



Luton Local Transport Plan 3

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1 Introduction

Luton Borough Council is required by the Transport Act 2000 and the Transport Act 2008 to produce a Local Transport Plan. This is the third Local Transport Plan (LTP3) that mainly covers Luton, although it does refer to strategic transport infrastructure and other cross-boundary matters for the whole conurbation, particularly in relation to the planned growth of the area. The Plan has been prepared with extensive liaison with Central Bedfordshire Council, and we will continue to work in partnership with them to deliver strategic transport infrastructure associated with the growth of Luton and southern Central Bedfordshire which, whilst located within their area, will deliver transport benefits throughout the whole Luton-Dunstable-Houghton Regis conurbation.

This Plan has been prepared in accordance with Government guidance published in July 2009. Chapter 4 of that guidance sets out the process to be followed in preparing the LTP, which can be summarised as:

- clarify goals;
- specify the problems or challenges of the area;
- generate options to resolve these challenges;
- appraise the options and predict their effects;
- select preferred options and decide priorities;
- deliver the agreed strategy.

The guidance also indicates that the LTP3 should take account of the spatial geography of the area, set out the Local Policy context, and include consultation with key stakeholders, partners, and the local community. The 2008 Act also enables us to produce our plan in two distinct sections, the council's policies for transport contained in a long term strategy and a shorter term implementation plan focused on delivery. Taking account of these requirements:

Part 1 sets out the spatial context of the area, together with the problems and challenges it faces. It also sets out the consultation that has taken place with stakeholders and the local community.

Part 2 covers the long-term strategy up to 2026, consistent with the timescale of the Luton and southern Central Bedfordshire Local Development Framework (LDF) and the Luton Sustainable Communities Strategy. The strategy sets out the overall goals and objectives for transport for Luton over the 15 years from 2011 to 2026. It includes a series of inter-related policies that describe how transport will be managed as well as what and where the priorities will be. The aim is that the policies should guide investment and decisions, but they should be flexible given the uncertainty over such a long time period, particularly in relation to funding.

Part 3 sets out the Implementation Plan covering the period from April 2011 to March 2015. The shorter time-scale enables much more certainty and so the plan sets out the priorities for local and neighbourhood transport projects that will be delivered over the next four years and where they will be implemented. This provides a much more locally focused approach, which shows people what will be happening in their area. The Implementation Plan also recognises the importance of more strategic transport infrastructure to both address existing travel problems and support the planned growth

of the area. The process for the development and implementation of such schemes is more complex and the timescales are longer. This is reflected in the 10 year programme for such schemes.

The Council is also required by EU Directive (2001/42/EC) to undertake an environmental assessment of all plans and strategies that are likely to have significant environmental implications. The LTP Guidance sets out the relationship between the various stages of the LTP and the Strategic Environmental Assessment (SEA) of that Plan. This LTP3 is therefore complemented by a separate Environmental Report produced in accordance with Government guidance on the SEA process.

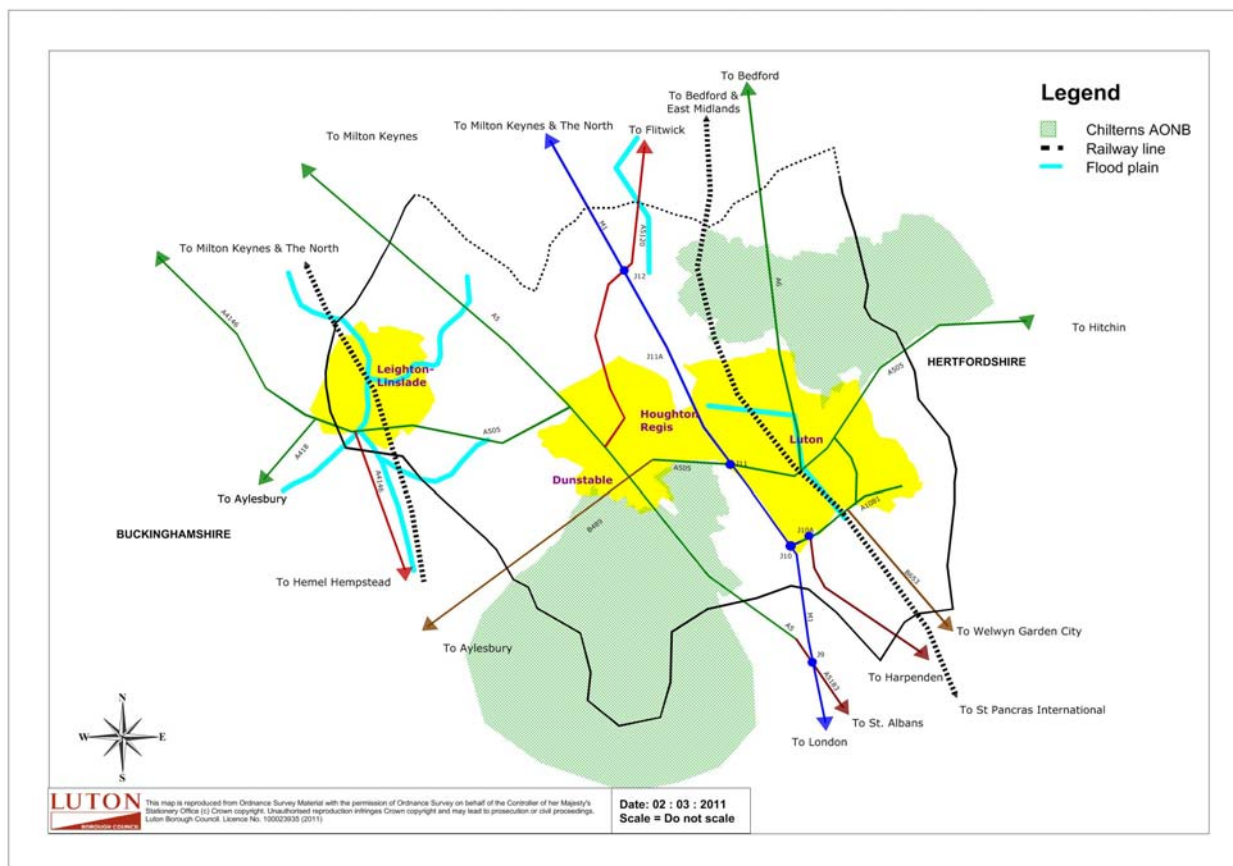
PART 1

BACKGROUND

2 Background to the Area

The M1 motorway and the Midland Main Line railway sever the conurbation, with limited 'bridging points'. The densely built-up nature of most of the conurbation is also constrained by environmentally-sensitive areas both within it (e.g. the upper Lea valley) and around it (in particular the Chilterns Area of Outstanding Natural Beauty). These constraints are shown in Figure 2.1 below.

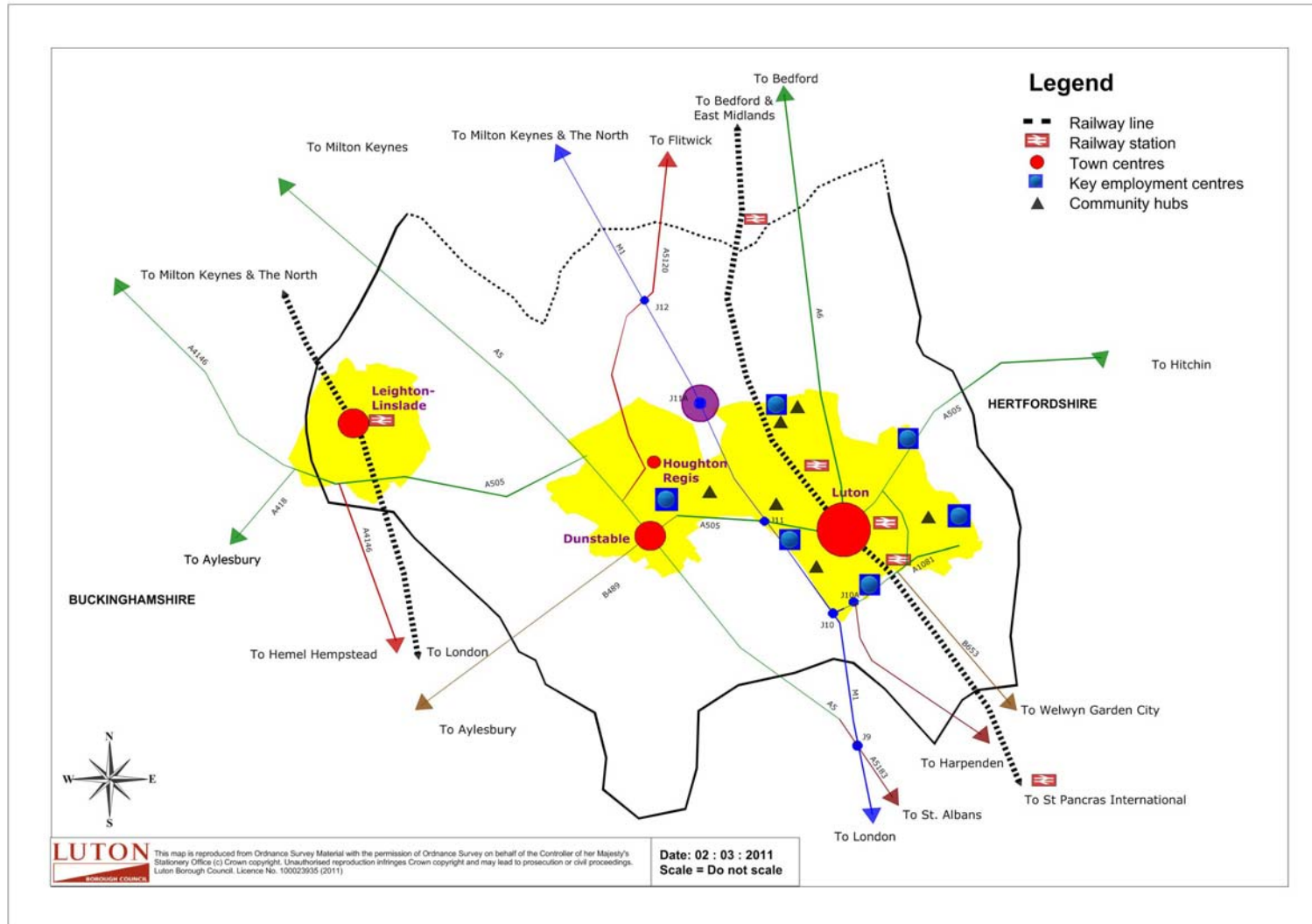
Figure 2.1 Existing Constraints



The combination of these constraints means the local road network channels high levels of traffic through Luton and Dunstable town centres, resulting in high levels of congestion particularly at peak times. This has a significant impact on journey time reliability for vehicle trips made within the conurbation. In particular this affects the punctuality of local bus services, the reliability of business deliveries, response times of emergency service vehicles and the safety and 'journey experience' of non-motorised users (NMUs).

Travel to gateways onto the national and international transport networks, key employment sites, the town centres, and local community hubs, adds a further complexity to movements in and around the town, and the location of these is shown in Figure 2.2 overleaf.

Figure 2.2 Transport Gateways & Hubs



The town has higher than average levels of unemployment and low qualifications/skills of residents. There is also a lack of affordable homes in Luton. A combination of these and other factors result in high levels of deprivation, and the Luton Dunstable Houghton Regis conurbation is identified as a Priority Area for Economic Regeneration. Overall about 26% of households in Luton do not have access to a car, but the proportion is significantly higher in these areas of greatest deprivation.

An Evidence Base report was produced in early November 2009, following consultation with a wide range of Council officers in that Autumn. It sets out the transport-related strengths, weaknesses, opportunities and threats that have been used to identify the problems and opportunities for the area that form the basis of development of the LTP3.

Whilst the Evidence Base report represents the situation at the time of its compilation, it is recognised that the collation of evidence is an ongoing process to support development of the LTP3. Since the publication of the Evidence Base the development of the LTP3 strategy has been particularly informed by the first phase of an Eastern Region study of 'Sustainable Transport Options to Support and Deliver Housing and Economic Growth' carried out by Halcrow Group Ltd between February and July 2010.

Further transport, demographic and socio-economic information is contained in the Evidence Base report, but the key issues (in no particular order) that emerged from that work can be summarised as follows:

- The mode share for single occupancy car journeys to work is high, despite 50% of people that either live or work in Luton commuting less than 5 Km.
- There are low levels of walking, cycling and public transport use, despite the high proportion of people who travel short distances to work.
- There is an increase in the number of children being driven to school, despite the high number of School Travel Plans in place.
- There are already high levels of peak period congestion, and a study by EEDA indicated the economic costs of congestion and the related wider economic benefits in Luton were £51.4 m a year. Without any intervention, travel demand is expected to increase as a result of planned growth and travel speeds on the road network are expected to continue to reduce, resulting in worsening journey time reliability.
- Car travel is the greatest contributor to CO₂ emissions in Luton.
- National and local landscape and habitat designations in and around Luton could impact on the feasibility of future transport improvements.
- Travel by rail and air has continued to grow over the last ten years and this trend is expected to continue. However the facilities at Luton and Leagrave stations needs to improve, in particular for mobility impaired people.

- There are higher than average numbers of casualties, in particular slight injuries, resulting from road traffic accidents specifically in the areas of greatest deprivation and to pedestrians and motorcyclists.
- There are poor perceptions of road safety and high levels of crime/fear of crime in the areas of greatest deprivation.
- Accessibility to further education sites, key employment centres (including the town centre), the Luton & Dunstable hospital, and local parks/green spaces is poor in certain areas of the town, in particular in areas of greatest deprivation where there are high levels of non car-owning households who rely more on travel by walking, cycling and public transport.
- Low levels of walking and cycling are a contributory factor in higher than average levels of obesity (particularly in children) and Coronary Heart Disease in adults.
- The residential areas around Junction 11 of the M1 suffer from higher levels of poor air quality which impacts particularly on people with respiratory problems.

Notwithstanding the aforementioned issues that this Plan will need to address, there are also a number of positive aspects based on recent transport trends, including:

- Good connectivity to national and regional road and public transport networks;
- Rail usage is continuing to grow at the three Luton stations;
- Increase in people travelling to the airport by public transport;
- Continued investment in cycle infrastructure resulting in more cycling activity;
- Low per capita road transport CO₂ emissions that are predicted to continue declining;
- Improvements in footway condition and the number of accessible pedestrian crossings;
- Exceed government targets for reduction in Killed or Seriously Injury accidents;
- Low proportion of cycle casualties in Luton;
- Air Quality is improving.

3 Consultation on this Local Transport Plan

In June and July 2010 the Council carried out consultation with stakeholders and key partners that covered the transport-related issues of the area and the various options to address these. The “Issues and Options” report included an assessment of a range of transport schemes and initiatives similar to those set out in both the Transport Strategy (see Part 2) and the Implementation Plan (see Part 3). The assessment was based principally on work carried out for the regional study into ‘Sustainable Transport Options to Support and Deliver Housing and Economic Growth’ in the east of England, the first phase of which was completed in June 2010. That study did not include any specific modelling, although it did make use of previous modelling work undertaken and also recent travel information collected in and around the Luton-Dunstable conurbation in 2009.

In June and July 2010, IPSOS /MORI undertook a survey of the satisfaction of Luton residents with key aspects of transport. These surveys were also carried out in other transport authorities in England, providing a comparison of results across the country and enabling an assessment of the scope for improvement of particular transport aspects in Luton. Those aspects that Luton residents were most unsatisfied with, and which are considered to offer the greatest scope for improvement, are:

- ease of access to key services, specifically for people with disabilities and non car owning households;
- local bus services and information about those services;
- cycle routes and cycle facilities;
- condition of roads, pavements and footpaths;
- traffic levels and congestion;
- traffic management; and
- enforcement of obstruction of highways.

In September 2010 BMG Research undertook a survey of the Council’s Citizens Panel (1005 people) of which 533 responded. The survey included questions about road safety and sustainable transport. The main conclusions were that:

- around half felt that speed humps, 20mph zones and restricted parking were effective;
- about two thirds felt that fixed and mobile speed cameras were effective;
- just under half thought that road safety publicity was good;
- more than three quarters felt that sustainable travel was important.

The LTP3 Strategy (see Part 2) is based on the range of policy interventions set out in the “Issues and Options” report, but amended to take account of comments received from Stakeholders/Partners and the key issues identified by local people in the IPSOS/MORI and BMG surveys.

Community and stakeholder consultation on the full Local Transport Plan and the associated Environmental Report commenced just before Christmas 2010 and ran until 14 February 2011. The wider Stakeholder group consulted on the LTP3 Issues and Options report was also consulted about the whole Plan. The consultation

included presentations to the Environment and Economy Board of the Local Strategic Partnership and its two sub groups, together with the Central Bedfordshire and Luton Local Access Forum.

Three separate Focus groups comprising adults, young people and other local stakeholders (31 in total) were also held about the safety and sustainable transport themed areas of the Plan. In broad terms, the views of the Focus groups supported the range of actions identified in the LTP3 strategy and implementation plan, and in particular the need to reduce the proportion of accidents associated with travel to school given the focussed time period associated with those accidents. With regard to sustainable travel, it was felt that to be effective, there has to be a range of solutions available. However there were clearly differences of opinion both within and between the particular groups, in particular:

- Criticism of road humps as drivers just speed up between them; adults view that traffic calming based on physical reduced widths was most effective.
- View of adults was that Park & Ride services would not work.
- They also felt that the Luton Dunstable Busway will be an effective way of taking traffic away from the town centres.
- Problem of parking outside schools, which needs better enforcement.
- Adults view was that speed reminder signs were most effective.
- Adults were sceptical about proposals to use volunteers to raise road safety awareness; they felt that most effective ways of getting road safety message across to adults was via children. Walking buses were considered a practical way of putting road safety into practice.
- Adults also felt putting signs up about the number of accidents on a particular road was also effective in getting road safety message across.
- Adults felt that road safety adverts should be hard-hitting - 'blood and gore' - with real people, not actors, in them.
- Adults were sceptical about whether promoting car sharing would work, as all adults have different priorities.

Copies of the draft LTP3 and Environmental Report were available in all community centres and libraries in the town, and articles were included in the local press and the Councils newspaper, LutonLine. A self-completion questionnaire was also available on the consultation section of the Council's website, which sought views on the priorities of the different themes of the Implementation Plan.

A total of 40 organisations and individuals responded to the consultation on the full LTP, including 27 people who completed the on-line questionnaire about the Implementation Plan. The top priorities identified for each of the LTP3 themes were as follows:

Supporting the Economy:

- Continue to improve bus punctuality and reliability
- Improve interchange between rail, coach and bus services
- Continue to modernise traffic signals and expand traffic control on priority routes

Protecting the Environment

- Encourage travel to school /college on foot or by bus/cycle
- Develop travel plans to increase walking, cycling and public transport use

Improving Road Safety and Personal Safety

- Implement small scale safety measures in local neighbourhoods
- Encourage travel to school on foot or by bus/cycle
- Continue to upgrade street lighting and lighting of paths/cycle routes

Improving health and well being

- Improve parking for residents, businesses and their visitors
- Consolidate signs and street furniture to avoid 'clutter'
- Improve air quality in areas surrounding the M1 motorway

The final draft of the LTP3 and the Environmental Report, amended to take account of comments received during the consultation on the full Plan, was presented to the Councils Joint Board on 17 March 2011 and the Executive on 28 March.

PART 2

TRANSPORT STRATEGY

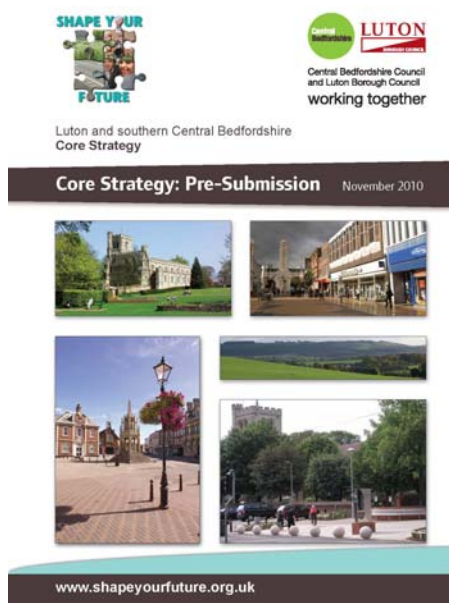
2011-2026

4 Local Policy Context

4.1 Background

Our new transport strategy will help us to address local priorities, such as helping to improve the economic, social and environmental well-being of the local community and helping to improve health and reduce inequalities. It updates the policies contained within the Luton, Dunstable and Houghton Regis Local Transport Plan 2006 - 2011 published jointly by the Borough Council and the then Bedfordshire County Council and South Bedfordshire District Council, which were respectively the highway and planning authorities for Dunstable and Houghton Regis.

Government guidance recommends that Local Transport Plans demonstrate the relationship with the wider local policy context, in particular spatial planning elements defined through the LDF and those wider community aspirations detailed within the Sustainable Community Strategy.



The Luton & southern Central Bedfordshire LDF Core Strategy



The Luton Sustainable Community Strategy

Luton's LTP3 has been influenced by these wider local priorities and will show how transport will play a role in their achievement. In particular, transport can:

- Support economic growth by improving transport connections and journey reliability, making Luton more attractive for businesses;
- Protect the environment by promoting less environmentally damaging ways of travelling;
- Help make communities safer by reducing the number and severity of road traffic casualties;
- Promote health by enabling people to walk or cycle more, and by reducing air pollution;
- Support vulnerable people and reduce inequalities by improving and ensuring equitable access to key services.

4.2 Luton and South Bedfordshire Local Development Framework

The Council is currently in the process of developing a joint LDF with Central Bedfordshire Council, which covers Luton and the southern part of Central Bedfordshire. The LDF Core Strategy proposes major expansion of housing and jobs in Luton and the surrounding area. Based on the scale of growth and development allocated in Luton and southern Central Bedfordshire, the area is considered a Key Centre for Development and Change, and the Regional Economic Strategy also identifies the Milton Keynes / South Midlands area as an 'Engine of Growth'. The Luton Dunstable Houghton Regis conurbation is also a Priority Area for Economic Regeneration and a regional transport node, and Luton is identified as a sub-regional centre. Effective and integrated transport and spatial planning is a key corporate priority for both Luton Borough Council and Central Bedfordshire Council. To that end a Joint Committee, set up by the two Councils, has been responsible for developing the long-term strategy for the growth area.

The LDF Core Strategy is required to set a vision and strategic objectives for the development of the area, and this is set out below:

"Luton and southern Central Bedfordshire will become sustainable communities. All its towns, villages, and the countryside surrounding them will contribute, according to their specific strengths, to achieving this aim.

Luton's main contribution will be that the town will continue to develop as a sub-regional shopping and service centre and as the principal focus for new employment and inward investment within its area of influence. However an urban extension will take place within south Central Bedfordshire, immediately adjacent to the north of Luton, to accommodate needed housing development.

This will be supported by an enhanced public transport infrastructure, new green infrastructure, new strategic road infrastructure and by taking advantage of the town's regeneration opportunities and the asset of London Luton Airport."

The primary objectives of the LDF that the Luton LTP3 will help to achieve are:

- SO1:** To manage the natural growth of the area to help deliver sustainable and integrated communities.
- SO3:** To increase job opportunities in the area through an improvement of its image, skills, connectivity, and quality of employment premises.
- SO4:** To improve strategic and local connectivity through delivery of major transport infrastructure, improved access to existing strategic transport facilities, efficient integrated public transport, and new sustainable transport opportunities.
- SO5:** To revitalise and support the delivery of vibrant, dynamic, distinctive, safe and popular town centres.
- SO7:** To deliver development which offers the highest level of protection for, and access to, the natural environment to enable greater enjoyment of this resource.
- SO8:** To require sustainable development and design quality, including maximising opportunities to use renewable and decentralised energy, in

order to help minimise the area's carbon footprint and to mitigate and adapt to climate change.

The LDF focuses on the planned growth in homes and employment over the next 15 years and sets out the key infrastructure that is required to sustainably deliver that growth. It is currently anticipated that the Examination in Public (EiP) for the LDF Core Strategy will be held in mid 2011, and the EiP Panels' report will be completed that Autumn. Whilst this LTP3 broadly reflects the proposals contained within the LDF Core Strategy submitted to Government in early March 2011, if the Panel report requires significant changes to strategic transport schemes and other interventions, then it is recognised that it may be necessary to subsequently amend this Plan.

In addition this LTP strategy recognises that passenger throughput at London Luton Airport will also be expected to increase in the period up to 2026.. The number of passengers travelling through London Luton Airport has increased from 7.5 million passengers per annum (mppa) in 2004 to 10.1 mppa in 2008, and although this fell to about 9.2mppa in 2009 and 8.8 mppa in 2010, the overall trend is still rising. Over this period the proportion of passengers arriving at the airport via the shuttle bus to Luton Airport Parkway station has increased from 16% to 22%.

The 2009 Government air travel forecasts assume that passenger throughput at Luton Airport will increase to about 15mppa by 2015 and then remain static. However, following the coalition Government's announcement in late 2010 that it does not intend to pursue previous proposals for a third runway at Heathrow and a second one at Stansted, and assuming current trends continue, this could result in more optimistic growth at Luton Airport being achieved, possibly reaching 18mppa by 2021 and around 20mppa by 2026.

The *Interim Airport Surface Access Strategy (ASAS)* published by the airport operator in 2008 sets a target of 40% of all airport passengers using public transport (rail or bus/coach) to access the airport, although there is a much higher proportion of non-UK National passengers who use public transport.



Buses waiting at London Luton Airport Arrival & Departure building

There are also about 8500 employees who currently work at the airport and this is expected to increase, to service the needs of passenger growth, to about 12000 employees by 2026. Currently about 72% of airport employees drive alone to work, although there is a higher proportion of shift workers that drive to work. The Interim ASAS also sets a target of 60% of all airport employees driving alone to work by 2011, principally as a result of greater use of buses or trains to travel to work.

Whilst these interim targets, together with any targets in the subsequent ASAS, aim to reduce the number of airport passengers and employees driving to the airport, it is clear that around a doubling of airport passengers by 2026 is likely to increase the absolute numbers of cars wanting to access the airport. The time of day that those cars will be travelling on local roads to access the Airport is particularly governed by the times at which flights arrive or depart. Improving the operational capacity of the airport by extending the taxiway at each end is vital to increasing the number of flights using the airport to cater for these forecast increases in passengers.

4.3 The Luton Sustainable Community Strategy

The Luton Sustainable Community Strategy (SCS), *Our Luton in 2026*, is the Council's overarching vision for making Luton a better place for everyone. It is based on what residents and businesses in Luton tell us is important to them. To improve the quality of life for everyone living and working in Luton, the community strategy has four delivery themes, with key priorities that transport can affect within each.

- Stronger & Safer Communities:
 - Reducing anti social behaviour and the fear of crime, ensuring all people feel safe;
 - Improving road safety;
 - More well designed, safer and accessible open spaces.
- Health & Wellbeing:
 - Promoting healthy living and tackling the key risk factors which affect health;
 - Improving leisure and cultural opportunities, and better access to them for all.
- Environment & Economic Development:
 - Successfully adapting and mitigating for climate change;
 - Protecting and enhancing the natural and built environment, including our rivers and natural habitats within Luton's green spaces;
 - Reducing consumption of water, energy, materials and minimising waste, including support for renewable energy generation;
 - Improving public transport, access and mobility and increasing travel to work and places of education by sustainable modes of transport e.g. public transport, walking, cycling.
- Children & Young People

This transport strategy is focussed around the first three key themes of the SCS, with the fourth theme - Children and Young People - integrated throughout the strategy. For each of these themes the SCS sets out a baseline assessment and where we want to be by 2026, together with a series of short to medium term priorities (up to 2014). An overarching theme of all these priorities is for the public, private and

voluntary/community sectors to work together in addressing key issues for the local community.

4.4 The Local Economic Assessment and Local Enterprise Partnership

The Council has a duty under the Local Democracy, Economic Development and Construction Act 2009 to undertake a Local Economic Assessment (LEA) that summarises the current performance of Luton’s economy, and to develop the strategic priorities for the economic regeneration and development of the town. The four key priorities identified are to improve Luton’s skills base, reduce levels of worklessness, focus business support around key sectors/clusters, and create the right environment for businesses to thrive. Transport initiatives may have a role to play in implementing the first two of these priorities, although the most significant contribution relates to the fourth priority, in particular the role transport improvements will play in creating an environment for businesses to thrive, specifically the improvement of M1 Junction 10a, together with the role of the Town Centre Transport Scheme in delivery of the town centre regeneration programme and extension of the East Luton Corridor to serve new employment sites in the east of Luton.

In addition to the LEA, the Council is a key partner in a Local Enterprise Partnership (LEP) that covers the three Bedfordshire Unitary Authorities; South Northamptonshire and Corby, Kettering and Northampton Boroughs; and Milton Keynes, Aylesbury Vale, Cherwell District, and Dacorum Borough as shown in Figure 4.1 below. This South East Midlands LEP recognises the importance of sub regional communications infrastructure to support the planned growth of this sub Region.



South East Midlands Local Enterprise Partnership area

The newly formed LEP covers a very similar area to the former Milton Keynes / South Midlands (MK/SM) sub region, which had commissioned various transport related studies, including a sub regional Transport Strategy published in Autumn 2009. In addition to identifying key highway improvements necessary to support the planned growth of the six constituent growth areas in the MK/SM sub region, the Strategy proposed improvements to six inter-urban bus and coach routes to improve public transport connectivity between those six growth areas not well served by rail.

5 Overall Strategic Approach

5.1 Vision

Based on the wider vision and priorities for the Luton area, the vision for the long term transport strategy is summarised below.

Transport Vision for 2026

To make Luton a safer and healthier place in which to live, work, learn and have fun, we will provide an integrated, safe, accessible and more sustainable transport system which supports the economic regeneration and prosperity of the conurbation and the planned growth of the area whilst reducing unnecessary car use and CO₂ emissions, enhances the environment and generally improves the health and quality of life of the community.

5.2 Aims

To achieve this vision, we will work in partnership with other Government Agencies, the private sector, community/voluntary groups and social enterprises to develop a transport system in Luton that will work to achieve the following aims:

- **Generate continued employment and prosperity** by improving access to employment and skills/training opportunities for local residents, and by improving existing and providing new transport infrastructure and other measures that support local businesses, climate change objectives and the diversification of the local economy;
- **Create and preserve an attractive environment and pleasant living conditions** by promoting a quality built environment together with improving the condition of green space in the conurbation and conserving/enhancing the surrounding Chilterns AONB to encourage greater access by walking and cycling;
- **Promote equitable opportunities and access to services for all members of the community** by improving choices of modes of transport and the design of transport facilities for NMUs and mobility-impaired and other vulnerable people;
- **Promote the development of Luton Town Centre as a sub-regional centre**, and improve the vitality and viability of other District centres;
- **Give people the opportunity to choose more sustainable travel habits** by implementing transport schemes and travel planning initiatives to maximise the role of public transport, walking and cycling, thus reducing vehicular emissions and increasing physical activity;
- **Support Luton's growth as an international gateway** in the context of both the growth of London Luton Airport and ease of access to the new Channel Tunnel Rail Link terminus at St Pancras; and
- **Lay the foundations for future expansion** by ensuring accessibility (by more sustainable transport modes) between the new residential developments, existing and proposed employment areas, the town centres, and existing and new community facilities to serve the growth area.

5.3 Strategic Priorities

The priorities for implementation of transport schemes and initiatives within this LTP3 have been defined at two levels, consistent with the approach set out in the emerging Local Development Framework (LDF) Core Strategy for Luton and southern Bedfordshire; that is, strategic/conurbation-wide priorities and area/local neighbourhood priorities.

The main priority at the strategic/conurbation-wide level is to improve east-west connectivity particularly between Luton and Dunstable/Houghton Regis. The priority of other strategic corridors will depend in part on the timing of other strategic developments outside this corridor coming forward in the LDF process.

Priorities at an area/local level will be based principally on the Area Studies programme (a holistic approach to improving accessibility, safety and quality of life in existing local neighbourhoods in Luton), together with interventions that have emerged from partnerships set up during the LTP2 period, in particular the work with the Primary Care Trust and Sustrans to address health inequalities. However, measures will also be developed to integrate existing neighbourhoods in the town with those in new strategic development sites.

6 Supporting the Environment and Economic Development

6.1 Background

There has been a link between the transport system and prosperity throughout history. Transport's key economic role is to support the success of the UK's highly productive economic centres in the global marketplace and to enable the efficient movement of goods and people. The connectivity of the transport system as a whole is critical in enabling people to get to work and the freight sector to deliver goods. Good connectivity enables people to reach the jobs that are right for them. However, connectivity can subsequently have an impact on travel behaviour by encouraging more travel or travel over longer distances, such as accessing work opportunities further away. This can often result in congestion.

Under the Traffic Management Act (2004), the Council has a duty to keep traffic, including pedestrians, moving. Congestion causes frustration and delay, and has a significant impact upon the local economy and well being of the community. It is detrimental to the overall operation of the transport network, leading to the potential for higher accident rates, compromising public transport reliability and operations, and impeding walking and cycling. Taken together, these effects make sustainable transport modes less attractive and encourage more people to travel by car, further increasing congestion and leading to a vicious circle that deters people from making more sustainable transport choices.

The environment and economic growth are inextricably linked, although growth has typically been associated with environmental degradation. Transport can impose significant effects on our water quality, landscapes, biodiversity and historic assets. Increasing concentrations of greenhouse gases originating from human activities, including transport, are leading to global climate change. Climate change is an environmental issue of global significance, but may also have severe repercussions on a local level in Luton. The current challenge, not just in Luton but across the world, is to identify ways to support economic growth in a low carbon and environmentally sensitive manner.

In Luton, the key local transport challenges for supporting economic growth and the environment include:

- Reducing single occupancy car journeys within, to and from Luton in part by increasing the use of more sustainable modes of transport;
- Improving journey time reliability, particularly by public transport;
- Improving the utilisation of the existing transport network through effective management and maintenance;
- Improving transport's contribution to economic growth and productivity by improving connectivity between key employment and housing areas and strategic transport corridors and especially across the conurbation;
- Increasing the use of low or no emission vehicles;
- Reducing the wider impacts of transport on the natural and built environment;
- Accommodating new development and growth both within and around the town;
- Supporting the town's role as a transport node of International, Regional, and sub regional importance.

6.2 Supporting Economic Growth

Luton is a dense urban area making up part of the larger Luton-Dunstable-Houghton Regis conurbation and as such provides a workforce and housing for a wider economic area. As a result, strategic transport schemes for Luton cannot be delivered in isolation from this wider area. Network connectivity is generally good in and around Luton, but key parts of the network suffer from congestion, which may become significantly worse in the face of planned housing and employment growth. Journeys between Luton and Central Bedfordshire (including Dunstable and Houghton Regis) and between Luton and towns in the north and west of Hertfordshire represent the most significant current and future transport movements and are therefore, the focus of strategic connectivity improvements.

We will, therefore, work closely with our partner organisations including Central Bedfordshire Council, Network Rail, the Highways Agency, Hertfordshire County Council and the South East Midlands and Hertfordshire Local Economic Partnerships to identify, develop and coordinate the delivery of strategic, cross boundary transport connectivity improvements, particularly those required to facilitate growth in the wider conurbation.

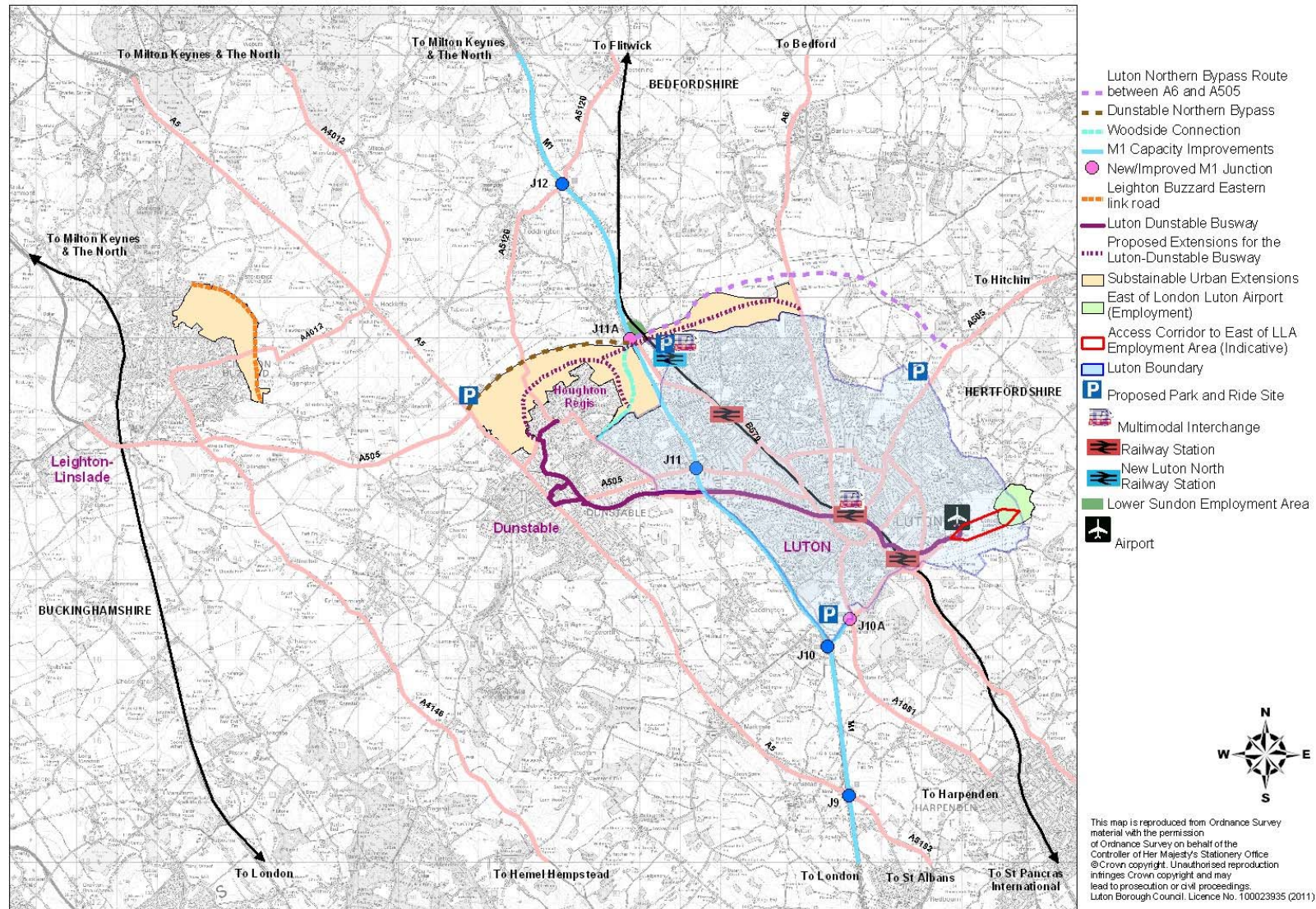
Traffic in the UK is currently measured by the Department for Transport in two ways – the annual average daily traffic flow (volume) and the number of vehicle kilometres travelled (distance). In terms of annual vehicle kilometres, distances travelled in Luton have grown by 8% over the past ten years, although traffic growth has slowed down considerably in the last five years. In terms of annual average daily traffic flows, overall traffic volumes have decreased in Luton between 2004 and 2008. However, traffic is likely to grow as a result of new development within the Luton and southern Central Bedfordshire area. In particular, the planned expansion of 23,150 dwellings and provision of 11,650 jobs between 2011 and 2026 will put enormous pressure on the transport network in Luton and southern Central Bedfordshire.

A multi-modal transport model has been developed to support the transport appraisal of the impact of the Luton and southern Central Bedfordshire Local Development Framework. The initial results of this work show that between 2007 and 2026 there will be an increase in the overall levels of travel demand, and hence vehicle travel, of around 20%. Without investment in new public and private transport infrastructure, coupled with improvements to the existing transport network, this increased demand will merely result in further congestion and increased journey times, with travel speeds expected to reduce.

Luton and Central Bedfordshire have together developed a joint Core Strategy, which identifies the following strategic transport schemes (see Figure 6.1 overleaf) that may be required to facilitate growth. These include:

- Park and Ride -
 - A5/A505 to the north of Dunstable;
 - M1 at Junction 10a and the proposed Junction 11a;
 - A6 north of Luton;
 - A505 east of Luton.

Figure 6.1 Strategic Transport Schemes



- Luton Dunstable Busway extensions, particularly to the north, coupled with bus priority measures;
- Luton Town Centre Transport Scheme and associated improvements to Luton Central railway station;
- A new parkway type railway station in the vicinity of proposed M1 Junction 11a;
- Reducing Congestion -
 - o M1 Junction 10A improvements;
 - o Woodside Connection;
 - o Luton Northern Bypass;
 - o A5-M1 Link Road and the M1 motorway capacity improvements proposed by the Highways Agency.

Further details of these individual schemes are referred to in Section 9.3. Luton will deliver this strategic transport infrastructure working in partnership, where appropriate, with neighbouring Councils (in particular Central Bedfordshire), the Highways Agency, Network Rail, developers, bus and train operators, and Statutory environmental bodies. The remainder of this section sets out the key aspects of reducing congestion to facilitate economic growth and regeneration.

6.2.1 Managing Congestion

Managing congestion is an important part of creating an efficient transport network and supporting the local economy. Congestion currently occurs at various locations throughout Luton, particularly during the morning and evening peak periods. The road network is operating close to its capacity during much of the day and this means that relatively small incidents can quickly result in significant delays and congestion. More serious problems such as incidents on the M1 can bring many local roads to a standstill due to diverted motorway traffic.



Congestion delaying an emergency service vehicle

Policy 1: Congestion Priorities

In managing congestion, priority will be given to delivering measures along those corridors where the highest levels of congestion occur, including:

- the corridor between Luton and Dunstable/Houghton Regis;
- routes between Luton town centre and residential areas in the north and east of the town.

Prioritisation of spending/measures will also be linked to their economic impacts, so that those measures offering the greatest economic benefits are prioritised.

In order to manage congestion effectively, we will look to deliver Smarter Choices to encourage a modal shift to sustainable modes of transport, improve passenger transport services, manage the network in such a way as to improve its operational efficiency and, if necessary, consider increasing network capacity. More detail of each of these methods can be found in the following sections.

6.2.2 Passenger Transport Improvements

Performance indicators for public transport in Luton show trends of significant (18%) decline in bus patronage over the past decade, which has only begun to level off in the last few years. Bus punctuality has also declined in Luton over a shorter period of time.

The Luton Dunstable Busway will improve connectivity between Dunstable, Houghton Regis and the west of Luton with the rest of the conurbation. This should result in improved employer accessibility to the workforce. The Busway will also improve accessibility to Dunstable town centre, potentially helping to improve its viability. There is significant scope to further extend the Busway and maximise its benefits.

Policy 2: Passenger Transport Improvements

Strategic journeys between Luton and the surrounding growth areas will be improved through the on-going implementation of the Luton Dunstable Busway and subsequent extensions, together with other bus network improvements focussing on the priority corridors identified in Policy 1, including provision of Park & Ride services in partnership with Central Bedfordshire Council and Hertfordshire County Council.

We will build upon the existing Bus Quality partnership with Arriva and develop a Punctuality Improvement Partnership between the Council and bus operators. We will also work in partnership with train operating companies and Network Rail to implement rail station improvements, enhance rail services, develop rail station travel plans and integrate bus and rail services.

This will be implemented through:

- Bus priority schemes and other initiatives to improve bus punctuality and reliability;
- Installing bus Real Time Passenger Information systems that incorporate enhanced facilities for disabled and elderly people;
- Improvements to interchanges between rail services and local/inter-urban bus or coach services;

- Ensuring good public transport access for all new developments, particularly through Busway extensions;
- Park & Ride facilities where key radial routes cross the fringe of the expanded conurbation, with bus priority routes through the urban extensions and on into the town centres;
- An increase in inter-urban coach services for areas not well covered by rail services, in particular to/from Milton Keynes.

6.2.3 Network Management and Capacity

Under the Traffic Management Act (2004) the Council has a duty to keep all traffic moving. Improving the efficiency of the existing transport network can reduce the need to increase road capacity, provide better value for money in managing congestion and improve local economic productivity. The Eddington study¹ recommended making best use of existing networks by improving traffic flow management in order to maximise the competitiveness and productivity of the economy. The challenge is, therefore, to maximise the performance of the existing network in Luton.

Increasing capacity has historically been viewed as a sensible solution for managing congestion. However, the Department for Transport has since identified that the provision of additional road capacity can induce new traffic onto the network, resulting once more in congestion issues. It is therefore important that an appropriate balance is struck between providing additional road infrastructure to maintain and support economic growth and the need to stabilise traffic growth.

Improving signal timings, minor road widening and changes to lane markings can result in a 12-20% increase in junction capacity. However there are very few locations in Luton where there is sufficient highway land to widen roads.

Policy 3: Highway Improvements

Luton Council will investigate and deliver transport network management and efficiency improvements on congested roads before providing new highway infrastructure. Where modal shift and network management are insufficient to manage congestion on the priority corridors (see Policy 1), the Council will look to support additional highway improvements to reduce congestion and improve journey times.

Network capacity improvements, including junction improvements, will be undertaken where their impact benefits the road network as a whole and will be carried out within the existing highway boundaries, where practicable. New road building will only be supported where it facilitates growth and improves access to strategic employment sites.

Managing and improving the efficiency of the network can be realised in a number of ways including:

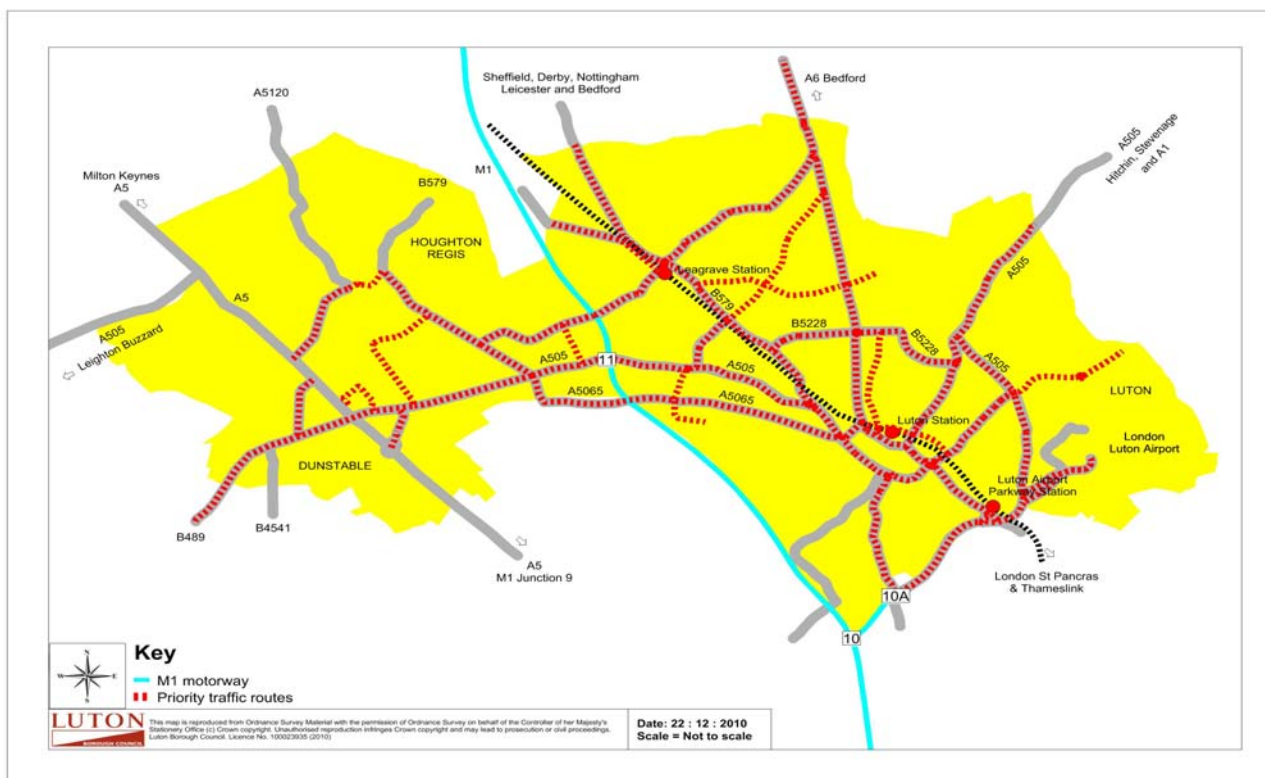
¹ Sir Rod Eddington, *Transport's role in sustaining UK's Productivity and Competitiveness: The Case for Action*, 2006.

- **Intelligent transport systems:** We will look to introduce Urban Traffic Management and Control (UTMC) through which to manage the traffic on the road network in the most efficient way. In doing so, we will develop a UTMC control centre that will receive information from a variety of sources about travel conditions on the public transport and highway networks in and around the conurbation. This information will be used to adjust the traffic signal timings at junctions along key corridors to allow traffic to move more freely where congestion occurs.
- **Improved information:** We will coordinate information for the travelling public about journey times and routes, ensuring that information is disseminated by a variety of means at all stages of a journey (e.g. radio, internet and mobile phone messages, together with bus real time passenger information and static/variable message signs for road users).
- **Parking enforcement:** Luton has Special Parking Area status, enabling the Council to take action against most parking offences, including parking on yellow lines and stopping on School Keep Clear markings. Parking outside schools is still a problem and we will continue to enforce School Keep Clear markings to help maintain the safety of children. The Council has already decided to introduce bus lane enforcement by the end of March 2011, and will continue to review the opportunities for other enforcement powers available to the Highway Authorities under the Traffic Management Act 2004.
- **Coordination of road and utilities works:** One of the frequent causes of congestion is the temporary loss of road-space during roadworks. Figure 6.2 overleaf indicates bus routes and other traffic-sensitive streets on which works will normally only be allowed outside peak periods. The Council is already responsible for co-ordinating streetworks for highway improvements and public utilities, and this will be improved through the introduction of a Council-run permit system for streetworks backed up by enforcement powers.



Portable variable message signs can be used to provide urgent travel information

Figure 6.2 Traffic Sensitive Streets



6.2.4 Parking

Controlled provision and availability of car parking is essential to managing urban traffic congestion and encouraging people to use alternative forms of transport for accessing the town centre. It can also play an important part in ensuring the economic vitality of the town centre by enabling people to gain access to our retail centres. To that end, restricting the number of total parking spaces or limiting the availability of long-stay parking can have a significant effect on traffic volumes, providing that these measures are complemented by the provision of adequate alternative transport options.

Policy 4: Parking

Car parking provision in Luton town centre will be managed in such a way that it favours short stay demand and will be limited to the current number of parking spaces. We will look to reduce on-street parking if parking capacity increases at Park & Ride sites on the periphery of Luton.

Additional parking provision may be appropriate at rail stations and other public transport interchange locations on Luton's periphery (such as Park & Ride) to encourage the use of rail and bus to access the town centre.

Maximum parking standards at new developments will be established through the Luton and southern Central Bedfordshire Local Development Framework.

We will price public off-street car parks peripheral to the town centre and Park & Ride sites to facilitate long stay commuter car parking, and price central car parks to cater mainly for demand by short stay users. Long stay parking in the town centre will therefore be limited to encourage daily commuters to exploit the public transport, walking and cycling opportunities available for travelling to work.

Permission will not be granted for new car parking in Luton town centre unless it replaces existing parking provision and improves the quality of existing car parks. At rail stations, car parking will only be increased where station travel plans have been implemented and a parking shortage remains. The provision of further safe and convenient parking facilities for cyclists and motorcyclists at railway stations and generally around the town will be encouraged.

6.2.5 Freight

Freight movement is an activity that increasingly occurs in edge-of-town and other away-from-town-centre locations. In Luton, most large industrial premises have long since moved to “out of centre” estates and offices, and large retailers increasingly favour such locations as well. In theory, this should take some of the pressure off busy roads and residential areas, but in practice it raises issues about access for employees and visitors, particularly those without cars.

As a result of freight activity, there are Heavy Goods Vehicles (HGVs) on many parts of the road network. HGVs are large and take up more road space than cars and light vans, further limiting road network capacity and impeding traffic flows. HGVs also tend to produce more noise and vibration than smaller vehicles and can be especially problematic on hills, such as Stockingstone Road. HGVs accounted for 6% of Annual Average Daily Traffic Flow in 2008 in Luton and HGV flows are highest along the M1 (24%) and adjacent sections of the A505 Dunstable Road (8%).

Policy 5: Freight

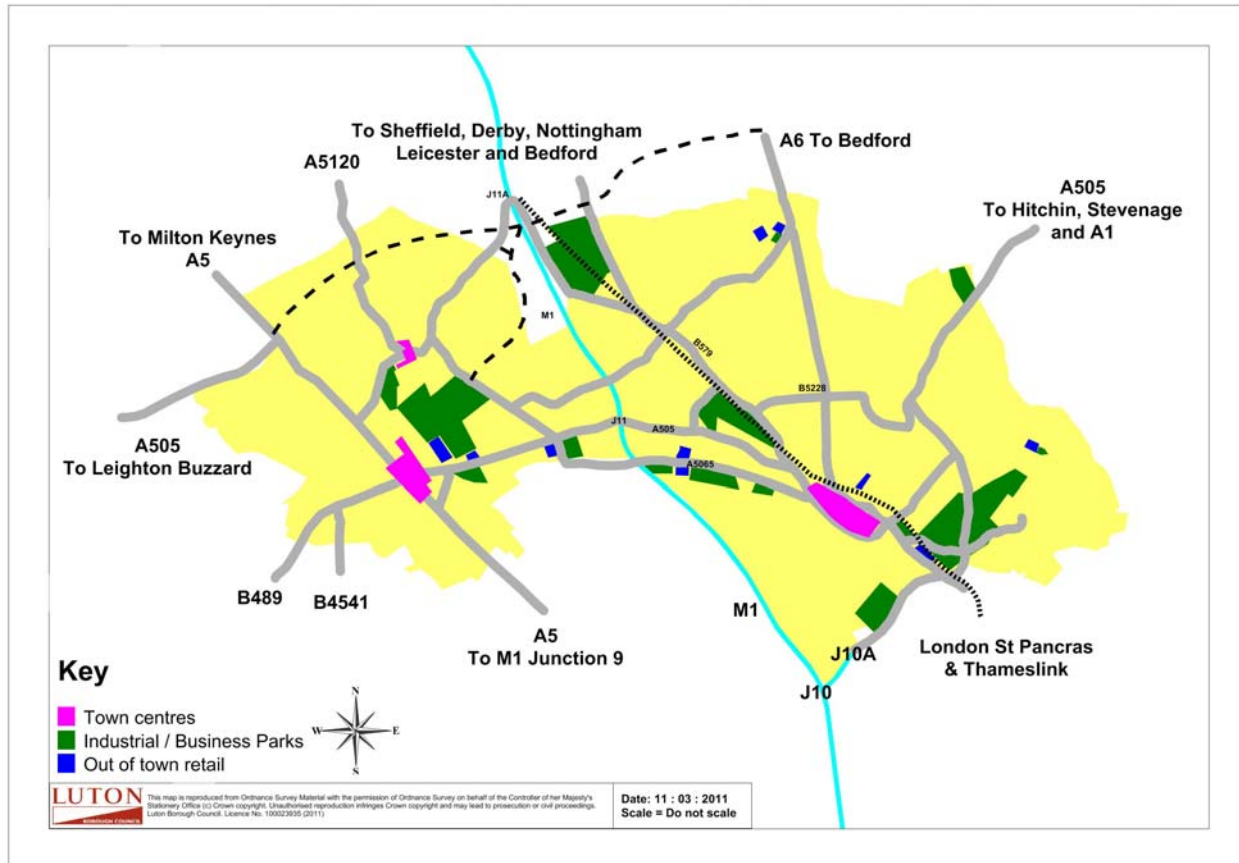
In addition to continuing our membership of the regional Freight Quality Partnership (FQP), we will also work in partnership with major local employers, representatives of the freight industry and with Central Bedfordshire Council to develop initiatives at the local level to mitigate the adverse impacts of the movement of freight, in particular to remove lorries from residential areas.

The Council will therefore work with local partner organisations to develop a local Freight Quality Partnership with the freight industry, businesses, Local Economic Partnerships, residents, community and environmental groups through which we can deliver measures to deal with freight issues in the Borough. In doing so, we will look to provide a forum through which we can:

- Establish Strategic Lorry Routes and produce a map of these for freight operators and businesses that includes information about waiting, access and height restrictions;
- Improve existing and provide more signing to guide lorries to destinations such as key employment sites and town/district centres;

- Explore sustainable alternatives for freight distribution, in particular the opportunities arising from the proposed rail freight interchange adjacent to the former Sundon Quarry for a freight consolidation centre to serve the conurbation;
- Rationalise local delivery times and restrictions to minimise traffic impacts.

Figure 6.3 Main Generators of Road Freight



6.3 Protecting the environment

The main focus of the environmental impacts of transport is to reduce Greenhouse Gas emissions. Carbon dioxide (CO₂) is the most abundant greenhouse gas and has therefore become the main focus of climate change mitigation activity. The majority of CO₂ emissions from transport in Luton arise from vehicles travelling on minor roads rather than on A roads. Although Luton has relatively low per capita transport CO₂ emissions there remains scope for further reductions from the transport sector.

6.3.1 Encouraging Modal Shift

In Luton, many people are undertaking short distance car journeys (under 5km) that could otherwise be viably accommodated by walking, cycling or public transport. As such, there is substantial scope and opportunity for encouraging a modal shift to more sustainable transport modes, particularly for those travelling to work and school. We will therefore set targets in this LTP for increasing mode share for sustainable transport or reducing forecast growth in traffic.

Fundamental to managing congestion at peak times and greenhouse gas emissions is investment in sustainable transport infrastructure to encourage more people to walk, cycle or use public transport for their local journeys. However, the benefits of investment in sustainable transport infrastructure can be further maximised through the development of “smarter choices” initiatives. Smarter choices are techniques for influencing people's travel behaviour towards more sustainable travel through active promotion and marketing.

Policy 6: Smarter Choices

Our main focus for managing congestion and reducing greenhouse gas emissions will be through the intensive application of Smarter Choices measures to encourage a modal shift away from single occupancy car use and towards sustainable transport choices, particularly through travel planning processes.

The priority will be to promote the use of bus services, walking and cycling between people's homes, the town centre, other key employment areas and local hubs/community facilities, with the highest priority being afforded to promoting sustainable travel between Luton and Dunstable/Houghton Regis.

The planning process has an important role to play in requiring travel plans for a range of different developments such as hospitals, shops, homes, schools, and leisure facilities. We will use the development travel plan process to secure funding of travel plan initiatives for new developments. In particular, we will encourage developers in residential areas to fund and implement “car clubs”. To ensure the successful delivery and implementation of development travel plans we will also develop an effective travel plan monitoring and enforcement regime.

Recent research has shown that an increase in active travel of approximately 90 minutes per week can significantly reduce levels of absenteeism at work. The Councils Corporate Workplace Travel Plan promotes safe, sustainable and healthy travel alternatives to the private car for staff, and to provide them with initiatives, facilities and travel information to encourage modal shift. The Council will work with other employers in the town to encourage them to develop similar workplace travel plans to facilitate the uptake of walking and cycling to work, to use a car sharing database and provide parking spaces for car sharers in prime locations, as well as to work with operators to negotiate and promote discounted fares for public transport services and taxis.

The provision of office space hubs within existing and new residential areas may also encourage more flexible working arrangements for employees. In promoting the wider use of workplace travel plans, the Council will also work with local employers to promote more flexible working arrangements such as home-working and flexible working hours, together with video conferencing to encourage reduction in business travel. The Councils support for improved Broadband provision in the town will be key to facilitating this greater flexibility.

Our travel plan advisor and road safety officers will continue working with schools to promote sustainable travel to schools by influencing attitudes and promoting behavioural change through a range of initiatives, as set out in the Council's sustainable travel to schools toolkit. We will also look to introduce engineering

measures under the Safer Routes to Schools Challenge initiative (e.g. traffic calming, 20 mph zones and pedestrian crossings) and encourage pedestrian and cycle training.

Finally, providing families and individual residents with information about sustainable travel, together with a range of incentives to use them, can be one of the most effective ways of reducing car travel, resulting in up to 11% reduction in car trips. We will provide travel advice in community hubs and travel information packs for residents of new homes that include details of how to reach local facilities by public transport, walking and cycling.

However, there will still be a need to decarbonise those car journeys that remain as well as the other aspects of our transport planning remit. Our strategy therefore recognises that we must not only look at ways to reduce demand for travel and encourage a modal shift to more sustainable modes of transport, but must also look at ways of making driving and the Council's own internal transport activities more sustainable. The Councils Corporate Workplace Travel Plan will have an important role to play in this process, along with initiatives to maximise the opportunities of using the Councils vehicle fleet to provide other services, such as patient transfer to the Luton Dunstable Hospital.

Policy 7: Improving Energy Efficiency

For those car journeys that remain, we will look to encourage people to drive in a more carbon efficient manner through eco-driving and also promote low carbon vehicle and alternative fuel use through the provision of infrastructure for low emission vehicles, such as electric vehicle recharging points and preferential parking.

We will also lead by example by examining our corporate use of transport and by exploiting opportunities to both save money and reduce carbon emissions through the minimisation of our own energy use and requirements for transport infrastructure, such as through the use of low energy street and traffic lights.

This will be implemented by:

- Encouraging the use of low carbon buses as part of Bus Quality Partnerships;
- Continuing to specify the Councils' own fleet of vehicles as low emission ones;
- Providing electric vehicle charging points at key sites in the town centre and in new developments, through our Plugged in Places² bid;
- Reducing parking charges and providing preferential parking spaces for more low CO₂ vehicles.

² A Government programme of funding to introduce charging points for electric vehicles.



The Mayor of Luton learning eco-driving techniques at a sustainable travel exhibition

6.3.2 Adapting to Climate Change

Climate change impacts in the Luton area are likely to lead to hotter, drier summers and warmer, wetter winters. The main climate changes particularly affecting transport infrastructure are those leading to increased flood risk. Parts of key transport infrastructure in Luton currently have a high probability risk of flooding and this risk is likely to be further exacerbated by increases in rainfall and extreme storm events as a result of climate change³. Storm events and wetter weather could lead to flooding of transportation infrastructure resulting in economic disruption, and may also threaten the structural integrity of our transport assets, as well as having safety repercussions on roads with fast-moving traffic.

The adverse effects of more extremely hot days in summer (resulting in melting of tarred road surfaces and buckling concrete surfaces) may be balanced by reduced costs as a result of warmer winters with fewer frosty days and less snow (resulting in less frost damage to road surfaces and less frequent need to clear snow and to salt roads). It is also possible that climate change could lead to increased risk of road accidents from both wetter winter and warmer summer conditions.

The possible impacts of climate change will therefore require us to start thinking about how we can adapt our transport network in order to increase its resilience, particularly from flooding and severe weather events in the shorter term. In the longer term we need to make sure our transport infrastructure can adapt to the more generalised impacts of climate change.

To help us meet the requirements of the Flood and Water Management Act 2010 we have formed the Luton Flood Group, a partnership of organisations who are involved in water matters. The Group's role is to look at all aspects of flooding and flood management and, as part of their work, they are developing a Surface Water

³ UK Climate Impacts Programme 2009.

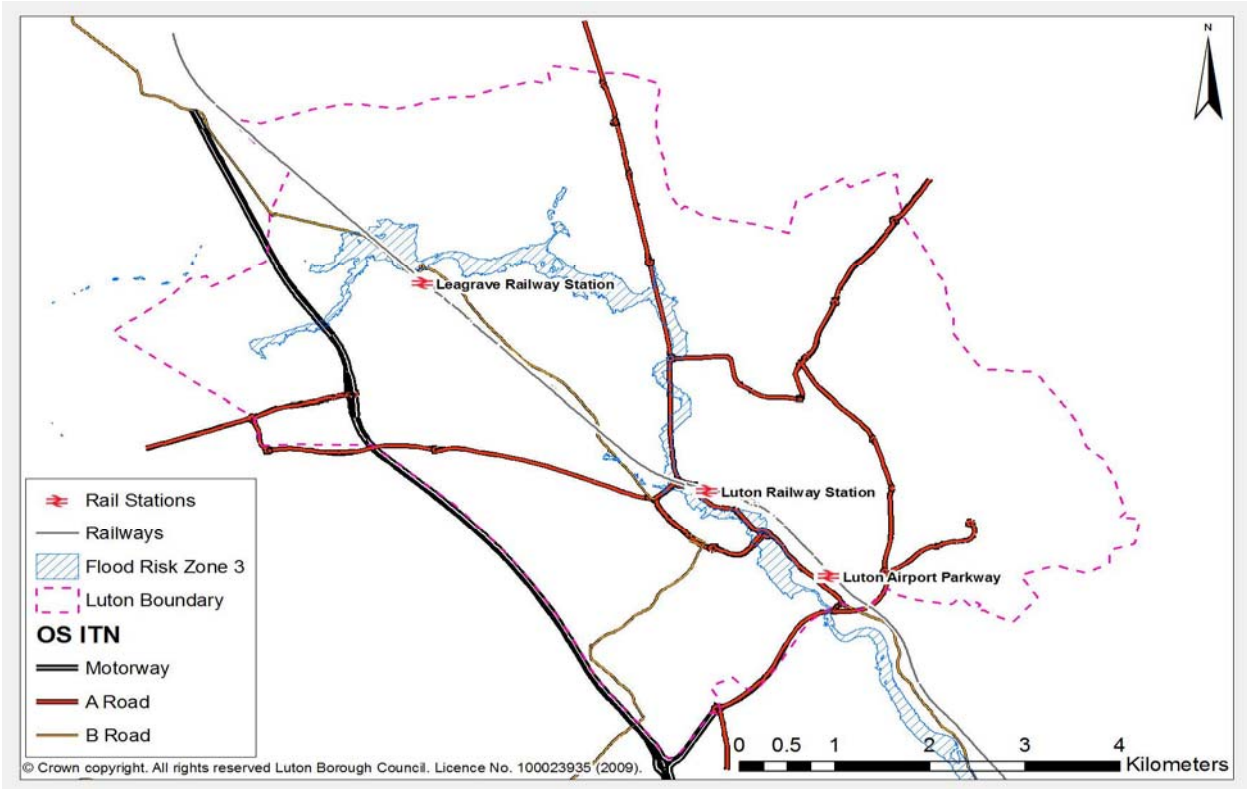
Management Plan (SWMP) for Luton and those parts of the surrounding area that could be affected by or could contribute to flooding in Luton.

The SWMP, which will be completed in late 2011, will look at current and future areas at risk of flooding and will include a series of actions for each of the partners to take, including minimising the risk of flooding, and managing any residual flooding, of transport infrastructure. This work will inform the adaptation and resilience development process referred to above.

Policy 8: Increasing Resilience of the Transport Network to Climate Change
In order to minimise economic disruption, we will seek to reduce vulnerability of the transport network to flooding and extreme weather events in the shorter-term by delivering specific adaptation improvements. These will be prioritised along traffic sensitive streets and key bus routes that are also within Flood Risk Zones 3a and 3b (see Figure 6.4 below).

To ensure that the vulnerability of the Luton transport network to climate change impacts is minimised in the longer-term, we will integrate climate change adaptation considerations into the design of new transport schemes, where appropriate.

Figure 6.4 Flood Risk Vulnerability of the Transport Network



Therefore, when designing transport schemes for all modes, current and future vulnerability to the impacts of climate change will be given consideration and, where necessary, appropriate adaptation measures will be designed into the scheme to reduce or neutralise vulnerability. These measures could include:

- Incorporating permeable surfacing materials into new footway, cycleway and road schemes as well as into the maintenance regime, in areas at risk of flooding;
- Improving drainage, including through the delivery of Sustainable Drainage Systems, where feasible, and drain clearance, particularly in and immediately adjacent to areas of flood risk;
- Incorporating flexible and/or heat resistant paving materials into suitable locations in new footway, cycleway and road schemes and the maintenance regime where sun exposure and/or risk of subsidence and heave is high;
- Ensuring that new planting schemes are designed to cope with climate change and that shade-providing landscaping along footways and cycleways is increased;
- Encouraging public transport operators to provide an appropriate and comfortable environment for passengers through Quality Bus Partnerships.

In delivering adaptation improvements a review of the maintenance regime will be required, particularly in relation to construction materials specifications, the condition of the drainage network and verge maintenance. We will aim to review this maintenance regime every five years in order to take into account climate change impacts.



New street shade trees

The Council has developed and adopted a Transport Asset Management Plan (TAMP) that draws together and consolidates the various regimes used to monitor and maintain the highway into an integrated whole covering all the requirements of highway asset maintenance management. The TAMP is a 'living' document, subject to review in accordance with continuous improvement principles, and is thus well suited to help deliver any improvements required to mitigate climate change impacts.

6.3.3 The Natural and Built Environment

Luton has a diverse built environment surrounded by the Chilterns AONB, which is a significant asset for the area providing an attractive backdrop to the town as well as opportunities for sustainable leisure and tourism.

Although Luton does not host any sites of international biodiversity importance within its boundary, there are several sites of national biodiversity importance immediately adjacent to the Luton periphery. Despite its lack of designated international and national sites of nature conservation value, there are 25 County Wildlife Sites (CWS) within the Luton boundary, all of which provide wildlife havens and protect and conserve local biodiversity.

In terms of water quality, the Environment Agency rates Luton's biological river quality as poor to bad, with no improvement between 1995 and 2006. Chemical river quality is slightly better, although only 8% of Luton's river lengths were rated as having good quality chemistry, with the remaining length being considered poor to bad.

In the built environment, there is a need to improve its quality in order to facilitate regeneration in parts of Luton, and improvements to the public realm are discussed further in Chapter 7. Luton hosts a number of heritage assets, such as Conservation Areas, listed buildings, and Scheduled Monuments. Heritage assets may be particularly vulnerable to damage as a result of increased pressure from development and regeneration within the Borough, but regeneration is also likely to provide opportunities to enhance these historic built assets.

Appropriate planning and implementation of transport interventions can play a key role in mitigating environmental problems and in minimising the impact that new transport schemes have on the wider environment.

Policy 9: Protecting and Enhancing the Natural and Built Environment

We will give a high priority to conserving and enhancing Luton's natural, built and historic environment, and greatest priority to the conservation and enhancement of the Chilterns AONB, when making transport decisions. When designing and implementing transport improvements we will ensure that they maintain the integrity of our historical townscape, cultural heritage assets and their settings, and protect and enhance our local landscape, biodiversity and their habitats, as well as water quality.

This will be implemented by:

- Ensuring that transport schemes avoid damage to sensitive and important nature conservation areas where possible, and compensate for any unavoidable effects by encouraging the creation of new habitats and linkages for biodiversity;
- Minimise the impacts of transport on protected landscapes, particularly the quiet enjoyment of the Chilterns AONB;
- Avoiding damage to sensitive and important areas of archaeological interest and heritage conservation (including listed buildings), where possible;
- Ensuring that new transport infrastructure is designed to minimise the possible impact of storm water run-off on water courses, and implement Sustainable Drainage Systems in order to reduce flood risk as well as minimising diffuse pollution and maintaining natural flow regimes;
- Promoting sustainable design and construction practices, including the minimisation of construction waste and use of local materials and recycled highway materials, especially in regeneration areas.

7 Stronger and Safer Communities

7.1 Background

Road safety continues to be a concern nationally and locally, in spite of considerable progress having been made in reducing Road Traffic Accidents. These impact on a range of wider policy areas, especially health, and the relative levels of road safety are important factors in people's choice of mode of transport. Walkers and cyclists are more vulnerable to injury than vehicle users if they are involved in collisions and the perception that roads are more dangerous than they actually are is a significant barrier to getting more people to use more sustainable modes of travel. This perception may be to do with the numbers of non-injury collisions, which we often do not take into account because they tend not to be reported.

Personal security, or crime and the fear of crime, when walking, cycling or using public transport, is a major concern for many people, particularly at night, and especially certain groups in our community such as women and those from ethnic minorities.

Improving accessibility so that people can get to where they need to is a critical social need. Access to services and employment is an essential component of a properly functioning society, enabling people to realise their aspirations or ambitions by gaining access to work, training or education, and ensuring that people are able to lead healthy lifestyles through access to healthcare, healthy food and leisure activities.

From an equality of opportunity perspective, many people find it easier than others to get access to services, mainly those with a car compared to those without, and this can lead to social exclusion for members of non-car owning households. Furthermore, accessibility is more of an issue for some groups of people such as the old, the young and the unemployed.

How people feel about their local areas, and how they use them and gain access to community facilities will be influenced by safety, security and accessibility considerations, but there are also other aspects which need to be considered including how an area is designed and laid out, the availability of open space and how clean and tidy it is.

All of these policy areas combined can help to create vibrant and safe local communities that are in contrast to the car-focused urban design of the 1960s and 1970s that left a legacy of local neighbourhoods that are not as attractive as they should be. Improving conditions for travellers and residents makes places more attractive and less dangerous and can also make them more economically vibrant.

The main priorities for this policy area are to:

- reduce the actual and perceived risk of death or injury due to transport accidents, particularly for vulnerable users along busy main roads and in areas of high deprivation;
- reduce crime, fear of crime and anti-social behaviour, particularly in areas of high deprivation, and high actual levels of crime/anti-social behaviour;

- improve accessibility by sustainable transport for residents, particularly vulnerable people living in areas of high deprivation and those without access to a car;
- adopt a more proactive role in using transport to improve the environmental quality of local neighbourhoods, especially in areas of high deprivation.

The key challenges are:

- Reduce the risk of death and injury owing to transport accidents;
- Improve the perception of poor road safety and reduce the fear of crime, particularly for people living in areas of greater deprivation and higher levels of crime;
- Improve the safety and security of existing and potential public transport passengers;
- Improve the safety of vulnerable road users, in particular pedestrians and motorcyclists;
- Improve access to services for all people by walking, cycling and public transport;
- Improve access to further education for young adults;
- Improve access to key employment centres from areas with high non car-owning households;
- Improve access to Luton and Dunstable hospital for staff, visitors and out-patients;
- Design transport measures which improve the streetscape, public realm and the environmental attractiveness of local communities and the town centre;
- Improve the tranquillity of Luton, and especially reduce transport noise;
- Continue to improve the condition of roads by maintaining them properly.

To deliver these priorities we will continue to build on our current partnership working arrangements to ensure close co-operation with key partner agencies, such as Bedfordshire Police for safety and security related policy areas, and to improve more sustainable access to local services working with Sustrans, public transport operators, the Primary Care Trust and commercial organisations. However, we will also build on our experience of partnership working to provide greater input to the efforts of local community groups, helping them to deliver their local priorities by providing them with support and resources to tackle their local issues and improve their local areas.



Residents and officials ready to start work on a local project to improve the community

7.2 Road Safety

Policies and actions to improve road safety aim to not only reduce casualties but also to improve the perception of safety in order to widen travel choice where safety concerns would otherwise act as a barrier to the use of sustainable transport.

Engineering measures have played, and will continue to play, a role in reducing road traffic accidents in Luton. However, whilst good progress has been made in reducing the number of casualties, in particular the number of people Killed or Seriously Injured, it will be a challenge to maintain the level of progress we have made using these measures, and issues still remain with regard to vulnerable road users. Therefore the emphasis on the approach to road safety will change under the LTP3, focussing more on altering road user attitudes and behaviours about safety and achieving casualty reduction through education and enforcement. We will continue to be a part of the Bedfordshire and Luton Casualty Reduction Partnership.

Engineering measures will focus on safer road environments, managing speed and improving the safety of vulnerable road users including motorcyclists. The Council's Area Studies programme is the main initiative we will use to achieve these objectives. This approach is consistent with key recommendations from the National Institute of Health and Clinical Excellence (NICE) public health guidance note 29 which are to maintain road safety partnerships and to introduce engineering measures and lower speed limits in order to reduce speeds in residential areas or other areas of high pedestrian and cycling activity.

The main thrust will be to get vehicles to move at speeds appropriate to road conditions in the local area. Lower traffic speeds significantly reduce casualties, especially amongst vulnerable groups such as pedestrians, and should also improve how safe the streets feel. As this type of measure addresses actual as well as perceived road safety, it will be an important element of road safety policies over the period of this plan.

All schemes will be subject to a safety audit, undertaken in partnership with the Bedfordshire police, and vulnerable road user audits that together provide a methodical process to check the safety of new road schemes and other schemes that may affect the highway. This process will be informed by implementing key recommendations from the NICE public health guidance note 31.

7.2.1 Road Safety Education

Most road traffic accidents involve some aspect of road user error. Evidence suggests that road safety education is an important element of improving road user behaviour, particularly by targeting interventions to make people better informed and to promote more responsible behaviours. Certain key road user groups stand out in the evidence as being at higher risk, particularly the more vulnerable groups.

Policy 10: Road Safety Education

We will use education, training and publicity to improve road safety by not only reducing casualties but also improving the perception of safety in order to widen travel choice, especially where safety concerns act as a barrier to the use of sustainable transport modes. Road Safety education, training and publicity will be targeted at improving the safety of high risk groups and vulnerable road users. This will be through improving their own road user behaviour groups, and also increasing drivers' awareness of them.

This policy will be implemented by focusing on

- Pedestrians, especially children and their parents, with priority being given to those living in the more deprived areas of the town;
- The promotion of driver and rider training schemes, especially for novice/ return drivers and riders. The priority will be to support the integration of eco-driving with safe driving and riding practices to reduce fuel consumption and emissions at the same time as improving safety;
- Commuters and occupational drivers. We will support improving their awareness of the consequences of their driving practices;
- Supporting high quality and high profile national and regional publicity campaigns, focusing on improving the safety of vulnerable road users.

In supporting and raising the profile of training for drivers and riders we will work in partnership with various agencies including Bedfordshire Police, the Driving Standards Agency and local approved driving instructors. In considering the needs of vulnerable road users we will work in partnership with the Bedfordshire and Luton Motorcycling Matters Forum, the Luton Cycling Forum, the Senior Peoples Forum and the Disability Advisory and Access Forum.

We will continue to focus on promoting road safety education, training, and publicity to influence road users' attitudes and behaviours, including raising the awareness of motorists about the vulnerability of motorcyclists, cyclists and pedestrians. We will continue to implement a lifelong learning approach to raise awareness within the community of the road safety responsibilities of all of us. This will be based on the success of the programme of Education, Training and Publicity for schools, and facilitated by using the new national public health guidance issued by the National Institute of Health and Clinical Excellence (NICE) which supports a systematic approach to preventing unintentional injuries in children under 15 in the design of roads, external environments and education and protective equipment.

7.2.2 Road Safety Engineering

In the past the evidence showed that accidents often clustered around particular locations, such as problem junctions. Considerable success has been achieved in reducing casualties by targeting accident cluster sites, to the extent that few clusters of accidents now occur and accidents tend to be more dispersed, especially along certain busy routes. Although dispersed, there does tend to be evidence that accidents, at least the more serious ones and involving children, are more densely

distributed in the south western/ central areas of Luton, perhaps coinciding with levels of deprivation.

Policy 11: Improving the Safety of the Local Community

The focus of road safety engineering measures will be on increasing the number of minor residential streets, roads around schools, and roads in areas of social and commercial activity that comprise parts of 20mph zones. This will be delivered as part of the Area Studies programme, which will cover all of Luton by the end of the first Implementation Plan. This will facilitate the safe and efficient movement of people and goods whilst protecting and enhancing the quality of life within communities. The priorities for 20mph zones will be those areas with at least some of the following characteristics:

- Relatively high number of accidents, especially involving vulnerable road users;
- High levels of unnecessary through traffic;
- Parking problems;
- High use of local facilities;
- High levels of social deprivation.

Most main roads in Luton are already subject to 30 mph speed limits and a strategic review of speed limits has been carried out that has resulted in a number of extensions of 30 mph limits along certain main roads. In addition, the number of 20 mph speed limits and zones on minor roads in residential areas, outside schools and around town/district centres has increased in recent years and will continue to increase in the future. The aim is to retain and maintain a network of 30 mph and a few 40 mph roads but, by the end of the Area Studies Programme (which will coincide with the end of the first Implementation Plan period (2015)), it is anticipated that most residential roads will have 20 mph speed limits as the default limit.



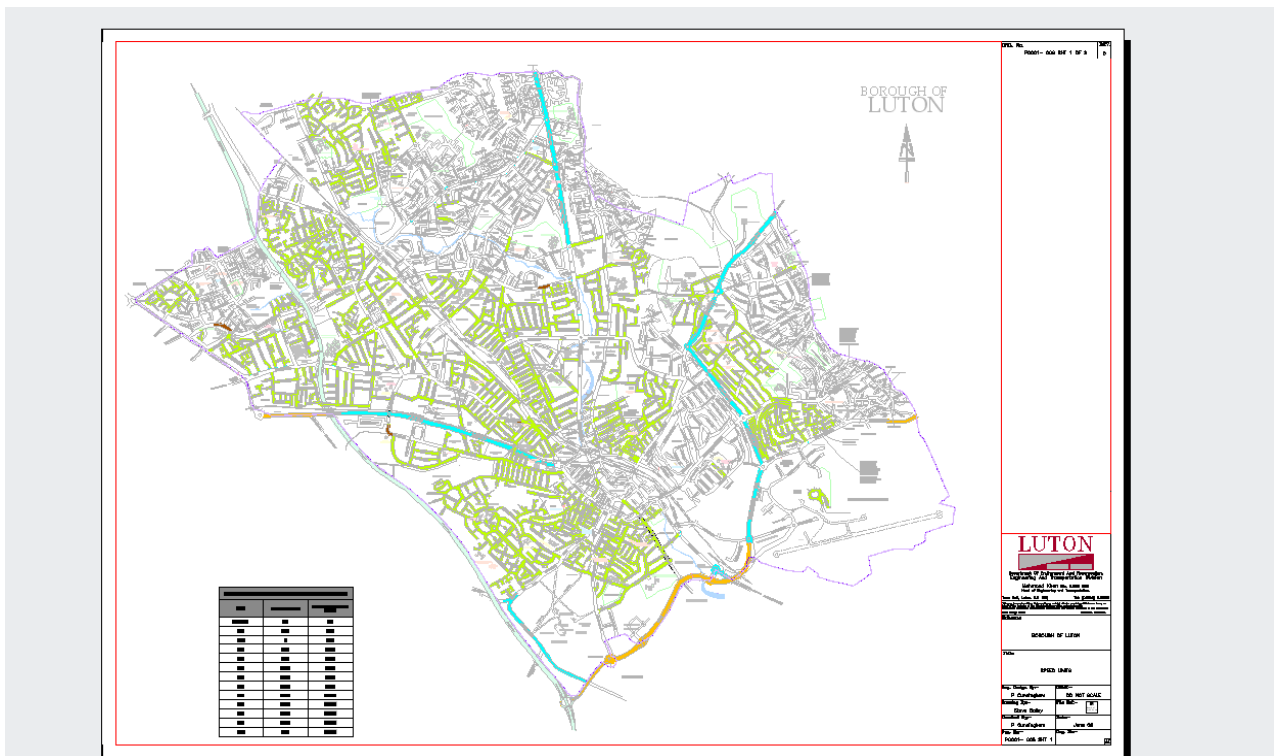
The main thrust will be to get vehicles to move at speeds appropriate to road conditions in the local area. Lower traffic speeds significantly reduce casualties, especially amongst vulnerable groups such as pedestrians, and should also improve how safe the streets feel. As this type of measure addresses actual as well as perceived road safety, it will be an important element of road safety policies over the period of this plan.

In residential areas priority engineering measures will include introducing 20 mph zones. This will:



- Address the increasingly dispersed nature of accidents;
- Significantly reduce casualty severity;
- Create safer and more pleasant neighbourhoods;
- Enable people to choose to walk or cycle in greater safety;
- Potentially support regeneration initiatives when integrated into public realm and streetscape improvements.

Figure 7.1 Existing 20mph zones in Luton



The programme for this is already well advanced and will continue to be largely achieved through speed management measures to ensure appropriate vehicle speeds as well as discouraging the use of local roads for through journeys. 20mph zones will be implemented in a way that will make them largely self enforcing through the use of traffic calming (including gateway features at changes of speed limits and vehicle activated signs), innovative use of materials, and improvements to the road layout. Where possible, the approach will be to use minimal engineering measures, preferably integrated with wider streetscape improvements and other community wide actions to create a more pleasant environment. This form of intervention would need strong community support.

Residents of the inner areas, such as High Town and Biscot, are generally within walking and/or cycling distance of the town centre, whilst those living in other areas will be within walking distance of district centres. Improvements in these areas should therefore support those residents who are dependent on walking or cycling, or who would prefer to walk or cycle to key services and facilities in the district centres or town centre rather than drive. Measures should also integrate with the development of Core Walking Routes to the district centres and town centre. More details can be found at Section 8.3, but safety (both road and personal) will be a key element in the delivery of these Core Walking Routes.

As referred to earlier most accident cluster sites have now been treated, and the focus for potential accident reduction measures has shifted to the treatment of routes particularly the three priority congestion corridors of Hitchin Road, New Bedford Road and Luton to Dunstable. So, although the Council will continue to work to identify and treat cluster sites, it is likely that these will generally be dealt with as part of route

treatment programmes. We will seek to ensure that road safety interventions along routes are integrated with any other programmes of work along the same routes. We will carry out education, training and publicity where route accident investigation work shows that there is a driver behaviour problem rather than an engineering problem.

Policy 12: Targeted Accident Reduction Measures

Targeted accident reduction measures will continue to be implemented. This will need in particular to reduce the severity of road traffic accidents as well as reduce the risk presented to vulnerable road users. The prioritisation of interventions will therefore be determined by:

- The total number of injury accidents;
- The number of Killed or Seriously Injured accidents;
- The number of children injured;
- The number of pedestrians and cyclists injured;
- The number of motorcyclists injured.

The majority of accidents in Luton occur on our A and B class roads, so priority engineering measures for improving safety on these roads will include installation of average speed cameras and the use of mobile speed indicating devices. Nevertheless, the actual measures used will largely depend on the nature of the accident problem.



A typical safety camera



A mobile speed indicating unit

Engineering measures will continue to be used to support the general safety of school children through the continuing implementation of the Safer Routes to School initiative. Our priority will be to ensure such measures are implemented and maintained in the more deprived areas, including High Town, Biscot and Dallow around the town centre, and Northwell on the northern outskirts.

7.2.3 Safety and Maintenance

Whilst making improvements to the road environment and promoting responsible attitudes and behaviour will be important, the role played by the condition of the

transport network should not be neglected, especially as the IPSOS/MORI survey showed that highway condition is important to people.

Policy 13: Highway Maintenance and Safety

In terms of highway maintenance the Council needs to be fully aware of highway defects with potentially serious consequences, so safety inspections will take priority over other inspection-related demands as detailed in the authority's highway maintenance plan. Such dangerous defects will always take priority for treatment. The main policy consideration of routine maintenance will therefore be safety.

However, maintenance should support other non-safety objectives. Utilising a risk management approach, the frequency of inspection and intervention levels will need to give priority to key elements of the transport network. The acceptability of particular defects will vary, depending on the potential consequences and wider policy considerations, e.g. a slight tripping hazard on a quiet footway presents a much lower risk than the same defect on a Core Walking Route.

This policy will be implemented using the following types of interventions:

- Ensure good skid resistance on bends, on the approaches to junctions and pedestrian crossings, along on- and off-road strategic cycle routes, and in the vicinity of schools where there is an increased chance of children running into the road. This will be especially important where 20mph zones have not been implemented;
- Treat pot holes and similar hazards on all routes, including strategic cycle routes;
- Reduce tripping hazards on Core Walking Routes and in the vicinity of hospitals, GP surgeries, retirement homes and sheltered housing to reduce the risk to the elderly, to people with disabilities and to other vulnerable pedestrians.



Skid resistant surfacing laid on the approach to a pedestrian crossing

7.3 Personal Security and Crime

Evidence shows that crime and feelings of personal safety vary across Luton. Luton does have some areas where crime is an issue, although recently there have been reductions in reported crime and anti-social behaviour on public transport. However, only one of the three rail stations currently has secure stations accreditation, so we will seek to work with the station operators in an effort to get the other two stations accredited as soon as possible.

The policy area of personal security and crime focuses on reducing levels of crime and anti-social behaviour, and working with people to build public confidence and improve perceptions of safety. It also complements road safety, especially if we are to increase the use of modes of transport other than the private car, as people are more likely to choose a mode of transport that they perceive to be safe. It is this perception of what is safe or unsafe that needs to be changed.

The focus of community safety is based on effective partnership working to tackle the most deep-seated crime and anti-social behaviour problems affecting the people of Luton or their property. As the nature of crime and anti-social behaviour changes in the town, we will address this by paying careful attention to the root causes, and ensuing crime patterns, and re-directing our priorities accordingly. The current emphasis on reducing crime in Luton is concentrated on those wards where crime or fear of crime is a particular issue, which includes Biscot, Dallow, High Town and South wards. The sharing of up to date information amongst various agencies about hotspots of activity and persistent offenders is key to the success of any initiatives as, by paying attention to the root causes and ensuing crime patterns, the Council and its partners can re-direct their priorities accordingly. By doing this we can build public confidence and reduce re-offending.

Measures such as improved lighting, secure public car parks and CCTV, together with improvements to the layout of new developments, can all contribute to reducing levels of crime and will be targeted in priority areas.

Policy 14: Transport and Crime

Transport improvements and maintenance should promote feelings of greater personal security and public confidence. The focus will be on reducing crime and anti-social behaviour against people or property particularly

- In areas of high deprivation;
- In areas with higher levels of crime and antisocial behaviour;
- With people who have greater concerns about personal safety after dark.

The wards of particular concern include South, Dallow, Northwell, High Town, Biscot, Leagrave and Sundon Park, as crime deprivation is high in these areas. Ensuring good quality and working street lighting throughout the Borough is important. Our current street lighting maintenance plan is prioritised to take into account such areas of crime concern, and future street lighting replacement schemes will continue to focus on crime reduction.

We will focus efforts to reduce thefts from motor vehicles on locations where this is more prevalent. The reduction of on-street non-residential car parking (see Policy 4) through the accompanying shift to off-street car parking, including Park and Ride, will

help to reduce thefts from motor vehicles. In addition, lighting can be improved at vehicle theft hot-spot locations. Residential car parking arrangements whereby the cars are not parked parallel to the kerb will be considered in 20mph zones. We will also work with car park operators to support all off-street car parks gaining safer parking accreditation, and all of the Council's car parks will gain this accreditation during the life of this plan.

We will improve safety at transport interchanges through a range of measures, including:

- Working with the rail industry to ensure that all three of Luton's train stations gain secure stations accreditation;
- Improving pedestrian access between Marsh Road and platform 1 (north-east) of Leagrave railway station;
- Improving lighting at key bus stops and around train stations;
- Introducing Real Time Passenger Information at bus stops so that people know when the next bus will be arriving.

We will also continue to work with Luton's Community Safety Partnership, drawing on its knowledge, skills and experience to develop a range of initiatives to reduce crime and the fear of crime.

7.4 Improving the Quality of the Public Realm

A key policy area for the LTP3 will be for the Council to take a more pro-active role in improving the environmental quality of the local neighbourhoods. What a place looks like is strongly influenced by the highway, often the main component of an area's public space. The highway has a number of functions. The aim of this policy area is to help turn many local highways back into streets that people can enjoy and that contribute positively to the appearance and feel of a local area. This policy will notably build on the roll-out of 20mph zones and the consequent reduced traffic dominance on local streets and high streets in Luton, and the associated reduction in traffic related street furniture that can clutter local areas.

Urban regeneration is a key issue in Luton. There will be a need to make sure transport contributes to a higher quality built environment as part of the redevelopment of the town centre and regeneration projects in general. Appropriate planning, design and implementation of transport interventions can play a key role.

In terms of improving the layout of new developments, Luton will follow the principles set out in Manual for Streets published by the Government along with associated professional guidance. In addition the Council has developed a Co-ordinated Street Scene guide, the principles of which are set out in Policy 15 below.

Policy 15: Improving the Quality of the Public Realm

We will adopt a more proactive role in using transport to improve the environmental quality of local neighbourhoods, especially in areas of high deprivation. We will turn many local roads back into streets that people can enjoy and that contribute positively to the appearance and feel of a local area which in turn can have positive impacts on the local economy. The priorities will be to improve the quality of life in the town centre and district centres and in areas of high deprivation. We will improve the quality of the public realm, mainly by implementing our Area Studies programme, but also through:

- Ensuring when designing and implementing transport improvements that they contribute to the quality of the built environment by improving the public realm and street scene. This will require seeking transport solutions that contribute to a sense of place;
- Using our regular highway maintenance safety and service inspection regimes to identify street furniture that is surplus to requirements and removing it, or that is in such a state of disrepair that it detracts from the visual appearance of the area and replacing it;
- Enabling communities to get more involved in taking care of their local area.

This will be implemented by:

- Improving the public realm in the town centre by giving greater priority to pedestrian infrastructure and better management of on-street car parking (see Policy 4);
- Ensuring continual improvement in the street scene throughout Luton as schemes are implemented through simple, logical, zoned and consistent layouts;
- Keeping places tidy and minimising litter, including by undertaking community action days to address a range of problems;
- Extending role of local 'street champions' to be responsible for other transport infrastructure such as bus stops (see also Policy 16);
- Improving the quality of design and accessibility through the use of specified palettes of materials appropriate to the area;
- Ensuring that signage, street furniture and structural materials used in transport projects are in keeping with the character of the local area, contribute to the sense of place and that street clutter is minimised and signage consolidated, particularly in the town centre and in those areas where 20mph zones have been implemented;
- Complementing and strengthening the objective in the Council's Vision for a clean, tidy and green environment through a significant increase in the number of street trees.

A large part of the built environment is the highway, so its condition and state of repair can influence how people feel about their area. The Council has a duty to maintain the public highway and public rights of way, and also to improve the local environment. The Council has a team of Inspectors who inspect the condition of the network and arrange for any defects to be repaired. The highway network is a

substantial asset, so consideration of its on-going value is a primary factor in deciding the Council's highway maintenance programme and, as a result, the condition of both principal and non-principal roads has been improving in recent years.

Policy 16: Highway Maintenance and the Public Realm

Our maintenance of the highway will contribute to the public realm and the local environment by bringing street conditions up to an acceptable standard of repair and appearance, including where this is most needed to improve the quality of life for residents.

This will be implemented by

- Working with partner agencies and the community to integrate routine highway repairs with other community wide actions, especially in areas of high deprivation;
- Increasing community involvement in identifying the required street repairs;
- Carrying out reviews of the prioritisation hierarchy of the maintenance of highway infrastructure, including footways and cycleways;
- Co-ordinating scheduled highway maintenance works with other improvements to reduce the disruption to the local community;
- Reducing and consolidating signage when carrying out maintenance schemes;
- Delivering structural maintenance schemes that improve the condition of the highway assets. Priority will need to be informed by condition as well as the aims of the policies in this LTP, such as focusing improvements on drainage in flood risk zone 3 to support the aim of adapting to climate change.

We will undertake Action Days in the local community under the 'soLUTiONs' initiative, a multi-partnership approach to addressing a range of problems in targeted areas. To ensure that any problems were addressed in the local community as soon as they arose, the Council introduced the Street Champions and Junior Street Champions initiative in 2006 with direct contacts at the Council to inform us of a range of street maintenance problems. This initiative has now come to an end, but we will seek to engage with communities to enable them to maintain the initiative themselves, and to expand its scope to include transport-related issues as well.



A 'soLUTiONs' Action Day meeting in a local community

7.5 Accessibility and Equality of Opportunity

Generally Luton's residents have good accessibility to a range of services by walking, cycling and public transport, and of course by car. Of the non-car modes, cycling in particular substantially improves access to a number of local services, such as areas of employment. This is because a good distance can be covered in quite a short time. Reassuringly, given the health deprivation in the town, access to a GP is good, although the hospital is less accessible. However, there are issues; notably, access to further education by walking and public transport is not especially good. Furthermore, there are some issues for at-risk groups in the town, such as their access to food stores with a range of fresh healthy food. Although in percentage terms access to employment areas for those claiming job-seekers allowance is quite good compared to neighbouring Central Bedfordshire, there are more claimants in Luton and so the actual number with poor access is relatively high.

The Government has recently published research into the relationship between health/ climate change and transport that identifies the barriers to use of different transport modes. However the most comprehensive assessment is the Department for Transport *Evidence base review on mobility* undertaken in 2006, which considers the equality of opportunity to transport by race, gender, disability, and age, and what interventions could overcome these. That research also shows that people from ethnic, low income and single-parent households are least likely to have access to a car, and also that, even if the household has a car it is often not always available for use by the whole household, particularly affecting women and children.

These people without access to a car view this as a 'vicious circle', in which being unable to afford a car means they could not access jobs, education, health, and social/leisure opportunities. This can lead to social isolation, loss of confidence, feelings of insecurity and lack of independence. Vulnerability to exclusion increases with age and impairment, so that the oldest people and those with more severe disabilities most likely to be disadvantaged.

A key aim is to improve access to employment opportunities and other local services / social networks by a range of transport modes. Community centres and doctors/dentists surgeries are generally well located to serve their local surrounding community. However, in reality some GP's/dentists or schools may either be full or people choose not to attend their nearest ones. A lot of school children are being bussed out from the central area because there are not enough primary places close to the centre of town. Under these circumstances, access is still an issue, and the need is to ensure that people, especially the vulnerable, get access to key services. We also need to consider the changing face of primary care services, which means that many services will be out in the community and there may be more specialist (serious) cases that, for example, require travel across town to the Luton and Dunstable hospital.

Alternative means of making service provision such as community service hubs and the use of on-line services, and changes to opening times of GP and dental surgeries, will also assist in addressing accessibility problems.

The Department for Transport's *Evidence base review on mobility* identified working adults (particularly women), together with disabled and elderly people, as experiencing

barriers to public transport use. Enabling and ensuring the availability of public transport is vital in promoting social inclusion, especially where service provision is declining, such as the closure of local post offices. The loss of local services can have dramatic impacts on accessibility, with alternatives being effectively inaccessible without a car.

Policy 17: Access to Services and Amenities

We will focus efforts on the availability, affordability, acceptability and accessibility of sustainable transport modes in order to target:

- Those communities that are most in need, being those which have a relatively high number of households without a car or van and poor access to local services, especially employment and further education;
- Areas of high health deprivation;
- Those services that are least accessible overall to Luton residents, such as the Luton and Dunstable hospital;
- Locations where there are the highest numbers of job seekers with poor accessibility to employment.

To improve the availability of transport or accessibility of services we will:

- Use a multi-agency approach to improve passenger transport accessibility by continuing to work with key partners, such as transport providers. However, we will also work with key service providers in order to seek ways of making their services more accessible, particularly the National Health Service, further education colleges, and employment centres. This will include working through the Local Strategic Partnership;
- Work with communities to facilitate the further development of community led and operated schemes, helping the community develop their own solutions to meet their own particular needs. This could include more innovative projects such as social car sharing initiatives;
- Make better use of the Council's own vehicle fleet to help those without a car have better access to the hospital and other key facilities;
- Investigate the use of taxis in improving accessibility for vulnerable people or in areas of poor accessibility to services;
- Encourage new developments in locations that are accessible to key services or ensure that key service provision is included as part of the developments;
- Require developers to provide or contribute towards transport provision.

The Evidence Base report also found that cycling and, to a lesser extent, walking significantly improve accessibility in Luton, and this is addressed at Section 8.3. The Council will work in partnership with Sustrans to improve access to local community facilities.

There will be a focus on identifying and delivering the most appropriate solutions to address the needs of the targeted communities and so engagement with them too will be critical. We will work to improve the availability of passenger transport in areas of

poor accessibility, though improving transport may not always be the best thing to do. Where this is the case we will work with others to help support and facilitate improvements to local service availability. However, a key area of work will be ensuring there is independent support for communities to help them to develop their own local transport projects to meet local needs. This is likely to manifest as support for innovative and viable transport solutions, such as social car schemes.

The location of new development has a big impact on the ability of residents to access services. Land use planning should aim to maintain or increase accessibility to services for communities by providing new local service centres or facilities or provide an increased level of public transport service. Land use planning should also aim to ensure that new developments are located on sites with good access for those without a car, for example near public transport nodes. The amount of new development identified in and around Luton will provide the various councils with the opportunity to integrate the demands of accessibility into all transport, housing and business development proposals.

The most basic requirements in terms of accessibility by those people experiencing mobility problems, as well as a bus being available, is that to use it they need to:

- be able to get on and off the bus with ease;
- be able to afford the fare;
- know about and understand the system, especially timetables.

Luton has an increasingly elderly population as a proportion of the total population, and this proportion is expected to increase over the duration of this LTP3 Strategy. As such it will be important to ensure that elderly people, and those with other mobility impairment, are able to access and make full use of public transport and the transport network with ease.

Luton Borough Council's own vehicle fleet is very accessible for people with mobility problems, but this is not the case with public transport generally in the town. Step free access within rail stations is getting better with the improvements at Luton station, but this still leaves Leagrave station with poor accessibility. The condition of footways has been getting better and all of Luton's controlled pedestrian crossings are now fully accessible for disabled people.

Policy 18: Use of the Transport Network by Mobility Impaired People

Key priorities will be:

- Ensuring that all bus services are fully accessible, be they commercial services, those subject to council tendering arrangements or the council's own fleet of vehicles;
- Ensuring people, especially those with mobility problems, are able to use the footway network to access passenger transport services. The further provision of dropped kerbs will be essential, as will improving bus stops by providing raised kerbs to enable "level boarding". The priorities will be dropped kerbs and raised bus stops:
 - Along all routes served by Luton Dunstable Busway services;
 - Near nursing or residential homes or sheltered housing;
 - Near GP surgeries;
 - Serving local facilities and services;
 - Serving key bus corridors (see Policy 2);

- Serving the town's three rail stations;
- Working with rail operators to ensure all three stations become fully accessible by providing step-free access;
- Continuing to support Government initiatives on concessionary fares for older people and for those with disabilities;
- Ensuring that high quality information about bus services is made available to users, including at the roadside, through electronic media and in printed form. We will in particular continue to roll out the provision of Real Time Passenger Information, especially at the bus stops themselves;
- Working with the operators to help facilitate joint ticketing arrangements or the use of smartcard technology.

Safety, or at least concerns over safety, can be a barrier for many people wanting to access and use public transport. Level boarding at bus stops and the use of smartcard technology for 'special needs' passengers will assist mobility impaired people, and the provision of shelters equipped with Real Time Passenger Information, and lighting and CCTV will contribute to improve personal safety of vulnerable people such as women and elderly people.



A demonstration of level boarding



A smart card reader

The needs of people with disabilities will routinely be considered as part of all transport improvement schemes. These include the consideration of street furniture along the footway, ensuring adequate seating and removing clutter that may act as an obstacle and consideration of raised and dropped kerbs at appropriate points to enable crossing of the road. As explained in other policies, the Council will focus improvements to footways on the Core Walking Routes and around services most used by people with mobility problems.

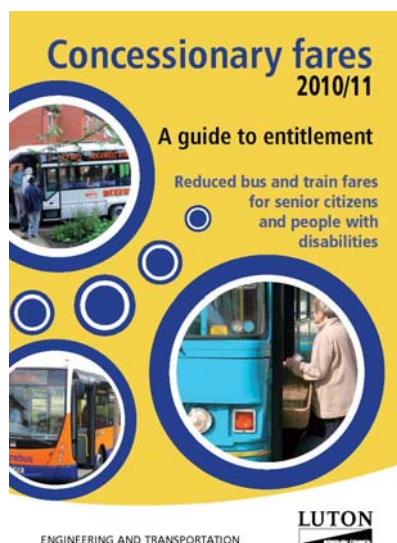
The Council has worked, and will continue to work, closely with its partners to meet the requirements of the Disability Discrimination Act Legislation for accessible facilities, vehicles and equality of access to services. However, there is more that can be done to improve accessibility ahead of legislated deadlines. We will work with transport operators to ensure all buses and bus boarding points in Luton are fully accessible and comply with the Disability Discrimination Act. In 2004, Luton Council entered into a voluntary Bus Quality Partnership with Arriva to improve the provision of bus services in the town. This will be enhanced in the next 2 to 3 years and extended to cover other bus operators. Under the Partnerships, in return for the Council investing in bus priority measures and stop improvements, the operators will invest in more low-floor vehicles and better driver training/customer care. We will also work with Passenger Focus to ensure that effective complaints procedures are in place.

Fundamental to accessibility to rail stations is the provision of obstacle-free, accessible routes to and between platforms. This generally includes the provision of lifts or ramps, as well as associated works and refurbishment along the defined routes to the stations. Luton Airport Parkway station is already fully step-free, whilst the work on the central station will also make this step-free. We will therefore continue to work with Network Rail and train operating companies to improve accessibility at Legrave station in north Luton.



Accessibility improvements at Legrave Station

Concessionary fares were introduced in April 2006 for people with disabilities and for those aged over 60. They have helped to remove cost as a barrier to bus use for many and this has increased passenger transport patronage and has benefited those who are able to use bus services.



Joint ticketing arrangements will take advantage of developments in smart card ticketing with a priority for the provision of integrated ticketing between operators. We will also help to support other joint bus and rail ticketing initiatives to develop a range of ticketing options to facilitate better integration between bus and rail services, including multi bus operator ticketing and integrated bus-rail tickets.

Information on timetables is critical for bus use. We will work with the bus operators to ensure a range of passenger information is available at all stages of a journey, including better integration of bus services with train timetables. We will deliver new formats that make timetable information more easily understood by service users and innovative arrangements with bus operators to ensure their regular update. In particular, we will install Real Time Passenger Information facilities based around interactive displays which can be used with a smartcard programmed to suit the individual requirements of people with special needs.

8 Health and Wellbeing

8.1 Background

Transport is a key determinant of health and is therefore an important consideration for improving health and wellbeing. Air pollution exacerbates respiratory problems, and can have a negative effect on the quality of life of local people. In 2009 Asthma UK reported that 42% of asthma sufferers said that fumes from traffic stopped them walking and shopping in congested areas. In addition, European evidence has shown that high concentrations of particulate matter *decrease* life expectancy of every European by, on average, almost one year. This could potentially have a bigger impact in more deprived areas of Luton where there are low levels of life expectancy.

Emerging evidence show the costs of illness as a result of physical inactivity to the NHS amounts to over £1 billion per year. They also contribute to economic benefits to the wider society, particularly in the workplace where evidence has shown that intensive changes in travel behaviour through active travel to work, lead to significant health improvements and reduce absenteeism.

Supporting communities to change unhealthy (or health limiting) behaviour is a key aim of the LTP3. Evidence from NICE public health guidance note 8 shows how physical activity and the built environment are intertwined and, by applying the recommendations from this guidance, local transport plans can contribute to the reduction in rising obesity levels in children and adults.

Most studies have shown that there is a direct cost to the NHS due to physical inactivity. Nationally, a 20% increase in cycling would save the NHS £50 million per year in treatment of diseases related to inactivity. However, the indirect costs, including expenditure not directly attributed to the NHS, such as informal care, inferior physical and mental function, have been conservatively estimated at £8.2 billion per annum (at 2002 prices).

Evidence from the Social Exclusion Unit (2003) has also shown that improving local networks, accessibility and walking and cycling trips could contribute to tackling issues of poverty. This is because the poorest fifth of households who own cars are likely to spend up to 25% of their income on the cost of motoring. Furthermore, the importance of high levels of accessibility to key services and products such as fresh fruit and vegetables has wider implications for delivering improvements in general health conditions such as coronary vascular disease, obesity and diabetes. This is considered in Policy 17 on access to services.

The effects of noise and vibration are wider ranging, from being little more than a minor irritant, to having a serious effect on mental well-being. Even relatively low levels of noise can be disturbing, whilst light pollution impairs our enjoyment of the night sky and light nuisance can adversely affect sleep patterns.

The key challenges are:

- Improving local access by walking and cycling, especially to green space and parks and other places where people linger and socialise;
- Increasing the number of children walking and cycling;

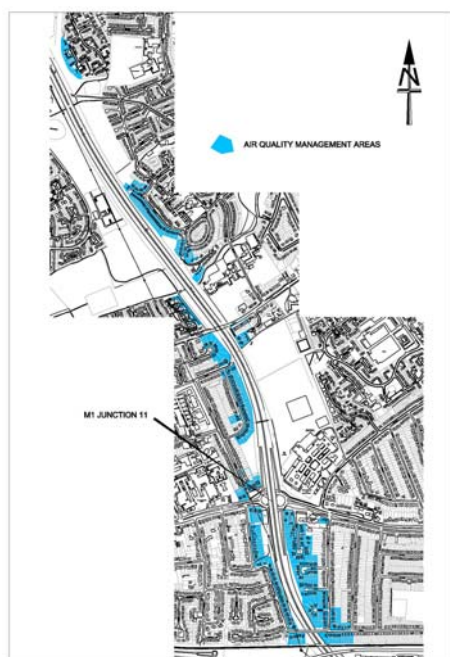
- Continuing to increase the number of adults who walk and cycle, especially to work;
- Increasing the number of people who walk and cycle for leisure/ recreation;
- Mitigating the impact of noise generated by new development and associated traffic;
- Continuing to improve air quality and ensure that no new Air Quality Management Areas are declared, especially as a result of new development.



A 'walking bus' on its way to a local school

8.2 Air Quality

Air pollutants above regulated threshold limits are considered dangerous to human health. When air pollution levels exceed these limits, local authorities are required to declare Air Quality Management Areas (AQMAs) and produce action plans to reduce air pollution back to safe levels.



There is currently one AQMA within Luton, and that is related to traffic using the M1. Although Local Air Quality Management remains a function of the Borough council, when an AQMA is declared on the basis of traffic sources of air pollution from a Trunk road the Highways Agency is responsible for delivering transport improvements and actions to reduce transport air pollution emissions along that road.

The Council is required by the National Air Quality Strategy, where an AQMA has been declared, to produce an Air Quality Action Plan containing initiatives which will reduce relevant air pollutants to levels no higher than the corresponding objective levels in that Air Quality Strategy. As Luton's AQMA is directly related to traffic on the M1, and the Council has no direct control over traffic emissions contributing to it, it has decided to

integrate the LTP3 and the Air Quality Action Plan, to show how the synergy of many transport related initiatives will contribute to the overall improvement of air quality in the Borough.

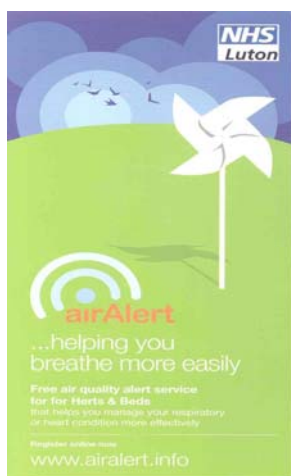
Outside of the M1 AQMA, there are currently no air quality issues in Luton. However, this does not preclude further air quality issues from possibly arising, particularly in relation to growth.

Policy 19: Improving Air Quality
Where AQMAs are declared as a result of traffic sources from a trunk road, we will work closely with the Highways Agency to develop and implement an appropriate Air Quality Action Plan for reducing air pollution emissions within those AQMAs.

In order to ensure that no new Air Quality Management Areas are declared in Luton, we will require an Air Quality Assessment for all development proposals that:

- result in increased congestion, or a change in traffic volumes and/or speeds;
- significantly alter the traffic composition in an area, such as bus stations, lorry parks and new road layouts;
- include new car, coach or lorry parks;
- adversely affect sensitive areas or areas nearing air quality threshold limits;
- would be close to known sources of air pollution and which would include Relevant Receptors, e.g. housing, schools, hospitals.

Most of this will be implemented through our development management process as and when planning applications are received. In order to better understand air pollution levels across the Borough and facilitate the application of the above policy, we will be reviewing our existing air quality monitoring data and agree an appropriate extended monitoring regime to establish baseline air pollution levels. We will also use this monitoring data to inform the development of future transport schemes and initiatives and to monitor their performance in air quality terms.



We will also continue to work in partnership with the Herts and Beds Air Quality Monitoring Network, which provides the airAlert service free to subscribers who suffer from asthma or chronic obstructive pulmonary disease and other respiratory conditions. Alerts are sent to users when air pollution levels are predicted to rise to moderate levels or worse, enabling more effective management of their condition.

A leaflet explaining how the 'airAlert' service works

8.3 Walking and Cycling

There is evidence that obesity is increasing in Luton amongst both adults and children, and that adults in the town have low levels of exercise. There has been an increase in the number of children being driven to school but proportion of children going to school by car has dropped, suggesting that the increase is due to immigration to Luton. Although mode share for cycling is low there are real positive signs regarding the potential for increasing cycling. Firstly, there has been an increase in cycling following investment by the council over recent years in cycling infrastructure. It is also known that people do want to cycle more. In addition, not only are many journeys short and therefore walkable or cyclable, the use of a bicycle significantly improves access to a wider range of services and opportunities in the town.

Supporting people to change their behaviour by promoting and making it easier to undertake active travel and leisure can make a significant positive contribution to people's physical and mental health and well-being. In the former annual Chief Medical Officer's report (2010) it was recognised that physical activity (including walking and cycling) is one of the most undervalued interventions to improve public health.

Active travel plays a part in reducing vehicular emissions, so we will encourage cycling and walking as a sustainable way to travel, and promote the health benefits that can be delivered through an increased take up of these modes, particularly for shorter distances of up to 5km.

The Council will therefore continue to develop and implement initiatives in partnership with key partners such as Sustrans in order to improve the use of walking and cycling infrastructure and opportunities for people to choose active modes of travel and indulge in active leisure pursuits, including cycle training for children, adults and family groups. The provision of a high quality walking and cycling network will contribute to improved personal safety of vulnerable people such as women and young people, to community cohesion, improved health and wellbeing and to sustainable communities.

Walking and Cycling

We will continue to implement a high quality, direct, convenient and safe Strategic Cycle Network of both on- and off-road routes, with priority in areas where:

- Access to key local services by bicycle is above average for Luton in terms of distance but where safe routes are needed to take advantage of this;
- The terrain is relatively flat and cyclable;
- Efforts are being focused on reducing congestion through modal shift for peak time journeys to work and school, including towards more walking and cycling;
- There is evidence to suggest that low levels of physical activity are leading to levels of child obesity that exceed the national average;
- There are high levels of deprivation, especially health deprivation, and where the level of car ownership is low;
- High levels of housing or employment growth are being planned.

We will develop a series of short Core Walking Routes that will:

- Improve access to the town centre and other concentrations of local facilities and services;
- Provide a high quality, safe and attractive walking environment;
- Provide a focus for street scene improvements.

The National Cycle Network Route 6 runs through the conurbation and, combined with the new route alongside the Busway, provides a “spine” from which to expand the core cycle and walking network.

Safety is a key concern for new cyclists and can also be a concern for pedestrians. This is partly addressed in Policy 11 which aims to improve pedestrian and cyclist safety, especially by reducing road traffic casualties and delivering 20mph zones. Where 20mph zones have been implemented, it is the premise that pedestrians and cyclists will generally not need dedicated routes as they will be relatively safe travelling on any such roads given the low traffic speeds. The strategic walking and cycling routes will take this further. The networks will include quieter roads and the development of off road routes on busier roads.

Figure 8.1 overleaf shows the various cycle routes in Luton and the surrounding area. We aim to complete any key gaps in the network (for example links between Dunstable Road and the cycle track running alongside the Luton Dunstable Busway and a link between Oakley Road and Leagrave Station). Elsewhere, improvements that aid safe walking and cycling will be implemented as opportunities arise, especially as part of making new development more sustainable. The improvements would aim to deliver better integration with existing walking and cycling networks and facilities, facilitating better access to work, further education, railway stations, school, shops and other local community facilities, and for leisure purposes such as to and through parks and open spaces. Support will also be given to the on-going improvement and further development of the National Cycle Network.

Improved walking and cycling infrastructure will be part of promoting sustainable growth. New housing and employment development need to have walking and cycling links to the surrounding community, helping to reduce the tendency for people to make relatively short journeys to work by car. All major new housing and employment sites should also have on-site walking and cycling links which connect with existing and planned parts of the pedestrian and cycle network.

Figure 8.1 Cycle routes in and around Luton

We will aim to construct off-road paths and cycle routes to respect the natural environment through which they pass, such as stipulating minimum widths and appropriate surfaces and signing. We will also integrate cycling and walking into other traffic and transport schemes wherever possible, to improve safety and provide greater priority for these modes. Most importantly, we will evaluate pedestrian and cycle routes for safety, security, ease and attractiveness of use, and target programmes for improvement to give continuous routes. Where pedestrian and cycle routes cross busy roads it will be important to provide appropriate crossing facilities to meet the needs of all users, in particular disabled and mobility impaired people.

The prioritisation of footway/ pathway maintenance interventions will take into account whether or not it is part of the strategic walking and cycling network. In particular, core walking and strategic cycling routes into the town centre will be prioritised under our maintenance and street lighting programmes to ensure they are of the highest quality and do not deter residents from choosing to travel this way. We will free these routes from unappealing street furniture and excessive signage to make them more pleasant for users.

To complement the routes we will work with various partners to provide high quality facilities for cyclists at destinations. In particular we will:

- continue with our programme to install cycle parking in the town's parks, at further education colleges, and in employment areas;
- continue the programme of installing secure cycle parking facilities at all the Borough's schools
- work with the rail industry to provide adequate and secure cycle parking facilities at each of Luton's three stations
- use the planning process to ensure plans for major developments include facilities for cycle storage and infrastructure for cycle use.

The Council will continue to work in partnership with Sustrans, Luton National Health Service, Luton Cultural Services Trust, Active Luton and with organisations such as the Luton and south Bedfordshire Groundwork Trust to improve the facilities for walking and cycling on the highway and in parks and open spaces. Cycle training to give both children and parents the skills and confidence to cycle safely and well on our roads, as set out in Section 7.3, also has an important role to play in encouraging more active travel. We will also continue to develop an exercise-based GP referral system, which will include encouragement to walk and cycle more, and we will investigate a cycle hire scheme for Luton.

With regard to Rights of Way specifically, the Council has a duty to produce a *Rights of Way Improvement Plan (RoWIP)*, which was published in mid 2008 after extensive consultation in 2007/8 with key stakeholders and local residents. Whilst there are less than 15km of Public Footpaths and Bridleways in and around Luton they are vital, in combination with other paths, both for gaining access from Luton to the surrounding countryside and improving access between surrounding villages and the town and vice versa.



Public Rights of Way and other paths in and around Luton

Together with footways and footpaths and cycle paths and lanes, these form a network of safe routes for active travel by commuters and others to local shops and other facilities, and provide access to walking cycling and nature activities in and around Luton. In this respect the importance and associated health benefits of improving access to the natural environment via a network of greenways linking urban and more rural areas is recognised.

Policy 20: Public Rights of Way

We will encourage the use of the Public Rights of Way network by:

- Wherever practicable improving existing Rights of Way that pass through the planned urban extensions and integrating them into the local walking and cycle networks;
- Ensuring that designated wildlife/conservation sites and the open countryside are accessible by a range of transport modes, unless there are over-riding conservation reasons why access should be discouraged. This will be by means of creating green corridors and bridges where appropriate to link the walking and cycle network in the town with the surrounding countryside;
- Reviewing the need for and effectiveness of gates, stiles and other barriers on existing routes to see if they can be removed, and avoid the use of these on new routes, wherever practicable.

This will be implemented in accordance with the Luton RoWIP which is based around five key themes of existing network improvements, better promotion, improving health and wellbeing, improved safety and security, and integrating rights of way with greenspace in and around the area.

The Council works in several co-operative partnerships, particularly with Central Bedfordshire Council who are responsible for management and promotion of access to much of the countryside surrounding Luton. In this context the Council has operated a Joint Local Access Forum (JLAF) with Central Bedfordshire Council since

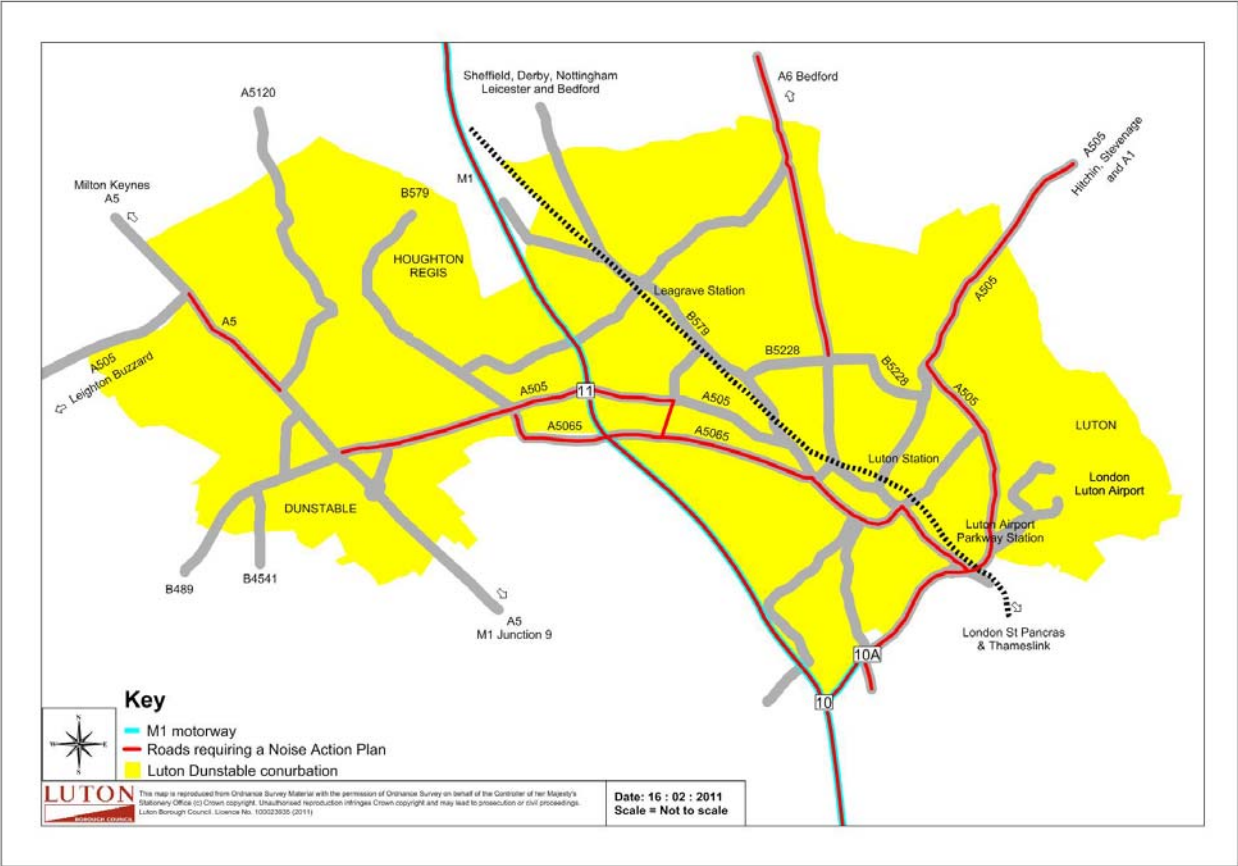
April 2010. The Council also works with the Chilterns Conservation Board in the promotion and raising of awareness of public rights of way.

8.4 Noise and Light Pollution and Nuisance

Luton is the third least tranquil place in the UK, and the planned growth could make it worse due to potential for increased noise and light pollution. The main sources of noise and light pollution and nuisance are transport and streetlights. People in urban areas such as Luton generally expect some traffic noise, but there can be occasions when it can be excessive. Strategic noise mapping undertaken by DeFRA in 2008 indicates that the greatest noise impacts are from the traffic on the M1 which passes through Luton mainly on embankment, resulting in daytime noise levels greater than 75 dBA and night-time levels of around 79 dBA.

The Council has a duty under the Environmental Noise (England) Regulations 2006 to prepare a Noise Action Plan to reduce the impact of traffic noise on certain major roads in Luton which have been identified by DeFRA as Important Areas. The routes to be studied are shown in Figure 8.1 below.

Figure 8.2 Roads Requiring a Noise Action Plan



Similarly the Highways Agency, Network Rail and London Luton Airport Operations Limited are required to respectively produce Plans for the M1, the Midland Main Line, and the Airport. Reducing noise from transport should have a positive impact by

reducing the number of people exposed to high levels of noise from road and rail networks.

Policy 21: Noise and Light Pollution and Nuisance

Measures to reduce the adverse impacts of noise and light will be implemented with a view to:

- Reducing noise and vibration from traffic, with priority being given to those areas where these impacts are excessive and adversely impact on the greatest number of people;
- Reducing light pollution and nuisance at night where it is possible and safe to do so by designing new and replacement lighting schemes to minimise these impacts.

We will implement this policy by

- Reducing the adverse impact of noise and vibration from transport by using low noise road surfacing, particularly along main roads that are lined with residential properties;
- Re-routeing freight traffic away from the worst affected residential areas, where possible;
- Using planting schemes between roads and residential properties to attenuate noise. This may have the additional benefit of reducing the visual intrusion of traffic;
- Using redesigned street lights to reduce upwards light spillage;
- Turning off street lights in the early hours of the morning where, in consultation with Bedfordshire Police, it is considered that this will not have an unacceptable adverse impact on personal security, crime or road safety;
- Carrying out noise and vibration impact and light pollution and nuisance assessments of new transport schemes, and implementing resulting recommendations to minimize any negative impacts;
- Working with Network Rail and the train operating companies, the Highways Agency, freight operators and London Luton Airport with a view to reducing transport noise and vibration and light pollution and nuisance from the use of railways, trunk roads such as the M1, and aircraft.

PART 3

IMPLEMENTATION PLAN

2011/12-2014/15

9 Implementation Plan

9.1 Background

The Implementation Plan sets out the priorities for local transport schemes and initiatives to be implemented over the next four years, consistent with the policies and priorities set out in the long-term transport strategy. The full list of those interventions to be implemented during this period is set out in the Integrated Transport and Highway Maintenance work programme, which will be reviewed annually and reported to the Council's Executive each March. The Implementation Plan will be fully revised every 4-5 years to reflect past progress and changing priorities.

A number of strategic transport schemes set out in the previous LTP have either been completed or are currently under construction. The schemes completed between 2006 and 2010/11 include the widening of the M1 Motorway between Junctions 6a and 10 and dualling of the East Luton Corridor up to the airport (phase 1) completed in 2009, and a new multi-storey car park at Luton station completed in 2010.

In 2010 platform lengthening was completed at the rail stations in Luton as part of the Thameslink Programme. The project work is being led by Network Rail, although the Council supports the aims of the project to increase the capacity, frequency, and range of destinations of Thameslink services. The rebuilding and remodelling of the area around London Bridge will not be completed until 2018, after which local residents will benefit from additional destinations within and south of London. However new services to places like Rochester and Ashford have already been introduced, and 12-carriage trains will start running on the Thameslink route North of London in 2012, providing a 50% increase in available capacity on trains.

In 2010 the Government also approved funding of the Luton Dunstable Busway and the M1 capacity improvements between Junctions 10 and 13 using the Hard Shoulder as an additional running lane as part of a "Managed Motorway". Work has started on both these schemes, and they are due to be completed in 2013. The timing of the implementation of subsequent strategic transport schemes will relate more to planned development of the area.

The Implementation Plan is defined at two levels, consistent with the approach set out in the emerging LDF Core Strategy for Luton and southern Central Bedfordshire; that is, strategic/conurbation-wide priorities and area/local neighbourhood priorities. The approach to priorities at these two levels can be summarised as follows:

- i) The main priority at the strategic/conurbation-wide level is to improve east-west connectivity particularly between Luton and Dunstable/Houghton Regis. The improvement of other priority corridors will depend in part on the timing of other strategic developments coming forward in the LDF process;
- ii) Priorities at an area/local level will be based principally on the Area Studies programme (a holistic approach to improving accessibility, safety and quality of life in existing local neighbourhoods in Luton), together with interventions that have emerged from partnerships set up during the LTP2 period, in particular the work with the Primary Care Trust and Sustrans to address health inequalities.

Measures will also be developed to integrate existing neighbourhoods in the town with those in new strategic development sites set out in the LDF Core Strategy.

The next section of this Implementation Plan sets out the local transport schemes and initiatives to be implemented over the next four years, consistent with the policies and priorities set out in the longer term LTP Strategy (see Part 2). However, it should be noted that the actions set out in this section do not cover all of the LTP policies, as some policies relate to processes and procedures rather than the outcomes.

The final section of this chapter sets out the approach to and programme for developing and implementing strategic transport improvements in and around Luton Dunstable and Houghton Regis. Given the longer timescales for the planning and delivery of these schemes, the programme for strategic and conurbation wide schemes is based around a ten year planning horizon. Section 9.3 also sets out some of the key principles of the LTP3 strategy to be applied to the major developments in and around the conurbation that are expected to commence over the next 4-5 years and, in particular, measures that will be required to improve connectivity between those developments and nearby existing communities.

9.2 Local Transport Schemes and Initiatives

At the start of each year Luton Borough Council produces a programme of integrated transport and highway maintenance schemes and initiatives for the following year, with indicative spending plans for the following 4 years. The current programme for 2010 / 11 was approved by the Council's Executive on 29 March 2010.

In preparing this Implementation Plan, it has been necessary not only to review the interventions proposed in the latest annual work programme and assess whether or not they still meet the objectives of LTP3 and should therefore continue to be included, but also to take account of other emerging issues which have been identified during the development of the LTP3 Strategy and inter-related Policies. We shall however use the latest work programme as a starting point for the delivery of the LTP and modify it in line with funding availability and revised prioritisation to take account of the policies in this LTP, in particular the implementation of:

- proposals to manage congestion in the three priority corridors identified in Policy 1 of the LTP strategy and set out in the Council's Network Management and Congestion Strategy;
- a range of travel planning initiatives as set out in Policies 3 and 6 and sections 6.2.2 and 6.3.1 of the LTP Strategy;
- various safety and personal safety initiatives as set out in policies 10-14 and Chapter 7 of the LTP Strategy;
- a range of initiatives to increase active travel (building on current work with Sustrans and the LBC health strategy) and quality of the environment as set out in Policies 15 and 16 of the LTP Strategy, and.
- schemes to improve the connectivity between the rest of the town and key development sites starting up in the period 2011-15. The main sites at which development is expected to commence in this period are Napier Park/Stirling

Place, High Town East village and the Station Quarter all within Luton, together with development to the north-east of Houghton Regis. The last of these may involve some schemes jointly designed and funded by Luton and Central Bedfordshire Councils

The Department for Transport has developed and reviewed a formulaic approach to the allocation of funds for Integrated Transport and Highway Maintenance schemes. Following the Comprehensive Spending Review in October 2010, the Government announced the following grant allocation for these funds:

	2011-12	2012-13	2013-14	2014-15
Integrated Transport	£1,260k	£1,344k	£1,344k	£1,890k
Highway Maintenance	£1,156k	£1,070k	£1,010k	£1,028k

Whilst the Highway Maintenance allocation remains largely unchanged compared to previous years, the average Integrated Transport funding in the first three years has reduced by just over 35% compared to the original allocation for 2010/11 (£2,073k). Some other Government funding sources ring-fenced for transport have also been withdrawn - for example, the capital element of the Road Safety Grant has been withdrawn, but the revenue element continues in the revenue support grant. The reduction in the amount of Government funding will therefore require some difficult decisions to be made particularly over the next three years.

In January 2011 the Government published details of the Local Sustainable Transport Fund (LSTF) that makes up, in part, for the reduced level of Integrated Transport grant and compensates for the loss of other funding streams. The Council will submit a bid for about £5 million from the LSTF in April 2011, based on a package of various measures set out in the following pages. We will also continue to seek funding opportunities from other Government and European transport-related funds, and in the following tables we also identify those schemes which could be included in these bids. However there is an uncertainty of course as until these funds are awarded we will not know how much we are going to receive.

We will also continue to negotiate with developers for an appropriate Section 106 agreement to implement a range of transport interventions to mitigate the effects of their development and to provide the facilities necessary to ensure that their development is served by sustainable transport as well as by cars.

In developing the LTP Strategy we identified a large number of interventions which will help us deliver our LTP policies. We have been using a number of these in the past and some will continue to have a prominent role in the implementation of this new LTP. The overall effect of these considerations is shown in the following tables which identify the tools we will seek to use and the types of scheme we will seek to deliver over the next 4 years – we have identified those which are considered to be essential and desirable. However, there are others that we have not listed, which would be “nice to have” and may need to be considered in later Implementation Plans or if additional funding becomes available. As circumstances change over the next few years, the order of these activities may also change.

Supporting the economy

Based upon our Network Management & Congestion Strategy 2008-2012, we have identified three key corridors on which to focus our efforts to manage congestion - the east-west corridor between Luton and Dunstable/Houghton Regis, the Hitchin Road corridor and the New Bedford Road corridor. There are a number of junctions along Dunstable Road and on the town centre ring road which require improvement and we will undertake this work in phases in the next 4 years, linking them as part of an Urban Traffic Management and Control (UTMC) system. This will enable the timings of the signals to be adjusted reactively to the traffic situation in order to manage congestion.

To prioritise the other bus corridors for improvement, we will work in partnership with the bus operators.

WHAT	WHERE	HOW	Outcomes
Continue to implement bus priority schemes and other initiatives to improve bus punctuality and reliability	In areas where congestion/ parking is a problem	Integrated Transport grant	Improve journey time reliability for buses in all bus corridors
Improve bus and railway stations to facilitate better interchange between rail, coach and bus services	New bus/coach Interchange at Luton station Improve Luton and Leagrave stations	Local Major Schemes fund Integrated Transport grant Network Rail Access for All fund	Increase number of bus and rail passengers
Continue to modernise traffic signals & expand the UTMC system linking them, and improve other key junctions	A505 Dunstable Road, Leagrave High Street and Hatters Way M1 Junction 11 improvement Complete the town centre link road	Integrated Transport grant National Major Schemes fund Local Major Schemes fund / Developer funding	Improve journey time reliability in priority corridors
Introduce permit system for all highway works	Borough wide	Funded by cost of permits	Improve journey time reliability
Continue to increase the amount of secure and convenient parking for motorcycles and cycles together with initiatives to reduce their theft	Key employment destinations, town centre, transport interchanges	Integrated Transport grant and Local Sustainable Transport Fund	Increase number of cyclists
Continue to expand the existing control centre to receive and disseminate information about travel conditions	Conurbation wide, with information displays at key nodes on the three priority routes	Integrated Transport grant and Local Sustainable Transport Fund	Improve journey time reliability in priority corridors

Improve interurban coach services	Increase frequency of VT99 Luton-Milton Keynes service to half hourly	Bus operators and Local Sustainable Transport Fund	Increase number of bus passengers
Establish Strategic Lorry Routes and improve/ provide more signing for HGVs	Conurbation wide Improved HGV signing as part of M1 Junction 10a/Junction 11a proposals Introduce HGV ban on Poynters Road	Integrated Transport grant	Reduce HGV through movements in residential areas
Develop and implement park and ride site(s) and priority route to the town centre(s), and review potential to reduce town centre long-stay parking	A505 (Hitchin Road) corridor	Integrated Transport grant (site) Developer funding (site) Bus operators and Local Sustainable Transport Fund (buses)	Improve journey time reliability for buses in priority corridors Reduce traffic flow in priority corridors

Protecting the environment

The implementation of travel plans for major employment sites, other commercial premises, local schools/colleges and the University of Bedfordshire, combined with other schemes and initiatives to encourage greater use of public transport, walking and cycling, will both improve the environment and reduce congestion. Recent studies into Sustainable Travel Towns and other Active Travel initiatives in partnership with Sustrans has shown that travel planning initiatives can reduce car use by about 10%, and increase walking, cycling and public transport use. We will work in partnership with local bus and train operators, Sustrans and the Luton Primary Care Trust to deliver a range of initiatives.

WHAT	WHERE	HOW	Outcomes
Implement initiatives to encourage more sustainable travel to school and college	Borough wide	Integrated Transport grant and Local Sustainable Transport Fund	Increase number of students cycling, walking, or using bus to travel to school or college Reduce air pollution
Develop workplace travel plans and implement a range of measures to increase walking, cycling and public transport use for travel to work	Borough wide: - Major employers - Strategic Employment sites - University of Bedfordshire - Luton & Dunstable hospital	Council and participating employers Developer funding Local Sustainable Transport Fund European funding	Increase number of employees cycling, walking and using public transport for travel to work and business use Reduce traffic flow Reduce air pollution
Community personalised journey planning	Borough wide, initially in the three priority corridors	Local Sustainable Transport Fund Developer funding	Increase number of residents cycling, walking and using public transport Reduce traffic flow Reduce air pollution
Implement a car sharing database for use by Council staff and other employers and promote car sharing	Luton and Central Bedfordshire	Councils and participating employers Local Sustainable Transport Fund	Increase number of employees who car share for travel to work Reduce traffic flow Reduce air pollution
Negotiate and promote discounted taxi fares.	Borough wide	Council and participating employers	
Implement charging points for electric cars in on and off street parking	Borough wide, initially in town centre	Council and Plugged in Places fund	Reduce CO ₂ locally

Improving road safety and personal safety

The Area Studies programme (a holistic approach to improving accessibility, safety and quality of life in existing local neighbourhoods) was introduced in 2004. The priority for the areas to be treated is reviewed each year, based on the number of accidents, traffic intrusion, rat-running, parking problems, social deprivation and use of local facilities in each area, and the local community is consulted on the measures to be implemented. Since its introduction, the Area Studies programme has led to a significant increase in the introduction of 20mph zones in residential areas.

Engineering measures have played, and will continue to play, a role in reducing road traffic accidents in Luton including safety improvements at junctions or along sections of the three key corridors (Hitchin Road, New Bedford Road and east-west between Luton and Dunstable/Houghton Regis) as well as more local small scale improvements and community safety initiatives in order to improve safety in local neighbourhoods.

The focus of the LTP3 will be more on altering road user attitudes and behaviours about safety and achieving casualty reduction through road safety education (e.g. Responsible Road User Challenge and Operation Pride), training (e.g. "On Probation" for young drivers and Bikeability for cyclists), publicity, and enforcement.

WHAT	WHERE	HOW	Outcomes
Small scale measures to improve safety in local neighbourhoods	Borough Wide measures identified by the local community (including street champions), Councillors, the Police and Community Safety partnership	Integrated Transport grant	Reduce the number and severity of casualties
Continue to upgrade street lighting and, where appropriate, lighting of paths and cycle routes	Borough wide but especially - key interchanges - core walking/ cycle routes - areas of greatest crime (South, Hightown, Biscot & Dallow Wards)	Integrated Transport & Maintenance grants	Increase walking, cycling and public transport use
Introduce engineering measures from the Safer Routes To Schools Challenge	Various measures Borough wide	Integrated Transport grant	Reduce the number & severity of casualties Increase number of children walking, and cycling to school
Further implement the Responsible Road User Challenge which would cover road safety education, training and publicity	Various initiatives Borough wide but especially in deprived areas & for vulnerable users	Council resources	Reduce the number & severity of casualties

Accident remedial measures	Borough wide, but focus on the three priority corridors	Integrated Transport grant	Reduce the number and severity of casualties
Continue programme of improving bus stops (including Real Time Passenger Information)	Stops on bus routes between Luton and Dunstable/Houghton Regis Other stops on a route by route basis, focussing on those that serve local shopping centres, rail stations, the hospital, and community hubs	Local Major Schemes fund Local Sustainable Transport Fund and Integrated Transport grant.	Increase number of passengers using buses
Provide appropriate crossing facilities to meet the needs of all users, in particular mobility impaired people	Various measures Borough wide, especially on core walking routes and strategic cycle routes	Integrated Transport grant	Reduce the number and severity of casualties
Complete implementation of the Area Studies programme	Ashcroft started in 2010-11 and will be completed in 2011-12 2011-12 Stopsley and Lewsey Farm 2012-13 Limbury and Crawley 2013-14 West Icknield and Bushmead 2014-15 Wigmore and Putteridge and start on Bramingham	Integrated Transport grant	Improve accessibility to community facilities on foot or by bus/cycle Reduce traffic flow Reduce the number & severity of casualties
Increase the amount of accessible car parking for disabled people, both on and off-street	Borough wide, but especially in the town centre and adjacent to day centres, doctors surgeries and similar institutions	Integrated Transport grant.	

Improving health & wellbeing

Recent studies into sustainable Travel towns and other Active Travel initiatives in partnership Sustrans has shown that the improvement of walking and cycling infrastructure together with supporting initiatives can increase active travel and reduce health inequalities. Research undertaken by NICE has indicated that providing safer routes to nearby parks, recreation sites and other local community facilities can encourage a more active lifestyle, particularly for children and young adults. We will work in partnership with Sustrans and the Luton Primary Care Trust to deliver a range of initiatives to promote Active Travel.

WHAT	WHERE	HOW	Outcomes
Continue to review the existing controlled parking zones and other parking to manage the available space in favour of residents and businesses and their customers and visitors	Around the town centre, close to transport hubs, Luton & Dunstable Hospital, key employment areas and other areas where overspill parking will affect local residents and businesses	Integrated Transport grant	Reduce proportion of long stay parking in the town centre
Continue to reduce street clutter by removal and consolidation of existing signs	Borough wide, but especially as part of the Areas Studies programme and on main roads	Integrated Transport and Maintenance grants	Increase cycling and walking
Work with the HA to ensure smoother traffic flows on the M1 during pollution episodes	M1 Air Quality Management Area	National Major Schemes fund	Improve Air Quality in the M1 AQMA
Contribute to the reduction of childhood obesity by improving pedestrian/cycle connectivity	Borough wide, but initially in Dallow, Farley and South Wards	Local Sustainable Transport Fund	Increase cycling and walking
Continue to expand a direct, convenient and safe strategic cycling and walking network	Connect "spine" of the cycle and walking network to strategic employment areas and district shopping areas	Integrated Transport grant and Local Sustainable Transport Fund	Increase cycling and walking
Continue to improve the street scene with materials appropriate to each area	Borough wide, but especially as part of the Areas Studies programme and in areas of greatest deprivation	Integrated Transport and Maintenance grants	Increase cycling and walking
Implement measures to reduce traffic noise	Borough wide but especially on the priority corridors	Integrated Transport and Maintenance grants	Reduce traffic noise

9.3 Improving Transport Connectivity to Planned Developments

The main sites at which development is expected to commence in the period 2011-2015 are Napier Park/Stirling Place, High Town East village and the Station Quarter all within Luton, together with development to north-east of Houghton Regis. Strategic transport improvements, in particular the improvement of M1 Junction 10a, the Luton Town Centre Transport Scheme, and the A5-M1 Link will be key to enabling these developments. In addition the developers of these sites will need to identify other improvements to the existing transport network in the vicinity. However there may be other transport improvements that are required to improve the connectivity between the rest of the town and key development sites, and some of these are identified in the following table

WHAT	WHERE	HOW	Outcomes
Ensure good public transport access for all new developments	Northern entrance to Luton Airport Parkway Station to serve Napier Park Busway extensions & bus services to connect development NE of Houghton Regis to Luton	Developer funding Developer funding	Increase number of people using public transport
Integrate existing Rights of Way in planned developments into local walking and cycle networks	Footpaths/Bridleways in area NE of Houghton Regis to be incorporated into development of the area and improved Provide pedestrian/cycle underpass under railway to improve connectivity of area NE of Houghton Regis with north of Luton	Developer funding Local Sustainable Transport Fund	Increase the number of people walking and cycling
Provide residents of new homes with information packs about public transport, walking and cycling in the local area	Napier Park / Stirling Place. High Town East village NE of Houghton Regis	Developer funding	Increase number of people walking, cycling and using public transport

A number of strategic transport schemes set out in the previous LTP have either been completed or are currently under construction as indicated in Section 9.1. Given the relationship of many of these other strategic transport improvements to the planned growth of the area, it is envisaged these would involve developer contributions related to both the scale of development and its proximity to, and benefit from those proposals. As part of the Autumn 2010 Comprehensive Spending Review together with subsequent transport announcements, the Government confirmed that that funding of Local Major Schemes is already oversubscribed, and proposed alternative

funding sources for strategic transport schemes necessary to promote development, specifically the Regional Growth Fund and, particularly where business would benefit from those improvements, Tax Increment Financing. Further details on the funding of the delivery strategy for strategic transport schemes are contained within Chapter 4 of the LDF Core Strategy.

Table 9.1 below sets out the anticipated timescales for the development and implementation of strategic transport schemes, the timing of which relates to development proposals included within the LDF Core Strategy.

Table 9.1 Implementation Programme for Strategic Transport Schemes

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
M1 Jct 10-13 Capacity Improvement										
Luton Dunstable Busway										
Northern Entrance to Luton Airport Parkway Station										
M1 Jct 10a Improvement										
Luton Town Centre Transport Scheme										
Access to Century Park Employment Area										
A5-M1 Link (Dunstable Northern Bypass, including M1 Junction 11a)										
Woodside Connection										
Public Transport Improvements North of Luton – Dunstable										
Luton Northern Bypass										

The remainder of this section provides a brief summary of each of these strategic transport schemes. Detailed development of these schemes, including all of the necessary Statutory highway and planning procedures (including a full Environmental Assessment undertaken in partnership with the Statutory environmental bodies) will be undertaken as any related planned development progresses.

M1 Junction 10-13 Capacity Improvements

Following withdrawal in early 2009 of proposals to widen the M1 between Junctions 10 and 13, proposals have been developed to improve the capacity of this section of the M1 by providing Hard Shoulder Running as part of a “Managed Motorway”. Improvement works on the M1 commenced in early 2010, and Junctions 11 and 12 will be improved as part of the scheme to facilitate 4 lanes of traffic to operate on the motorway.

Luton Dunstable Busway

The contract for design and construction of this dedicated Busway between Houghton Regis, Dunstable and Luton town centre and onto Luton Airport was awarded in May 2010. Access points along the Busway will maximise the opportunities for buses to serve the three town centres from nearby residential areas and ensure that busway services are able to serve important employment, shopping and education centres.

The scheme is also capable of being extended to serve the growth area to the north of the conurbation.

In addition to a high quality segregated route, the scheme incorporates improved passenger facilities and features at over 200 stops on the local road network such as real-time passenger information, improved shelters, level boarding and off-bus ticketing. As such, the scheme will facilitate a step-change in the quality of public transport provision, contributing to an increase in public transport patronage and helping stem the traffic growth in the A505 corridor and around the town centres. It will also make a major contribution to the modal shift targets included in the Airport's Surface Access Strategy.

Luton Town Centre Transport Scheme

This scheme, for which provisional funding approval was awarded in December 2003, involves completion of the ring road around the northeast side of the town centre, referred to as the Station Quarter, together with traffic management measures on the north side of the town centre. The scheme will be progressed in accordance with the wider Luton Town Centre Development Framework, and facilitates development of the Station Quarter, Power Court and High Town East. Removal of extraneous traffic from Luton town centre will provide significant benefits to pedestrians and public transport users, as well as to service vehicles that need to access the town. Significant land parcels are in the process of being acquired from Network Rail, with advanced accommodation works already complete, including space provided for the road under the new 740 space multi-storey car park adjacent to Luton Station.

Planning permission for the road has been granted and the CPOs/Orders for the road published. The Council was preparing for the Public Inquiry when the new coalition Government announced in June 2010 that work on all major transport projects not fully approved would be halted until the outcome of the Comprehensive Spending Review (CSR). Following the CSR, the Council was invited to prepare an Expression of Interest in order to determine whether the scheme would continue within the Government's "Development Pool" for major transport projects. That was submitted to the DfT in early January 2011, and the following month they announced that the scheme was successful in getting through to the "Development Pool". This will allow the Council to progress to the Public Inquiry.

Northern Entrance to Luton Airport Parkway Station

Luton Airport Parkway station opened in 1999, and currently has one vehicular, pedestrian and cycle access to the south-west side off Gipsy Lane. The planned Napier Park and Stirling Place development sites lie immediately to the north-east of the station. Use of the station, which is related to increased passengers at Luton airport, has grown from 1.9 million passengers per year (mppa) in 2004/05 to 2.7 mppa in 2007/08. The percentage of passengers using rail to get to and from the airport has increased from 16% to 22% over this period. Consequently there is peak period crowding at the existing single entrance.

The creation of a new northern entrance to Luton Airport Parkway station will improve access for airport passengers undertaking part of their journey by rail, and will be of

particular benefit to passengers using the London-bound (up-slow) line by reducing peak period crowding via the existing single entrance. In addition residents, employees and visitors to the Napier Park/Stirling Place mixed use development will benefit from the new station entrance. The two station entrances will be connected by a new dedicated one-way bus route.

Planning permission for the scheme has been granted and initial construction works commenced using Community Infrastructure Funding with further local contributions anticipated.

M1 Junction 10a Improvement

In January 2009 the Council secured funding and appointed consultants to undertake engineering and environmental design to improve the existing Junction 10a roundabout, which experiences significant queues and delays particularly at peak travel times. A high proportion of the existing employment sites in the south and east of Luton are accessed off Junction 10a including Vauxhall, Capability Green Business Park, London Luton Airport and the surrounding campus, and Butterfield, and the existing congestion causes problems for both staff and deliveries on these sites. The junction also provides access to the North Hertfordshire towns and Harpenden).

The Junction 10a improvements are also necessary to provide capacity for increased demand arising from development in this part of the town (including growth of the airport). In the last 3-4 years, the Highways Agency (HA) has submitted holding objections to various planning applications for key employment and mixed use development sites providing around 17000 new jobs in this area. This has frustrated the pace of economic growth in the town and is directly attributable to the congestion problems at Junction 10a.

Following public consultation in Summer 2009 on a number of options, the Council has been engaging with key stakeholders, in particular the Highways Agency (HA), in order to develop a preferred design solution. A public Information exhibition on the preferred grade-separated junction solution was held in September 2010. The Council is actively working with the HA to develop the detailed design of the scheme, which includes proposals to de-specialise the M1 spur to facilitate 3 running lanes between Junction 10 and Capability Green, together with associated minor improvements to M1 Junction 10.

The Council has already secured £3m in Section 106 contributions towards the completion of these junction improvements, and in January 2011 submitted an application for a £13m contribution from the Government's Regional Growth Fund, the outcome of which should be known in late April 2011.

Access to Century Park Employment Area

Both the Luton Local Plan and the LDF Core Strategy incorporate proposals for employment land east of Luton airport. The Council will continue to work in partnership with both Prologis (who own the site) and London Luton Airport Operations Limited to agree access to the site.

A5-M1 Link (Dunstable Northern Bypass, including M1 Junction 11a)

The line of the proposed Dunstable Northern Bypass runs from the A5 close to its junction with the A505 (Leighton Linlade southern bypass) to a new junction (Jct 11a) with the M1 north of Luton. In conjunction with the M1 capacity improvements, the scheme will provide a bypass of Dunstable and Houghton Regis. Implementation of the A5-M1 Link is expected to result in the existing A5 through Dunstable ceasing to be managed as part of the national trunk road network and becoming part of the local road network. Central Bedfordshire Council are working on proposals to reduce the traffic demands on the High Street and help reduce the severance the road causes.

Woodside Connection

The Woodside Connection links the employment areas on the east side of Dunstable to the A5-M1 Link at the proposed M1 Junction 11a. The completion of both schemes also facilitates the commencement of development in the Sustainable Urban Extension to the north east of Houghton Regis. The Woodside Connection also complements the A5-M1 Link by facilitating local connections to Junction 11a from parts of Dunstable/Houghton Regis and the north west of Luton, reducing traffic travelling to Junctions 11 and 12 from the local road network in those parts of the conurbation and also on unsuitable routes in adjacent rural areas.

Public Transport Improvements North of Luton-Dunstable

The proposed M1 Junction 11a and related highway infrastructure will provide an opportunity for public transport improvements in the vicinity of that junction, in particular given the close proximity of the planned development both to that junction and the Midland Main Line. The Luton and southern Central Bedfordshire Core Strategy sets out aspirations for a new Luton North station to serve Strategic Site Specific Allocations (SSSAs) in the north of the conurbation. However to provide a new rail station in this location may require the closure of either Harlington or Leagrave stations. Luton Borough and Central Bedfordshire Councils will continue to work in partnership with the Developers, the Highways Agency, and Network Rail to examine the potential for either a bus or rail based Park & Ride site (or a combination of the two) in the vicinity of that junction.

East-West Rail

The East-West Rail project, promoted by a consortium of Councils from across the East and South East England, provides a continuous rail route between Oxford and Cambridge that connects various radial rail routes from London, facilitating a variety of train paths.

The detailed engineering design for the western section (between Bedford and Oxford) has been completed, and a Business Case submitted to Government in 2010 shows a Benefit Cost Ratio of 5:1. Chiltern Railways are interested in running services along this section of the route as part of their "Evergreen 3" proposals. Previous and planned development at various points along the old railway line between Bedford and Sandy means that route cannot be used to connect the Midland Main Line with the East Coast Main Line. A number of alternative routes for this central section have been considered, including two new alignments, one from the south of Bedford to Sandy and the other from the south of Luton to Stevenage. Whilst

Stakeholder consultation on alternative routes and service plans was carried out in Spring 2010, no definite decisions about the route have yet been made.

Electrification of Midland Main Line north of Bedford

Network Rail is planning to electrify the Midland Main Line north of Bedford. Whilst these works are taking place to outside of the area, Luton could potentially benefit through increases in capacity on the Midland Main Line and further development of local rail services. This scheme may be brought forward as part of Network Rail's programme of works for Control Period 5 (April 2014 to March 2019).

Luton Northern Bypass

Public consultation on alternative routes for Luton Northern Bypass was presented at a public and stakeholder consultation in early 2009. The results of that consultation were reported to the Joint Committee that March, and the Committee resolved to support proposals for an outer bypass subject to the outcome of further more detailed work. A full northern bypass of Luton between the M1 and the A505 Hitchin Road will remove through traffic both from roads within Luton Dunstable and Houghton Regis and also from unsuitable minor roads outside the conurbation.

The section between the M1 north of Luton and the A6 Barton Road will be designed as part of the master-planning for the North Luton SSSA which is identified in the Luton and southern Central Bedfordshire Core Strategy and will be constructed as part of that planned development.. East of the A6, proposals are for a link through to the A505 Hitchin Road. Whilst the preference of the Joint Committee was for an outer route, work is currently ongoing to develop a design that addresses the environmental sensitivity of any routes in this area. Luton and Central Bedfordshire Councils will continue to progress proposals for the A6-A505 section in timescales consistent with the provision of the M1 to A6 section of the bypass as part of the North Luton SSSA.

10 Monitoring and evaluation

Previous LTPs defined a series of performance indicators used to monitor and report progress being made towards targets determined to help us achieve our stated aims and objectives. Many of these were National Indicators and some were developed to directly address local issues, but all of them were used to monitor progress and report to central Government.

However, following the Comprehensive Spending Review, the Government announced that the National Indicator set was withdrawn and the requirement to report to central Government was ended. In mid December 2010 the Government commenced consultation on a list of data requirements, with many of the transport related data set out in the Department for Transport's Business Plan. This has provided us with the opportunity to develop a new set of wholly local indicators for LTP3 focussed on addressing local issues by measuring key outcomes of policies in this strategy, whilst ensuring (as far as possible) that they should be suitable to meet the anticipated requirements of the Government. Consequently we have looked at how we can monitor progress of various measures referred to in this LTP3 and the outcomes of the Implementation Plan, and devised a suitable target and associated trajectory for each of them. Table 10.1 shows how the measures are related to the policies in Part 2, and the trajectory over the last five years together with proposed targets are set out in Table 10.2 on the next page.

Table 10.1 LTP3 Strategy Measures and Related Policies

	Measure	Policies
1	Condition of Principal Roads	P13, P16
2	Condition of other roads	P13, P15, P16
3	Total Killed and Seriously Injured casualties	P11, P12
4	Total Slight casualties	P11, P12
5	Patronage of local bus services	P2, P6, P18
6	Satisfaction with local bus services	P2, P18
7	Punctuality of local bus services	P2
8	Access to jobs by public transport	P2, P17
9	Access to other services by sustainable modes	P17
10	Number of rail journeys	P2
11	Proportion of rail travellers who travel by car to stations	P2, P6
12	Proportion of children travelling to school by car	P6, P20
13	Number of cycle trips (on selected routes)	P6, P20
14	Traffic congestion on priority corridors	P1, P4
15	Traffic flow on priority corridors (weighted)	P1
16	Proportion of long-stay parking (> 3hours) in town centre car parks	P4
17	Proportion of sustainable travel for journeys to work < 10 km	P6
18	Condition of street lighting stock	P14
19	Nitrogen Dioxide (NO ₂) levels	P19
20	Total CO ₂ emissions from transport in tonnes	P7

Table 10.2 LTP3 Strategy Indicators

Measure	Indicator											2014 Target
		Year	Data	Year	Data	Year	Data	Year	Data	Year	Data	
1	%age requiring intervention	05/06	6.28%	06/07	6.87%	07/08	4%	08/09	3%	09/10	5%	8%
2	%age requiring intervention	"	52%	"	27.5%	"	18.5%	"	21.5%	"	6%	8%
3	Number of casualties	05	62	06	55	07	55	08	65	09	52	57
4	Number of casualties	"	530	"	610	"	605	"	593	"	627	565
5	Number of passengers	05/06	8.55m	06/07	7.95m	07/08	7.89m	08/09	10,73m	09/10	10.24m	12.5m
6	Increase in %age satisfied	03/04	49.3%	"	53%	-	-	08	54%	-	-	59%
7	Increase in %age buses on time	05/06	60%	"	68%	07/08	53%	08/09	61%	-	-	80%
8	Increase in %age of residents able to access public transport for journey to work	-	-	"	68%	"	58%	"	67%	09/10	83%	85%
9	Increase in %age of residents able to access sustainable transport for access to other services	-	-	"	68%	"	68%	"	70%	-	-	75%
10	Number of rail passengers	05/06	16,995	-	-	"	20,749	"	21,374	09/10	22,232	25,000
11	Decrease in %age of trips to stations by car	-	-	-	-	"	43.8%	"	45.1%	"	46.6%	40%
12	Decrease in %age of trips to schools by car	-	-	06/07	73.5%	"	73.1%	"	74%	"	73.9%	72.8%
13	Increase in number of cycle trips	05/06	863	"	934	"	1070	"	1166	"	1246	1370
14	Journey time per mile in minutes and seconds	-	-	-	-	"	3m:37s	"	3m:44s	-	-	3m:45s
15a	Traffic flow on A6 corridor	05/06	17,592	06/07	17,456	"	16,344	"	16,561	10/11	15,338	15,000
15b	Traffic flow on Hitchin Road corridor	"	15,282	"	15,283	"	15,443	"	15,351	"	15,318	15,000
15c	Traffic flow on Dunstable Rd. corridor	"	17,025	"	17,377	"	17,687	"	18,084	"	16,887	16,000
16	Decrease in %age of long stay parking	"	14.66%	"	15.56%	"	13.55%	"	21.38%	09/10	16.77%	13%
17	Increase in %age of travel to work by sustainable modes for trips <10Km	-	-	-	-	-	-	08/09	41.3%	-	-	47.4%
18	Decrease in %age of stock older than 25 years	-	-	-	-	"	35.2%	08/09	32.4%	"	29.7%	25.0%
19	Decrease in annual average NO ₂ level	05	28.2	06	34	07	35	08	35	09	36	35
20	Decrease in CO ₂ emissions	05/06	33,552	06/07	30,197	07/08	30,197	08/09	30,197	-	-	29,294