Oxfordshire County Council Local Transport Plan 2006-2011

2008 Progress Report

Course

December 2008



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Table of Contents

| | | Page number | |
|----|--|-------------|--|
| I | Introduction and overview | 2 | |
| 2 | Tackling congestion and network management | 5 | |
| 3 | Delivering accessibility | 15 | |
| 4 | Safer roads | 25 | |
| 5 | Better air quality | 35 | |
| 6 | Improving the street environment | 44 | |
| 7 | Asset management | 50 | |
| 8 | Meeting wider objectives | 56 | |
| 9 | Use of resources | 60 | |
| 10 | Risk analysis | 81 | |
| | | | |

Introduction and overview

Oxfordshire County Council adopted its second Local Transport Plan (LTP) in 2006 to cover the period from April 2006 to March 2011. The Plan has five overarching objectives for improving transport in the county:

- Tackling congestion
- Delivering accessibility
- Safer roads
- Better air quality
- Improving the street environment

These, together with managing the highway asset, formed the basis for developing the Plan's 5-year transport programme.

To meet these complex and sometimes conflicting goals we have put together a mixture of specifically targeted schemes and programmes together with integrated schemes aimed at delivering multiple objectives in particular areas or on important roads. Already in this Plan period we have, amongst other things, delivered:

- The multi-award winning 'hamburger' improvement at A40 Headington roundabout;
- New waiting and interchange facilities at Thornhill Park & Ride;
- Improvements at over 100 schools as part of our Better Ways to School Programme;
- Integrated town centre enhancements in Abingdon and Henley;
- Seven new controlled parking zones in Oxford;
- Notable improvements in the overall condition of our carriageways and footways;
- Maintenance integrated with street environment improvement for Oxford High Street;
- Quality bus route improvements for Kidlington and East Oxford;
- Extensions to the real time information system on seven routes; and
- Countywide de-cluttering.

In addition to this, major improvements are currently being undertaken in the Summertown and Headington areas to improve traffic flows, the pedestrian environment and facilities for buses. We have started to develop the technology to monitor congestion more effectively through Automatic Number Plate Recognition systems and make better use of this information through the development of a long-term Traffic Information and Management Strategy. Oxfordshire County Council has also developed a Transport Asset Management Plan and a Network Management Plan during the last 2 years.

To assess our progress in meeting our objectives, targets were set for 28 indicators. This included 19 for nationally designated 'Core Targets' plus 9 'Local Indicators' which were added to allow the set to better reflect Oxfordshire's priorities. This report sets out the changes that have been monitored in each of these indicators since the Plan was adopted.

Our progress to date on the indicators set out in the Plan is summarised in the following table:

| | On track | Not on track |
|------------------|----------|--------------|
| Core Targets | П | 7 |
| Local Indicators | 5 | 4 |

(No data have been available to judge progress on one Core Target).

Each of the indicators has nominally been allocated to one of the objectives for the purposes of this report. Generally these results are satisfactory, although there is clearly some room for improvement, particularly with those area covered by the Local Indicators such as the safety of vulnerable road users. Our intentions for each of the areas where targets are **not on track** are set out as part of this report.

The objectives themselves are not wholly independent: tackling congestion may help to deliver improved accessibility and better air quality but can also increase accidents if speeds increase; measures to improve the local environment in one area can result in congestion elsewhere if traffic is displaced; improving safety by reducing traffic speeds can reduce accessibility through increased journey times.

Looking ahead, Oxfordshire County Council has been successful in putting forward a major scheme proposal to improve access to Oxford. The Access to Oxford proposals will be at the core of the county council's investment programme over the next ten years and are a package of a number of elements:

- A34 traffic management: allowing road space on the A34 to be used more efficiently using the latest real-time traffic management techniques, including variable speed limits and variable message signs;
- Oxford northern approaches improvements: tackling congestion around the Wolvercote, Pear Tree and Cutteslowe roundabouts to improve traffic flow and journey time reliability with enhanced bus priority;

- Oxford southern approaches improvements: tackling congestion around the Heyford Hill, Kennington and Hinksey Hill roundabouts to improve traffic flow and journey time reliability with enhanced bus priority;
- Oxford Rail Station: increasing capacity by building a new platform for local services. Improvements to integrate the new platform, improve interchange with other modes of transport and develop the station into an attractive gateway into Oxford; and
- Oxford to Bicester rail line: service enhancements and line improvements tied in with East-West rail proposals.

In addition, two major initiatives have been developed since the LTP was adopted and which will form a major part of our programme for the rest of the plan period: introducing a 20mph speed limit on most roads within the city of Oxford and the Transform Oxford project which aims to significantly improve the pedestrian environment in the city centre. 2

Oxfordshire County Council is currently developing a Network Management Plan to outline how it will carry out its Duty as set out in the Traffic Management Act. This Duty requires the council to manage its highway network with a view to ensuring safe and effective movement of traffic, including both pedestrians and cyclists, and to co-operate with other authorities to the same end. The aim to tackle congestion and reduce disruption is to be achieved through:

- Pro-active management of road networks;
- More effective co-ordination and management of works and all other activities taking place on the road network;
- More stringent powers and sanctions over utilities' street works; and
- Wider civil enforcement powers over traffic contraventions.

2.1 Progress on targets

A direct measure of congestion relevant to Oxfordshire is being developed as a Local Indicator (see below) but is not yet available The LTP did contain a number of indirect targets which are relevant to congestion in the county.

Our progress to date on the indicators outlined in this chapter is summarised in the following table:

| | On track | Not on track |
|------------------|----------|--------------|
| Core Targets | 3 | 3 |
| Local Indicators | 0 | 0 |

It should be noted that two of the bus punctuality indicators, while above the trajectory set in the LTP and therefore included in the 'not on track' column in the table, showed significant improvements in the last year which, if continued, would result in the indicators meeting their targets by the end of the Plan period.

2.1.1 Core Targets

Countywide traffic flows

Oxfordshire County Council has a long established, robust monitoring mechanism to monitor this indicator by using its network of automatic traffic counters on the A and B class road network.

This indicator is a well established way to monitor traffic growth in the county and the same methodology has been used since 1991. Results of traffic growth from this time and before (using a different methodology) can be seen on the county council's website (www.oxfordshire.gov.uk).





Although various events such as the floods in 2007 will have influenced the figures to some extent, the results are showing that we are on track to meet the 2010/11 target that was set in the Local Transport Plan.

Number of journeys into Central Oxford in the morning peak

As with area wide road mileage, this indicator has been monitored for many years and was one of the key indicators used in monitoring the effect of the Oxford Transport Strategy, the main measures of which were introduced in 1999. Over the years, these figures have shown little change. However the last two years have seen a significant drop in flows.



The key action in ensuring that journeys into central Oxford remain at least unchanged is the implementation of the enforcement of four bus gates in the city. Since enforcement began in March 2007, traffic counts at the High Street bus gate have suggested a decrease of about 300 vehicles. Enforcement at this site, combined with the effects of the other bus gates, could account for over half of the observed decrease. There are two factors that could explain the further decreases observed from this indicator. Firstly, from May until October 2006 and again from January until September 2007 highway renewal and improvement works took place in High Street and St Clements in Oxford, one of the busiest bus corridors in the city. When figures become available for the 2008/09 period it will be possible to see the impact that works had in the previous two years.

Secondly, the closure of the Radcliffe Infirmary had a major effect on traffic flows on the Woodstock Road and Walton Street inner cordon points. The hospital was a major employer with 161 parking spaces (including drop off points). Flows at these count sites reduced from 2156 in 05/06 to 1843 in 07/08 and most of this can be put down to the closure of this major establishment in the centre of Oxford.

Nonetheless, it is still felt that we are on track to meet the target of 'no change' over the five year period, and may exceed it.

Bus punctuality

Bus punctuality - non-frequent services, start





Bus punctuality - non-frequent services, intermediate points



Bus punctuality – non-frequent services, non-timing points

Punctuality of timetabled services at the start of their routes fell from 81.3% in 2005/06 to 76.0% in 2006/07, but then recovered to 79.6% in 2007/08. While improving, the indicator remains not on track. Major highway renewal and improvement works took place progressively along the main bus priority route in Oxford city centre for large parts of 2006 and 2007. Although works were carefully managed, in close discussion with bus operators, to minimise the impact upon bus services (2500 buses per day) a significant short-term impact on bus punctuality has been inevitable. Analysis of the detailed results also indicate that services to and from Abingdon (both at the terminus in Abingdon itself and at the city centre departure point) performed particularly poorly. This period has coincided with the introduction of new town centre traffic arrangements in the town. In the longer term the Access to Oxford proposals will focus on ways to improve performance of buses approaching Oxford from the A34 corridor (the majority of which, from the south, run from or through Abingdon).

There was an improvement at intermediate timing points, from 55.5% in 2005/06 to 63.8% in 2007/08 and the indicator is on track. A study of the detailed figures indicates that services running through Headington were poor. A scheme to improve bus punctuality through this area is being implemented during the current year, which we anticipate will result in a significant improvement in this area after the end of 2008/09. The punctuality at non-timing points remains not on track.

The individual indicators of punctuality have been replaced in the new National Indicator set by a single combined value. Monitoring of the National Indicator will replace the existing LTP indicators in future reporting. Oxfordshire County Council intend to monitor this indicator in the same way as for the LTP indicators, using on-street surveyors at principal points on the county's bus network. It is noted that punctuality monitoring at non-timing points is no longer required; we welcome this, having always considered this calculation to be essentially meaningless, and will use the resources freed up from this to obtain a larger sample of start and intermediate timing points instead.





Frequent services were particularly affected by the city centre works. Whilst it is not possible for an observer at one point on a route to accurately identify the causes of the punctuality performance seen, we believe that the increase in excess waiting time from 1.22 minutes in 2005/06 to 1.64 minutes in 2006/07 is attributable to the impact of these works. However although the works also affected a significant part of 2007/08, excess waiting time in that year has reduced to 1.47 minutes. We believe that this reflects the benefits of the other actions being taken to improve punctuality on these routes -the frequent bus routes being those which have been the focus of the Premium Routes improvements programme. However, the target remains not on track.

2.2 Congestion monitoring

In 2004 the county council was invited to join the joint LGA\DfT Shared Priority Pathfinder Project. The county council's proposal was to establish a clear definition and methodology for measuring congestion as it related to the particular local characteristics of a shire county.

The study recommended that a two level monitoring network should be adopted. Firstly, a base network would be defined to help identify where problems are, or where problems are likely to occur. The study originally suggested that this network could be compiled using our comprehensive network of Automatic Traffic Counters, however it is felt that the council can utilise the government supplied ITIS data to achieve this, and rather than use the flow\capacity ratio, adopt an indicator looking at average speeds across the network.

Secondly, where specific problems are identified and measures are proposed to tackle this, more detailed monitoring will be carried out. This will include the use of journey time information (through Automatic Number Plate Recognition) and separate monitoring of bus reliability where this is affected.

Following on from this study and the subsequent developments we have chosen three Local Indicators to inform us on congestion.

| Base Network Monitoring Indicator | More detailed monitoring |
|---|---|
| Percentage of base network with congestion during the morning peak. | Average journey time per mile in the morning peak. (Same as National Indicator 167) |
| | Percentage of journey times within 15% of the average journey time. (Measure of journey time reliability) |

An initial exercise has allowed a calculation of the base monitoring indicator for 2007 on the A Class road network.

The calculation shows that of 814 miles of 'A Class' road network, 59 miles (7.3% of the network) have traffic on it travelling at less than half the speed limit. Of these 59 miles, 18 were travelling at less than quarter of the speed limit (2.2%).

In partnership with its stakeholders, we will consult on what constitutes 'acceptable delay' -the level below which conditions would be considered congested. It is anticipated that this will be defined as a fraction of the speed limit for the sections of road within the base network, as demonstrated above.

The doubts over the future availability of the ITIS data stream puts in doubt what can be repeated on an annual basis. It is understood that data will become available from the government using Traffic Master cameras. It is therefore not possible at this stage to confirm the network upon which this indicator will be measure upon.

The Automatic Number Plate Recognition (ANPR) camera network was expanded to 50 cameras in November 2008. This will report detailed journey time for the main corridors into central Oxford. Data will therefore be available to calculate National Indicator 167 and the Local Indicator on journey time reliability from November onwards.

2.3 Traffic management

Managing car parking is an essential tool in helping to control traffic levels and thereby reduce the impact of traffic on the street environment, but must be supported by improvements to public transport and walking and cycling facilities to ensure access is maintained.

Controlled parking zones (CPZs) and associated signing or equipment are relatively inexpensive to introduce. The following CPZs have been implemented in Oxford since 2006:

| CPZ | Date Implemented |
|-----------------------|------------------|
| Girdlestone Road | June 2006 |
| Headington Quarry | July 2006 |
| Headington North East | September 2006 |
| The Lakes | January 2007 |
| Northway | January 2007 |
| Marston South | June 2007 |
| North Summertown | November 2007 |

In Bicester, Oxfordshire County Council has supported Cherwell District Council in introducing CPZs on a number of residential roads.

The five Park & Ride sites in Oxford play an important part in improving conditions in the city centre by reducing motorised traffic, as the need for parking is reduced. The Park & Ride sites have the potential to remove up to 5000 vehicle movements into the city centre per day. A new interchange at the Thornhill site was completed in early 2008, with extensions to increase capacity at this site under investigation. Starting in October 2008, all Park & Ride sites are now controlled by Oxfordshire County Council, with the Seacourt, Pear Tree and Redbridge sites having been transferred from Oxford City Council control. This allows all five Park & Ride sites to be managed on a common free parking basis and to provide an improved customer experience. This will encourage more people to use these facilities, decrease trips made by vehicles into the city centre and thereby improve the street environment.

Often it is through-traffic that causes street environment problems. Providing alternative, more suitable routes can be a good way of reducing the intrusion in a street dominated by traffic. Variable Message Signing (VMS) has been approved for the approach roads into Oxford. Six VMS signs are to be implemented in April 2009 at the following locations:

- A40 East of Oxford (near Forest Hill Junction)
- A40 West of Oxford (near B4449 roundabout)
- A40 North West of Oxford (near A34 flyover)
- A44 North of Oxford (before A4260 roundabout)
- A420 West of Oxford (Cumnor junction)
- A4074 South of Oxford (Sandford-on-Thames junction)

These VMS signs will display information advising motorists on parking availability in Oxford city centre as well as information on Park & Ride sites. This will help towards decreasing levels of traffic in the city centre, and contribute towards improving the street environment.

Real Time Information (RTI) for buses was first trialled in Oxfordshire on the Kidlington and Bicester services serving the Banbury Road in Oxford, where 20 displays were installed. There are now a total of 85 RTI displays installed with all Oxford Bus Company and most local Stagecoach vehicles now RTI enabled. In addition, Thames Travel buses serving Wallingford, Didcot, Harwell and Wantage are in the process of being fitted. It is predicted that by the end of 2008, 160 displays covering Premium Routes serving a range of areas will be installed at bus stops throughout the county. Ultimately, a minimum of 220 displays will be in use. For the new RTI displays many bus shelters will also be upgraded.

OxonTime (see www.oxontime.com) and bus stop SMS facilities are now available at 850 bus stops. Trial vehicle displays are also being installed on some Park & Ride services, showing next stop information for passengers. The next generation of RTI will, in future, allow for more accurate tracking of vehicles, improving prediction times on RTI displays.

Since 2006, approximately 600 timetable cases complete with relevant information have been provided by the county council, mainly in rural locations and on subsidised routes. In addition over 600 new bus stop flags have been installed on the premium routes, each complete with a new timetable case. These have replaced stops where multiple timetable cases and bus stop flags were previously found, resulting in both clearer information and the reduction of clutter.

2.4 Network Management Plan

A Network Management Plan has been developed to ensure that Oxfordshire County Council is fulfilling its Network Management Duty to 'secure the expeditious movement of traffic on its own highway, and to facilitate it on other highway authorities' (such as those of the Highways Agency and neighbouring authorities) road networks'.

It is considered important that the plan aligns itself with the council's existing policies and strategies and works in a way that complements these and adds value in a constant and balanced way. The Network Management Plan is closely aligned with the Local Transport Plan, particularly the local objective and action plans to tackle congestion, and recognises the council's strategic objective to 'help the economy grow as fast as possible with a real choice of access to jobs, homes, leisure and services and in a way that does not prejudice the future of our environment'.

In order to carry out the Network Management Duty effectively, the council has put in place a structure that can deliver on different levels, from the daily operation and management of the duty to the longer term planning overarching management of the duty. Much of this structure has been in place and working well for two years now, whilst some of the teams within the new structure have been demonstrating good network management practice for far longer.

The Traffic Management Act requires all Highway Authorities to appoint a Traffic Manager. The breadth and scope of the Network Management Duty require that this position has status and influence within and beyond the county council, providing a focal point and championing the need to consider the duty in all areas

of work. For this reason the role has been integrated into that of the Head of Transport. At this high level also, it has been recognised that there has to be in place a group with sufficient influence to ensure that the duty is being progressed and that network management issues are being considered across the board. Consequently a 'Network Management Board' was set up in 2006 for this purpose.

To support the Traffic Manager, a new Network Management division was set up within Oxfordshire's Transport Service, containing the following teams:

- Network Co-ordination
- Streetworks
- Transport Monitoring
- Traffic Signals
- Parking and Bus Lane Enforcement
- Traffic Regulation Orders.

The Network Management division is also responsible for the Traffic and Information Management (TIM) project, a function that is seen as a major component in Oxfordshire meeting its Network Management Duty.

The Network Management Plan is to be published alongside this Progress Report as an associated document to the Local Transport Plan. The following issues relevant to this Progress Report are dealt with in the Network Management Plan. The section numbers are given as a guide to where the issues are mainly dealt with.

| lssue | Section within Network Management Plan |
|--|--|
| Progress in delivering a change in travel behaviour sufficient to deliver the plan's congestion strategy | 3.3, 4, Annex A |
| Arrangements that have been put in place by the authority in order to manage the road network (section 17 duties) | 3.1 and 3.2 |
| Planning actions to be taken under section 16 of the Act | 3, Annex A and B |
| Performing the duty under section 16 of the Act | 3 |
| Appointment of traffic manager | 3.1 |
| Processes for ensuring identification of things which are causing road congestion on its road network, or other disruption to the movement of traffic on that network | 3.3 and 3.7 |
| Processes for ensuring identification of things, including future occurrences, which have the potential to cause road congestion on road network, or other disruption to the movement of traffic on that network | 3.4, 3.5 |
| Processes for ensuring consideration of any possible action that could be taken in response to, or in anticipation of, anything so identified? | 3.4, 3.5 |
| Determination of specific policies or objectives in relation to different roads or different classes of road in its road network | 4.1, 4.2, 4.3 |
| Monitoring the effectiveness of organisational and decision- making processes and the implementation of decisions | 3.2 and 5 |
| Processes for assessing performance in managing the road network | 5 |
| Evidence that exercise of Network Management Duty: | Annex A |
| Considers the needs of all road users; Co-ordinates and plans works and known events; Gathers information and provides information needs; Includes incident management and contingency planning; Deals with traffic growth; Works with all stakeholders – internal and external; Provides evidence to demonstrate network management; and Ensures parity with others. | |
| Self assessment of performance since 2006 describing what is in place and where further actions are needed | Annex A |

Delivering accessibility

3

The aim of the Accessibility Strategy outlined in the Local Transport Plan is to improve people's access to work, education, healthcare and other services by means other than driving. The Accessibility Strategy focused mainly on travel by bus and to a lesser extent walking. However accessibility is wider than this and encompasses a number of issues relating to access to services and people's ability to use them, particularly with regard to non-car based travel. This is reflected in the variety of targets associated with this objective.

3.1 Progress on targets

Our progress to date on the indicators outlined in this chapter is summarised in the following table:

| | On track | Not on track |
|------------------|----------|--------------|
| Core Targets | 3 | |
| Local Indicators | 3 | I |

3.1.1 Core Targets



Access to town centres

The target for bus access to a town centre within 30 minutes is based on a baseline figure of 87.1% of the population in 2005/06. The target is for annual increases of 0.1 percentage points to 87.6% by 2010/11. The actual figures show an annual decline of 0.1 percentage points to 87.0% in 2006/07 and 86.9% in 2007/08. It is therefore **not on track**.

It is difficult to identify how this small change relative to the base year and to the target has arisen. Since the population data and location of town centres has not changed, it appears to be the case that changes to commercial and supported bus services may explain this. However, the Accession model makes certain technical assumptions about walking and waiting times that mean re-timing a journey can change the size of the catchment area within 30 minutes of a town centre, even when there has been no real change.

The access to town centres indicator from the new National Indicator set has been selected as one of Oxfordshire's Local Area Agreement targets. A new definition and methodology for the indicator has been developed and it is the council's intention to agree a new baseline and target for this in early 2009 as part of this process. This will replace the existing indicator in future reporting.



Bus patronage

Bus patronage was 33.3 million in 2005/06 with targets to maintain this level in 2006/07 and increase it to 34.0 million in 2007/08. Actual performance has been above target, with 34.5 million in 2006/07 and 35.3 million in 2007/08. We are therefore **on track** to meet the target.

The introduction of free concessionary travel in 2006/07 naturally led to a large increase in bus patronage. The travel concession scheme in Oxfordshire is managed by the district councils. Usage data have only been received so far from four of the five authorities. These data show a 71% increase in pass use between 2005/06 and 2007/08. Even without data for Cherwell District, the absolute number of concessionary trips grew by 1.6 million from 2005/06 to 2006/07. Whilst the growth in passholder journeys thus exceeded the growth in all journeys it is believed that, in practice, many of the extra passholder trips are by people who previously paid or used travel tokens for the journey rather than being wholly new trips.

Between 2006/07 and 2007/08 passholder trips increased by a further 0.4 million. However much of the patronage growth in this period was also likely to be due to the various measures to promote greater bus use including pump priming funding of selected services, investment in bus stop infrastructure and Real Time Information and new bus priority measures. Oxfordshire remains the shire county with the highest rate of bus use per head in England as shown in the table opposite; a statistic made more remarkable by the county's relative affluence and predominantly rural nature.

| County | Number of bus passenger journeys | Population | Bus pass journeys per head |
|------------------|-------------------------------------|------------|-------------------------------|
| Oxfordshire | 34,892,229 | 626,200 | 55.7 |
| Lancashire | 62,270,000 | 1,152,200 | 54.0 |
| Durham County | 25,162,647 | 491,500 | 51.2 |
| Nottinghamshire | 34,028,525 | 748,400 | 45.5 |
| Derbyshire | 28,494,000 | 739,300 | 38.5 |
| Cumbria | 18,716,477 | 492,113 | 38.0 |
| Northumberland | 11,073,000 | 310,800 | 35.6 |
| Cambridgeshire | 20,149,713 | 565,700 | 35.6 |
| Cheshire | 23,200,000 | 675,800 | 34.3 |
| Gloucestershire | 19,271,825 | 564,000 | 34.2 |
| East Sussex | 16,871,087 | 496,100 | 34.0 |
| Norfolk | 27,727,231 | 816,500 | 34.0 |
| Hertfordshire | 32,700,000 | 1,041,300 | 31.4 |
| Suffolk | 20,866,188 | 668,548 | 31.2 |
| Northamptonshire | 19,089,736 | 629,676 | 30.3 |
| Essex | 39,468,954 | 1,324,100 | 29.8 |
| Kent | 47,136,895 | 1,600,000 | 29.5 |
| Staffordshire | 23,632,020 | 812,586 | 29.1 |
| North Yorkshire | 16,633,998 | 576,100 | 28.9 |
| Worcestershire | 15,246,166 | 552,000 | 27.6 |
| West Sussex | 20,856,785 | 762,930 | 27.3 |
| Wiltshire | 11,686,899 | 428,380 | 27.3 |
| Bedfordshire | 10,656,000 | 392,200 | 27.2 |
| Leicestershire | 15,680,000 | 615,500 | 25.5 |
| Surrey | 26,988,330 | I,060,500 | 25.5 |
| Warwickshire | 13,300,000 | 525,500 | 25.3 |
| Shropshire | 6,678,284 | 282,300 | 23.7 |
| Lincolnshire | 15,580,000 | 673,500 | 23.1 |
| Devon | 23,270,110 | 1,009,950 | 23.0 |
| Hampshire | 28,187,689 | 1,251,400 | 22.5 |
| Cornwall | 9,310,000 | 481,500 | 19.3 |
| Buckinghamshire | 9,260,975 | 479,026 | 19.3 |
| Dorset | 11,090,647 | 693,460 | 16.0 |
| Somerset | 7,426,339 | 498,000 | 14.9 |

Annual bus passenger journeys per head of resident population in English shire counties 2006/07

Cycling levels

Cycling index (2005/06=100)

In the Local Transport Plan the county council set a target of at least maintaining levels of cycling across the county at baseline levels. This level was a combination of expectations in Oxford and the larger towns (where there was the prospect



of achieving growth) and in the rural areas (where experience from the first Local Transport Plan had shown that achieving increases in cycling levels was extremely difficult).

Based upon a baseline of flows recorded in 2005/06 there have now been two further years' data collected on the countywide cycle monitoring network. In the first year (2006/07) the value was marginally down on that in the baseline but in the second year (2007/08) this reversed and the index was above the baseline. There is not sufficient experience in looking at indices such as this to see if this increase is a result of a real change or the result of sampling error attributable to daily or seasonal variation in cycling levels, however the latest year's results are **on track** to exceed the target.

School travel



Car journeys to school (%)

Against the original target set in the LTP our results in 2007/08 are **not on track**. However this change has been the result of improvements in the way that school travel data is collected which have resulted in a new target being set. Oxfordshire overall has the lowest proportion of car journeys to school of any of the English shire counties as shown in the table below.

| County | Percentage | County | Percentage |
|--------------------------|------------|-----------------|------------|
| Oxfordshire | 21.4 | Gloucestershire | 28.3 |
| Cambridgeshire | 22.1 | West Sussex | 28.3 |
| Northumberland | 22.1 | Warwickshire | 28.4 |
| East Riding of Yorkshire | 22.4 | Staffordshire | 29.5 |
| Durham | 22.4 | Norfolk | 30.2 |
| Nottinghamshire | 24.4 | Hampshire | 30.5 |
| Leicestershire | 24.7 | Dorset | 31.0 |
| Bedfordshire | 24.9 | Hertfordshire | 31.0 |
| Devon | 25.0 | Buckinghamshire | 31.5 |
| Derbyshire | 26.1 | Worcestershire | 31.6 |
| Somerset | 26.3 | Herefordshire | 32.5 |
| Northamptonshire | 26.3 | Kent | 32.6 |
| Wiltshire | 26.8 | Cheshire | 32.8 |
| North Yorkshire | 26.9 | Lancashire | 33.3 |
| Shropshire | 27.4 | East Sussex | 34.7 |
| Essex | 27.6 | Cornwall | 34.9 |
| Lincolnshire | 28.2 | Surrey | 37.1 |

Percentage of pupils that travel to school by car (All pupils aged 5-16) 2007

(Department for Transport, School Census Data 2008)

The percentage of journeys to school made by car (non-shared) was 22.2% in 2005/06, as measured by a hands-up survey methodology. The original target was to reduce this to 21.3% in 2006/07 and 20.4% in 2007/08, reaching 18.0% by 2010/11. In line with DfT guidance, Oxfordshire began monitoring journeys to school using data from School Census mechanisms for the 2006/07 year and set the 2006/07 year as a new baseline for monitoring journeys to school. Accordingly, the targets for reducing car use have changed to reflect a higher baseline car use figure, whilst in terms of actual number of car journeys saved, the targets remain the same.

Oxfordshire County Council has revised its Local Area Agreement target for reduction in (single occupancy) car use for journeys to school. The target is to reduce the value from 23.9% in 2007/08 to 21.0% in 2010/11 which equates to a 2,500 daily car journeys transferring to walk, cycle and public transport use. The target is being monitored annually, based on the data received from the Schools Census. Supporting this is a rolling programme of key actions – for example, the delivery of capital measures in the Better Ways to School Programme against which progress is monitored quarterly. A review of the Travel Plans update process has also been completed, which will lead to a focus on those schools which have the greatest potential for further mode shift to walk, cycle and public transport use (approximately 75 in total) to maximise the council's ability to meet the LAA target.

Bus satisfaction

Bus satisfaction was 52% in 2006/07 but this is only measured every three years. It will next be measured in 2009/10 when the target is 55%.

3.1.2 Local Indicators

Access to hospitals



Proportion of households with easy access to hospitals by public transport (%)

The target for bus access to a hospital within 30 minutes is based on a baseline figure of 36.7% of the population in 2005/06. The target is for annual increases of approximately 0.3 percentage points to 38.1% by 2010/11. The actual figures show an annual decline of 0.9 percentage points to 35.8% in 2006/07 followed by a large fall of 7.6 percentage points to 28.2% in 2007/08.

The initial small decline in 2006/07 can be explained by the closure of the Radcliffe Infirmary in central Oxford with the transfer of services to the Churchill and John Radcliffe Hospitals in the suburb of Headington. The further large decline in 2007/08 is not explicable in terms of changes to the bus network. Although the data on which the calculations were carried out has been checked, and some initial errors corrected, our consultants believe that the 2007/08 figure is correct but that the previous figures are not. Our intention with access to hospitals is to produce a new 2008 baseline using the improved Accession model produced to model National Indicator 175. A new trajectory for this indicator will also be set and monitoring will continue against this.

School travel plans



Schools with approved travel plans (%)

The target for the percentage of schools with approved Travel Plans was 39% in 2005/06 with targets for a modest increase to 41% in 2006/07 and 62% in 2007/08. The county council's Travel Plans Team has however enjoyed considerable success and has exceeded these targets by a large margin, achieving 65% in 2006/07 and 83% in 2007/08 and is therefore **on track**. As a result, the target for achieving 100% coverage has been brought forward from March 2010 to March 2009. This indicator will cease to be reported upon when the target of 100% is reached.

Rights of way



Ease of use of rights of way

In 2005/06 the survey of rights of way showed that 63% met the defined standard for ease of use, according to the various criteria agreed at national level. The target, based upon the actions in the county's Rights of Way Improvement Plan, was to increase this to 66% in 2006/07 and then by one percentage point in each subsequent year (i.e. 67% in 2007/08).

The surveys in 2006/07 and 2007/08 showed above target results of 74% and 72% respectively. However, these are the results of an annual survey of 5% of the rights of way network. This method inevitably generates random variations from year to year and it is only in the longer term that any clear trend can be determined with confidence. However the indications are that this indicator is **on track** to meet its target.

Pedestrian crossings



Pedestrian crossings with facilities for disabled persons

The percentage of pedestrian crossings with facilities for disabled people was 65% in 2005/06 with targets of 67% in 2006/07 and 75% in 2007/08. Significant levels of investment and an approach of focusing on "quick wins" achieved 76% in 2006/07 (one year ahead of the target) and 86% in 2007/08 (better than the 85% target

for the end of the LTP in 2010/11). Improving the remaining crossings will be more difficult and expensive so a revised internal target has been set to achieve 87% in 2008/09, 88% in 2009/10 and 89% in 2010/11.

3.2 Future accessibility monitoring

Oxfordshire has a relatively good bus network serving all but the smallest settlements. The main factor underlying the size of the catchment areas for both town centres and hospitals is simply distance. While measures such as bus priority and some of the junction improvements to improve access to Oxford from outside the city can help, it is proving difficult to influence these figures. In time, new patterns of settlement (as reflected in future population data from the next census) will have a positive impact, but not within the duration of the current Local Transport Plan.

The main benefit of this work is the opportunity to map the data and identify the small number of locations where access to the nearest town centre or hospital appears (intuitively and from local knowledge of the bus network) to be poorer than expected. This may enable these anomalies to be resolved when, year by year, supported local bus services are reviewed. The newly updated Bus Strategy highlights the importance of the accessibility target.

We are currently calculating new base year figures on a slightly different basis for the Local Area Agreement (LAA) target. This will, in future, assess the percentage of the rural population within 30 minutes of a town centre between 8am and 11am. This target was revised to remove a potential conflict between achieving the target (previously, as for the LTP, between 8am and 10am) and delivering real improvements to accessibility to concessionary pass holders, many of whom are unable to travel before 9.30am. In association with this LAA target the county council will be monitoring accessibility to employment opportunities in line with the new National Indicator.

It is also intended to calculate a new base year figure in 2008 for access to hospitals. This will be based on 60 minutes travel rather than 30 (the basis for the current indicator), as this is considered a more meaningful measure for access to major hospitals which are a less everyday destination than town centres, and for which longer journey times are more likely to be acceptable.

3.3 Bus subsidy decisions

Buses make a significant contribution to ensuring people's access to work, education, healthcare and other services. During 2005/06 the county council carried out a major study of accessibility in Oxfordshire by bus and walk, using the Accession software developed by the Department for Transport.

As part of that work, the county council adopted a target of increasing the proportion of households within 30 minutes of a town centre by public transport from 87.1% in 2005/06 to 87.6% by 2010/11. This has been followed by the adoption of a Local Area Agreement to achieve the same result (although, as stated above, it is intended that this will be monitored using a revised methodology). In addition,

a Local Target was adopted to increase the proportion of households within 60 minutes of a major hospital by public transport from 73.5% in 2005/06 to 75.0% in 2010/11.

A major part of achieving these targets is necessarily through the support of noncommercial bus services across the county. The county council assesses the services it supports through a rolling 4-year programme of reviews. At an early stage in the review of existing services, officers consider the results of accessibility analyses covering the review area and compare them with the network of bus services in the area. Taking account of the results of any recent work on accessibility and any relevant views of the countywide stakeholder working group, they aim to identify ways in which bus services in the review area might be changed to increase local accessibility in cost-effective ways.

Local consultees will then be told of any potential changes, and their opinion sought on them. Taking account of consultees' views, these service changes will be included amongst the options for which tenders are invited from operators. When the final decision is made on subsidy allocations, an assessment of whether adopting that option would increase, reduce, or have a neutral effect on the measured accessibility (compared to the pattern of services in existence immediately prior to the review) is made. Preference is given to options which would increase accessibility. 4

In 2007 Oxfordshire saw a reduction of 50% in fatal casualties over the previous year; down from 68 to 34. During that year Oxfordshire also experienced a drop of almost 300 in the overall casualty figures; the lowest since 2004, and the second lowest since 1999.

These figures coupled with the general downward trend in casualty numbers are helping the county continue the good progress it is making towards meeting the national casualty reduction targets for 2010, and also the more stringent targets set in Oxfordshire's Local Transport Plan. More work is still required though to reduce accidents for particular groups, particularly vulnerable road users.

4.1 Progress on targets

Significant resources have been directed towards achieving the LTP's challenging casualty reduction targets recognising not only the very high human and other costs of accidents but also the contribution that improved safety makes in support of wider transport objectives. Our progress to date on the indicators outlined in this chapter is summarised in the following table:

| | On track | Not on track |
|------------------|----------|--------------|
| Core Targets | 2 | I |
| Local Indicators | 1 | 3 |

4.1.1 Core Indicators







Child casualties (killed or seriously injured)





Progress towards meeting two of the Core Targets has been satisfactory, with reductions in the number of children that are killed or seriously injured (KSI) and the number of slight injuries being **on track** to achieve Oxfordshire's 2010 'Stretch' target.

For all KSI, the picture is less clear – good progress was seen through to 2005, following which numbers appear to have increased slightly and is therefore **not on track**. However, in 2006 and more particularly 2007, revised procedures were put in place in partnership with Thames Valley Police to help validate the severity of injury (between the slight and serious categories) with much more confidence. The net effect of this improved accuracy in 2007 was to add almost 10% to the KSI total above that which was recorded through the initial severity coding by police officers.

Allowing for this, the actual trend in KSI is perhaps in reality appreciably closer to the target trajectory (had the improved methods been applied to pre-2007 data, it is very probable that a very similar level of additional serious injuries would have been identified).

It is interesting to note that, as with other neighbouring authorities, the general reduction in overall casualty numbers is primarily accounted for by a reduced number of car occupant injuries.

4.1.2 Local Indicators

To complement the National Targets the county council set a series of Local Targets to reduce the number of casualties for more vulnerable road users and also for the number of accidents attributable to vehicles skidding in the wet. The treatment of locations where accidents involving vulnerable road users have occurred has been a focus of our attention over a number of years. This has brought about significant reductions in casualty numbers but there are now few locations where specific local action would bring benefits. As a consequence, the focus of our efforts has shifted towards route or area wide actions, particularly targeted towards speed reduction.

Pedestrian casualties



Cyclist casualties



Cyclist casualties





Less satisfactory progress has been made towards achieving these Local Targets with numbers of injuries to pedestrians, pedal cyclists and powered two wheel vehicle users increasing or remaining stable in recent years. These indicators are **not on track** to meet their targets. There is at present insufficient data to establish whether increased levels of walking and cycling may in part be contributory reasons for this.

Speed management is likely to offer a more viable means of contributing to the reductions required. In addition to the targeted programme of reduced speed limits on (predominantly) rural roads with high accident rates, the council is taking forward a project to introduce 20mph speed limits across the majority of roads in within Oxford, backed up by supporting measures where necessary and appropriate. This comprehensive scheme will include all minor residential roads, most through routes and targeted sections of the main road network where there is significant frontage activity (through the local shopping centres of Summertown and Headington, for example). An extended city centre area covered by 20mph is also proposed. Informal public consultation on the scheme has now been completed, with a clear majority in favour of the proposals, and a detailed scheme is now being drawn up for formal consultation early in the new year and implementation in the summer of 2009.

The benefits of this scheme are expected to be a reduction in casualty levels (Oxford accounts for a significant number of the county's pedestrian and cyclist injuries for example) as well as wider 'quality of life' benefits resulting from a more pleasant environment for all. If this is found to be effective, then similar proposals may be considered for other urban areas in the county.

Other initiatives, for example tackling the perceived (and often real) conflict between buses and cyclists, are being actively pursued in partnership with the local bus operators and cycling groups, which have recently worked together to produce a joint leaflet.

Powered two wheel (PTW) casualties, especially those of higher severity sustained by recreational riders on the rural road network, have proved very difficult to address, and at present it is still far from clear as to how this problem can be effectively tackled. Current factors such as escalating fuel costs may lead to increasing use of smaller motorcycles (in place of cars) for commuting trips, which would be likely to result in higher casualty numbers. Despite continuing to identify possible new approaches or local measures to help reduce PTW casualties, we have to acknowledge that this will continue to be a problematic area to effectively address.

| | National Target | Oxfordshire Target | Changes in injuries 1994/98 - 2007 | |
|---|--------------------|-----------------------|---------------------------------------|-------------|
| | | | Great Britain | Oxfordshire |
| Core Targets | | | | |
| Reduction in number of people killed or seriously injured | -40% | -50% | -36% | -31% |
| Reduction in number of children killed or seriously injured | -50% | -60% | -55% | -55% |
| Reduction in number of people slightly injured | -10% | -20% | -20% | -17% |

| | National Target | Oxfordshire Target | Changes in injuries 1994/98 - 2007 | |
|--|--------------------|-----------------------|---------------------------------------|-------------|
| | | | Great Britain | Oxfordshire |
| Local Targets | | | | |
| Pedestrian injuries | n/a | -50% | -33% | -25% |
| Pedal cyclist injuries | n/a | -50% | -33% | -18% |
| Powered two wheeler rider injuries | n/a | -20% | -8% | -4% |
| Reduction in wet skid injuries | n/a | -15% | n/a | -39% |

Wet skid accidents



Wet skid accidents have reduced for the past two years, are **on track** and in 2007 were below our target for 2010. This good return may be in part due to weather conditions but may also reflect the priority given to locations where skid accidents have occurred in developing the council's annual road re-surfacing programme. Our intention is to continue to monitor and report upon all of the road safety Local Indicators.

4.2 Road safety activities

4.2.1 Road safety strategy

As recognised in both the national road safety strategy and the Local Transport Plan the target casualty reduction will only be achieved through a wide range of interventions at both the national and local level. It is also important to bear in mind that the casualty totals reflect a complex interaction of diverse factors.

4.2.2 Partnership working with other agencies

At a local level, an appreciable amount of work is carried out in partnership with others, including the police, health service and other local agencies. Our work as an integral part of the Thames Valley Safer Roads Partnership (TVSRP) is particularly significant; the changes in the funding arrangements which came into effect in 2007/08 provided an opportunity to widen the contribution of TVSRP beyond its core role in supporting the use of safety cameras to include other measures. This has facilitated the expansion and development of work including roadside operations targeting specific hazardous behaviours (an example has been the funding of a dedicated road safety exhibition and public consultation vehicle as part of this work) and also the commissioning of additional 'Theatre in Education' performances, including a new production targeting seat belt use. Other partnership working has been carried out with Neighbourhood Action Groups, the health service and road safety charities such as Brake.

The council's first formal Road Safety Strategy was published in 2007 to ensure that the wide range of activities required of the county council and its core partners was clearly defined to enhance higher level planning of the delivery of road safety services. Within Oxfordshire County Council, the Strategy formally integrates the contributions made by the Road Safety team and others in the Transport Service with the contributions of other services to support the delivery of road safety education and awareness campaigns.

The council's Fire & Rescue service has taken a greater role in road safety work following the Fire and Rescue Services Act 2004, including the development and delivery of targeted education programmes aimed at Key Stage 4 pupils under the theme of 'choices and consequences'. A holistic approach to the delivery of education and training across the whole school age range is now being put together, irrespective of which part of the council is responsible for delivering any individual activities. Some education measures – in particular child pedestrian and cyclist training – have a dual aim: helping prepare children for a lifetime of safer use of the road, and hopefully also encouraging the walking and cycling to support the council's wider transport and health objectives.

Decisions on the interventions to progress locally are taken after careful and frequent analysis and monitoring of the traffic accident data as supplied by Thames Valley Police. It is important to identify the main problem areas (whether these be the geographic sites, routes and areas which have accidents which can be cost effectively addressed through engineering measures) or road user groups with a high risk of accident involvement. Enhanced methods of identifying the higher risk road user groups by socio-economic profiling are being developed by TVSRP to improve the targeting of education and publicity measures. In addition to the police data, we have also liaised with the health service to compare the trends observed in hospital admissions following road traffic accidents to help obtain a broader picture of the road casualty problem.

4.2.3 Safer road infrastructure

A wide mix of schemes including single site treatments and route action measures has been carried out. It is too early to reliably assess the accident reductions obtained through these but on the basis of monitoring of past schemes of this type, it is estimated that such schemes will in aggregate achieve a 30% reduction in accident frequency at the treated locations. In addition to new works, targeted maintenance measures have been applied to address skid resistance problems in particular; this work has significantly benefited from the more effective integration of the traffic accident and road condition data in the county's Pavement Management System.

Increasing emphasis has been placed in recent years on route action and mass action treatments. As past accident remedial schemes have largely addressed the sites most amenable to standard site specific remedial treatments, a high proportion of KSI accidents now occur on the rural road network away from accident cluster sites. A programme of introducing 50mph limits on rural routes with above average accident rates has continued and a recent example of mass action work has been a programme of measures to help address accidents on rural bends. This change of emphasis requires increasing innovation in the specific engineering measures used and also in developing approaches which more effectively integrate engineering with other interventions (such as targeted education and speed enforcement).

4.2.4 Road Safety Education, Training and Publicity (ETP) measures

A wide ranging package of ETP measures has been delivered. Child pedestrian and cyclist training programmes (although not specifically targeting high numbers of casualties) contribute to achieving the challenging child KSI target. They also support our objectives of achieving higher levels of walking and cycling to school to tackle congestion, climate change and obesity. The training reaches a high proportion of children through the contribution of a large number of trained volunteers. The programmes are offered free of charge to all schools in Oxfordshire and are being expanded with the assistance of Cycling England grant funding.

Measures targeting the higher risk teenage years have included Theatre in Education productions which seek to develop safer behaviour and attitudes in areas such as alcohol use and speed.

Pre- and young-driver education and publicity measures are largely carried out in partnership with other agencies, including the police, TVSRP and the Fire & Rescue service. Examples include the highly acclaimed *Safe Drive Stay Alive* presentation which presents to young people the real life lasting consequences of road accidents not only for surviving victims, but also for the family and friends of those killed and seriously injured.

Other activities include Older and Wiser, a pilot programme of workshops offering advice and an assessment for older drivers. Road-user psychology work in partnership with behavioural experts helps to identify programmes which can best affect attitudes and behaviours. Joint roadside operations targeting specific behaviours (such as speeding, mobile phone use and seat belt usage) are also carried out with the police and Fire & Rescue service.

4.2.5 20 mph in Oxford

Oxfordshire County Council has carried out a public consultation on proposals to introduce 20mph limits in 2009 on:

- All minor residential roads within Oxford ring road;
- All un-numbered through roads except where they are part of heavily-used bus routes into the city; and
- Some sections of the main A and B road network through busy shopping areas.

20mph speed limits, which are designed to be self-enforcing, can reduce accident levels especially when associated with traffic-calming measures, and can bring other benefits, such as creating a more pleasant environment and encouraging more walking and cycling.

Depending on how the current consultation stages of the project progress the scheme could be implemented on the ground in the summer of 2009. This timescale is based on a single speed limit order covering the whole of the city (plus Botley/ North Hinksey) with those roads not covered to be identified by exemption and all limits proposed to be introduced at the same time.

OXFORD - PROPOSED 20mph LIMITS



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A preliminary estimate of around \pounds 250,000 - \pounds 300,000 has been obtained for the supply and installation of the speed limit signs needed to create legally enforceable limits. This estimate is based on an indicative number of signs and poles, which may vary once the scheme is finally specified. Funding for the scheme will come from a number of sources including the road safety programme, developer contributions and bus lane enforcement charges.

4.3 Planned road safety activities

During the remainder of the LTP period it is anticipated that the programme of engineering and ETP measures will continue to be broadly funded at current levels. The additional grant allocation for road safety measures from 2007/08 to 2010/11 following the changes to safety camera operations will however be reducing in accordance with the schedule announced at the time the change was introduced.

Close monitoring of the overall casualty trends and the performance of specific interventions will be carried out to help ensure that these remain cost effective; similarly the opportunity to exploit new approaches and opportunities will be regularly reviewed. Examples of planned new work include the use of vehicle activated signs that can be easily transferred between sites and the commissioning of a Theatre in Education production targeting seat belt usage. We are also planning to carry out in 2008/09 the general review of speed limits on the A and B class road network as requested in DfT Circular I/2006. The implementation of any changes is provisionally programmed for late 2008/09 and 2009/10. This work is anticipated to help consolidate previous speed management work which has proved effective in reducing casualties.

Similarly there are a number of ETP initiatives (for example more targeted interventions for high risk user groups as identified through detailed analysis of casualty post code data using socio-economic profiling techniques) that are being explored in conjunction with TVSRP. We also anticipate an increase in multiple objective schemes (building on the success of the Cowley Road Improvement) and also wider multiple objective strategies (such as the Sustainable School Transport Strategy).

Although national work on developing targets to follow on from 2010 is still at a very early stage, it is understood that one possible approach is to seek a specific target on fatal casualties. The recently developed joint working with Oxfordshire Fire and Rescue service has a particular focus on seeking to help tackle the high risk behaviours (such as failure to wear seat belts) which appear to feature disproportionately in fatal accidents.
5

Air quality across Oxfordshire is generally good but there are a number of areas in the county where elevated levels of pollutants have been detected. Where this is so the county and district councils are committed to working together to develop proposals to reduce or eliminate these problems. In some cases the air quality problem comes on top of identified congestion or street environment problems, particularly in town centres, where integrated schemes need to be developed.

5.1 Air Quality Strategy

The Environment Act 1995 established a National Air Quality Strategy, adopted in 1997. Part of this strategy requires local district councils to carry out a periodic review and assessment of air quality within their areas.

District councils are required to monitor the following pollutants against national standards (known as air quality objectives) as outlined in the National Air Quality Strategy:

- nitrogen dioxide (NO₂)
- sulphur dioxide (SO₂)
- carbon monoxide (CO)
- fine particulates (PMI0)
- lead
- benzene
- I,3-butadiene

Where the objectives are exceeded then the district council will declare an Air Quality Management Area (AQMA). If the main source of the problem is traffic then the county council, as transport and highway authority, nominates an officer to work with the district council to develop a workable Action Plan for the area. In the Action Plan proposals to deal with the identified problem are put forward.

There are currently eight declared Air Quality Management Areas (AQMAs) in Oxfordshire (Abingdon, Botley, central Oxford, Green Road Oxford, Chipping Norton, Henley, Wallingford and Witney). In addition a number of other sites are currently being investigated in detail to see if further declarations are required, as shown on the plan overleaf. In all the AQMAs in Oxfordshire the declaration has been made on the basis of the annual average level of nitrogen dioxide (NO₂) although

Oxford City Council is also currently investigating whether a further declaration is required on the basis of peak concentrations of NO_2 in Oxford city centre.

The general trend is for a reduction in emissions per vehicle as the vehicle stock is replaced by newer vehicles meeting higher emissions standards. However this downward trend can be offset locally if traffic growth exceeds these reductions; overall emissions increases are even more likely if traffic growth results in increased congestion. Predictions of future emissions have to include consideration of future traffic levels and composition, and the manner of future traffic flow through an area.



Air quality management areas

5.2 Air quality targets

Of the current six AQMAs only two (central Oxford and Henley) have adopted Action Plans and have therefore set targets for improving air quality. Our progress to date on these indicators is summarised in the following table:

| | On track | Not on track |
|--------------|----------|--------------|
| Core Targets | 1 | I |

Oxford

An AQMA was declared in 2001 covering a number of streets in the centre of Oxford on the basis of annual average concentrations of NO_2 . It was extended in 2003 following a Further Assessment. Of the streets in the AQMA the highest concentrations are found on Queen Street (estimated 98 µg/m³ in 2005), St Clements Street (85 µg/m³), High Street and George Street (both 81 µg/m³).

An Action Plan for the city centre was agreed by the city and county councils in 2006. The main elements of the Plan are as follows:

| High impact on air quality | Medium impact on air quality | Low impact on air quality |
|---|--|---|
| Low emission zone | Action to stop idling vehicles | Roadside testing of emissions |
| Bus gate enforcement | Review of commercial delivery times | Bus quality partnership |
| Improved phasing of traffic lights on city centre bus priority route and key radial routes | Improved bus priority | Advanced bus ticketing |
| | Residents'/controlled parking zones | Review of city centre parking policy |
| | High Street Improvement | School and workplace travel plans |
| | Cycling and Walking improvements in and on approaches to city centre | Taxi Quality Partnership |



Air quality in central Oxford (St Aldates)

The monitoring for Oxford has shown a decrease in the level of NO_2 , probably as a result of the continuing introduction of newer, less polluting buses, but remains significantly above the objective level of 40 µg/m³. In March 2008 Oxford City Council began to enforce a ban on vehicles keeping their engines running while stationary in the city centre. The figure for St Aldates in 2007 was 57 µg/m³. It is therefore **on track** to meet the target.

Henley

An Air Quality Management Area for Henley was declared in January 2003 following modelled concentrations of NO_2 at the facades of buildings in Duke Street of 62.6 μ g/m³. The area covers most of the main shopping streets in the town plus some adjoining residential areas. An Action Plan was agreed by the district and county councils in May 2007.

| The | Action | Plan | includes | the | following | measures: |
|-----|--------|------|----------|-----|-----------|-----------|
|-----|--------|------|----------|-----|-----------|-----------|

| High impact on air quality | Medium impact on air quality | Low impact on air quality |
|---|--|---|
| Restricting vehicular access via a one way system on Duke Street as part of Integrated Transport Scheme | Increase parking enforcement to reduce congestion and misuse of delivery bays | Education to encourage local businesses and residents to walk, cycle or use public transport for short journeys |
| Restricting HGV access | Action to stop idling vehicles whilst waiting or loading | Emissions reduction through use of alternative fuels |
| Reduce congestion | | Improve public transport |
| | | School and workplace Travel Plans |
| | | Cycling initiatives |
| | | Planning initiatives |

Work on an Integrated Transport Scheme comprising a change in the routeing of vehicles through the town centre together with environmental improvements and restrictions on loading and parking started in June 2006 and was largely completed by January 2007 although work on environmental improvements in the town centre continued through much of the year. The need for further physical measures in the town will be assessed when the impact of these measures is clear. The need for more education is being addressed by the launch of the Henley Clean Air Campaign supported by the district, county and town councils with a website (www.henleyairquality.com) and associated newsletter.



Air quality in Henley (Duke Street)

The target level for Henley includes an allowance for improvements in the emissions standards for vehicles as well as an assessment of the likely impact of the measures included in the Action Plan. While the combination of these is a predicted 14% decrease in concentrations of NO_2 , this will remain above the objective level of 40 μ g/m³. The figure for 2007 was up to 53.7 μ g/m³, which may have been the result of the disruption in the town centre caused by the construction of the Integrated Transport Scheme, and is therefore **not on track**.

5.3 Other air quality areas

An Officer Steering Group from the five district councils and the county council has been set up to share knowledge and expertise in the development of Action Plans and provide a more strategic decision making framework for dealing with air quality across the county. All the information available on air quality across the county can be accessed through a single page on the county council website: (oxfordshire.gov.uk/airquality).

The following section outlines the current situation within those areas where air quality management areas have been declared in Oxfordshire but no Action Plan has currently been agreed and also those where investigations are still progressing and declarations may be made in the future.

Cherwell district

There are currently no declared AQMAs in Cherwell district. However investigations are continuing in the following areas:

Banbury – Three areas have been identified for detailed assessment: Horsefair, Oxford Road and Bridge Street.

Bicester – One area has been identified for detailed assessment: Market Square.

Oxford city

An Air Quality Management Area was declared in May 2005 for the area immediately surrounding the A40 Green Road Roundabout in Headington. An improvement was already planned for this location comprising the conversion of the roundabout into a traffic signal controlled "hamburger" junction. The development of an Action Plan was deferred until the impact of this scheme on air quality could be assessed. Indications from this post-scheme monitoring are that there remain some areas surrounding the roundabout which exceed the objective level.

The joint city/county council steering group for the implementation of a Low Emission Zone is now halfway through its feasibility study work for completion later in 2008. The Transform Oxford project is expected to have a significant impact on the air quality of the city centre above that which was envisaged in the Action Plan.

Detailed assessment work is being undertaken to review city centre AQMA and Green Road area (where a Further Assessment is being carried out to consider the impact of the recent major improvement scheme) together with assessments on a list of areas where there may be potential problems; initial indications are that new AQMAs are required at the following locations:

- Cowley Shopping Centre, and junction of Between Towns Road and Oxford Road;
- Headington Shopping Centre, including junction of Windmill Road and London Road;
- Summertown Main Shopping Parade (West);
- Wolvercote and Cutteslowe Roundabouts; and
- Junction of Abingdon Road and Weirs Lane.

South Oxfordshire district

Didcot – Diffusion tube monitoring in Didcot has indicated elevated concentrations approaching objective levels of NO₂ in the centre of town (annual average concentrations of between 30 and 36 μ g/m3 NO₂ between 2002 and 2006 on Broadway) and further air quality monitoring will be required in this area to confirm levels. South Oxfordshire District Council has recently granted planning permission for a residential development for 3,200 dwellings at Great Western Park in Didcot and to assess the impact of the development an analyser is to be installed, paid for from the local developments.

Wallingford – An Action Plan was due to be produced by December 2007 but South Oxfordshire District Council has asked DEFRA for this to be put on hold for a year to allow for the trial of traffic management schemes to be carried out. Of the options already considered re-routeing was not deemed acceptable on safety grounds; the scheme now being considered is a "gating" scheme with traffic being held in Crowmarsh – public views are not known.

Watlington – Indications to date are that there may be a need to declare an Air Quality Management Area in Watlington in 2008. Annual mean concentrations in 2005 on Shirburn Steet and Couching Street were near or over the objective level (39.6 and 41.4 μ g/m3 NO2, respectively). While the levels in 2006 were slightly reduced, and the predictions of 2010 are also for below the objective, the district council have begun a Detailed Assessment to allow a final decision to be made.

Vale of White Horse district

Abingdon – An AQMA for central Abingdon has been in place since August 2006. Nitrogen dioxide levels were estimated to have exceeded the objective levels in 2005 on High Street, Strurt Street, Bridge Street, Stratton Way and the Vineyard. Predictions of the levels in 2010 showed that exceedances would still occur on High Street and Sturt Street.

At the time of the declaration the Abingdon Integrated Transport Strategy (AbITS) was already in an advanced stage and, as the indications were that these measures would improve emissions within the declared area, the production of an Action Plan was postponed until after the completion of these works.

| Location | Estimated concentrations 2005 (from observations) | Estimated concentration 2010 (modelled) |
|---------------|---|---|
| Sturt Street | 59.8 | 45.8 |
| High Street | 63.2 | 48.4 |
| Bridge Street | 42.5 | 32.5 |
| Stratton Way | 43.3 | 33.1 |
| The Vineyard | 46.3 | 35.5 |

Works to AbITS Phase I traffic management were implemented in October 2006. Accurate traffic count data will assist in defining the extent of the improvements in air quality and should provide an assessment of the impact of the AbITS phase one works. Early predictions show an improvement in air quality in some areas but it is likely that the AQMA designation will remain. The district council intend to agree and submit an Action Plan in 2009 following which a target for improvement will be agreed.

Botley – Detailed Assessment has indicated exceedences of the air quality objective for NO_2 at properties alongside the A34 in Botley. Estimated corrected annual mean concentrations of NO_2 were up to 43.1 µg/m³ on Westminster Way and up to 57.0 µg/m³ on Stanley Close (although values between individual properties varied considerably on both these roads). Vale of White Horse District Council consulted, in January 2008, on the extent of the area to include and declared an AQMA earlier this year.

The A34 is a Trunk Road controlled by the Highways Agency; however some of the properties front onto county roads and other county roads feed into the A34 Botley Interchange just to the north of the proposed AQMA. Changes which impact on these roads could impact on the flow of traffic in the AQMA.

West Oxfordshire district

Chipping Norton – An AQMA was declared in January 2006 for Horsefair and High Street together with sections of adjoining roads. An air quality assessment in January 2007 confirmed an earlier assessment at these roads, together with the junction of West Street and Burford Road were likely to exceed the objective level with the concentration of NO₂ on the facades of buildings on Horsefair estimated at between 40 and 61 μ g/m³.

Heavy goods vehicle through-traffic has been identified as the main source of local emissions. Three major options were considered in the draft Action Plan: an upgrade of local roads to allow heavy vehicles to be diverted onto them; the imposition of a weight restriction and signing of heavy vehicles onto an alternative route; and the use of traffic signals to control passage of vehicles through the affected area. It is unlikely that any of these measures would be sufficient in themselves to wholly remove the need for an AQMA at today's levels. However air quality predictions for the town suggest that the base level problem would become significantly less severe simply through the expected change in emissions standards on the vehicle fleet and that this change, in combination with one or more of the measures, could remove the need for designation.

A draft Action Plan was completed in October 2007 and a consultation on this took place in March 2008. The results of this consultation were considered by District and county councils in September 2008 and a final version of the Action Plan is due to be adopted and submitted in late 2008.

Witney – No automatic monitoring is taking place at the moment but funding is now available for the district council to begin this. There is a need to consider the impact of major development in town centre (both during construction and once completed) and the planning decision on implementation of the Cogges Link Road is likely to be a major determinant for what can be included in a forthcoming Action Plan.

Streets that are dominated by traffic or poorly designed can be unpleasant to spend time in, particularly for pedestrians. A high quality street environment, on the other hand, can add to the vitality of the street, attracting visitors, boosting businesses and creating a pleasant public space for people to relax in and enjoy.

6.1 Progress on target

6

A consultation exercise into the quality of the street environment in Oxfordshire's town centres and shopping parades took place in the spring/summer of 2006 and 2007 using the Oxfordshire Citizens' Panel. The Citizens' Panel were asked how satisfied they are with the overall quality of the street environment in the town centre or shopping parade they visit most often in Oxfordshire. The graph shows the percentage net satisfaction between the two survey years, and the trajectory until 2010. Net satisfaction was calculated by taking the percentage either 'very satisfied' or 'satisfied' and taking away the percentage either 'very dissatisfied' or 'dissatisfied'. The trajectory has been set based on improvements to the street environment at various locations throughout the county, and the percentage contribution of these to the overall figure.



Street environment in the town centre visited most often

For the town centre/shopping parade visited most often, panel members were also asked to rate the street environment in that town centre/shopping parade against thirteen key criteria, using a satisfaction/dissatisfaction rating scale. The table shows the net satisfaction for 2006 and 2007 for the 13 categories, and the percentage change between the two years.

| | Net Satisfaction (%) | | | |
|---|----------------------|------|---------------------------------|--|
| | 2006 | 2007 | +/- 2007 compared to 2006 | |
| The cleanliness of the streets | 32 | 43 | + | |
| The appearance and quality of pavements and road surfaces | 7 | 4 | +7 | |
| The appearance and quality of street furniture | 35 | 43 | +8 | |
| The provision of seating and places to rest | 14 | 17 | +3 | |
| The appearance of greenery and floral displays | 37 | 49 | +12 | |
| The quality of street lighting | 58 | 65 | +7 | |
| The external appearance of shops and other buildings | 35 | 40 | +5 | |
| Feeling safe from traffic | 26 | 35 | +9 | |
| Feeling safe from crime during daylight hours | 66 | 75 | +9 | |
| Feeling safe from crime during hours of darkness | 2 | 13 | + | |
| The quality of the air | 13 | 23 | +10 | |
| The amount of noise from traffic | 7 | 12 | +5 | |
| Being able to cross the road safely and easily | 29 | 33 | +4 | |

The table shows that there is an improvement, in many cases significant, across all thirteen categories when comparing 2007 to 2006 results.

6.2 Improvement activities

6.2.1 Town centre improvements

Identifying those areas where transport contributes to an overall problem in the quality of street environment is not an easy task and to a degree will always be a subjective matter. Action has been focused on areas where there is a high level of both pedestrian and vehicular activity. Areas identified as having a poor street environment are those with high volumes of traffic and a layout, design and finish that detract significantly from the overall appearance of the street.

Every reasonable opportunity will be taken by the county council to improve the design and layout of streets as part of other transport improvements or maintenance, using high quality materials and street furniture wherever possible. The county council has worked successfully in partnership with town and district councils in the past to develop street enhancement schemes.

Oxford

Street environment conditions in Oxford city centre have been improved by restricting unauthorised vehicles entering certain roads. The Oxford central area bus lane enforcement on Magdalen Street, George Street, High Street and Castle Street uses cameras to detect unauthorised vehicles, issuing penalty charge notices when a contravention has occurred.

Significant improvements to Oxford High Street have been made since the start of the LTP involving the use of high quality materials and the reduction of unnecessary clutter. Phase I (Carfax to Turl Street) of the High Street improvements was completed in September 2006, with Phase 2 (Longwall Street to The Plain Roundabout) completed in October 2007. Phase 3 (Turl Street to Longwall Street) is due to commence in April 2009 and aims to reduce clutter. Originally, high quality materials were to be used as in phases I and 2, however funding issues have arisen which may prevent the use of these.





High Street – before improvements

High Street – after improvements

Works are currently being undertaken in the Summertown and London Road areas which will improve conditions in these major suburban centres. The Transform Oxford project will bring substantial improvements to the quality of the streetscape of the city centre over the next decade.

Abingdon

In Abingdon, the narrowing of Stert Street to one lane for traffic, thus increasing the width of the footways for pedestrians has significantly improved the environment on this street. On Stratton Way, a new bus waiting area with high quality, well designed bus stops have been installed.

Henley

In Henley, Duke Street has been converted from two-way to one-way, single lane for traffic. This has allowed the widening of the footways and the provision of off-carriageway loading bays preventing conflict between pedestrians and vehicles. Through additional funding from South Oxfordshire District Council, high quality materials for footways have been used in Duke Street complementing the conservation area. In January 2009 work is set to commence on the street environment improvements on Bell Street, again involving the use of high quality materials, narrowing of the carriageway, widening of the footways and provision of loading bays.

6.2.2 Walking & cycling

Improvements to walking and cycling infrastructure to increase the attractiveness of these modes relative to motorised modes contributes to creating a better street environment by reducing volumes of motorised traffic.

Several improvements have been made to the Oxford Cycle Network including a new toucan crossing on Headley Way, surface improvements on various routes and upgrades on the Donnington Bridge to Folly Bridge towpath cycle route. Safety improvements have also been made to the Plain Roundabout. The Fairfax Avenue/ Purcell Road cycle link is to be pursued in the remaining duration of the LTP which will extend an existing off-road route into the city centre to further residential areas of the city.

In Abingdon some funding has been made available to improve conditions for cyclists. These improvements are expected to be made by the end of 2008 and are likely to include cycle parking, a small number of necessary signs, lining and resurfacing work. Funding from developments has also allowed improvements to be made in Banbury and Witney and are planned for Carterton.

6.2.3 Travel planning

Promotional efforts such as Travel Plans and better information provision can make walking, cycling and public transport more attractive, and enable the public to make better informed travel choices.

The Government requires all schools to have a School Travel Plan (STP) by 2010. Oxfordshire County Council is ahead of the national milestones for the project and has set its own stretch target for every Oxfordshire school to have a STP by 2009. Since 2006, 200 STPs have been approved with 83% of schools in Oxfordshire having an approved STP by the end of 2007/08. In 2008/09 the council is focusing on independent schools, which tend to have different catchment areas and travel patterns to those of maintained schools. A targeted approach to this market has been developed. Travel Plans for all schools will continue to be updated in line with the size of the school and the ability to encourage further modal in order to meet Local Area Agreement targets.

Initial work has taken place evaluating the potential benefits of developing other forms of travel planning over the remainder of the LTP period and beyond. Initial evaluation has taken place of around a dozen different types of Travel Plan (which include workplace personalised and residential travel planning) looking at the broad benefits including the potential number of trips that may be captured. More work on this will take place in 2008/09, to quantify this further and evaluate how this work would best support the broader priorities of the council including the Central Oxfordshire Transport Strategy and the Access to Oxford Project.

6.2.4 De-cluttering policy

The street environment includes buildings, open spaces, roads, footways, verges, road markings, signs, and other street furniture. Highway Authorities and local councils have a vital role in managing the street environment and ensuring that the design and installation of new equipment is in-keeping with the character of an area.

Street furniture tends to accumulate in locations over a period of time. It can make a street look cluttered and untidy particularly if little thought has been given to where installations are located, other than to comply solely with statutory requirements. Furthermore, a proliferation of signs may impart confusing or conflicting information and be distracting to motorists in some situations. To combat these problems the county council adopted a formal De-cluttering Policy in April 2007 to be used as part of all relevant scheme designs.

New items of equipment are usually installed to fulfil a single function with little regard to the effect on the whole street scene. Rationalising the amount of street furniture and providing uniformity of scale and consistency of materials help to introduce more harmony to the street environment. This in turn can induce a greater sense of business confidence, public satisfaction and civic pride. The same principles must be applied to the design of new schemes and installations, to ensure they are sensitive, in context, uncluttered, and in keeping with appropriate codes and guidance.

The de-cluttering policy works to the following principles:

- Only provide new or replacement apparatus where it is legally necessary and there are no satisfactory alternatives.
- Do not over-design adopt a policy of restraint regarding the size and amount of essential equipment.
- Carry out site inspections to ensure installations are sited to best effect, and specify accordingly.
- All new schemes must provide minimum street clutter:
 - Non-essential items to be removed
 - Remaining items to be rationalised
- Adopt a policy of restraint with the palette of materials and finishes.

The de-cluttering policy has been put into practice countywide, and specifically in the improvement of Oxford High Street and the town centre schemes for Henley and Abingdon.

6.3 TRANSFORM OXFORD

Oxfordshire County Council has exciting plans to transform the centre of Oxford's streets, to consolidate the city as a world class economic centre while enhancing its status as an international heritage site. There are currently too many buses, dirty, cluttered streets and poor quality paving in some parts of the city centre.

We want to create a city centre which retains excellent access for all but also provides exciting spaces, a safe environment, great shopping and cleaner air. It is a bold challenge which builds on work begun almost 10 years ago with the introduction of the original Oxford Transport Strategy.



The proposals are to be implemented in two stages. The first stage will take up the rest of the current LTP period and include:

Queen Street interim scheme - summer 2009

- Reduction in bus flows
- Relocate all bus stops from Queen Street
- More pedestrian space
- Interim landscaping scheme
- Significant improvement in air quality

George Street/Magdalen Street pedestrianisation - summer 2010

- Full pedestrianisation
- Great opportunities for outdoor cafés and restaurants
- Linked pedestrianisation of New Inn Hall Street and St Michael's Street
- High quality landscaping scheme
- Significant improvement in air quality

Broad Street – 2010 (in Partnership with the Broad Street Plan Group)

- High quality landscaping scheme
- Exciting pedestrian and public space

A second stage, including the creation of a pedestrian zone in High Street, St Aldate's and other streets and a fully pedestrianised Queen Street, will follow after 2011.

The proposals will be funded by a combination of SCE, developer contributions and other funding.

Asset Management

7

A Transport Asset Management Plan (TAMP) for Oxfordshire's highway network was approved in 2008. It states the current approach used for the management of the transport asset, it highlights the strengths and weaknesses of the existing systems and methods in managing the highway network and it discusses ways to improve the current practices. The TAMP proposes a series of actions to enable the council to build on existing processes and tools to meet its strategic goals in the most effective manner.

7.1 Progress on targets

Although changes in the definitions and methodologies used in calculating the monitoring values for highway maintenance standards have made comparisons difficult (as outlined below), in terms of the trajectories set out in the Local Transport Plan our progress to date has been:

| | On track | Not on track |
|--------------|----------|--------------|
| Core Targets | 3 | I |

Condition of principal roads

The original definition used to measure this target was the TTS BVPI 96, however in subsequent years the definition was changed. This has required a re-assessment of the target. The original target aimed to reduce the proportion of Principal Roads requiring structural maintenance by 4.68% from 28.68% to 24%. This represents an approximate improvement of 16%. Equating this to the current BVPI (223) method of measuring Principal Road structural condition indicates that an improvement of 0.5 to 1 percentage point is required to achieve the same level of improvement. The DfT has indicated that at a 4% BVPI value a variation of $\pm 1.4\%$ can be expected. A revised target of maintaining the indicator at current levels is therefore considered appropriate.



The figure above shows the targets re-calculated using the UKPMS 8.01 Rules and Parameters BVPI 223 measurement method. This chart also shows the actual performance achieved over the period (calculated to RP 8.01).

Recent changes to the maintenance formulae used by central government have resulted in significant reductions in funding for Oxfordshire for the period 2008 to 2011, compared to the previous indicative figures. Consequently, we have modified the design of the A420 High Street (Phase 3) works that we are already committed to progressing in 2009/10. We have also re-set all of our maintenance targets to reflect the available funding and the strategy that we have developed in the Transport Asset Management Plan. This acknowledges that it may be necessary to sacrifice some Principal Road condition in order to fund maintenance elsewhere on the county network. So, whilst our aim is to maintain the Principal Road network in a steady state as far as possible, we have also established an upper threshold of 8% as an acceptable limit for Principal Road condition over the next 5 years, provided other maintenance targets are met (using UKPMS 7.01 Rules and Parameters for the base year).

Condition of non-principal classified roads

The original definition used to measure this target was the TTS BVPI 97a, however in subsequent years this definition has also changed. The original target aimed to reduce the proportion of Non-Principal classified roads requiring structural maintenance by 4.7% from 50.7% to 46.2%. On this scale, this represents an approximate improvement of 8.87%. Equating this to the current BVPI (224a) method of measuring Non-Principal classified road structural condition indicates that an improvement of 2 percentage points is required to achieve the same level of improvement.

The figure below shows the revised targets re-calculated using the UKPMS 8.01 Rules and Parameters BVPI 224a measurement method. This chart also shows the actual performance achieved over the period.



As can be seen from the chart the actual performance shows that a steady improvement from 17% to 8% has been achieved. This equates to a 53% improvement or on the original scale would be a value of 23.8%. This target has therefore been significantly exceeded. The DfT has indicated that at an 8% BVPl value a variation of $\pm 1.8\%$ can be expected. Our current aim is to maintain the Non-Principal Road network in a steady state at the current value. We have therefore recalculated our trajectory to achieve 8% ± 1.8 over the remaining period of the LTP.

Condition of unclassified roads

The original definition used to measure this target was the BVPI 97b but in line with the other indicators the definition has been changed. The original target aimed to reduce the proportion of Unclassified Roads requiring structural maintenance by 7.16% from 13.36% to 6.2%. On this scale, this represents an approximate improvement of 53.6%. Equating this to the current BVPI (224b) method of measuring Unclassified Roads structural condition indicates that an improvement of 8 percentage points or 50% is required to achieve the same level of improvement.

The figure below shows the targets re-calculated using the UKPMS 8.01 Rules and Parameters (R &P) and BVPI 224b measurement method. This chart also shows the actual performance achieved over the period.



As can be seen from the chart the actual performance shows that an improvement from 16% to 14% has been achieved. This equates to a 2 percentage point or 12.5% improvement. The previous target is no longer considered realistic or practical and our current aim is to maintain the Unclassified Road network in a steady state at the current value. We have therefore recalculated our trajectory to achieve 14% or below over the remaining period of the LTP. Although this indicator is not included in the National Indicator set we intend to continue monitoring it to assist in delivering the objectives set out in our Asset Management Plan.

Condition of footways

The original definition used to measure this target is BVPI 187 which has remained consistent through the first part of the LTP. The original target aimed to reduce the proportion of footways requiring structural maintenance by 2.4% from 31.2% in 2004/05 to 28.8 % by 2010/11.





Although there appeared to be a poor result in 2006/07 the overall trend continues to improve and the latest result indicates that the original 2010/11 target (28.8%) has been significantly exceeded. Our aim is to improve the busiest footway network by 1.5% over the next five years (relative to UKPMS R&P7.01 results). We have therefore recalculated our trajectory to achieve 11.4% or below by 2011. Although this indicator is not included in the National Indicator set we intend to continue monitoring it to assist in delivering the objectives set out in our Asset Management Plan.

7.2 Asset management

Significant progress has been made in developing and implementing pro-active Asset Management in Oxfordshire during the current LTP. The progress made against a number of key actions identified in 2006 is shown in Annex I and summarised below:

- A rigorous health-check was undertaken to qualify/improve the integrity of the virtual highway network, and the data and parameters in the pavement management system.
- New prioritisation framework established for Principal Road schemes.
- New procedures introduced to ensure timely recording of as-built construction and cost data.
- Inventory update (Stage I) trial of automated system.
- 10 year partnering contract entered into with Exor Corporation that established Oxfordshire as a priority user.
- Upgrading of Highway Management System to Exor Atlas v 4.2.1, and v4.5.0. Utilisation of GPS and hand-held data capture devices now fundamental to the business process.
- Setting up of Area-based customer contact centres linked to Exor Public Enquiry Manager.
- Electronic works ordering system established.
- Client re-structuring and establishment of Oxfordshire Highways.
- Service Levels, Policies and Budgets reviewed holistically and aligned with priorities.
- Development of new skidding resistance procedure, supported by a comprehensive review of site categories, and a formalised programme of site investigation. Production of relevant asset condition inventory, prioritised scheme list and audit trail.
- Commencement of Winter Service pre-salting route optimisation.
- Comprehensive programme of Business Process Reviews and Re-engineering.
- Rolling programme of coring/site investigation.
- Production of draft Oxfordshire Highways Surfacing Materials : Best Practice Design Guide.

- Development of financial modelling/condition scenarios.
- Publication of 5-year works programmes.
- Demonstrable continuous improvement in overall condition of carriageways and footways.
- Preparation work commenced for re-tendering of the Oxfordshire Highways term maintenance contract.
- Charter Mark accreditation (Transport Service).

The first Oxfordshire Transport Asset Management Plan (TAMP) was published in March 2008. It contains a continuous programme of asset management improvements, covering the key areas of:

- Weather and Climate Change,
- Sustainability,
- Value for Money, and
- Risk Management.

The plan is available to view on the Oxfordshire County Council website at: http://www.oxfordshire.gov.uk/links/public/tamp.

Meeting wider objectives

8

Apart from the Plan's transport objectives, there are other wider objectives to which the LTP can make a useful contribution. These include landscape and biodiversity, community safety and crime, healthy communities, sustainable communities, noise and climate change. These were not the principal reasons for schemes being included in the LTP programme but nevertheless can be achieved in parallel with work to deliver the shared priorities.

These objectives accord with the county council's overall priorities as set out in our Corporate Plan 2007/08 -2010/11 with sets four themes for the council together with challenges for each:

Theme I – The economy

- Developing technology clusters and the sustainability of the rural economy;
- Sustainable development of growth areas;
- Improving our skills base and widening labour market participation;
- Investing in infrastructure roads, schools, affordable housing; and
- Tackling social exclusion.

Theme 2 – The environment

- Making our contribution to the global challenge of climate change;
- Improving the street scene and enhancing the environment;
- Dealing with the environmental impact of population growth while maintaining the character of our towns and villages and the Green Belt around Oxford City;
- Achieving an urban renaissance in key areas such as the West End of Oxford;
- The potential challenge of the proposed new reservoir; and
- Reducing waste going to landfill for environmental and economic reasons.

Theme 3 – Stronger and safer communities:

- Breaking the cycle of deprivation;
- Reducing crime and anti-social behaviour;
- Maintaining the energy and vibrancy of our market towns and rural Communities;

- Supporting older people to maintain their health and independence;
- Reducing gaps in health inequality; and
- Engaging with the public, private and voluntary sectors to deliver joined up, responsive public services that meet local needs.

Theme 4 – Value for money

- Reducing the burden of council tax;
- Providing what customers want; and
- Maintaining and improving the quality of our services.

These objectives are also reflected in the draft Sustainable Community Strategy for Oxfordshire which sets out as its vision that:

"By 2030 we want Oxfordshire to be recognised for its economic success, outstanding environment and quality of life; to be a place where everyone can realise their potential, contribute to and benefit from economic prosperity and where people are actively involved in their local communities"

with the main strategic objectives of the draft Strategy being:

- A World Class Economy
- Healthy and thriving communities
- Environment and climate change
- Reducing inequalities and breaking the cycle of deprivation

8.1 Landscape and biodiversity

The work outlined in this report has had little impact (positive or negative) on landscape and biodiversity.

The Transport Division of the council does however have a professional Arboricultural Team dealing with highway trees throughout the county. As part of the Highway Tree Management Policy their aims are to:

- promote the proactive management of highway trees within Oxfordshire ;
- control risks to highway users & property;
- enhance the overall condition of the council's tree stock; and
- to produce environmental benefits through programmes of tree planting and landscaping.

8.2 Healthy communities

There are various results with positive implications for healthier communities. Chapter 2 shows an increase in cycling and Chapter 3 shows success in the number of schools with approved Travel Plans and the ease of use of rights of way. Although Chapter 3 includes more disappointing results for car journeys to school and public transport access to hospitals, both results are thought to be down to the way the data is collected rather than representative of real deterioration.

As mentioned above, Chapter 4 reveals that road safety performance in recent years has been mixed. Chapter 5 shows that some progress has been made in improving air quality in Oxford although this still fails to meet objective levels and the remaining AQMAs have yet to adopt action plans. Finally, Chapter 6 describes investment in improved facilities for pedestrians and cyclists.

8.3 Sustainable and prosperous communities

One definition for sustainability is "improving the quality of life for all without damaging the environment or the ability of future generations to meet their own needs". Prosperity is usually defined more narrowly in terms of real income per capita.

The impact of the LTP on sustainable and prosperous communities will always be limited in the face of the powerful economic and social forces at work at national and global level. However, many of the factors outlined above can have a small but positive effect. The main way in which this LTP has helped with this is through the continued success in encouraging more public transport travel despite the already high base and Oxfordshire's nature as a highly rural county.

Oxfordshire County Council's policy on land use is to encourage development to be located and designed to reduce the need to travel. To this end, development over the past two decades has been concentrated in Oxford and the larger towns in order to develop these as more self-contained developments. Although land use policies are a crucial aspect of transport planning, the complexities of the modern labour and housing markets mean that caution is needed in assuming a relationship between land use policies and transport outcomes.

If the proposed "eco-town" at Weston Otmoor goes ahead, this is likely to have an adverse effect on sustainability as the scheme would be likely to generate significant out-commuting, particularly towards Oxford and London, and could threaten the economic viability of the nearby market town of Bicester.

8.4 Community safety, personal security and crime

As reported in Chapter 6, public perceptions of safety from crime and traffic have improved significantly between 2006 and 2007. There was also a smaller improvement in the perception of being able to cross the road safely. However, as Chapter 4 makes clear, road safety performance in recent years has been mixed, with disappointing casualty figures for vulnerable road users but better results for child casualties.

8.5 Noise

We continue to use materials with negative texture that have the effect of reducing road noise. These are normally our materials of choice.

8.6 Climate change and greenhouse gases

The county council has pledged to reduce its carbon dioxide emissions by 18% by 2012. Measures include a reduction in street lighting at night in appropriate locations. The countywide traffic flows indicator, discussed in Chapter 2, provides a useful proxy to the amount of CO_2 produced by road transport in the county and shows that overall traffic levels have continued to rise, albeit at a considerably lower rate than would have been expected given the amount of development that has occurred in the county in recent years.

Use of resources

9

The proposals outlined in the Local Transport Plan totalled £73 million over 5 years. This funding was to come from a number of sources. In the first two years of the Plan the council delivered schemes worth £26 million – broadly in line with the initial programme. Public finance is likely to be tighter for the remainder of the Plan but the council is looking to identify other sources to maintain our programme as much as possible.

9.1 Integrated transport improvements capital programme

Delivery to date

The Local Transport Plan set out an overall programme for integrated transport improvements divided into 6 sub-programmes: Network Development, Road Safety, Oxford Transport Strategy, Towns Integrated Transport Strategies, Public Transport and Smarter Choices. These programmes were to be funded from three main sources: supported capital expenditure (SCE) allocations, developer contributions (DC) and other sources (including on-street parking surpluses, and capital receipts). Each of these sources of funding has different constraints on the type of scheme that can be funded from them, the location of eligible schemes or the time available for expenditure to occur. The implementation programme needs to be managed to ensure that the best use is made of the funding available at any time.

For the two completed years of this Plan the expenditure for SCE compares well with that which was envisaged when the Plan was written:

| | 200 | 6/07 | 2007/08 | | |
|---------------------|------|--------|---------|--------|--|
| £000s | Plan | Actual | Plan | Actual | |
| Network Development | 2980 | 3489 | 1618 | 1827 | |
| Road Safety | 984 | 387 | 815 | 543 | |
| Oxford | 1110 | 1320 | 1814 | 1310 | |
| Towns | 1659 | 1679 | 1996 | 1618 | |
| Public Transport | 1159 | 1028 | 1344 | 1603 | |
| Smarter Choices | 1187 | 1119 | 1164 | 1659 | |
| TOTAL | 9079 | 9022 | 8750 | 9207* | |

*The allocation for 2007/08 was increased following the settlement in December 2006. The total includes a £647K allowance for salaries and fees which has yet to be attributed to particular schemes. Please note that all 2007/2008 figures are provisional and subject to review.

In addition to the SCE allocations referred to above, the county council has also invested over \pounds 7.3 million from other sources over the two years.

The full delivery programme for the first two years of the Plan is as follows:

Integrated Transport Improvements Programme

Delivery to date (£000s)

| | | 20 | 006/07 | | 20 | 007/08 |
|-------------------------------|------|-----|--------|-----|-----|--------|
| | SCE | DC | other | SCE | DC | other |
| Network management | | | | | | |
| A40 Cassington | 2 | 34 | | | | |
| A40 Downs Road, Witney | I | | | | | |
| A40 Eynsham | 302 | | | | | |
| A40 Green Road Roundabout | 2750 | 375 | 1403 | 317 | | |
| A40/A44 Link Road | 50 | | | | | |
| Access to Oxford | 28 | | | 13 | | |
| Benson Lane Crowmarsh | | 3 | | | | 60 |
| Chipping Norton AQMA | | | | 73 | | |
| Congestion Monitoring ANPR | | | | 366 | | |
| Kilkenny Lane Carterton | | 20 | | | | |
| Network Routeing | 5 | | | | | |
| Park & Ride Extensions | 15 | | | | 196 | |
| Thornhill P & R | 325 | 138 | 703 | 518 | | 1280 |
| Westgate 278 Works | | | | 8 | | |
| Witney Road, Eynsham | | | 55 | | | |
| Road safety | | | | | | |
| A329/B480 Little Milton Rbt | 2 | | | | | |
| A4074 Burcot Turn | | | | 46 | | |
| A4074 Woodcote Crossroads | 14 | | | 17 | | |
| A4095/B4030 Bicester | | | | 23 | | |
| A4I30/A34 Hatching | 20 | | | | | |
| A4144 St Giles | | | | 12 | | |
| A40 East End of Witney Bypass | | | | 4 | | |
| A420 Botley Interchange | 6 | | | | | |
| A44 Peartree Interchange | 31 | | | | | |
| A4421 Poundon/Godington | | | | 2 | | |
| B4009 Lewknor Village Turn | | | | 124 | | |

| | | 20 | 006/07 | | 20 | 007/08 |
|-----------------------------------|-----|-----|--------|-----|----|--------|
| | SCE | DC | other | SCE | DC | other |
| B430 Akeman St | 9 | | | | | |
| Bampton Traffic Calming | 5 | | 10 | | | |
| Blackbird Leys/Sandy Lane West | | | | 9 | | |
| East Hanney TC | 2 | | | | | |
| Henley Gravel Hill | | | | 7 | | |
| KP51RKZ Fiat Ducato | | | | 22 | | |
| Mobile Information Unit | | | | 21 | | |
| Oxford Eastern Bypass | I | | | | | |
| Quick Response Measures | | | | | | 9 |
| Rural Bend Treatments | | | | 112 | | |
| Rural Speed Management | | | | 45 | | |
| Safety Cameras | | | | | | 201 |
| Speed Limits | 51 | | | 60 | | |
| Speed Management Strategy | | | | 21 | | |
| Speed Reactive Signs | 63 | 10 | | 23 | | |
| Stanford Zebra Crossing | I | | | | | |
| Windsor/George St Banbury | | | | 3 | | |
| Witney Hailey Rd Ped Crossing | 3 | | | | | |
| Wheatley Traffic calming | 187 | | | | | |
| Oxford | | | | | | |
| Bus Gate Enforcement | 215 | | 100 | 23 | | |
| Bonn Square | | | | 3 | | |
| Central Area AQMA | 30 | | | | | |
| Cheney Lane | | 18 | | | | |
| Controlled Parking Zones | 281 | 237 | 5 | 157 | 14 | |
| Cowley Road | 109 | 121 | | 190 | 65 | |
| Cycle Network | 33 | | | | | |
| Fairfax Ave/Purcell Rd Cycle Lane | | | | 5 | | |
| Garsington Roundabout | | | | | | |
| Garsington Rd Cycle Lane | 5 | | | 238 | | |
| HAMATS/East Oxford | | 150 | | | | |
| High Street | 40 | | | 60 | | |
| Jackson Left Turn | I | 3 | 4 | | | |

| | | 20 | 006/07 | 20 | | 007/08 | |
|--|-----|-----|--------|-----|-----|--------|--|
| | SCE | DC | other | SCE | DC | other | |
| Jack Straws Lane | | | | 2 | | | |
| London Road Improvement | 45 | | | 285 | | | |
| Marston Road Cycle Imp. | 5 | | | | | | |
| Marston Road Bus Lane | | | | 7 | | | |
| Marston Village traffic calming | 214 | | 77 | | | | |
| Old Road Cycle Scheme | l | | | | | | |
| OTS Headington Central | | 5 | | | | | |
| Parks Road/South Parks Road | I | | | | | | |
| Phipps Rd Relocation of Gate | | | | 3 | | | |
| The Plain Cycle Improvements | 4 | | | 7 | | | |
| The Plain Roundabout | 51 | | | | | | |
| Ring Road Signing | 64 | | | | | | |
| SCOOT Upgrade | | | | 42 | | | |
| Summertown Improvement | 84 | | | 307 | | | |
| Thames Towpath cycle route | 129 | | 99 | | | | |
| The Plain Roundabout | 51 | | | | | | |
| Transfer to maintenance for phase 2 High Street | | | | 639 | | | |
| Towns | | | | | | | |
| Abingdon | | | | | | | |
| A415 Marcham Road | | | | | 18 | | |
| Abingdon ITS | 6 | | | | | | |
| Abingdon Town Centre | 901 | | 233 | 722 | | | |
| Banbury | | | | | | | |
| Beaumont Rd Traffic Calming | 60 | 24 | | 24 | | | |
| Bloxham Rd | 63 | | | | | | |
| Bretch Hill Corner | 4 | | | | | | |
| Broughton Road, Banbury | | | | | | | |
| Grimsbury Traffic Management | 12 | | 18 | | | | |
| Hennef Way | 60 | | | | | | |
| Lockheed Close, Banbury | | | | 4 | | | |
| Merton Street | 8 | 150 | | 6 | 198 | | |
| Queensway/Bloxham Road | | | | 2 | | | |
| Tramway Extension | 26 | | | | | | |

| | | 20 | 006/07 | | 20 | 007/08 |
|---------------------------------|-----|-----|--------|-----|-----|--------|
| | SCE | DC | other | SCE | DC | other |
| Western Corridor | 27 | | | 21 | | |
| Woodgreen Avenue | 43 | | | 14 | | |
| Bicester | | | | | | |
| Bicester Station Footways | 2 | | | | | |
| Howes Lane | 12 | 87 | | | | |
| Skimmingdish Lane | I | 219 | | | | |
| Didcot | | | | | | |
| DMH2 | | 75 | | | | |
| A4130 Milton Heights Pelican | | | | | | |
| Milton Road | | 3 | | | | |
| Steventon Traffic Calming | 9 | | 12 | | | |
| Henley | | | | | | |
| Henley Town Centre imp. | 435 | | | 827 | | |
| Duke St/Bell St | | | | | | |
| Witney | | | | | | |
| Burford Rd/Downs Rd junction | | | 46 | | | |
| Cogges Link Road | 4 | 189 | | | 415 | |
| West End Link Road | 3 | | 25 | | | |
| Woodford Mill Cycle Link | 2 | 10 | | | 18 | |
| Woodgreen Cycle Route | | | | 8 | 9 | |
| Public transport | | | | | | |
| Banbury South Bar Premium Route | | | | | | |
| Barton Premium Route | | | | 41 | | |
| Besselsleigh Premium Route | | | | 9 | | |
| Between Towns Rd | | | | 65 | | |
| Bicester Premium Route | 30 | | | | 44 | |
| Blackbird Leys Bus Stop Imps | | | | 56 | | |
| Bretch Hill, Banbury | 5 | | | | | |
| Bus Priority Measures | | | | | | |
| Bus Shelters | 7 | 9 | | 17 | | |
| Bus Stops Clearways | 96 | | | | | |
| Carterton Public Transport | 26 | | | | 61 | |
| Cowley Premium Route | | | | 62 | | |

| | 2006/07 | | | 2007/08 | | | |
|----------------------------------|---------|------|-------|---------|------|-------|--|
| | SCE | DC | other | SCE | DC | other | |
| Didcot Parkway Interchange | | | | 199 | | | |
| East Oxford Quality Bus Route | 225 | | | 51 | | | |
| Eynsham Premium Route | 25 | | 23 | 27 | | | |
| Hardwick Banbury | | | | 47 | | | |
| Iffley Road Premium Route | | | | | | | |
| Kidlington Premium Route | 315 | 29 | | 49 | | | |
| Langford Lane Turning Area | | 91 | | | 5 | | |
| Oxford Business Park | 19 | | | | 12 | | |
| Premium Routes General | 5 | | | | | | |
| Rail Stations Development | 154 | | | 496 | 25 | | |
| Real Time Information System | 110 | | 2 | 338 | | | |
| Redbridge Bus Stops Improvements | | | | 50 | | | |
| Witney–Carterton Prem. Route | | | | 36 | | | |
| Woodstock Premium Route | | | | 104 | | | |
| Smarter choices | | | | | | | |
| Better Ways to School | 1096 | | 81 | 34 | | | |
| Charlbury Home Zone | 4 | | | | | | |
| Culham-Berinsfield Cycle Rte | I | | 59 | | | | |
| Ducklington-Witney Cycle Rte | 2 | | 27 | | | | |
| Hanborough-Bladon Cycle Rte | 2 | | 10 | | | | |
| Thame-Shabbington Cycle Rte | 4 | | 167 | | | | |
| Salaries | | | | 647 | | | |
| TOTAL | 9069 | 2011 | 3278 | 9080 | 1081 | 1550 | |
| | 14358 | | | 7 | | | |

The county council is making increasing use of modelling processes in developing its proposals. A major modelling exercise in the last year has seen the development of a Central Oxfordshire Traffic Model. This will be used to support the development of the Access to Oxford programme, assess the wider impacts of developments within the Central Oxfordshire sub-region and also develop our future strategy for Oxford. Detailed local models have also been built to assess transport requirements in Banbury, Bicester, Witney and South Central Oxfordshire (Didcot, Harwell, Wantage, Grove) in the light of the planned growth in these areas. Results from these models will play a major role in developing our proposals for beyond the end of the current Plan period.

The Local Transport Plan was developed taking into account the likely demands on the county by the draft South-east Plan. Since then the Plan has been revised with 8,000 additional homes planned for Oxfordshire before 2026 together with changes in emphasis in the Plan prioritising the improved management of transport over providing new infrastructure. The Central Oxfordshire Traffic Model takes account of the implications of these additional homes, particularly the 4,000 in a proposed urban extension to Oxford, especially on the county's strategic road network. The success of the Access to Oxford project in attracting support reflects the Southeast Plan's increased emphasis on managing existing demand and its identification of the A34 in Oxfordshire as one of the region's three priority links.

In terms of the individual schemes delivered, compared to that set out in the Plan, our progress is summarised in the table below (schemes estimated in the Programme to cost more than \pounds 50K only).

| Scheme | Progress |
|---|---|
| A40 Headington (Green Road) Roundabout | Scheme completed April 2007 |
| A40 North of Oxford | Scheme suspended following prioritisation of Access to Oxford project for major scheme funding, including consideration of Northern Approaches |
| Variable message signing | Initial scheme now to be funded through developer funding in 2009/10, also to be included as part of Access to Oxford package |
| Congestion monitoring | Automatic number plate recognition system installed on Oxford radials to give information for VMS and Oxford UTC |
| Thornhill Park & Ride interchange | New vehicle access route and terminal building completed December 2007 |
| Oxford southern approaches | Scheme suspended following prioritisation of Access to Oxford project for major scheme funding, including consideration of Southern Approaches |
| Chipping Norton AQMA | Scheme now due for implementation 2009/10 following consultation on Action Plan |
| Kilkenny Lane Carterton | Scheme completed Summer 2007 |
| A44 Peartree interchange | Scheme completed 2006 |
| A420 Botley interchange | Major scheme deleted because not judged to be cost effective, reduced scheme still under investigation |
| Wheatley traffic calming | Scheme completed Spring 2007 |
| Lewknor village turn | New scheme identified and implemented 2007 |

| Scheme | Progress |
|--|--|
| Banbury Road (Summertown) improvement | Scheme Implementation started Spring 2008 for completion January 2009 |
| London Road improvement | Scheme Implementation started Summer 2008 |
| Central area AQAP | Implementation delayed pending report on Low Emission Zone |
| Bus gate enforcement | Implemented Spring 2007 |
| High Street enhancements | Stages I and 2 completed in conjunction with road maintenance scheme |
| Thames towpath cycle improvement | Scheme completed autumn 2006 |
| The Plain cycle improvements | Scheme implemented 2006, minor modifications subsequent to main scheme |
| Abingdon town centre | Stages I and 2 implemented, Stage 3 (High Street enhancement) on hold pending assessment of impact |
| Banbury western corridor improvements | Schemes completed |
| Tramway extension | On hold pending outcome of study work |
| Henley town centre | Traffic Management works completed Autumn 2007, street enhancements under construction |
| Kidlington premium bus route | Completed Summer 2007 |
| Eynsham premium bus route | Scheme suspended pending review of costs and benefits |
| Real time information system | Phased implementation continues in tandem with Premium Routes Programme |
| Didcot Parkway interchange | New scheme developed using developer funding and Growth Point funding |

Remaining programme

In the settlement for LTP2 \pounds 24.198 million was allocated to the Integrated Transport Improvements Programme for the final three years of the Plan. However, Oxfordshire's status as a floor authority means that the level of supported borrowing would not be reflected by a corresponding increase in Formula Grant. This means that \pounds 6.462 million of the indicative settlement to 2011 will no longer be able to be taken up and the programme must therefore be revised.

Our approach to meeting the challenge of this reduction in available funding has been to reduce budgets within the Better Ways to School, Public Transport and Road Safety programmes, to re-programme some larger schemes to later years, and to identify where additional developer funding could be used. For 2008/09 the SCE now available is \pounds 6.090 million; a reduction of \pounds 2.403 million. A number of specific changes have been made to the programme (deferring the start of some schemes; revising the programme of others) to bring the programme nearer to the available level. These changes still left a funding gap of \pounds 0.933 million. The remaining shortfall will be met by using funds from developer funding accounts which are not tied to particular schemes or areas. These changes have allowed the reductions to be made to the 2008/09 programme without significantly reducing the outputs that will be delivered.

The changes to the programme described above and reductions in the Road Safety, Better Ways to School and Premium Routes programmes, together with the deferral of the final section of the London Road improvements mean that the programme shown for 2009/10 can be delivered within the new funding levels. The programme as set out does not accommodate a 2009/10 start on work to introduce the Eynsham Premium Route, as previously planned, although work is ongoing to establish the full costs and benefits of this scheme to determine whether it should be reinstated in a future year.

Improvements programme – Progress and amendments

For 2010/11 the current programme is £2.452 million greater than the revised funding figure, even after reducing the funding allocated to the on-going programmes in a similar way to the previous years. This funding gap could be made up by further reductions in the allocations made available to these programmes or by bringing forward future years' developer funding. Other changes to the programme could be accommodated, for example, by further deferring the start of the final stage of the London Road improvement, and by recognising the potential for slippage of the Cogges Link Road through the need for planning approval. Work is currently being undertaken to produce a finalised cost and programme for Cogges Link, and a final decision on the content of the programme for 2010/11 will be made when this work has been completed.

The start of the Cogges Link in 2010/11 would also commit the council to expenditure of £5.6 million in 2011/12 to complete the scheme. Of this it is expected that £3.6 million would be able to be funded from developer contributions, the remaining £2 million would be required from the capital allocation for that year. In addition, the full benefits of Cogges Link are likely to only be realised if additional works are carried out on the current route though Witney town centre. In the original LTP £0.521 million had been allocated for this work.

The full three year programme is set out in the tables on the following pages. (Cells marked with a ' \mathcal{L} ' indicate that expenditure is expected in that year but insufficient work has been carried out to date to determine the amount.)

Integrated transport improvements programme

| | | 2008/09 | | | 2009/10 | | 2010/11 | | |
|---|------|---------|-------|------|---------|-------|---------|------|-------|
| | SCE | DC | other | SCE | DC | other | SCE | DC | other |
| Network manageme | nt | | | | | | | | |
| A415 Standlake | | | | | | | 50 | | |
| Access to Oxford | | | | 450 | | 6000# | 856 | | |
| Chipping Norton AQMA | | | | 290 | | | | | |
| Congestion monitoring | 320 | | 100 | | | | | | |
| Green Rd Rbt | 83 | | | | | | | | |
| Oxford VMS | 50 | 300 | | | 200 | | | | |
| P&R extensions | 33 | | | | | £ | | | £ |
| Thornhill P&R | 357 | | | 15 | | | | | |
| TNR routeing | 23 | 34 | | 62 | | | 67 | | |
| Wallingford AQMA | | | | 248 | | | | | |
| Road safety | | | | | | | | | |
| Road safety schemes | 244 | | 297 | 700 | | | 500 | | £ |
| Oxford | | | | | | | | | |
| Central Oxford AQMA | | | 32 | 100 | | | | | |
| CPZs | 8 | 75 | | 306 | 70 | | | | |
| Frideswide Square | | | 100 | | 100 | | | 1100 | |
| High Street | | | | 229* | | | | | |
| Highfield traffic management | | | | | 116 | | | | |
| London Rd Phase 2 | 1436 | 40 | | 312 | 242 | | | | |
| London Rd Phase 3 | 170 | | | 318 | | | 730 | | |
| New Inn Hall Street | | | 500 | | | | | | |
| Peat Moors- Gir'stone Rd cycle link | | | | | 30 | | | | |
| Fairfax Ave — Purcell Road cycle link | | | | | 247 | | | | |

| | 2 | 008/09 | | | 2009/10 | | <u>2010/11</u> | | | |
|---------------------------------------|------|--------|-------|-----|---------|-------|----------------|------|-------|--|
| | SCE | DC | other | SCE | DC | other | SCE | DC | other | |
| Speedwell Street/St Aldates | | | 100 | | | | | | | |
| Summertown | 1060 | | 200 | 34 | | | | | | |
| Transform Oxford | | 200 | | 453 | 372 | | 350 | 328 | | |
| Woodstock & Banbury Rds toucans | | 50 | | | | | | | | |
| Towns | | | | | | | | | | |
| Abingdon | | | | | | | | | | |
| Marcham Rd | | 125 | | 185 | | | | | | |
| Secondary cycle links | | 38 | | | | | | | | |
| Town centre | 150 | | | 540 | | | 150 | | | |
| Banbury | | | | | | | | | | |
| George Street footway | 12 | | | | | | | | | |
| Hennef Way | 200 | | | | | | | | | |
| Merton St One Way | | | | | | | | | | |
| Queensway | 20 | | | | | | | | | |
| Western corridor barrier | 10 | | | | | | | | | |
| Bicester | | | | | | | | | | |
| Central area | | | | | | | | 200 | | |
| Henley | | | | | | | | | | |
| Town centre | 160 | 450 | | | | | | | | |
| Witney | | | | | | | | | | |
| Cogges link road | | 720 | | | 1033 | | 1800 | 6660 | | |
| Other | | | | | | | | | | |
| Ambrosden pedestrian refuge | | 42 | | | | | | | | |
| Carterton B4477 upgrade | | 30 | | | | £ | | | £ | |
| Carterton cycle schemes | | 50 | | | | | | | | |
| | 2008/09 | | 2009/10 | | 2010/11 | | | | |
|-----------------------------------|---------|------|---------|------|---------|-------|------|------|-------|
| | SCE | DC | other | SCE | DC | other | SCE | DC | other |
| Public transport | | | | | | | | | |
| Didcot Station | | | £ | | | £ | | | |
| Marston Road premium route | | | | | 338 | | | | |
| Premium routes (general) | 424 | 12 | | 391 | 30 | | 379 | | |
| Rail stations | | 172 | | 176 | | | 134 | | |
| Real time information system | 333 | | | 288 | | | 232 | | |
| Yarnton-Pear Tree bus priority | | | | | 33 | | | | |
| Smarter choices | | | | | | | | | |
| Better Ways to School | 352 | 98 | | 850 | | | 500 | | |
| Garsington Road cycle lane | 12 | | | | | | | | |
| Schemes before 2007/08 | 7 | 298 | | | | | | | |
| Salaries | 626 | | | 651 | | | 677 | | |
| TOTAL | 6090 | 2795 | 1829 | 6598 | 2811 | 6000 | 6425 | 8288 | 0 |
| | 10664 | | 15409 | | 47 3 | | | | |

9.2 Maintenance programmes

Service priorities

The 2006-07 and 2007-08 structural maintenance budgets were prioritised to support the county council's objective to improve the condition of local roads and pavements while at the same time holding the condition of the Principal Road network at a constant level. Additionally, budget allocations were adjusted to better reflect service requirements, customer expectation and the different conditions in the North and South of the county. As more work is carried out to formalise asset management the more budgets are being refined to tailor the service to meet local demands.

The Principal Roads budget for 2006/07 was approximately £5 million and included the A40 between Cutteslowe and Sandhills, the A420 Shrivenham Bypass, and the A420 High Street in Oxford. Approximately £3m was allocated to structural maintenance on Principal Roads in 2007/08. Overall, the level of investment in Principal Roads was less in 2007/08 than in recent years, primarily due to less funding being available for work on recently de-trunked roads. High profile Principal

Road schemes carried out during 2007/08 included the continuation of the A420 High Street strengthening and enhancement works and the strengthening of the carriageway along A420 St Aldates between Carfax and Speedwell Street. The final phase of repairs to A420 Shrivenham Bypass also took place.

The budgets for Non-Principal Roads were increased in 2006/07 and 2007/08 compared to previous years in keeping with the strategy to invest a higher proportion of the structural maintenance budget in local roads.

Expenditure on assessed footway schemes was increased by approximately \pounds 350k during 2007-08 with resulting improvements in the footway National Indicator BV187.

The Bridge Condition Indicator determined from regular bridge inspections classes the condition of bridges in Oxfordshire as good, but with a small year on year deterioration. Bridge maintenance and strengthening schemes undertaken in 2006/07 and 2007/08 included the re-decking of Oxhey Road bridge near Cropredy, and Goring Station Bridge, and the development of schemes on Shillingford Bridge, Marsh Lane Flyover, Bodicote Flyover, Lower Heyford Railway Bridge, Potash Bridge at Milton and Wolvercote (Goose Green) Railway Bridge.

Further progress was made to address the backlog of drainage improvement schemes. The budget was again increased in recognition of concerns over the need to protect highways and property from flooding.

Our energy contract was renewed on I October 2006. Although we now procure our energy through a consortium, energy costs continue to rise sharply. The increase in energy costs in 2006-07 was £550k.

The use of the 2006/07 highway maintenance budget can be best summarised as follows:

- The allocation for structural maintenance schemes on Principal Roads was increased by £1.7m.
- The Non-Principal Roads schemes budget was slightly increased.
- The budget for assessed footway schemes was increased by £240k
- £190k was allocated specifically to mobility crossings.
- The surface dressing budget was increased by £0.5m with £1m of the allocation targeted to improving skidding resistance at specific sites.
- Additional funds were directed to the maintenance of verges along high speed roads, including £20k for trialling a 'cut & collect' machine that gathers arisings as they are mown.
- Continuing with our 'Cleaner/Greener' theme, £300k was targeted specifically for cleaning signs and for clearance of vegetation around them.
- The allocation for village maintenance gangs was increased substantially for the second consecutive year.

- £15k was allocated to expedite the reinstatement of road markings in central Oxford for more efficient parking control.
- £150k was directed to Business Process Re-engineering (BPR) to identify further opportunities for organisational and procedural reform leading to improved operational efficiencies.

A 3% reduction was applied to the annual highway maintenance base budget to drive further efficiency savings.

2006/07 Highway maintenance expenditure by activity

| Activity | SCE | DC | Other | Revenue |
|--|------------|---------|-----------|-------------|
| | * | | | |
| Assessed carriageway schemes: | 8,593,000 | 140,000 | 1,007,000 | |
| Assessed footway schemes | 1,493,000 | | | |
| Surface dressing treatments | 4,148,000 | | | |
| General structural maintenance (inc £190k for mobility crossings) | | | | 5,261,238 |
| Safety fencing: Programmed (survey/tensioning) | | | | 240,000 |
| Reactive repairs | | | | 100,000 |
| Drainage programme | 449,000 | | | |
| Routine operations: Gully emptying and jetting | | | | 1,512,810 |
| Verge, hedge & tree maintenance – Gras | s cutting: | | | |
| High Speed Roads (HSR) | | | | 232,100 |
| HSR (Cut & collect trial) | | | | 20,000 |
| Other roads | | | | 713,000 |
| Weed control | | | | 140,000 |
| Tree and landscape maintenance | | | | 354,336 |
| Village maintenance | | | | 1,537,800 |
| Winter maintenance | | | | 1,214,308 |
| Signs & lines general | | | | 1,411,100 |
| Parking control | | | | 15,000 |
| Sign cleaning & veg clearance (Cleaner/greener) | | | | 300,000 |
| Area traffic schemes | | | | 60,000 |
| Bridge maintenance | 1,675,000 | | | 426,900 |
| Electrical maintenance | | | | 4,776,800 |
| Signalised crossings | | | | 200,000 |
| Laboratory contract payments | | | | 80,000 |
| Condition surveys, systems & licences | | | | 400,000 |
| Business process re-engineering | | | | 150,000 |
| SUB-TOTAL | 16,358,000 | 140,000 | I,007,000 | 19,145,392 |
| Detrunking grant included | | | | (1,581,658) |
| TOTALS | 16,358,000 | 140,000 | 1,007,000 | 17,563,734 |

2007/08 Highway maintenance expenditure by activity

| Activity | SCE | DC | Other | Revenue |
|--|------------|----|--------|-------------|
| Assessed carriageway schemes: | 5,645,000 | | | |
| Premium bus routes | 200,000 | | | |
| Assessed footway schemes | 1,931,000 | | | |
| Surface dressing treatments (Safety & routine) | 4,060,000 | | | |
| General structural maintenance (inc £185k for mobility crossings) | | | | 5,517,225 |
| Safety fencing | | | | 261,734 |
| Drainage programme | 457,000 | | 50,000 | |
| Routine operations: Gully emptying and jetting | | | | 1,602,033 |
| Verge, hedge & tree maintenance; tree and landscape maintenance | | | | 358,000 |
| Grass cutting: | | | | |
| High Speed Roads (HSR) | | | | 249,000 |
| Other roads | | | | 871,000 |
| Noxious/invasive weeds | | | | 32,000 |
| Scrub clearance | | | | 80,000 |
| Public realm (Cleaner/greener) | | | | 300,000 |
| Village maintenance | | | | 1,758,000 |
| Signs & lines | | | | 1,329,381 |
| Local safety schemes | | | | 60,000 |
| Winter maintenance | | | | I,386,350 |
| Bridge maintenance | 2,923,000 | | | 426,900 |
| Level crossings | | | | 35,000 |
| Electrical maintenance | | | | 5,424,000 |
| Asset management & surveys | | | | 285,000 |
| Highway management systems | | | | 190,000 |
| Traffic Management Act | | | | 30,000 |
| Business process re-engineering | | | | 127,036 |
| SUB-TOTAL | 15,216,000 | | 50,000 | 20,322,659 |
| Detrunking grant included | | | | (1,621,200) |
| TOTALS | 15,216,000 | | 50,000 | 18,701,459 |

2007/08

The use of the available budget in 2007-08 can be best summarised as follows:

- Delivery of an £8m programme of structural maintenance carriageway and footway schemes.
- In recognition of their importance to the county council's overarching transport policies, £200k was ring-fenced for structural repairs on Priority Bus Routes. £100k of this money was directed to Oxford's High Street, and the other £100k to Field Avenue, an unclassified road in the city.
- Although the surface dressing budget was slightly reduced compared with 2006/07, the volume of surface dressing completed was increased because of cost savings delivered through a re-tendered surface dressing contract.
- £205k was allocated to support Public Rights of Way improvements and for the construction of dropped kerbs and ramps for easier access to footways and crossings.
- The £300k allocated to our 'Cleaner/Greener' initiative was used to fund various route treatments including the cutting back of vegetation around signs, sign cleaning and decluttering, and the completion of a Countywide programme to clean and paint black and white chevron markings on roundabout block paving.
- The allocation for Village Maintenance gangs has increased by over £1m since 2000/01, with another £220k allocated in 2007/08.
- £100k was spent on improvements to signalised pedestrian crossings.
- £127k was directed to BPR and contract renewals to identify further opportunities for organisational, contractual and procedural reform, and improved efficiency.

The highlighted increases in budget allocations were realised through an increasingly pro-active approach to asset management that has enabled funds to be better directed to service the current needs of the network, rather than on a predominantly historical basis. The amounts allocated within the 2006/07 and 2007/08 highway maintenance budgets were re-aligned to reflect this, although overall the revenue budget remained at a similar level to 2005/06.

2008/09

The 2008/09 programme comprises £3.09m of works on Principal Roads, including £1.2m for structural maintenance schemes on recently de-trunked roads. The programme includes high profile schemes on the A420 at St Aldates and London Road, and the design of Phase 3 High Street. The Non-Principal Roads allocation for 2008/09 is £1.91m, and the budget for structural maintenance of footways (assessed schemes) is £2.05m. £2.28m has been allocated to routine surface dressing, and £0.99m for safety surface dressing and safety re-surfacing treatments. As in 2007/08, £200k has also been allocated specifically to carriageways structural maintenance on

Priority Bus Routes. Work is still ongoing to develop prioritisation techniques and cost estimates for assessed schemes. The programme will be further refined during the course of the year.

| Activity | Revenue | Capital |
|--------------------------------------|---------|---------|
| Principal roads assessed schemes | | 3094 |
| Non-principal roads assessed schemes | | 1914 |
| Priority bus routes | | 200 |
| Safety resurfacing schemes | | 175 |
| Footway schemes | | 2054 |
| Surface dressing treatments | | 3101 |
| General structural maintenance | 5518 | 544 |
| Safety fencing | 491 | |
| Drainage improvements | | 550 |
| Drainage maintenance | 1802 | |
| Verges, hedges, trees & landscape | 1580 | |
| Signs & lines | 1540 | |
| Winter maintenance | 1587 | |
| Bridge maintenance | 436 | 3000 |
| Level crossings | 35 | |
| Electrical Maintenance | 4925 | |
| Asset Management & Surveys | 285 | |
| Highway Management Systems | 230 | |
| Traffic Management Act | 102 | |
| Contract Renewals | 255 | |
| TOTAL | 21086 | 14633 |

2008/09 Highway maintenance programme

A 5 year programme of highway maintenance schemes has now been developed and approved in principle by the county council. The programmes of maintenance and transport improvement schemes are contained in the recently published Transport Asset Management Plan.

The effects of climate change

Weather patterns appear to be changing as a result of global warming, to the detriment of the highway network in Oxfordshire. The extreme temperatures experienced in Oxfordshire during summer 2006 caused road surfaces across the

county to melt, causing an estimated £3 million of damage. £500k was subsequently provided from county council emergency funds for urgent re-surfacing and carriageway re-texturing. Although the worst sites have now been treated, they are primarily short-term treatments that remain susceptible to further heat damage.

Rainfall is also becoming more intense and flooding more prevalent as drainage systems struggle to cope with excessive volumes of water. In July 2007, Oxfordshire was one of the counties worst affected by the unprecedented summer floods. Another $\pounds I$ million of damage was incurred to the highway infrastructure.

Sustainability

Opportunities for making more efficient use of resources have been identified through Business Process Re-engineering and by working co-operatively through the Oxfordshire Highways partnership. The amount of recycled materials used is increasing annually, and includes aggregates that are reprocessed using Oxfordshire Highways' own facilities. Changes to working practices have enabled our contractors to reduce their carbon footprint by programming work more efficiently, and deploying less plant. Considerable effort is also taken at the planning, co-ordination and implementation stages of schemes to reduce delays at roadworks. We also recycle lighting apparatus where feasible, and are planning to increase the use of energy efficient elements in electrical apparatus including street lighting and illuminated signs.

9.3 Public transport revenue support

Oxfordshire County Council spent a total of £6,461,000 on revenue expenditure directly related to public transport in 2006-07. This rose broadly in line with inflation to \pounds 6,778,000 in 2007-08. Funding for this came from the following principal sources:

| £000s | 2006/07 | 2007/08 |
|---------------------------------------|---------|---------|
| County council general revenue budget | 3,746 | 3,960 |
| Rural bus subsidy grant | 1,516 | 1,553 |
| Government kickstart | 152 | 54 |
| Other sources* | 1,044 | 1,209 |

* other sources include:

- Section 106 funding to provide enhanced bus services to new developments (70%),
- funding from other businesses for service enhancements to serve their site (15%),
- funding from the county council education budget for provision of Home-to-School transport (11%), and
- funding from other adjacent authorities in respect of cross-boundary services (4%).

By far the greatest proportion of this funding is used to maintain services which were running prior to 2006, but cannot be provided commercially. In Oxfordshire, commercial bus services cater for the majority of passenger-journeys (86%), and the county council's transport policies give a high priority to creating the conditions where commercial services can thrive. However, in a relatively rural county such as Oxfordshire there are many areas where it is not possible to provide services on a commercial basis, and county council funding plays a vital role in ensuring accessibility. These core subsidised services are subject to rolling four-yearly reviews on an area-by-area basis, so during 2006-08 around one half of them were reviewed and re-tendered to ensure continuing value for money. Wherever possible the county council encourages the use of modern low-floor buses in new subsidy contracts, and 92% of bus subsidy expenditure is now on services where provision of low-floor vehicles is a requirement of the contract. The county council also requires drivers on all significant subsidised services to have attended a disability awareness training course, and 1500 Oxfordshire bus drivers have now attended such courses.

Through its subsidy funding the county council has aimed to develop a network of services running at regular hourly intervals on Monday to Saturday daytimes. 54% of funding goes towards inter-urban and rural services of this sort, with a further 12% on local town services. 8% also goes to support evening and/or Sunday services to supplement services run commercially on weekday daytimes (though it should be noted that many evening and Sunday services are also provided commercially). The remaining 26% provides less frequent services to ensure essential access in more remote rural areas.

In addition to this funding for the core network, funding is also provided on a pumppriming basis to enhance selected services; often this is on the basis of an agreed declining subsidy profile year-by-year. In many cases this is in association with capital spending on upgraded bus stop infrastructure, real-time information and other improvements on the highway, as part of a co-ordinated package to improve the attractiveness of the service and ultimately make it self-financing at a higher level of service. Services introduced during the period and funded on this basis include:

- X39/X40 Oxford-Wallingford-Reading: frequency enhancement funded in association with infrastructure upgrades, plus evening 'Kickstart' funding;
- 36 Experimental peak service Wantage Didcot: developer-funded;
- I3 Oxford-Marston-JR Hospital: enhanced and extended to rail station; developer funded;
- I0 Oxford-Cowley-Headington-JR Hospital: frequency enhancement in association with infrastructure upgrades; and
- 700 Water Eaton Park & Ride JR Hospital: new service, developer-funded.

We hope that, in addition to those listed above, many of the other services funded by developer contributions will also become self-financing in the long term. There are many travel needs which, whilst very important to the individuals concerned, cannot effectively be provided for by a bus service because of low total passenger volumes. The county council encourages widespread provision of community transport for these purposes, and there are currently over 50 formal schemes in Oxfordshire. County council funding is available if required, but in practice most such schemes are self-financing, and their greatest need is for practical advice and assistance. The county council, in partnership with Oxfordshire districts, therefore funds 3 advisers, each a specialist in particular areas of community transport, to provide this support and encouragement. A total of £182,000 was spent over the 2 year period on supporting community transport.

There are also 4 transport schemes providing dial-a-ride services specifically for people with disabilities, which between them cover the entire county except certain parts of South Oxfordshire. These schemes are provided and funded in partnership with district councils; over the 2 years the county council spent a total of \pounds 241,000 in funding these services.

Oxfordshire County Council believes that good information is vital to encourage use of bus services. We support the Traveline national information service, and ourselves provide printed guides to services available, 'where to catch your bus' maps for principal centres, and ensure that cases are available at stops for display of timetable information. Over the 2 years £205,000 was spent by the county council on direct provision of information in these ways. This is however, only a small proportion of the total spend in the county on public transport information. Oxfordshire County Council uses the powers in the Transport Act 2000 to ensure that bus operators display timetables at every bus stop and publish and distribute timetable leaflets for all of their services. The cost of this provision is borne by the bus companies themselves – in the case of subsidised services operators are required to reflect any cost of doing so in their tender prices. In our view, on most routes the cost of doing so will be recouped several times over through extra passenger generation.

As described elsewhere, capital funding has been used to provide real-time information on many routes throughout the county. This is being developed in partnership with bus operators, and a substantial proportion of the cost of this is borne by them. However, over 2 years a total of £390,000 of revenue funding was also spent by the county council in maintaining this system, once installed.

Substantial capital investment has also occurred on providing upgraded bus stop infrastructure under the Premium Routes programme. Over the 2 years £110,000 of revenue funding was also spent on maintenance of Premium Routes and other bus stop infrastructure. This does not include maintenance of bus shelters; many of these are maintained through advertising contracts – including a new contract now providing much improved shelters in Oxford City – and the remainder by local parish, town or district councils.

Finally, Oxfordshire County Council works in close partnership with train operators and local communities to encourage further development of our local rail services. In addition to capital funding contributions towards much improved facilities at Oxfordshire rail stations, £60,000 in revenue funding was spent in support of station adoption, partnership working and marketing of local rail services.

IO Risk analysis

There are a number of often competing forces which can either help or hinder the achievement of the targets set in the Local Transport Plan. These can be summarised in a SWOT analysis setting out both the positive/negative and internal/external forces. This has been carried out for each of the six main areas which have been set out in this report. For each area this analysis has included consideration of both overall objectives and the targets as set out previously in this report. While the main emphasis has been on the ability to meet the 2011 targets set out in the LTP, some of the factors outlined below will have impacts over a longer timescale.

10.1 SWOT Analysis of priorities

Congestion

| Strengths | Weaknesses |
|--|---|
| Network Management Plan in place with new service structure to support it Traffic Information and Management project developed Current bus infrastructure in place and culture of bus use Mature Park & Ride structure New traffic models developed | Lack of easy opportunities for improvement High levels of through traffic mean vulnerable to national trends Not using full potential for walking and cycling in some areas |
| Opportunities | Threats |
| Reduced traffic levels from higher fuel costs & lower economic growth Better control from new technology and intelligent transport systems Improvements to local rail network from Cotswold Line upgrade, Access to Oxford improvements to Oxford rail station and East West Rail Unification of Park & Ride operations | Traffic from new developments including eco-town at Weston Otmoor Cost increases and inflation for improvements and service operation General traffic growth Public opinion may not favour necessary measures Difficulty of balancing competing demands |

Accessibility

| Strengths High existing levels of bus and cycle use Increased priority from accessibility and school travel targets being included in the council's LAA Updated Bus Strategy with accessibility as a key factor in reviews of supported bus services High levels of take up for school Travel Plans | Weaknesses Lack of easy opportunities for improvement particularly within Oxford Difficulties with modelling accessibility accurately and sensitivity of models to insignificant real changes |
|---|---|
| Opportunities Designing in more sustainable travel patterns in new developments New technologies giving opportunities to provide better information on travel choices | Threats Withdrawal of commercial bus services Worsening congestion, extending journey times by bus. Cost increases for improvements schemes and service operation |

Road safety

| Strengths | Weaknesses |
|--|---|
| Strong, well established history of data analysis | Need for better integration of road safety and maintenance schemes |
| Good track record of developing effective improvements | Fewer accident locations amenable to accident reduction treatments |
| Effective network of volunteers for training and education | Linkages with other initiatives for children and young people need |
| Innovative approach to speed management and partnership working | improvement |
| Opportunities | Threats |
| New technologies for traffic management, speed enforcement and data collection | Need to replace ageing speed camera equipment Cost increases and inflation for |
| Integration of road safety and | improvements |
| environmental messages (especially with regard to speed) | Increase in high risk behaviour |
| | Demographic changes |
| | Increased P2W and cycle use |
| | • Cost increases and inflation for |
| | improvements and service operation |

Air quality

| Strengths | Weaknesses |
|---|---|
| Good co-operation with district councilsExisting strategies in main towns | Difficulty of devising cost-effective solutions for small localised problem areas |
| | Division of responsibilities in two-tier system |
| | Cost increases and inflation for improvements |
| Opportunities | Threats |
| More fuel efficient vehicles Improved traffic management and routeing Reduced traffic growth and congestion | Proposals tend to be politically and publicly controversial Cost increases and inflation for improvements and service operation Problems related in many instances to |
| | through traffic not amenable to local measures |
| | Increased unsuitable routeing through use of sat-nav systems |

Street environment

| Strengths | Weaknesses |
|---|---|
| Improvements are visible and direct High level of bus and cycle use Generally high level of support for improvements in historic towns Anti-clutter policy in place Innovative approach to new residential layouts Established joint working with local councils | Difficulty in maintaining schemes following implementation Cautious approach to design, especially when potential conflict with established highway standards Funding issues |
| Opportunities | Threats |
| Development of new materials and coatings to maintain schemes better for longer Growing popularity of street events New lighting technologies Improvements to bus facilities | Reliance on commercial partners taking control of timing out of local control Anti-social behaviour leading to questioning of value of improvements Cost increases and inflation for improvements especially for higher quality materials Concerns from key stakeholders |

Asset management

| Strengths | Weaknesses |
|--|--|
| Good and improving information on condition of network Improving condition of network Improved systems for sharing information with partners and stakeholders 3-5 year programme developed for both capital and surface dressing schemes Budget allocations targeted to need | Updates required to targeted sets of inventory data Lack of staff resources Detailed service histories for all main assets |
| Opportunities | Threats |
| Collection of better information from contractor (has started with gulley information, may be extended) New contract arrangements to improve efficiencies and fill skills gaps Improved recycling options Removal of street lights Information and publicity Analysis of claims information linked to network condition | High energy and materials costs and inflation Impact of climate change and increased frequency of extreme weather events Theft of roadside equipment from high metal price Changes to funding mechanisms High public expectations and poor press Insufficient funding |

10.2 RAG analysis of targets

The following analysis has been carried out on the progress that has been made toward meeting the targets set in the Local Transport Plan and the risks involved in future success with them. In this analysis targets are labelled as "green" if they are on or above trajectory to meet the target, "amber" if they are within 10% of the trajectory value, and "red" if they are more than 10% away from the trajectory.

| Target | RAG | Comments and actions |
|---|-----|---|
| Core Targets | | |
| Principal roads condition | G | |
| Non-principal roads condition | G | |
| Unclassified roads condition | G | |
| Footways condition | G | |
| KSIs | R | Insufficient information to establish reasons for recent increases – may be in part related to change in police reporting procedures. |
| Child casualties | G | |
| Slight injuries | G | |
| Bus patronage | G | |
| Bus satisfaction | | No data collected since start of LTP. |
| Area wide mileage | G | |
| Cycling levels | G | |
| Car journeys to school | R | New baseline and target to be agreed for LAA – refocus Better Ways to School programme onto schools with best prospects for modal switch. |
| Trips entering central Oxford | G | |
| Air quality (Oxford) | G | |
| Air quality (Henley) | R | Poor 2007 results may be due to road works and construction of town centre schemes. |
| Access to town centre | А | New baseline and target to be agreed for LAA |
| Bus punctuality (non- frequent services, start) | R | May be related to works in Oxford city centre delaying arrival of preceding services. To be combined with intermediate timing points value in future. Access to employment opportunities will also be monitored in the future. |
| Bus punctuality (non- frequent services, intermediate points) | G | |

| Target | RAG | Comments and actions |
|--|-----|--|
| Bus punctuality (non- frequent services, non- timing points) | A | Data problematic – compares observed with assumed values rather than set targets (not to be monitored in future years). |
| Bus punctuality – frequent services | R | Poor results probably associated with delays from Oxford city centre works. |
| Local Indicators | | |
| Congestion | | Indicator(s) still under development. |
| Pedestrian casualties | R | Transform Oxford should bring future reductions in pedestrian casualties in Oxford city centre. |
| Cyclist casualties | R | Baseline for trajectory is unusually low so apparent deficiency may be exaggerated – may be reductions from Oxford 20mph zone initiative. |
| Powered two-wheeler casualties | A | Numbers stable but below target trajectory – no easy way to effectively reduce casualty numbers. |
| Wet skid accidents | G | |
| Approved travel plans | G | |
| Ease of use of rights of way | G | |
| Pedestrian crossings with disabled facilities | G | |
| Access to hospitals | R | Previous data questionable – to be reassessed using new methodology |
| Quality of street environment | G | |

The impact of the highway replacement works in Oxford city centre on the punctuality figure shows the inter-dependence of these indicators. It is possible that the Oxford air quality figures for 2008 may be similarly affected by road reconstruction on St Aldates, from where the air quality figure used in the target is sampled.

Similarly the poor result for air quality in Henley town centre is probably due to the carrying out of works adjacent to the sample location. While it is impossible to eliminate the impact of highway works on other indicators these results show the importance of considering all the possible impacts of works when they are being designed.

The poor performance of the Local Indicators for casualties to vulnerable road users is a particular worry, although the reasons for the observed increases are not clear. It is to be hoped that the 20mph speed limit and Transform Oxford projects will

reduce future. If so then this will also help to bring the target for the total number of people killed or seriously injured on Oxfordshire's roads each year back onto target.

10.3 Conclusions

The analysis above shows the complexity of achieving the objectives set out in the Local Transport Plan. National trends in the economy are likely to have a large impact in the next few years. Some of these may help in meeting the objectives (for example, if fuel costs remain high then this could assist in meeting the targets for controlling traffic growth), while others could hinder them (for example, if construction inflation remains high then it may not be possible to deliver all the schemes currently programmed). Similarly the high level of development proposed for Oxfordshire in the South-east Plan will present considerable challenges for the county's transport network but also presents opportunities for developing more sustainable communities both directly through the layout of new areas and indirectly through providing resources for wider improvements.

The analysis also shows up the interconnectedness of the objectives – for instance, meeting the objective for accessibility is dependent to some extent upon meeting the objectives for reducing congestion, and the need for continuing with a balanced programme for developing the county's transport networks.

Providing better information to the traveller is a common thread through most of the objectives in the Local Transport Plan. The importance of this has grown more evident in the time since the Plan was written and this has been reflected in the changes that have been made to the investment programme. This has been both through installing new equipment and developing strategies for the future and this should lay down good foundations for the remainder of this plan period and beyond.

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Printed January 2009

Designed by Folio Creative Communication Ltd Henley-on-Thames RG9 2AA