

**Stage D of the Strategic Environmental
Assessment (SEA) and Health Impact
Assessment (HIA) of**

**The City of Leicester's
Third Local Transport Plan (LTP3)
“Planning for people not cars”
2011 to 2026:**

**FINAL
ENVIRONMENTAL REPORT
AND SEA STATEMENT
ON THE ADOPTED
CITY OF LEICESTER LTP3**

March 2011

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1. Introduction

Leicester City Council is in the process of adopting its third Local Transport Plan (LTP3) covering the period 2011 to 2026.

This will come into force from 1st April 2011, and will replace the existing second round LTP for Central Leicestershire, which runs from 2006-2011.

The third round of LTPs requires a separation between the policies and strategies, which are contained in Part A of the LTP, and the Implementation Plan, which is Part B. Note that Part A, "Planning for People not Cars", covers the fifteen year period 2011-2026; while Part B, "Delivering our Transport Goals", covers only the four years 2011-2015, and will be updated regularly.

The Strategic Environmental Assessment (SEA) and the Health Impact Assessment (HIA) have been carried out independently in a parallel process to the preparation of the LTP. An Equality Impact Assessment (EqIA) has also been carried out.

This document is the final revised Environmental Report which completes Stage D of the SEA process, as laid out in the DfT Guidance on Local Transport Plans.

It also contains the SEA Statement, and suggests areas which should be monitored to ensure that the significant effects of LTP3 Implementation Plans are kept under review (Stage E).

2. Summary

This Final Environmental Report concludes that the significant environmental effects of Leicester's LTP3 Strategy are:

- **No significant net harm.** There are no transport strategy or policy proposals in LTP3 which are likely to cause significant net harm to the natural environment, heritage, social wellbeing or human health.
- **Limited net benefit in the early years because of limited resources.** However, the public spending austerity programme announced in the coalition Government's 2010 Comprehensive Spending Review is likely to limit the amount of net benefit that can be delivered by the LTP3 first Implementation Plan.
- **Difficult decisions for 2011-15.** Leicester's LTP3 has been written on the assumption that difficult decisions will have to be taken; and that many desirable projects will have to wait for funding until the national economy is stronger.
- **Air Quality standards are unlikely to be met, unless stronger measures are taken.** Leicester is likely to continue to experience exceedences of national and European Air Quality Standards, especially of Nitrogen Dioxide, and there is a possibility of incurring European Commission penalties. The Air Quality Action Plan recognises this challenge.
- **Carbon reduction.** It is likely, unless more action is taken, that transport's CO₂ emissions will not reduce in line with the trajectory required to meet the *One Leicester* target. The short term trend is likely to be distorted by the effects of the current economic recession which reduces the number of trips made.
- **Road casualties.** Despite everything that has been done to make travel safer, it is likely that some areas of road safety, such as young driver casualties, will not meet the long-term targets before 2014.
- **Encouraging healthy lifestyles.** The reform of the NHS and the integration by the City Council of many of the duties of the Primary Care Trust, allows the introduction of a programme of preventative behaviour, including Active Travel, to reduce obesity, sedentary lifestyles, cardiovascular disease and type 2 diabetes, all of which are major ways to limit ill-health, premature death and health inequalities in Leicester.
- **Compliance with National Transport Policy.** The 2011 Local Transport White Paper features carbon reduction, supporting economic prosperity, and Smarter Travel as the priorities. At present Leicester's LTP3 is well placed to deliver these priorities, and the Government emphasis on putting together a package of measures to encourage people to make the sustainable transport choice fits well with Leicester's LTP3 approach.

3. The 2004 baseline

- 3.1 The second Local Transport Plan for Central Leicestershire (CLLTP2) was the first LTP for which an SEA was undertaken. It is therefore the first time a set of baseline data was prepared, and in general the latest available information was for the year 2003-2004.
- 3.2 The main environmental themes against which LTP2 objectives were assessed were: pollution, transport, resources, waste, biodiversity, access & enjoyment of the local environment, heritage & urban landscape, population & health, infrastructure & property, and environmental awareness & understanding. These 10 themes covered 46 individual issues.
- 3.3 Specific significant environmental effects which were reviewed in the CLLTP2 SEA were: air quality, noise pollution, water quality, loss of flora, fauna, listed buildings, sites of interest for nature conservation, encroaching on private gardens, community severance, light pollution, flooding / drainage, waste minimisation, visual impact, climate change, crime and disorder, and health.
- 3.4 A total of 16 environmental indicators were selected for monitoring, although it was clear that some indicators were too general (and were affected by other factors outside the control of the LTP), and others needed to be further developed. All were included within the comprehensive monitoring system set up for LTP2, and were of course verified by the Council's Eco Management & Audit Scheme (EMAS) procedures.
- 3.5 Annual monitoring up to 2007/08 showed a general improvement, subject to some annual fluctuations, for example in road casualties. In particular, the LTP1 downward trend in the number of cyclists was reversed, and the anticipated growth trend in peak hour traffic was contained below expectations. However, the effects of high petrol prices combined with the economic recession, especially the almost complete halting of new house building in early 2008, affected many of the wider indicators such as vehicle kilometres more than the LTP could. For example, the UCT person journey time to cover a mile is now lower than its 2004/05 baseline, but is still slower than all the other urban areas except Greater Manchester.
- 3.6 As a result of these external issues, the 2010 Evidence Base cannot simply bring forward the 2004 baseline. It has had to conduct a wider discussion on how trends have been affected and what the latest data actually means. Section 4 contains a brief summary of some key points.
- 3.7 It is also important to note that CLLTP2 covered Central Leicestershire, which includes Oadby & Wigston, and parts of Blaby, Charnwood, Harborough and Hinckley & Bosworth. As many performance indicators are only collected on a whole district basis, in practice some were monitored on a City only basis.

4. Progress in the period 2006-11 on 2004 baseline issues

- 4.1 LTP2 was well funded in terms of capital spending and external funding secured, and achieved a great deal in terms of improving transport infrastructure and contributing to the regeneration of Leicester. Particular highpoints were:
- The substantial programme of public realm improvements in the City Centre retail shopping area, which together with the expansion of Highcross has secured Leicester's future as a regional shopping centre,
 - The completion of several major city centre regeneration projects, such as Colton Square, the Curve, and Phoenix Square,
 - The successful completion, on time and to budget, of the Upperton Road Viaduct Replacement major maintenance scheme which safeguards one of the key east-west crossings of the River Soar,
 - The expansion of the Park and Ride network with the opening of the Enderby site, and the securing of the Birstall site for opening in 2011,
 - The introduction with support from emda of the Skylink bus service to East Midlands Airport, and the Hospital Hopper service funded by the NHS,
 - Major progress on active travel infrastructure, improving bus stops with raised kerbs and shelters, expanding the cycleway and footway network, improving the condition of roads, footpaths and rights of way, and investment in related issues such as community safety lighting.
 - The percentage of footpaths graded "easy to use" was improved from 57% in 2004/5 to 94% in 2008/9.
 - The completion of the programme to plant 10,000 new trees in Leicester, including a large number on highway land.
 - The trialling of permeable paving at Abbey Rise to look at sustainable drainage solutions.
 - The completion of the London Road and Humberstone Road Quality Bus Corridors, with improved bus journey times and increased passenger numbers resulting.
- 4.2 All these major schemes were subject to full appraisal processes to minimise adverse environmental impact. Of particular note are the achievements in recycling demolition waste from the old Upperton Road Viaduct, and the great improvement of the Enderby site in terms of biodiversity and habitat improvement, tree cover, and sustainable drainage.
- 4.3 The LTP3 Evidence Base contains the latest data available; the 2010-11 figures will only become available after the adoption of the LTP. There is a full discussion of all the indicators in the Evidence Base.
- 4.4 Given the concerns about the performance indicators being affected by the world economic crisis noted in Section 3 and the Evidence Base, the following points still need to be made:
- Air Quality remains an issue as exceedances of NO₂ standards continue; as noted in the Air Quality Action Plan it was necessary to extend the Air

Quality Management Area in 2008 along the Abbey Lane corridor. It is clear that some of the most deprived areas in Leicester also suffer from the worst air quality.

- Although the number of car trips to the City Centre was contained within the Urban Congestion Target limit, it was on an upward trend which may continue once economic growth restarts and vehicle numbers increase. A reduced number of vehicles did not result in very much greater average speeds, which suggests that the frequent and busy junctions on the major roads are a fairly fundamental constraint on vehicle movements.
- Bus patronage, cyclist numbers and pedestrian counts all showed positive growth, although there are concerns about how bus use will overcome an expected sharp increase in fares and a drop in patronage because of the recession. We know that evening and Sunday bus services are still very patchy, circular routes are less frequent than arterial routes to the City Centre, and services are not meeting the needs of shift workers.
- As a result of pedestrianisation and a much more attractive public realm, the relocation of some bus stops and car parks outside the Central Ring Road, and hopefully as part of lifestyle choices, the modal share proportions of pedestrians and cyclists entering the City Centre have greatly increased, even though total numbers remain depressed because of the recession.
- Although some progress has been made on improving the built environment and protecting heritage buildings and urban landscapes – for example moving the Central Ring Road so that it no longer isolates the medieval Magazine Gateway – there remains a great deal of work to be done in protecting Leicester's rich architectural heritage and enhancing the streetscape. English Heritage are particularly concerned about the number of intrusive signs, and the use of appropriate vernacular materials in historical areas. The 2007 Manual for Streets also sets new challenges for improving streetscapes. Lack of money is likely to result in little more improvement during the first Implementation Plan period.
- Road casualties were reduced substantially, but there remains a stubborn core of drivers who put others at risk by carelessness or inconsiderate driving, and more vulnerable road users such as children, pedestrians and cyclists are still over-represented in the casualty figures.
- In 2008/9, 21.3% of reception year children and 32.2% of year 6 pupils measured in Leicester's primary schools were classified overweight or obese. This will translate into a huge health problem for the future if the causes of obesity, including lack of physical activity, are not tackled. The West of the City and deprived wards showed particularly high levels of overweight Reception children; highlighting the level of health inequalities.
- Progress towards reducing the proportion of children who travel to school by car was disappointing during LTP2; as it is important to encourage future generations to travel sustainably, more resources need to be put into tackling school travel mode issues.
- A political decision was taken by Leicester City Council not to pursue active demand management measures such as road pricing, congestion charge or workplace parking levy, because there was no national strategy. This decision may have to be revisited if softer measures do not achieve

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the required impact on poor air quality, congestion, and CO₂ emissions before the end of the LTP3 strategy period.

5. New issues since 2004

- 5.1 Leicester has remained at the forefront of environmental sustainability, and many of its pioneering activities are now considered standard. Having tackled the more obvious problems of activities which caused environmental damage and social harm, the focus of new interventions is the issues about which much less was known in 2004, and moving on to social sustainability. These particularly include meeting the new national Climate Change Act carbon reduction targets, supporting and enabling the expected high rate of housing and economic growth, and taking a proactive approach to helping everyone live healthier and more fulfilling lives.
- 5.2 The primary aim of the LTP is to support the *One Leicester* ambition for Leicester to become Britain's Sustainable City. This means striking a balance between the demands of economic growth and improved quality of life (which mean enabling more travel) and the priorities of living within the planet's capacity (which means finding smarter ways of travelling without using fossil fuels or producing carbon dioxide emissions).
- 5.3 The following paragraphs list the new issues which needed to be considered or substantially reviewed because of new evidence or higher priority since the 2004 SEA was carried out:

"One Leicester"

- 5.4 The "*One Leicester*" Sustainable Communities Strategy (SCS) was published in 2008 and sets out long term ambitions for the City. The SEA has therefore needed to test how well the LTP3 proposals support the "*One Leicester*" priorities. The subtitle of the LTP, "Planning for People Not Cars" comes directly from "*One Leicester*".
- 5.5 Leicester City cannot operate in isolation; not only does it form the centre of the Leicester Principal Urban Area (PUA) or continuous built up area, but its relationship with the whole County of Leicestershire is so reciprocal that Leicester and Leicestershire are treated as one Housing Market Area (HMA). The *Leicestershire Together* Sustainable Communities Strategy is the County top level strategy, and the City and County Councils have co-operated closely in producing their LTP3 Strategies against both SCSs.

The Climate Change Act 2008 and Carbon Budgets

- 5.6 The Climate Change Act set statutory targets for reducing carbon dioxide emissions; again the SEA has to test how the LTP will contribute to achieving these targets. "*One Leicester*" commits the City to achieving a 50% reduction against the 1990 Carbon Dioxide emission baseline by 2033; this is in line with the national and EU targets of a 20% reduction by the year 2020, and 80% by the year 2050. However, much of Leicester's housing stock is old and quite difficult to make energy efficient, and it may be necessary for Transport to achieve a higher percentage emission reduction if Domestic Use does not reduce sufficiently.

The Local Development Frameworks and Housing Growth

- 5.7 Although the new Coalition Government will abolish the recently adopted East Midlands Regional Plan, the requirement for new housing remains, with an expected need for 80,000 more homes in Leicester and Leicestershire by 2026. The City Council's Core Strategy has now been adopted, and it contains a number of transport specific policies which support LTP objectives. This means that issues such as car parking and green travel plans can be included within the conditions under which planning consent is granted.
- 5.8 There is some uncertainty about how the transport needs of new housing developments will be met. Public funds are not available to deliver the necessary infrastructure, and it will be essential that transport is fully considered when planning consent is being negotiated. Resources will need to be devoted to ensuring that travel plans are prepared before occupation of a new development. Some transport modelling has already taken place, but a "whole Principal Urban Area" approach will need to be taken to assessing what needs to be provided. The Leicester and Leicestershire Enterprise Partnership is preparing a Local Investment Plan to clarify how transport and other infrastructure will be delivered.
- 5.9 Sustainable transport infrastructure such as footways, cycleways, secure cycle parking, and bus shelters, will need to be provided from the start of any development, and ongoing support in travel planning and transport information provision will be needed. The City Council will need to work closely with the County Council and the adjoining districts of Blaby, Charnwood, Harborough, and Oadby & Wigston, to co-ordinate this on a PUA-wide scale.

The Coalition Government's Localism Agenda

- 5.10 The Coalition Government is making substantial changes to the way local authorities, the English Regions, and central government interact. Although this agenda is still developing, it is clear that the LTP will have to take account of measures such as the abolition of the Regional Development Agencies, the formation of Local Enterprise Partnerships, and the emerging Localism and "Big Society" agendas which will seek to empower local communities and encourage new ways of providing services.
- 5.11 This may mean a move away from the traditional contracted service model; for example by giving individuals with severe mobility difficulties a travel budget to spend as they choose, rather than employing a contractor to provide a specified level of service for them. But there will be difficult decisions to be made in order to meet spending targets, and many services may no longer be offered. This is likely to affect school travel in particular, but together with cuts in social care provision may conflict directly with the LTP's wish to respond to the challenge of an ageing population.
- 5.12 One other area of conflict which will emerge is that between local neighbourhood aspirations – a "request led" approach to minor schemes such

as road crossings or parking spaces – and the need to safeguard LTP monies to deliver the identified strategic priorities. The future response of the Council to requests and petitions is likely to be that Councillors, advised by their local forums, will make the final decisions, but that they are already committed to the Implementation Plan which they have adopted, and therefore any new local requests will have to wait until new funding becomes available. This “planned programme of works” approach is similar to that taken to road safety schemes, which were prioritised by past casualties in order to tackle the worst accident sites first. The County LTP3 also adopts the principle of concentration of effort where LTP resources will make the most contribution to strategic priorities.

The LTP3 Evidence Base

- 5.13 A great deal of evidence has been gathered to ensure that LTP3 meets the needs of the inhabitants, businesses and visitors of Leicester and Leicestershire. The policy proposals have been tested against the evidence base, and also by several consultation exercises with specific stakeholders and the public in general.
- 5.14 The one weakness of the evidence base is that all data from the 2001 Census is now a full ten years old, and therefore important facts, such as the population profile and car ownership statistics, are not as certain as we would like. Population count is a particular problem for the major cities with an often transitory population, but especially for Leicester which has high populations of students and new multicultural communities. The City Council believes that Leicester's true population is over 330,000, some 10% greater than that given in national statistics. There is a concern that the 2011 Census data may also be incomplete, and that deprived communities in particular will be undercounted. As Government grant often depends on population, any undercounting puts even more pressure on the Council budget.
- 5.15 Leicester City has a relatively young population profile, with many people reaching the age of wishing to set up new households and become independently mobile, which in practice normally means obtaining a car. This trend is likely to lead to even more pressure on road and parking space (especially in areas of Victorian terraces) unless sustainable transport can be made more attractive to young adults. The 2011 Local Transport White Paper recognises the challenge of making public transport more attractive.
- 5.16 It is also clear from the Evidence Base that, despite recent regeneration and the success of the two Universities, Leicester City is still underperforming in terms of providing well paid skilled employment and modern business premises. The lack of potential employment land within the City boundary means that City residents will continue to have to travel outside the City for work, and the woeful scarcity of skills and qualifications in some deprived areas of the City make it even more difficult to help residents access employment opportunities, or to give City employers good access to a skilled workforce. Supporting economic prosperity will be a difficult, but essential task for the LTP.

New statutory powers and duties for Local Transport Authorities

- 5.17 It is worth repeating that LTPs already needed to meet certain statutory duties; under the Transport Act 2000, the Countryside and Rights of Way Act 2000, the Traffic Management Act 2004, and the Local Transport Act 2008, they need to include:
- A Transport Asset Management Plan (TAMP)
 - A Network Management Plan (NMP)
 - A Rights of Way Improvement Plan (ROWIP)
 - An Air Quality Action Plan (AQAP)
 - An Equality Impact Assessment (EqIA)
 - This Strategic Environmental Assessment (SEA) and Health Impact Assessment (HIA)
- 5.18 In addition, the Flood and Water Management Act 2010 now requires a Local Flood Risk Management Strategy to be prepared; this is not yet ready but will form part of LTP3 when it is adopted by the Council in 2012. The Environment Agency has been consulted in the preparation of the SEA, as have English Heritage and Natural England. The new duty as a Drainage Authority also requires the preparation of a Surface Water Management Plan.
- 5.19 Guidance for third round LTPs relaxed a lot of the previous requirements for bidding for funds, for providing specified performance indicator data, and for sticking rigidly to Government priorities. LTP3 needs to demonstrate a clear distinction between strategy and implementation plan; this has been done by splitting the document into Part A and Part B.

Progress with EMAS

- 5.20 The City Council remains committed to the Eco Management and Audit Scheme (EMAS) to monitor and improve the environmental performance of its own activities. EMAS targets include city wide carbon dioxide emission reduction, where the target of 50% against 1990 levels by the end of 2025/26 is more ambitious than the *One Leicester* target. EMAS, the Council's Environmental Policies, and the level of staff buy-in to the Sustainability culture, are more than adequate to ensure that LTP operations protect the local environment.
- 5.21 EMAS quite rightly requires that the Council uses its wider influence to help the people and businesses of Leicester reduce their environmental impact, and the LTP is one tool to do that. LTP3 needs to continue, and enhance, the current dialogue (embodied in the annual Local Transport Day) with businesses, residents, transport stakeholders and local communities of interest including the voluntary sector.
- 5.22 The City Council as a major employer has its own travel plan and carries out regular travel surveys (the latest in March 2011), and the Transport team regularly deliver awareness raising events. The City schools which have adopted EMAS also have travel plans in place, but more could be done to

reduce travel. The current debate over how to replace the ageing New Walk Centre council offices offers an opportunity to greatly improve performance on home working and reducing the need to travel.

"Peak Oil" and rising commodity prices

- 5.23 At the time of writing (March 2011), political uncertainties in the Middle East and rising demand have raised the cost of petrol to £1.30 per litre or £6 per gallon, an unprecedented price. This highlights a long term trend, known as "Peak Oil", which shows that the most easily extracted oil reserves have already been exploited and the amount of oil being pumped is diminishing. The amount of global oil production has peaked, and is now reducing.
- 5.24 While the fuel price increase strengthens the business case for moving to more sustainable transport modes, it also causes major problems. Bus fares have to increase above inflation, people on low incomes find themselves in transport poverty as they cannot afford to make essential trips, and although drivers cut down on travel, the reduced number of trips can distort the true picture and wrongly influence policy.
- 5.25 The LTP must consider resilience issues. Peak Oil poses both a long term and immediate threat to our current transport system because there is increasing world wide demand for a reducing supply of oil. The newly industrialised countries such as Brazil, Russia, India and China are demanding more oil; the price will therefore keep increasing. The world political situation is often volatile; oil producing countries such as Venezuela and Libya see oil as a political weapon. Pinch points such as the Straits of Hormuz and the Suez Canal are vulnerable to Somali pirates and local wars or terrorism, and with such a "Just enough, just in time" supply chain the UK is very vulnerable to a temporary halt in supplies. Natural events such as the Gulf hurricane season in the southern USA cause the shutting down of rigs and refineries. The UK is over-dependent on oil; there are few alternatives in place, and there needs to be a fundamental national appraisal of how we adapt to a future where oil is no longer cheap or abundant. Energy security is a resilience issue, and at present there is too much uncertainty and vulnerability.
- 5.26 In wider environmental terms, higher oil prices also makes prospecting in more remote, challenging (and environmentally sensitive) places financially viable for the oil companies. In 2010 we saw the difficulties in shutting off the Deepwater Horizon spill because of the depth of water beneath the rig; the oil companies are looking to even deeper oceans and to delicate ecologies such as Alaska and the South Atlantic, where weather conditions can be incredibly dangerous most of the time. Dirty fossil fuels such as brown coal, tar sands and oil shale become profitable once the oil price goes over \$70 a barrel, but they leave behind a huge problem of environmental pollution at the extraction site. As oil prices rise, developing countries are also encouraged to grow biofuel crops to sell for hard currency, instead of the food crops they need to feed their people. The City Council has often expressed its serious concerns

over the global impact of local consumption, and should therefore be pushing in its LTP3 for a move away from reliance on oil.

The world economic crisis

- 5.27 The LTP document is clear that the substantial reductions in public spending as a result of the Coalition Government's determination to remove the national structural financial deficit will affect the Council's ability to deliver the services it believes are necessary for Leicester. Whereas the well-resourced LTP2 was able to strive for excellence on a broad front, LTP3 will have to concentrate on making the very best use of the transport network we have now.
- 5.28 A side effect of the world economic crisis is a reduction in travel as people cut out discretionary travel to save money, or become unemployed and therefore stop commuting to work. The slowdown in manufacturing and consumption means less freight traffic delivering goods or raw materials. This reduction in traffic due to recession masks the long term trend of traffic growth, and must not cause a lessening in activities to reverse the long term trend.

Advances in transport technology

- 5.29 Internal combustion engines have become more efficient over the years, and the Government has followed vehicle taxation policies which have encouraged smaller engines. Alternative fuels such as biodiesel have been introduced to reduce the emissions of carbon dioxide from fossil fuels (although there are serious concerns about the global side effects of using food crops to create fuel), but petrol and diesel seem likely to remain major causes of emissions. However, the expected increase in the total number of vehicles will outweigh the improved efficiency of individual vehicles, leading to an overall rise in transport internal combustion engine emissions in the medium term.
- 5.30 At the time LTP2 was written in 2005/6, it was thought that the breakthrough in battery technology to allow better electricity storage would shortly allow the replacement of petrol and diesel with electric power sources. Despite the development of mass production electric hybrid vehicles such as the Toyota Prius, and the installation of a network of charging points, the electric vehicle revolution still seems to be some way off. The cost of battery packs and the limited range from one battery charge are the main obstacles (which is why production hybrid vehicles with a small internal combustion engine are the most successful). The Hydrogen revolution is also some way off, despite Hydrogen Fuel Cell buses having reached fleet trial status in London.
- 5.31 LTP3 considered the possibilities of supporting low carbon and zero carbon transport technology, for example in procuring hydrogen or diesel electric hybrid buses to provide the Park and Ride fleet, but at present the costs are simply too great to provide value for money. The matter needs to be reviewed again when the second Implementation Plan is prepared in 2014/15. Some LTP-funded steps such as providing public electric vehicle charging points to

encourage early adoption can certainly be justified on cost / benefit grounds, as would financial support for an electric vehicle car club.

Research into health issues such as obesity and poor air quality

- 5.32 We have a much clearer picture than we had in 2006 of the costs and harm done by more sedentary lifestyles and prolonged exposure to poor air quality. The link between deprivation and lower life expectancy has been clearly evidenced, and the challenge is laid down for Local Authorities to reduce these inequalities.
- 5.33 Taking poor air quality first, the headline fact from Parliament's Environment Audit Committee 2010 inquiry is that poor air quality causes up to 50,000 premature deaths in the UK each year – which equates to at least 750 deaths in Leicester alone – and reduces everyone's lifespan by an average of 7-8 months. This is a far bigger problem than road deaths or passive smoking.
- 5.34 It is also clear that the areas where poor air quality has led to the declaration of Air Quality Management Areas also contain some of the most deprived communities in Leicester, who already suffer health inequalities and who have the least opportunity to get away from air pollution.
- 5.35 There is little doubt that the primary cause of NO₂ pollution in Leicester is vehicle emissions, nor that the problem of particulate material is also largely caused by transport, whether it be PM10 and smaller soot particles from (often diesel) engine exhausts, or dust created and moved by vehicle activity. The European Commission is examining research that shows that the smallest particles penetrate deep into the lungs and can cause cancers as well as other respiratory disease. This may lead to even tighter controls on particulates, which would be very challenging to implement.
- 5.36 There is a growing life expectancy gap between Leicester and the rest of England. On average a man in Leicester will live 2.4 years less and a woman 2.1 years less than the average for England. The difference between the City wards with the highest and lowest life expectancy is 7.4 years for men and 7.6 years for women.
- 5.37 Increasingly sedentary lifestyles and easy access to foods containing too much fat and sugar are causing an epidemic of obesity and lifestyle diseases such as diabetes and cardio-vascular disease. Around 25% of Leicester adults are obese and a further 36% overweight. Levels of physical activity are low, with only 18% of adults doing 30 minutes of moderate activity on 3 days a week. Circulatory diseases cause 35% of all deaths in Leicester.

National Transport Policy

- 5.38 The Coalition Government has now published the 2011 Local Transport White Paper, although some parts of its transport policy remain unclear. The Department of Transport was not subjected to as high a percentage savings target as some other departments of state, but it seems that funding for new

major schemes will be almost impossible to obtain because there are so many approved schemes awaiting funding.

- 5.39 The previous Government published a number of key documents, notably the Stern Review into the economics of climate change and the Eddington Transport Study into enabling economic prosperity. The Government response to these reports was published in "Towards a Sustainable Transport System" (TaSTS) and "Delivering a Sustainable Transport System" (DaSTS) with five "enduring goals". Although the LTP3 Guidance did not make it mandatory to follow these objectives, they are of great importance and need to be considered within the factors driving the LTP3 policies.
- 5.40 The Climate Change Act 2008 is also a major driver of national transport policy; it has led to a DfT Carbon Reduction Strategy "Low Carbon Transport: A Greener Future", a Carbon Reduction Plan, and in March 2010 the DfT published "Building Resilience to Climate Change: An Adaptation Plan for Transport 2010-2012". The "promoting lower carbon choices" strand is particularly relevant because of Leicester's compact urban nature, but it is unclear what financial support the Coalition Government intends to provide.
- 5.41 Also of note are 'A Safer Way', a DfT 2009 consultation paper on road safety, and the 2010 DfT 'Active Travel Strategy' which aims to put walking and cycling at the heart of both transport and health planning. The Coalition Government has said that it will publish a road safety strategy in Spring 2011; the LTP3 road safety section (Chapter 6) may need reviewing if any new powers (above the 'A Safer Way' proposals) are offered to local authorities. The 2010 DfT report "Delivering Sustainable Transport for Housing Growth – Case Studies from Local Communities" also contains important lessons for enabling growth without putting undue pressure on the transport network.
- 5.42 There is no national policy on introducing active demand management measures to reduce the number of vehicles using the roads. The City Council has already decided not to introduce a congestion charge or workplace parking levy because of the likely adverse effect on Leicester's economic regeneration if the additional costs made Leicester a less attractive business location than its competitors. The 2011 Local Transport White Paper puts "guide choice through disincentive" as the fifth of seven increasingly greater levels of intervention; this chimes well with the Council's intention to try a package of enabling and guiding options to change behaviour, before moving to harder interventions and regulation.

6. The process of including the new issues in LTP3

- 6.1 The issues listed in section 5 were raised in the SEA Scoping Report, and discussed with stakeholders throughout the consultation process. The authors of the LTP document were engaged throughout, and agreed from the start that those issues were relevant to LTP3. Many of the issues had started to be addressed during LTP2, for example the bids to the East Midlands Development Agency for help with bringing a car club to Leicester, trialling a diesel-electric hybrid bus fleet for Park & Ride, and promoting cycling at the Universities by purchasing a bike hire fleet.
- 6.2 Some new issues are still emerging, and although in-principle policies are included in the LTP document, there may well need to be adjustments to the Implementation Plan. These issues include:
- The forming of the Leicester and Leicestershire Local Enterprise Partnership in late 2010, and the intention to adopt its Local Investment Plan as the vehicle for delivering the infrastructure to support population and economic growth.
 - The decision by the Government to go ahead with detailed planning and consultation for the High Speed Two rail line from London to Birmingham, and the examination of the options for a 'Y' shaped route which could greatly improve Leicester's rail links with Birmingham, Manchester, Leeds, the North East of England and with Glasgow and Edinburgh.
 - The January 2011 Local Transport White Paper, "Creating Growth, Cutting Carbon - Making Sustainable Local Transport Happen" lends support to the LTP3 long term strategy, but is currently short on new resources to help deliver its objectives. However, any opportunities to access more funds to deliver LTP objectives should be seized.
 - The Major Scheme to deliver a proper City Centre public transport interchange is fundamental to overcoming the problems caused by having the railway station, the bus and coach station, and the two bus termini, in different parts of the City Centre. Should the scheme not be fully completed, then some of the LTP assumptions about improving the "end to end" public transport experience will need revisiting.
 - It is not yet clear how the Coalition Government's NHS reforms will impact on public health provision; nor how our LTP3 wish to encourage active travel because of its health benefits will access Health funding.
 - Similarly, it is not yet clear how the Coalition Government's wish to encourage parental choice and greater independence for schools will affect travel to school. Influencing the travel habits of future generations is essential to delivering a sustainable transport system; given the pressure on school transport budgets, it is very likely that the Sustainable Modes of Travel to School Strategy will have to be delivered in extremely challenging circumstances and that the proportion of pupils being dropped off by car may actually increase.
- 6.3 All these issues were raised during briefings of the decision makers approving the LTP, and were included in successive drafts of the LTP and SEA.

7. SEA Statement

- 7.1 This SEA Statement has been prepared in compliance with the European Directive 2001/42/EC "on the assessment of the effects of certain plans and programmes on the environment", also known as the SEA Directive.
- 7.2 It follows the UK national guidance contained in ODPM's 2005 Practical Guide to the Strategic Environmental Assessment Directive, DFT's 2004 Transport Analysis Guidance (TAG) Unit 2.11 "Strategic Environmental Assessment for Transport Plans and Programmes", and DFT's 2009 "Guidance on Local Transport Plans".
- 7.3 The main purpose of the SEA Statement is to provide information on the decision-making process; and to document how environmental considerations, the views of consultees, and the recommendations of the Environmental Report have been taken into account in the adopted LTP3. It should illustrate how decisions were taken, making the process more transparent. It must be made available to the public to accompany the adopted LTP3 document.
- 7.4 The SEA Statement must include the following information:
- Summary of how environmental considerations have been integrated into the LTP process;
 - Summary of how the Environmental Report has been taken into account;
 - How consultation responses have been taken into account;
 - Reasons for choosing the options selected in the LTP, in the light of other reasonable alternatives considered;
 - Measures that are to be undertaken to monitor the significant environmental effects of implementing the Plan.

Summary of how environmental considerations have been integrated into the LTP process

- 7.5 The SEA, HIA and EqIA were commissioned from other specialists by the Transport Strategy Team as the work began on preparing LTP3 in March 2010; and were therefore integrated with the process from the start.
- 7.6 A specific report on "Reducing Leicester's Transport Carbon Footprint" was commissioned from the Environment Team in April 2010 because of the importance of that issue to achieving the *One Leicester* priority. Similarly, transport modelling exercises were commissioned to help understand the future growth trends and likely effects if no remedial measures were put in place by LTP3. These have all helped us to understand the scale of the challenge, and to identify some of the most effective interventions.
- 7.7 SEA, HIA and EqIA Scoping Reports were produced in April and May 2010 and went out for stakeholder consultation with the "Local Transport Planning in Leicester & Leicestershire 2011 – 2026" document in June 2010.

March 2011 Final Environmental Report on the City of Leicester's Adopted LTP3

- 7.8 As a result of the comments received from both stakeholders and the staff working on the LTP Transport Strategy, a draft Environmental Report was written and sent out to the statutory consultees in July and August 2010. Detailed feedback was received from the Environment Agency and English Heritage, as well as Leicestershire County Council, most of the Leicestershire Districts, and the Transport Strategy, Development Control and Environment teams.
- 7.9 These comments were included in the revised consultation draft Environmental Report which went out to public consultation for eleven weeks between 25th October 2010 and 5th January 2011, together with the Consultation Draft LTP3, the draft Air Quality Action Plan (AQAP) and draft Rights of Way Improvement Plan (ROWIP), and the draft first LTP Implementation Plan 2011-15.

Summary of how the Environmental Report has been taken into account

- 7.10 There is a strong culture of public service and environmental protection in Leicester City Council. The Council's EMAS verification is an independently audited check that the Council strives for continuous environmental improvement.
- 7.11 It is clear from reading the final draft LTP3 that extracts from the various scoping and consultation draft environmental reports have been included in the final text, and that the options identified and chosen by the Transport Strategy team have tried to maintain progress towards delivering a sustainable transport system for Leicester.
- 7.12 Similarly, the briefing notes prepared for decision makers at Senior Management Board, Cabinet Lead and Cabinet also demonstrate a commitment to making the social and environmental consequences of LTP3 decisions clear to those people who have to make those decisions.
- 7.13 The LTP is one of the few Council policies where the adoption is reserved to a Full Council meeting rather than the ruling Cabinet. This ensures a full and public debate and offers a final opportunity for stakeholders to have their case heard.

How consultation responses have been taken into account

- 7.14 Leicester's Transport Strategy Team treat consultation as a constant ongoing process. The Annual Local Transport Day, and other regular engagement with stakeholders and focus groups, gives regular feedback on what matters to the people who use our transport system.
- 7.15 The responses to the various LTP consultation exercises have been reviewed by the Transport Strategy Team and by the author of the SEA, and the subsequent drafts have been amended or strengthened in order to emphasise the points brought up by the various consultees. Examples include English Heritage's concerns over the protection of Leicester's rich archaeological and

architectural heritage, and the Environment Agency's wish to ensure the prioritisation of sustainable drainage and resilience to climate change, both of which were included in the text of subsequent drafts. All the SEA consultees who responded have proved extremely positive and supportive.

- 7.16 Meetings with individual groups over key issues – for example improving the accessibility of public transport for people with mobility difficulties – have always proved rewarding in identifying problem areas and finding satisfactory solutions.

Reasons for choosing the options selected in the LTP, in the light of other reasonable alternatives considered

- 7.17 The process used for assessing option is fully explained in Chapter 3 of the LTP Strategy.
- 7.18 In many ways, LTP3 is evolutionary because the long term LTP2 strategies were reviewed and found to be sound; although where better delivery mechanisms exist or a change of emphasis is required, this has been done. An example is in reducing road casualties, where most of the road engineering work has now been done, and the emphasis needs to shift to better targeted education and changing the behaviour of drivers who put themselves at risk, mainly through inexperience or overconfidence.
- 7.19 The area where there is perhaps the clearest change of option is that of deliberately choosing not to increase the capacity of the network. This has been done because the option of building more roads to increase capacity to meet future demand is not only unsustainable, but also extremely expensive, and in many of the places which suffer the worst congestion, physically impossible without major demolition. Clearly there is an exception, where junction improvements can be made, in order to improve safety and reduce the choke point effect which slows down the rest of the network, for example at Pork Pie Roundabout or Sanvey Gate junction.
- 7.20 We do not yet fully understand quite what effect budget reductions will have on some of the LTP3 policies; for example in supporting the bus operators in delivering a high level of service befitting one of England's ten largest cities. Where possible we will safeguard the services which support Leicester's most vulnerable people; this may mean that some desirable and very worthwhile projects have to be slimmed down or put on hold until resources become available.
- 7.21 The LTP still aspires to providing a comprehensive park and ride network, because of its proven worth in reducing congestion, pressure on city centre parking space, reducing air pollution and emissions, and encouraging people to walk for part of their journey. Although it is recognised that funding for new park and ride sites will not be forthcoming in the short term, the ambition remains. Similarly, options for low-carbon transport such as electric and hydrogen vehicles have not been abandoned although the cost is currently

prohibitive, and nor has the ambition for a tram line to achieve a step change in public transport attractiveness been abandoned.

- 7.22 Road Safety options have had to be considered quite carefully, given the failure to quite reach the LTP2 targets. The Council has taken a conscious decision (unlike some other authorities) to continue tackling excess speed with the use of safety cameras, because analysis shows that on average each camera prevents 1.1 KSI accident a year. Engineering solutions (apart from maintaining the grip of road surfaces to assist braking) seem to have been completed in the worst accident sites, and the emphasis probably needs to move onto more training, education, and targeted course attendance in order to tackle bad driving habits.
- 7.23 An example of option appraisal correctly testing options against all the strategic goals is that of permitting an increase in City Centre off-street car parking spaces, to increase accessibility for car users and commuters. Appraisal found that while it would have benefits to one group of users, it would have had detrimental effects on all our other goals (congestion, carbon emissions, air quality and safety) as it leads to an increase in the number of cars entering the city centre. It was quite clear that the disbenefits outweighed the benefits, and this option will not be pursued in LTP3. (In addition, the evidence that some city centre regeneration sites are not coming forward for development because the site owners can make an income from car parking has led to a strengthening of both the LTP Car Parking Strategy and the City Local Development Strategy transport policies.)

Measures that are to be undertaken to monitor the significant environmental effects of implementing the Plan

(see Section 8)

8. **SEA Stage E - Monitoring**

Stage E covers the monitoring of plan delivery, in order to ensure that those issues raised by the SEA are kept under regular review. This section lists the issues that the SEA suggests may need monitoring and possible corrective action where required.

Measures that are to be undertaken to monitor the significant environmental effects of implementing the Plan

- 8.1 The draft Environment Report issued on 29th November 2010 to accompany the Consultation Draft of the LTP contained a list of areas of concern, where it was not yet clear how certain issues would be addressed, given the very uncertain state of public finances before the 2010 Public Spending Review was announced. Many of those issues have now been resolved, but there are still some issues which will need to be monitored.
- 8.2 The Council has a robust performance management system in place. The LTP too has its own monitoring regime which will assess progress, and identify where remedial action needs to happen.
- 8.3 There are no SEA concerns about LTP3 policies actually causing net harm to the environment or human health. There will be issues about how much net benefit can be delivered when value for money criteria may outweigh quality weightings, but these will need to be considered on a case-by-case basis.
- 8.4 There are a number of areas where the SEA and the LTP text agree that current targets are unlikely to be met given the existing interventions, and that future implementation plans may require the introduction of stronger measures. These are:
 - The LTP3 Air Quality Action Plan predicts that current and future EU standards for local NO₂ and particulates concentrations will continue to be occasionally exceeded in part or parts of the Air Quality Management Area due to vehicle emissions; and that demand management measures may need to be introduced in the medium term if the situation does not improve.
 - The Leicester Climate Change Strategy notes the contribution to total CO₂ emissions made by transport, and recognises that unless a major modal shift to lower carbon options is achieved, the increasing number of vehicles may mean that total emissions will not reduce at the rate required to meet the *One Leicester* target.
 - The LTP3 Road Safety and Active Travel Strategy recognises that the LTP2 targets for reduction of KSI casualties and young driver accidents were not quite met, and that the rate of improvement is now static.
 - Although participation in walking and cycling increased considerably during the LTP2 period, LTP3 consultation revealed that there are still substantial barriers to be overcome, mainly around information provision, personal safety and peer group attitudes.

- The Leicester and Leicestershire Local Enterprise Partnership will now provide the governance for the provision of the required transport infrastructure for new housing developments, but it is unclear how the LTP3 wish to ensure sustainable transport infrastructure is in place from the first occupation of these sites will be achieved, and how modal shift interventions will be funded.
- Access to the natural environment is improving, mainly through the success of the existing Rights of Way Improvement Plan. Step change further improvement will rely on the implementation of the Green Infrastructure Strategy, especially in new housing areas and deprived communities where new access routes will need to be developed.
- Because of the sheer quantity of transport infrastructure assets, it will take some time for resilience and adaptation to Climate Change actions to be completed.

8.5 These issues are already well known to the Transport Strategy Team and the LTP3 decision makers, and will be covered during routine LTP3 monitoring.

8.6 There are two other areas which the SEA process suggests will require monitoring. They are:

- Climate Change predictions suggest that the transport network will need to be better prepared to withstand stormwater and flooding events; this is the remit of the Surface Water Management Plan which is still in preparation. The Environment Agency input to the SEA strongly recommends the adoption of sustainable drainage systems to absorb storm surges and prevent flash flooding; these should be a key tool of the new Drainage Authority and be mandatory in all new development.
- Leicester has a remarkable archaeological record, historic landscapes, and built heritage; some of which has been sadly neglected in past years. English Heritage's comments on the draft SEA requested that no opportunities be lost to enhance the built environment and improve the streetscape and public realm. *One Leicester* too comments how past road building (" a concrete neck tie") has caused severance and blighted landscapes and streetscapes. LTP progress reports will need to show how schemes help to deliver quality places, and meet the aspirations of the Manual for Streets.

9. Health Impact Assessment

- 9.1 Although health issues have been considered as part of the whole SEA, the current uncertainties about the future provision of public health initiatives suggest that it would be worth being more precise about what needs to be done. The 2011 Local Transport White Paper estimates the annual national health costs of physical inactivity, air quality and noise at £25 billion, with an additional £9 billion cost of road traffic accidents. There is a compelling case to place a greater emphasis on the public health implications of the LTP.

Tackling Health Inequalities

- 9.2 There is an unacceptably wide variation in life expectancy between the most deprived and least deprived wards in the City, and also between Leicester and the rest of England. While transport is only part of the picture, it is clear that any extra stress placed on deprived communities – for example excessive transport noise or vibration, poor air quality, or poor transport links to health services, education, training, employment and food shopping – needs to be tackled by LTP interventions where possible. So specific programmes, such as improving public transport access from deprived areas to major employment sites, continue to be a high LTP priority, while other connected projects such as teaching people from deprived communities cycle maintenance skills and making bikes available to jobseekers also need to continue if funding can be found from other sources.
- 9.3 Health and social care providers will need to reconsider their provision in light of an ageing population, the increasing problems in parking at hospitals and surgeries, the need for better joining up of services to allow people to remain independent for longer, the requirement to avoid “bed blocking” and get people back to their own homes quickly, and the localism and Big Society agendas to empower local people and communities. More services will need to be delivered at home or at local centres, and it may often work out cheaper (and quicker) for the service provider to travel to the patient, especially if the patient does not have their own transport. (The NHS national targets to reduce CO₂ emissions will also require a re-evaluation of transport services.)
- 9.4 There are proven links nationally between living in a deprived area, living with poorer air quality, and higher chances of becoming a road casualty; with children in deprived areas particularly being over-represented both with childhood asthma, and as road accident victims.

Tackling the health implications of poor air quality

- 9.5 The 2011 Local Transport White Paper says:

“Where air quality is poor it can contribute to heart and lung conditions, as well as reducing life expectancy – DEFRA modelling suggests air pollution from man-made fine particulate matter is estimated to cut life expectancy by 6 months, averaged across the United Kingdom population. Based on 2008 figures, this equates to health costs of as high as £19 billion per year.

Children are even more susceptible to environmental hazards than adults. Health impacts are not distributed evenly and are felt disproportionately in urban areas.”

- 9.6 At present, our Air Quality Management Area (AQMA) is defined by concentrations of NO₂ and particulates in the air close to busy roads. We are beginning to get some public health data on where respiratory disease and asthma are most common, and this may help us target our interventions aimed at reducing pollution (for example phasing traffic lights to reduce stationary traffic) or perhaps plant hedges and trees to act as a green screen.
- 9.7 The Air Quality Action Plan does, however, conclude that current measures are not improving air quality sufficiently to meet EU standards, and it may be necessary in the long term to introduce demand management measures in some parts of the AQMA, if packages of softer measures do not lead to sufficiently improved air quality.

Reducing road accident casualties

- 9.8 The social and economic costs of casualties are high, and the return on investment of reducing casualties is considerable, given that the average cost of a casualty is estimated at £48,000, and that the Government estimated the value of preventing all the accidents that were reported in 2009 at £16 billion. It therefore makes sense in terms of emergency service budgets to invest in interventions which will reduce the number and severity of accidents. Road casualties in Leicester cost the NHS £4,294,400 in 2009.
- 9.9 Another concern is that the more vulnerable road users – children, cyclists and pedestrians – are much more likely to become casualties per person mile than vehicle drivers and passengers. The total number of killed or seriously injured (KSI) casualties fluctuates between years, but after a steady reduction from over 200 KSI casualties a year before 1990, the number has stalled in the high 80's / low 90's. Although this is a huge improvement on the 1994-1998 baseline of 127 KSI casualties, something is still not responding to our road safety initiatives. At present we think it is driver inexperience coupled with inattention or error, and therefore believe that more effort needs to go into education and changing driving behaviour. We would hope to gain economies of scale and a head start by looking at how successful health promotion activities in Leicester have been conducted.

Encouraging more active lifestyles and tackling obesity

- 9.10 The 2011 Local Transport White Paper is again quite clear:

“Lack of physical activity and poor physical fitness can contribute to obesity, cardiovascular disease, strokes, diabetes and some cancers, as well as to poorer mental wellbeing. Obesity is one of the most significant health challenges facing our society, representing a significant risk factor for a number of chronic diseases including cardiovascular heart disease and Type 2 diabetes.

School travel is also significant. Sustainable, active travel for journeys to school, when replacing vehicle trips, can reduce local congestion and carbon emissions as well as improving cognitive performance and academic achievement. Current estimates suggest an annual £600 return (much from short and long term health gains) for each pupil making the shift from travelling by car to walking and cycling.”

- 9.11 Government fears that by 2050, half of adults will be obese, and the situation among children may not be much better. This is clearly a huge health time bomb, which is very much recognised locally by “*One Healthy Leicester*”. According to the NHS Leicester City Commissioning and Investment Strategy 2010, inactivity costs Leicester’s NHS £6million per annum.
- 9.12 Among the top five actions supported by local people during the LTP3 consultation process was “Provide more opportunities for people to walk or cycle - better information, more crossings, cycle lanes, maps/route planners”. There is clearly an unmet demand for walking and cycling, but this is also a strong signal that people see lack of information and personal safety as barriers to walking and cycling more often.
- 9.13 There is a wide range of possible interventions to encourage more active travel. Some, like Bikeability, will continue to be funded by Government until 2015, others will receive LTP3 funding. But in order to put in place the whole package of active travel measures, a substantial contribution will be required from health resources. There is already a successful partnership in Leicester between GPs and the Council’s local sports centres, and this could be extended to put patients who would benefit from more active travel in touch with opportunities to walk and cycle more.
- 9.13 The LTP2 target of reducing the proportion of children travelling to school by car was not achieved, despite initiatives such as the Star Walker scheme and the existence of many Safe Routes to School. Parents cite convenience, fears for their children’s safety on the route to school, and lack of time as the reasons for driving their children to school, and seem oblivious of the harm lack of activity could do to their childrens’ long term health. There is clearly a health message here which is being ignored.

Annex A – List of related documents summarised in this report

LTP2 SEA Scoping Report December 2004

LTP2 SEA Final Environment Report March 2006

Draft LTP3 SEA Scoping Report 19th April 2010

Final draft SEA Scoping Report 28th May 2010

Informal Engagement phase of SEA and HIA Consultation 12th July 2010

SEA Statutory Scoping Report Consultation Draft 2nd August 2010

First draft Environment Report 29th September 2010

Consultation Draft Environment Report 29th November 2010