

Derby City Council

Local Transport Plan 3
Strategic Environmental Assessment
Environmental Report
Non-Technical Summary

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Local Transport Plan 3 Strategic Environmental Assessment

Draft Environmental Report

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Non-Technical Summary

What is this document?

This document is a non-technical summary of the draft Environmental Report prepared as part of the Strategic Environmental Assessment (SEA) of the third Derby Local Transport Plan (LTP3).

This document and the full draft Environmental Report accompanies the draft LTP3, which is under consultation on with the public between 8 November 2010 and 07 January 2011. Details of how to respond to this consultation are provided at the end of this document.

What is LTP3?

LTP3 is being prepared by Derby City Council to replace the current 2006 to 2011 LTP2 and sets out:

- The long-term transport strategy for the city of Derby from 2011 to 2026
- A short-term implementation plan initially covering the period from 2011 to 2013.

What is the LTP3 vision?

The central focus of LTP3 is the Transport Vision:

*'To provide people living and travelling within Derby with viable travel choices and **effective** and **sustainable** transport networks.'*

The LTP3 vision has been influenced by local, regional and national priorities and policies and current local and regional transport issues.

What are the current transport related issues?

- Derby is a compact city with excellent links to the regional and national transport networks.
- It is well served by rail connections and has a comprehensive local bus network.
- There is an expanding network of cycle routes and footpaths.
- There is generally good accessibility. However, the perceived high cost of public transport and the impacts of congestion on reliability of bus services is a threat to continued high levels of accessibility.
- In the wider area, delay and congestion on the Strategic Road Network, especially the A38, has a severe impact not only on traffic travelling across the area using the trunk roads but also local traffic.
- Car ownership in the East Midlands is increasing. Latest statistics show that between 1996 and 2006 the number of households without a car decreased by 10%.
- Figures show that traffic in the East Midlands Region since 2000 has grown well above the average trend for England.
- Traffic growth and congestion in Derby has associated economic, social and environmental impacts. For example, delay in Derby is estimated to cost £46 million per year or £103 per person.
- Traffic growth in Derby and the East Midlands as a whole is linked to the Region's population and strong economic growth. Despite a recent dip in traffic levels that may be attributable to a combination of higher fuel prices and the recession, the long-term growth trend is likely to continue.

What are the LTP3 goals and challenges?

To deliver the LTP3 vision, we have developed five overarching transport goals and nine practical objectives which are known as challenges.

Goals

- Support growth and economic competitiveness by delivering reliable and efficient transport networks.
- Contribute to tackling climate change by developing and promoting low-carbon travel choices.
- Contribute to better safety, security and health for all people in Derby by improving road safety, improving security on transport networks and promoting active travel.
- Provide and promote greater choice and equality of opportunity for all through the delivery and promotion of accessible walking, cycling and public transport networks, whilst maintaining appropriate access for car users.
- Improve the quality of life for all people living, working in or visiting Derby by promoting investment in transport that enhances the urban and natural environment and sense of place.

Challenges

- Challenge 1: Provide network efficiency, reduce unnecessary delays and facilitate economic activity.
- Challenge 2: Maintain and improve transport infrastructure to address existing and future needs.
- Challenge 3: Minimise the effects of any unpredictable events on the transport network, and enhance adaptation to the effects of climate change.
- Challenge 4: Minimise the negative effects of travel and existing and new transport infrastructure on local communities, air quality and the wider environment.
- Challenge 5: Minimise transport's contribution to climate change and improve energy efficiency.
- Challenge 6: Provide safer travel opportunities and reduce road casualties.
- Challenge 7: Provide good access to employment opportunities, key facilities and services for all residents and visitors to the Derby Local Transport Plan area.
- Challenge 8: Encourage and enable all people and businesses to use sustainable travel options.
- Challenge 9: Enhance the integration of transport in the urban environment to provide safe, secure and multifunctional space, promoting greater social interaction and natural surveillance.

Background to the Strategic Environmental Assessment and the Environmental Report

Local authorities are required by law to undertake an SEA of their LTP3, under the Environmental Assessment of Plans and Programmes Regulations 2004. SEA is a systematic process that identifies and predicts the potential significant environmental effects of plans, informing the decision making process.

The SEA has involved the following key steps:

- Determining what the environmental conditions are like now and how these may change in the future, without implementing the LTP3. Specific environmental problems and opportunities which the LTP3 should address were identified to help inform the development of the Plan.

- Developing and assessing options for a long-term transport strategy and short-term implementation plan for the LTP3.
- Assessing the likely environmental effects of the long-term transport strategy and implementation plan and developing ways of preventing, reducing or offsetting negative environmental effects which cannot be avoided.
- Preparation of a draft Environmental Report which sets out the likely environmental effects of LTP3 and the measures proposed to mitigate and reduce these effects.
- Consulting with statutory environmental bodies, including English Heritage, Natural England and the Environment Agency, and other stakeholders during the development of LTP3. A formal period of public consultation on the draft LTP3 and draft Environmental Report (and this NTS) is taking place now.

This process allows the government, statutory environmental bodies, the public and other stakeholders to understand what the environmental effects of LTP3 are likely to be before it is finalised and ensures that environmental considerations have been taken into account fully during the development of the LTP3.

What other assessments have been done?

- Health Impact Assessment – this assessment has been undertaken as part of the SEA which considers the potential effects of transport and LTP3 on the health of our residents and how this affects different groups in the community. Health is one of the SEA challenges and is considered throughout the SEA.
- Habitats Regulations Assessment (HRA) – in addition to undertaking an SEA, we are legally required to undertake a separate HRA where the LTP is likely to have a significant impact on certain sites where wetlands, animals and plants are protected under European legislation. As a result of consultation on the SEA Scoping Report, it was accepted that LTP3 is unlikely to have any significant impact on any of these sites and a HRA is not required for Derby's LTP3. Natural England (the organisation responsible for nature conservation) is satisfied that we have met all considerations. Further information can be found in the full SEA report.
- Equality Impact Assessment – Derby City Council has also undertaken an Equality Impact Assessment of the LTP3. This assesses the impacts of LTP3 on different social groups, mainly focussing upon race, gender, age, religion, disability and sexual orientation.

What are the current environmental conditions and future trends in Derby?

An important part of the SEA was to establish what the environment is like in Derby now and how this might change, up to the year 2026, without the long-term transport strategy in the LTP3. In particular, the study considered how the environment is affected by transport. This provided a good basis for comparing a scenario with LTP3 in place and one without.

The key environmental issues are:

- Derby is home to a number of designated nature conservation sites, geological sites, habitats and species. These include a Site of Special Scientific Interest at Boulton Moor, ten Local Nature Reserves and over a thousand hectares of Green Wedges. Without LTP3, these are likely to be protected by other council policies.
- Landscape character areas and features including green wedges, parks and open spaces are at risk from loss due to development pressures including transport proposals but are likely to be in some part protected even without LTP3.
- Derby has a rich local historic environment and townscape, which contains a number of historic assets and features such as listed buildings, conservation areas and the Derwent Valley Mills World Heritage Site. Without LTP3, traffic and congestion may adversely affect such resources through, for example, air pollution.

- There is pressure on Derby's land resources through demand for use of undeveloped or previously developed land. Without LTP3 it is unlikely that appropriate use of land for transport schemes will be supported.
- Local air quality is generally good but there are hotspots where quality is less good. Derby has two designated Air Quality Management Areas (AQMAs). The first is focussed around the inner and outer ring road and the second is around a section of the A52 in Spondon. Without LTP3, it is likely that traffic and congestion will grow and air quality would worsen.
- Transport is an important contributor to greenhouse gases, in particular carbon dioxide (CO₂). Without LTP3, traffic growth and congestion would increase and contribute to climate change and associated impacts such as increased flood risk.
- With an increase in population and economic growth, facilitated by transport, there will be more waste produced, and the consumption of natural resources such as fossil fuel will increase. Without LTP3 it is unlikely that there will be the necessary measures within Derby to influence fuel consumption.
- Increased population will put more pressure on public transport and may lead to shortages in provision. Without LTP3 it is likely that this pressure on services will intensify.
- Water quality is generally good at key features such as the River Derwent and Markeaton Brook. Impacts on water resources such as from contamination of ground and surface waters could result from development in the absence of LTP3.
- Transport infrastructure can lead to a loss of tranquillity, related to increasing levels of noise, vibration and lighting from vehicles, roads and infrastructure. Without LTP3, it is likely that tranquillity levels will worsen.
- Access to key services, facilities and employment is generally good. However, there are pockets of deprivation in Derby and accessibility is a determining factor. Without LTP3, the situation is likely to stay the same, however LTP3 represents an opportunity to help tackle deprivation.
- Lack of community cohesion is an issue in parts of Derby where not everyone has the same transport opportunities and consequent accessibility to key services, facilities and employment. Without LTP3, it is likely that this situation will remain unchanged.
- Traffic has grown in Derby and may continue to grow without LTP3, leading to a range of impacts such as worsening air quality.
- Road safety is generally good but traffic growth will increase the risk of road accident casualties in the absence of LTP3.
- The general physical health of the population in Derby is in line with national trends though this is worse amongst deprived groups. Health is likely to improve without LTP3. However, health can be improved through transport and its role in promoting physical activity and access to key facilities such as health clinics and open spaces. This will at the same time help tackle health inequalities.

What are the Strategic Environmental Assessment objectives?

The next stage in the SEA process was to create an SEA framework for assessment. This looks at the key environmental issues set out above to produce objectives to help assess the performance of LTP3 and its effects on the local environment. A set of 18 objectives was identified:

SEA Objectives

1. To protect and enhance local air quality, in particular in Air Quality Management Areas.
2. To minimise the emissions of greenhouse gases from transport.
3. To protect and enhance biodiversity, the natural environment and green infrastructure.
4. To conserve and enhance the buildings, sites and features of cultural interest and their settings.
5. To protect and enhance landscape and townscape character.
6. To protect, enhance, and promote the enjoyment of open spaces.
7. To prevent land contamination associated with transport and seek to conserve soil quality and resources.
8. To protect and enhance the water environment.
9. To reduce vulnerability to climate change by minimising the impact of flooding and effects from other adverse weather conditions.
10. To manage and conserve natural resources and minimise the production of waste.
11. To increase energy efficiency and increase the use of renewable energy.
12. To reduce noise and vibration and light pollution related to transport.
13. To protect and improve the health of Derby's population and reduce health inequalities between areas and groups.
14. To reduce crime and fear of crime and promote safer and more cohesive communities.
15. To improve road safety and reduce number of transport incidents.
16. To improve accessibility to employment opportunities, key facilities and services.
17. To reduce road traffic and congestion.
18. To improve journey ambience.

How has the 2011-2026 long-term transport strategy been developed?

Our transport vision, goals and challenges have been established taking into account local transport and environmental challenges for Derby, and have informed the development of a long-term transport strategy covering the period 2011-2026. This will be implemented through shorter-term implementation plans, the first covering the period 2011-2013. Further implementation plans will be published in future.

We have checked the compatibility of the LTP3 challenges and SEA objectives and found that they were broadly compatible.

We have also identified a number of different alternatives to help meet our vision, goals and challenges. Each alternative comprises a combination of measures that fall under four themes:

- Active travel – includes measures to encourage walking and cycling, such as road safety training, travel planning, pedestrian and cycle routes, cycle training and bike pools.
- Public transport – includes measures to improve bus route infrastructure such as shelters, support for new bus services such as the SkyLink to East Midlands airport, integrated ticketing and park and ride schemes.
- Network management – includes measures to improve road safety, such as enforcement of bus lanes and street working permits and management of on and off street parking.
- Asset management – includes measures such as delivering the replacement of London Road railway bridge and road maintenance.

Each alternative has a different level of emphasis on each theme. Five alternatives were developed and assessed against the SEA objectives:

1. Significant support for network management and asset management and a minimum of level of support for active travel and public transport.
2. Significant support for active travel and public transport, moderate support for network management and a minimum of support for maintenance.
3. Significant support for active travel with moderate support for network management and asset management but a minimum level for public transport.
4. Either maintaining or improving on services or standards (medium investment) across all areas.
5. Delivering an achievable minimum (low investment) across all areas.

Alternative 3 was considered by the SEA to be the most sustainable overall as it has no significant negative effects. Alternative 2 delivers a higher number of positive social significant effects and is highly sustainable in this respect. The two alternatives differ largely as a result of the different level of public transport schemes.

However, we believe that strategic alternative 4 is the best alternative as it proposes the most balanced approach delivering in the key areas of land use policies, active travel, public transport, network management and asset management at a realistic funding level. In addition, we believe that there should be further emphasis in active travel and network management to make the most of efficiency improvements made to the road network. This would also lead to further environmental benefits by preventing any potential induced traffic building up at certain times of the day.

What is the 2011-2026 long-term transport strategy?

We are proposing two alternative scenarios for the 2011-2026 long-term strategy based on different levels of available funding. The first is an 'aspirational' scenario and the second is a 'most likely' scenario.

The Aspirational scenario is set out in the following table:

Active Travel	Public Transport	Network Management	Asset Management
<ul style="list-style-type: none"> • Maintain existing pedestrian and cycle infrastructure, amounting to approximately 210 km of routes. • Continue road safety training - typically training up to 5,000 primary age pupils a year. • Increased support for the city council's own travel plan – including measures such as a car share website and pool bikes and cars. • Improve pedestrian and cycle safety hotspots and infrastructure improvements. • Provide more Smarter Choices education and information measures - Increased travel awareness campaigns, cycling and walking promotion, public transport information and 	<ul style="list-style-type: none"> • Maintain existing bus route infrastructure including shelters, signs, kerbs, bus lanes and signals. Implement 16 projects a year typically. • Maintain and expand Real Time Information system and signal priority across more routes, targeting 60% coverage. • Revenue support and capital for key bus services such as Skylink (to East Midlands Airport 24 hr service). • Bus service enhancements, excluding the orbital bus route. • Optimum support for community transport services, for example, the dial-a-bus service to the city centre and major supermarkets. • Measures to enhance the attractiveness of buses 	<ul style="list-style-type: none"> • Maintain current level of support in management of traffic impacts, including on the environment. Currently the council implements about 2 junction improvements per year and 4 traffic management schemes typically to address local safety or operational concerns. • Expand and upgrade Intelligent Transport System (ITS) network to enable active and real time management of the network including signal control, pedestrian control, CCTV and Urban Traffic Control (UTC) systems on key routes. Increase network coverage by approximately 10-20%. • Increased support and expansion of on and off 	<ul style="list-style-type: none"> • Refurbishment of 4 sets of traffic signals per year. • Maintenance of the road network in a planned rather than a reactive way. • Delivery of major maintenance project through the replacement of London Road Railway Bridge. Ensure a high level of access is retained on London Road and the surrounding area. • Deliver an effective planned maintenance programme.

marketing and travel planning. • Increase investment in travel planning for existing and future businesses - Potentially implementing more city wide measures such as car clubs targeting up to 20,000 people per year. • Consider and encourage the appropriate use of new technologies including electric charging points for a range of vehicles.	such as integrated Smart Card Bus Ticketing. • Bus reliability measures and traffic management.	street parking and enforcement. • Park and ride at sites at Boulton Moor, the A516, the A61 and the A52. • Increased control of road space through street work permit scheme, enforcement of bus lanes, weight limits and signage. The aim is to reduce impacts of congestion. • Road Safety - increase expenditure. Includes schemes specifically aimed at children, such as safer routes to school. • Network management measures to influence travel choices.	
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The two scenarios both involve a balanced level of investment in all of the transport themes (active travel, public transport, network management and asset management) but the Aspirational scenario includes measures above and beyond the Most Likely Funding scenario. These are:

- the level of active travel measures such as walking and cycling,
- travel planning and smarter choices
- additional bus reliability measures and traffic management measures
- park and ride sites at A516, A61, and A52
- maintenance of the road network in a planned rather than a reactive way.

What are the environmental effects of the 2011-2026 long-term transport strategy?

The outcomes of the assessment are set out below. Significant effects (in other words, those moderate or large and highlighted in colour) are the key ones as they are deemed to be noteworthy. Slight effects are not significant.

Assessment Summary for the Preferred Strategy Scenarios

SEA Objectives	Scenarios	
	Aspirational	Most Likely Funding
Environmental	Scale / significance of effect	
1. Air quality	Slight adverse	Slight adverse
2. Greenhouse gases	Slight adverse	Slight adverse
3. Biodiversity	Moderate adverse	Slight adverse
4. Historic assets	Neutral / no effects	Neutral / no effects
5. Landscape and townscape	Slight adverse	Slight adverse
6. Open spaces	Slight adverse	Neutral / no effects
7. Land contamination and soil	Moderate adverse	Slight adverse
8. Water	Slight adverse	Slight adverse
9. Climate change vulnerability, including flood risk	Slight adverse	Slight adverse
10. Natural resources and waste	Moderate adverse	Slight adverse
11. Energy efficiency and renewable technology	Slight beneficial	Slight beneficial
Social Including Health		
12. Noise, vibration, light	Slight adverse	Slight adverse
13. Health	Slight beneficial	Slight beneficial
14. Crime and fear of crime	Slight beneficial	Slight beneficial
15. Safety	Slight beneficial	Slight beneficial

16. Accessibility	Slight beneficial	Slight beneficial
17. Traffic and congestion	Moderate beneficial	Moderate beneficial
18. Journey quality	Slight beneficial	Slight beneficial

On a scenario-by-scenario basis, the following observations can be made:

Preferred Strategy – Aspirational scenario

- There are likely to be significant adverse effects in this scenario against the biodiversity SEA objective. This is as a result of the landtake required for the four park and ride sites at Boulton Moor, the A516 site, the A61 site and A52 site, as well as the A38 grade separation proposed by the Highways Agency. All sites will remove greenfield land (sites that have not previously been built on) to a lesser or great extent. Although these sites are not nationally or internationally designated for their biodiversity value, they are locally protected. Collectively, their loss is likely to be significant, even though LTP3 may lead to some modal shift away from cars to other forms of transport.
- There are also likely to be significant adverse effects against soil quality and quantity as a result of the location of the park and ride schemes. These sites either involve brownfield and potentially contaminated sites or greenfield and/or agricultural sites.
- The nature of the measures in this scenario may cause significant adverse effects for resource usage (such as an increased use of concrete) and increased waste production (for example, spoil) as a result of construction.
- There are predicted to be significant positive effects against traffic and congestion as a result of the measures in this scenario.
- The main way this scenario can be improved against SEA objectives is by closer attention to the location and number of park and ride schemes and through a number of recommended mitigation and enhancement measures.

Preferred Strategy – Most Likely Funding scenario

- There are likely to be fewer adverse significant effects compared to the Aspirational Scenario due to the lesser number of park and ride schemes:
 - For biodiversity, there will be fewer locally protected sites lost and therefore the effects are unlikely to be significant.
 - Less undeveloped greenfield land and previously developed land would be needed, and therefore there are not expected to be significant adverse effects against this particular SEA objective.
 - The requirement for resources and generation of waste will be minor adverse rather than significant.
- Like the Aspirational scenario, there are predicted to be significant positive effects against traffic and congestion as a result of the measures in this scenario.

Overall, it has been shown that the greater the level of intervention in the form of the construction of transport infrastructure such as park and rides and road schemes, the greater the extent of beneficial and adverse environmental effects. Although some are significant, mitigation and enhancement can be used to further improve the performance of these scenarios. The decision on which scenarios to pursue in LTP3 depends on the balance given to social and environmental considerations, and importantly on the prevailing funding situation which determines as much the level of intervention LTP3 can make.

How has the 2011-2013 short-term implementation plan been developed?

The short-term implementation plan for Derby reflects the funding realities that we will face in the next two years and is therefore more limited in the extent of measures proposed compared with the Aspirational and Most Likely Funding scenarios.

There are quite a few similarities between this plan and the Aspirational scenario such as maintaining bus route infrastructure, pedestrian and cycle infrastructure and the replacement of London Road Bridge, but there are also a number of key differences. For instance:

- There are no park and rides, integrated Smart card bus ticketing, bus reliability measures or revenue and capital support for key bus services such as Skylink.
- Less funding would be available for some measures such as on the Derby City Council Travel Plan.
- There would be continued rather than an optimum level of support for community transport
- Real Time Information would be maintained, not expanded.

What mitigation measures will be used?

The proposed LTP3 has a range of beneficial and adverse effects, most of which are not significant. For those effects that are significant, the following measures are proposed by the SEA:

- Further attention should be given to the location, construction and operation of the park and ride sites. This will help determine if there are any alternative locations which avoid adverse biodiversity impacts and use of greenfield and contaminated land.
- Another form of avoidance is deciding to implement only a few rather than all of the park and ride schemes proposed.
- If this is not possible, then the footprint of the development should be limited wherever possible. More detailed measures should be explored at the project planning stage including: habitat compensation spaces and the use of tree planting to create a barrier between habitats and species and the park and ride schemes.
- Compensation should be provided to offset any loss of agricultural land through the provision of alternative land.
- In order to avoid natural resource use and wastage, there should be greater focus on using intelligent technologies and measures such as expanding the ITS (Intelligent Transport Systems) network.
- For the same purpose, developments should adhere to a Construction Environmental Management Plan (CEMP) during construction incorporating the requirements for Site Waste Management Plans (SWMPs). Opportunities should be sought to identify and reuse materials on site and give preference to locally sourced materials to reduce transport requirements.

A number of other mitigation and enhancement measures have been provided for effects that are not deemed to be significant. These can be found in the draft Environmental Report.

How will LTP3 be monitored?

Monitoring the significant sustainability effects of implementing LTP3 will be an important ongoing element of the SEA process. SEA monitoring involves measuring indicators which provide a better understanding of the links between the implementation of the plan and the sustainability effects (either beneficial or adverse). This allows any unforeseen adverse effects to be identified and enables appropriate remedial action to be taken.

What happens next?

Following confirmation of what LTP3 funding will be available for Derby in from 2011 onwards, comments made by DfT and the findings of public and stakeholder consultation on the draft LTP3 and the draft Environmental Report, any necessary revisions will be made to the plan and a final LTP3 will be published by April 2011.

During its two year implementation period between 2011 and 2013, the effects of the plan on the environment will be monitored. We will make the results of this monitoring publicly available.

Where can I find further information and comment?

This statement is a non-technical summary of the draft Environmental Report. More detail can be found in copies of the full draft Environmental Report, available:

- At libraries throughout the LTP area
- At Derby City Council offices at Roman House, on Friar Gate.
- Online at www.derby.gov.uk/LTP3

The consultation period runs from 8 November 2010 and 07 January 2011.