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

Leicestershire's Third Local Transport Plan (LTP3) 2011 to 2026:

FINAL ENVIRONMENTAL REPORT AND SEA STATEMENT ON THE ADOPTED LEICESTERSHIRE LTP3

March 2011

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1. <u>Introduction</u>

Leicestershire County 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 LTPs for Central Leicestershire and Leicestershire, which ran from 2006-2011.

The third round of LTPs requires a separation between the policies and strategies, which are contained in the Strategy section of the LTP, and the Implementation Plan, which is a separate section. Note that the Strategy covers the fifteen year period 2011-2026; while the first Implementation Plan covers only the three years 2011-2014, 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 Leicestershire'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, simply because fewer improvement schemes will be undertaken.
- Difficult decisions for 2011-14. Leicestershire's LTP3 has been written on the
 assumption that difficult decisions will have to be taken; and that some new
 ways of working will take over from previous delivery methods. It is likely that
 provision in more rural areas will be affected more than the more densely
 settled parts of Leicestershire.
- Air Quality. Leicestershire is likely to continue to experience some
 exceedances of national and European Air Quality Standards, especially of
 Nitrogen Dioxide, and there is a possibility that those authorities responsible for
 air quality could incur European Commission penalties. The Air Quality Action
 Plans recognise this challenge, especially in Loughborough, Lutterworth and
 Kegworth, and the new Air Quality Management Areas declared during the
 LTP2 period.
- 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 national target, especially in the more rural and car-dependent Districts. Per capita CO₂ emissions from transport in Leicestershire are nearly 50% higher than the figure for England. The short term trend is likely to be distorted by the effects of the current economic recession, which has reduced 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. The LTP Strategy proposes a greater emphasis on driver education and training to tackle driver inexperience and error, which seem to be the main causes of many accidents.
- Encouraging healthy lifestyles. The reform of the NHS and the integration
 into the County 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 Leicestershire.

- 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 Leicestershire'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 Leicestershire's LTP3 approach.
- Compliance with Leicestershire's rural strategy. The marginal cost of providing an hourly bus service for more than 76% of the County's rural population has already been considered too high to be considered reasonable value for money; in the light of reduced resources it is likely that some supported bus services will have to be reviewed. The County Council has already ruled out removing bus subsidies (as has been done in the neighbouring county of Northamptonshire) but there is a risk that rural isolation deprivation may not be addressed as expected when the Rural Strategy was written.
- The importance to Loughborough of the Town Centre Transport Scheme. The County Council has submitted a £20m Major Scheme proposal to the Government, which is currently at the Development Pool stage. Loughborough has a world class cluster of knowledge economy businesses centred around the University, but opportunities for growth are constrained by the M1 and the River Soar floodplain. Loughborough already contains some of the most deprived neighbourhoods in Leicestershire; but without further investment in the town centre it is at risk of becoming a two speed town, with the areas closest to the M1 getting most of the economic benefits.

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. The area of Central Leicestershire outside the City was tricky to compile data for because it contains parts of five Districts, and often data is only available on a whole authority basis.
- 3.2 The main environmental themes against which CLLTP2 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 CLLTP2, and were verified by the City 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 in Central Leicestershire is now lower than its 2004/05 baseline, but is still slower than all the other urban areas except Greater Manchester.
- 3.6 The situation in the rest of Leicestershire for the County LTP2 was slightly easier as whole District data could be used, but with a wide variation between the wholly urban borough of Oadby & Wigston and the very rural districts of Harborough and Melton, not to mention the County Towns and the particular issues of Loughborough, some generalisations were required.
- 3.7 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.

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

- 4.1 CLLTP2 and Leicestershire's LTP2 were well funded in terms of capital spending and external funding secured, and achieved a great deal in terms of improving transport infrastructure. Particular highpoints were:
 - 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,
 - Major progress on active travel infrastructure, improving bus stops with level access 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,
 - Working with the Highways Agency on the national exemplar Grove Park Business Park Travel Plan to reduce commuter car traffic around M1 J21,
 - Achieving a significant increase in cycling around Loughborough with a programme of improving cycle tracks, and pulling together a significant railway station improvement scheme in Loughborough Eastern Gateway,
 - Redeveloping the town centre bus station in Hinckley as part of major improvement works,
 - Building an excellent relationship with bus operators, succeeding in delivering an hourly bus service covering 95% of all people in Leicestershire and 76% of rural inhabitants, introducing the "Rural Rider" service in the east of the county, and the Airlink Coalville service to help people from North West Leicestershire access the employment opportunities at East Midlands Airport
- 4.2 All these major schemes were subject to full appraisal processes to minimise adverse environmental impact. Of particular note is the achievement of making the Enderby Park & Ride site of better wildlife habitat, biodiversity and sustainable drainage than the original fields it was built on.
- 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 and the LTP3 Strategy.
- 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 in Kegworth, Lutterworth and Loughborough due to road traffic. During LTP2 it was necessary to declare additional AQMAs at Groby, B4114 Foxhunter Roundabout, Enderby Road Whetstone, Castle Donington, Coalville and Copt Oak.
 - Although the number of car trips to Leicester 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. The County Towns also suffer from peak period congestion, and the problem will worsen as they grow in population.
- 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 around the edge of Leicester are less frequent than arterial routes to the City Centre, and services are not meeting the needs of shift workers. In rural areas, access to employment by public transport is still very difficult.
- There were some major achievements in terms of access to Green Infrastructure, particularly in the National Forest area around Coalville and at Watermead Country Park. There is still an ambitious programme to further improve access to the natural environment and fulfil the potential of Charnwood Forest. Tourism is becoming an increasingly important part of the Leicestershire economy, and the LTP will need to support the sector.
- In terms of heritage and the built environment, there is still a demand from the County Towns and district centres for public realm improvements. 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.
- Too many children in Leicestershire's primary schools are 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 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.
- The 6Cs congestion study helped the County Council decide 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 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 Leicestershire 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 *Leicestershire Together* Sustainable Communities Strategy (SCS), published in 2008. 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:

Leicestershire Together

- 5.4 The Leicestershire Together SCS was published in 2008 and sets out long term ambitions for the County. The SEA has therefore needed to test how well the LTP3 proposals support the SCS priorities. One Leicester is the City SCS, and the City and County Councils have co-operated closely in producing their LTP3 Strategies against both SCSs.
- 5.5 Leicestershire County cannot operate in isolation; not only does it include half the Leicester Principal Urban Area (PUA) or continuous built up area, but its relationship with the City of Leicester is so reciprocal that Leicester and Leicestershire are treated as one Housing Market Area (HMA). The County also has to remain aware of the activities of the neighbouring Counties and the Highways Agency Strategic Road network these are well discussed in the LTP3 Strategy.

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; which are a 20% reduction by the year 2020, and 80% by the year 2050.

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 County Council has been working with the Districts and the City, the Local Planning Authorities, to ensure that their Local Development Frameworks are properly informed by transport modelling and contain spatial policies which support only sustainable transport developments. There is complete agreement that major new housing developments must only be permitted where public transport, walking and cycling will be an attractive choice, and that car-dependant development proposals will be resisted.

- 5.8 There is some uncertainty about how the transport needs of these 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 County Council will need to work closely with the City Council and the adjoining districts of Blaby, Charnwood, Harborough, and Oadby & Wigston, to co-ordinate this on a PUA-wide scale around Leicester. The challenge around growth in the County towns will require individual solutions; in the case of Melton Mowbray it will almost certainly require some road building as part of the whole package.

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 LTP is quite specific that it will adopt 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 nationally 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. Some of those people will now be living in the County, and of course there are substantial numbers of new houses constructed since 2001. 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's budget.
- 5.15 Leicestershire has an ageing population profile, with many people reaching the age of no longer being independently mobile during the LTP3 period. This trend is likely to lead to even more pressure on demand responsive transport services, and finding new ways of delivering mobility and accessibility.
- 5.16 It is also clear from the Evidence Base that, despite recent regeneration, 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 this will cause additional pressure on the PUA road network. Economic opportunities in the rest of the County are not always balanced with skills and population dispersion, and new employment sites need to be sustainably accessible. A third of rural businesses report problems over their staff being able to get to

work by public transport. 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), although the latest LTP3 guidance states "Integrating AQ Action Plans with LTP's is strongly encouraged"
 - 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 Strategy and Implementation Plan.

"Peak Oil" and rising commodity prices

- 5.20 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.
- 5.21 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.
- 5.22 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.

5.23 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 County 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

- 5.24 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 Leicestershire. 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.
- 5.25 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

- 5.26 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.
- 5.27 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.
- 5.28 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 2013/14. 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 in some of the County Towns.

Research into health issues such as obesity and poor air quality

- 5.29 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.
- 5.30 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, and reduces everyone's lifespan by an average of 7-8 months. This is a far bigger problem than road deaths or passive smoking.
- 5.31 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 Leicestershire, who already suffer health inequalities and who have the least opportunity to get away from air pollution. Through traffic on

- the Highways Agency strategic road network (the M1, A46, M69, A5 etc) also has an effect on some local communities.
- 5.32 There is little doubt that the primary cause of NO₂ pollution in Leicestershire 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.
- 5.33 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 few adults doing even the recommended 30 minutes of moderate activity on 3 days a week. Circulatory diseases cause 35% of all deaths in Leicester. The pattern will be similar in most of the urban areas of the County.

National Transport Policy

- 5.34 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.
- 5.35 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.
- 5.36 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 Central Leicestershire's compact urban nature and Loughborough's national centre of excellence, but it is unclear what financial support the Coalition Government intends to provide.
- 5.37 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 8) 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.

5.38 There is no national policy on introducing active demand management measures to reduce the number of vehicles using the roads. The County Council has already decided not to support the introduction of a congestion charge or workplace parking levy, because of the likely adverse effect on Leicester and Leicestershire'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 bid to the East Midlands Development Agency for help with trialling a diesel-electric hybrid bus fleet for Park & Ride.
- 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 City Major Scheme to deliver a proper City Centre public transport interchange is fundamental to overcoming the connectivity 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 in the PUA will need revisiting.
 - Similarly, a great deal depends on the Government funding the Loughborough Town Centre major scheme to tackle congestion and greatly increase the attractiveness of public transport options in and around Loughborough.
 - 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. In rural areas, access to schools and

colleges is already a real challenge to ensuring young people get skills and qualifications, and lack of access is a major reason for people dropping out of courses.

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 Policy Team as the work began on preparing LTP3 in March 2010; and were therefore integrated with the process from the start.
- 7.6 The Evidence Base was commissioned at an early stage, as were transport modelling exercises 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.
- 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 between 2nd August and 6th September 2010. Detailed feedback was received from the Environment Agency and English Heritage, as well as most of the Leicestershire Districts, the PCT, and internal consultees.
- 7.9 These comments were included in the revised consultation draft Environmental Report which went out to public consultation for eleven weeks between 1st October and 26th November 2010, under the heading Local Transport Planning in Leicestershire 2011-2026.

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 Leicestershire County Council.
- 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 Policy team have tried to maintain progress towards delivering a sustainable transport system for Leicestershire.
- 7.12 Similarly, the briefing notes prepared for decision makers at 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 Leicestershire's Transport Policy Team's approach to engagement during the development of LTP3 has been to engage and consult with existing boards and groups that were already involved in development and delivery of the objectives of both the County Council and its partners, including Leicestershire Together the Local Strategic Partnership (LSP) for Leicestershire.
- 7.15 The LSP includes a wide range of partners from the public, private and voluntary sectors, the emergency services, the health service, education, businesses, neighbouring authorities and equality groups. More information on Leicestershire Together can be viewed at: Link to LSP.
- 7.16 This engagement was also supplemented with engagement with individuals from the LSP membership, Multi Area Agreement (MAA) groups, Highway Forums, Community Forums, Councillors, officers, representatives from young and older people, campaign groups, individual organisations and members of the public etc.

- 7.17 Engagement took place over several stages (initial development, evidence base, draft strategy and draft implementation plan) in order that views and suggestions could inform the development of the document at all stages.
- 7.18 Engagement included giving information, seeking views and reporting progress. It took the wide variety of forms including reports, verbal updates/presentations, workshops, press articles, consultations and webbased questionnaires, group meetings and one-on-one meetings.
- 7.19 The responses to the various LTP consultation exercises have been reviewed by the Transport Policy 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 Leicestershire'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.
- 7.20 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

- 7.21 The process of assessing the options is fully explained in the LTP Strategy.
- 7.22 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 and others at risk, mainly through inexperience or overconfidence.
- 7.23 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.
- 7.24 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 leading rural

Counties. Where possible we will safeguard the services which support Leicestershire'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.

- 7.25 The LTP still aspires to providing a comprehensive park and ride network for Central Leicestershire, 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 opportunities to rework town centres to improve facilities for walking, cycling and public transport interchanges will be sought.
- 7.26 Road Safety options have had to be considered quite carefully, given the failure to quite reach the LTP2 targets. The Council and its partners have 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.

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. Seven top level Key Performance Indicators have been selected.
- 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:
 - It is recognised in the LTP3 that current and future EU standards for local NO₂ and particulates concentrations will continue to be occasionally exceeded in part or parts of some Air Quality Management Areas 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 growth forecast transport modelling 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 national target.
 - The LTP3 Road Safety 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 Policy 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.
 - Leicestershire has a remarkable archaeological record, historic landscapes, and built heritage; some of which has been sadly neglected in past years. Many of the County Towns have especially strong vernacular architecture which fosters a real sense of place. 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. 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 Even though Leicestershire as a whole is one of the least deprived areas in England, there is an unacceptably wide variation in life expectancy between the most deprived and least deprived wards in the County. 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 Areas (AQMA) are 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 planting 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 alone 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 since 1990, the decline in numbers has stalled. Although this is a huge improvement on the 1994-1998 baseline 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 Leicestershire 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 health professionals.
- 9.12 There is an unmet demand for walking and cycling, with surveys finding that respondents would like to do more, but the evidence shows 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.
- 9.14 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

CLLTP2 SEA Scoping Report December 2004 Leicestershire LTP2 Scoping Report December 2004 CLLTP2 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 Consultation Draft Environment Report 30th September 2010