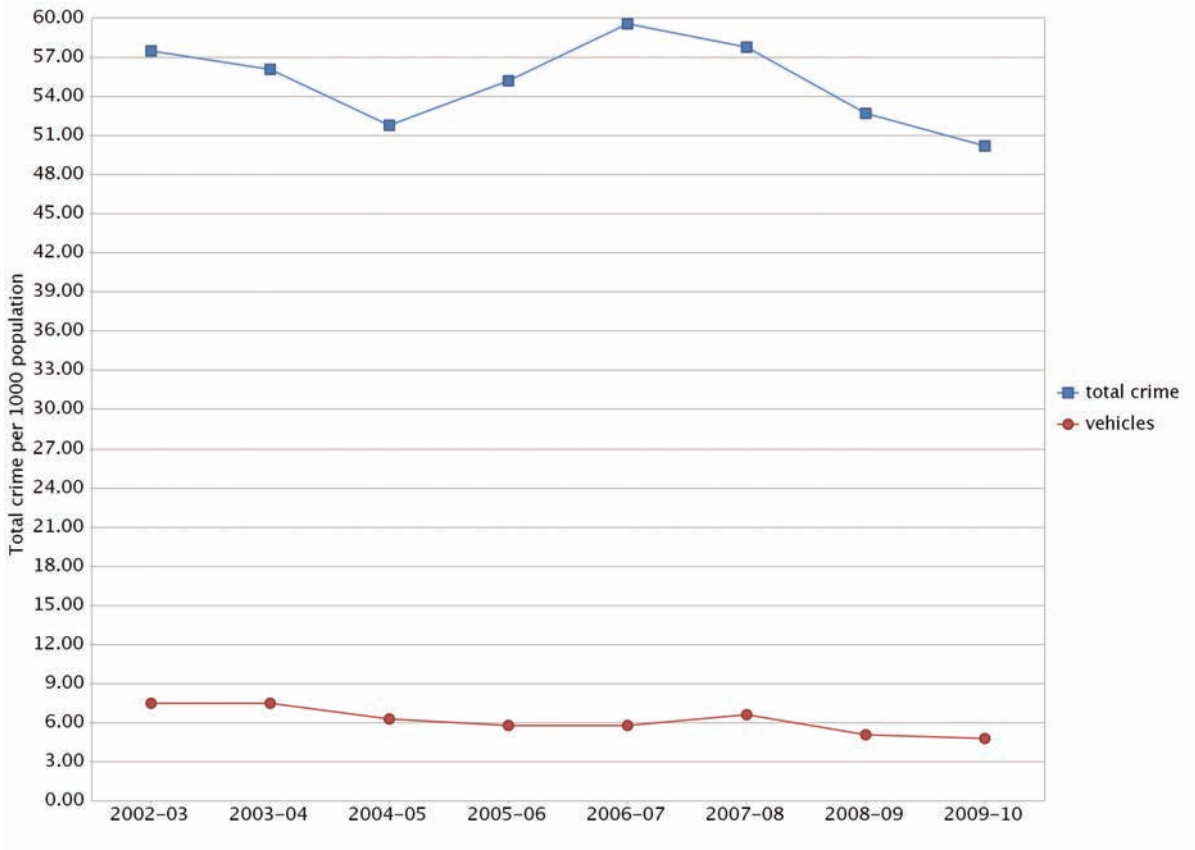


The average scores for all local authorities has been compiled from the map and ranged from +28.6 in Northumberland (the most tranquil) to -79.5 in Slough Unitary Authority. Wiltshire scored 3.04 and features 10th of 87 local authorities.

Crime

3.23 Crime is low within Wiltshire. Nevertheless, there is still a strong perception and fear of crime. Trends indicate that the total number of recorded crimes per 1,000 population has been stable or slightly decreasing over the past 12 months. This is also true of vehicle related crimes, both of these trends are shown in Figure 3.4. In general terms Wiltshire is performing better than the rest of country, but worse than the rest of the South West. Although the level of crime is low, perception that crime has increased is high.

Figure 3.4 Wiltshire's crime offences 2002/03-2009/10



4. Environmental problems and issues

4.1 These are key environmental problems and issues for healthy communities in Wiltshire:

Table 4.1 Environmental problem/issues and opportunities

Issues/problems	Likely future environmental baseline and climate change impacts without some intervention	Implications for transport/Opportunities offered by LTP3
The number of overweight and obese people has tripled over the last two decades and is still rising. Obesity rates are indicative of lifestyle and health inequalities.	Obesity rates will continue to rise, creating more pressure on the health system both locally and nationally.	To provide accessible services which encourage modes of travel that require some form of physical activity, such as walking and cycling.
Noise impacts created by the transport system can cause mental and physical distress to both human and animal life.	The noise effects of the transport will continue to be felt and may lead to a decline in some wildlife species. It may also cause sleep and rest deficiencies in individuals which may result in a drop in work productivity, with a knock-on effect on the economy.	To reduce the effects and impact of the transport system, through the introduction of softer measures and transport demand techniques.
There is a pattern of decreasing road casualties and road deaths on Wiltshire's roads.	If traffic growth is left un-curbed this downward trend may falter and there may be a rise in the number of road traffic accidents.	Implement measures that will reduce the numbers of vehicles using the road network system, such as soft measures.

5. Suggested SEA objectives

5.1 Following a review of plans and programmes and the key baseline data issues the SEA objective for healthy communities is:

Table 5.1 SEA objectives

LTP SEA objective	Decision making criteria	Potential indicators
To reduce the need/desire to travel by car and encourage physical modes of transport.	• Will it lead to an increase in walking and cycling numbers?	• Accessibility to GP surgery • No of people killed or seriously injured.
To reduce the noise impact of the transport system.	• Will it reduce the amount of traffic in tranquil areas? • Will it affect sensitive receptors within 200m of a noise change? • Will it affect areas adjacent to habitats where sensitive species breed? • Will it affect areas where noise is likely to change in nature as a result of an increase in HGVs or change to the time of traffic?	
To reduce the adverse effects of transport on safety.	• Will it lead to a decrease in traffic accidents/accident severity and help meet KSI targets?	

6. Evaluation of the draft plan

6.1 Evaluating the effects of the draft plan entailed the following:

- Identifying the effects of the plan against the SEA objectives, including identifying changes in the future baseline, which are predicted to arise from implementation of the plan.
- Assessing the significance of these effects. This means describing these changes in terms of the nature and the magnitude of the impact and the sensitivity of the receiving environment.
- An assessment of the likely changes to the future baseline which may have been caused by secondary, cumulative and synergistic impacts.

6.2 Evaluation involves judging whether or not a predicted effect is likely to be significant. The results of the evaluation are categorised by the nature of the effect using the key as shown in Table 6.1.

Table 6.1 SEA significance scores and criteria

Score	Description	Symbol/Key
Significant positive effect	The plan addresses all the elements that are required to protect the environment and address the relevant sustainability issues in Wiltshire and would help achieve all of the applicable SEA objectives. The plan also sets out how, where and when these policies will be implemented	++

Score	Description	Symbol/Key
	and these will have a positive impact in relation to characteristics of the effect and the sensitivity of the receptors.	
Minor positive effect	The plan addresses all the elements that are required to protect the environment and address the sustainability issues in Wiltshire and would help achieve all of the SEA objectives.	+
Partial positive/partial negative effect	The plan addresses some of the elements that are required to protect the environment and address the sustainability issues in Wiltshire and would help achieve or partially achieve the SEA objectives. There is also an element of the plan that conflicts with some of the SEA objectives.	+/-
No significant effects	The plan does not have an effect on the achievement of the SEA objectives	O
Significant negative effect	The plan conflicts with some of the SEA objectives. The plan also sets out, how, where, and when these policies will be implemented and these will have a negative effect with relation to characteristics of the effect and the sensitivity of the receptors.	--
Minor negative effect	The plan conflicts with some of the SEA objectives.	-
Uncertain	It is unclear whether there is the potential for a negative or positive effect on the SEA objective.	?

6.3 The impact of the draft strategy/plan and the significance on healthy communities is as follows:

Accessibility Strategy		
Impact of the draft Accessibility Strategy (including nature and spatial extent of the impact, probability, duration, frequency and reversibility) Where there is more than one objective these will be addressed individually for each strategy.	**Significance of the effect**	**Suggested mitigation and enhancement measures**
(A) The strategy will work in conjunction with the cycling and walking strategies and will therefore seek to encourage travel by these active modes.	+	**Mitigation:** Measures required to upgrade older buses. Older vehicles tend not to be as efficient as new vehicles on the market such as those with Euro 5 or 6 engines. Grants and financial incentives could be offered to transport operators to invest in newer vehicles which are quieter.
(B) Increased sustainable travel should reduce travel by noisier modes. However, funding restraints may mean that older public transport vehicles are used which will not as quiet as new more efficient vehicles.	+/-	
(C) Increased walking and cycling levels may reduce the number of motorised vehicles on the road network, which should help to improve road safety. However this could be counter productive as increased walkers and cyclists may increase the chances of more KSI people using these modes.	+/-	

Cycling Strategy		
Impact of the draft Cycling Strategy (including nature and spatial extent of the impact, probability, duration, frequency and reversibility) Where there is more than one objective these will be addressed individually for each strategy.	**Significance of the effect**	**Suggested mitigation and enhancement measures**
(A) Cycling infrastructure will be improved and increased which should should enable and encourage travel by the physical mode of cycling.	+	

Cycling Strategy		
(B) Enabling and encourage cycling should help to reduce travel by the noisier modes.	+	
(C) By providing cycle training for children should help improve overall cycle safety.	+	

Powered Two-Wheeler Strategy		
Impact of the draft Powered Two-Wheeler Strategy (including nature and spatial extent of the impact, probability, duration, frequency and reversibility) Where there is more than one objective these will be addressed individually for each strategy.	**Significance of the effect**	**Suggested mitigation and enhancement measures**
(A) Potentially reduces the need to travel by car however does not necessarily encourage physical modes of travel. No significant effect.	O	
(B) Incentives to increase motorcycle travel will help reduce the noise impact of the transport system.	+	
(C)The strategy seeks to contribute to broader road safety strategies and help reduce two-wheeler casualties.	+	

Smarter Choices Strategy		
Impact of the draft Smarter Choices Strategy (including nature and spatial extent of the impact, probability, duration, frequency and reversibility) Where there is more than one objective these will be addressed individually for each strategy.	**Significance of the effect**	**Suggested mitigation and enhancement measures**
(A) Working in conjunction with the cycling and walking strategies, it will encourage and enable travel by these physical modes.	+	
(B Encouraging and increasing sustainable travel whilst reducing the need to travel by car will help lessen the noise impact of the transport system.	+	
(C) Increased walking and cycling levels may reduce the number of motorised vehicles on the road network, which should help to improve road safety. However this could be counter productive as increased walkers and cyclists may increase the chances of more KSI people using these modes.	+/-	

Assessment conclusions
Cumulative, synergistic and secondary effects: The cumulative effects of the strategies have the potential to be positive but is dependant to some extent on the amount of modal shift. Stand alone measures are unlikely to yield any significant positive effects, however where measures are planned and thoroughly integrated there are opportunities to increase significant amounts of physical mode travel. Similarly, reductions in car travel will result in reduced noise levels in towns and built up areas. Reductions in car travel will also likely result in improvements to air quality which may also encourage further take up of walking and cycling.
Cumulative effects with other plans: Where these strategies are implemented in conjunction with other plans and strategies, such as the Road Safety Strategy, and where there specific road safety concerns, it should result in fewer serious road safety accidents. Fewer road accidents and casualties can also potentially encourage more walking and cycling.

Assessment conclusions
Summary of performance and performance of the strategies as a whole: Overall the strategies should make a positive contribution to healthy communities, with each of the strategies contributing to the strategic transport objectives.

Inclusive communities

1. Introduction

1.1 An inclusive community is one that can readily access life's essential services and facilities allowing residents to make the most of live their everyday lives whilst building strong and resilient communities. Communities that suffer with social exclusion are those that are remote from essential services and with little or no opportunity to travel easily to such services.

2. Review of plans/programmes

2.1 One of the requirements of the SEA process is to consider and take account of any other policies, plans, programmes and environmental objectives which may be relevant to LTP3. This is a key element of the SEA process, since it ensures the work is consistent with up-to-date policy, is informed by reliable information whilst at the same time identifying environmental issues.

2.2 The SEA Directive specifically requires environmental protection objectives established at international, European Community or national levels to be taken into account during the development of the LTP.

2.3 LTP3 will be influenced by other external environmental objectives such as those laid out in policies and legislation. These relationships will be acknowledged to enable potential synergies to be identified and exploited.

2.4 Table 2.1 lists the documents reviewed for the inclusive communities, with Table 2.2-2.4 providing brief summaries for each plan/programme.

Table 2.1 Documents reviewed for Inclusive Communities

International
The Johannesburg Declaration of Sustainable Development (2002)
European Sustainable Development Strategy 2001
National
Our Shared Future (2007)
PPS1 - Delivering Sustainable Development (2005)
PPS7 - Sustainable Development in Rural Areas (2004)
The Rural Strategy (2004)
Local
A Sustainable Community Strategy for Wiltshire 2007-2016
Wiltshire Local Area Agreement 2007-2010 Final Report (2008)
Wiltshire Council (2010) People, Places and Promises: Wiltshire Community Plan 2011 - 2026

Table 2.2 International plan/programme summaries for Inclusive Communities

International plan/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
The Johannesburg Declaration of Sustainable Development (2002)	To strengthen and improve governance at all levels for the effective implementation of Agenda 21.	Support the sustainability aims of Agenda 21 at the local level and reflect the principles of sustainable development at a local level.
European Sustainable Development Strategy 2001	The aim of the EU Sustainable Development Strategy is to identify and develop actions to enable the EU to achieve a continuous long-term improvement of quality of life through the creation of sustainable communities able to manage and use resources efficiently, able to tap the ecological and social innovation potential of the economy and, in the end, able to ensure prosperity, environmental protection and social cohesion. Objectives: • Limit climate change and increase the use of clean energy • Address threats to public health • Combat poverty and social exclusion and address the economic and social constraints of an ageing society • Manage natural resources in a responsible way • Improve the transport system and land use management.	LTP3 will need to reflect these objectives.

Table 2.3 National plan/programme summaries for Inclusive Communities

National plan/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
Our Shared Future (2007)	This report sets out proposals for building integration and cohesion at a local level. It provides practical approaches to building communities' own capacity to reduce tensions and create opportunities for more integrated and cohesive societies. A collection of case studies illustrating examples of local good practice is offered as a	LTP3 and the SEA will both need to reflect the need to create, and foster sustainable inclusive communities.

National plan/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
	companion piece to the local messages in the report; it is hoped that these will promote creative ideas on how to take the recommendations forward. There are four key principles that are hoped will underpin a new understanding of integration and cohesion: 1. The sense of shared futures which is at the heart of the recommendations with emphasis on articulating what binds communities together rather than what divides them 2. An emphasis on a new model of rights and responsibilities 3. An ethics of hospitality – a new emphasis on mutual respect and civility that recognises that alongside the need to strengthen social bonds within groups, the pace of change across the country reconfigures local communities rapidly, meaning that mutual respect is fundamental to issues of integration and cohesion 4. A commitment to equality that sits alongside the need to deliver visible social justice, to prioritise transparency and fairness, and build trust in the arbitration institutions.	
Securing the Future: delivering UK sustainable development strategy (2005)	Five guiding principles: • Living within environmental limits • Ensuring a strong, healthy and just society • Achieving a sustainable economy • Promoting good governance • Using sound science responsibility.	LTP3 to consider principles of the strategy.

National plan/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
The Rural Strategy (2004)	Sets out the government's approach to rural policy and delivery, based on targeting the greatest needs and working in partnership at national, regional and local level. Objectives: Three priorities for rural policy: • economic and social regeneration – supporting enterprise across rural England, but targeting greater resources at areas of greatest need • social justice for all - tackling rural social exclusion wherever it occurs and providing fair access to services and opportunities for all rural people • enhancing the value of our countryside - protecting the natural environment for this and future generations.	LTP3 will need to reflect these priorities.
PPS7: Sustainable Development in Rural Areas (2004)	The policies in this statement apply to the rural areas, including country towns and villages and the wider, largely undeveloped countryside up to the fringes of larger urban areas. Quality of life and the environment in rural areas need to be enhanced through the sustainable development of communities and their environment. Relevant objectives include: 1. raising the quality of life and the environment in rural areas 2. promoting more sustainable patterns of development 3. promoting the development of the English regions by improving their economic performance so that all are able to reach their full potential 4. promoting sustainable, diverse and adaptable agriculture sectors.	LTP3 will need to ensure it takes into full consideration these objectives when promoting and carry development in rural areas.

Table 2.4 Local plan/programme summaries for Inclusive Communities

Local plan/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
Sustainable Community Strategy for Wiltshire 2007-2016	Vision for 'Strong and Sustainable Communities in Wiltshire'.	LTP3 objectives will take into consideration the principles of the SCS for Wiltshire.
Local Agreement for Wiltshire and Local Area Agreement (2008-2011)	Key delivery mechanism for the SCS for Wiltshire.	LTP3 will need to fully consider these agreements during its preparation.
Wiltshire Council (2010) People, Places and Promises: Wiltshire Community Plan 2011 - 2026	People, places and promises is the proposed new Wiltshire Community Plan to take the place of the existing sustainable community strategy. The plan will guide the actions of the many public and voluntary agencies and partnerships that work in the county to work towards making Wiltshire a better place to live and work over the next 15 years. The plan contains a number of objectives relating to the three priorities listed above. These are briefly: **Economy:** • Strengthen the connectivity of the county. • Develop a wide consensus on how Wiltshire responds to the UK's financial difficulties. • Encourage the restructure of the economy. • Forge much stronger links with universities. • Ensure that the establishment of the super garrison on Salisbury Plain brings positive benefits. • Define a vision for what sort of place Salisbury, Trowbridge and Chippenham should become. • Ensure that the Wiltshire workforce benefits from better preparation of young people. **Disadvantage and inequality:** • Ensure that Wiltshire is able to meet the needs of its rapidly growing older population. • Address, as far as is possible, the lack of affordable housing.	LTP3 will need to ensure it fully considers these objectives during its preparation.

Local plan/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
	• Reduce inequality in the county. • Help people to take more responsibility for their futures. • Continue to support the thriving voluntary and community sector. **Climate change:** • Strongly promote the refitting of all existing public buildings and private homes with energy efficient features. • Reduce the level and frequency of out-commuting. • Significantly increase the amount of electricity and heat generated by local renewable schemes. • Agree a way forward where all can contribute to achieving a major shift to sustainable transport. • Prepare for and protect vulnerable members of communities from the impacts of unavoidable climate change. • Explore the extent to which Wiltshire needs to improve its own food security. Create a series of living landscapes across the county. **Overarching:** • Produce a design framework for the county which encourages the development of communities, not just houses. • Promote a greater public understanding and ownership of the difficult choices facing Wiltshire • Increase public confidence and trust in the police, NHS and council services and the local democratic process. The plan contains a number of objectives relating to inclusive communities.	

3. Baseline data

3.1 The concept of inclusive communities embraces a range of issues relating to equality and social cohesion. These include access to housing, services and other opportunities, the needs of particular social groups and the level of active involvement in community activities.

Accessibility in Wiltshire

3.2 The term accessibility can be used in relation to the provision of essential services and facilities to all members of the community, and also in relation to the physical environment and the physical barriers people may face in being able to move about their communities.

3.3 Improving accessibility in Wiltshire is an important and significant challenge because of:

- the rural nature of the county
- the centralisation of services and facilities
- increasing car ownership and use
- certain groups/individuals not having access to private transport
- the difficulty in meeting accessibility needs in a cost effective way.

3.4 There is a need to ensure that employment, education, health, shops and other essential facilities are accessible to all, and not just those with access to a private car. In Wiltshire there are different factors that affect accessibility to transport and services, especially in rural areas. These are mainly associated with the cost and provision of public transport services, the location and provision of retail and healthcare facilities, and the lack of opportunities to education and employment. Failure to recognise and tackle accessibility issues can result in social exclusion for many vulnerable members of society. In order to maintain and improve sustainability, future housing development needs to take into account the location of services and to consider constructing additional services where needs are not met by existing services.

Car ownership

3.5 Car ownership and use are high in Wiltshire and across the South West in general, reflecting the rural nature and lack of access to services in these areas, see Table 3.1. Between 1981 and 2001 there was a 92% increase in the number of cars in Wiltshire, and in 2001 just 16% of households did not have access to a car.

Table 3.1 Car ownership in Wiltshire, the South West and England in 2001

	All households	No car	1 car	2 cars	3 cars	4+ cars	Total cars
	2001	2001	2001	2001	2001	2001	2001
England	20,451,427	5,488,386	8,935,718	4,818,581	924,289	284,453	22,607,629
South West	2,085,984	421,517	963,145	554,149	111,469	35,705	2,565,747
Wiltshire	176,665	28,433	77,396	55,287	11,665	3,874	240,375

Travel to work patterns

3.6 Most rural counties have a certain amount of out-commuting and in recent years housing and employment trends in Wiltshire have resulted in an ever increasing car dependent society, where out-commuting to larger towns and cities is now common place. Wiltshire, because of its closeness to several larger employment centres, has established commuting links to Bath, Swindon, and Andover, with lesser links to Bristol and Southampton/Eastleigh/Romsey. In 2001 the number of out-commuters stood at 52,344, a 61% increase from 1991, this equated to 24% of the employed population where 62.5% were males.

3.7 Over time commuting patterns have become more complex and disparate which has implications in terms of accessibility, with average commuting distances increasing both nationally and locally. This trend is reflected in data from the 2001 census which indicates that on average Wiltshire residents are more likely to drive when compared to the rest of the nation and that significantly fewer people use the bus as shown in Table 3.2. The 2011 census will indicate whether this position has since changed.

Table 3.2 Travel to work modes of transport in Wiltshire and England, 2001

Mode	Wiltshire	England
Motor vehicle	67%	62%
Public transport	5%	15%
Bicycle	4%	3%
Foot	12%	10%
Other	1%	1%
Work from home	11%	9%

Poverty and deprivation

3.8 As a county, Wiltshire is not a deprived area, although the greatest concentrations of deprivation are in the towns. The average Index of Multiple Deprivation (IMD) for Wiltshire's Lower Level Super Output Areas (LSOAs) in the ID 2010 is 22,229, therefore comparing favourably against the England benchmark in terms of overall deprivation. However, the county has seen an increase in relative deprivation since the 2007 Indices, as shown by the decrease in this average rank.

3.9 The highest levels of relative deprivation in Wiltshire relate to Barriers to Housing and Services, reflecting the rural nature of the county, and Education, Skills and Training.

3.10 The Indices of Deprivation (ID) (2010) shows that for the first time, Wiltshire now has one LSOA in the 10% most severely deprived in England; Salisbury St Martin – central. This area is also now in the 10% most deprived in England with regards to Health Deprivation and Disability; again, this is the first time that Wiltshire has had an LSOA in this category. Wiltshire also has five LSOAs in the 20% most deprived and 14 in the 30% most deprived nationally.

3.9 There is scattered deprivation across the whole rural area. Studies have shown that the rural areas of the county have deprived people in almost every community, but that rural areas are less deprived than the larger towns, with the only exception being with respect to access

to key services, in particular for older people. This latter situation is partly a result of the geographical isolation of some communities, but also of the decline in many rural services over the last 30 years.

3.10 Levels of deprivation might not seem significant when compared with other parts of England. However, the variations within Wiltshire are major, with some of the most affluent areas in the county being located right next to the very deprived, those in the bottom 20% of the national score. In addition, rural deprivation is difficult to qualify; given the higher than average proportion of the population living in rural communities in Wiltshire, it is likely that small pockets of rural deprivation will exist that are not highlighted by the IMD.

Rural communities

3.11 Wiltshire is a large rural county with over 350 villages and hamlets outside the urban areas. Recent trends towards the centralisation of services in larger towns have disadvantaged those living in rural areas, especially those without access to a car. Those areas of the county that suffer the most with poor levels of accessibility are often rural households on low incomes facing higher living costs from residing in the countryside who find it difficult accessing employment, education, health facilities, shops and leisure facilities.

3.12 A closer look at the state of services and facilities shows that accessibility is most definitely a key concern in rural areas, for example, The Rural Facilities Survey for Wiltshire (2008) identified:

- Since 1976, there has been a significant decline in the number of villages that offer all four basic facilities, i.e. general food store, journey-to-work public transport, post office and primary school.
- The number of settlements with primary schools have declined by approximately 30%, and about 66% of villages have lost their general food store and 50% of post offices have closed.
- The number of settlements recording the presence of a large variety of community facilities has fallen since 2005.

3.13 The Commission for Rural Communities Rural Data Series (2009) also shows that:

- 8% of rural households in Wiltshire live more than 6kms from a principle GP site and 4% live more than 14kms from a hospital.
- 2% of households in rural areas live more than 4km from a primary school, 31% live more than 6kms from a secondary school and 56% live more than 10kms from a principle job centre.
- 4% of households are more than 4kms from a post office, 30% are more than 4kms from a convenience store, 37% are more than 4kms from a supermarket and 30% are 4kms from a free cash machine.

3.14 Table 3.1 shows a range accessibility concerns between rural and urban Wiltshire, where 'Rate' refers to the proportion of the population and 'Share' refers to the proportion of the 41065 population in rural areas.

Table 3.1 Comparison of rural Wiltshire vs. urban Wiltshire

	Rural Wiltshire			Wiltshire	
	N	Rate	Share	N	Rate
All households	87,022	-	49.3%	176,655	-
Households with no car or van	10,089	11.6%	35.5%	28,432	16.%
No car households 60+ mins by public transport from hospital	5,187	50.8%	34%	15,259	52.6%
No car households 60+ mins by public transport from FE institution	1,555	13.9%	48%	3,237	15%
Households 6+km from principle GP site	7,617	8.2%	100%	7,620	4%
Households 10+km from principle job centre	49,973	54%	93.1%	53,667	28.1%
Households 6+km from secondary school	24,301	26.3%	100%	24,302	12.7%

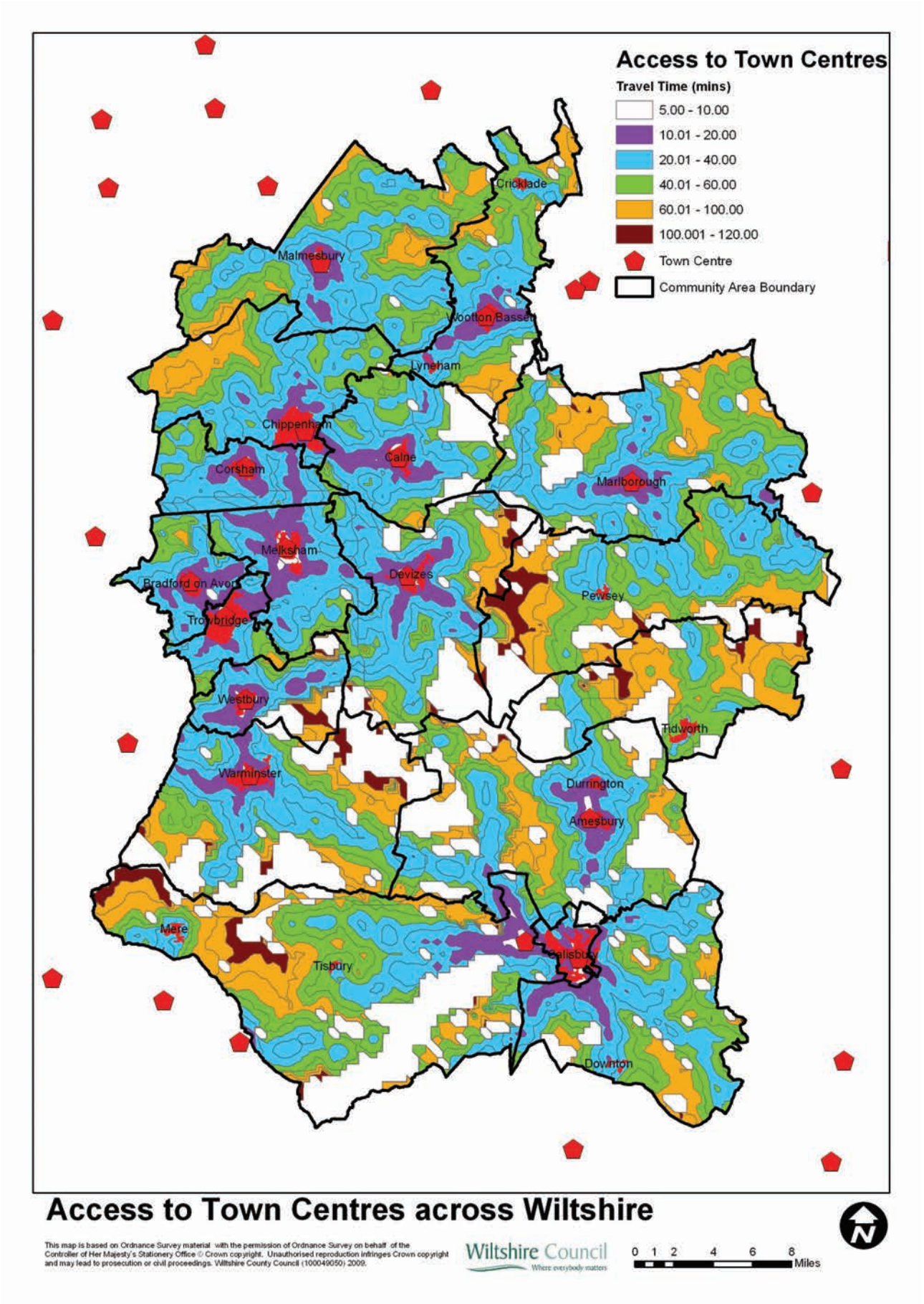
3.15 Whilst accessibility for the county has improved overall there are still accessibility problems in rural areas with many bus services being unable to access out of town facilities such as supermarkets, health or leisure facilities, as well as an overall lack of services outside the main daytime operating times during the evenings and on Sundays. Map 3.1 shows the access to the main centres in Wiltshire. The West and North of county generally have greater accessibility then the East and South, particularly the South West corner where accessibility is poor.

Community severance

3.16 Community severance is defined in the design manual for roads and bridges as the "separation of residents from facilities and service they use within the community caused by traffic flow". It also includes those residents which are separated from one another as a result of high levels of traffic flow.

3.17 The council monitors traffic flows on a regular basis through its network of automatic traffic counters (ATCs) and other manual surveys. A web-based traffic report is currently being developed by the council to present this information.

Map 3.1 Access to town centres using public transport, walking and cycling



Broadband availability

3.18 Currently not all parts of Wiltshire have the same access to broadband. This is due to the fact that Wiltshire is a large rural county and it is uneconomic in some areas to supply broadband and the next generation superfast broadband to homes and businesses. Around 5% of all households currently receive a poor service with very slow broadband speeds and over half of all premises are unlikely to receive superfast broadband by 2015.

3.19 Two surveys have been carried out in order to understand the views of residents and businesses regarding Wiltshire's existing broadband services, as well as their aspirations for future provision. A total of 3,622 residents responded along with 425 businesses. The results of these surveys have been analysed and are being used to inform the council's Digital Inclusion Programme.

4. Environmental problems and issues

4.1 These are key environmental problems and issues for inclusive communities in Wiltshire:

Table 4.1 Environmental problems/issues and opportunities

Issues/problems	Likely future environmental baseline and climate change impacts without some intervention	Implications for transport/Opportunities offered by LTP3
Access to services in some parts of Wiltshire is poor for people without the use of a car.	Accessibility levels will continue to decline, and social exclusion will become more prevalent.	Increased provision of public transport services.
A lack of employment opportunities has led to a substantial amount of out-commuting.	It is likely that without action out-commuting will become worse.	There is a need to correct the balance between housing and employment, once this is achieved sustainable transport provision is required to encourage people to remain within the county.
Community severance caused by high traffic volumes.	If traffic growth left unchecked severance will worsen which may affect the visual quality in many areas as well as the physical accessibility of some areas.	To introduce measures to curb traffic growth especially in the SSCTs of Trowbridge, Chippenham and Salisbury and other larger towns in Wiltshire.

5. Suggested SEA objectives

5.1 Following a review of plans and programmes and the key baseline data issues the SEA objective for inclusive communities are:

Table 5.1 SEA objectives

LTP SEA objective	Decision making criteria	Potential indicators
To increase accessibility to key services, facilities, and retail without the need for a car.	• Will it provide opportunities to travel without the need for a car?	• Access to services and facilities by public transport, walking and cycling. • Working people with access to
To ensure that where employment opportunities are to be found there is appropriate accessibility that doesn't involve the use of a car.	• Will it lead to alternatives ways of travel to employment hubs?	

LTP SEA objective	Decision making criteria	Potential indicators
To reduce the community severance effects of transport.	• Will it result in a reduction in community severance (i.e improved crossing facilities, reduced traffic speeds and reduced traffic levels)?	employment by public transport (and other specified modes)

6. Evaluation of the draft plan

6.1 Evaluating the effects of the draft plan entailed the following:

- Identifying the effects of the plan against the SEA objectives, including identifying changes in the future baseline, which are predicted to arise from implementation of the plan.
- Assessing the significance of these effects. This means describing these changes in terms of the nature and the magnitude of the impact and the sensitivity of the receiving environment.
- An assessment of the likely changes to the future baseline which may have been caused by secondary, cumulative and synergistic impacts.

6.2 Evaluation involves judging whether or not a predicted effect is likely to be significant. The results of the evaluation are categorised by the nature of the effect using the key as shown in Table 6.1.

Table 6.1 SEA significance scores and criteria

Score	Description	Symbol/Key
Significant positive effect	The plan addresses all the elements that are required to protect the environment and address the relevant sustainability issues in Wiltshire and would help achieve all of the applicable SEA objectives. The plan also sets out how, where and when these policies will be implemented and these will have a positive impact in relation to characteristics of the effect and the sensitivity of the receptors.	++
Minor positive effect	The plan addresses all the elements that are required to protect the environment and address the sustainability issues in Wiltshire and would help achieve all of the SEA objectives.	+
Partial positive/partial negative effect	The plan addresses some of the elements that are required to protect the environment and address the sustainability issues in Wiltshire and would help achieve or partially achieve the SEA objectives. There is also an element of the plan that conflicts with some of the SEA objectives.	+/-
No significant effects	The plan does not have an effect on the achievement of the SEA objectives	O
Significant negative effect	The plan conflicts with some of the SEA objectives. The plan also sets out, how, where, and when these policies will be implemented and these will have a negative effect with relation to characteristics of the effect and the sensitivity of the receptors.	--
Minor negative effect	The plan conflicts with some of the SEA objectives.	-
Uncertain	It is unclear whether there is the potential for a negative or positive effect on the SEA objective.	?

The impact of the draft strategy/plan and the significance on the historic environment as follows:

Accessibility Strategy		
Impact of the draft Accessibility Strategy (including nature and spatial extent of the impact, probability, duration, frequency and reversibility) Where there is more than one objective these will be addressed individually for each strategy.	**Significance of the effect**	**Suggested mitigation and enhancement measures**
(A&B)The strategy in conjunction with other strategies seeks to improve access opportunities, including access to employment hubs, encourage a change in travel behaviour and reduce the need to travel by car.	+	**Enhancement**: More specific location of employment hubs and access opportunities would be useful.
(C) Increased walking and cycling will help to reduce travel by car and improve overall community severance.	+	

Cycling Strategy		
Impact of the draft Cycling Strategy (including nature and spatial extent of the impact, probability, duration, frequency and reversibility) Where there is more than one objective these will be addressed individually for each strategy.	**Significance of the effect**	**Suggested mitigation and enhancement measures**
(A&B) The strategy seeks to increase cycling and access to a range of opportunities, including employment hubs and encourage travel without the need to travel by car.	+	
(C) Increased cycling will help to reduce the need to travel by car and improve overall community severance.	+	

Powered Two-Wheeler Strategy		
Impact of the draft Powered Two-Wheeler Strategy (including nature and spatial extent of the impact, probability, duration, frequency and reversibility) Where there is more than one objective these will be addressed individually for each strategy.	**Significance of the effect**	**Suggested mitigation and enhancement measures**
(A&B) The strategy seeks to increase motorcycling and access to a range of opportunities, including employment hubs and encourage travel without the need to travel by car.	+	
(C) Increased motor cycling will help to reduce the need to travel by car and improve overall community severance.	+	

Smarter Choices Strategy		
Impact of the draft Smarter Choices Strategy (including nature and spatial extent of the impact, probability, duration, frequency and reversibility) Where there is more than one objective these will be addressed individually for each strategy.	**Significance of the effect**	**Suggested mitigation and enhancement measures**

Smarter Choices Strategy		
(A&B) The strategy seeks to encourage a change in travel behaviour and reduce the need to travel by car. In doing so it will provide additional opportunities to access key services, facilities and employment hubs.	+	
(C) Reducing the need to travel by car will help reduce the community severance effects of transport.	+	

Assessment conclusions
Cumulative, synergistic and secondary effects: Working together in conjunction with one another the strategies will provide much greater access opportunities without the need to travel by car. This includes access to employment hubs. There is further opportunity to increase access to all services through the effective integration of spatial and transport planning.
Cumulative effects with other plans: At the current time it is not practicable to provide a full and detailed cumulative effects assessment with other transport plans. The greatest potential on inclusive communities will occur where LTP3 supports the development proposed as part of the forthcoming Wiltshire Core Strategy.
Summary of performance and performance of the strategies as a whole: The strategies contribute to a positive effect for inclusive communities. They seek to encourage a change in travel behaviour and modal shift and reduce people's reliance on the private motor car. Reducing car travel can potentially improve community severance, through less moving motorised vehicles and on-street parking and invasive road markings and street furniture.

Transport

1. Introduction

1.1 Transport as a commodity is something many of us take for granted. However, access to transport isn't necessarily available to all. This topic paper briefly outlines the types and choice of transport available within Wiltshire and the associated sustainability issues.

2. Review of plans/programmes

2.1 One of the requirements of the SEA process is to consider and take account of any other policies, plans, programmes and environmental objectives which may be relevant to LTP3. This is a key element of the SEA process, since it ensures the work is consistent with up-to-date policy, is informed by reliable information whilst at the same time identifying environmental issues.

2.2 The SEA Directive specifically requires environmental protection objectives established at international, European Community or national levels to be taken into account during the development of the LTP.

2.3 LTP3 will be influenced by other external environmental objectives such as those laid out in policies and legislation. These relationships will be acknowledged to enable potential synergies to be identified and exploited.

2.4 Table 2.1 lists the documents reviewed for the transport with Table 2.2-2.4 providing brief summaries for each plan/programme.

Table 2.1 Documents reviewed for Transport

International
European Commission White Paper on the European Transport Policy (2001)
European Commission - A sustainable future for transport (2009)
European Commission Transport White Paper: Roadmap to a single European Transport Area - Towards a competitive and resource efficient transport system (2011)
National
Guidance on Local Transport Plans (2009)
Creating Growth, Cutting Carbon: Making Sustainable Local Transport Happen (2011)
PPG13: Transport (2001)
The Future for Transport: A Network for 2030 (2004)
UK Climate Change Act (2008)
Low Carbon Transport: A Greener Future (2009)
Renewable Energy Strategy (2009)
The Stern Review of the Economics of Climate Change (2007)
Local
Swindon Borough Local Transport Plan 2011 -2026

International
West of England Partnership Joint Local Transport Plan 2011-2026
Hants County Council Local Transport Plan 2011 - 2031
Dorset County Council Local Transport Plan - 2011 -2026
Gloucestershire County Council Local Transport Plan 2011-2026
Somerset County Council Local Transport Plan 2011-2026

Table 2.2 International plan/programme summaries for Transport

International plan/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
European Commission White Paper on the European Transport Policy (2001)	Key measures include: • Revitalising the railways • Improving quality in road sector transport • Improving road safety • Developing high quality urban transport. • Developing medium and long term environmental objectives for a sustainable transport system.	LTP3 will consider how the measures could be addressed and the SEA will consider the environmental effects of such measures.
European Commission - A sustainable future for transport (2009)	Broad policy objectives: • Quality transport that is safe and secure • A well-maintained and fully integrated network • More environmentally sustainable transport • Keeping the EU at the forefront of transport services and technologies • Protecting and developing the human capital • Smart prices as traffic signals • Planning an eye to transport: improving accessibility	Whilst this document is more significant at an international and national level, there is some relevance for Wiltshire as the trans-european transport network passes through the county: • M4 motorway • A303 trunk road • Berks and Hants railway line • Great Western railway line • Waterloo-Exeter railway line.
European Commission Transport White Paper: Roadmap to a single European Transport Area - Towards a competitive and resource efficient transport system (2011)	By 2050, key goals will include: • No more conventionally-fuelled cars in cities.	Particularly relevant from an emissions and air quality view point. Both the SEA and LTP3 will remain focused on improving these environmental factors.

International plan/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
	• 40% use of sustainable low carbon fuels in aviation; at least 40% cut in shipping emissions. • A 50% shift of medium distance intercity passenger and freight journeys from road to rail and waterborne transport. • All of which will contribute to a 60% cut in transport emissions by the middle of the century.	

Table 2.3 National plan/programme summaries for Transport

National plans/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
Guidance on Local Transport Plans (2009)	Statutory guidance to support local transport authorities in producing their local transport plans. Lays down the strategic policy framework for LTP's using the five national transport goals: • Support economic growth • Reduce carbon emissions • Promote equality of opportunity • Contribute to better safety, security and health • Improve quality of life and a healthy natural environment	Ensure that the national transport goals are included as key guiding principles of LTP3. The SEA should help plan makers to assess whether the LTP is helping to meet these goals.
Creating Growth, Cutting Carbon (2010)	Two key themes: • Offering people sustainable transport choices that will stimulate behaviour change • Demonstrating how localism and big society can work for transport	Opportunities to encourage sustainable local travel and economic growth by making public transport, cycling and walking more attractive and effective.
The Future for Transport: A Network for 2030 (2004)	Four central themes: • Sustained investment (over the longer term) • Improvements in transport management • Better traffic management • Planning ahead	Themes will be considered in development of LTP3.

National plans/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
UK Climate Change Act (2008)	Main objective is to cut emissions by 80% by 2050, and reductions of at least 26% by 2020, against a 1990 baseline.	Carbon Dioxide (CO2) is one emission contributing to greenhouse gases emitted from vehicle exhausts. LTP3 will seek to reduce emissions and provide support for electric vehicles. The SEA will include objectives to reduce the contribution of the transport system to CO2 emissions.
Low Carbon Transport: A Greener Future (2009)	Reiterates the 10% target in UK Renewable Energy Strategy. National transport measures will need to contribute to a reduction of 17.7 million tonnes of CO2 in 2020.	
Renewable Energy Strategy (2009)	10% of transport energy from renewable energy.	
The Stern Review of the Economics of Climate Change (2007)	Developed countries must cut carbon emissions by at least 60% by 2050 on 1990 levels.	

Table 2.4 Local plan/programme summaries for Transport

Local plan/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
Swindon Borough Council LTP 2011-2026	A range of transport objectives taking into account the overarching national transport goals.	Wiltshire's LTP3 will seek to support all neighbouring authorities LTP's and cross boundary issues.
West of England Partnership Joint Local Transport Plan 2011-2026		
Hants County Council Local Transport Plan 2011 - 2031		
Dorest County Council Local Transport Plan 2011 - 2026		
Gloucestershire County Council Local Transport Plan 2011 - 2026		
Somerset County Council Local Transport Plan 2011 - 2026		

3. Baseline data

3.1 The large area covered by the county, and its geographic position in relation to nearby major economic centres, results in a wide range of transport related problems and issues which need addressing and resolving. Due to its rural nature, the area has a vast network of country lanes and other rural routes, many of which have evolved from historic tracks or droving routes. Consequently, many of these routes are unsuitable for coping with modern day traffic, particularly HGVs. Wiltshire Council has the opportunity to limit the impact of traffic in rural areas, through such measures as the introduction of speed limits in rural communities and working with freight operators.

Wiltshire's transport network

3.2 Wiltshire is a predominately rural, land-locked county on the eastern edge of the South West region, adjoining the more economically active South East region. The M4 motorway runs through the north of the county and directly connects Wiltshire to London, Swindon and Bristol. Wiltshire has access to other areas of the South West, such as Somerset, Devon, Cornwall and Gloucester through the M4's connection with the M5 motorway. The M5 also

connects Wiltshire to the Midlands and the north. Other major routes in Wiltshire include the A303 trunk road which spans east to west and the A350 and A36 which link the north of the county with the south.

3.3 Wiltshire Council is responsible for maintaining 4,381kms of road in the county. Previous under investment provided to the former County Council for road maintenance, as well as increased wear and tear on the highway network through increased traffic volumes, has led to sections of the network being below national standards for structural condition and skid resistance. Road maintenance also often leads to acute local congestion and increased journey time unreliability; which can have a major detrimental effect on the local economy.

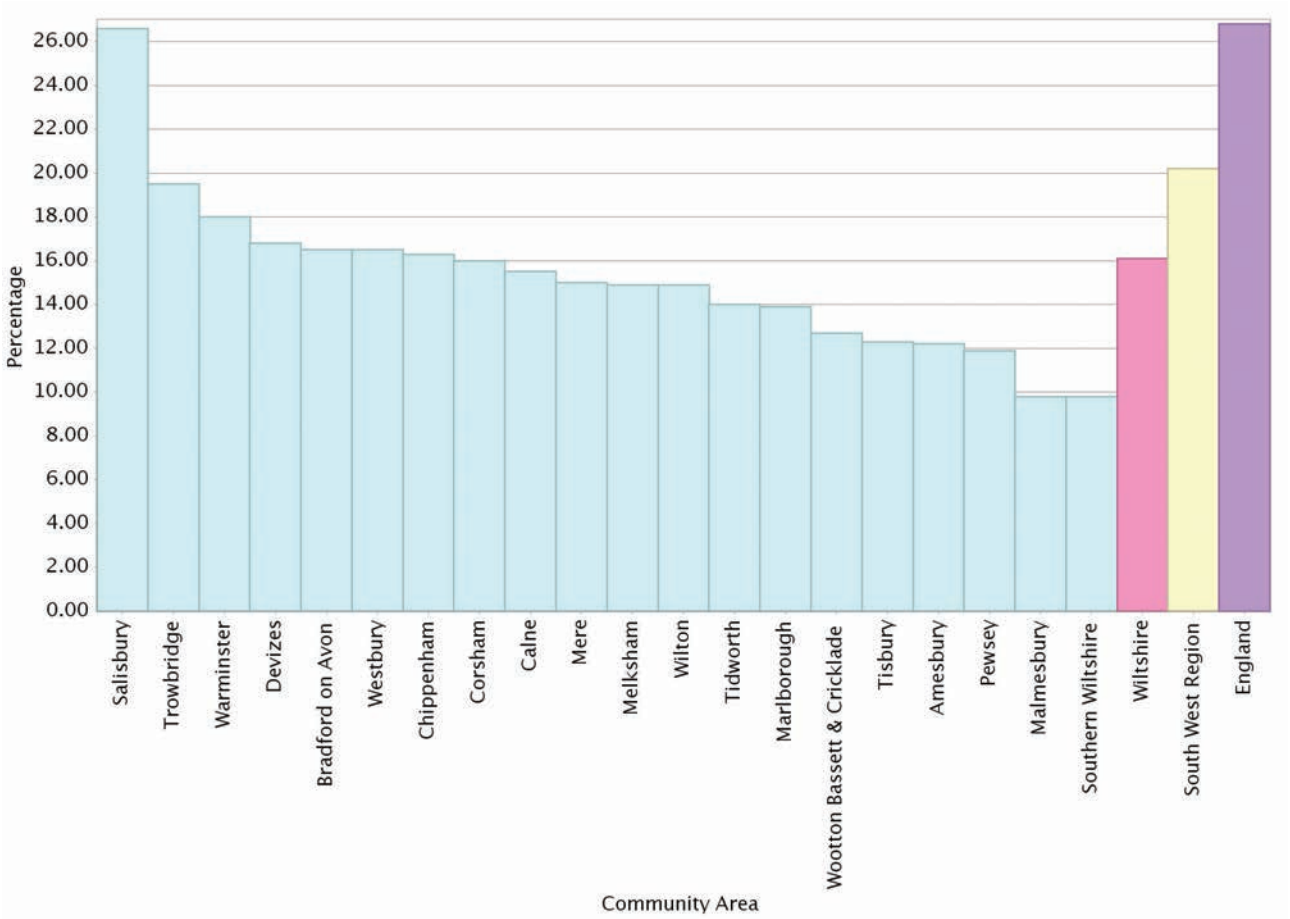
3.4 Some of the main highway routes in the county are unsuited to the volume and weight of traffic carried and this has given rise to some local congestion, relatively low inter-urban journey speeds and journey time reliability issues. See Map 3.1 for the main transport network in Wiltshire. This has resulted in some societal impacts such as community severance and environmental impacts in terms of increases in vehicle emissions and air pollution. In both urban communities and rural areas, such conditions can devalue the quality of life and act as a major inhibitor to walking and cycling through increased and perceived dangers, and to public transport by increasing journey times on services.

Car ownership

3.5 Having access to a car has a direct impact on the ability of individuals to access key goods, services and employment. Car ownership is high in Wiltshire reflecting the rural nature of the county. Between 1981 and 2001 there was a 92% increase in the number of cars in Wiltshire, and in 2001 just 16% of households did not have access to a car. However, there are clear geographic differences in the distribution of households without access to cars, see Figure 3.1. Over one in four households without access to cars compared to less than one in ten in Southern Wiltshire.

3.6 Car ownership is generally higher among low-income households in rural areas where cars are viewed as a necessity, rather than amongst low-income families in urban areas where can be seen as a luxury. Car ownership in urban areas tends to be lower, partly because there is usually a concentration of deprivation, but also because transport by other means is more viable, although limited chargeable parking and congestion may constrain usage. To this end the future growth of Wiltshire's largest towns should be about creating more favourable conditions for people to be less reliant on the car.

Figure 3.1 Percentage of households without access to a car or van in 2001



3.7 Car ownership is typically linked to car usage and so with rising car ownership comes rising car usage and in Wiltshire it is expected to rise from 17%-28% from now until 2025.

Public transport

3.8 Public transport in Wiltshire accounts for 6% of journeys to work, which is a greater proportion than the average for the South West. However, this is half the national average suggesting scope for public transport to carry a greater proportion of trips in the county.

3.9 Increasing car ownership levels have given rise to greater flexibility for many social, leisure and employment activities as well as many facilities now being located on the edge of urban areas. Public transport is mostly unable to meet these changes, both in terms of service frequency and geographic coverage, thus leaving those without access to a car disadvantaged. For many trips there is no public transport alternative, or, the cost and perceived inconvenience leads car owners to choose to bear the marginal extra motoring costs.

Buses

3.10 Bus services in Wiltshire are provided for by many different companies, with no single company being dominant across the county. The majority of services are provided on a commercial basis with the remainder being tendered revenue supported services. The tendered services are usually found in the rural areas and/or outside normal daytime hours, mainly being early morning, evening or Sunday services.

3.11 There has been significant growth in bus use in Wiltshire, which increased from 8.7 million passenger trips per annum in 2003/4 to 12.3 million passenger trips per annum in 2008/9 before falling back to 10.4 million in 2009/10 mainly as a result of the recession. These increases are largely as a result of the introduction of free travel for older people, but development of the Park & Ride services in Salisbury, and partnership schemes with the main operators to improve ridership on their commercial services, such as Kickstart improvements to the Chippenham-Swindon route, the Salisbury Area and Active8 Quality Partnerships, have also contributed to this growth.

3.12 The proportion of the rural population with access to an hourly or better weekday bus service has remained fairly stable and has only fallen from 53% to 51% and the proportion with at least a daily weekday daytime service has remained at 90%. See Table 3.1 for bus usage data in Wiltshire.

3.13 The proportion of bus routes operated by low floor vehicles has increased from 11% in 2005/06 to 21% in 2007. However, both figures appear low due to the relatively large number of small rural and school services, which are less likely to be a priority for low floor conversion. The proportion of Key Bus Route services that were low floor operated in 2007 was 64% compared to 41% in 2005.

3.14 Currently around a third of services are subsidised by Wiltshire Council, which is a significant demand on the annual revenue budget. Additionally tender prices have risen considerably over recent years due in part to the lack of qualified bus drivers and rising fuel prices. Future increases in tender prices pose a real threat to maintaining the existing coverage of bus services in the county.

Table 3.1 Bus usage in Wiltshire

Indicator	Year	Bus usage
Proportion of rural households within 800m of a bus stop	2003/2004	90%
	2004/2005	90%

Indicator	Year	Bus usage
with a daily or better bus service	2005/2006	90%
	2006/2007	90%
	2007/2008	91%
	2008/2009	
	2009/2010	
	2010/2011	90%
Proportion of rural households within 800m of a bus stop with a hourly or better bus service	2003/2004	64%
	2004/2005	65%
	2005/2006	66%
	2006/2007	53%
	2007/2008	54%
	2008/2009	
	2009/2010	
	2010/2011	47%
Number of bus passenger journeys (millions)	2003/2004	8.76
	2004/2005	9.3
	2005/2006	9.74
	2006/2007	11.69
	2007/2008	12.04
	2008/2009	12.39
	2009/2010	10.46
	2010/2011	10.86

3.15 The last progress report (2008) shows that while bus punctuality remains on track the impact of slowly rising traffic levels on the road network as a whole is beginning to have an effect on bus service reliability, and several routes have required additional running time to be inserted in the timetable. On at least one route this has led to significantly increased costs as an extra vehicle was required to maintain the existing regular frequency.

Demand responsive transport

3.16 There are a range of demand responsive services offered in Wiltshire, including the Wigglybus, Hopper and various taxi-based schemes, which all now come under the Connect2 Wiltshire banner following a review in 2006.

Community transport

3.17 Community and voluntary transport schemes play an important role in supplementing conventional services where socially necessary needs cannot be provided in cost effective manner. The council provided £330,000 of funding for community transport in 2010/11.

3.18 There are currently 24 community minibus schemes in the county, carrying 250,000 single passengers trips a year. The majority are small scale and locally based, providing a service predominantly for older and less able residents, including those who travel in a wheelchair, who can not, or who find it difficult, to use ordinary public transport.

3.19 There is an extensive network of over 40 'Link' good neighbour schemes in Wiltshire, providing, as part of the 'good neighbour' remit, social car coverage to 98% of rural households.

Passenger rail

3.20 Rail travel is increasingly popular, monitoring of rail patronage in Wiltshire has indicated a sustained growth in the number of rail passenger journeys over recent years. The LTP 2008 progress report indicates that rail passenger trips have increased by 17% since 2003, despite a slight decrease in 2007, as shown in Figure 3.2. This was due to timetable changes following the award of the new Great Western Franchise.

Information and marketing

3.21 The council continues to provide information about local transport services through a variety of methods, and will work with regional partners to upgrade the Traveline website. The existing real time passenger information system will also be upgraded.

Transport interchanges

3.22 Transport interchanges across Wiltshire are generally of a low standard with considerable investment required to create quality facilities. Recent improvements include enhancements to the main bus interchange in Trowbridge town centre for pedestrians, cyclists and public transport users, and improvements to Chippenham station forecourt which now provides better integration of bus and rail services.

Parking

3.23 The car parking strategy in Wiltshire was subject to a review in 2010 and as a strategy it seeks to find a balance between supporting economic growth and being an effective demand management tool to encourage the use of sustainable transport alternatives.

3.24 There are three broad categories of car parking in Wiltshire:

- On-street – this is parking within the adopted highway boundary that is regulated by the council acting as highway authority. Enforcement of on-street parking regulations has historically been carried out by the Police but following the introduction of civil parking enforcement (CPE) is now carried out by the council.
- Public off-street – these are parking areas provided by the council which are open for use by the general public. Typically users are charged according to length of stay.
- Private off-street – parking that is privately owned for use by residents, employers, retailers, etc.

3.25 The majority of parking within Wiltshire's market towns and villages is off-street, publicly operated car parks and/or on-street parking. Typically, the parking stock is supplemented by large car parks operated by supermarkets and other smaller privately operated car parks.

Freight management

3.26 Road freight distribution by the use of Heavy Goods Vehicles (HGV), smaller lorries and vans are by far the most widely used form of distributing freight in the county. Approximately 85% of freight in Wiltshire is distributed via this means, which is in line with national distribution patterns.

3.27 Due to the rural nature of the county, freight movements have a noticeable impact upon the road network, as the roads which are used to access businesses and homes are, in instances, neither designed or always suitable for freight movements.

3.28 The need to provide an efficient distribution system can have an adverse impact on the local environment. This has resulted in increased vehicle emissions from road based freight traffic, increased noise, vibration, pollution, and deteriorating air quality. It also results in freight vehicles using inappropriate roads in sensitive rural areas or along residential roads. Work through the Freight Quality Partnership and the Freight Assessment Priority Mechanism seek to ensure that not only is best practice followed by the freight industry but that congestion and safety is reduced through better a managed road network for HGV's and other delivery vehicles.

3.29 A study by the former Wiltshire County Council, found that 86% of freight trains in Wiltshire travel through the county and there are no rail freight movements with both end trips in Wiltshire. Freight movements in the county consist predominantly of the Somerset quarry traffic routed via Westbury to London or Wootton Bassett. There is also movement of oil tanks through the county from Hampshire and freight movements from Avonmouth/Portishead and South Wales on the Great Western mainline, as well as freight from Didcot in the other direction towards Cardiff.

3.30 Rail freight can provide distinct benefits to business, society and local authorities over road based transport. Road based congestion and associated road maintenance could be reduced if significant transfer to rail could be achieved. However, rails biggest advantage is the environmental benefits that can be achieved. Using rail freight produces 3.4 times less CO_2 per tonne-km than road transport, which means that switching to rail freight gives a 70% reduction in CO_2 emissions compared to the equivalent road journey.

3.31 There is currently no known movement of freight on the canal system in Wiltshire. The canals are primarily used for leisure and recreational purposes.

Walking

3.32 Walking is not as extensively studied as motor vehicle traffic, and useful information on the extent and purpose of walking journeys is limited. From the 2001 census, about 16% of journeys to work by residents of urban areas in Wiltshire were made on foot. Overall, the proportion of journeys to school made on foot is close to the regional average, and has been recently increasing slowly.

3.33 The LTP progress report 2008 shows that walking in Devizes and Salisbury has increased with the 2007/08 figure for Devizes being just below the trajectory target. Unfortunately walking in west Wiltshire continued to slowly decline and was when last reported was someway off the trajectory target for 2007/2008.

3.34 The rights of way network has nearly 3600km of footpaths exclusively for walkers in Wiltshire. (This does not include byways, nor footways on public roads). This compares with around 4400km of roads under the responsibility of the council. There is very little data available on the use of the rights of way network, nor of walking for leisure on any routes in Wiltshire.

Cycling

3.35 Across the UK cycling accounts for 1% of all trips and 2% of all trips under 2 miles (DfT National travel Survey). Other European countries with similar weather and topography have much higher rates of cycling e.g. Germany (10%) and Denmark (18%). Within the UK there are great variations with the highest rates of cycling to work seen in Cambridgeshire (10% in 2001) and Oxfordshire (8%). Wiltshire has slightly higher than average levels with 4% of people cycling to work in 2001 compared to 3% across England. However, the number of cycling trips in Wiltshire has remained fairly stable since 2001 which is similar to national trends.

3.36 Wiltshire has large rural areas where cycling may be less practical due to the larger distances involved. However, 49% of the population live in urban settlements or large market towns, and by 2026 many of these may have grown in size. Improved interchange with buses and trains, and 'park & cycle' schemes can make cycling more viable for rural areas.

3.37 Lyneham has the highest rate of cycling to work at 13%. Other areas with high proportions of cycling to work (6-9%) tend to be parts of Salisbury and Chippenham or around military bases e.g. Tidworth, Melksham, Bulford, Warminster, Harnham, Colerne, Calne, and Chippenham Redland. This correlates with higher proportions of people living less than 2km from their place of work in these areas. Despite being one of the largest settlements in Wiltshire, only 3-5% of people cycle to work in Trowbridge. There are also large areas of Chippenham and Salisbury where cycling is at similar levels.

3.38 At school across Wiltshire, cycling accounts for 0% to 15% of journeys to school. Schools with a proportion above 6% include primary schools and are located in both rural and urban areas.

3.39 There is great potential to increase cycling in Wiltshire, particularly through replacing short car journeys. This is most feasible for trips under 5miles (30 minutes), although it can also form a part of longer journeys. 40% of commuters in Wiltshire live within cycling distance of work, yet only 3% cycle. Only 10% walk and 2% take the bus to work so it is clear that there are a large proportion of journeys which could switch from car to cycle. Electric bikes can be comfortably used for journeys up to 10 miles and 77% of car journeys are less than this distance.

3.40 Research shows that cycling is more popular in higher income households. Wiltshire's relative affluence and high levels of cycle ownership offer a good opportunity to increase levels of cycling. 43% of people in the UK own a bike yet only 15% of people say they use a bike at least once a week. Ownership levels are highest amongst under-16s and higher income quartiles which generally correlates with higher usage levels. Lack of knowledge about maintenance or concerns about breakdowns may be more of a barrier than bike ownership.

3.41 The council will continue though the LTP process and developer contributions, to seek opportunities for the development of the defined pedestrian and cycle networks for each of the main towns, as well as the programme of pedestrian and town centre accessibility improvements.

4. Environmental problems and issues

4.1 These are key environmental problems and issues for transport in Wiltshire:

Table 4.1 Environmental problems/issues and opportunities

Issues/problems	Likely future environmental baseline and climate change impacts without some intervention	Implications for transport/Opportunities offered by LTP3
There is a general lack of resources to significantly invest in sustainable transport solutions.	It is likely there will be rises in traffic growth and infrastructure which in turn will have significant negative effects on a multitude of environmental factors such as wildlife habitats, landscape value, soils and cause other negative externalities such as congestion, community severance, and noise impacts. Climate change will likely result in a greater risk of widespread flooding and increased wind speeds which will result in direct consequences for the transport network.	• Employ relatively low cost softer measures. • LTP3 must consider ways in which the transport network can be be kept operational in the event of extreme weather conditions.
The operating costs of bus services are increasing and this may lead to reductions in service.	Increases in private motor vehicles on the road network and lack of accessibility to essential services and employment.	There is potential to increase subsidised services where most required and encourage take up of walking and cycling.

5. Suggested SEA objectives

5.1 Following a review of plans and programmes and the key baseline data issues the SEA objective for transport is:

Table 5.1 SEA objectives

LTP SEA objective	Decision making criteria	Potential indicators
To reduce the need to travel, and promote sustainable travel modes of transport.	• Will it increase the range, availability and affordability of sustainable travel choices (i.e. public transport, walking, cycling)?	• Number of households with two or more cars • Train ticket sales • Number of bus stops • Number of received travel plans

6. Evaluation of the draft plan

6.1 Evaluating the effects of the draft plan entailed the following:

- Identifying the effects of the plan against the SEA objectives, including identifying changes in the future baseline, which are predicted to arise from implementation of the plan.

- Assessing the significance of these effects. This means describing these changes in terms of the nature and the magnitude of the impact and the sensitivity of the receiving environment.

- An assessment of the likely changes to the future baseline which may have been caused by secondary, cumulative and synergistic impacts.

6.2 Evaluation involves judging whether or not a predicted effect is likely to be significant. The results of the evaluation are categorised by the nature of the effect using the key as shown in Table 6.1.

Table 6.1 SEA significance scores and criteria

Score	Description	Symbol/Key
Significant positive effect	The plan addresses all the elements that are required to protect the environment and address the relevant sustainability issues in Wiltshire and would help achieve all of the applicable SEA objectives. The plan also sets out how, where and when these policies will be implemented and these will have a positive impact in relation to characteristics of the effect and the sensitivity of the receptors.	++
Minor positive effect	The plan addresses all the elements that are required to protect the environment and address the sustainability issues in Wiltshire and would help achieve all of the SEA objectives.	+
Partial positive/partial negative effect	The plan addresses some of the elements that are required to protect the environment and address the sustainability issues in Wiltshire and would help achieve or partially achieve the SEA objectives. There is also an element of the plan that conflicts with some of the SEA objectives.	+/-
No significant effects	The plan does not have an effect on the achievement of the SEA objectives	O
Significant negative effect	The plan conflicts with some of the SEA objectives. The plan also sets out, how, where, and when these policies will be implemented and these will have a negative effect with relation to characteristics of the effect and the sensitivity of the receptors.	--
Minor negative effect	The plan conflicts with some of the SEA objectives.	-
Uncertain	It is unclear whether there is the potential for a negative or positive effect on the SEA objective.	?

6.3 The impact of the draft strategy/plan and the significance on transport is as follows:

Accessibility Strategy		
Impact of the draft Accessibility Strategy (including nature and spatial extent of the impact, probability, duration, frequency and reversibility) Where there is more than one objective these will be addressed individually for each strategy.	**Significance of the effect**	**Suggested mitigation and enhancement measures**
The strategy in conjunction with other strategies seeks to improve access opportunities across the county to services, facilities and other key sites, and encourage sustainable and reduce the need to travel by car.	+	

Cycling Strategy		
Impact of the draft Cycling Strategy (including nature and spatial extent of the impact, probability, duration, frequency and reversibility) Where there is more than one objective these will be addressed individually for each strategy.	**Significance of the effect**	**Suggested mitigation and enhancement measures**
Improving and increasing cycling infrastructure, parking and training should increase cycling levels and reduce the need to travel by car.	+	

Powered Two-Wheeler Strategy		
Impact of the draft Powered Two-Wheeler Strategy (including nature and spatial extent of the impact, probability, duration, frequency and reversibility) Where there is more than one objective these will be addressed individually for each strategy.	**Significance of the effect**	**Suggested mitigation and enhancement measures**
Improving and increasing powered two-wheeler infrastructure, parking and training should increase cycling levels and reduce the need to travel by car.	+	

Smarter Choices Strategy		
Impact of the draft Smarter Choices Strategy (including nature and spatial extent of the impact, probability, duration, frequency and reversibility) Where there is more than one objective these will be addressed individually for each strategy.	**Significance of the effect**	**Suggested mitigation and enhancement measures**
The strategy seeks to encourage a change in travel behaviour, it promotes the use of sustainable transport and reduces the need to travel by car.	+	

Assessment conclusions
Cumulative, synergistic and secondary effects: Each of the strategies seeks to promote sustainable travel encouraging modal shift and reducing the need to travel by car.
Cumulative effects with other plans: At the current time it is not practicable to provide a full and detailed cumulative effects assessment with other transport plans. The greatest potential on transport will occur where LTP3 supports the development proposed as part of the forthcoming Wiltshire Core Strategy, where effective and integrated spatial planning can provide a self-contained and inclusive living and working environment and reduce the need to travel by car.
Summary of performance and performance of the strategies as a whole: The strategies increase the range and availability of sustainable travel choices and contribute to a positive effect for transport. They all promote the use of sustainable travel, encourage a change in travel behaviour and reducing the need to travel by car.

Economy & enterprise

1. Introduction

1.1 The term 'economy' refers to a wide ranging network of producers, distributors and consumer goods and services therefore connects with almost every aspect of business and personal life. Wiltshire has a varied industrial base and so therefore a number of economies and enterprises operate within the county.

2. Review of plans/programmes

2.1 One of the requirements of the SEA process is to consider and take account of any other policies, plans, programmes and environmental objectives which may be relevant to LTP3. This is a key element of the SEA process, since it ensures the work is consistent with up-to-date policy, is informed by reliable information whilst at the same time identifying environmental issues.

2.2 The SEA Directive specifically requires environmental protection objectives established at international, European Community or national levels to be taken into account during the development of the LTP.

2.3 LTP3 will be influenced by other external environmental objectives such as those laid out in policies and legislation. These relationships will be acknowledged to enable potential synergies to be identified and exploited.

2.4 Table 2.1 lists the documents reviewed for the inclusive communities, with Tables 2.2-2.3 providing brief summaries for each plan/programme.

Table 2.1 Documents reviewed for Economy and Enterprise

National
PPS4: Planning for Sustainable Economic Growth (2009)
Local
Wiltshire & Swindon Economic Strategy 2003-2008
Wiltshire Council Corporate Plan 2010-2014
Wiltshire Strategic Economic Assessment 2007/2008

Table 2.2 National plan/programme summaries for Economy and Enterprise

National plans/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
PPS4: Planning for Sustainable Economic Growth (2009)	PPS4 brings together all of the government's key planning policies relating to the economy in both urban and rural areas into one single PPS. In addition to the widely expected abolition of the needs test, the government has taken the opportunity to	This PPS should be taken into account in the preparation of the local transport plan, particularly delivering more sustainable patterns of growth and reducing the need to travel, especially by car.

National plans/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
	emphasise its support for sustainable economic growth and the need for LPAs to take a positive approach to identifying sites, and determining applications. The government's overarching objective is sustainable economic growth. To help achieve sustainable economic growth, the government's objectives for planning are to: • build prosperous communities by improving the economic performance of cities, towns, regions, sub-regions and local areas, both urban and rural • reduce the gap in economic growth rates between regions • deliver more sustainable patterns of development, reduce the need to travel, especially by car and respond to climate change • promote the vitality and viability of town and other centres as important places for communities • raise the quality of life and the environment in rural areas by promoting thriving, inclusive and locally distinctive rural communities whilst continuing to protect the open countryside for the benefit of all.	

Table 2.3 Local plan/programme summaries for Economy and Enterprise

Local plan/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
Wiltshire & Swindon Economic Strategy 2003-2008	Three key objectives: • ensuring the right conditions prevail to raise productivity through innovative and sustainable development enabling increased investment in jobs and services to improve quality of life • developing a skilled, motivated and adaptable workforce with the skills to meet current and future business needs • bringing about additional benefits to Wiltshire and Swindon through partnership working	Continued economic success is very important for the county. Economic objectives should be achieved with regard to objectives for sustainable development. The promotion of sustainable economic growth should help achieve benefits in other areas, such as social inclusiveness and skills and training.

Local plan/programmes	Objectives/targets or indicators	Implications for the SEA and LTP3
Wiltshire Council Corporate Plan 2010-2014	Vision: • 'To create stronger and more resilient communities'. • 'Provide high quality, low cost, customer focused services' • 'Ensure local, open and honest decision making' • 'Working with our partners to support Wiltshire's communities'	LTP3 will need to specifically reflect the corporate plan's vision within its own objectives. The SEA will need to ensure these objectives are environmentally sensitive.
Wiltshire Strategic Economic Assessment 2007/2008	The assessment concludes that in the past 10 years Wiltshire has been losing competitive advantage against the rest of the South West region and against neighbouring economies. This loss can be explained by a combination of at least four key (and at times inter-related) issues: Firstly, Wiltshire's attraction as a place to live (as opposed to work); secondly, its location (situated in close proximity to a series of major and competitive economies which provide large numbers of quality well paid jobs in growth sectors); thirdly, the ongoing gradual employment decline of Manufacturing and Public Administration & Defence; and, fourthly, lower employment growth than competitor areas in higher added value growth employment service sectors (i.e. business services). The last 3 of these key issues can also be regarded as key issues and challenges which will need to be tackled if the area is to ensure that it regains competitiveness and good growth. The main mechanisms for tackling these issues are: Skills; Entrepreneurship; Innovation; and, Infrastructure.	LTP3 will need to be aware of the key issues from this document.

3. Baseline data

3.1 The local authority area for Wiltshire contains three strategically significant cities and towns (SSCTs) as set out by the former regional spatial strategy for the South West. These are Chippenham, Salisbury ad Trowbridge and should be the focus of both housing and employment development in the future. There is also a strong relationship with other SSCTs in neighbouring authorities, such as Bath, Bristol and Swindon.

Employment opportunities, earnings and commuting

3.2 The employment rate in Wiltshire during the period January 2006 to December 2007 was 79.2%, above both the regional and national averages (78.2% and 74.4% respectively). Wiltshire has a high proportion of people of working age in employment compared to the national average; this is particularly true of Salisbury and North Wilts where 82.3% and 82% of working population is currently in employment respectively. However, with exception of Salisbury, there seems to be a low containment rate across Wiltshire with almost 40% of those employed in Kennet and North Wilts travelling out of the district to their place of employment. This compares unfavourably to neighbouring authorities such as Bath and North East Somerset where only 25% travel out the authority area. However, this data is from the 2001 census and therefore may not be a current reflection. It is therefore anticipated that the 2011 census will provide a more current and up to date picture.

Growing population

3.3 Wiltshire has a significant and growing population to draw upon (likely to reach the significant half million mark sometime before 2020) and significantly higher economic activity rates and employment rates than either the region or the nation as a whole. However, Wiltshire's labour market is significantly tighter than either that of the broader region or the country as a whole and, as with most local economies across the South West, its population profile is ageing. In addition, discrepancies between average earnings by workplace and average earnings by residence in Wiltshire suggests that Wiltshire's higher skilled resident workers are unable to secure the higher than average earnings within Wiltshire that are on offer in adjacent economies with commuting patterns confirming this.

3.4 All of Wiltshire's districts have had an influx of migrants over the last few years, particularly from Eastern Europe, most of whom have come to work. However, West Wiltshire has seen the greatest increase by far and away. The key economic effects of these changes are likely to be an increase in Wiltshire's overall population and an increase in its working age population, economic activity rate and employment rate. Wiltshire may also see a possible decrease in average earnings (if most migrants gain work in lower order lower paid occupations as opposed to higher order higher paid occupations).

Cost of working

3.5 The cost of working and living in Wiltshire appears reasonably competitive, this is less so for those that live and work in Wiltshire than those who live in Wiltshire but work elsewhere. Wiltshire house prices remain too high for younger people and the lower skilled (and paid) who tend to rely on local jobs. As a result, some local industries will struggle to secure labour at a price which will enable them to compete with lower cost foreign production. These conditions place further pressures on manufacturing in the Wiltshire economy. In fact, Wiltshire has one of the biggest gaps between relative affordability for residents and relative affordability for workers.

3.6 In summary, in the past 10 years Wiltshire has been losing competitive advantage against the rest of the South West region and against neighbouring economies. This loss can be explained by a combination of at least four key (and at times inter-related) issues:

- Wiltshire's attraction as a place to live (as opposed to work)
- Wiltshire's location (situated in close proximity to a series of major and competitive economies which provide large numbers of quality well paid jobs in growth sectors)

- The ongoing gradual employment decline of Manufacturing and Public Administration & Defence

- Lower employment growth than competitor areas in higher added value growth employment service sectors (i.e. business services).

Tourism in Wiltshire

3.7 The tourism sector has increased in importance in Wiltshire since 1995, and specifically since 2005. Tourism accounts for 10% of the GDP of the South West and supports over 300,000 jobs. This sector is of great value in Wiltshire and offers the potential for future growth. Salisbury is particularly recognised as a nationally important tourist destination with over 800,000 visitors to the nearby Stonehenge in 2004.

3.8 The tourism industry is worth over £779 million a year to the Wiltshire economy (South West Tourism 2008, NB: figures include Swindon). Over £474 million of this originates from visitors enjoying day trips to the county. The remainder is made up of visitors from both the UK and overseas staying overnight in Wiltshire (over £263 million); people visiting their friends and relatives in the county (over £40 million); and spend on second homes and holiday accommodation (£842,000).

3.9 Compared to other counties in the south west of England, Wiltshire generates the lowest amount of spend from staying visitors - £263 million each year in Wiltshire, compared to £1,210 million in Cornwall. Wiltshire earns slightly more spend (£474 million) from visitors on day trips than Cornwall (about £452 million). However, this is a long way behind other counties in the south west, with Devon generating the most money from day trips at £918 million each year. There is a definite opportunity for Wiltshire to capitalise further on its tourism potential.

3.10 There are nearly 20,000 tourism related jobs in Wiltshire, which accounts for about 6% of all employment. This equates to about 14,459 full time equivalent (FTE) jobs. Of the actual jobs, about 14,306 are directly employed in tourism related businesses. The remainder are from indirect and induced employment related to the tourism industry. Nearly half of all actual direct jobs related to the Wiltshire tourism industry are in the catering trade (4063 jobs). Retail is the second largest employer of people (1901 jobs), followed by jobs related to accommodation (1452 jobs) and visitor attractions / entertainments (1344 jobs).

3.11 Across the county (excluding Swindon), south Wiltshire (which includes the medieval city of Salisbury and the World Heritage Site at Stonehenge), generates the majority of visitor spend and employment. South Wiltshire earns about £187 million a year from tourism, compared to £138 million in mid Wiltshire; £138 million in west Wiltshire and £158 million in the north of the county. Approximately 4200 jobs in south Wiltshire are related to tourism spending. This accounts for over 31% of all tourism related jobs in Wiltshire. In south Wiltshire the jobs supported by tourism represent 7% of all employment. This is similar to the rest of the county where between 5% and 6% of all employment is tourism related.

4. Environmental problems and issues

4.1 These are key environmental problems and issues for economy and enterprise in Wiltshire:

Table 4.1 Environmental problems/issues and opportunities

Issues/problems	Likely future environmental baseline and climate change impacts without some intervention	Implications for transport/Opportunities offered by LTP3
Most development and associated infrastructure investment is currently focused on the SSCTs of Chippenham, Salisbury and Trowbridge. There is also the future expansion of Swindon as a business, retail and residential location There may be a risk that other settlements could be affected if investment is centred on these settlements.	SSCTS may suffer with increased congestion and pollution whilst other settlements may suffer with lack of services and facilities leading to an increased need to travel to other area's communities to seek employment, and satisfy retail and leisure pursuits.	• Ensure adequate sustainable transport provision is made for the SSCTS and other major towns in Wiltshire so that there is a reduced need to use the private motor vehicle. • Potential to enhance the green infrastructure network linking communities and employment hubs.
In parts of Wiltshire tourism contributes significantly to the local economy and there are opportunities to develop tourism potential elsewhere.	Increases in tourism will benefit the local economy but the increases in traffic generated could have many implications for the local community.	To ensure adequate sustainable transport provision is made available at the known tourist locations.

5. Suggested SEA objectives

5.1 Following a review of plans and programmes and the key baseline data issues the SEA objective for economy and enterprise are:

Table 5.1 SEA objectives

LTP SEA objective	Decision making criteria	Potential indicators
To help to manage and maintain the existing transport system efficiently in all areas of Wiltshire.	• Will it help to manage routes effectively in order to maintain journey times?	• The number of new tourism enterprises • Journey time reliability
To Invest in transport improvements that help the economy of Wiltshire.	• Will it include schemes that decrease journey times and congestion, improve journey time reliability and help to meet congestion targets in the LTP? • Include areas where tourism has a foothold?	
To reduce the impact of road freight on communities.	• Will it include schemes that decrease journey times and congestion, improve journey time reliability and help to meet congestion targets in the LTP? • Will it include areas where tourism has a foothold?	

6. Evaluation of the draft plan

6.1 Evaluating the effects of the draft plan entailed the following:

- Identifying the effects of the plan against the SEA objectives, including identifying changes in the future baseline, which are predicted to arise from implementation of the plan.

- Assessing the significance of these effects. This means describing these changes in terms of the nature and the magnitude of the impact and the sensitivity of the receiving environment.

- An assessment of the likely changes to the future baseline which may have been caused by secondary, cumulative and synergistic impacts.

6.2 Evaluation involves judging whether or not a predicted effect is likely to be significant. The results of the evaluation are categorised by the nature of the effect using the key as shown in Table 6.1.

Table 6.1 SEA significance scores and criteria

Score	Description	Symbol/Key
Significant positive effect	The plan addresses all the elements that are required to protect the environment and address the relevant sustainability issues in Wiltshire and would help achieve all of the applicable SEA objectives. The plan also sets out how, where and when these policies will be implemented and these will have a positive impact in relation to characteristics of the effect and the sensitivity of the receptors.	++
Minor positive effect	The plan addresses all the elements that are required to protect the environment and address the sustainability issues in Wiltshire and would help achieve all of the SEA objectives.	+
Partial positive/partial negative effect	The plan addresses some of the elements that are required to protect the environment and address the sustainability issues in Wiltshire and would help achieve or partially achieve the SEA objectives. There is also an element of the plan that conflicts with some of the SEA objectives.	+/-
No significant effects	The plan does not have an effect on the achievement of the SEA objectives	O
Significant negative effect	The plan conflicts with some of the SEA objectives. The plan also sets out, how, where, and when these policies will be implemented and these will have a negative effect with relation to characteristics of the effect and the sensitivity of the receptors.	--
Minor negative effect	The plan conflicts with some of the SEA objectives.	-
Uncertain	It is unclear whether there is the potential for a negative or positive effect on the SEA objective.	?

6.3 The impact of the draft strategy/plan and the significance on transport is as follows:

Accessibility Strategy		
Impact of the draft Accessibility Strategy (including nature and spatial extent of the impact, probability, duration, frequency and reversibility) Where there is more than one objective these will be addressed individually for each strategy.	**Significance of the effect**	**Suggested mitigation and enhancement measures**
(A) Encouraging and increasing travel without the use of the car will help to improve journey times for the more sustainable modes of travel as well as the distribution of freight. Overall it will improve resilience as well as the vitality and viability of Wiltshire's market towns.	+	

Accessibility Strategy		
(B) Improving access to a range of opportunities, sites, services and facilities will help the economy of Wiltshire.	+	
(C) No significant effect.	O	

Countryside Access Improvement Plan		
Impact of the draft CAIP (including nature and spatial extent of the impact, probability, duration, frequency and reversibility) Where there is more than one objective these will be addressed individually for each strategy.	**Significance of the effect**	**Suggested mitigation and enhancement measures**
(A&B)		
(C) No significant effect	O	

Cycling Strategy		
Impact of the draft Cycling Strategy (including nature and spatial extent of the impact, probability, duration, frequency and reversibility) Where there is more than one objective these will be addressed individually for each strategy.	**Significance of the effect**	**Suggested mitigation and enhancement measures**
(A) The strategy seeks to increase cycling and reduce the need to travel by car, this will help to increase the resilience of Wiltshire's economy and improve vitality and viability of Wiltshire market towns.	+	
(B) Encouraging and increasing cycling through improvements to infrastructure, parking and training will help increase access to a range of services and facilities which will help the economy.	+	
(C) No significant effect.	O	

Powered Two-Wheeler Strategy		
Impact of the draft Powered Two-Wheeler Strategy (including nature and spatial extent of the impact, probability, duration, frequency and reversibility) Where there is more than one objective these will be addressed individually for each strategy.	**Significance of the effect**	**Suggested mitigation and enhancement measures**
(A)The strategy seeks to increase motorcycling and reduce the need to travel by car, this will help to increase the resilience of Wiltshire's economy and improve vitality and viability of Wiltshire market towns. Journey times should also be improved as there will be less cars on the road network.	+	
(B) Encouraging and increasing motorcycling through improvements to infrastructure, parking, and road safety will help increase access to a range of services and facilities which will help the economy.	+	
(C) No significant effect	O	

Smarter Choices Strategy		
Impact of the draft Smarter Choices Strategy (including nature and spatial extent of the impact, probability, duration, frequency and reversibility) Where there is more than one objective these will be addressed individually for each strategy.	**Significance of the effect**	**Suggested mitigation and enhancement measures**
(A) Promoting the use of sustainable transport will help to increase the resilience of Wiltshire's transport network, it will help to reduce congestion and maintain journey times.	+	
(B) Encouraging a change in travel behaviour and promoting the use of sustainable transport will provide increased access opportunities to a range of opportunities which will help Wiltshire's economy.	+	
(C) No significant effect	O	

Assessment conclusions
Cumulative, synergistic and secondary effects: Encouragement of modal switch and sustainable travel will help reduce congestion, free up road capacity and produce a freer flowing road network system. This will help to improve and maintain journey time reliability.
Cumulative effects with other plans: At the current time it is not practicable to provide a full and detailed cumulative effects assessment with other transport plans. The greatest potential on economy and enterprise will occur where LTP3 supports the development proposed as part of the forthcoming Wiltshire Core Strategy.
Summary of performance and performance of the strategies as a whole: On the whole the strategies will have a positive effect on economy and enterprise in Wiltshire and overall they perform well against the SEA objectives. Clearly this strategies will have little effect on reducing the impact of freight on communities.

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