
Non-technical Summary

Connecting Oxfordshire 'Local Transport Plan 4' (LTP4): Strategic Environmental Assessment

Non-technical Summary

Prepared for
Oxfordshire County Council

July 2015

CH2MHILL®

Burderop Park
Swindon
SN4 0QD
+44 (0)20 3479 8000
+44 (0)20 3479 8001

Contents

Section	Page
Glossary	iv
1 Introduction	5
1.1 The Study Area	5
1.2 Environmental Considerations.....	6
1.2.1 Baseline	6
1.3 Description of the LTP4	9
1.4 Stakeholder Involvement.....	10
1.5 SEA Objectives.....	10
1.6 Environmental Effects of the LTP4	10
1.6.1 Assessment of Impacts.....	10
1.6.2 Cumulative Impacts	13
1.7 Recommendations to Improve the Environmental Outcomes.....	13
1.8 Implementation and Monitoring	13
1.9 Next Steps	14

Figures

- 1 Oxfordshire Study Area (Oxfordshire County Council 2014)

Tables

- 1 Likely evolution of the baseline without LTP4
- 2 Effects of the Draft LTP4 on the SEA Objectives.

Glossary

Area of Outstanding Natural Beauty	Area of high scenic quality, which has statutory protection in order to conserve and enhance the natural beauty of its landscape. Designated under the provisions of the National Parks and Access to the Countryside Act 1949, in order to secure their permanent protection.
Baseline Environment	The state of the environment against which to measure change from the plan
Flood Risk	Flood risk is the product of the likelihood (or frequency) of flood events and their consequences (such as property loss or damage, physical harm or distress and social and economic disruption).
Green Infrastructure	Areas set aside for multi-functional purposes of leisure, exercise, drainage, wildlife corridors, green space and play areas.
Local Nature Reserve	Designated under the National Parks and Access to the Countryside Act 1949 by local authorities, for their locally important wildlife or geological features.
National Nature Reserve	Designated under the National Parks and Access to the Countryside Act 1949 or the Wildlife and Countryside Act 1981 (as amended) primarily for nature conservation.
Water Framework Directive	European Community Directive (2000/60/EC) on integrated river basin management. The WFD sets out environmental objectives for water status based on ecological and chemical measures, common monitoring and assessment strategies, arrangements for river basin administration and planning, and a programme of measures to meet the objectives.

1 Introduction

This Non-Technical Summary summarises the Strategic Environmental Assessment (SEA) of the **Connecting Oxfordshire 'Local Transport Plan 4' (LTP4)**. As a Transport Provider, Oxfordshire County Council is required to produce a Local Transport Plan (LTP) under the Transport Act 2000 (as amended) in which are set out objectives and plans for developing transport in the county.

Oxfordshire County Council has prepared three LTPs to date. The LTP4, which builds on the current LTP3 amended in 2012, has now been prepared to set the policy and strategy for Oxfordshire's transport requirements, and the council's approach to addressing the challenges of the transport system in Oxfordshire, in the period from 2015 – 2030. The LTP4 takes account of changes in housing and economic growth, changes in land use and planning, and places an increased focus on reducing demand for travel.

The LTP4 considers the demand and need for transport provision and management in Oxfordshire, while being developed to help meet national goals, set out in the Department for Transport's 'Delivering a Sustainable Transport System'. The main objectives of the LTP4 are to: -

- support growth and economic vitality;
- cut carbon; and
- improve quality of life.

These objectives helped to set the long term aspirations of the Plan and guide the prioritisation of future schemes.

The purpose of the SEA is to identify, evaluate and describe the likely significant effects on the environment of implementing the plan. The SEA is an iterative process, which informs the decision-making in plan development. It provided opportunities for the public to get involved in developing a plan that meets important objectives for people and the environment. The SEA Environmental Report and this Non-Technical Summary have been prepared in accordance with the Environmental Assessment of Plans and Programmes Regulations 2004.

1.1 The Study Area

The study area comprises the entire county of Oxfordshire (see Figure 1), which is located in the south east of England. The county comprises the districts of Oxford, Cherwell, Vale of White Horse, West Oxfordshire and South Oxfordshire.



Figure 1: Oxfordshire Study Area (Oxfordshire County Council 2014)

1.2 Environmental Considerations

1.2.1 Baseline

The SEA identified the social and environmental features and issues that are relevant to Oxfordshire and its transport provision. These include:

- Increasing population growth is increasing demands on housing and existing transport infrastructure, which requires improved connectivity and infrastructure to match new travel patterns. Areas of proposed growth in population, employment and housing will require wider local and national transport links. The high use of private cars in Oxfordshire, causes significant emissions of greenhouse gases and noise. It also contributes to community severance and unsafe conditions for pedestrians and cyclists, reducing rates of physical activity. Improvements to Oxfordshire's countryside access and Green Infrastructure have the potential to reduce fossil fuel consumption by providing walking and cycling corridors, which can improve general wellbeing, health and fitness.
- The health of those living in Oxfordshire is generally good and better than the England average (Oxfordshire County Council 2014¹). Obesity levels are however rising across localities and age groups. Promoting healthy lifestyles through physical activity is an effective way of reducing the risk of chronic disease, and the LTP4 can promote this. The rate of road injuries and deaths is worse in Oxfordshire than the England average, although the total number of road accidents in Oxfordshire fell between 2003 and 2012.
- Significant traffic noise can interfere with the enjoyment of those working, visiting and living in the county.
- Air quality across Oxfordshire is generally good, however there are currently nine declared Air Quality Management Areas (i.e. areas where national standards in air quality are not likely to be met). The declared areas relate to annual average levels of nitrogen dioxide, which is linked to transport emissions. The growth in newer diesel vehicles with emission control technology, has given rise to higher emissions of nitrogen dioxide, which has led to increases in localised pollution levels in urban centres. Despite improvements in air quality in recent decades, air pollution from road transport continues to pose respiratory and inflammatory health risks to people, and has serious implications for the natural environment including wildlife.
- Climate change is predicted to lead to higher temperatures in Central England with hotter/drier summers, warmer/wetter winters and more weather extremes, which will increase pressure on transport assets within Oxfordshire.
- There are protected wildlife sites of international, national and local importance in Oxfordshire that need to be taken into account when planning further development. The LTP4 has been developed to ensure that its measures minimise risk to nature conservation sites and UK priority habitats and species i.e. by the fragmentation, damage or loss of habitats by roads, increasing recreational pressures, and elevating air and noise pollution or polluting water, for example through road surface runoff. Opportunities also exist to create new or improved wildlife areas as part of the LTP4.
- River water quality in Oxfordshire varies between districts. On a county level it was not possible to determine what percentage of water pollution incidents could be attributed to transport, but for England and Wales, 4% of all serious incidents are related to transport. The EU Water Framework Directive requires that the water environment be protected and improved. Large areas of Oxfordshire's transport network, which are prone to flooding, lie within main river catchments or adjacent to lakes. In the past decade, Oxfordshire has experienced significant flooding of some key transport links and climate change is likely to increase this flood risk, which has implications for the resilience of transport networks and water quality.
- There are over 75 national and local sites in Oxfordshire notified for their geological interest.

¹ Oxfordshire County Council (2014c): [A Thriving Oxfordshire: Oxfordshire County Council Corporate Plan 2014/15 – 2017/18 - DRAFT](#)

- Approximately 78% of the land in Oxfordshire is agricultural although the continued pressure for development and new infrastructure is likely to result in further loss of farmland and greenfield land. There are a large number of potentially contaminated sites that could be affected by transport improvements.
- Traffic on Oxfordshire's roads is steadily increasing and Oxford City is becoming increasingly important as a nationally important transport hub. The county also supports major rail infrastructure including main and branch railway lines. Climate change is likely to pose an increasing threat to critical infrastructure. This includes increased risk to transport networks, as well as energy supplies, hospital and schools.
- The transport sector uses mineral resources in the construction of new infrastructure as well as fuels for vehicles. Fossil fuels are non-renewable and subject to price fluctuations on the global market due to changes in supply and demand. Dependence on car use has high resource requirements since significant land is required to accommodate traffic growth while continued capacity improvements are required on the transport network such as road widening and the provision of parking infrastructure. Increased uptake of passenger transport and walking and cycling has lower overall demands on resources per person.
- Oxfordshire has a rich archaeological resource, with Blenheim Palace UNESCO World Heritage Site, 55 Registered Parks and Gardens, nearly 13,000 listed buildings, 242 Conservation Areas, 2 historic battlefields and approximately 350 Scheduled Monuments. There is considerable archaeological potential elsewhere in the county, which is not designated, and on sites where information is presently limited. Historic town and village centres, greenfield and previously developed sites may all contain surviving or buried archaeology, which can be affected by transport improvements.
- Approximately 75% of Oxfordshire is designated for its national or local value (e.g. as Green Belt, Area of Outstanding Natural Beauty or Area of High Landscape value). Oxfordshire's settlement pattern provides few opportunities for major re-use of land within existing built up areas. This has led to a high proportion of development being accommodated on greenfield sites on the edge of the County Towns (Banbury, Bicester, Didcot and Witney).
- As development in the south-east continues, light pollution is likely to increase further. Lighting can affect the quality of people's lives by providing a greater feeling of security and safety or negatively affecting views of night sky features such as stars. Lighting can also affect bird and animal behaviour and vegetation growth.

Table 1 summarises the likely evolution of baseline conditions in Oxfordshire without the LTP4.

Table 1: Likely evolution of the baseline without LTP4

Receptor	Likely evolution of the baseline without LTP4
Population	The population across the region has doubled in size since the 1940s and this increase is set to continue. The proportion of people of pension age is expected to rise.
	Road transport is expected to increase in the county and the reliance on cars for commuters will continue unless strategic action is taken.
	Traffic increases are likely to cause further community severance increasing isolation and safety fears/accidents among pedestrians and cyclists.
	Ongoing development for new housing will increase settlement size, which will exert pressure on the floodplain and transport infrastructure. Increasing development within Oxfordshire will place additional pressure on open spaces, green infrastructure and recreational land.
Human Health	The numbers of serious or fatal road accidents in the county has been decreasing. However, without a road safety strategy within and beyond the county, some roads may become more dangerous, for example through inappropriate use.
	Obesity, lack of exercise and unhealthy lifestyles are problems that increasingly face the county. Health issues related to low physical activity and obesity are likely to reduce the use of alternative modes of transport rather than the car, compounding traffic growth.

Receptor	Likely evolution of the baseline without LTP4
	Health issues related to air pollution are likely to increase.
Noise	The increasing pressure for development and new infrastructure is likely to result in continued traffic growth, with more people being disturbed by transport-related noise.
Air quality	Whilst the vehicle fleet in general is getting cleaner with improved emissions standards, the projected growth for Oxfordshire is likely to lead to increased traffic volumes and greater traffic congestion unless strategic action is undertaken.
Climatic Factors	Greenhouse gas emissions are currently growing, however government and international targets indicate significant cuts in these emissions by 2020.
	Without action, the contribution of transport to carbon dioxide emissions (and associated climate change) will continue to rise.
	It is predicted that Oxfordshire will experience warmer, drier summers and warmer, wetter winters. Droughts and flooding are predicted to become more frequent with increasing demands on maintenance of transport infrastructure such as repairs to structures, reinforcements to embankments and additional drainage requirements.
Biodiversity, Flora and Fauna	Changes in land management (including new development and infrastructure) together with climate change, is likely to negatively affect wildlife.
	More stringent protection of conservation sites strengthened through government strategy
	If there was no co-ordinated transport plan at a strategic level it is possible that new transport plan schemes or plans could have a negative impact on wildlife at a local level.
Water	Water resources within Oxfordshire are under increasing pressure from a growing population and increased demand for wastewater treatment and drinking water.
	Increasing traffic volumes are likely to lead to greater levels of diffused pollution from surface-water run-off on older roads and increasing pollution of adjacent rivers and lakes.
	Winter flooding and increasing risk of drought could affect water supply or treatment facilities, resulting in loss of service or contamination of water supplies.
	The Environment Agency is aiming to improve water quality in rivers and lakes in the county in line with the Water Framework Directive.
Geology and Soils	Soil erosion in the county is likely to continue due to surface water flash flooding and other causes.
	Compaction and sealing will also continue, for example through an increase in developed areas and impermeable surfaces.
	Continued pressure for development and new infrastructure is likely to result in further greenfield development and loss of farmland.
	Greater levels of diffuse pollution from surface-water run-off may increase pollution of adjacent soil resources.
Material Assets	Without a strategic plan to stem road traffic and congestion, traffic numbers would be likely to rise at a faster rate than currently experienced. The heavy reliance on Oxfordshire's road and railway network and comprehensive public transport system will continue with increased population growth.
	The condition of many roads and footpaths will deteriorate. Increasing occurrence of extreme weather events is likely to increase the need for repairs to structures.
	The volume of waste generated is likely to increase and place greater demand on the county's roads.
The Historic Environment	The historic environment is likely to remain an important economic, social and cultural feature of the county and the management and restoration of heritage assets is likely to continue. There would be no new road transport improvements with potential to negatively affect historic and heritage assets nor transport-related opportunities to enhance heritage assets. However, increasing traffic levels will impact upon the amenity and quality of the archaeological sensitivity of streetscapes and the cultural environment. Increasing traffic congestion (in the absence of traffic management to

Receptor	Likely evolution of the baseline without LTP4
	support forecasted housing growth) is likely to negatively affect historic towns and villages.
	Oxfordshire's archaeology (and the setting of historic sites) will continue to be threatened by development as well as inadequate management of features, landscapes or nearby resources, neglect and inappropriate development within or near historic features or landscapes.
Landscape	Increasing urbanisation will increase pressure on the skyline and viewpoints around Oxfordshire.
	There is potential for development pressure to detract from the quality of some of the county's landscapes.
	Light pollution from development will continue.
	Increasing traffic volumes will increase noise disturbance in the countryside and the loss of tranquillity.
	Increases in traffic will cause more vehicles to use unsuitable rural roads. However, plans to de-clutter streets and improvements to the public realm will improve the townscape in some areas.

These environmental issues and their relative importance have been taken into account throughout the development of the plan.

1.3 Description of the LTP4

The LTP4 has identified 34 policies that will be applied across the county through:

- The council's key role in integrated strategic land use and transport planning for the county
- Involvement in the development of Local Plans and Neighbourhood Plans
- The council's response to strategic infrastructure and development proposals
- The council's response to planning applications
- The development of Area Strategies (see below) for areas planned for growth
- The development of Supporting Strategies (see below)
- The council's work with partners to develop transport solutions; and
- The council's decision making process for all aspects of transport for which they have control.

Area Strategies have been developed for those parts of the county that are due to experience significant housing and/or employment growth, and to reflect the emerging Local Plans. The Area Strategies describe how these different localities, will meet local transport needs in the county, and comprise: -

- Oxford
- Science Vale (an area encompassing Wantage and Grove, Abingdon, Didcot, Culham Science Centre, Milton Park and Harwell Oxford Campus)
- Bicester
- Banbury
- Witney
- Carterton

These Area Strategies, which are presented in detail in the LTP4, set a clear strategy for transport to guide decision-making and support future funding arrangements. Other strategies that have been developed to support the Area Strategies are: -

- Science Transit Strategy
- Bus Strategy
- Rail Strategy
- Cycling Strategy
- Freight Strategy

- A420 Strategy
- Highways Asset Management Plan

The likely environmental effects of alternative LTP4 policies, Area Strategies and Supporting Strategies were assessed through a staged and systematic approach, which was informed and influenced by stakeholders.

1.4 Stakeholder Involvement

Effective stakeholder and public engagement is central to the development of an effective LTP4. Throughout the development of the plan, it was important to meet both regulatory requirements for consultation and to ensure that the knowledge, experience and views of stakeholders and the general public were taken into account. This was achieved through consultation during the preparation of the earlier LTP3 between 2009 and 2011 and formal consultation activities during the development of the LTP4.

1.5 SEA Objectives

The baseline information and relevant key environmental issues identified have been used to define a series of SEA objectives, which are shown in Table 2.

1.6 Environmental Effects of the LTP4

1.6.1 Assessment of Impacts

Environmental assessments of the LTP4 policies and Area/Supporting Strategies have been evaluated and are presented in the Environmental Report. Table 2 summarises the assessment of the effects of the LTP4 on the SEA objectives.

The LTP4 has been developed to benefit people and their travel, supporting accessibility and future development/economic growth. Significant positive effects are identified such as improvements to the vitality of town and city centres, air quality, the built environment and walking and cycling. However, the LTP4 is likely to give rise to a number of construction related impacts on the environment such as land take, change in landscape, loss of habitats, resource use and impacts upon the historic environment. In many instances, these effects are likely to be better than the 'without LTP4 scenario', where such changes to provide short-term solutions, would be unplanned.

Table 2: Assessment of the Effects of the LTP4 on the SEA Receptors and SEA Objectives.

SEA Objective	Effects of the LTP4
1. Maintain the vitality of town centres	Significant beneficial impacts on town and city centres through the reduction in through traffic (including freight movements), improvements to the public realm and the provision of infrastructure to support regeneration and economic growth. During construction of any transport improvements, the proposed network improvements are likely to result in some initial travel disruption within town centres and in the city of Oxford.
2. Improve accessibility to jobs, facilities and services	Significant beneficial impacts on accessibility in the short and medium-term. The Area Strategies will improve access and connectivity to businesses, residential areas, leisure, retail destinations, employment opportunities and new and existing development locations.
3. Enhance and protect the green infrastructure and countryside	No significant strategic impacts on the countryside and green infrastructure have been identified. The majority of impacts have been identified as uncertain, as a result of delivering the LTP4. The LTP4 promotes improvements to, linkages between, and the creation of new pedestrian and cycle routes (and their facilities), but there is uncertainty as to the effect of

SEA Objective	Effects of the LTP4
	new and improved road, rail and public transport infrastructure on the countryside and existing green infrastructure during construction.
4. Protect and promote everyone's physical and mental wellbeing and safety	No negative impacts on human health have been identified as a result of the LTP4. This LTP4 identifies strategies to improve facilities, links and safety conditions for pedestrians and cyclists to encourage the uptake of walking and cycling.
5. Reduce noise pollution	No significant strategic impacts on noise have been identified as a result of implementing the LTP4. Any impacts of the strategies on noise are uncertain and are likely to be dependent on location.
6. Reduce all forms of transport-related air pollution in the interests of local air quality	No significant strategic impacts on air quality have been identified as a result of implementing the LTP4. Any impacts of the strategies on air quality are uncertain and are likely to be dependent on location.
7. Reduce transport related greenhouse gas emissions	No significant strategic impacts on greenhouse gas emissions have been identified as a result of implementing the LTP4. The LTP4 will encourage greater use of sustainable modes of transport (walking and cycling) together with an improved rail service, more energy efficient buses, park and ride sites and a fully integrated and enhanced public transport system with bus priority measures, which will help accommodate future traffic growth and reduce greenhouse gas emissions.
8. Protect and enhance habitats and the diversity and abundance of species	With the exception of the Oxford Transport Strategy, no significant strategic impacts on biodiversity have been identified as a result of implementing the LTP4. However, the LTP4 assumes a number of new road improvements and cycle routes to improve accessibility and support housing growth, together with the construction or redevelopment of structures and facilities, which may have an overall negative effect upon biodiversity through the loss and fragmentation of habitats with associated impacts on species of principal importance and European Protected Species. Further assessment of affected habitats and species (including European Protected Species) will be required at project level, when detailed design information becomes available. Additionally, opportunities will also be sought at project level to provide a net gain in biodiversity. Such opportunities should include consideration of the potential for road verge networks to support wildlife, appropriate tree management and protecting and enhancing habitats (e.g. for bees and other pollinators in line with the Council's resolution in July 2014)
9. Maintain and improve the quality of water resources	No significant effects upon water quality are anticipated as it is assumed that any new infrastructure would be designed with appropriate drainage to address potential surface water pollution.
10. Retain the floodwater storage function of riparian land and the floodplain and reduce the risk of flooding where it would be detrimental	The LTP4 demonstrates a commitment to maintaining drainage and associated infrastructure to minimise flooding on and from the highway network.
11. Maintain resources such as minerals and soils and enhance geological diversity	The potential transport network improvements associated with the LTP4 are likely to be resource intensive. It is assumed that increases in frequency and length of trips to be taken by road would lead to an ongoing high maintenance requirement and long term high mineral use, which would result in negative impacts (some of which may be significant). Some significant adverse impacts on agricultural land have been identified including the loss and fragmentation of some good to very good quality

SEA Objective	Effects of the LTP4
	<p>agricultural land in the footprint of new road improvements and roundabouts, within Oxford, the Science Vale and Banbury. Further losses of lower quality agricultural land will be experienced in other strategy areas. Delivery of the LTP4 should seek to minimise or avoid these losses wherever possible.</p> <p>There is a commitment to making the best use of natural mineral resources, planning for Oxfordshire's long-term minerals need whilst minimising waste going to landfill, which is considered to be a beneficial impact.</p>
12. Optimise the use of previously developed (brownfield) land thereby reducing waste generation	No significant strategic impacts on the brownfield land have been identified. The impacts have been identified either as uncertain, as it is unknown at this plan level whether brownfield land will be used for the proposed transport network improvements, or negative, where land-take is likely to comprise currently undeveloped greenfield sites or agricultural land.
13. Adapt transport network to climate change	No significant strategic impacts on climate change have been identified. It is assumed that the LTP4 schemes would be constructed to design standards that take account of climate change predictions and therefore be more resilient than existing infrastructure, which is considered a beneficial impact.
14. Conserve and enhance the historic environment, the significance of heritage assets and their settings	<p>The impacts of the LTP4 on the historic environment are uncertain for most Area Strategies and will be dependent on the nature, location and siting of new and improved transport infrastructure and services. Not all transport improvements will necessarily negatively impact on the historic environment and during the implementation of transport schemes, measures will be actively sought to enhance the historic environment and quality of life. Access improvements and the Sustainable Transport Strategy may also improve sustainable access to known heritage sites. However, although a reduction in traffic (including freight) in town centres and the city is likely to benefit heritage assets and their setting through improved air quality, visual amenity and reduced vibration, there are likely to be some negative effects on the historic centre of Oxford City, its Scheduled Monuments and the Conservation Area during the construction of the tunnels. There may be some negative impacts upon the historic environment from the improvements to the transport network and the re-routing of road traffic although the LTP4 generally seeks to ensure that historically sensitive areas (e.g. Banbury town) are protected. A more detailed assessment of the impacts of the proposals on specific designated and undesignated heritage assets will be required during the feasibility stage of schemes.</p>
15. Maintain and enhance the quality and distinctiveness of the built environment	No significant strategic impacts on the built environment have been identified. It is likely that improved road and rail infrastructure, and new pedestrian and cycling facilities would benefit the built environment.
16. Maintain and enhance the quality and character of the landscape, including its contribution to the setting and character of settlements	<p>Potential for significant negative impacts on landscape character identified as a result of delivering the Science Vale Area Strategy (e.g. impact on landscape features, road signage clutter and road verge erosion, loss of open countryside, loss of tranquillity, loss of dark night skies, change in visual amenity and loss/disturbance to narrow lanes). Oxfordshire County Council will seek to conserve the AONBs, working with AONB management teams to implement relevant policies or actions from their management plans.</p> <p>Road and junction improvements (including a new Thames river crossing), and park and rides are likely to have a negative effect on landscape character. The design of all new infrastructure should seek to minimise impacts on landscape character and visual intrusion. Pedestrian improvements and a commitment to maintain street furniture and other assets that contribute to</p>

SEA Objective	Effects of the LTP4
	the local landscape character (while removing redundant street furniture) will help to improve the streetscape in some areas.

1.6.2 Cumulative Impacts

Many of the predicted effects for the LTP4 are cumulative in their nature. For example, the predicted positive effect on air quality depends upon a reduction in traffic arising from a shift from car use to public transport and an increased uptake of walking and cycling. An increase in walking and cycling and improvements to walking and cycling facilities would combine to improve human health through a combination of increased physical activity and reduced air and noise pollution. Consideration will be given to completing walking and cycle route improvements promptly to improve the chance of achieving a modal shift within the timescales envisaged within the LTP4.

The negative effects predicted on landscape character, soils and biodiversity are chiefly due to the cumulative effect of transport measures in combination with development pressure and land-take within greenfield sites and the countryside in general. Few of the Area Strategies will, alone, lead to any significant impacts on a strategic scale.

The LTP4 was developed to ensure that it was fully integrated with other plans, strategies and programmes including Local Plans, Town masterplans, MOD Proposals, rail proposals and other development proposals.

When project level detail associated with the LTP4 schemes (including location of transport improvements and ongoing maintenance and repair works) is available, further assessment of potential in-combination or cumulative impacts should be considered.

1.7 Recommendations to Improve the Environmental Outcomes

As summarised in Table 2 above, there are significant negative impacts anticipated on landscape character, the historic environment and soil and mineral use as a result of the LTP4. Some negative impacts were identified in relation to noise, air quality, greenhouse gas emissions, biodiversity, flora and fauna and water. No significant negative impacts were identified in relation to the vitality of town centres, human health and material assets.

Mitigation measures are recommended where the LTP4 is anticipated to have negative impacts and are detailed in the SEA Environmental Report. For the significant negative impact on landscape character, a detailed landscape and visual impact assessment at scheme level was recommended and should be implemented through a detailed scheme level Environmental Impact Assessment, where appropriate. For the significant negative impact on soils and minerals use, a detailed environmental assessment of the effects on land use of individual highway schemes and new park and ride facilities was recommended and should be considered as part of detailed Environmental Impact Assessment. The principal recommendation is that the predicted negative impacts should be taken forward as the plan is delivered and mitigated when they are likely to arise during the construction of transport schemes.

1.8 Implementation and Monitoring

The SEA Environmental Report documents how Oxfordshire County Council will monitor the environmental effects of implementing the LTP4 against the predictions made by the SEA. The key principles of implementation and monitoring are to: -

- Ensure that mitigation measures are fully implemented and are effective
- Monitor all the significant environmental effects identified during assessment and documented in the SEA Environmental Report. This includes all significant positive, negative, foreseen and unforeseen environmental effects
- Identify any unforeseen environmental effects
- Avoid duplication of monitoring by utilising existing monitoring programmes

The SEA Environmental Report provides a monitoring plan in relation to the predicted significant effects (major positive and negative effects) during the life of the LTP4 (up to 2031) or where uncertain effects have been identified in this same timescale.

1.9 Next Steps

This Non-Technical Summary and the SEA Environmental Report will be made available on the Oxfordshire County Council consultation webpage under Local Transport Plan 4:

<http://www.oxfordshire.gov.uk/connecting-oxfordshire>

Following adoption of the final LTP4, a Statement of Environmental Particulars will be prepared to meet the requirements of the SEA Regulations. This Statement will indicate how Oxfordshire County Council took environmental considerations and consultee contributions into account during the development of the LTP4, the work undertaken to finalise the LTP4 following consultation on the draft, and how Oxfordshire County Council selected the approach adopted in the final LTP4. It will also set out the monitoring procedures that have been put in place to monitor both the significant and the uncertain environmental effects of the implementation of the plan.